

**EIGHTEENTH CENTURY DUTCH TRADE WITH RUSSIA**

**by**

**Jake V. Th. Knoppers**

IMPORTANT NOTICE

Sections of this thesis have already been published. This applies especially to several tables and graphs in Volume II. In addition a number of graphs employ the use of colour which if reproduced in black and white tones only will be difficult to interpret.

Therefore, those interested in a copy or partial reproduction of the thesis are asked to contact the author c/o Department of History  
McGill University  
Montreal, Quebec



**DUTCH TRADE WITH RUSSIA FROM THE TIME OF  
PETER I TO ALEXANDER I. A QUANTITATIVE  
STUDY IN EIGHTEENTH CENTURY SHIPPING**

by

**Jake V. Th. Knoppers**

**A thesis submitted to the Faculty of Graduate Studies  
and Research in partial fulfilment of the  
requirements for the degree of  
Doctor of Philosophy**

**Department of History  
McGill University,  
Montreal, Canada.**

**August 1975.**

## ABSTRACT

Despite the importance of Russia's trade with the West and the dominating role of the Dutch in it, there are no studies devoted to these problems. In particular very little is known about the pattern of shipping and relative position of the Russian ports.

The main emphasis in this study is on the presentation and analysis of ship movements as an indicator of developments and changes both absolute and relative in the maritime commerce between Russia and Holland. The statistical data derived from the Amsterdam Galjootsgeldregisters, the Rotterdam Zee-tijdingen, the Sound Toll Accounts and other sources are set out in over 450 pages of original tables and graphs based on over 55,000 ship movements. They show that the pattern and structure of shipping from each of the Russian ports had its own characteristics. The mutual confrontation of the Galjootsgeldregisters and the Sound Toll Accounts offers solutions to some of the basic problems of shipping in the eighteenth century.

The information presented in this dissertation provides a new insight into the basis for Dutch-Russian trade during the period as well as into the changes that took place both in shipping and the commercial methods used by the Dutch in their trade with Russia.

Name: Jake V. Th. Knoppers.

Title of Thesis: Dutch Trade with Russia from the Time of Peter I to Alexander I. A Quantitative Study in Eighteenth-century Shipping.

Department: History.

Degree: Doctor of Philosophy.

## RESUME

Malgré l'importance du commerce entre la Russie et l'Occident et le rôle prépondérant joué par la Hollande dans ce domaine, il n'existe aucune étude sur ce sujet. En particulier, très peu est connu du mode de navigation et de la position relative des ports russes.

Cette étude consistera principalement en une présentation et en une analyse du trafic maritime à titre d'indice des développements et changements absolus et relatifs concernant le commerce maritime entre la Russie et la Hollande. Les données statistiques recueillies des Galjootsgeldregisters d'Amsterdam, des Zeeijdingen de Rotterdam, des Comptes du Sund et des autres sources sont reproduites dans plus de 450 pages contenant des tableaux et chartes originaux basés sur au-delà de 55,000 mouvements de navires. Ces données indiquent que le mode et la structure du commerce maritime de chaque port russe possédait ses propres caractéristiques. La confrontation mutuelle des Galjootsgeldregisters et des Comptes du Sund offrent des solutions à quelques-uns des problèmes fondamentaux à l'égard du commerce maritime au dix-huitième siècle.

Les renseignements contenus dans cette thèse offrent une nouvelle interprétation des bases du commerce russo-hollandais durant cette période ainsi que des changements qui prirent place dans les méthodes de transport et du commerce maritime employées par la Hollande dans leur commerce avec la Russie.

Nom: Jake V. Th. Knoppers.

Titre de la thèse: Le commerce hollandais avec la Russie du temps de Pierre I à Alexandre I. Une étude quantitative de la navigation au XVIII<sup>ème</sup> siècle.

Département: Histoire.

Degré: Docteur en Philosophie.

TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES . . . . .	vii
LIST OF GRAPHS . . . . .	xxvi
LIST OF MAPS . . . . .	xxxi
LIST OF ABBREVIATIONS . . . . .	xxxii
PREFACE . . . . .	xxxiv

PART ONE: THE EVIDENCE—  
CRITICISM AND APPRAISAL OF THE AMSTERDAM  
GALJOOTSGELDREGISTERS AND OTHER SOURCES

Chapter

I THE SOURCES AND PROBLEMS OF INTER- PRETATION . . . . .	1
A. The Amsterdam Galjootsgeldregisters (GGR) . . . . .	1
B. The Sound Toll Accounts (STA) . . . . .	12
C. The Dutch Notarial Archives . . . . .	17
D. Other Archival Sources. . . . .	22
1. Shipping. . . . .	22
2. Marine assurance and average . . . . .	24
3. The archives of the Brants family . . . . .	27
Footnotes . . . . .	29

## TABLE OF CONTENTS (Cont'd)

<u>Chapter</u>		<u>Page</u>
II	EVALUATION AND METHODS . . . . .	54
	A. The Interpretation of the GGR Variables, . . . . .	56
	1. The "registered" date of arrival. . . . .	56
	2. The port of departure. . . . .	60
	3. The homeport of the captain. . . . .	64
	4. The name of the captain . . . . .	65
	5. The name of the ship. . . . .	66
	6. The lastages . . . . .	67
	a) The lastages of the ship . . . . .	69
	b) The lastage of the cargo. . . . .	79
	B. The Amsterdam Galjootsgeldregisters compared with the Sound Toll Accounts . . . . .	86
	1. The STA date of passage and the GGR "registered" date of arrival. . . . .	89
	2. The name of the captain . . . . .	93
	3. The port of departure. . . . .	94
	4. The port of destination or arrival . . . . .	96
	5. The homeport of the captain. . . . .	97
	C. The GGR as a Basis for the Study of Russian (and Baltic) shipping to Amsterdam . . . . .	103
	Footnotes . . . . .	112

TABLE OF CONTENTS (Cont'd)

PART TWO: SHIPPING AND TRADE

<u>Chapter</u>	<u>Page</u>
III THE INDIVIDUAL AREAS	148
A. St. Petersburg . . . . .	148
B. Narva . . . . .	174
C. Riga . . . . .	186
D. Viborg and Frederikshamn. . . . .	204
E. Reval and Lesser Ports in Estonia and Courland. . . . .	212
F. Archangel . . . . .	219
Footnotes . . . . .	243
IV SHIPPING AND TRADE IN THE BALTIC-EUROPEAN CONTEXT . . . . .	259
Footnotes . . . . .	316
CONCLUSION . . . . .	333
APPENDIX A . . . . .	339
APPENDIX B . . . . .	363
BIBLIOGRAPHY . . . . .	365
TABLES AND GRAPHS . . . . .	405
Explanatory Note to Tables and Graphs . . . . .	405

## LIST OF TABLES

<u>Tables I</u>	<u>Page</u>
I.1	Index of shipping from St. Petersburg to Amsterdam, 1715-1823 . . . . . 152
I.2	Index of tonnage of cargo carried from St. Petersburg to Amsterdam, 1715-1823 . . . . . 157
I.3	Index of tonnage of shipping from St. Petersburg to Amsterdam, 1715-1823 . . . . . 160
I.4	Index of average size of ship in tons from St. Petersburg to Amsterdam, 1715-1823 . . . . . 161
I.5	Index of average size of cargo in tons from St. Petersburg to Amsterdam, 1715-1823 . . . . . 162
I.6	Freight prices per last for shipping from St. Petersburg to Amsterdam, c. 1695-1789 contracted at Amsterdam . . . . . 171
I.7	Freight prices per last for shipping from St. Petersburg to non-Dutch ports, c. 1726-1790 as contracted at Amsterdam . . . . . 173
I.8	Index of shipping from Narva to Amsterdam, 1715-1825 . . . . . 179
I.9	Index of tonnage of cargo carried from Narva to Amsterdam, 1715-1825 . . . . . 180
I.10	Index of tonnage of shipping from Narva to Amsterdam, 1715-1825 . . . . . 181
I.11	Index of average size of ship in tons from Narva to Amsterdam, 1715-1825 . . . . . 182
I.12	Index of average size of cargo in tons from Narva to Amsterdam, 1715-1825 . . . . . 183
I.13	Freight prices per last for shipping from Narva to Amsterdam and elsewhere, c. 1690-1784 contracted at Amsterdam . . . . . 185
I.14	Index of shipping from Riga to Amsterdam, 1715-1825 . . . . . 192

LIST OF TABLES (Cont'd)

<u>Tables I</u>	<u>Page</u>
I. 15 Index of tonnage of cargo carried from Riga to Amsterdam, 1715-1825 . . . . .	195
I. 16 Index of tonnage of shipping from Riga to Amsterdam, 1715-1825 . . . . .	196
I. 17 Index of average size of ship in tons from Riga to Amsterdam, 1715-1825. . . . .	198
I. 18 Index of average size of cargo in tons from Riga to Amsterdam, 1715-1825. . . . .	199
I. 19 Freight prices per last for shipping from Riga to Amsterdam, c. 1690-1789 contracted at Amsterdam .	202
I. 20 Freight prices per last for shipping from Riga to non-Dutch ports, c. 1737-1784 contracted at Amsterdam .	203
I. 21 Freight prices per last for shipping from Viborg and Frederikshamn to Dutch and non-Dutch ports, c. 1695-1784 contracted at Amsterdam. . . . .	211
I. 22 Freight prices per last for shipping from Reval to Amsterdam and other ports, c. 1690-1788 contracted at Amsterdam. . . . .	218
I. 23 Freight prices per last for shipping from Pernau to Amsterdam and other ports, c. 1701-1784 contracted at Amsterdam. . . . .	219
I. 24 Index of shipping from Russian (White Sea) ports (primarily Archangel) to Amsterdam . . . . .	228
I. 25 Index of tonnage of cargo carried from Russian (White Sea) ports (primarily Archangel) to Amsterdam . . . . .	229
I. 26 Index of tonnage of shipping from Russian (White Sea) ports (primarily Archangel) to Amsterdam . . . . .	230
I. 27 Index of average size of ship in tons from Russian (White Sea) ports (primarily Archangel) to Amsterdam. . . . .	231
I. 28 Index of average size of cargo in tons from Russian (White Sea) ports (primarily Archangel) to Amsterdam. . . . .	232



LIST OF TABLES (Cont'd)

<u>Tables I</u>	<u>Page</u>	
I.29	Freight prices per last for shipping from Archangel to Amsterdam and non-Dutch ports, c.1710-1784, contracted at Amsterdam . . . . .	236
I.30	A comparison of shipping from Archangel and St. Petersburg to Amsterdam from 1720-1822 . . . . .	241
I.31	Index of shipping from Russian (Baltic ports) to Amsterdam, 1715-1825 . . . . .	264
I.32	Index of tonnage of shipping from Russian (Baltic ports) to Amsterdam, 1715-1825 . . . . .	267
I.33	Index of tonnage of cargo carried from Russian (Baltic ports) to Amsterdam, 1715-1825 . . . . .	268
I.34	Index of average size of cargo in tons from Russian (Baltic ports) to Amsterdam, 1715-1825 . . . . .	270
I.35	Index of average size of ship in tons from Russian (Baltic ports) to Amsterdam, 1715-1825 . . . . .	271

LIST OF TABLES(Cont'd)

<u>Tables II</u>	<u>Page</u>
II. 1    Baltic shipping from Russia to Amsterdam distributed according to ports of departure and registered month of arrival . . . . .	409
II. 1.A    Baltic shipping from Russia to Amsterdam distributed according to ports of departure and registered month of arrival in percentages of both . . . . .	436
II. 2    Breakdown of Baltic shipping from Russia to Amsterdam by size of cargo in tons . . . . .	463
II. 2.A    Breakdown of shipping from St. Petersburg to Amsterdam by size of cargo in tons . . . . .	466
II. 2.B    Breakdown of shipping from Narva to Amsterdam by size of cargo in tons . . . . .	469
II. 2.C    Breakdown of shipping from Riga to Amsterdam by size of cargo in tons . . . . .	472
II. 2.D    Breakdown of shipping from Viborg to Amsterdam by size of cargo in tons . . . . .	475
II. 2.E    Breakdown of shipping from Reval to Amsterdam by size of cargo in tons . . . . .	478
II. 2.F    Breakdown of shipping from Estonia to Amsterdam by size of cargo in tons . . . . .	481
II. 2.G    Breakdown of shipping from Frederikshamn to Amsterdam by size of cargo in tons . . . . .	484
II. 2.H    Breakdown of shipping from Courland to Amsterdam by size of cargo in tons . . . . .	486
II. 3    Breakdown of Baltic shipping from Russia to Amsterdam by size of ship in tons . . . . .	487
II. 3.A    Breakdown of shipping from St. Petersburg to Amsterdam by size of ship in tons . . . . .	490
II. 3.B    Breakdown of shipping from Narva to Amsterdam by size of ship in tons . . . . .	493

LIST OF TABLES (Cont'd)

<u>Tables II</u>	<u>Page</u>
II. 3. C Breakdown of shipping from Riga to Amsterdam by size of ship in tons . . . . .	496
II. 3. D Breakdown of shipping from Viborg to Amsterdam by size of ship in tons . . . . .	499
II. 3. E Breakdown of shipping from Reval to Amsterdam by size of ship in tons . . . . .	502
II. 3. F Breakdown of shipping from Estonia to Amsterdam by size of ship in tons . . . . .	505
II. 3. G Breakdown of shipping from Frederikshamn to Amsterdam by size of ship in tons . . . . .	508
II. 3. H Breakdown of shipping from Courland to Amsterdam by size of ship in tons . . . . .	510
II. 4 Baltic shipping from Russia to Amsterdam giving total and average tonnages of cargo carried and of size of ship. . . . .	511
II. 4. A Shipping from St. Petersburg to Amsterdam giving total and average tonnages of cargo carried and of size of ship. . . . .	514
II. 4. B Shipping from Narva to Amsterdam giving total and average tonnages of cargo carried and of size of ship. . . . .	517
II. 4. C Shipping from Riga to Amsterdam giving total and average tonnages of cargo carried and of size of ship. . . . .	520
II. 4. D Shipping from Viborg to Amsterdam giving total and average tonnages of cargo carried and of size of ship. . . . .	523
II. 4. E Shipping from Reval to Amsterdam giving total and average tonnages of cargo carried and of size of ship. . . . .	526
II. 4. F Shipping from Estonia to Amsterdam giving total and average tonnages of cargo carried and of size of ship. . . . .	529

LIST OF TABLES (Cont'd)

<u>Tables II</u>	<u>Page</u>
II. 4. G Shipping from Frederikshamn to Amsterdam giving total and average tonnages of cargo carried and of size of ship . . . . .	532
II. 4. H Shipping from Courland to Amsterdam giving total and average tonnages of cargo carried and of size of ship. . . . .	534
II. 5 Tons of cargo shipped to Amsterdam distributed according to Russian (Baltic) ports of departure . .	535
II. 6 Average size of cargoes in tons shipped to Amsterdam distributed according to Russian (Baltic) ports of departure. . . . .	538
II. 7 Tons of Baltic shipping to Amsterdam distributed according to Russian ports of departure. . . . .	541
II. 8 Average size of ships in tons to Amsterdam distributed according to Russian (Baltic) ports of departure . . . . .	544
II. 9 Total tonnage of cargo shipped to Amsterdam from Russian (Baltic) ports distributed according to registered month of arrival. . . . .	547
II. 9. A Total tonnage of cargo shipped to Amsterdam from St. Petersburg distributed according to registered month of arrival. . . . .	550
II. 9. B Total tonnage of cargo shipped to Amsterdam from Narva distributed according to registered month of arrival . . . . .	553
II. 9. C Total tonnage of cargo shipped to Amsterdam from Riga distributed according to registered month of arrival . . . . .	556
II. 9. D Total tonnage of cargo shipped to Amsterdam from Viborg distributed according to registered month of arrival . . . . .	559
II. 9. E Total tonnage of cargo shipped to Amsterdam from Reval distributed according to registered month of arrival . . . . .	562

LIST OF TABLES (cont'd)

<u>Tables II</u>	<u>Page</u>
II. 9. F Total tonnage of cargo shipped to Amsterdam from Estonia distributed according to registered month of arrival . . . . .	565
II. 9. G Total tonnage of cargo shipped to Amsterdam from Frederikshamn distributed according to registered month of arrival . . . . .	568
II. 9. H Total tonnage of cargo shipped to Amsterdam from Courland distributed according to registered month of arrival . . . . .	570
II. 10 Average tonnage of cargo shipped from Russian (Baltic) ports to Amsterdam distributed according to registered month of arrival . . . . .	571
II. 10. A Average tonnage of cargo shipped from St. Petersburg to Amsterdam distributed according to registered month of arrival . . . . .	574
II. 10. B Average tonnage of cargo shipped from Narva to Amsterdam distributed according to registered month of arrival . . . . .	577
II. 10. C Average tonnage of cargo shipped from Riga to Amsterdam distributed according to registered month of arrival . . . . .	580
II. 10. D Average tonnage of cargo shipped from Viborg to Amsterdam distributed according to registered month of arrival . . . . .	583
II. 10. E Average tonnage of cargo shipped from Reval to Amsterdam distributed according to registered month of arrival . . . . .	586
II. 10. F Average tonnage of cargo shipped from Estonia to Amsterdam distributed according to registered month of arrival . . . . .	589
II. 10. G Average tonnage of cargo shipped from Frederikshamn to Amsterdam distributed according to registered month of arrival . . . . .	592

LIST OF TABLES (cont'd)

<u>Tables II</u>	<u>Page</u>
II.10.H Average tonnage of cargo shipped from Courland to Amsterdam distributed according to registered month of arrival . . . . .	594
II.11 Percentage of total tonnage of cargo shipped from Russian (Baltic) ports to Amsterdam distributed according to registered month of arrival. . . . .	595
II.11.A Percentage of cargo tonnage shipped from St. Petersburg to Amsterdam distributed according to registered month of arrival. . . . .	598
II.11.B Percentage of cargo tonnage shipped from Narva to Amsterdam distributed according to registered month of arrival . . . . .	601
II.11.C Percentage of cargo tonnage shipped from Riga to Amsterdam distributed according to registered month of arrival . . . . .	604
II.11.D Percentage of cargo tonnage shipped from Viborg to Amsterdam distributed according to registered month of arrival . . . . .	607
II.11.E Percentage of cargo tonnage shipped from Reval to Amsterdam distributed according to registered month of arrival . . . . .	610
II.11.F Percentage of cargo tonnage shipped from Estonia to Amsterdam distributed according to registered month of arrival . . . . .	613
II.11.G Percentage of cargo tonnage shipped from Frederikshamn to Amsterdam distributed according to registered month of arrival. . . . .	616
II.11.H Percentage of cargo tonnage shipped from Courland to Amsterdam distributed according to registered month of arrival . . . . .	618
II.12 Total tonnage of shipping to Amsterdam from Russian (Baltic) ports distributed according to registered month of arrival . . . . .	619

LIST OF TABLES (cont'd)

<u>Tables II</u>	<u>Page</u>
II.12.A Total tonnage of shipping to Amsterdam from St. Petersburg distributed according to registered month of arrival . . . . .	622
II.12.B Total tonnage of shipping to Amsterdam from Narva distributed according to registered month of arrival . . . . .	625
II.12.C Total tonnage of shipping to Amsterdam from Riga distributed according to registered month of arrival . . . . .	628
II.12.D Total tonnage of shipping to Amsterdam from Viborg distributed according to registered month of arrival . . . . .	631
II.12.E Total tonnage of shipping to Amsterdam from Reval distributed according to registered month of arrival . . . . .	634
II.12.F Total tonnage of shipping to Amsterdam from Estonia distributed according to registered month of arrival . . . . .	637
II.12.G Total tonnage of shipping to Amsterdam from Frederikshamn distributed according to registered month of arrival . . . . .	640
II.12.H Total tonnage of shipping Amsterdam from Courland distributed according to registered month of arrival . . . . .	642
II.13 Average shipping tonnage from Russian (Baltic) ports to Amsterdam distributed according to registered month of arrival . . . . .	643
II.13.A Average shipping tonnage from St. Petersburg to Amsterdam distributed according to registered month of arrival . . . . .	646
II.13.B Average shipping tonnage from Narva to Amsterdam distributed according to registered month of arrival . . . . .	649

LIST OF TABLES (Cont'd)

<u>Tables II</u>	<u>Page</u>
II. 13. C Average shipping tonnage from Riga to Amsterdam distributed according to registered month of arrival . . . . .	652
II. 13. D Average shipping tonnage from Viborg to Amsterdam distributed according to registered month of arrival . . . . .	655
II. 13. E Average shipping tonnage from Reval to Amsterdam distributed according to registered month of arrival . . . . .	658
II. 13. F Average shipping tonnage from Estonia to Amsterdam distributed according to registered month of arrival . . . . .	661
II. 13. G Average shipping tonnage from Frederikshamn to Amsterdam distributed according to registered month of arrival . . . . .	664
II. 13. H Average shipping tonnage from Courland to Amsterdam distributed according to registered month of arrival . . . . .	666
II. 14 Percentage of total shipping tonnage from Russian (Baltic) ports to Amsterdam distributed according to registered month of arrival . . . . .	667
II. 14. A Percentage of shipping tonnage from St. Petersburg to Amsterdam distributed according to registered month of arrival . . . . .	670
II. 14. B Percentage of shipping tonnage from Narva to Amsterdam distributed according to registered month of arrival . . . . .	673
II. 14. C Percentage of shipping tonnage from Riga to Amsterdam distributed according to registered month of arrival . . . . .	676
II. 14. D Percentage of shipping tonnage from Viborg to Amsterdam distributed according to registered month of arrival . . . . .	679



LIST OF TABLES (Cont'd)

<u>Tables II</u>	<u>Page</u>
II.14.E Percentage of shipping tonnage from Reval to Amsterdam distributed according to registered month of arrival . . . . .	682
II.14.F Percentage of shipping tonnage from Estonia to Amsterdam distributed according to registered month of arrival . . . . .	685
II.14.G Percentage of shipping tonnage from Frederikshamn to Amsterdam distributed according to registered month of arrival . . . . .	688
II.14.H Percentage of shipping tonnage from Courland to Amsterdam distributed according to registered month of arrival . . . . .	690
II.15 Average size of cargoes and of ships in tons in each of the size categories of Russian (Baltic) shipping to Amsterdam . . . . .	691
II.15.A Average size of cargoes and of ships in tons in each of the size categories of shipping from St. Petersburg to Amsterdam. . . . .	694
II.15.B Average size of cargoes and of ships in tons in each of the size categories of shipping from Narva to Amsterdam . . . . .	697
II.15.C Average size of cargoes and of ships in tons in each of the size categories of shipping from Riga to Amsterdam . . . . .	700
II.15.D Average size of cargoes and of ships in tons in each of the size categories of shipping from Viborg to Amsterdam . . . . .	703
II.15.E Average size of cargoes and of ships in tons in each of the size categories of shipping from Reval to Amsterdam . . . . .	706
II.15.F Average size of cargoes and of ships in tons in each of the size categories of shipping from Estonia to Amsterdam . . . . .	709

LIST OF TABLES (Cont'd)

<u>Tables II</u>	<u>Page</u>
II. 15. G Average size of cargoes and of ships in tons in each of the size categories of shipping from Frederikshamn to Amsterdam . . . . .	712
II. 15. H Average size of cargoes and of ships in tons in each of the size categories of shipping from Courland to Amsterdam . . . . .	714
II. 16 Relation of size of cargo carried to size of ship in each of the ship size categories of Russian (Baltic) shipping to Amsterdam . . . . .	715
II. 16. A Relation of size of cargo carried to size of ship in each of the ship size categories of shipping from St. Petersburg to Amsterdam . . . . .	718
II. 16. B Relation of size of cargo carried to size of ship in each of the ship size categories of shipping from Narva to Amsterdam . . . . .	721
II. 16. C Relation of size of cargo carried to size of ship in each of the ship size categories of shipping from Riga to Amsterdam . . . . .	724
II. 16. D Relation of size of cargo carried to size of ship in each of the ship size categories of shipping from Viborg to Amsterdam . . . . .	727
II. 16. E Relation of size of cargo carried to size of ship in each of the ship size categories of shipping from Reval to Amsterdam . . . . .	730
II. 16. F Relation of size of cargo carried to size of ship in each of the ship size categories of shipping from Estonia to Amsterdam . . . . .	733
II. 16. G Relation of size of cargo carried to size of ship in each of the ship size categories of shipping from Frederikshamn to Amsterdam . . . . .	736
II. 16. H Relation of size of cargo carried to size of ship in each of the ship size categories of shipping from Courland to Amsterdam . . . . .	738

LIST OF TABLES (cont'd)

<u>Tables III</u>	<u>Page</u>	
III. 1	Shipping from Russian (White Sea) ports (primarily Archangel) to Amsterdam distributed according to registered month of arrival. . . . .	740
III. 1. A	Shipping from Russian (White Sea) ports (primarily Archangel) to Amsterdam distributed according to registered month of arrival by percentages . . . . .	748
III. 2	Breakdown of White Sea shipping (primarily Archangel) to Amsterdam by size of cargo in tons . . . . .	751
III. 3	Breakdown of White Sea (primarily Archangel) to Amsterdam by size of ship in tons . . . . .	754
III. 4	White Sea shipping from Russia (primarily Archangel) to Amsterdam giving total and average tonnages of cargo carried and of size of ship. . . . .	757
III. 5	Total tonnage of cargo shipped from White Sea ports (primarily Archangel) to Amsterdam distributed according to registered month of arrival. . . . .	760
III. 6	Average tonnage of cargo shipped from White Sea ports (primarily Archangel) to Amsterdam distributed according to registered month of arrival. . . . .	763
III. 7	Percentage tonnage of cargo shipped from White Sea ports (primarily Archangel) to Amsterdam distributed according to registered month of arrival. . . . .	766
III. 8	Total tonnage of White Sea shipping from White Sea ports (primarily Archangel) to Amsterdam distributed according to registered month of arrival. . . . .	769
III. 9	Average tonnage of White Sea shipping from White Sea ports (primarily Archangel) to Amsterdam distributed according to registered month of arrival. . . . .	772
III. 10	Percentage tonnage of White Sea shipping from White Sea ports (primarily Archangel) to Amsterdam distributed according to registered month of arrival. . . . .	774

LIST OF TABLES (Cont'd)

<u>Tables III</u>	<u>Page</u>
III.11 Average size of cargoes and of ships in each of the size categories of shipping from Russian (White Sea) ports (primarily Archangel) to Amsterdam . . . . .	778
III.12 Relation of size of cargo carried to size of ship in each of the ship size categories of shipping from Russian (White Sea) ports (primarily Archangel) to Amsterdam . . . . .	781
III.13 Russian White Sea shipping (primarily Archangel) compared to Russian (Baltic) and total Russian (Baltic + White Sea) shipping to Amsterdam, 1717-1823 . . . . .	784
III.14 Shipping to Amsterdam from the White Sea (primarily Archangel) compared with that from St. Petersburg, 1717-1823 . . . . .	787

LIST OF TABLES (Cont'd)

<u>Tables IV</u>	<u>Page</u>
IV.1 Baltic shipping to Amsterdam at five year intervals, 1709-1824 distributed according to registered month of arrival . . . . .	791
IV.1.A Baltic shipping to Amsterdam at five year intervals, 1709-1824, distributed according to registered month of arrival in percentages . . . . .	792
IV.2 Breakdown of Baltic shipping to Amsterdam by size of cargo in tons at five year intervals, 1709-1824 . . . . .	793
IV.3 Breakdown of Baltic shipping to Amsterdam by size of ship in tons at five year intervals, 1709-1824 . . . . .	794
IV.4 Baltic shipping to Amsterdam giving total and average tonnages of cargo carried and size of ship at five year intervals, 1709-1824. . . . .	795
IV.4.A Baltic shipping from Danish ports and ports in the Duchies to Amsterdam giving total and average tonnages of cargo carried and size of ship at five year intervals, 1709-1824 . . . . .	796
IV.4.B Baltic shipping from Swedish ports (including those in Finland) to Amsterdam giving total and average tonnages of cargo carried and size of ship at five year intervals, 1709-1824. . . . .	797
IV.4.C Baltic shipping from ports in Courland to Amsterdam giving total and average tonnages of cargo carried and size of ship at five year intervals, 1709-1824 . . . . .	798
IV.4.D Baltic shipping from Elbing, Konigsberg, and Pillau to Amsterdam giving total and average tonnages of cargo carried and size of ship at five year intervals, 1709-1824 . . . . .	799
IV.4.E Baltic shipping from Danzig to Amsterdam giving total and average tonnages of cargo carried and size of ship at five year intervals, 1709-1824 . . . . .	800

LIST OF TABLES (Cont'd)

<u>Tables IV</u>	<u>Page</u>
IV.4.F Baltic shipping from other East Prussian ports (including Memel) to Amsterdam giving total and average tonnages of cargo carried and size of ship at five year intervals, 1709-1824. . . . .	801
IV.4.G Baltic shipping from Stettin to Amsterdam giving total and average tonnages of cargo carried and size of ship at five year intervals, 1709-1824. . . . .	802
IV.4.H Baltic shipping from other German ports to Amsterdam giving total and average tonnages of cargo carried and size of ship at five year intervals, 1709-1824 . . . . .	803
IV.4.I Shipping from unspecified Baltic ports to Amsterdam giving total and average tonnages of cargo carried and size of ship at five year intervals, 1709-1824 . . . . .	804
IV.5 Total tonnage of cargo shipped to Amsterdam from the Baltic at five year intervals, 1709-1824, distributed according to registered month of arrival. . . . .	805
IV.6 Average tonnage of cargo shipped to Amsterdam from the Baltic at five year intervals, 1709-1824, distributed according to registered month of arrival. . . . .	806
IV.7 Percentage of Total Tonnage of cargo shipped to Amsterdam from the Baltic at five year intervals, 1709-1824, distributed according to registered month of arrival . . . . .	807
IV.8 Total tonnage of shipping to Amsterdam from the Baltic at five year intervals, 1709-1824, distributed according to registered month of arrival. . . . .	808
IV.9 Average shipping tonnage to Amsterdam from the Baltic at five year intervals, 1709-1824, distributed according to registered month of arrival. . . . .	809

LIST OF TABLES (Cont'd)

<u>Tables IV</u>	<u>Page</u>
IV.10 Percentage of total tonnage of shipping to Amsterdam from the Baltic at five year intervals, 1709-1824, distributed according to registered month of arrival . . . . .	810
IV.11 Average size of cargoes and of ships in tons in each of the size categories of shipping to Amsterdam from the Baltic at five year intervals, 1709-1824. . . . .	811
IV.12 Relation of size of cargo carried to size of ship in each of the ship size categories of shipping to Amsterdam from the Baltic at five year intervals, 1709-1824 . . . . .	812
IV.13 Shipping from Russia as a percentage of all shipping from the Baltic to Amsterdam at five year intervals, 1709-1824 . . . . .	813
IV.14 Tonnage movements from the Baltic and Russia to Amsterdam, 1764-1825. . . . .	814

LIST OF TABLES (Cont'd)

<u>Tables IV</u>	<u>Page</u>
IV.10 Percentage of total tonnage of shipping to Amsterdam from the Baltic at five year intervals, 1709-1824, distributed according to registered month of arrival . . . . .	810
IV.11 Average size of cargoes and of ships in tons in each of the size categories of shipping to Amsterdam from the Baltic at five year intervals, 1709-1824. . . . .	811
IV.12 Relation of size of cargo carried to size of ship in each of the ship size categories of shipping to Amsterdam from the Baltic at five year intervals, 1709-1824 . . . . .	812
IV.13 Shipping from Russia as a percentage of all shipping from the Baltic to Amsterdam at five year intervals, 1709-1824 . . . . .	813
IV.14 Tonnage movements from the Baltic and Russia to Amsterdam, 1764-1825 . . . . .	814



LIST OF TABLES (cont'd)

<u>Tables V</u>	<u>Page</u>
V.1     A comparison of shipping through the Sound destined for Amsterdam according to the Sound Toll Accounts with ship arrivals in Amsterdam according to the Galjootsgeldregisters for 1724. . . . .	818
V.2     A comparison of shipping through the Sound destined for Amsterdam according to the Sound Toll Accounts with ship arrivals in Amsterdam according to the Galjootsgeldregisters for 1725. . . . .	819
V.3     A comparison of shipping through the Sound destined for Amsterdam according to the Sound Toll Accounts with ship arrivals in Amsterdam according to the Galjootsgeldregisters for 1784. . . . .	820
V.4     A comparison of shipping through the Sound destined for Amsterdam according to the Sound Toll Accounts with ship arrivals in Amsterdam according to the Galjootsgeldregisters for 1785. . . . .	821
V.5     Passages of west-bound ships through the Sound from Russian ports to Holland and elsewhere according to the Sound Toll Accounts, 1715-1783 . . . . .	822
V.6     Percentage distribution of passages through the Sound from Russian ports to Holland and elsewhere according to the Sound Toll Accounts, 1715-1783. . . . .	824

LIST OF TABLES (Cont'd)

<u>Tables VI</u>		<u>Page</u>
VI.1	Shipping between Russian ports and Rotterdam, 1765-1822 . . . . .	826
VI.2	Rates of assurance on shipping between Dutch and Baltic (primarily Russian) ports from 1724- 1825 . . . . .	827

LIST OF GRAPHS

<u>Graphs I</u>	<u>Page</u>
I.1 Observed (*) versus Estimated (X) Registered Lastage of Registered Lastage of the ship and the Measured Lastage according to the charterparties . . . . .	76
I.2 Observed (*) versus Estimated (X) Registered Lastage of the Registered Lastage in timber lasts and the cargo capacity in rye lasts according to the charterparties . . . . .	77
I.3 Observed (*) versus Estimated (X) Cargo Lastage of the Cargo Lastage and the Measured Lastage according to the charterparties. . . . .	81
I.4 Observed (*) versus Estimated (X) Cargo Lastage of Cargo Lastage and the Cargo Capacity in rye lasts according to the charterparties. . . . .	83

LIST OF GRAPHS (Cont'd)

<u>Graphs II</u>	<u>Page</u>
II. 1      Shipping from the Baltic and Russia (Baltic ports only) to Amsterdam (1716 - 1824) . . . . .	829
II. 1.A    Shipping from Russia (Baltic & White Sea ports), Archangel & St. Petersburg to Amsterdam (1717 - 1822) . . . . .	830
II. 1.B    Shipping from Narva, Reval & Riga to Amsterdam (1716 - 1824) . . . . .	831
II. 1.C    Shipping from Estonia, Viborg, Frederikshamn & Courland to Amsterdam (1716 - 1824) . . . . .	832
II. 2 (1)   Proportions of Baltic shipping from Russia to Amsterdam according to size of cargo (1715 - 1825) . . . . .	833
II. 2 (2)   Proportions of cargo tonnage carried from Baltic Russia to Amsterdam according to size of cargo (1715 - 1825) . . . . .	834
II. 2.A (1) Proportions of shipping from St. Petersburg to Amsterdam according to size of cargo (1717 - 1822) . . . . .	835
II. 2.A (2) Proportions of cargo tonnage carried from St. Petersburg to Amsterdam according to size of cargo (1717-1822). . . . .	836
II. 2.B (1) Proportions of shipping from Narva to Amsterdam according to size of cargo (1719 - 1825) . . . . .	837
II. 2.B (2) Proportions of cargo tonnage carried from Narva to Amsterdam according to size of cargo (1719 - 1825) . . . . .	838
II. 2.C (1) Proportions of shipping from Riga to Amsterdam according to size of cargo (1715 - 1825) . . . . .	839
II. 2.C (2) Proportions of cargo tonnage carried from Riga to Amsterdam according to size of cargo (1715 - 1825) . . . . .	840

LIST OF GRAPHS (Cont'd)

<u>Graphs II</u>		<u>Page</u>
II. 3 (1)	Proportions of Baltic shipping from Russia to Amsterdam according to size of ship (1715 - 1825) . . . . .	841
II. 3 (2)	Proportions of shipping tonnage from Baltic Russia to Amsterdam according to size of ship (1715 - 1825) . . . . .	842
II. 3.A (1)	Proportions of shipping from St. Petersburg to Amsterdam according to size of ship (1717 - 1822) . . . . .	843
II. 3.A (2)	Proportions of shipping tonnage carried from St. Petersburg to Amsterdam according to size of ship (1717 - 1822) . . . . .	844
II. 3.B (1)	Proportions of shipping from Narva to Amsterdam according to size of ship (1719 - 1825) . . . . .	845
II. 3.B (2)	Proportions of shipping tonnage carried from Narva to Amsterdam according to size of ship (1719 - 1825) . . . . .	846
II. 3.C (1)	Proportions of shipping from Riga to Amsterdam according to size of ship (1715 - 1825) . . . . .	847
II. 3.C (2)	Proportions of shipping tonnage carried from Riga to Amsterdam according to size of ship (1715 - 1825) . . . . .	848
II. 4	Ship & tonnage movements from Russia (Baltic ports only) to Amsterdam (1716 - 1824) . . . . .	849
II. 4.A	Ship & tonnage movements from St. Petersburg to Amsterdam (1716 - 1822). . . . .	850
II. 4.B	Ship & tonnage movements from Narva to Amsterdam (1716 - 1824) . . . . .	851
II. 4.C	Ship & tonnage movements from Riga to Amsterdam (1716 - 1824) . . . . .	852
II. 4.D	Ship & tonnage movements from Viborg to Amsterdam (1716 - 1824) . . . . .	853



LIST OF GRAPHS (Cont'd)

<u>Graphs III</u>	<u>Page</u>
III.1 Ship & tonnage movements from Russian White Sea ports (primarily Archangel) & from St. Petersburg to Amsterdam (1717-1822) . . . . .	861
III.2(1) Proportions of shipping from the White Sea (primarily Archangel) to Amsterdam according to size of cargo (1717-1822) . . . . .	862
III.2(2) Proportions of cargo tonnage carried from the White Sea (primarily Archangel), to Amsterdam according to size of cargo (1717-1822) . . . . .	863
III.3(1) Proportions of shipping from the White Sea (primarily Archangel) to Amsterdam according to size of ship (1717-1822). . . . .	864
III.3(2) Proportions of shipping tonnage carried from the White Sea (primarily Archangel) to Amsterdam according to size of ship (1717-1822). . . . .	865
III.4 Ship & tonnage movements from Russian White Sea ports (primarily Archangel) to Amsterdam (1717-1822) . . . . .	866

LIST OF MAPS

<u>Map</u>		<u>Page</u>
1	Map of the eastern coast of the Baltic Sea, c. 1697 taken from, "Paskaart van de Oost-Zee" in J. Loots, <u>Paskaertboek</u> , Amsterdam, 1697 . . . . .	147
2	Map of approaches to Kronstadt and St. Petersburg, c. 1796-1801 . . . . .	159
3	Map of the Baltic coastline near Riga . . . . .	188
4	Map of the Dvina River channel from Riga to the Baltic . . . . .	190
5	Maps of the harbours and surrounding areas of the ports of Frederikshamn and Viborg . . . . .	205
6	Map of the harbour of Reval and surrounding area . . .	213
7	Map of Archangel and the White Sea region . . . . .	223
8	Map of the eastern section of the Gulf of Finland. . . .	302



## LIST OF ABBREVIATIONS

A. A. G. Bijdragen	Afdeling Agrarische Geschiedenis Landbouwhogeschool, Wageningen
A. B. D. M.	Archief Burgemeesters, Diplomatieke Missiven, G. A. A.
A. R. A.	Algemeen Rijksarchief 's Gravenhage
A. S. E. E. R.	American Slavic and East European Review
B. M. H. G.	Bijdragen en Mededeelingen Historisch Genootschap
Büsching's Magazine	Magazin für die neue Historie und Geographie angelegt von Dr. Anton Büsching, Hamburg, 1767-1771 and Halle, 1773-1793
B. V. G. O.	Bijdragen voor Vaderlandsche Geschiedenis en Oudheidkunde
C. M. R. S.	Cahiers du Monde Russe et Soviétique
Ec. H. Jrbk.	Economisch-Historisch Jaarboek
Ec. H. R.	Economic History Review
G. A. A.	Gemeente Archief Amsterdam
G. A. R.	Gemeente Archief Rotterdam
H. G.	Hansische Geschichtsblätter
J. Ec. H.	Journal of Economic History
J. M. H.	Journal of Modern History
Jrbk.	Jaarboek
M. N. V. Z.	Mededelingen van de Nederlandse Vereniging voor Zeegeschiedenis

LIST OF ABBREVIATIONS (Cont'd)

N.A.	Notariële Archieven, G.A.A. or G.A.R.
PA6	Archief van de Directie van de Moscovische Handel, G.A.A.
PA38	Archief van de Waterschout, G.A.A.
PA78	Archief van de Directie van de Oostersche Handel, G.A.A.
PA88	Archief Brants, G.A.A.
R.A.	Rechterlijk Archief, G.A.A.
Sc. Ec. H. R.	Scandinavian Economic History Review
S. E. E. R.	Slavonic and East European Review
TvG	Tijdschrift voor Geschiedenis

## PREFACE

In 1721 the Treaty of Nystadt put an end to the Great Northern War, the struggle between Sweden and Russia for control of the Baltic provinces in which the latter emerged victorious. While the war was still in progress, Peter I, Tsar of Russia, had begun the construction of St. Petersburg. The building of this port stressed the urgency of the desire of the Tsar to have Russia's commerce with Europe travel via her own ports and in her own ships in the Baltic. For the only all-Russian trade route with the West at that time was the White Sea route via Archangel. Other ports such as Viborg, Narva, Reval and Riga were ceded to Russia by Sweden. The result was that Russia now controlled all the principal trade routes by which her imports and exports were made with the West.

The Baltic region and Russia were the principal suppliers of commodities which were vital to the economies of the Western European countries. These were such items as rye, wheat, barley and other cereals as well as hemp, flax, timber, tar, pitch and other naval stores. The volume of this trade was so vast that the Dutch quite justifiably called it "the mother trade."<sup>1</sup>

At the same time in Western Europe, the Treaty of Utrecht in 1713 terminated the War of the Spanish Succession, the last of a long series of wars in which the Dutch, English, French and other European powers had been involved. By the end of this war, it had become apparent to all that although the Dutch Republic and Amsterdam in particular remained

the commercial centre of Europe, the Republic no longer was a first-rate naval power having been replaced in this respect by England. English shipowners and merchants under the protection of the Navigation Acts and the Royal Navy set out to surpass and replace their traditional Dutch competitors.

Still, during the first half of the eighteenth century more than 50% of the ships which carried Russia's exports to Western Europe were Dutch and of these Dutch ships all, except a handful, brought their cargoes to the Republic, primarily to Amsterdam. Even during the second half of the century, right up to the time of the Fourth Anglo-Dutch War, Dutch ships, while no longer commanding an absolute majority of shipping from Russia, still accounted for about 40% of all ships from Russia which carried cargoes through the Sound. And the Dutch market continued to absorb at least one-third of Russia's exports.<sup>2</sup>

Given the fundamental changes in the political and military relations of Russia with the Baltic and Europe, and the vital nature of the Baltic-Russia trade for the West, one would expect that these problems would have received ample attention from scholars in the form of extensive and detailed studies. This, however, is not the case. As a matter of fact, one of the outstanding features of eighteenth-century Dutch commerce with the Baltic and Russia is the noticeable disproportion between the importance ascribed to this trade in general histories and the specialized studies that have been done. In view of the great abundance of primary source material, the absence of monographs and, to a lesser degree, articles is the more striking.

With the exception of a few studies, Russo-Dutch trade relations between the Petrine era and the death of Alexander I have been a singularly neglected subject. The work of Jacob Scheltema, written more than a century and a half ago, was limited largely to events before and during the reign of Peter I.<sup>3</sup> The doctoral dissertation of Max Gideonse, written in 1932, dealt with eighteenth century Dutch trade with the Baltic as a whole and devoted just one chapter to Russia.<sup>4</sup> Apart from the works by Scheltema and Gideonse and a few articles by S. van Brakel and D.S. van Zuiden,<sup>5</sup> written at the beginning of the twentieth century, there are virtually no studies devoted to any aspect of Russo-Dutch relations in the eighteenth century.<sup>6</sup>

By contrast, the commercial, military and political developments between Europe and the Baltic and White Seas regions during the sixteenth and seventeenth centuries have been extensively treated by West and East European scholars alike. The works by Erik Amburger, Sven-Erik Aström, Artur Attman, Maria Bogucka, Aksel Christensen, E. Dunsdorf, Raymond Fisher, Simon Hart, R.W. Hinton, Pierre Jeannin, G. Jensch, Pieter Klein, Andrew Larsen, Ina Lubimenko, A. Ohberg, N.W. Posthumus, and T.S. Willan, to name a few, provide detailed and penetrating accounts of Baltic and Russian trade relations with Western Europe up to the time of Peter I.<sup>7</sup> It is true that in recent years, the commercial connections of eighteenth-century Russia with Western Europe in general and Holland in particular have begun to attract the interest of Russian scholars such as M.I. Belov, Vasili Doroshenko, P.I. Kozintseva and E. Vinter, but again these studies concentrate on the time of Peter I.<sup>8</sup> Also, German

scholars like Elizabeth Harder-Gersdorff and Christopher Menke have recently completed valuable studies on eighteenth-century trade of German ports such as Lubeck and Hamburg with Baltic Russia while Herman Kellenbenz has surveyed the trade of Archangel with Western Europe.<sup>9</sup> Yet the commerce of Russia's two principal and competing trading partners, namely, the Dutch and the English, remains an unexplored area of research.<sup>10</sup>

One of the main reasons for the lack of an overall appraisal of Dutch shipping and trade with Russia during the eighteenth century is the fact that very little is known about the pattern of shipping and the relative position of each of the Russian ports. The opening statement with which Aksel Christensen introduced his pioneering work on Dutch trade to the Baltic at the end of the sixteenth century applies equally to this study and deserves to be quoted here:

"The work here presented has been termed 'Studies.' By this term I want to emphasize that it is not a comprehensive and balanced monograph. My object has been quite different: that of providing positive and concrete information on this important trade route through the Sound in its true relations. The centre of gravity is in the quantitative determination. . . ." <sup>11</sup>

It is a remark which says much about the problem facing those engaged in research in the area of maritime economic history. Archival records where they exist tend to be massive because they recorded the numerous daily commercial transactions, the import and export duties, various shipping and harbour tolls, etc. As a result it is impossible for an individual researcher to encompass in a single study the whole spectrum of economic, diplomatic, military and financial developments between Holland

and Russia during the eighteenth century without preliminary investigation of various aspects of archival materials. In addition, the vacuum of detailed scholarly works in related areas such as eighteenth-century English or French trade with Russia prevents us from undertaking such a synthetic study. On the other hand, if we take a limited period such as the reign of a particular Tsar, the time span might be too short for any significant trends to emerge.

There are several reasons for choosing the time from the reign of Peter I to the death of Alexander I as a single historical period from the point of view of both Russian history and Dutch history. The case for the inclusion of the Napoleonic Wars and the reign of Alexander I as closing a series of historical developments which began with Peter I has been convincingly argued by scholars such as Marc Raeff.<sup>12</sup> On the side of the Dutch, the European wars at the end of the seventeenth century signalled that the "Golden Age" of the Republic was coming to an end. At the same time, the visits of Peter I to the Dutch Republic and his seizure of the eastern Baltic provinces marked the beginning of a new phase for Dutch trade with Russia. The creation of the Kingdom of the Netherlands and the overhaul of Dutch tariff and trade policies in the 1820's represented for the Dutch the end of one era and the commencement of another. Historically speaking, the assumption that Dutch trade with Russia from the time of Peter I to Alexander I should be treated as a single unit is therefore justified. Additional support for this is the fact that the major source for this study, namely, the Amsterdam Galjootsgeldregisters cover the same chronological period and reflect the major changes in

their trade.

Foreign trade of Russia was a passive and not an active trade. Merchants and ships from other countries took away her exports and brought her imports. The study of any branch of Russia's maritime commerce with Europe must therefore centre on those foreign merchants and shipowners who carried Russia's foreign trade, in our case the Dutch. For this reason the title of this dissertation is "Dutch Trade with Russia . . ." and not "Russo-Dutch Trade . . . ."

The main emphasis of this study is the presentation and analysis of data on ship movements as an indicator of the overall patterns of Dutch trade with Russia. The subtitle of this dissertation is therefore "A Quantitative Study in Eighteenth Century Shipping."

There are several reasons why, for the present, the decision was made to investigate this trade from the point of view of ship movements rather than commodities. First of all, official or semi-official commercial records, in particular records of tariffs, tolls or duties, are at times rendered almost totally useless because of the question of evasion and fraud. The judgement by Professor G.N. Clarke on the English commercial statistics may be applied almost unaltered to similar Dutch and Russian sources:

"The records of the inspectors-general of imports and exports record, however, imperfectly, only the trade which passed through the customs. They tell us nothing about the great quantities of goods which were smuggled. In the nature of the case it is impossible to invent any satisfactory way of correcting the figures to allow for these goods. Guesses were sometimes made as to the extent of smuggling . . . but we have no way of knowing whether these estimates



are anywhere near the truth. This uncertainty is limited only by the fact that only certain kinds of goods were smuggled in great quantities. The quantity was greater when the tax was higher and when the goods were portable and easily concealed. . . .

Nor is that all. It might be supposed that the proportion of smuggled goods that passed the customs would remain fairly constant, so that, even without knowing the quantities of goods for each year, we could approximately trace the rise and fall in these quantities from one year to another. Unfortunately it is generally agreed that heavy increases of duties, and still more prohibitions, increased the rewards and therefore the prevalence of smuggling, while large reductions of duties decreased it. We can therefore trace the fluctuations in the movements of heavily taxed or prohibited goods only within each period of the commercial policy affecting them.<sup>13</sup>

The Russian government, like all other governments at that time, was cognisant of large scale evasion and fraud at the customs office. Officially it admitted an evasion or fraud of 20%.<sup>14</sup> Scholars who have studied Russia's external commerce are even more severe and estimate the evasion of customs as high as 90%, concluding that as a source for the study of Russia's foreign trade the customs accounts are next to worthless since these records conceal rather than disclose the real extent of trade.<sup>15</sup> A similar problem exists for those studying the foreign trade of Holland. Evasion and fraud in the customs office was considered to range from 20 to 50% and even as high as 80%.<sup>16</sup>

Even if somehow a satisfactory solution could be found to the problem of customs evasion which took place either through outright smuggling or the underdeclaration of the cargo, there remains the question of accessibility and existence of sources on imports and export. On the side of the Dutch, it suffices to say that a fire in 1843 destroyed most of the

Dutch admiralty and customs accounts and only the yearly summaries have survived. These summaries, however, state only the yearly totals of revenue collected and do not provide any breakdown by commodity, or port of origin and destination. As a matter of fact, except for a few scattered records, no Dutch sources exist outside those utilized in this thesis which give a breakdown of the number of ships to and from Holland by port of origin or destination.<sup>17</sup>

The situation is not so bleak for Russia. The works by M.D. Chulkov, M.N. Firsov, J. Kulischer and Heinrich Storch are based on the official customs figures which are still available.<sup>18</sup> But, they did not solve the problem of fraud and evasion and, do not tell us much of the country or port of origin and destination of the commodities traded. Only by comparing the original Russian sources on a case by case basis over a long period of time with other similar sources such as the Sound Toll Accounts and private merchant archives will it be possible to estimate the percentages and fluctuations of fraud.<sup>19</sup>

In addition, the export or import by Russia of certain key commodities should properly be studied in the context of the wider Baltic-European-Atlantic system. For example, the examination of Russia's iron exports to Holland necessitates a parallel study of iron exports from Sweden while investigations into commodities such as grain and timber have to take into account that these were also exported from the other Baltic nations and even from North America. And the picture is much the same for many other commodities.

Finally, in the light of the "broken East-West connection" in Nina Bang's compilation of the Sound Toll Accounts, data on commodity movements from each of Russia's Baltic ports can be derived only from the original Sound Toll Accounts with great difficulty.<sup>20</sup> The preparation by Hans Chr. Johansen of a source edition of the Sound Toll Accounts for 1784-1807 on magnetic tape will be completed in a few years.<sup>21</sup> Thus, it would seem that a study of eighteenth-century Dutch trade with Russia which focuses on commodity movements and price formation should be undertaken as a sequel to this present study which deals with ship movements. This does not mean, however, that commodity movements as summarized in the Bang volumes or presented in other works have been neglected but they are peripheral to this dissertation. Besides, the works of M. Gideonse, J.A. Faber, Pierre Jeannin, Frits Snapper, W.S. Unger and A.M. van der Woude, to name a few, provide sufficient information for the moment as to what were the major commodities and shifts in commodities that the Dutch traded with the Baltic region including Russia.<sup>22</sup>

Therefore the present study has as its centre of gravity several quantitative or quantifiable sources of which the Amsterdam Galjootsgeldregisters form the core or leading element of the analysis. Other sources are utilized to determine the reliability of the Galjootsgeldregisters as an indice of Dutch trade with Russia. One of the major assumptions in this dissertation is, therefore, that a relation exists between ship movements and commodity movements and that for studying the quantitative aspects of trade, information on shipping does provide an accurate reflection of

changes and developments both absolute and relative in maritime commerce. Very little is known about the progress of Dutch maritime trade with Russia and the roles played by the individual Russian and Dutch ports in the eighteenth century. By studying the ship movements, it will be possible to delineate some of these major developments and, at the same time, provide a solid frame of reference for future studies in this area.

The last decade has witnessed a veritable explosion in the use of statistical methods and approaches by historians. To a certain degree, this dissertation is a reflection of these trends. The insertion in the title of the words, "A Quantitative Study," does not, however, imply any value judgement regarding the quantitative or qualitative approach to the study of history. In the context of this dissertation these words denote simply that because of the existence of voluminous source material of a quantitative nature, the first practical step for studying Dutch trade with Russia is to provide a frame of reference which outlines some of the main features of certain maritime aspects of this trade. The statistical methods and analysis used in this dissertation are what might be called "descriptive statistics," the level of statistical analysis being of a descriptive rather than interpretive order with the main tool being the percentage.

To some this may seem surprising as the data base is immense by any standard and the long continuity of the time series a rarity among historical sources. Nevertheless, the economic, political, military and climatological developments which took place while these quantitative sources were being created are of much greater "significance" in explain-

ing the quantitative data than that which might be obtained by advanced statistical analysis. In addition, it is not possible to build a hypothetical analytical model on the basis of only Dutch-Russian commercial relations or use such analytical tools as the counterfactual hypothesis. Such an attempt would be possible only if one had at his disposal similar information on shipping and trade of Russia with the rest of the Baltic as well as with England, France, the Iberian Peninsula, the Mediterranean and, for later in the eighteenth century, even North America.

The term "A Quantitative Study" as applied to the sources can have two meanings. It can mean the study of a series of uniform quantifiable data or the study of a large number of individual documents which contain certain common quantifiable elements. Both meanings are applicable here. In the first category, that of series of quantitative data, fall such sources as the Amsterdam Galjootsgeldregisters, the Sound Toll Accounts and the Rotterdam Zeetijdingen. In the second category, that of individual documents containing quantifiable elements, belong, on the one hand, the notarial acts such as the charterparties and ship-declarations, and, on the other, the judgements in general average of the Court of Marine Assurance, correspondence of the merchants, bills of lading and marine assurance policies.

Foremost among the sources utilized in this study are those which are located in the Amsterdam City Archives. During the eighteenth century Amsterdam continued to be the leading city in the Dutch Republic. The great commercial and financial power that Amsterdam possessed nationally as well as internationally meant that copies of consular reports, foreign

trade and tariff regulations and almost every proposal or complaint concerning commerce were sent to Amsterdam and can be found there. The City Archives also contain literally millions of notarial acts many of which pertain to Dutch shipping and trade with Russia. The records of the two commercial colleges which looked after the Russian and Baltic trades are located there. All this makes Amsterdam the logical base from which to launch a study such as this one. Further, there are copies of most of the trade and tariffs regulations, edicts concerning monopolies, prohibitions and other ukases issued by the Russian government concerning trade which compensate for the lack of research in the Russian archives proper. Other sources which were utilized are located in the Dutch National Archives and the City Archives of Rotterdam. The manuscript and rare book collections of the universities of Leiden and Utrecht as well as those in the National Archives and Royal Library of Denmark were also consulted.

Almost all the sources employed in this dissertation have never been used before and the few that have been, not in such great detail. The first part of this thesis is therefore devoted to the introduction and evaluation of these sources, specifically those of a quantitative nature. The principal primary source, namely, the Galjootsgeldregisters, are introduced as are the other quantitative sources. The historical origins of these sources and the problems of interpretation and evaluation posed by them are discussed. Other sources such as the notarial archives, the judgements in general average as well as the archives of merchants and shipowners are presented in order to obtain an insight into the structure and nature of

Dutch shipping and trade with Russia. Knowledge of how the merchants and shipowners dealt with problems such as import or export prohibitions and shipping during times of war is essential for the understanding of fluctuations and variations which are shown in the tables and graphs based on the quantitative data.

Since this is the first time that the Galjootsgeldregisters are used in this fashion, considerable attention has been paid to the problem of defining the parameters of the variables in this source. For if this study is to present an outline of Dutch shipping and trade with Russia for such a long period of time, it is of vital importance that the data derived from the Galjootsgeldregisters and other similar sources can withstand criticism. If, for example, it is later discovered that for a certain period approximately 20% of the ships that according to the Galjootsgeldregisters sailed from Riga to Amsterdam actually had come from St. Petersburg, this would have profound consequences on the evaluation of the role played by this port in Russia's foreign commerce and on the assessment of the success of Peter I's policy in making St. Petersburg the primary port of Russia. If the parameters of the variables are not defined correctly, conclusions derived from the data even though statistically quite correct can in fact be misleading and even erroneous. The recent work by Robert Fogel and Stanley Engerman, while being a pioneering study both methodologically and historically on American slavery, has nevertheless seen some of its findings successfully challenged because some of the parameters were weakly defined.<sup>23</sup>

Two methods are used for the testing and defining of the Galjoots-geldregister variables. The first consists of taking what can be considered random samples of disparate sources, each of which nevertheless includes information similar to that contained in the Galjootsgeldregisters. While the origin and nature of each of these sources is different, they all pertain to individual transactions of merchants and ship owners.

The second method consists of a quantitative comparative analysis of the Galjootsgeldregisters with a source of a similar quantitative nature, namely, the Sound Toll Accounts. These Accounts constitute the largest, most important and longest continuous source for the study of the economic history of Europe from the fifteenth to the mid-nineteenth centuries. Except for a few comparisons with individual scattered port books, the Sound Toll Accounts have never been tested against a source of a similar nature. A comparative analysis of the Galjootsgeldregisters with these Accounts will, therefore, not only be of value for the evaluation of the variables of the Galjootsgeldregisters but also present for the first time an insight into the overall reliability of the Sound Toll Accounts. The time-consuming character of such an analysis limited this comparison to the taking of two two-year samples. Even so, over 5,000 ship movements were examined and the results obtained were sufficient to answer some very important questions on the manner in which the Galjootsgeldregisters should be evaluated. The testing of these variables will be of assistance also in providing solutions to some of the basic problems of shipping in general in the eighteenth century.



Having thus gained a perception of the nature and structure of shipping to and from Russia, and the mode in which the quantitative data should be interpreted, the second part of this dissertation applies this data to the study of Dutch trade and shipping with Russia.

The statistical information furnished by the Galjootsgeldregisters and other sources has been utilized to give a geographical breakdown on the number of ships, the size of the ships and the size of the cargoes of shipping from the Russian ports to Amsterdam. Though the organizational structures and methods of trade were quite similar, each of the Russian ports played a distinct and separate role in Russia's trade with Holland. The tabular and graphic portraits based on over 55,000 individual ship movements offer the characteristic features of shipping from each of the Russian ports. This study contains over 450 pages of tables and graphs. They are all original and, with the exception of two tables, freshly constructed from archival sources.<sup>24</sup> The shipping and trade from each of the Russian ports, starting with St. Petersburg, has been examined. Russia's commerce via the White Sea ports, primarily Archangel, is also scrutinized. And since the Sound Toll Accounts do not apply to Archangel this is the first time that a quantitative appraisal of shipping on the Archangel route is presented and a series of tables and graphs prepared which can be compared with those drawn up for Russia's Baltic ports especially St. Petersburg. It will, therefore, be possible to judge whether, as far as the Dutch were concerned, Peter I's policy of diverting the Archangel trade via St. Petersburg was successful and if and when St. Petersburg became the leading port for Dutch trade.

Finally, this dissertation provides a quantitative appraisal of Dutch shipping in the wider context of economic and military developments in the Baltic and Europe. It has sought to provide some insight into the basis for Dutch-Russian relations during the eighteenth century and the changes that took place both in shipping and the commercial methods used by the Dutch in their trade with Russia. The importance to the Dutch of the shipping from Russia and the increasing role played by Rotterdam, hitherto totally neglected, is also discussed. Specific attention is paid to the reaction of the merchant community to price fluctuations, wars and the problems of neutral shipping. The causes for the decline and changing nature of Dutch trade with Russia are also investigated.\*

At this point, I would like to thank those who have helped make this dissertation possible. To Professor Mladenovic, my research director, I am very much indebted. It was he whose vivid grasp of history first aroused in me an interest in the history of Russia and the Baltic and who suggested eighteenth-century Russo-Dutch relations as a topic for investigation. His encouragement and support enabled me to continue my graduate studies and his rigorous criticism and advice do honour to the professorial profession.

This thesis is for the greater part the result of archival research. Without the assistance of Dr. Simon Hart of the Amsterdam City Archives,

---

\*The spelling of place names and the geographical demarcations are based on the coding system as presented in Appendix A. All foreign language quotations except those in French have been rendered into English by the author. The Gregorian calendar has been used throughout unless otherwise noted. Russian titles and names have been transliterated from the Cyrillic into the Latin alphabet according to the Library of Congress system with diacritical marks being omitted.

this dissertation may never have come to fruition. His generous help, advice and unselfish sharing of a vast quantity of source material that he has gathered for his own research are much appreciated. I am also indebted to Dr. Frits Snapper for his many helpful suggestions and assistance in coding of the data presented in Tables IV. I would also like to thank the staff of the City Archives of Amsterdam and Rotterdam, of the National Archives of both Denmark and the Netherlands and of the libraries of the Universities of Amsterdam, Leiden and Utrecht. The cooperation of the McGill Inter-Library Loans Department and especially the University Printing Service must also be stressed.

The financial support of the Government of Quebec through a Post-Graduate Fellowship, the research grants received from the McGill University Social Sciences Research Committee, the Interuniversity Centre for European Studies (Montreal) and the Directie van de Oostersche Handel (Amsterdam) as well as the assistance of Ian Brown, Mario Labelle and the McGill University Computer Centre are gratefully acknowledged.

To Margaret Blevins goes my appreciation for her help in preparing the manuscript. All typographical errors or omissions are my responsibility.

Last, but foremost in my mind, I am indebted to my wife, Jocelyne, who sustained me in the broadest sense of the term throughout the genesis of this dissertation.

Footnotes — Preface

<sup>1</sup>A.R.A., Resolutie van de Staten van Holland, 18 August 1714.

<sup>2</sup>See Table V.6. The term "Dutch ships" in the context of the Sound Toll Accounts refers to ships commanded by a captain whose domicile was a Dutch port.

<sup>3</sup>Jacob Scheltema, Rusland en de Nederlanden beschouwd in derzelve wederkeerige betrekkingen, 4 vols., Amsterdam, 1837-1839.

<sup>4</sup>Max Gideonse, Dutch Baltic Trade in the Eighteenth Century, unpublished Ph.D. dissertation, Harvard University, 1932.

<sup>5</sup>S. van Brakel, "De Directie van de Oostersche Handel," B.V.G.O., 4th ser., 9(1910)329-364, and "Statistische en andere gegevens betreffende onzen handel en scheepvaart op Rusland gedurende de 18de eeuw," B.M.H.G., 34(1913)350-404; D.S. van Zuiden, "Nieuwe Bijdragen tot de kennis van Hollandsch-Russische relaties in de 16e-18e eeuw. Bronnen-publikatie uit de Amsterdamse notaris protocollen," Ec.H.Jrbk., 2(1916)258-295.

<sup>6</sup>Aksel Christensen, Dutch Trade to the Baltic about 1600. Studies in the Sound Toll Register and Dutch Shipping Records, Copenhagen, 1941, pp. 19-21 and 142; Walter Kirchner, Commercial Relations between Russia and Europe, 1400-1800: Collected Essays, Bloomington, 1966, p. 25; J.G. van Dillen, Van Rijkdom en Regenten, Handboek tot de economische en sociale geschiedenis van Nederland tijdens de Republiek, 's Gravenhage, 1970, p. 348. Reviews of periodical literature underscore the necessity for basic studies in the maritime commerce of the Baltic and North Seas. See, for example, Paul Heinsius, "Schiffahrt und Schiffbau," H.G., 92(1974) 106-107.

<sup>7</sup>Erik Ambufger, Die Familie Marselis, Giessen, 1957; Sven-Erik Aström, From Stockholm to St. Petersburg. Commercial factors in the Political Relations between England and Sweden, Helsinki, 1962, and From Cloth to Iron. The Anglo-Baltic Trade in the late Seventeenth Century, Helsingfors, 1963; Artur Attman, Den Ryska Marknaden i 1500-talets baltiska politik 1558-1595, Lund, 1944, and The Russian and Polish Markets in International Trade, 1500-1650, Göteborg, 1973; Maria Bogucka, "Handel Baltycki Amsterdamu i pierszej potowie XVII w swietle kontraktow fractowych," Zapiski Historyczne, 34(1969)2:1-33, and "Amsterdam and the Baltic in the First Half of the Seventeenth Century," Ec.H.R., 2nd ser., 26(1973)433-447; Aksel Christensen, Dutch Trade to the Baltic about 1600, Copenhagen, 1941; E. Dunsdorf, Der Aussenhandel Rigas im 17. Jahrhundert, Riga, 1938; Raymond Fisher, The Russian Fur Trade 1550-1700,

(Footnotes - Preface)

Berkeley, 1943; Simon Hart, "De handels betrekkingen van Amsterdam met Archangel en Lapland (Kola) in de 17e eeuw," Nederlands Archievenblad, 73(1969)66-80, and "Amsterdam Shipping and Trade to Northern Russia in the Seventeenth Century," M.N.V.Z., 26(1973)5-30 and 105-116; R.W. Hinton, The Eastland Trade and the Common Weal in the Seventeenth Century, Cambridge, 1959; Pierre Jeannin, "La pratique du commerce avec la Russie à Narva au début du XVII siècle," paper presented at the Vth International Congress on Economic History, Leningrad, 1970; G. Jensch, Der Handel Rigas im 17. Jahrhunderts, Riga, 1930; Pieter Klein, De Trippen in de 17de eeuw. Een Studie over het ondernemers gedrag op de Hollandsche stapelmarkt, published Ph.D. dissertation, University of Rotterdam, 1965; Andrew Larsen, Commerce in the Baltic from 1500 to 1700 with Special Reference to the Decline of the Hanseatic League, unpublished Ph.D. dissertation University of California at Berkeley, 1934; Ina Lubimenko, "The Struggle of the Dutch with the English for the Russian Market in the Seventeenth Century," Royal Historical Society Transactions, 4th ser., 7(1924)27-51, and Les relations commerciales et politiques de l'Angleterre avec la Russie avant Pierre le Grand, Paris, 1933; A. Öhberg, "Russia and the World Market in the Seventeenth Century," Sc. Ec. H. R., 3(1955)127-162; N.W. Posthumus, De Oostersche Handel te Amsterdam. Het oudste bewaarde koopmansboek van een Amsterdamse vennootschap betreffende de handel op de Oostzee, Leiden, 1953; T.S. Willan, The Early History of the Muscovy Company, 1553-1603, Manchester, 1956. The above list is by no means exhaustive and one should check the bibliography for additional works by the same or other authors on pre-eighteenth century Russian and Baltic commerce.

<sup>8</sup>M.I. Belov, "Rossiia i Gollandiia v poslednei chetverti XVII v." Mezhdunarodnye sviazi Rossii v XVII-XVIII vv., Moscow, 1966, pp. 58-83; Vasili Doroshenko, "Tseny i Mery v Rige: pribyli rzhskikh kuptsov ot zapadno-dvinskoi trgovli v kontse XVII veka," offprint, 1974, and "Riga and its Commercial Area in the 16-18th Centuries," paper presented at the Vth International Congress on Economic History, Copenhagen, 1974; P.I. Kozintseva, "Vneshnetorgovii oborot Archangelogorodskoi iarmarki i ee rol v razvitii vserossiiskogo rynka," Issledovania po istorii feudalno-krepostnitseski rossii, Academiia Nauk CSSR, Moscow, 1964; E. Vinter, "Niderlandy i Rossiia nakanune Svernoi voyny, Nikolai Vitsen i Petr. I," Mezhdunarodnye sviazi Rossii v XVII-XVIII vv., Moscow, 1966, pp. 291-302.

<sup>9</sup>Elizabeth Harder, "Seehandel zwischen Lübeck und Russland im 17./18. Jahrhundert nach Zollbüchern der Novgorodfahrer," Zeitschrift des Vereins für Lübeckische Geschichte und Altertumskunde, 41(1961)43-104 and 42(1962)5-55 and (also by the same author, now Elizabeth Harder-Gersdorff) "Handelskonjunktoren und Warenbilanzen im lübeckischrussischen Seeverkehr des 18 Jahrhunderts," Vierteljahrschrift für Sozial und Wirt-

(Footnotes - Preface)

schaftsgeschichte, 57(1970)15-45 and "Changes in the Structure of Russian Exports to the Baltic in the Eighteenth Century," paper presented at the Vith International Congress on Economic History, Copenhagen, 1974; Christopher Menke, Die wirtschaftlichen und politischen Beziehungen der Hansestädte zu Russland im 18. und frühen 19. Jahrhunderts, unpublished Ph.D. dissertation, University of Göttingen, 1959; Herman Kellenbenz, "The Economic Significance of the Archangel Route (from the late 16th to the late 18th centuries)," Journal for European Economic History, 2(1973) 541-581. A survey work which should be mentioned here is Walter Kirchner's Collected Essays.

<sup>10</sup>Two dissertations currently in progress in England on Anglo-Russian relations are P.H. Clendenning, Anglo-Russian commercial policy and diplomatic relations 1725-1787 at Cambridge under the direction of Charles H. Wilson, and A.J. Nurnberg, Anglo-Russian relations during the Napoleonic Wars at London University under the direction of Hugh Seton-Watson. According to the authors both dissertations stress the political and diplomatic aspects rather than that of shipping and trade. At the University of Leiden, Piet de Buck is completing a dissertation dealing with the diplomatic and cultural relations and, to some degree, that of trade between Holland and Russia from the early seventeenth century to the end of the Petrine era.

<sup>11</sup>Christensen, p. 13.

<sup>12</sup>Marc Raeff, Imperial Russia 1682-1825. The Coming of Age of Modern Russia, New York, 1971.

<sup>13</sup>G.N. Clark, Guide to English Commercial Statistics, 1697-1782, (Royal Historical Society, Guides and Handbooks No. 1), London, 1938, p. 34.

<sup>14</sup>G.A.A., A.B.D.M. 31. Missive from Secretary Swart, St. Petersburg, to the Burgomasters of Amsterdam, received 4 August 1768. It contains an Appendix titled Handelsverordering der Stad Riga which was issued by the Russian Senate by command of Catherine II, December 1765. Article 7 mentioned the "great illegalities" at the customs office and instructed the customs officers to assess all goods at at least 20% above their declared value for duty purposes.

<sup>15</sup>Kirchner, Collected Essays, p. 9; Heinrich Storch, Historisch-Statistisches Gemälde des Russischen Reichs, vol. 1, Riga, 1797, p. 127; P. van Woensel, Beschrijving van Rusland, Haarlem, 1804, p. 441. Storch noted that some of the increase in eighteenth-century export figures for

(Footnotes - Preface)

Russia was due to a rise in prices rather than an increase in the volume of goods. In addition the increase in export figures may have been caused by changes in the exchange rate of the ruble.

<sup>16</sup>J.C. Westerman ("Statistische gegevens over den handel van Amsterdam in de zeventiende eeuw," TvG, 61(1948)4-5) placed the customs evasion at 20%. J.G. van Dillen felt that this was more of the order of 50% ("Naschrift," TvG, 61(1948)16), while Johannes de Vries puts the percentage of fraud at the customs at 40% for Amsterdam, 30% for Rotterdam and at 80% in Zeeland (De economische achteruitgang der Republiek in de achttiende eeuw, 2nd ed., Leiden, 1968, pp. 21-23).

<sup>17</sup>The only other sources outside of this thesis which give a breakdown by port of departure for ships arriving at Amsterdam are the Amsterdamse Courant for 1734, 1739, 1741, 1742, 1743, 1744, 1750, 1752, 1753 and 1754 and the Nieuwe Nederlandsche Jaarboeken for 1776, 1778, 1781, 1783, 1784, 1788, 1790, 1791, 1792 and 1793. Even then only for the last ten mentioned years is the data complete. The data contained in these two sources have been presented in W.F.H. Oldewelt's article "De scheepvaartstatistiek van Amsterdam in de 17e en 18e eeuw," Jrbk. Amstelodamum, 45(1953)114-151.

<sup>18</sup>M.D. Chulkov, Istoriia Kratkaia Rossiiskoi Torgovli, Moscow, 1788 and his much larger and more valuable work, Istoricheskoe opisanie rossiiskoi kommertsii pri vsekj portakh i granitsakh . . ., 7 vols., Moscow, 1781-1788; N.N. Firsov, Pravitel'stvo i obshchestvo v ikh otnosheniakh k vnieschnei torgovli Rossii . . ., Kazan, 1902; J. Kulischer, Ocherk istorii rosskoj torgovli, St. Petersburg, 1923; Heinrich Storch, Historisch-Statistisches Gemälde des russischen Reichs am Ende des achzehnten Jahrhunderts (mit Supplementband), 8 vols., Riga-Leipzig, 1797-1803.

<sup>19</sup>Professor Doroshenko of Riga informed the author that many of the port books, customs accounts and private merchant ledger books containing bills of lading on the eighteenth century to and from that city have survived and would lend themselves to such a comparative analysis.

<sup>20</sup>The original Sound Toll Accounts do give breakdowns of the commodities carried by each ship that entered or left the Baltic as well as the port of departure and destination of each ship.

<sup>21</sup>For a description of this project see Hans. Chr. Johansen, A Preliminary Manual to the tapes containing a source edition of the Sound Toll Accounts 1784-1807, University of Odense, 1973, mimeographed.

(Footnotes - Preface)

<sup>22</sup>Gideonse, pp. 57-220; J.A. Faber, Drie Eeuwen Friesland. Economische en sociale ontwikkelingen van 1500 tot 1800, published Ph.D. dissertation, University of Utrecht, 1972, pp. 269-293 and Graphs V.2 and 3, pp. 602-603, and his article, "Friesland en de Sontvaart," It Beaken, 21(1959)187-196; Pierre Jeannin, "Les comptes du Sund comme source pour la construction d'indices généraux de l'activité économique en Europe (XVIe-XVIIIe siècles)," Revue Historique, 231(1964)55-103 and 307-340; Frits Snapper, Oorlogsinvloeden op de Overzeese Handel van Holland 1551-1719, published Ph.D. dissertation, University of Groningen, 1959, pp. 303-315 and Appendices 5 and 6; W.S. Unger, "De publikatie der Sonttabellen voltooid," TvG, 71(1958)147-205 and a shorter version in English of the same article, "Trade through the Sound in the seventeenth and eighteenth centuries," Ec.H.R., 2nd ser., 12(1959)2:206-221; A.M. van der Woude, Het Noorderkwartier. Een regionaal historisch onderzoek in de demographische en economische geschiedenis van westelijk Nederland van de late middeleeuwen tot het begin van de negentiende eeuw, published Ph.D. dissertation, 3 vols., University of Utrecht, 1972, Chapter 6, Tables 6.1 - 6.5, pp. 376-406 and Graphs 6.1 - 6.4, pp. 803-806.

<sup>23</sup>Robert W. Fogel and Stanley Engerman, Time on the Cross. The Economics of American Negro Slavery, 2 vols., Boston, 1974. Due to errors of interpretation and inadequate testing of some of their sources, Fogel and Engerman were forced to revise quite drastically some of their most controversial assertions. For example, the percentage of black overseers on plantations was revised downward from 70% to 40%. The mean age of a slave mother at the birth of her first child was lowered from 22.5 years to 19.5. The 22.5 figure was important because the authors had used it to show that slave breeding was a myth. (See Fred Siegel, "Time on the Cross: A First Appraisal," Historical Methods Newsletter, 7(1974)4:299-301.

<sup>24</sup>One of the reasons for the large number of detailed tables and graphs is the realization that this information may serve as platforms for future and more detailed studies of the individual Russian ports. The preparation for processing by computer of data taken from manuscripts is very time consuming and expensive. When such data have been prepared they should be presented in a way such as to render unnecessary duplication of the preparation and programming process.



PART ONE: THE EVIDENCE—  
CRITICISM AND APPRAISAL OF THE AMSTERDAM  
GALJOOTSGELDREGISTERS AND OTHER SOURCES

## CHAPTER I

### THE SOURCES AND PROBLEMS OF INTERPRETATION

#### A. The Amsterdam Galjootsgeldregisters (GGR)

At the beginning of the eighteenth century, Dutch merchants and shipowners involved in trading and shipping with the Baltic region and Russia formed two organizations to promote and protect their trade and shipping interests. They were the Directie van den Moscovische Handel (Board of Directors for Moscovite Trade) from c. 1693 to 1828 and the Directie van des Oostersche Handel en Reederijen (Board of Directors for Baltic Trade and Shipping) founded c. 1702 and still in existence. The first group of merchants and shipowners, the D.M.H., looked after commerce with Archangel and other White Sea ports, and after 1753 they were given permission to include the trade with St. Petersburg and Kronstadt. The second group, the D.O.H., promoted the interests of those trading with the Baltic region. Both organizations originated as a result of the Nine Years War (1689-1698) when representatives of the merchant-shippers consulted with and pressured various levels of the Dutch government to protect and convoy the merchant fleets.<sup>1</sup> The Directors themselves organized convoys and repeatedly sent advisory galliots (galjooten) to inform the merchants and ship-captains of the effects, both actual and possible, on trade due to changes in the European political or military situation. In addition, the Directors protected the general interests of their respective trades and looked after the Dutch who had settled in

those regions.<sup>2</sup>

Until late in the XVIIth century, Dutch merchants often formed ad hoc committees to protect their interests in time of war. The Nine Years War (1689-1698), the Great Northern War (1700-1721) and the War of the Spanish Succession (1701-1713) drove home the need for a more permanent body, preferably one which would have some official authority to protect the interests of those trading in the Baltic and White Sea regions.<sup>3</sup> Such an organization could put pressure on the various Admiralties<sup>4</sup> and the States-General<sup>5</sup> to ensure adequate protection of merchant shipping. At the outbreak of the Nine Years War, there was widespread concern that the Admiralty of Amsterdam was either not willing or not able to provide warships for convoy duty or to send advisory galjots. It was the custom for the merchantmen sailing in convoy to pay for the expenses of the accompanying naval ships, but it was not so easy to distribute the costs of sending the galjots. These problems led to the creation of an ad hoc group which called itself the Gecommitteerden tot den Oosterschen Handel (Delegates for the Baltic Trade). The Gecommitteerden, therefore, acted as a liaison between the Admiralty of Amsterdam and the merchant and shipowning community. It decided whether a galjot should be sent and collected the monies to cover expenses through the levy of galjoots-geld. These galjots were sent to inform ships going to and coming from the Baltic on such vital matters as the outbreak of war, the blockade of ports and the activities of pirates and privateers. At the end of the Nine Years War, after paying all expenses, a sum of f.827:12

remained on the account of the Gecommitteerden.<sup>5</sup> Not much more is known about this committee until 1702 when it held elections for new members. The question as to whether the Gecommitteerden also included the reederijen<sup>6</sup> (shipowners) was answered by the declaration that trade and shipping were een lichaam (one body).<sup>7</sup> Protests concerning the representativeness of the delegates chosen in 1702 led to a more formal structuring in 1706. All known merchants and shipowners trading in the Baltic were registered and the committee henceforth consisted of three merchants and three shipowners.<sup>8</sup> Yet the Gecommitteerden were still without any official recognition or authority. It was not until 10 April 1717 that the Burgomasters of Amsterdam acceded to requests that the Gecommitteerden be officially recognized as "delegates and directors of the Baltic trade."<sup>9</sup> The title Gecommitteerden was replaced by the more imposing Directeuren and the official name of the body became the Directie van de Oostersche Handel en Reederijen.<sup>10</sup>

In order to defray the expenses involved, the Directors obtained the right to levy a small sum of money on "Dutch"<sup>11</sup> ships and their cargoes sailing from the Baltic and the White Seas to Amsterdam. This levy, called lastgeld or galjootsgeld, was collected from the beginning of the eighteenth century until 1823 by the D.M.H.,<sup>12</sup> and to 1825 by the D.O.H.<sup>13</sup> Fortunately, the archives of both the D.M.H. and D.O.H. have survived (with minor gaps) and are presently kept in the Amsterdam City Archives. As a result, the records of the ships which paid the galjootsgeld are still available.<sup>14</sup> Basically, each entry contains the following information: the date of arrival, the port of departure, the homeport of the captain, the

registered lastage<sup>15</sup> of the ship, the lastage of the cargo carried, the name of the captain and the name of the ship.<sup>16</sup> The Galjootsgeldregisters contain data on approximately 70,000 ships which sailed from the Baltic Sea to Amsterdam and on about 3,000 from the White Sea. Of those that sailed from the Baltic, nearly 25,000 came from Russian ports. In this study, all the ship movements from the Russian ports (both Baltic and White Sea) have been coded, punched on to cards and placed on magnetic tape.<sup>17</sup> In addition, the data on ship movements from all Baltic ports between 1709 and 1824 at five-year intervals (every fourth and ninth year in each decade) were also placed on magnetic tape for processing and analysis.<sup>18</sup>

Already in 1704, the Admiralty of Amsterdam had given the Gecommitteerden permission to collect from "all ships"<sup>19</sup> coming from the Sound a levy of one stuiver<sup>20</sup> on each last of cargo and one-half stuiver on each last according to the official lastage of the ship.<sup>21</sup> This permission was renewed in 1707 and 1709 but only on 10 April 1717 did the Burgo-masters establish the galjootsgeld levy on a more permanent basis.<sup>22</sup>

In 1751 a general reorganization of Dutch trade was being planned by the Stadhouder Willem IV.<sup>23</sup> Among his proposals was the idea to lower or abolish many tolls in order to stimulate trade. The D.O.H. decided not to resist an eventual halt to the collection of the galjootsgeld. Willem IV's plans did not come to fruition and it was not until 1 September 1825 that the galjootsgeld was abolished.<sup>24</sup>

During this whole period, only two changes were made in the levying of the galjootsgeld. The first occurred in 1753 when the D.O.H. finally

acquiesced to repeated demands by the D.M.H. that the trade from St. Petersburg should be considered as part of the Muscovy trade together with that from Archangel and other White Sea ports. Until well into the eighteenth century, Russia was referred to by the Dutch as Muscovy and, as far as commerce was concerned, was limited by definition to Russian goods which travelled via the White Sea (Archangel) route. When Peter I built St. Petersburg and tried to re-route the Archangel trade via his new port on the Baltic, a dispute arose among the D.O.H. and D.M.H. The argument was whether St. Petersburg, built in the former Swedish province of Ingria and not Muscovy proper, should be considered as part of the Baltic commerce or Muscovy commerce. The D.M.H. was of the opinion that St. Petersburg should be considered a Russian and not Baltic port and that the galjootsgeld received from ships sailing from thence should be allocated to them and not the D.O.H. Finally in 1753 the D.O.H. agreed to accept the view of the D.M.H. and the galjootsgeld levied on ships which sailed from St. Petersburg to Amsterdam was collected by the D.M.H.<sup>25</sup>

A problem of this nature had already arisen two centuries earlier during the reign of Ivan IV between the English Russia Company and the English Eastland Company. The Russia Company had received a monopoly on the then newly discovered Archangel route. Ivan IV's temporary conquest of part of Ingria extended to control of the east bank of the Velikaia River where just opposite to Narva he established the port of Ivangorod and diverted part of the Russian trade there. The Russia Company con-

sidered the new commerce as an extension of the Russia trade while the Eastland Company maintained that Ivangorod's commerce fell under their jurisdiction. An agreement whereby the Russia Company paid some compensation to the Eastland Company provided a solution. When Russia lost control of this part of Ingria and was once again cut off from direct contact with the Baltic the matter was dropped.<sup>26</sup>

The second change occurred in 1763 when the D.O.H. decided to reduce the galjootsgeld on cargo from one to one-half stuiver.<sup>27</sup> The actual collection of the galjootsgeld was made by the Admiralty of Amsterdam on behalf of the D.O.H. At the end of each quarter or year, the monies collected as well as the transcript taken from the Admiralty's ledgers were transferred to the D.O.H. The same procedure was used for collecting galjootsgeld on behalf of the D.M.H.<sup>28</sup> It is this collection of documents which has been named the Amsterdam Galjootsgeldregisters (GGR).

The exact date of the creation of the D.M.H. is not known, but it was certainly the visit of Peter I of Russia to Holland in 1697-98 which acted as a stimulus for the establishment of such a college.<sup>29</sup> In addition to a substantial contribution of public funds, the private sector was called upon to aid in defraying the expenses incurred by Peter's visit. Since it was reasonable to assume that those trading with Russia would benefit most from the tsar's goodwill, the merchant community floated a loan of f. 50,000 at 4%. It was to be paid off with the revenues obtained by levying a duty of 1/2% ad valorem on all goods exported to or imported from Russian (White Sea) ports by way of Amsterdam and other Dutch ports,<sup>30</sup>

an arrangement that had governmental sanction. It is not known how long this duty was levied or when the loan was paid off.<sup>31</sup> In 1717, when Peter visited Holland a second time, another loan of f. 65,000 was floated in the same manner.<sup>32</sup> In 1722, permission was given to levy the 1/2% duty on goods now coming from St. Petersburg. By 1728, the loans seem to have been paid off and the cash balance of f. 1,400 was transferred to the Heeren Commissarissen van den Moscovische Handel (Lords Commissioners for the Muscovy Trade).<sup>33</sup>

Surprisingly, this is the first time that this college is mentioned in the registers of the Amsterdam City Council. Later, in 1752, when the clerk of the city, Jacobus Noordkerk, was asked by the Burgomasters to provide information on the origin and official nature of the Directie van den Moscovische Handel—by then well-established—he could not find any legal basis for their existence or their levying galjootsgeld.<sup>34</sup> According to existing sources, it is apparent that certain dues or schippgeld of f. 20 per ship were collected as early as 1693 from "all ships"<sup>35</sup> sailing between Amsterdam and Archangel or other White Sea ports.<sup>36</sup>

It is not certain when the levying of last- or galjootsgeld first began. The existing Galjootsgeldregisters start with 1716/17 and the title given the ledgers is Rekeningh aengaende de Heeren Gecommitteerden wegens den Moscovische Handel en Reederijen . . . (Account concerning the Lords Delegates for the Muscovite Trade and Shipping).<sup>37</sup> In these Galjootsgeldregisters the actual title of Directeuren instead of Gecommitteerden does not appear until 1786. In that year Estienne LeJay who was bookkeeper



for the D.O.H. began to serve in the same capacity for the D.M.H. and he brought this usage with him.

Thus for the early period, there existed three different types of dues in trading and shipping with Russia, namely, the schippgeld of f. 20 per ship, the 1/2% import/export duty and the galjootsgeld. Of these three, only the 1/2% duty pertained also to Dutch ports other than Amsterdam.

Of the two colleges, the D.O.H. was undoubtedly the more important and active. The D.M.H. seems to have done little after the first quarter of the eighteenth century. Apart from the occasional assistance to the Protestant church in Archangel, the D.M.H. did little else than collect the galjootsgeld.<sup>38</sup> After 1797, its only expense was the annual salary of f. 100 to the bookkeeper.<sup>39</sup> The cash balance of f. 144,100 was transferred to the City of Amsterdam on 25 April 1823.<sup>40</sup>

The D.O.H., on the other hand, quickly became the representative and consultant to both the City of Amsterdam and the States-General in all matters concerning Baltic and Russian affairs. It even had an official agent stationed in The Hague and maintained direct correspondence with the envoys and consuls in the Baltic countries. The archives of the D.O.H. testify to the scope of their activities, which ranged from advising and pressuring the Dutch government on trade and diplomatic relations with the Baltic powers to providing lighters for Dutch ships when unloading at Riga.<sup>41</sup> On 29 September 1825, the levy of galjootsgeld by the D.O.H. was abolished as part of a general reduction in tariffs by the Dutch king

in order to stimulate trade.<sup>42</sup>

It was only at the beginning of the twentieth century that the existence of the archives of the D.M.H. was noted by the Dutch historian S. van Brakel. He immediately realized the importance of the Galjootsgeld-registers of the D.M.H. for the study of eighteenth-century Dutch shipping from Russia. Subsequent research by Brakel revealed the existence in private hands of the archives of the D.O.H. and the Galjootsgeldregisters of this college. According to Brakel, the GGR give data on all ships whose home was Holland and which sailed from the Baltic or White Seas to Amsterdam.<sup>43</sup> Thus Brakel was of the opinion that the GGR data pertained to all Dutch-owned ships. Consequently he found nothing unusual about the fact that the GGR contained the names of captains whose homeport was not Dutch.<sup>44</sup> In addition, Brakel concluded that the galjootsgeld levied on the lastage of cargo was paid by the merchant, while that levied on the lastage of the ship was paid by the owner of the ship.<sup>45</sup> The GGR seem to support this interpretation of Brakel as the columns on the right-hand side of the earlier ledgers are clearly titled goederen (cargoes) and reederij (ship-owners).<sup>46</sup>

The only statistical work done on the GGR by Brakel was on the records of the D.M.H.<sup>47</sup> He compiled yearly totals of the number of ships coming from Archangel and other White Sea ports and after 1753 also from St. Petersburg and Kronstadt. He divided the ships into five different size categories according to the lastage of the ship and gave yearly totals for the lastage of cargo carried. Brakel noticed that for

almost all the years for which he had data the lastage of the cargo carried was much greater than that which the ship could carry according to its registered lastage. He attributed this to be ancient shipping practice of underrating the registered lastage of a ship and the primitive methods used for measuring ships.<sup>48</sup> Brakel did not pursue this question nor did he undertake any statistical work on the GGR of the D.O.H.<sup>49</sup>

In 1932, the American economic historian Max Gideonse made use of the archives of the D.O.H. but limited his study to presenting a table of the income of the D.O.H. and a table of the number of ships from fifteen of the most important Baltic ports for the years 1751 to 1795.<sup>50</sup> In 1958 the GGR again received attention, albeit in a secondary role. They were used by I. Schöffer in connection with his work on judgements in general average<sup>51</sup> as a comparative source for the study of Amsterdam's Baltic trade and shipping from 1700-1770.<sup>52</sup> Schöffer used both the GGR and Sound Toll Accounts to gauge the economic-historical value of the judgements. Lacking the means necessary to tackle the GGR in toto,<sup>53</sup> he restricted himself to presenting the total number of ships and the distribution of these ships into five ship size categories for every fifth-year from 1735-1765.<sup>54</sup> Schöffer interpreted the representativeness of the GGR data to be restricted to all ships carrying the Dutch flag.<sup>55</sup> Exception to this interpretation has recently been expressed by P. Dekker in a series of articles.<sup>56</sup> Basing his analysis on a particular ship sailing under a Russian flag and on a comparison between the muster-rolls<sup>57</sup> and the GGR, Dekker concluded that it is very probable that since 1730 and definitely since 1760 the galjootsgeld was levied on all ships arriving at

Amsterdam from the Baltic, irrespective of flag or nationality.<sup>58</sup>

One of the primary questions to be answered before using the GGR for the study of shipping from Russian ports to Amsterdam is the problem of the degree of inclusiveness of the GGR. Was the determining factor the homeport of the captain or were there other criteria on which the levying of the galjootsgeld was based? In order to find a solution, we have to know more about the shipping customs and trading practices in the eighteenth century and study the sources which give this information in order to be able to compare them with the GGR.<sup>59</sup> In addition, a comparative analysis of a more quantitative nature has also been undertaken. For the periods 1724-1725 and 1784-1785 the GGR of the D.O.H. are compared with the Sound Toll Accounts.<sup>60</sup>

Another problem concerning the interpretation of GGR data is that of the differing lastages for the cargo carried and that of the ship itself. Why is it that on certain routes, e.g., Narva or Viborg, there were no appreciable differences between these two measurements, whereas, on other routes, such as St. Petersburg and Riga, the average lastage of the cargo carried was at times more than twice the average registered lastage of the ship?<sup>61</sup> It may be quite possible that this difference was a function of the commodities carried and of particular shipping practices.

One question concerning the GGR that has not been mentioned so far, but which is equally important, concerns the port of departure given in the GGR. The reliability of this variable will be tested against individual cases such as those found in the notarial archives and on a larger scale

as part of the comparison with the Sound Toll Accounts mentioned above. The practice of Dutchifying names of both captain and of ship must also be mentioned. Finally the date of arrival given in the GGR is open to question. It seems that payment of the galjootsgeld was not always made as soon as the ship docked in Amsterdam. In some instances, a ship was not registered in the GGR until one to two months or even longer after its actual date of arrival. If some measurements of this practice can be made it will certainly aid us in determining the seasonal fluctuations of shipping from the Baltic and Russia.

Thus in order to be able to place the GGR information on shipping from the Baltic and Russian ports in its proper perspective, two steps will be taken. The first consists of an internal criticism of the GGR and the testing of individual cases with those found in other sources. The second step consists of a check of a quantitative nature, namely, the comparison of the GGR with the Sound Toll Accounts. Only after these problems concerning the interpretation and evaluation of the GGR have been worked out, will it be possible to commence the study of the actual figures on Russo-Dutch shipping as derived from the GGR. The following chapter is, therefore, devoted to defining the parameters of the GGR variables.

#### B. The Sound Toll Accounts (STA)

Ships sailing to Holland from the Baltic had to pass through the Sound<sup>62</sup> where, from the early fifteenth century until 1857, they had to pay a toll levied on ships and later also cargoes by the Danish monarchs.<sup>63</sup> The first year for which the records of these dues have been preserved

is 1497 although it is not until 1574 that with few exceptions the extant records can be considered complete.<sup>64</sup> For the period 1497-1783, Nina Bang and later Knud Korst have prepared a massive six volume series containing statistics compiled on a yearly basis derived from these Sound Toll Accounts (STA).<sup>65</sup>

Although there can be no doubt about the tremendous value of the work presented by Bang and Korst for the study of the economic and maritime history of early modern Europe, the assumptions made and methods used in compiling the STA data have received serious and well-founded criticism. The first blow was struck by Brakel in 1915 when he pointed out quite correctly that nationality of the ship and the domicile or homeport of the captain were by no means synonymous.<sup>66</sup> Bang had equated the domicile (or homeport) of the captain with the domicile or nationality of the ship which was also held to indicate the residence of the ship's owners. Brakel showed that such a connection was at most coincidental. He pointed out that if Bang's interpretation was correct, the logical conclusion derived from her work would be that the true maritime strength of Holland was centred, not in Amsterdam, but in the small ports on the Zuiderzee, the domicile of the preponderant part of the Dutch captains.<sup>67</sup>

The second blow was struck by Brünner in 1922. He based his criticism on the so-called scabinale acten (ship acts) of certain Zuiderzee ports in the sixteenth century which contain the actual contracts made between the captain and the shipping firms.<sup>68</sup> On the basis of these sources and also the registers of various notaries, Brünner quite clearly demon-

strated that the domicile of the captain and that of the shipping firms (or the domicile of the majority of shareholders) are not synonymous and concluded that "the information on the hjemsted (homeport) is of no value for the study of the history of commerce."<sup>69</sup> He also pointed out that one cannot draw a direct relation between the nationality of the captain and that of the merchant whose cargo is transported. Brünner also criticized Bang for breaking the connection between the port of departure and port of destination, which is given in the original sources.<sup>70</sup> The fact that Bang gives detailed information for each major Baltic port, and groups those west of the Sound by nation or area, also detracts from the value of her work. This prevents the reader from obtaining an insight into the coherence of the European-Baltic trade system.

Complicating the problem of evaluating the STA is the whole question of the figures themselves. Serious defects in the quantitative statements of the STA tables have been ascertained by skilled and conscientious investigators.<sup>71</sup> Schreiner, who was the first to use the Dutch notarial archives systematically, goes so far as to say that the figures on goods passing the Sound "can hardly have had much to do with the fact."<sup>72</sup> This is a far cry from the statement made by Bang when she wrote in the preface of the first volume that the STA "donnent des renseignements exacts . . . ils nous reflètent ainsi avec fidélité le développement de cette route."<sup>73</sup>

The situation, however, is neither as optimistic as stated by Bang nor as pessimistic as considered by Schreiner. While the controversy concerning the accuracy and usefulness of the STA was still raging,

Christensen provided a primary example of the usefulness of the STA data. His study of Dutch trade to the Baltic about 1600 is a convincing demonstration of how the STA should be used as a basis for any study of the history of trade and shipping of Europe. The STA is the source having the greatest extension in time and being the most complete with regard to the registration of individual cases of shipping to and from the Baltic. Later studies by other historians leave no doubt that when placed in their proper perspective the STA are still the most valuable source for the study of the economic history of Europe.<sup>74</sup> The recent massive undertaking under the direction of Hans Chr. Johansen to prepare a source edition of the STA for 1784-1807 on magnetic tape for computer processing is indicative of the value placed by scholars on the STA.<sup>75</sup>

In our study, we are faced with the problem of determining the reliability and representativeness of the GGR. Starting with the presumption that the GGR and STA should complement each other, the question remains as to what methods should be used to compare the STA and GGR. A comparison of the yearly totals as prepared by Bang or even five or ten year totals is of little value. First of all, ships passing the Sound at the end of November and December en route to Amsterdam would very likely not arrive there until the following year. Complicating the matter is the fact that there was quite often a considerable time lag between the date the ship arrived at Amsterdam and the date that it was registered in the GGR. Secondly, even if the year totals could be adjusted for this time lag, Bang's study on the STA does not give a breakdown for individual ports west of the Sound. This makes it impossible to determine the number of



ships passing the Sound destined for Holland which arrived at Amsterdam instead of another Dutch port. The STA have also never been compared with another source of a similar quantitative nature.

Any meaningful comparison between the STA and GGR, therefore, implies measuring the correlations between the individual cases as listed in the original manuscripts of both sources. In view of the fact that such an approach is very time-consuming and the number of cases to be compared simply overwhelming, it was necessary to restrict ourselves in this study by taking a sample consisting of two two-year periods, namely, 1724-1725 and 1784-1785. The reason for the choice of the latter two-year period is quite simple, that these years had been prepared for computer processing by Johansen in 1974. It must be noted that 1784 and 1785 are the first two years following a period of war.<sup>76</sup> It might, therefore, be possible to discern through a comparison of these two years and subsequent periods, an indication of the time it took for trade and shipping patterns to stabilize following periods of hostilities.<sup>77</sup>

The other two-year period taken as part of the sample, 1724-1725, was chosen for two reasons not directly related to each other. First of all, the analysis of all Baltic shipping to Amsterdam at five-year intervals limits our choice of samples to either 1709-1710, 1714-1715, etc. The first such period for which complete data was available was 1724-1725. Secondly, after the end of the Great Northern War several years before, by 1724 St. Petersburg had become an established Baltic port and the last two years of Peter I's reign were stable, from the point of view of Russia's Baltic commerce during the first quarter of the eighteenth century.

C. The Dutch Notarial Archives

In our previous discussion concerning the evaluation of the GGR and STA data, repeated mention has been made of notarial archives. We are fortunate in this instance that the Amsterdam City Archives contain by far the largest collection of these notarial registers in Holland.<sup>78</sup> Studies by Erik Amburger, Maria Bogucka, Christensen, Hart and other scholars for the seventeenth century have clearly demonstrated the value of these notarial acts not only as a source for the economic history of Holland but also for the whole of the early modern period as well.<sup>79</sup> They have, however, not been utilized for the study of economic development in the eighteenth century. Although there are many different types of notarial acts, those which pertain to the history of shipping and trade are of direct value to this study. These are the charterparties, ship-declarations, protests of bills of exchange, service contracts, attestations, contracts of bottomry, insinuations and procurations. The charterparties are of special interest and it would be useful to present some general remarks on the nature of these notarial acts and precisely how they contribute to this study since the notarial acts as such do not exist in those countries where the legal systems are based on English law.

A charterparty is a written contract of a special character made between a freighter or charterer and the master of a ship who acts in the name of the shipping partnership, i. e., the owners of the ship of which he may be one. Quite often a broker acted as an intermediary between the two parties who usually met at the Amsterdam exchange. It was

also possible for either the charterer or the shipmaster to be represented by an agent acting on their behalf. Whether or not a charterparty was notarized, i. e. , a signed copy entered in the notarial registers depended on the circumstances or the wish of either party. In their studies of seventeenth century Russian and Baltic shipping, Christensen, Bogucka and Hart have shown that for every route, the percentage of notarial charterparties is different.<sup>80</sup> In addition to charterparties that were not notarized, ships that sailed entirely at the risk of the shipping company as far as cargo was concerned and those that sailed "on adventure" are not taken into account.<sup>81</sup>

Under the terms of a charterparty, the freighter chartered the whole or part of a ship to carry a cargo from port A to port B at a price. Several variations were possible. For those cases in which only part of the ship was chartered, the quantity(ies) or weight(s) of the cargo(es) was (were) usually specified.<sup>82</sup> The charterer could allow or forbid the captain to take another cargo in addition to his own or a cargo of a similar nature to his own.<sup>83</sup> The route could involve more than two ports and different cargoes for the various legs of one voyage. A somewhat typical example of this would be a ship chartered to sail to Bayonne or Setubal to fetch a cargo of salt, deliver it to a Russian port such as Viborg and there load a cargo of timber for Amsterdam.<sup>84</sup> The captain could also be ordered to pick up a cargo at a certain port and if a full load was not available be ordered to sail to other ports in order to obtain an additional load.<sup>85</sup> Or a ship could be chartered to carry cargo from a Russian port to one of several ports of destination,<sup>86</sup> possibly receiving

further instructions at either the Sound,<sup>87</sup> or Texel,<sup>88</sup> the primary port of destination,<sup>89</sup> or at any other port en route.<sup>90</sup> The freighter could charter the ship to carry a single commodity<sup>91</sup> or several commodities.<sup>92</sup> He could forbid the captain to load a certain commodity.<sup>93</sup> This was often the case with Russian iron which was used quite commonly as ballast.<sup>94</sup> The charterer would specify that other "heavy goods" such as tar and pitch be loaded instead.<sup>95</sup>

The freight price was either stated in terms of the ship bij de hoop (lump freight)<sup>96</sup> in which instance the measurements of the ship were usually given and a well-stowed or "overloaded" ship could mean extra income for the captain.<sup>97</sup> If only part of the ship was chartered, the actual freight prices were given for each of the commodities carried.<sup>98</sup> The most commonly used measurement was the last of rye (although lasts of timber were also quite common).<sup>99</sup> For heavier and lighter goods, the charterparties sometimes gave the equivalences of barrels, packs, bundles, deals, etc. of various commodities in lasts.<sup>100</sup> The charterparty could also specify the number of lay-days in the port(s), the remuneration for extra lay-days,<sup>101</sup> sailing dates,<sup>102</sup> the armament the ship should carry,<sup>103</sup> the assistance that the captain and crew should render with the (un)loading,<sup>104</sup> what services should be performed free of charge,<sup>105</sup> prohibitions placed on portage and trading by captain and crew,<sup>106</sup> the gratuity or hat-money (caplaken) the captain would receive upon successful completion of the voyage,<sup>107</sup> instructions to the captain to act as an agent for the charterer in the purchase or sale of the cargo,<sup>108</sup> etc. The possible

effects of wars and blockades were also taken into consideration in charterparties.<sup>109</sup> However, the minimum information given in a charterparty was the date of the contract, the names and functions of the contracting parties, the route to be travelled and the price to be paid for the service rendered. The last type of charterparties reflects the uniformity and frequency of certain trade and shipping patterns. The charterparties also show that trade and shipping with Russia was carried out in a great variety of ways and under differing terms and conditions. The charterparties thus provide a detailed insight into the way merchants and shippers carried on commerce between Russia and other parts of Europe. In many instances, the ships did not call at a Dutch port and for these charterparties Amsterdam functioned as a shipping exchange for commerce all over the world.

Another type of notarial act which is of particular value for our study are the ship-declarations or scheepsverklaringen. They were usually the consequence of an unusual event or series of events that occurred between the port of departure of the ship and its arrival at another port and resulted in damage of one kind or another. In such instances, the crew, on behalf of or against the captain, made a declaration before a notary on the course of events. This declaration was used in determining a settlement among the parties concerned or, if they could not reach a settlement, by the Court of Marine Assurance.<sup>110</sup> Ship-declarations thus assisted in protecting the captain and his crew against charges of negligence.<sup>111</sup> In the ship-declarations, therefore, one finds detailed information on the route of the ship, the nature of the cargo,

various shipping practices, the dates of departure and arrival as well as certain other dates such as the date of passage through the Sound. According to most of the scheepsverklaringen, the ship in question had encountered heavy storms which caused water damage to the cargo.<sup>112</sup> Another common occurrence was that late in the season ships were trapped in the ice causing a delay in arrival,<sup>113</sup> damage to the cargo,<sup>114</sup> and expenses for extra lighters or towing fees.<sup>115</sup> Sometimes a "water-camel" had to be used.<sup>116</sup> The effects of actions by privateers,<sup>117</sup> forces blockading<sup>118</sup> a certain port and other hostilities were also reported in ship-declarations.

Thus, both the charterparties and ship-declarations furnish an accurate picture in detail of not only Russo-Dutch trade but also of shipping from Russian to non-Dutch ports in France, the Iberian Peninsula and Mediterranean.<sup>119</sup> The accessibility of the notarial acts pertaining to our study, however, is very much restricted by the fact that such acts are hidden, like needles in a haystack, among literally millions of other notarial deeds. For this study, we have analyzed over 2,500 notarial acts, most of which are charterparties because they have the greatest immediate value for our study. Although this is quite a large number, the charterparties consulted by the author should still be considered as random samples of the information available in the notarial archives pertaining to Russo-Dutch trade and shipping. Nevertheless, sufficient information of this sort has been gathered to gain an insight into the nature of Russo-Dutch commerce in general and of individual Russian ports in particular.

Not only are the charterparties and ship-declarations of cardinal importance for the study of Russo-Dutch trade and shipping, they are also a very useful and invaluable tool for verifying the STA and GGR. Christensen has already demonstrated the value of comparing individual cases found in the notarial archives with those of the STA. In this study, the notarial charterparties and ship-declarations will also be used as a tool for finding a solution to various questions arising from working with the GGR. Where possible, other variables common to the notarial acts, GGR and STA will also be evaluated. The notarial acts offer individual cases and, thus, serve as a balance against the larger, more uniform patterns outlined by the GGR and STA. Ostensibly, variations in the GGR and STA (the macro view) should be reflected in the notarial acts (the micro view) and vice versa.

#### D. Other Archival Sources

##### 1. Shipping

While the GGR form the basis of this study, several other series of archival documents provide valuable additional information on eighteenth-century Dutch shipping with Russia. Since the middle of the seventeenth century it had become the established and recognized practice that a captain could not sign on a crew without reading the crew the letter of articles, i.e., the muster-roll, in the presence of the crew and the shipping-master<sup>120</sup> who, together with the crew, signed the letter of articles.<sup>121</sup> These letters of articles, known in Dutch as monsterrollen or zeebrieven, contain information on the date of hiring, the names of the crew and their rank and the wages to be paid to each crew member.

In many cases, the flag carried, the ports of call and the homeports of the crew are given as well. This record series of monsterrollen covers the period from 1747 to 1857.<sup>122</sup> Enough have survived to give a good indication as to the nature of shipping practices and customs in the eighteenth century.

Although the monsterrollen are often called zeebrieven, they should not be confused with the certificates of registry which are also called zeebrieven. The latter were a type of passport issued by the burgomasters of Amsterdam attesting that the origin or provenance of the ships was the Dutch Republic. These zeebrieven contain information on the name of the ship, the name of the captain and his homeport as well as the registered lastage of the ship.<sup>123</sup> Also noted are those instances where owners of a part of the ship resided outside the Republic.<sup>124</sup> These certificates of registry thus provide us with an excellent source for testing the lastage of the ship as recorded in the GGR.

While both the muster-rolls and the certificates of registry provide additional opportunities for the testing of the data of the GGR, the Zeeijdingen van Hellevoetsluis en Maassluis provide data on shipping between Rotterdam and other ports for the latter half of the eighteenth and first quarter of the nineteenth centuries. The zeeijdingen or shipping news was a service begun in 1663 by the then postmaster of Rotterdam, Jacob Quack, who started this service at the request of the merchants of Rotterdam, for it was vital for them to know if their ships were not able to sail up the Maas because of lack of wind, contrary winds or other



hindrances. The merchants also wanted to know exactly what cargo the ship was carrying so that they could arrange for its sale.<sup>125</sup>

In 1715, the burgomasters of Rotterdam drew up regulations concerning the zeetijdingen which were later expanded to include Hellevoetsluis due to the gradual silting of the Maas channel. Of the zeetijdingen (actually just the extracts) only those for Maasluis from 10 June 1765 to 31 December 1822 and those for Hellevoetsluis from 1 June 1778 to 31 December 1882 have survived.<sup>126</sup> These sources have not been utilized by historians which is regrettable since they contain information on both incoming and outgoing ships sailing between Rotterdam and most of the major ports of the world at that time. The data contained in the zeetijdingen pertaining to shipping between Rotterdam and the Russian ports has been utilized in this study.<sup>127</sup> The zeetijdingen are also very useful for testing the STA.<sup>128</sup>

Other sources for eighteenth-century Dutch shipping are the newspapers, pamphlets and journals published during this period.<sup>129</sup> These other sources, unlike most of the sources mentioned above, have received ample attention from Dutch scholars but from the standpoint of Dutch economic history only and not that of Dutch trade and shipping with Russia.<sup>130</sup>

## 2. Marine assurance and average<sup>131</sup>

While it was the custom of merchants to divide their cargo among several ships so as to minimize possible loss, the need for insuring a particular shipment still remained. Early attempts at maritime assurance in the Netherlands were discouraged by edicts issued by both Emperor Charles V and by Phillip II as well as by the Duke of Alva. The object of

these edicts forbidding the insuring of ships and cargoes was not to ruin the Dutch merchant marine, as has often been asserted, but rather to force the merchants to arm their ships in order to assure the safety of their ships and at the same time to create a quasi-naval force. Nevertheless Charles V recognized the need for some basic guidelines especially in the area of average<sup>132</sup> and in 1551 set forth a common formula to be used in settling disputes in general average or averij grosse. The capture of Antwerp in 1585 by the Spanish army under General Parma signalled the taking over by the ports of Amsterdam and Rotterdam the role played previously by both Brugge and Antwerp in assuring ships and their cargoes. In 1598, Amsterdam issued its first by-law pertaining to marine assurance while Rotterdam followed suit in 1604.<sup>133</sup>

By the beginning of the eighteenth century, the development of marine assurance had reached the stage when definite proposals for the creation of assurance companies were made both in Amsterdam and Rotterdam. The opposition by the magistrates of Amsterdam thwarted the establishment of an assurance company there. The magistrates of Rotterdam, however, were more favourably inclined to this new idea. In 1720 there was established in Rotterdam a Maatschappij van Assurantie, Disconteerij en Beleening (Company for Assurance, Discounting and Loans).<sup>134</sup> This company continued to function successfully throughout the eighteenth and nineteenth centuries. In 1874, the company turned over its records to the Rotterdam City Archives but the bombardment of the city in 1940 destroyed most of them. Among the documents that survived is a series of Assurantieboeken covering the period from 1720 to 1874.<sup>135</sup> These assurance books

offer information on the route, name of the ship and captain, the insured value of the ship and/or cargo, the premium paid and, at times, details on the commodities comprising the cargo and the manner in which it was distributed among different ships. These sources do, therefore, provide such a wealth of information on various aspects of shipping and trade of Rotterdam that, for the moment, it was possible to investigate only the insurance rates for shipping and trade with the Russian ports in the eighteenth century.

Although Amsterdam in 1720 had prevented the creation of an assurance company,<sup>136</sup> it had as early as 1612 established a separate court for regulating and settling disputes in marine assurance and in general average. The records of the Amsterdam Court of Marine Assurance are quite extensive and include a large series of dispatches in general average. A dispatch is the official judgement on the apportionment of the general average. The extant documents of this court called the Schepenbank form part of the record group titled Rechterlijk Archief of the Amsterdam City Archives. These dispatches or judgements in general average (vonnissen averij grosse) contain an account of the misfortunes which occurred during the voyages.<sup>137</sup> The dispatches offer information not only on the financial settlement and the commodities carried but also on the nature of the average, the name of the ship and its captain as well as on the conditions and dates of the route sailed.

Except for a gap from 25 May 1729 to 27 April 1731, these judgements form an unbroken record series covering the whole of the eighteenth

century. Of course, the very nature of these sources prevent them from being considered an accurate reflection of Amsterdam shipping and trade. Neither absolutely nor relatively can we use these documents to measure the extent or intensity of trade relations between Amsterdam and Russia.<sup>138</sup> The judgements in general average form, however, a very valuable secondary source for verifying the data obtained from the GGR and STA. The routes and dates mentioned in the judgements provide an excellent method for testing and evaluating questions of interpretation of the GGR variables. It is in this context and for obtaining an insight into the structure of trade and shipping that these documents will be used in this study.

### 3. The archives of the Brants Family

One additional archival record group that deserves separate mention is that of the Brants family.<sup>139</sup> The Brants were a prominent Amsterdam merchant family in the late seventeenth and eighteenth centuries. Among their widespread business interests was a strong involvement in shipping and trade with the Baltic and Russia. Of particular interest to this study are the letters and reports sent by merchants and factors in Russia to the Brants in Amsterdam. This correspondence provides a valuable insight into the economic and trading conditions in Russia and has yet to be utilized by historians. The problems faced by Dutch merchants doing business in Russia and their reactions to interventions by the Tsar in commerce, such as changes in tariffs and tolls, the awarding of import and export monopolies on certain commodities and the forced re-routing of the Archangel trade via St. Petersburg are amply documented.

In connection with the GGR, of special interest, are the bills of lading or cognossements which these letters quite often contained. These bills of lading provide us with another means for testing the GGR. The Brants also owned shares in ships and served as bookkeepers for several of them. The Brants' collection contains the reederyboeken or ship-owners' account books of two ships which sailed regularly to Russian ports, primarily Narva and Viborg. These reederyboeken serve as an additional means for verifying the GGR data.

In this chapter we have discussed the principal primary source on which this study is based, namely, the GGR. Other equally valid sources of a like quantitative or semi-quantitative nature such as the STA, the notarial archives, the muster-rolls, the certificates of registry, marine assurance records, judgements in general average and the private archives of merchants have also been introduced. The later group of sources serve a dual purpose. First of all, they provide us with many different and divergent means for testing and evaluating the GGR variables. This will be done in the following chapter. And secondly, they serve the purpose of providing the flesh on the skeleton of the GGR for our discussion in the second part of this study of eighteenth-century Dutch shipping and trade with Russia.

Footnotes - Chapter I

<sup>1</sup>A similar organization called the Gesellschaft der auf Archangel (or Nach Moscovien) handelnden Kaufleute (Company of merchants trading with Archangel (or Muscovy)) was formed by the merchants of Hamburg. See Menke, p. 242; Ernst Baasch, Hamburgs Convoyschiffart und Convoywesen: Ein Beitrag zur Geschichte der Schiffart und Schiffartseinrichtungen im 17. und 18. Jahrhundert, Hamburg, 1896, p. 133.

<sup>2</sup>G.A.A., PA78/30. Letter of 20 March 1807 by the D.O.H. to the Burgomasters of Amsterdam. Responding to a request by the Burgomasters of Amsterdam to explain their origin and purpose, the D.O.H. replied that their College consisted of all those interested in the trade and shipping (i.e., merchants and shipowners) in the Baltic in order to look after all matters regarding this commerce before all courts and nations and to take whatever measures may be necessary in carrying out these functions. G.A.A., PA6/46. A letter of the D.M.H. to the Governor of North-Holland, 9 July 1818. This letter ascribes a similar role to the D.M.H. For a detailed description of both these colleges and other similar institutions on the role played by them in the development of various branches of Dutch overseas commerce, see S. van Brakel, "Directie," pp. 329-364, and "Statistische," pp. 350-404. Descriptions of both these colleges, with summaries in English, can also be found in I.H. van Eeghen, Inventarissen van de Archiven van de Directie van de Moscovische Handel, Directie van de Oostersche Handel en Reederijen, Commissarissen tot de Graanhandel en Commissie voor de Graanhandel, Amsterdam, 1961, pp. 1-13, 23-27 and 92-93.

<sup>3</sup>G.A.A., 9 Groot Memoriaal, fol. 236, 24 October 1752, "Gecommitteerde tot den Oosterschen Handel"; idem, fol. 235 as found on the inside cover of PA78/69, "Jaarlijkse rekeningen/en verantwoording van directeuren 1717-1761." The date of the latter document, written by Johannes van Droogenhorst, George Bruijn, et al., to the Secretary of the City of Amsterdam is probably also 1752. It was most likely placed in the inside cover of the book to provide proof of the legitimacy and history of the levying of the galjootsgeld when this whole question arose in 1751-1752.

<sup>4</sup>At that time there were five Admiralties in all, namely, Amsterdam, Westfriesland en het Noorderkwartier, Maas (Rotterdam), Zeeland and Friesland. Of these Amsterdam was by far the most important.

<sup>5</sup>The government of the Dutch Republic was composed of seven "sovereign" provinces, namely, Holland, Zeeland, Friesland, Groningen, Overijssel, Gelderland and Utrecht.

(Footnotes - Chap. I)

<sup>6</sup>Brakel, "Directie," p. 339; Eeghen, Inventarissen, p. 23. Dutch guilders or florins are denoted as "f."

<sup>7</sup>Actually the word reederij means a firm of shipowner(s) while reeder is translated as shipowner.

<sup>8</sup>Brakel, "Directie," pp. 337-343.

<sup>9</sup>G.A.A., PA78/10, Minutes of the meeting of the Directeuren van des Oostersche Handel en Reederijen, 20 October, 1796. The list of the merchants and shipowners "of ships trading and sailing on the Baltic" numbers over 145 names. The meeting was held on 3 December 1706 at the end of the shipping season. The names have been printed in Appendix A of Brakel, "Directie," pp. 358-361.

<sup>10</sup>The relevant documents have been printed as Appendix B in Brakel, "Directie," pp. 361-364.

<sup>11</sup>The question of nationality of a ship and what is meant by a "Dutch" ship in terms of the Galjoetsgeldregisters is discussed below in pp. 9ff. and Chapter II.C.

<sup>12</sup>See footnotes 24 and 37 below.

<sup>13</sup>G.A.A., PA6/62.

<sup>14</sup>Both colleges were private and not public bodies. They are classified in the Amsterdam City Archives as PA6/57-62 for the D.M.H. and PA78/94-102 for those of the D.O.H. With the dissolution of the D.M.H. in 1823, its records became the property of the Amsterdam City Archives. The D.O.H. still exists and its archives are deposited on loan in the Amsterdam City Archives.

<sup>15</sup>One last is approximately two tons and normally is equal to 2000 kilos of rye (Danzig dry measure). The ratio of 1 last = 2 tons has been applied throughout this study as was also done in Walter Vogel's "Beitrage zur Statistik der deutschen Seeschiffart im 17. und 18. Jahrhundert," H.G. 53 (1928) 110-151 and 57(1932) 76-151. See also Chapter II.A.6.

(Footnotes - Chap. I)

<sup>16</sup> Actually the data on the homeport of the captain and name of the ship are not continuous. See Chapter II and the footnotes to Tables II and III for the precise details. The term "ship movement" is used to designate those variables contained in each entry (or case) which are numeric or can be reduced to a numeric variable by means of specific codes (the ports). Thus "ship movement" does not include the name of the ship or name of the captain.

<sup>17</sup> There are two magnetic tapes containing the Galjootsgeldregisters information, each on a separate format. They are kept at the McGill University Computing Centre as:

a) Tape GLDOH1

- IBM-standard-label, 9-track, 1600BPI
- Dataset name: GALJOOTS.COBOL.FILE
- RECFM=FB, LRECL=80, BLKSIZE=4000, DEN=3
- UNIT=TAPE9, VOL=SER=GLDOH1, LABEL=(1, SL)

This tape contains the exact copy of the Galjootsgeldregisters card images and serves as a security copy.

b) Tape GLDOH2

- IBM-standard-label, 9-track, 1600BPI
- Dataset name: DOH.FILE01
- RECFM=VBS, LRECL=62, BLKSIZE=3104, DEN=3
- UNIT=TAPE9, VOL=SER=GLDOH2, LABEL=(1, SL)

This tape contains the same information as in GLDOH1 but in Fortran unformatted records. Information on Russian White Sea shipping can be accessed by using the parameter LABEL=(2,SL,IN).

<sup>18</sup> This was done in order to place the shipping from Russia to Amsterdam in the context of the larger Baltic pattern. Time and resources did not permit the processing of the whole D.O.H. (a task demanding 3 man-years with computer facility back-up). Even then, this particular task represents the joint effort of Dr. Fritz Snapper and the author as well as the assistance of Dr. Simon Hart and the staff of the Amsterdam City Archives. The treatment and analysis of this particular data set is presented below in Chapter IV and Tables IV.

<sup>19</sup> The problem of the definition and interpretation of this term is treated below on pp. 9 ff. and in Chapter II. C.

<sup>20</sup> One stuiver = 1/20 of a Dutch guilder.



(Footnotes - Chap. I)

<sup>21</sup>G.A.A., PA78/103. Permission was given by the Admiralty of Amsterdam to the D.O.H. on 24 July 1704 to levy galjootsgeld on all ships and their cargo sailing from Norway and the Baltic in order to collect and thus recoup the f. 3,000 that had been spent on convoy protection; G.A.A., 9 Groot Memoriaal, fol. 235, 4 April 1717. For a discussion as to how this measure was implemented and on what basis, see Chapter II.A.6.

<sup>22</sup>Eeghen, Inventarissen, p. 26.

<sup>23</sup>In order to restore commerce to its former glory, Stadhouder Willem IV made a proposal, commonly known as the "Propositie van 1751" to abolish all duties on goods passing through Holland in transit (vrije transit). For a detailed discussion of the Propositie, see J. Hovy, Het voorstel van 1751 tot instelling van een beperkt vrijhavenstelsel in de republiek (propositie tot een gelimiteerd porto-franco), Groningen, 1966.

<sup>24</sup>G.A.A., PA78/102, 1 September 1825.

<sup>25</sup>Thus from 1753 to 1823 data on St. Petersburg and Kronstadt are reported in the Galjootsgeldregisters of the D.M.H. although in this study they are presented continuously with that of the D.O.H.

<sup>26</sup>W.R. Scott, The Constitution and Finance of English, Scottish and Irish Jointstock Companies, vol. 1, Cambridge, 1912, pp. 35-36.

<sup>27</sup>The salary of the bookkeeper continued to be paid on the old basis, which made it possible to determine the total cargo lastage and total ship lastage for each year from that date on since the bookkeeper, in order to determine his commission, prepared separate sub-totals of the monies collected for each category, a practice he had not previously followed.

<sup>28</sup>Brakel, "Directie," p. 354; Brakel, "Statistische," p. 365; Eeghen, Inventarissen, p. 26. Of the records of the Admiralty of Amsterdam only the yearly summaries as presented to the Generaliteitsrekenkamer have survived. Consequently, the GGR are the only extant Dutch source which provides detailed and continuous information on shipping from the Baltic and Russia. For further details on this as well as on the Admiralty of Amsterdam, consult J.R. Bruijn, De Admiraliteit van Amsterdam in de rustige jaren 1713-1751, published Ph.D. dissertation, University of Leiden, 1970, pp. 69 ff.

(Footnotes - Chap. I)

<sup>29</sup>For details of Peter's visits to Holland, see J. Knoppers, The Visits of Peter the Great to the United Provinces in 1697-98 and 1716-17 as seen in light of the Dutch sources, unpublished M.A. thesis, McGill University, 1969.

<sup>30</sup>A printed copy of this request can be found as Appendix XVII in J. Scheltema, Rusland en de Nederlanden, vol. 2, pp. 393-396. It is interesting to note that of the 39 signatories, the names of only 3, namely, Adolf Houtman, Eghbert Theesing and Matthijs Straalman, match those of the Baltic merchants summoned in 1706 (see footnote 9 above). Apparently the commerce via the Baltic and via the White Sea were two distinct and separate trades.

<sup>31</sup>Eeghen, Inventarrissen, p. 11.

<sup>32</sup>G.A.A., 9 Groot Memoriaal, fol. 2348, 27 March 1717.

<sup>33</sup>G.A.A., 10 Groot Memoriaal, fol. 858, 7 January 1730.

<sup>34</sup>G.A.A., PA6/45. Even as late as 1818 in response to a request by the Governor of Holland as to the origins and legal basis for the D.M.H., the Director could not provide a satisfactory answer apart from the fact that it was based on a custom.

<sup>35</sup>Brakel, "Statistische," p. 361, is of the opinion that dues of f. 20 per ship were also collected before 1693 and that the cash-book for 1693-1712 is a continuation of earlier, no longer extant cash-book(s).

<sup>36</sup>G.A.A., PA6/49, "Register van ontvangsten en uitgaven van Directeuren 1694-1712" and PA6/123, "Register van makelaar Abraham de Kramer . . . , 1698-1738." For the period 1705-1721, the ships sailing from Archangel directly for Livorno, Lisbon, Venice, Cadiz, etc., are mentioned separately.

<sup>37</sup>G.A.A., PA6/57-58, "Rekeningen . . . geïnd door Reinier Lieftinck, 1717-1727."

<sup>38</sup>Neither the extant archives of the D.M.H. nor other materials found in Dutch archives allow us to surmise that documents have been lost which would indicate that the D.M.H. played a more active role.

<sup>39</sup>G.A.A., PA6/46. Letter of the D.M.H. to the Governor of Noord-Holland. In this letter, the D.M.H. stated that it incurred no expenses other than for bookkeeping and postage which together did not exceed more than f. 100 annually.

(Footnotes - Chap. I)

<sup>40</sup>The Galjootsgeldregisters of the D.M.H. were kept from 1717 to 1823 but the records for 1797 to 1813, for some reason, are missing from the archives. For further details on this, consult the footnotes to Tables III. For further details concerning the early years of the D.M.H., see Brakel, "Statistische," pp. 352-355, and Eeghen, Inventarissen, pp. 7-11.

<sup>41</sup>G.A.A., PA78/441.

<sup>42</sup>G.A.A., PA78/106 and 107.

<sup>43</sup>Brakel, "Directie," p. 351.

<sup>44</sup>ibid., pp. 354-356. In the light of the high degree of Dutchification of names practised by those who kept the actual registers, the spelling of the names of captains and of the ships will be discussed in Chapter II.

<sup>45</sup>Brakel, "Statistische," p. 365.

<sup>46</sup>G.A.A., PA6/57 and PA78/94.

<sup>47</sup>Brakel, "Statistische," pp. 380-393.

<sup>48</sup>ibid., pp. 366-367. For a more detailed discussion of this question, see Chapter II.4.A below.

<sup>49</sup>ibid., p. 372. Brakel does mention that he entertained the thought of doing a more detailed study of the D.O.H.

<sup>50</sup>Max Gideonse, Dutch Baltic Trade, pp. 320-324. In all fairness to Gideonse it must be mentioned that the archives of both the D.M.H. and D.O.H. were not properly ordered and inventoried until the late 1950's. In order to compare the pre-1753 income with the post-1753 income due to the transfer of the St. Petersburg income from the D.O.H. to the D.M.H., Gideonse made two assumptions. He assumed that the average size of ships from St. Petersburg for the period 1753 and 1795 was 100 lasts while in fact it was 122 lasts. Gideonse also assumed that the average size of the cargo carried during this period was 100 lasts while it was actually 196 lasts. This means that the average yearly loss of income to the D.O.H., which Gideonse put at f. 170 should be f. 270. The table of Dutch ship arrivals at Amsterdam from the ten major Baltic ports for 1715 to 1795 is given by him as Appendix B, pp. 369-372.

(Footnotes - Chap. I)

<sup>51</sup>"General average" is the apportionment of loss caused by intentional damage to the ship, e.g., cutting away masts or boats, sacrificing cargo, or expenses incurred by putting into a port in distress, to secure the general safety of the ship and cargo.

<sup>52</sup>I. Schöffer, "De Vonissen in Averij Grosse van de Kamer van Assurantie en Averij te Amsterdam in de 18de eeuw; Onderzoek naar hun economisch-historische waarde voor de geschiedenis van handel en scheepvaart op de Oostzee 1700-1770," Ec. H. Jrk., 26(1956) 73-132.

<sup>53</sup>Ibid., p. 90. Schöffer stressed the need for a mechanical systematic treatment of the GGR as he found it impossible to do the necessary calculations and compilations by hand. At that time, he advocated the use of the Hollerith system.

<sup>54</sup>At that time, Schöffer (pp. 88 and 92-97) like Brakel ("Directie," p. 351) was under the impression that the GGR of the D.O.H. were available only for 1731-1825. It was not until Eeghen made a systematic inventory that the existence of these D.O.H. records prior to 1731 became known. (Eeghen, Inventarissen, p. 34.)

<sup>55</sup>Schöffer, "Vonnissen," pp. 92-97. Schöffer bases his assertion on Brakel ("Directie," p. 354). Brakel, however, did not explicitly state that the galjoetsgeld was levied on all ships carrying the Dutch flag. Instead he talked of Dutch-owned ships or ships "belonging at home" in Holland. It must be noted that Brakel wrote his articles on both the D.O.H. and D.M.B. before he became engaged in the problem of the domicile of the captain and of the domicile and nationality of the ship when he criticized Bang's work on the Sound Toll Accounts (see below Chapter II. B).

<sup>56</sup>P. Dekker, "Friese schepentableaus in Sleeswijk-Holstein," Ons Zeewezen, (1971) 2:26-31; "Een nieuw licht op the Amsterdamse Oostzee-handel," Ons Zeewezen, (1971) 10:41-45 and "Vervolg," Ons Zeewezen, (1972) 1:63-65 and 69.

<sup>57</sup>On the muster-rolls, see Chapter I. D below.

<sup>58</sup>Dekker, "Vervolg," p. 69.

<sup>59</sup>For a brief description of these sources and how they will be used in this study, see Chapter I. C and D.

(Footnotes - Chap. I)

<sup>60</sup>A brief description of the Sound Toll Accounts, their use and interpretation is discussed in the following section. The comparison of the GGR with Sound Toll Accounts is presented in Chapter II. B.

<sup>61</sup>The problem of differences in lastage of cargo carried and registered lastage of the ship will be discussed below in Chapter II. A. 6.

<sup>62</sup>Ships could also use the Great and Little Belts. These, however, were shallow and treacherous and, therefore, with occasional exceptions all ships sailing between Amsterdam and the Baltic went by way of the Sound. The transshipment of goods by way of the overland Lubeck-Hamburg route falls outside the purview of this study. Those interested in this particular route should consult the works by Elizabeth Harder-Gersdorff, Christopher Menke and Pierre Jeannin listed in the bibliography.

<sup>63</sup>Charles E. Hill, The Danish Sound Dues and the Command of the Baltic, Durham, 1926, p. 11; G.W. Kernkamp, "De Nederlanders op de Oostzee," Vragen des Tijds, 1(1909) 2:67. For a discussion of the diplomatic importance of the Sound Toll for Dutch trade and shipping see G.W. Kernkamp, De Sleutels van de Sont, Het aandeel van de Republiek in den Deensch-Zweedschen oorlog van 1644-45, The Hague, 1890. On changes in the Sound Tolls one could consult the dated but still valuable work by F.A. Van der Hoeven, Bydragen tot de Geschiedenis van den Sonttol, Leiden, 1855. Van der Hoeven paid particular attention to Russian efforts in the second half of the eighteenth century to have the Sound Tolls abolished (pp. 140-145).

<sup>64</sup>The collection of the Sound Toll records is kept at the Rigsarkivet, Copenhagen, under the title Øresundtoldsregnkaberne. While some of the records pertaining to shipping through the Great Belt have survived those on shipping through the Little Belt have not.

<sup>65</sup>Nina E. Bang, Tabeller over Skibsfart og Varetransport gennem Øresund, 1497-1660, 2 vols., Copenhagen, 1906, 1922; Nina E. Bang and Knud Korst, Tabeller over Skibsfart og Varetransport gennem Øresund 1661-1783 og gennem Storebaelt 1701-1748, 4 vols., Copenhagen, 1930-1953. The organization of the second series is somewhat confusing and therefore the sub-titles of the individual volumes are listed here in the French translation of the Danish titles as given by Bang. It may be noted here that the preface and comments on the tables are also translated into French by Bang. The individual titles of the four volumes for the 1661-1783 period are:

(Footnotes - Chap. I)

65 (cont'd)

- I Tables de la navigation (dans le Sund, de 1661 à 1783, et dans le Grand-Belt, de 1701 à 1748), 1930.
- II, 1 Tables du transport des marchandises, 1661-1720 (dans le Sund), 1939.
- II, 2, I Tables du transport des marchandises, 1721-1760 (dans le Sund), 1945.
- II, 2, II Tables du transport des marchandises dans le Sund, 1761-1783, et dans le Grand-Belt, 1701-1748, 1953.

Hereafter the two volumes for 1497-1660 will be referred to as Bang, Tabeller, while the four volumes for the period 1661-1783 will be referred to as Bang 1930, Bang 1939, etc.

<sup>66</sup>S. van Brakel, "Schiffsheimat und Schiffersheimat in den Sontzollregistern," H.G., 21(1915)211-228.

<sup>67</sup>Ibid., pp. 227-228. Brakel supports his case with another article titled, "Rostocker Scheepsvaartstatistieken; een controlemiddel op de Sonttolregisters," B. V. G. O., 5th ser., 2(1915)222-233.

<sup>68</sup>E. C. C. Brünner, "De waarde der Skibsfart-Tabellen van Nina Ellinger Bang voor de kennis der handelsgeschiedenis van Holland in de 16e eeuw," B. V. G. O., 5th ser., 9(1922)269-280. For a further discussion of trade and shipping practices, see below Chapter I. C and Chapter II, et passim.

<sup>69</sup>Brünner, "Waarde," p. 277. The question of hjemsted is discussed below in Chapter II. B. 5.

<sup>70</sup>It would be possible by using Bang 1945 & 1953 (Tables 2 and 4) to partially reconstruct the broken East-West connection but this would be a very time-consuming task.

<sup>71</sup>See Aksel E. Christensen, "Der handelsgeschichtliche Wert der Sundzollregister. Ein Beitrag zu seiner Beurteilung," H.G., 49(1934) 28-142; Astrid Friis, "Bemaerkninger til Vurdering af Øresundstoldregnskaberne og Principperne for deres Udgivelse," Historisk Tidsskrift, 9th ser., 4(1925) 109-182; and A. Huhnhauser, Rostocks Seehandel von 1635-1648 (nach der Wärnemünder zentbüchern). I. Die Schiffart, Rostock, 1914. These authors dealt mainly with the question of fraud or under-assessment of cargoes for toll purposes.

(Footnotes - Chap. I)

<sup>72</sup>Johan Schreiner, Nederland og Norge 1625-1650, Trelastutførsel og handelspolitikk, Oslo, 1933, p. 9.

<sup>73</sup>Bang 1930, p. iii.

<sup>74</sup>See the works by Gideonse, W.G. Unger, Walther I. Vogel, Schöffner, Pierre Jeannin and others. Pierre Jeannin's article, "Les comptes du Sund comme source pour la construction d'indices généraux de l'activité économique en Europe (XVIIe - XVIIIe siècles)", Revue Historique, 231(1964) 55-103 and 307-340 is a good example of how the STA data can be used to depict short and long term conjunctural changes.

<sup>75</sup>For a description of this project and the methods used, consult Hans Chr. Johansen, A Preliminary Manual to the tapes containing a source edition of the Sound Toll Accounts 1784-1807, University of Odense, September 1973 (mimeographed).

<sup>76</sup>For the purpose of this study, the entry of the Dutch in 1780 into what had started out as the American Revolutionary War is important because from then till the Treaty of Paris in 1783 the Dutch shipping trade lost its favourable position of neutral carrier.

<sup>77</sup>The author intends to make a detailed comparative study of the GGR and STA for 1784-1807 and investigate the pattern of Baltic-European shipping and trade in the light of changes in military, diplomatic and economic relations between the various trading partners.

<sup>78</sup>G.A.A., Notariele Archieven 1578-1842. (Hereafter referred to N.A. and the number of the particular book of protocols.) Altogether, the collection comprises 20,421 volumes, each containing anywhere from 500 to 800 notarial acts. The period 1690-1825 is covered by the records of over 330 notaries comprising about 15,000 volumes. So far only the records for the years 1701-1710 have been systematically indexed and fully analyzed by the staff of the Amsterdam City Archives. To some degree the records for certain notaries known to have specialized in trade and shipping outside this period have also been indexed.

<sup>79</sup>Erik Amburger, Die Anwerbung ausländischer Fachkräfte für die Wirtschaft Russlands vom 15. bis 17. Jahrhundert, Wiesbaden, 1968; Maria Bogucka, "Handel Bałtychi Amsterdamu w pierwszej połowie XVII w swietle kontraktow frachtowych," Zapiski Historyczne, 34(1969)2:1-33 and "Amsterdam and the Baltic in the First Half of the Seventeenth Century," Ec. H.R., 2nd ser., 26(1973) 3:433-447; Christensen, Dutch Trade, pp. 260-268; and Simon Hart, "De handelsbetrekkingen van Amsterdam met

(Footnotes - Chap. I)

Archangel en Lapland (Kola) in de 17e eeuw," Nederlands Archievenblad, 73(1969) 66-80 and "Amsterdam shipping and trade to Northern Russia in the Seventeenth Century," M.N.V.Z., 26(1973) 5-30, 105-116. All these studies, however, pertain to the seventeenth and not the eighteenth century.

<sup>80</sup>Christensen, Dutch Trade, pp. 281 ff.; Bogucka, "Amsterdam," p. 434; Hart, "Amsterdam," p. 5.

<sup>81</sup>In some instances, the archives of private merchants do give us information on ships that sailed entirely at the risk of a shipping company. See below pp. 27-28.

<sup>82</sup>Usually the freight price was given as per last with separate prices for different commodities.

<sup>83</sup>G.A.A., N.A. 10893/161. On 22 March 1779 Gerrit Visser, an Amsterdam merchant formerly of Zaandam, made a contract with Gerrit Wiggers who was part-owner and bookkeeper of the flute "de Hoop" under the command of Doede Claasen. The measurements of the ship were 137 3/4' x 33 1/11' x 14 9/11' x 6 10 1/2 /11'. The ship was to load beams and other timber for Amsterdam but not any masts or wind-mill spars (molenroeden). The freight price would be f. 9,000; ordinary expenses according to custom, and f. 63 for hat-money (caplaken). The number of lay-days was 21 with f. 30 to be paid for each extra lay-day. All profit on the cargo over and above what was normally carried (bovenlast) would be shared equally by the charterer and captain; N.A. 10901/171. On 23/24 May 1782, Johan van der Wall for himself and the firm of Jacobus and Johannes van der Wall & Co. of Amsterdam signed a contract with Johannes Andreas Goebel, also of Amsterdam, acting on the written orders of Tjeert Guitjes from Ghent, skipper of the ship "t Welvaaren van Ghent," size c. 90 lasts rye. The ship was to sail from Middelburg to Riga and Memel to load 450 shpd. flax and 50 shpd. codilla. Timber could also be loaded but that in contact with the flax had to be dry. The captain was not allowed to load any additional flax either for others or himself. The freight price was f. 10 1/2 per shpd. of flax and other cargo in proportion, 10% for ordinary expenses and average, plus f. 63 for hat-money. The ship was to load/unload in 38 days or else would receive f. 30 for each extra lay-day; N.A. 9419/13453. On 27 July 1748, Thomas Adrian Hope and Co. chartered the ship the "Jonge Nagtegaal" under the command of Jan Hendrik Nagtegaal from Ameland. Nagtegaal was to sail for Archangel and there load 1800 barrels of tar [100 large = 134 small barrels and 14 small barrels = 1 last] for Amsterdam at f. 27 last. He was not allowed to load any additional tar but was allowed to load other goods for which he would receive freight in proportion with rye. Rye, wheat and linseed were measured at 16 chetvert/last, tallow at 120 pud/last and



(Footnotes - Chap. I)

hemp at 60 pud/last. While at Archangel, the captain and the crew were to assist with the loading and also pay for any lighters used. The D.M.H. Galjoetsgeldregisters for 22 March 1749 listed the ship as arriving at Amsterdam with 164 lasts of cargo, the registered ship lastage being 118 lasts. For further information on the measurement of ships, lastages and other weights and measures, see footnote 23 and Chapter II.A.4 below.

<sup>84</sup>For example, G.A.A., N.A. 8735/2. On 2 January 1738 an Amsterdam merchant named Johannes Vergeel purchased from Pieter Brouwer, also an Amsterdam merchant, the cargo of salt from St. Ubes in the ship "De Brouwer" (134' x 30' 3/11 x 14' 4/11 x 6' 1/2" Amsterdam measurements) under the command of captain Dirk Jansse Duijff. In the spring of 1738 the ship was to sail for either Reval, Narva or Viborg and return with a cargo of timber. The GGR of the D.O.H. for 3 September 1738 recorded a "Dirck J. Duijff" from Hindeloopen arriving at Amsterdam with the ship "De Brouwer" from Viborg with a cargo of 168 lasts; the registered ship lastage was also 168 lasts.

<sup>85</sup>G.A.A., N.A. 16517/486. On 26/28 June 1784, Jacques Marc Fraissinet chartered the ship "Thomas en Hendrik" to sail from Amsterdam to Viborg and there load deals of timber and if necessary also in Drangezond. When the ship is fully loaded (c. 100 lasts), it should sail to Rochefort to unload.

<sup>86</sup>G.A.A., N.A. 16344/425. On 25/31 August 1784, Balthazar Elias Altema in the name of the company Jan and Theodore van Marselis chartered the ship "De Vrouw Margaretha Susanna" c. 110 rye lasts under captain Herman Bakker. The ship was to sail from Amsterdam to Riga to load masts and other cargo. She was then to sail for either Brest, Rochefort or Lorient. In the Sound, the skipper had to address himself to C. Hansen & Co. of Elseneur for further instructions.

<sup>87</sup>Idem. Another possibility was that a ship could be ordered in the Sound to pick up a cargo in the Baltic as was the case of N.A. 15832/975. On 8 June 1789, Hendrik Hovy signed a contract with Herman Petersen ter Nuys acting on behalf of the firm as part-owner and book-keeper of the ship the "Twee Gebroeders," who would send orders to the captain, Andries Simon Boom, to sail from Copenhagen to St. Petersburg to load hemp and other cargo for Amsterdam. The captain was ordered to start loading the cargo no later than 20 July O.S. In the GGR of the D.M.H. for 16 December 1789, captain Boom was listed as coming from St. Petersburg with 110 lasts of cargo, 72 lasts being the registered lastage of the ship.

<sup>88</sup>G.A.A., N.A. 9412/12948. On 25 August 1748, captain Cornelis Oomes, commanding the "hoekerschip Vrouw Christina," contracted to go from Amsterdam to Kronstadt to load hides with 400 staves of iron as ballast (franco freight) and then sail to either Livorno or Amsterdam. If Oomes sailed to Amsterdam, he would receive f. 4,200 bij de hoop and if he sailed to Livorno, the freight would be f. 75 per last of hides. But should Oomes not be inclined to go to Livorno, he would be replaced at Texel by another skipper.

<sup>89</sup>In quite a few instances, the destination of the cargo was not known by the captain (apart from a certain area such as the French coast or Mediterranean) until he saw the cognossements. See for example, G.A.A., N.A. 15832/992. On 10 June 1789, Coenraad Adrian Hasselgreen for the firm of the same name contracted with Tamme Beth who had written orders from captain Lieuwe Teyes of the "kofschip Fetakia" c. 120 lasts rye, to sail from Workum to St. Petersburg to load hemp and other goods and then sail for either Amsterdam or Bordeaux according to the cognossements. If the ship sailed for Bordeaux, the freight would be f. 36 per last of hemp instead of f. 32 per last to Amsterdam. Iron was to be carried as ballast franco freight. According to the GGR of the D.M.H. for 22 December 1789, Lieuwe Teyes arrived at Amsterdam with 128 lasts of cargo, the ship itself being registered at 66 lasts.

<sup>90</sup>See G.A.A., N.A. 15845/902. On 2/5 July 1790, Louis Rynders, acting for Courtau Echenique Sanchez & Co., hired the ship "Jonge Hendrik Roltys" under captain Teunits Loitz (from Groningen) to sail from Amsterdam to St. Petersburg to pick up a cargo of 4000 pud of flax (a pud was equal to about 33 1/2 Amsterdam pounds), and 400 rolls of hides and then proceed to Corunna to register the cargo for unloading at Rivadeo. If the captain received orders at either Riga or the Sound to go to St. Andreas instead, he would receive an extra f. 100 for freight.

<sup>91</sup>The most common single commodity was timber from either Narva or Reval.

<sup>92</sup>This type of charterparty was very common for Riga, Archangel and especially St. Petersburg.

<sup>93</sup>For example, G.A.A., N.A. 9403/12119. A ship was chartered on 5 May 1744 to sail to St. Petersburg to load hemp for Amsterdam. It was not allowed to carry codilla.

<sup>94</sup>G.A.A., N.A. 9403/12141. On 26 May 1744, captain Hessel Jelles, in command of the "Vier Gebroeders" contracted with Egbert Thesingh to carry a full load (volle en bequame) of hemp to Amsterdam with iron as ballast. Iron was to be carried franco freight. See also N.A. 9411/12772 about a ship from Kronstadt to Livorno carrying 35 lasts of iron franco freight.

(Footnotes - Chap. I)

<sup>95</sup> Sometimes even tar was not permitted as was the case in 1778 (N.A. 10891/246) of the "Juffrouw Elisabeth" under captain Wiebe Symons who was to sail from Hamburg to Archangel to pick up a cargo of linseed, rye, barley or hemp. He was not permitted to load either tar or iron and had to agree to load at least 175 "heavy lasts" (sware lasten).

<sup>96</sup> There were two basic ways for hiring a ship. The first was when a ship was hired bij de hoop in which case the captain would receive a share of the profit on the sale of the cargo carried on the deck (usually this occurred in the timber trade). Secondly, a charterer could load only part of the ship (usually a majority part or fair load) and in addition to his (the charterer's) cargo, the captain could load other cargo at his own risk and profit. On freight bij de hoop or lump freight see Sir Thomas Scrullen, The Contract expressed in Charterparties and Bills of Lading, 14th ed. edited by W.L. McNaire and A.A. Mocata, London, 1939, Article 149, pp. 407-409. A typical example of a ship being chartered bij de hoop can be found in G.A.A., N.A. 9403/12146. On 1 June 1744, Jan Laurens, commanding the three-mast galjot "De Willem" agreed in a charterparty with Joan Christiaan Gerding of Amsterdam to take a cargo of salt and general cargo to Viborg and return with a full load of timber. The freight price was f. 3,400 bij de hoop with one half of the freight to be paid at Viborg and one half upon return at Amsterdam.

<sup>97</sup> For an example of a bonus for the captain for a well-stowed cargo, see in G.A.A., N.A. 9403/12169 the contract signed on 30 May, 1744 between Pieter Rijdenicus as charterer and Pieter Bel, a merchant of Hoorn, part-owner and bookkeeper of the ship the "Hoolwerff" under the command of Jan de Geus. The ship was loading salt at St. Ubes for Danzig. The captain was to be informed at the Sound to sail for Reval instead. From there he, after unloading, was to sail with cargo or in ballast to Narva to take on a full load of timber stored according to the custom of the Noordvaarders (timber ships sailing on the Norway route). The profit on the sale of the timber carried on deck (bovenlast) was to be shared equally between the charterer and captain. An example of the second case can be found in G.A.A., N.A. 9403/12093, 20 April 1744 which contains a contract between Justus van Maverick and the captain of the "Rigase Post," Leendert van der Spit. Under the terms of this charterparty the ship was to sail from Amsterdam to Riga to load a cargo of 500 shpd. of rijnhennep (hemp of the first quality) and 300 shpd. of pashennep (hemp of lesser quality) at a freight price of 35 stuivers/shpd. The captain was free to make whatever arrangements he could to secure extra cargo and thus earn extra freight.

(Footnotes - Chap. I)

<sup>98</sup>G.A.A., N.A. 15843/620. On 8/10 May 1790, Louis Rynders for Courtiau Echenique Sanchez & Co. chartered the "kofschip de Bontemantel," of c. 80 lasts, to sail from Brugge to St. Petersburg and there load cargo for San Sebastian. The freight prices to be paid were f. 33 per last of hemp or flax, and f. 36/last hemp of second quality, f. 36/last of wax, f. 37/last of tallow, f. 36/last of sailcloth at 60 rolls to the last and other goods in proportion.

<sup>99</sup>It seems that when the size of the ship was given in lasts of rye this more often than not indicated the cargo-carrying capacity of the ship. For a more detailed explanation of how lasts were determined, see Chapter II.A.6.a.

<sup>100</sup>Some of the more common measurements and equivalences taken from charterparties (9419/13453, 22 March 1749; 6639/—, 18 July 1721; 9419/13449, 26 June 1748; 10905/123, 7 May 1784; 10905/136, 12 May 1784) are for hides at 88 pud or 60 rolls/last, for tar at 14 small barrels/last with 100 large barrels = 134 small for hake at 90 pud/last, for tallow at 120 pud/last, for rye, wheat or linseed at 16 tsertvert/last, for hemp at 60 pud/last, mats at 400 large or 600 small/last, tallow or caviar at 88 pud/last, iron at 120 pud/last. Quite often, it is specified that 6% allowance must be made for "Russian measurements" and that the quantity refers to goods loaded on board. The question of measurements will be discussed further in Chapter II.A.6.b.

<sup>101</sup>The number of lay-days and the remuneration paid for extra lay-days was related to the size of the ship. Extra lay-days meant additional wages to be paid to the crew.

<sup>102</sup>For example, G.A.A., N.A. 15831/771. On May 1789, Arnoldus Dapper signed a contract with Hermanus Petrus Ter Nuys as part-owner and bookkeeper of the ship "de Vrouw Adriana," c. 80 rye lasts, to sail under captain Andries Christiaans within eight days from Copenhagen at a fine of f. 50 for each day of delay and head for St. Petersburg to load a cargo of hemp for either St. Malo, Nantes or Bordeaux, according to the cognossements. If the captain arrived at St. Malo, he was to be told within 72 hours whether he should sail for Nantes or Bordeaux in which case an extra f. 3/last would be paid. The loading and unloading was to take place within 36 days or else the captain would be paid f. 25 for each extra lay-day. See also N.A. 9403/12156 in which the captain was ordered to sail from St. Petersburg no later than 21 June 1744. Sometimes the charterparty mentioned the effect on the freight price of a later (more dangerous) sailing date as was the case of Abbe Lieuwes of Tershelling,

(Footnotes - Chap. I)

captain of the ship the "Koorneurs van Amsterdam" (N.A. 7315/—, 8 July 1722). Lieuwes was hired by George Colonius to leave Amsterdam no later than 15 July and sail for Archangel where he was to load a cargo of 150 lasts of tar for Amsterdam. He was to leave Archangel no later than 15 September. If Lieuwes left Archangel before 15 September, the freight price would be f. 20/last but if he left between 15 September and 1 October, the freight price would be f. 21:10 (a 7.5% increase).

103 It was mostly on the Archangel route that we found the question of armament of the ship mentioned in the charterparties. An exception is G.A.A., N.A. 6636/—. On 20 June 1720, Christoffel Brants, Court Councillor and Resident of Tsar Peter in Amsterdam, made a charterparty with captain Harke Zeres commanding the "Eendragt," 125 x 33 3/9 x 14 1/2 x 7. Zeres was to sail for St. Petersburg and return to Amsterdam. The cargo to be carried on either leg of the journey is not mentioned but in St. Petersburg, Zeres would be told by Brants correspondents, Bartholomew Borst and Hendrik Bodisco Pietersz what cargo to load for Amsterdam. The freight price was f. 10,750 bij de hoop, average and expenses according to custom and f. 100 for hat-money. The ship was to be armed with sixteen "pieces" (cannon), hand-guns and necessary ammunition. The crew numbered 32. Free passage and board had to be provided for any passengers.

104 The D.O.H. ensured that lighters were provided at Riga. However, at Archangel and St. Petersburg, it was the custom that the captain paid such expenses. In the case of St. Petersburg, this meant that the larger ships would load part of their cargo at the docks of the city insofar as the draught of the ship allowed to navigate the channel to Kronstadt and there take on the rest of the cargo. The extra expenses for lighters and handling to bring this remaining part of the cargo to the ship were to be paid by the captain unless otherwise specified. At Archangel, the shallowness of the channel forced most of the ship to load at sea or at the "Sollebol." Here the captain was obliged to use the crew and the ship's boat to bring the cargo aboard in addition to any lighter and handling costs. Sometimes it was specified that the cargo would be delivered f.o.b. (free-on-board). For examples of this, see N.A. 6636/—, 24 July 1720; 10886/130, 21 March 1777; 10891/288, 29 May 1778; 10893/284, 2 June 1779; 10905/185, 29 June 1784.

105 For example (N.A. 9403/12154 and 12156), it was quite common for the captain to transport firewood (twee vadem brandhout) free of charge for the charterer.

(Footnotes - Chap. I)

<sup>106</sup>G.A.A., N.A. 6638. In a charterparty signed between Christoffel van Brandt as agent for Tsar Peter and Willem Jantz Schot, captain of the ship "de St. Jan," the ship was chartered bij de hoop to fetch cargo from Archangel and carry it to Amsterdam. Contrary to custom, the captain was not allowed to carry any cargo on his own account.

<sup>107</sup>The most frequent sum mentioned was 10 silver ducats or f. 60. The sum does not vary and seems to have been dictated by maritime custom. During the course of the eighteenth century, the amount of the caplaken stayed more or less the same increasing only in times of war or other dangers on the route.

<sup>108</sup>G.A.A., N.A. 5954/20. On 25 July 1691, Cornelis Tiaerds, captain of the ship "Vijfhuizen" declared at the request of Jan van de Velde, an Amsterdam merchant, that when he, Tiaerds, was at Schansternye (near the future St. Petersburg; see Map 1), he had purchased timber the year before to be ready for shipment this year. According to correspondence received, the timber was ready for shipment.

<sup>109</sup>Examples of the reaction of merchants to war are especially noticeable during the Great Northern War and the Fourth Anglo-Dutch War of 1780-1783. Quite often the charterer protected himself by inserting a clause enabling him to opt out of the contract. For example (G.A.A., N.A. 3354/2789), on 28 March 1703, Gilles and Frederick Dorville chartered the ship "Prins Casimir" under captain Luyte Ryns to sail from Amsterdam to Schansternye to load a cargo of timber for Amsterdam. In case the waiting cargo was destroyed by enemy troops (presumably the Russians) or floods, the contract would be annulled with a penalty of f. 500 to be paid by the charterer to the captain instead of f. 3,044 freight for the whole voyage and the captain would be free to load whatever cargo he could find.

<sup>110</sup>See the article by Schöffer, "Vonnissen." For the Court of Marine Assurance and other archives pertaining to ship assurance see pp. 24 - 27 below.

<sup>111</sup>The ship-declarations were made by the crew of the ship at the request of the captain who was responsible for the cargo according to the bills of lading and for the ship to the shipowners. The ship-declarations, therefore, stress two points. First, that at the time of loading all proper and customary care was taken to ensure that the cargo was properly stowed. And second, usually at the end of the declaration, that the damage to the cargo and/or ship was exclusively the result of

(Footnotes - Chap. I)

bad weather conditions. See for example, G.A.A., N.A. 15512/185, 25 August 1784 or N.A. 15773/1214, 15 June 1784 and other ship-declarations cited in this study.

<sup>113</sup>G.A.A., N.A. 10843/114. On 9 February 1769 the first mate, carpenter and cook of the ship "d'Antonia en Jan Arnoud" under the command of Dirk Jorisz Pronk, declared that in October and November of 1768 they loaded linseed in barrels and wainscot at Riga. They left from the Boldera (sandbank outside Riga) on November 22 and because of adverse winds and coldness did not reach the Sound till 13 December. They were then forced to enter Blindsond in Norway to repair damage to the ship for which three carpenters were employed. This resulted in having to pass the winter there and it was not until 19 January 1769 that they left Blindsond, arriving at Texel on 24 January and at Amsterdam five days later. Aside from the damage already mentioned some of the cargo sustained water damage while the bottom had fallen out of some of the other barrels. Another ship had even worse luck. (G.A.A., N.A. 5289/213.) On 25 January 1702, the crew of the galjot "St. Jacob" (skipper, Jan Dirkse from Terschelling) declared that the cargo received water damage due to shipwreck after beaching at Riga. The cargo from Amsterdam, still to be unloaded, was damaged and consisted of tobacco, raisins, prunes, rice, figs, pipes, herring, salted fish, cheese from Leiden, wine, brandy, saltpeter. Some of the return cargo of linseed was also damaged. An interesting case is that of the ship the "vijf Gebroeders" under the command of Fokke Heije. (N.A. 15512/185.) On 25 August 1784 the crew declared that the ship was loaded with rye at Riga and ready to sail for Amsterdam on 5 June. Because of adverse winds, it could not leave till 12 June and after much difficulty reached Amsterdam on 15 August. The crew declared that the ship was seaworthy, the cargo competently stowed, that all did their duty and that the damage to the cargo and ship was solely the result of bad weather. What is interesting about this ship-declaration is that the ship was located in both the STA and GGR. According to the STA (7840626) the ship, under the command of Jan Holen passed the Sound on 26 June 1784 carrying 62 lasts of rye. The D.O.H. Galjootsgeldregisters for 19 August 1734 list the weight of the cargo also at 62 lasts while the registered ship lastage is given as 30 lasts. Apparently, the damage to the cargo either was minimal or did not result in any lowering of the galjootsgeld levy. When more such cases are found, it will be possible to determine whether or not the damage or loss of cargo resulted in a lowering of the galjootsgeld or not.

<sup>113</sup>G.A.A., N.A. 3873/13 gives the declaration of the crew of the ship "de Twee Schelvisen," skipper being Cornelis Jansz. Schelship was loaded with rye, hemp and hempseed. The ship arrived in the Sound in November and waited five weeks for the convoy with the result that it had been frozen in at Copenhagen. It can also happen that the charterparty

(Footnotes - Chap. I)

specifies that in case a ship was trapped in the ice the cost of wintering had to be paid by the captain. So far, only on the Archangel route, have we found examples of this as was the case with Pieter Hendrik in command of the flute "de Zon" (N.A. 10891/288, 29 May 1778). He was chartered by Claas Kruyer to sail for Archangel to load 2,700 to 2,800 large barrels of tar and other heavy goods for Amsterdam. The freight price would be f. 48/last of tar, for linseed f. 50/last, rye at f. 51 and barley or tallow at f. 56. At the Sollebol (a sandbank near Archangel), Hendrik would be granted thirty lay-days starting 1 August with f. 30 for every extra lay-day except if the ship was caught in the ice, there would be no payment for extra lay-days. The costs of wintering in Archangel were to be paid by the captain.

114 G.A.A., N.A. 9403/12082 concerns a declaration made on 10 April 1744 by the crew of the "koffschip de Juffrouw Maria Elisabeth" under skipper Cornelis Jelles Swart. In October 1743, the ship loaded at Riga with two parties of linseed and one party of hemp. It departed from the Boldera for Amsterdam on 2 November but storms forced it to seek shelter at Memel. Leaving Memel, it was forced by ice to winter at Rostock from which it could not leave until 10 March 1744. The ship passed the Sound on 18 March, Texel on the 27th and arrived the next day before the gates of Amsterdam. In addition, the cargo suffered water damage due to heavy storms and ice.

115 G.A.A., N.A. 10291/225. On 25 March 1760, Sören Basballe, the first mate, Jens Toffte, the second mate, Ole Poulsen, the boatswain and Lars Swenson, the cook, declared at the request of captain Peder Blegen in command of "de Boodschap Maria" that they sailed from Riga and the Boldera on 30 August 1759 with a load of hemp and some wainscot. Adverse winds and bad weather forced them to anchor at Ösel from 3 - 8 September, at Kristiansbø from 19 - 25 September, Jutland from 8 - 28 October and at Hesnaes from 29 October - 6 November, each time having to pay for pilotage. A storm of 8 - 14 November forced them into the bay of Hamburg and it stormed again from 20 - 21 November. On 24 November, they reached Vlieland and took a pilot on board, but because of darkness had to put out the anchors. A new storm the next day forced them to cut the anchor. Reaching the Pampus (a sandbank in front of Amsterdam) they unloaded some of the cargo on to two lighters and with the aid of a "ship-camel" passed over the Pampus, arriving at Amsterdam on 4 December. From 12 December to 2 January 1760, the Y was frozen. On 4 January, they managed to unload 18 bales of hemp but then from 7 January to 15 February, the Y was again frozen. Only after 15 February could the rest of the cargo be unloaded without any pilferage by the ship's crew. When unloading, water damages were discovered to a part of the hemp. Blegen



(Footnotes - Chap. I)

also declared that he had not loaded any cargo for others at Riga.

A similar, if not worse, fate overtook the crew of the three-mast galjot "d'Juffrouw Anna Jacoba" under the command of captain Pieter Meijndertsz Clements (N.A. 9419/13394). On 22 April 1748 her crew declared that in September 1747, they had loaded on the Boldera at Riga four parties of hempseed, five barrels of seed-linseed and planks two inches (duim) thick. The crew consisted of nine (negen eeters). They sailed from the Boldera for Amsterdam on 29 September, arrived at the Sound on 10 October and were ready to leave on the 14. Adverse winds prevented them from leaving the Sound till 31 October but they were forced back to the Sound again on 4 November. A storm caused the ship to list and they were not able to leave the Sound till 17 November. Subsequent storms in December caused the ship to list even more, leading the cargo to shift. Although the captain and crew used all possible sails to keep afloat, on 11 December, they were forced to cut the main mast to stay above water. On 13 December, they were forced to cut away almost all of the remaining rigging and masts. After anchoring at Terschelling, the ship was towed to Ameland. Then, while trying to reach Harlingen, the ship became stuck in the ice on 10 January 1748 until 18 February. It was not until 13 April, that they reached Amsterdam.

<sup>116</sup>A "water-camel" or "waterschip" was a barge-like device which was attached to the sides of a ship and then had its water-ballast pumped out. The increased buoyancy decreased the draught of the ship and made possible its passage through a shallow channel or over a submerged sand-bank. A description of "ship-camels" or water-camelen can be found in J. Perry, The State of Russia under the Present Czar, London, 1716, p. 25. Perry, a British engineer hired by Peter I to supervise the construction of canals and locks in Russia, described the water-camels as follows:

"I was ordered to attend him [Peter I] in a Yacht to Hellevoetsluis [from England in 1698] where his Majesty procured an Order for me, and sent a Person with me to shew me all the Camels (which are flat Vessels made to be fixed to the bottom of ships, and come up like a chest on each side) with which the Hollanders are obliged to lift their ships over the Pampus, a large Flat that lies in de Souda [sic! Perry must mean the Zuidersee] a sea between the City of Amsterdam and the Texel."

The Pampus continued to challenge inventors throughout the eighteenth century since the better the water-camelen the less cost would be incurred in having to pre-(un)load ships going to and from Amsterdam. For some of these inventions, see G. Doorman, Octrooien voor uitvindingen in de Nederlanden uit de 16e-18e eeuw, 's Gravenhage, 1940, pp. 251, 261, 308 and 310.

(Footnotes - Chap. I)

<sup>117</sup>G.A.A., N.A. 10278/725 contains a declaration (5 October 1765) of Thomas and Adrian Hope, merchants of Amsterdam and owners of the cargoes carried by the following ships:

- "De Witte Sleutel" under captain Jan Bakker;
- "De twee Gebroeders" under captain Jacob Vos;
- "De jonge Hellingman" under captain Dirk Vos;
- "De jonge Arend" under captain Simon Jacobs and later Jansen  
Woordman;
- "De jonge Juffrouw Anna Maria" under captain Jacob Brysen;
- "De Jonge Jan Ruyter" under captain Fokke Tjerds de Ruyter.

They gave their procuration to Henry and John Shiffner, merchants of London. The latter were to do whatever was necessary to reclaim the cargoes of these ships which were seized by English men-of-war. The first four ships had come from Riga and the others from St. Petersburg. (The act is in English.) See also 10282/938, 14 December 1757, and 10277/466, 20 July 1756, for Dutch ships taken by English privateers.

<sup>118</sup>G.A.A., N.A. 10339/1493. (This is a simple declaration and not a ship-declaration.) A number of Amsterdam merchants interested in the cargo of the ship "De Twee Gebroeders" under the command of Cornelis de Groot, made a declaration on 13 November 1741. They stated that the ship had left Amsterdam for St. Petersburg. Hendrik and Daniel Janse Schokker, bookkeepers of the ship, had informed them that the ship had arrived at Danzig instead of, according to the cognossements, St. Petersburg. As the ship had left Amsterdam for St. Petersburg before the date of the Swedish declaration of war on Russia, the merchants wished that the ship continue its journey to St. Petersburg and if blockade made this impossible, the ship should try to unload its cargo at either Reval or Riga. See also N.A. 10339/1498, 14 November 1741, for a similar declaration involving the ship "de Juffrouw Christina en Maria" under captain Seye Sjoerds. (N.A. 8127/361.) On June 1735, Pieter Bartelsz Roos, merchant and grower of trees, living in Aalsmeer, gave procuration to Limburgh and Bohtlingh, merchants in St. Petersburg, to reclaim 50 yew-trees and 3 fruit-trees which he had shipped in the spring of 1734 on the ship "de jonge Marten en Cornelis" under captain Cornelis Manus. The trees were sent by Roos to Jan Wessel in Danzig but the ship was captured by blockading Russian naval forces and taken to St. Petersburg.

<sup>119</sup>The charterparties often include non-Dutch or non-Russian ships and charterers. In fact, the ship need not even be sailing to or from Amsterdam or any other Dutch port as, for example, an English ship could be chartered in Amsterdam to sail from England to Riga to carry a cargo to the Mediterranean.

(Footnotes - Chap. I)

120 The Dutch waterschout has been translated as shipping-master. Actually the waterschout should be considered as a "balliff of the water." He was appointed by the city to maintain and enforce the ordinances pertaining to maritime affairs, i.e., the harbour.

121 W.H.F. Oldewelt, Amsterdamse Archiefvondsten, Amsterdam, 1942, pp. 45-49.

122 G.A.A., PA38. Archief van de Waterschout, 1747-1868. Of the 152 folios of monsterrollen, only three cover the period from 1747 to 1772 and one the period from 1841 to 1852. Most of the other years are covered by two or three folios each.

123 These zeebrieven can be found in G.A.A., Archief Burgemeesters, Zeebrieven. See Christensen, Dutch Trade, pp. 75-80 for a discussion of Dutch practices with regard to "sea-letters" and "sea-passes."

124 G.A.A., Archief Burgemeesters, Zeebrieven. A certificate of registry issued on 5 April 1769, to Pieter Fredrik (homeport: Amsterdam) for the ship "de Zee Vaart," c. 34 lasts, stated that 5/32 of the ship's shares resided in Denmark.

125 The author is indebted to Mr. R.A.D. Renting, Archivist of the Rotterdam City Archives for the information on the Zeetijdingen.

126 G.A.R., Nrs. 852-853. Zeetijdingen van Hellevoetsluis, 1778-1822 en Maassluis, 1765-1822. Amsterdam had a similar courier-coach connection with Texel which did not provide the same service on an organized basis but functioned as a regular and dependable postal service for the Amsterdam merchants.

127 The results have been summarized in Table VI. 1.

128 The Zeetijdingen are the only Dutch source discovered so far which lists both the incoming and outgoing ships. A comparison with the STA for the post-1784 period using the Johansen data should prove most interesting. However, since the fiches on the Zeetijdingen prepared by the staff of the G.A.R. use the name of the ship and not the name of the captain, it will be necessary to use the original manuscripts in order to make a comparison with the STA.

(Footnotes - Chap. I)

129 Such sources as the Amsterdamse Courant (1693+), the Nieuwe Nederlandse Jaarboeken (1766-1798) and De Koopman, of weekelijkse bijdragen ten opbouw van Neerlandsche koophandel en zeevaart, 6 vols., Amsterdam, 1768-1776 provide information on the number of ships arriving at or departing from Dutch ports (primarily Amsterdam and Rotterdam) during the eighteenth century.

130 In addition to the studies mentioned above, other works by Dutch authors which contain substantial summaries or reprints of eighteenth-century sources on Dutch trade and shipping are H. Becht, Statistische gegevens betreffende den handels omzet van de Republiek der Verenigde Nederlanden gedurende de 17e eeuw, (1579-1715), published Ph.D. dissertation, University of Amsterdam, 1908; R. Bijlsma, "Rotterdam's scheepvaartverkeer in de achttiende eeuw," Nieuwe Rotterdamse Courant, 25 November, 1906; J.G. van Dillen, "Naschrift. De achttiende eeuw," TvG, 61(1948):16-30; P.J. Dobbelaar, "Een Statistiek van den in- en uitvoer van Rotterdam c.a. 1753," Ec. H. Jrbk., 7(1921):210-213; P.J. Dobbelaar, "Statistische opgaven van de in- en uitgevoerde granen in de Maashavens gedurende de 2e helft der 18e eeuw," Ec. H. Jrbr., 6(1920): 134-167; H.C. Hazewinkel, "Een memorie over den handel van Rotterdam uit 1729," Rotterdamse Jaarboekje, (1937): 127-139; H.A.A. Kranenburg-Boelmans, "De haring export naar het Oostzeegebied in de 18e eeuw," TvG, 72(1959): 251-259; L. van Nierop, "Uit de Bakermat der Amsterdamsche Handelstatistiek," Jrbk. Amstelodamum, 12(1913):105-172 and 16(1917):35-110; W. F. H. Oldenweld, "De scheepsvaartstatistiek van Amsterdam in de 17de en 18de eeuw," Jrbk. Amstelodamum, 45(1953): 114-151 and L. van Nierop, "De Hollandse Imposten en ons beeld van de conjunctuur tijdens de Republiek," Jrbk. Amstelodamum, 47(1955): 48-80; N.W. Posthumus, "Statistiek van den in- en uitvoer van Amsterdam in het jaar 1774," B. M. H. G., 34(1913):516-526; F. Snapper, "Statistische gegevens betreffende de Zeeuwse convoien en licenten uit de 17e- en 18e eeuw," Ec. H. Jrbk., 29(1963):260-271; J. de Vries, "De Ontduiking der Convoien de Licenten in de Republiek tijdens de achttiende eeuw," TvG, 71(1958): 349-361; Joh. de Vries, "De Statistiek van in- en uitvoer van de Admiraliteit op de Maze, 1784-1793," Ec. H. Jrbk., "I : Statistiek van de invoer," 29(1963): 188-259 and "II : De Statistiek van de uitvoer," 30(1965): 236-307; J.C. Westerman, "Statistische gegevens over den handel van Amsterdam in de zeventiende eeuw," TvG, 61(1948): 3-15.

131 For a discussion of the development of Dutch marine assurance and average before and during the eighteenth century, consult W.H.A. Elink-Schuurman, "Korte aantekeningen betreffende de verzekering in de dagen der Republiek," Ec. H. Jrbk., 3(1917):110-123; F. Kracht, Die Rotterdamse Seeversicherungsbbörse. Ihre Entwicklung, Bedeutung und Bedingen, Weimar, 1922; G. van Rijn, "De Actiehandel in 1720 te Rotterdam en de Maat-

(Footnotes - Chap. I)

schappij van Assurantie," Rotterdamsch Jaarboekje, (1889) 1-75; I. Schöffner, "Vonnissen," pp. 73-132; C.H. Slechte, "De Maatschappij van Assurantie, Discontering en Beleening der Stad Rotterdam van 1720 bekeken naar haar productiefactoren over de periode 1720-1874," Rotterdamsch Jaarboekje, 7th ser., 8(1970)252-310; W.Z. Sneller, "De drie cargasoenen rogge van Daniel van de Meulen c.s. anno 1592 en hun verzekering," Jrbk. Amstelodamum, 32(1935)89-118, and J.P. Vergouwen, De Geschiedenis der makelaardij in assurantiën hier ter lande tot 1815, Amsterdam, 1945. For a short review, see Joh. de Vries, De Economische Achteruitgang der Republiek in de Achteinde Eeuw, 2nd ed., Leiden, 1968, pp. 68-71. For a recent study of the history of marine assurance in general, see L.A. Boiteaux, La fortune de mer, le besoin de sécurité et les débuts de l'assurance maritime, Paris, 1968.

<sup>132</sup>Average is defined as the expense or loss to owners arising from damage at sea to the ship or cargo. There exist two kinds of average, namely, particular and general. Particular average is the incidence of the partial loss or damage of ship, cargo, or freight, through unavoidable accident upon the individual owners (or insurers). General average is the apportionment of loss caused by intentional damage to ship, e.g., cutting away of masts or boats or sacrifice of cargo and consequent loss of freight, or of expenses incurred by putting into a port in distress by acceptance of towage or other service to secure the general safety of ship and cargo. In this case contribution is made by the owners (or insurers) of the ship, cargo and freight in proportion to the value of their respective interests. This became the prevailing sense of the word according to Maritime Law and Marine Assurance.

<sup>133</sup>This short summary is based on the sources cited in footnote 131.

<sup>134</sup>Schuurman, "Korte aantekeningen," pp. 112-118. The sources dealing with the invitation to participate in the constitution of the company are printed in Slechte, "De Maatschappij van Assurantie," pp. 296-297. Undoubtedly, Amsterdamers were a bit wary of new companies for insurance and transport in the light of the wild speculations taking place in England at that time (e.g., the so-called Mississippi and South Sea Bubbles). See Charles Wilson, Anglo-Dutch Commerce and Finance in the Eighteenth Century, new ed., London, 1966, pp. 103ff.

<sup>135</sup>G.A.R., Nrs. 215-226, Assurantieboeken 1720-1786, 12 vols.; 227-241, Zeeassurantieboeken, 1726-1784, 15 vols.; Nr. 242, Calcula der schuldens en loopende risico's op 't einde van ieder jaar, 1724-1744, 1 vol.; and Nrs. 243-260, Register van de loopende risico's ter zee, 1724-1784, 18 vols.

(Footnotes - Chap. I)

136 The development and role of this court are described in Schöffer, "Vonnissen averij grosse," pp. 73-86.

137 The declarations made by the crew. These were usually notarized and quite often can be found also in the Notarial Archives as ship-declarations.

138 For the period 1700-1770, Schöffer located a total of 3717 dispatches with yearly totals varying from 8 to 212. Of these 935 dealt with Baltic shipping and of these Baltic dispatches 295 (or 31.6%) dealt with Russian ports. Schöffer used the summaries prepared by A.H. Wicher-Hoeth and thus the dispatches for the period 1770 to March 1810 still await investigation. For this study those that pertain to ships to or from Russia have been consulted.

139 For a descriptive listing of the archives of the Brants family in the Amsterdam City Archives, see I.H. van Eeghen, Inventaris van het familiearchief Brants, Amsterdam, 1959.

## CHAPTER II

### EVALUATION AND METHODS

Scholars are aware of the difficulties posed by attaching quantitative values to the diversity of information found in historical source material. In order to make quantification and measurement possible, they often have had to make concessions. Faced with a multitude of variables, it is a common practice to use classification schemes to make such information more manageable. Classification methods quite often force a diverse flow of information to be channelled into certain defined streams. Through this process of simplification, it is argued that valuable information is lost, information which may very well cast serious doubts about the results reached by the analysis of the quantifiable variables.

Fortunately, the whole of the GGR can be prepared for processing by computer. The classification scheme used for the coding of the ports is broad and flexible enough to include even the smallest ports.<sup>1</sup> Each entry in the GGR or case contains the following variables: the "registered" date of arrival of the ship, the name of the port of departure, the name of the homeport of the captain, the "registered" lastage of the ship, the lastage of the cargo carried by the ship, the name of the captain and the name of the ship. Of these variables, the date of arrival and both lastages are already numeric. The names of the ports can be reduced quite easily to numeric or, as it is done in this study, to alpha-numeric variables. The two remaining variables, the name of the captain and the name of

the ship, were used (punched) as written.<sup>2</sup> As a statistical source, the GGR present a time series covering one and a quarter centuries and thus must be counted among the limited number of sources of this nature which are still extant. For this whole period the data is uniform. Figures for a later period do not have to be adjusted in order to render them comparable to figures for a previous period.<sup>3</sup> No debatable assumptions or approximations have to be made to compare, for example, the figures for 1724-1725 with those of 1784-1785.

As a result, the GGR lend themselves quite readily to quantitative processes. However, the reliability or accuracy of each of the variables must be determined before one can use the information given in the GGR, especially since this is the first time that these sources are being used extensively. It is, therefore, necessary to test and verify each variable against equally valid sources. Only when this has been done will it be possible to assess the GGR as a whole. It will also then be possible to determine to what degree the GGR are representative of shipping from Russian ports to Amsterdam or of all Russo-Dutch shipping and for the first time obtain an insight into the development of this shipping during the course of the eighteenth century. In the second part of this chapter the GGR are compared with the STA, a similar quantitative source. In the first section, the individual variables will be defined and tested against other Dutch sources.



A. The Interpretation of the GGR Variables

1. The "registered" date of arrival

While at first glance, the date of arrival seems to be a straightforward matter, further examination has shown that this is not the case. Except for one instance where the same ship is entered twice in sequence,<sup>4</sup> the GGR themselves do not give any indication that the date entered is not that of the arrival of the ship at Amsterdam. There are several entries which are not in chronological sequence. This would indicate that when the clerk had omitted an entry by mistake or received the necessary information at a later date, he would still record the entry according to the original document.<sup>5</sup> In his study on the GGR of the D.M.H., Brakel stated that the date given in the GGR of the D.M.H. (and by inference that given in the D.O.H. also) was the date of arrival of the ship.<sup>6</sup> However, when the GGR data were processed, it soon became clear that the number of cases entered during the first few months of the year was extraordinarily high considering the climatic restrictions placed on eighteenth-century shipping. Subsequently, tables were made of the percentage frequency distribution by month of arrival.<sup>7</sup> These show that in some years, the first four months, January through April, accounted for more than 50% of the total number of ships or the total tonnage of cargo carried that particular year.<sup>8</sup> These tables also show that at times one-fourth to one-third of the cargo carried arrived during the month of February.<sup>9</sup> In the light of the fact that these four months posed the greatest difficulties for shipping on the Baltic route due to storms and ice, this seems rather odd. A cursory check with other sources

also indicated discrepancies between the date of arrivals of ships at Amsterdam from the Baltic or White Seas as stated in these sources and the date on which they were registered in the GGR.

At first, it was assumed that this time-lag would have a certain uniformity as it might have been the result of an administrative process. With this theory in mind, several other sources in the Amsterdam City Archives were consulted. They were the ships-declarations as found in the notarial archives, the judgements in general average as found in the archives of the Court of Marine Assurance and the bills of lading and other documents located in private merchant archives.

The ship-declarations contain detailed descriptions by the crew on the voyage of the ship. In the majority of cases the date of arrival at Amsterdam is given.<sup>10</sup> A comparison of the date found in these sources with that given in the GGR for the same ship shows that the latter date quite often lags a month or more behind that stated in the ship-declaration. The difference in dates ranges from as little as eleven days<sup>11</sup> to as much as five months.<sup>12</sup> The average difference in dates between the GGR and ship-declarations is about one month and one week.<sup>13</sup>

The judgements in general average present a similar pattern. The date of arrival given in these judgements is from three weeks to two months earlier than that recorded in the GGR. Again the average difference in dates is about one month and one week.<sup>14</sup> This is not surprising. In fact, one would expect the difference in dates to be the same for these two comparisons since the evidence presented to the Court of Marine Assurance almost always included the ship-declaration made by the crew.

In both comparisons, the ship-declarations and judgements in general average, we dealt with those ships which deviated from the normal shipping pattern. It is quite conceivable that the galjootsgeld on either the cargo or the ship was not paid until all disputes about the state and value of damage to either cargo or ship were settled.<sup>15</sup> Ships which sailed late in the season had a higher chance of suffering some damage or delay due to inclement weather.

Enclosed from time to time in letters sent by merchants from various Russian ports to Amsterdam, one finds copies of bills of lading or cognossements.<sup>16</sup> Quite often, the Amsterdam merchants to whom these letters were addressed used these bills of lading to keep track of the expenses incurred in handling certain cargo through notations made on the margins or reverse side of these slips of paper. In many instances, the date and amount paid for galjootsgeld was noted. A comparison of these dates with those for the same ship as found in the GGR did not produce any recognizable pattern. Not only do some entries appear in the GGR two to three months after the galjootsgeld was supposedly paid,<sup>17</sup> but there are instances where the GGR entry precedes the date mentioned on the bill of lading by as much as one and one-half months.<sup>18</sup> The difference in dates between those given in the bills of lading and those recorded in the GGR is that the bills of lading precede those of the GGR by an average of a little more than three weeks.<sup>19</sup>

One last attempt was made at using the method of comparing individual cases for verifying the date recorded in the GGR. This involved using account books or reederyboeken of the ship-owners. Two such books

have been found to date.<sup>20</sup> While these account books list such minor expenses as the adjustment of the compasses and hourglasses<sup>21</sup> and for tobacco given to Russian labourers,<sup>22</sup> the amount paid for galjootsgeld is in most cases not recorded separately.<sup>23</sup> At times, these dues were shared between the ship-owner and the lessee. For example, if the ship was leased bij de hoop the lessee paid two-thirds of the costs for "water-camels"<sup>24</sup> to carry the ship over the sandbank at the Pampus<sup>25</sup> and for lighters at Amsterdam, while he paid galjootsgeld only for the cargo.<sup>26</sup> In order to determine when the ship arrived at Amsterdam, one type of entry was found to appear consistently, namely, that for the costs of the just-mentioned "water-camels" at the Pampus. It was decided to use the date of this entry, which can be considered to mark the arrival of the ship at the entrances to the harbour of Amsterdam, for comparison with the date recorded in the GGR.<sup>27</sup> The two ships for which we have this information were involved primarily in the timber trade with Narva and Viborg (a kind of "milk-run"). For the ship "de Juffrouw Christina" thirteen such date comparisons were possible. The average time lag between the date of arrival of the ship at Amsterdam and its registry in the GGR is 12.5 days.<sup>28</sup> Twenty of these date comparisons were obtained for the other ship, "de Waakende Leeuw," and the average time lag was computed at 9.9 days.<sup>29</sup>

Both these examples show a considerably smaller time lag than that derived from either the average judgements or the ship-declarations. The indication so far is that on the whole the date given in the GGR reflects within certain limits the date of arrival of the ship at

Amsterdam. Nevertheless, the above two case studies, as well as the average judgements and the ship-declarations, indicate that a considerable amount of time could and did elapse between the actual date of arrival of the ship at Amsterdam and its registration in the GGR. The date entered in the GGR is, therefore, called the "registered" date of arrival and the presentation of the data derived from the GGR must be seen in this context. In comparing the GGR data on a year to year basis, allowance must be made for the possibility that a change of up to 10% between years may be due solely to the variation in time lag between the actual date of arrival of the ship and the date recorded in the GGR. Further studies must be undertaken, especially those involving the STA before one can, by using the dates given in the GGR, establish the time shift that should be made in order to compare the STA and GGR data or retrospectively determine the date of departure of these ships from Russian or Baltic ports.

## 2. The port of departure

The names of the ports of departure have been assigned codes. Each port found in the GGR was assigned a specific code consisting of three digits and three letters.<sup>30</sup> The three letters were taken from the name of the port. The hundreds of the three digits represent a certain country or large geographic area, e.g., 300 through 399 represent Baltic Russia while 400 through 499 represent the ports on the southern coast of the Baltic. The tens represent a smaller geographic area of division within a country, e.g., the 370's have been reserved for Courland and

the 790's for Russian ports on the White Sea.<sup>31</sup> The code for St. Petersburg is thus 319STP while that for Amsterdam is 501AMS.<sup>32</sup>

The galjootsgeld was levied on all Dutch ships coming from the Baltic and White Seas. Yet the GGR contain the names of ports of departure which do not lie in the Baltic. In most cases, these are such ports as Aalborg, Aarhus, Flensburg, Helmsted and Varberg which are just outside the Baltic proper.<sup>33</sup> In Tables IV, these ports have been included under the heading "Other Ports." Aside from the occasional appearance of a non-Baltic port of departure, the methods used by those who recorded the GGR entries pose some difficulties. This is especially true for two clerks of the D.O.H., namely Willem Camper (1728-1759) and Johannes de Coup (1760-1776). De Coup's abbreviations and notations present the greatest problem. For example in 1774, he recorded ships as follows:<sup>34</sup>

"Maars 28	Corn Sleeswijk	v d Lemmer v Riga
Maars 29	Corn M Feddes	v Stokholm v dito
Maars 29	Hend M Feddes	v d <sup>o</sup> v d <sup>on</sup> .

Schöffer suggested that the "v dito" or "v d<sup>on</sup>" for "Corn M Feddes" referred to Riga and not to Stockholm.<sup>35</sup> But if this is the case then there would be no need for the "v Riga" in the next entry which is

"Maars 30	Heere Dirks	v Hindelopen v Riga"
-----------	-------------	-------------------------

since according to Schöffer this entry should read "v d<sup>on</sup>" and not "v Riga." A similar situation occurs further down on the same

folio where the following entries are noted:

"April 2	B Hielkes	v Harl v Hopzal
April 2	Martin Kofhal	v Coninxb v d <sup>o</sup>
April 3	Robert Walles	v Bergen v Hapzal."

Again if Schöffer's system of interpretation is correct, the "v Hapsal" in the last entry would not be necessary. Schöffer himself doubted whether his system corresponded to that of de Coup himself.

In this study the method used for interpreting the GGR as far as port of departure and homeport of the captain are concerned is as follows: 1) if the homeport of the captain is a Baltic port and the port of departure was recorded underneath as "v dito" or "v d<sup>o</sup>" then the port of departure is taken to be the same as the homeport of the captain; 2) if the homeport of the captain is a non-Baltic port and the port of departure was recorded as "v dito" or "v d<sup>o</sup>" then the port of departure is taken to be the same as that of the port of departure given in the previous entry; 3) if both the homeport of the captain and the port of departure are given as "v dito" or "v d<sup>o</sup>," then both ports are taken to be the same as that of the Baltic port given in the previous entry. Also found were two instances in 1779 where the notation "NB is Noorwegen" appeared.<sup>36</sup> However, the port of departure given in both instances is definitely a Baltic port and not one in Norway. Thus, aside from a very rare appearance of a non-Baltic port and the difficulties caused by the method of recording entries by Camper and de Coup, the ports of departure as stated in the GGR do not present any insurmountable problem for interpretation and codification.<sup>37</sup>

It is, however, quite possible that a ship took on cargo in more than one Baltic port. Schöffer has already noted this.<sup>38</sup> According to him, in such cases the GGR quite often suffice with the notation "Oost-zee." The author of the pre-1783 Sound Toll Tables complained that when a captain entered the Baltic, he would give a port of destination which differed from the declared port of departure when the ship left the Baltic.<sup>39</sup> The charterparties also confirm the quite accepted practice of captains to change the port of departure by touching at several ports on the return voyage in order to find some extra cargo (and thus extra income) for the ship if this was possible.

The sources used for testing the date of arrival are of limited value in determining the accuracy of the port of departure and homeport of the captain. In most cases the ship-declaration and average judgement precede the entries in the GGR. The possibility of conflicting information for these particular cases regarding the route is remote and none has been noted so far. Neither do the bills of lading and reederyboeken show any such discrepancies.<sup>40</sup> In addition, none of these sources provides an adequate sample for testing such a varied variable as the port of departure. Nevertheless, these sources do seem to indicate that the port of departure given in the GGR is, on the whole, quite accurate. Only by testing this GGR variable on a more quantitative basis against the STA or port books of the Baltic ports<sup>41</sup> will it be possible to check for variations.



### 3. The homeport of the captain

The term homeport which has already been used above on several occasions is not an English word. It is used by European historians as the equivalent for the Danish hjemsted or the German Schiffersheimat.<sup>42</sup> Homeport is thus used to denote the domicile of the captain of the ship.

The controversy surrounding the value of this variable as an economic indicator of shipping strength has already been discussed in the context of the STA. In the GGR of the D.O.H. the homeport of the captain is given up to 1779.<sup>43</sup> In 1780, a new bookkeeper, Estienne Le Jay was appointed and he apparently no longer felt it necessary to record the homeport and even the name of the ship. This is regrettable since it deprives us of an insight into the manner in which Dutch shipowners responded to the restrictions and dangers of the Fourth Anglo-Dutch War which broke out in 1780. That the recording of the homeport was stopped exactly in 1780 when Dutch shipping apparently sought refuge under neutral flags seems to be more than a coincidence but this is only a speculation. The GGR of the D.M.H. stopped the recording of the homeport four years earlier, on 1 April 1766, when Pieter Hijs replaced Johan de Coup as bookkeeper.<sup>44</sup> However, Hijs continued to record the name of the ship until 1786 when he was replaced by Le Jay.

The coding system used for the homeport is the same as that used for the port of departure. The overwhelming majority of those captains for which a homeport is given in the GGR are Dutch ports. Sweden and Danzig provide the bulk of the small number of non-Dutch captains. The fact that on the Russia to Amsterdam route the number of non-Dutch

captains including those from Russia is negligible means that this variable has been omitted in the tables and graphs presented below.<sup>45</sup> However, for three sample years, 1724, 1725 and 1769, the information on the homeports has been processed, and is presented in Tables V. The question of the reliability of this variable has been checked with the STA for the years 1724 and 1725. This has yielded some very interesting results.<sup>46</sup> Apart from these sample testings, no further work was done on the homeport. Most of the captains had Dutch homeports but this is a problem which is peripheral to our study.

#### 4. The name of the captain

Throughout the whole GGR both the Christian name(s) and surname of the captain are recorded. No serious discrepancies between the GGR and the sources used above for testing the GGR data pertaining to the name of the captain have been found. There are, however, some minor deviations which occurred from time to time. It was possible that a ship sailing from Amsterdam to Russia might return to Amsterdam with a different captain due either to illness or death or even the sale of the ship. Such cases are rare and a quick check of the name of the ship and lastages will usually settle the matter. A more frequent and not at all unusual occurrence was that a ship changed its captain while fitting out for a new voyage from Amsterdam.<sup>47</sup>

The tendency of the GGR to Dutchify the names of non-Dutch captains can pose some problems. These lie not so much with the treatment of the

GGR data itself as in the comparison of the GGR data with other quantitative sources such as the STA. This tendency to Dutchify names, in most cases the names of Swedish captains, is more of an irritant than a problem.<sup>48</sup> There also exists the infrequent possibility that different captains have identical names and even identical ports of departure and homeports.<sup>49</sup> One final remark about this variable is that while normally the two names given in the GGR are the Christian name and surname, it is possible that the two names given in the GGR are only the Christian names according to another source where the surname was added. The reverse is also true.<sup>50</sup> However, on the whole, the name of the captain serves as a very useful tool for comparing and evaluating the GGR data with other quantitative sources.

##### 5. The name of the ship

The name of the ship, like that of the captain, is an alphabetic variable which remains for all intents and purposes a constant from year to year. It was, however, possible that a ship which entered the Baltic under one name returned from there under another, although such occurrences were rare.<sup>51</sup> In most of the transfers of titles and sales of ships in the Baltic, there is no mention of the name of the ship being changed.<sup>52</sup> It could also happen that a ship was sold while on the high seas but again changes in the name of the ship seem to have been very rare.<sup>53</sup> The only probable exception was in times of war when simulated ship sales and corresponding changes in flag took place so that the ships might continue trading as neutrals.

A much more serious problem is the fact that many ships carried the name of the same saint or such popular names as "Liefde" (Love), "Vrede" (Peace), "Gerechtigheid" (Justice) and "Hoop" (Hope).<sup>54</sup> This practice makes it almost impossible to use the name of the ship in the GGR for comparison with other sources unless other attributes such as the name of captain or the lastages are known. Further, the name of the ship is no longer recorded in the GGR after 1779 as in the case of the D.O.H., and after 1785 in the case of the D.M.H. However, when combined with the name of the captain and the lastage of the ship, the name of the ship does, when necessary, provide an almost foolproof combination for the identification of a particular ship. Since this variable has no immediate utility for our study, it has not been processed except for the years 1724 and 1725.

#### 6. The lastages

Of the many different systems of measurement which were used in earlier times probably no system caused as many difficulties as that used for determining the size of the ship and no other measure could have so many different meanings as the "last."<sup>55</sup> What do we mean when we speak of a "last?" It is impossible to give a definite answer. An eighteenth century Dutch weekly for commerce and shipping, the Koopman, stated that it could not give an explanation of the methods used to calculate lastages of various commodities since this would take too long and be too difficult.<sup>56</sup> Not only did the last measure differ from place to place but it was used both as a volumetric and as a weight measure. In principle,

the last was a weight measure which was considered equal to about 4,000 Amsterdam pounds.<sup>57</sup>

The last as a volumetric measure was used to indicate the size of the ship. According to this measurement of capacity or size, duties were assessed on arriving and departing ships. This duty was called lastgeld.<sup>58</sup> Ostensibly, the lastage of the ship was meant to indicate not only the size of the ship but also that of the cargo. The difficulty lay in the conversion of measurements of the ship to its carrying capacity or burden. The problem was that the capacity of the ship was determined not only by the manner in which the ship was built but also by the kind of commodities it carried.<sup>59</sup> According to the Koopman the same Archangel flute could carry 500 to 600 lasts and sometimes even more. And a frigate of 150 rye lasts could carry only 135 lasts of wheat while flutes of the same size could carry 160 to 210 lasts of grain.<sup>60</sup> If this weekly periodical dedicated to the fostering of commerce and shipping found the problem of lastages too difficult to handle, present-day historians are still less sure what a last meant in all circumstances.<sup>61</sup>

The GGR were based on this dual nature of the last. Galjootsgeld was collected both on the basis of one stuiver per last of cargo carried (one-half stuiver per last of cargo after 1764) and one-half stuiver per last of the size of the ship.<sup>62</sup> In most cases the two lastages are not identical, the lastage of the cargo carried being generally higher than the lastage of the ship. We are thus faced with two problems related to lastage, namely that of the ship and that of the cargo. To understand the lastage of a ship, the figures given in the GGR have to be compared

with those of other sources. In order to do so, we must first establish an acceptable method for determining the lastage of a ship on the basis of its measurements, something that has not yet been done by scholars. Before we can deal with the lastage of the cargo, the weights and measures used for the different commodities must be defined. Ways should also be found to test the cargo lastage as given in the GGR with other sources. Thus we will deal first with the problem of the lastage of the ship and second with the lastage of the cargo carried.

a) The lastage of the ship

A correct method for measuring the lastage or tonnage of a ship continued to defy definition until the establishment of the Moorsom method in England in the 1850's.<sup>63</sup> Even today, historians are not sure as to what methods were used before then or should be used today to determine the size of the ship and the manner by which it was officially registered. The GGR are probably the only source available which lists both the lastage of the cargo carried and the size of the ship for a great number of ships for such a long period of time. Studies carried out by scholars to determine methods for establishing the size of the ship and the relation of this measurement to either the registered size of the ship or the cargo capacity so far have been based on rather small samples. For example, the study by John McCusker was based on five Philadelphia merchantmen and that by Christopher French on sixty-three merchantmen.<sup>64</sup> Both studies dealt with eighteenth-century English shipping which crossed the Atlantic and, while McCusker compared official and private sources, French

did not. Besides, shipping conditions in the Baltic and European system were different than those for ships which crossed the Atlantic. In order to find a solution to this problem, it is useful to establish theoretical equations for determining the size of the ship. These equations will then be tested by comparing the GGR information (an official source) with the size of ships as stated by the merchants themselves when they contracted these ships to carry cargo.

For ordinary wooden sailing vessels the deadweight lastage was about half of the displacement lastage loaded, that is, the weight of the cargo and the weight of the ship itself were about equal.<sup>65</sup> In other words, as a rough approximation, the cargo-carrying capacity of the ship and the size of the ship were considered equal.<sup>66</sup>

But how was the size of the ship determined? The usual method was to take the product of the length, width, and height of the ship and divide it by a certain conversion factor. From time to time, this method was tested by taking a ship of a certain type and loading it with cannon balls to determine its displacement lastage loaded. When fully loaded in this manner, the waterline of the ship was marked as the load line and then the cannon balls were removed and weighed.<sup>67</sup> It was, however, impractical to apply this method to every vessel and thus various formulas were used to determine the size of the ship.

Since the size of the ship was used to determine the amount of dues that had to be paid, it is not surprising that in a treaty between Holland and Denmark in 1647 concerning the levying of the Sound Tolls considerable attention was paid to the manner by which the lastage of the different

sizes of ships was to be determined.<sup>68</sup> Unfortunately, no exact formula for converting the ship's measurements into lastages was specified. From the examples given, however, it is possible to deduce that the formula must have been something in the order of:<sup>69</sup>

$$\text{Lastage} = \frac{L(\text{ength}) \times W(\text{idth}) \times H(\text{eight})}{300} \quad (1)$$

In the case that a ship had a deck, the following adjustment was made:

$$\text{Lastage} = \frac{L \times W \times (H + 1/4 D(\text{eck}))}{300}$$

The treaty also stipulated that ships carrying timber would receive a reduction of 20% of their lastage. The timber last was considered four-fifths of a rye last.<sup>70</sup> The latter together with the salt or St. Ubes last were used in determining the lastages of ships for the purpose of assessing the Sound Tolls.<sup>71</sup>

Another formula used was that found in the draft proclamation of 1688.<sup>72</sup> According to this proclamation the formula used by the Dutch was:

$$\text{Lastage} = \frac{L \times W \times H}{200} - 1/5 \frac{(L \times W \times H)}{200} \text{ or } 4/5 \frac{(L \times W \times H)}{200} \quad (2)$$

For ships with a deck or verdek, the following addition was made to the formula:

$$+ \frac{L \times 1/2W \times 1/2D}{200} - 1/5 \frac{(L \times 1/2W \times 1/2D)}{200} \text{ or } 4/5 \frac{(L \times 1/2W \times 1/2H)}{200}$$

The first observation to be made about Formula (2) is that it measures the ships in terms of lasts of timber instead of lasts of rye. The second is that the division by 300 in Formula (1) and by 200 in Formula (2) is not as strange as it might seem at first glance. It was a common practice



to register the ship at two-thirds of the lastage than it could actually carry.<sup>73</sup> If this is so, then Formula (1) pertains to the registered lastage of a ship in rye lasts for the purpose of assessment of tolls and dues. Formula (2) gives the carrying capacity of a ship in terms of lasts of timber. Without the reduction of the lastage by one-fifth, Formula (2) would give the carrying capacity of the ship in terms of lasts of rye.

During the seventeenth and eighteenth century, other methods were proposed in Holland to obtain a more accurate way of measuring the large variety of ship types. At the end of the seventeenth century, the Dutch East India Company, after extensive measurements, placed a last of Prussian rye equal to 125 cu. vt. (1 cu. vt. = .01705M<sup>3</sup> or 22.697 Litres) and this became an accepted standard.<sup>74</sup> The discourse on the "Measuring of Ships," written in the middle of the eighteenth century, stated, however, that up to that time all ship measurements were made in "timber feet" (Dutch lit. houtvoeten). For the so-called "wide ships," a last of timber was considered to be equal to 180 cu. vt. and for the "round ships," 194 cu. vt.<sup>75</sup> The author himself proposed what was according to him a more accurate means for determining the lastage of a ship. It would be equally applicable to all types and sizes of ships regardless of the sharpness of the ship's lines and can be stated as follows:<sup>76</sup>

$$\text{Lastage} = \frac{L \times W \times H}{200} - \frac{1}{3} \frac{(L \times W \times H)}{200} \text{ or } \frac{2}{3} \frac{(L \times W \times H)}{200} \quad (3)$$

For ships having a deck the following addition was to be made to the formula(s):

$$+ \frac{L \times 1/2W \times 1/2D}{200} - \frac{1/3(L \times 1/2W \times 1/2D)}{200} \text{ or } \frac{2/3(L \times 1/2W \times 1/2D)}{200}$$

This proposal was thus an attempt to officially recognize the accepted practice of registering the size of a ship at approximately two-thirds of its actual measurements or cargo-carrying capacity.<sup>77</sup>

All these attempts at reaching an all-embracing formula had serious drawbacks which lay not so much in the formulas themselves as in the diversity of types and sizes of ships. At both ends of the range in ship sizes the formulas lost much of their validity.<sup>78</sup> This was true especially for ships measuring 300, 400 or 500 lasts. The way a ship was built also greatly influenced its carrying capacity. A frigate and a flute of the same size could not carry the same amount of cargo because of the sharper lines of the frigate.<sup>79</sup> Dutch ships, in general, were built more round and square not only in order to be able to carry more cargo but also because of the shallowness and increased silting of the Dutch harbour approaches and shipping channels.

The above three formulas can, with minor deviations, be considered part of the same formula depending as to what particular aspect of the ship's measurements were to be stressed. If one assumes that these three formulas are essentially those which were used at that time, then a certain relationship should be observable between the measured lastage and the registered lastage. This relationship is determined by the following conditions which have been observed in the documents cited:

- 1) That the lastage calculated from the measurements should be equal to the cargo-carrying capacity of the ship expressed in lasts of rye (rye lasts).<sup>80</sup>

- 2) That the lastage of the ship for the assessment of tolls and duties was usually put at two-thirds of the actual measured lastage.
- 3) That ships were registered in lasts of timber which were considered equal to four-fifths of rye lasts.

The relationship between the measured lastage (ML) and the registered lastage (RL) of a ship can, therefore, be expressed as:

$$.667ML = RL \text{ (where RL is in rye lasts)}$$

and

$$.533ML = RL \text{ (where RL is in timber lasts).}$$

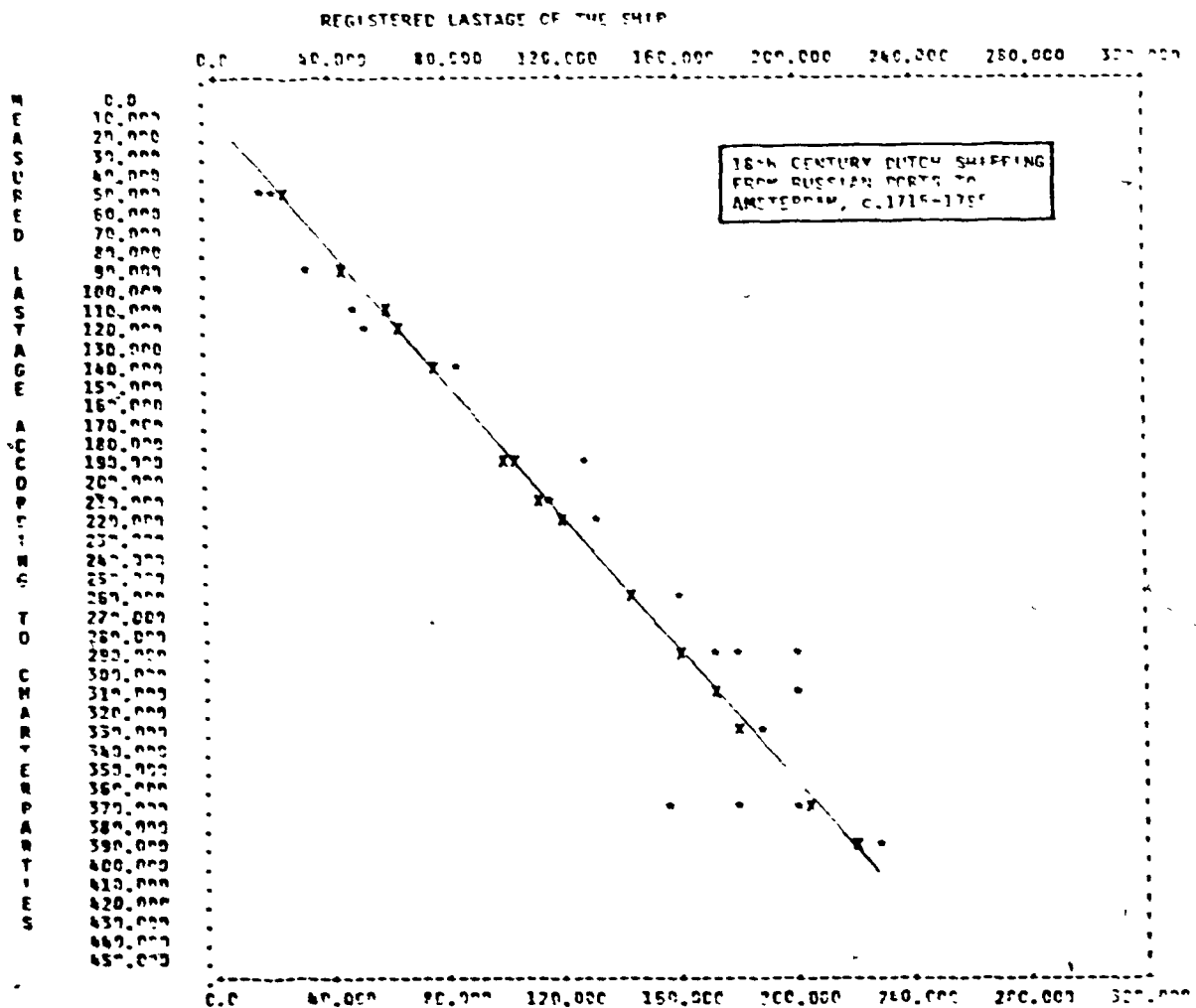
What last measure was then used for the ship and how does it relate to the cargo-carrying capacity of the ship? The GGR themselves seem to indicate that the lastage given for a ship were lasts of timber. The figures given in Tables II.4.B and II.4.D on shipping from Narva and Viborg to Amsterdam support this assumption. Both these ports, and especially Narva, were principally exporters of timber. In a large number of cases the lastages of the cargo and of the ship as stated in the GGR are the same. Presented on a yearly aggregate basis in the two tables mentioned above, the annual difference between these two lastages is usually less than 4% and in many cases less than 1%. Only during periods of war or other exceptional circumstances are the percentages above 4%. The number of ships in our sample (more so in the case of Narva than Viborg) is large and consistent enough to rule out the possibility of any coincidence.

In order to test and verify the theoretical relation of  $RL = .533ML$ , the charterparties were consulted. The charterparties state from time to time either the measurements of the ship or the approximate cargo-carrying capacity, the latter mostly in rye lasts. The first route that was investigated was that for ships sailing between Narva and Amsterdam. Since the greater part of Narva's export consisted of timber, it should be possible to test for the relation of  $.533ML = RL$ . The search for charterparties which stated the measurements of ships and which were located in the GGR on their return voyage yielded twelve samples since many ships sailed from Narva to ports other than Amsterdam.<sup>81</sup> While this is a small sample, it nevertheless yields some interesting results, namely,  $r = .954$ ,  $b = .589$  and  $R^2 = .893$ . The correlation coefficient ( $r$ ) at  $.954$  is thus quite strong while the regression coefficient ( $b$ ) is  $.589$ <sup>82</sup> and the coefficient of determination ( $R^2$ ) is  $.893$ .<sup>83</sup> In other words, on the basis of the 12 samples pertaining to Narva,  $RL = .589ML$  and this relationship holds true for 89.3% of the cases. The difference between the theoretical  $RL = .533ML$  and the observed  $RL = .589ML$  is  $.056$ . This small difference can be attributed in part to the preciseness of the measurements given in the charterparties and to what degree the measurements should be rounded off in various stages of the calculations.

It was possible to assemble a similar but smaller data set for Riga. The results obtained on the basis of seven samples were,  $r = .954$ ,  $b = .5397$  and  $R^2 = .910$ . The correlation coefficient is also  $.954$  but the regression coefficient has dropped to  $.53977$  or  $.540$  while the coefficient of deter-

mination was .910. Thus the observed relation of  $RL = .540ML$  is almost identical to the theoretical  $RL = .533ML$  and the degree of closeness of the linear relationship between  $RL$  and  $ML$  is .954 while 91% of the variance is explained by the regression equation. Both samples as well as three for St. Petersburg have been combined, thus bringing the total number of samples to 22. For this data set the following values were computed,  $r = .957$ ,  $b = .567$  and  $R^2 = .916$  and are presented in Graph I.1 of the estimated versus the observed registered lastage of the ship taking as the base variable the measured lastage of the ship.

GRAPH I.1 OBSERVED (•) VERSUS ESTIMATED (X) REGISTERED LASTAGE

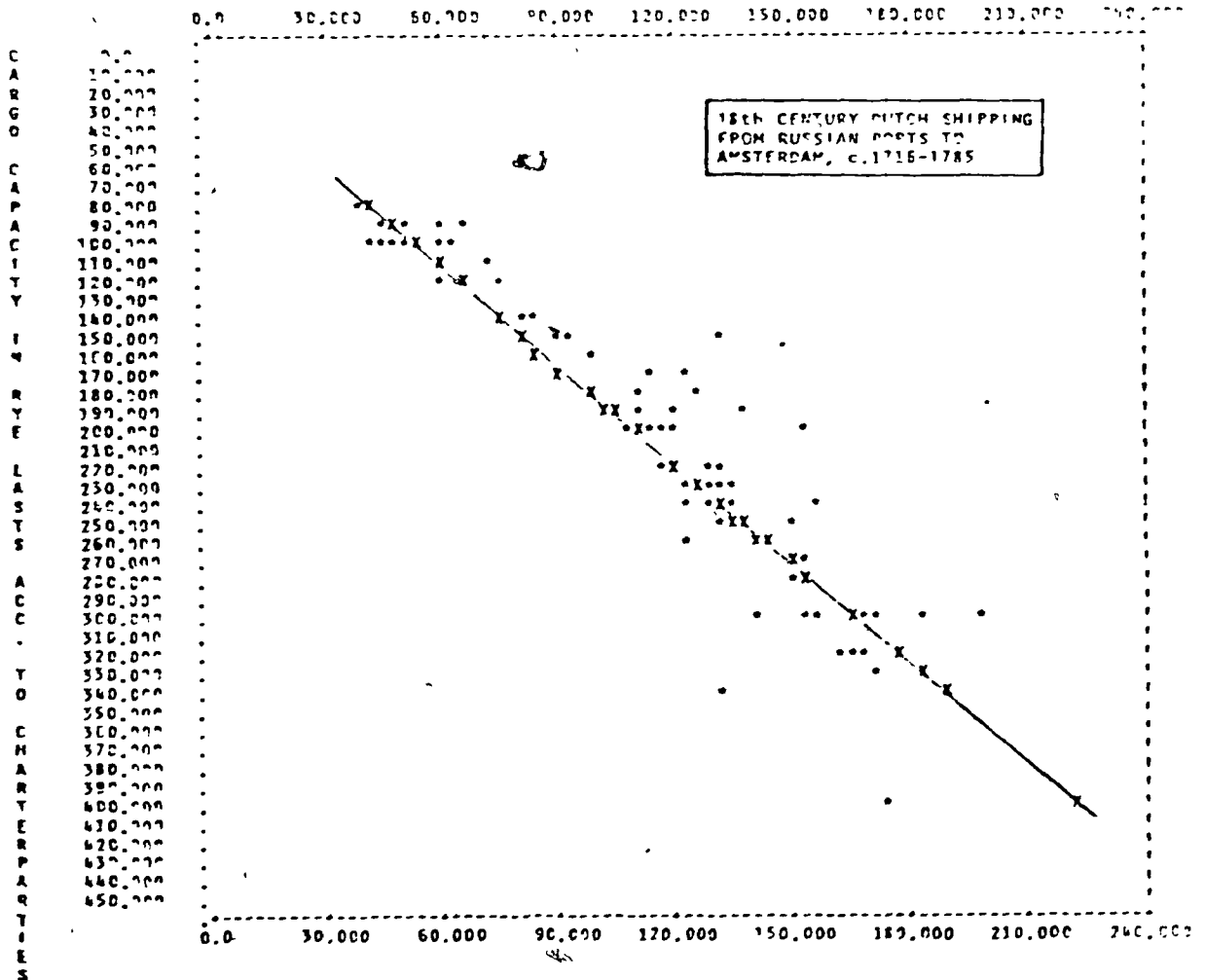


As could be expected, Graph I.1 shows that the variance increases as the values increase. Thus the relation is  $RL = .567ML$ . The degree of relationship between RL and ML is .0957 and 91.6% of the variance is explained by the regression equation. The difference between the observed RL and the theoretical RL is that the observed is .034 or 6.3% higher than the RL determined according to the formula.

Much more numerous are the charterparties which state the (approximate) cargo-carrying capacity (CC) of the ship, usually in rye lasts. For the St. Petersburg-Amsterdam route, 27 such charterparties were found which could also be located in the GGR.<sup>84</sup> By taking the registered lastage

GRAPH I.2 OBSERVED (•) VERSUS ESTIMATED (x) REGISTERED LASTAGE

REGISTERED LASTAGE IN TIMBER LASTS



of the ship as recorded in the GGR as the dependent variable and the cargo capacity as given in the charterparties in rye lasts as the independent variable, the following values were obtained,  $r = .943$ ,  $b = .563$  and  $R^2 = .889$  and our equation would be  $RL = .563CC$ . An additional 68 such observations were found for the Archangel-Amsterdam route and, being analyzed in the same manner, yielded  $r = .860$ ,  $b = .555$  and  $R^2 = .740$ . These two data sets were combined and the results are presented in the line plot labelled Graph I.2. Again the variance increases as the values increase. The regression analysis values computed for the combined data are  $r = .941$ ,  $b = .556$  and  $R^2 = .885$ . Accepting the premise that the cargo capacity (CC) and the measured lastage (ML), both stated in rye lasts, can be considered equal, these 95 observations yield the equation  $RL = .556ML$  and 88.5% of the variance is explained by this regression. The observed  $RL = .556ML$  is .023 or 4.3% higher than the theoretical  $RL = .533ML$  according to the formulas.

The Rederyboek of the ship "de Waakende Leeuw" provides an additional insight into the problem of determining the relationship of RL versus ML. When the ship was sold in 1744, according to the bill of sale, it measured  $129' \times 28^8/11' \times 12^6/11' \times 7.85$ . According to Formula (2) the measured lastage of the ship would, therefore, be 265 lasts. During the 11 years for which we have a record of the ship's movements, she made 20 voyages from the Baltic (primarily Narva and Viborg) to Amsterdam. Each time the lastage of the ship as recorded in the GGR was 140 lasts. For "de Waakende Leeuw," RL would thus equal .528ML. However, an entry for 12 May 1729 reads,

"Schietersgeld van 255 lasten, 8 man, f.117:12:-." <sup>86</sup>

In other words, when the ship was unloaded the actual rate according to which the labourers were paid was 255 last which represents a difference of 3.8 - 3.9% from the lastage computed according to the formula. This example illustrates that the difference between the observed and theoretical conversions (from 4.3% - 6.3%) may very well be due to metrological factors.

Thus the evidence obtained from contemporary sources, internal criticism of the GGR as well as a comparative analysis of the GGR and other equally valid sources support the hypothesis that for eighteenth-century Dutch shipping from Russia (and most likely other shipping as well) the conversion factor of  $RL = .533ML$  is a valid method (within a 4.3 - 6.3% margin of error) for converting the measured lastage (ML) or cargo-carrying capacity of the ship (CC), both in rye lasts, to the lastage at which the ship was registered (RL), in timber lasts. This conversion factor must be taken into account when evaluating the data tabulated on the lastage of the ship (or shipping tonnage) derived from the GGR on shipping from Russian and Baltic ports to Amsterdam. <sup>87</sup>

b) The lastage of the cargo

J. Phillipus Rodenburg, the author of the discourse on the measuring of ships, emphasized that it was impossible to equate a last to 4000 ponden <sup>88</sup> since a last was equal to 125 cu. vt. which held 13,550 ponden of copper but only 728 3/4 ponden of the lightest kind of cargo. <sup>89</sup> A last of 125 cu. vt. could contain a last of wheat weighing 4500 ponden, a last of Prussian rye weighing 4320 ponden but if dried only 4032 ponden or a



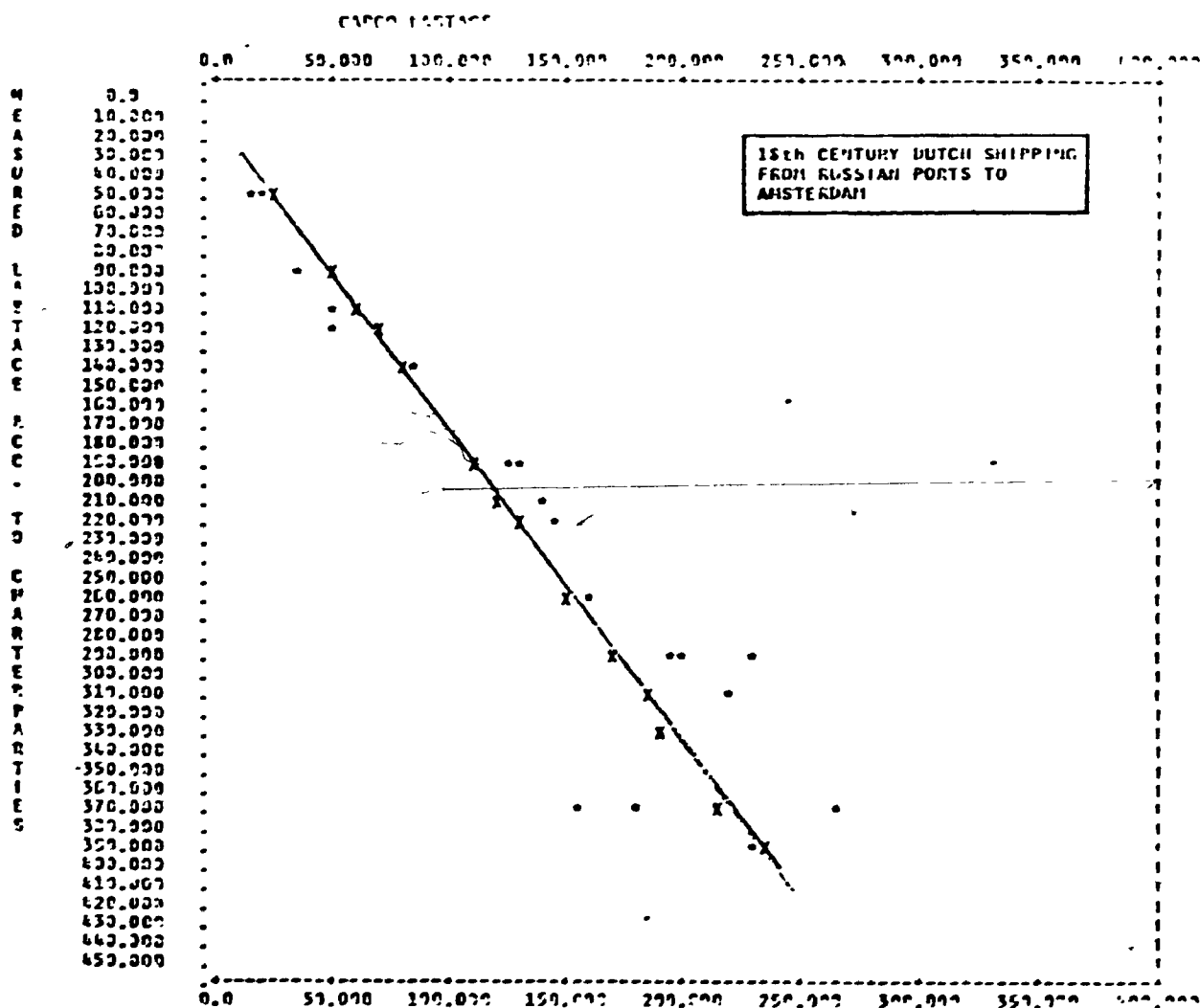
last of barley of 3525 ponden.<sup>90</sup> Timber was measured at 4/5 of a rye last.<sup>91</sup> Flax and hemp were measured in shippounds<sup>92</sup> (shpds.) of 300 ponden.<sup>93</sup> For some of the other principal articles of Dutch trade with Russia, the equivalent of a rye last at Amsterdam for freighting purposes was placed at 8 oxheads or 2 casks for wine, 14 casks of loose herring or 12 casks of packed herring, 12 casks of pitch, 13 casks of tar. For tallow, wax and caviar, 4000 ponden were considered equal to one last of rye, and flax or hemp were measured at 6 shippounds per last.<sup>94</sup>

In calculating the price of freight, a last of rye was the accepted standard used to determine the last burden expressed in weight measurement of 4250 ponden (about 2097.883 Kilograms) and not in volume.<sup>95</sup> In determining freight prices a last of wheat was considered to be 9% more than a last of rye, a last of oats, 20% less, while seeds, e.g., hemp-, lin- and rapeseed, were considered at 10% less than a last of rye.<sup>96</sup>

In the GGR, however, no distinction was made between these varying last measurements since the number of lasts for both the cargo and ship are recorded simply as "lasts cargo" and "lasts ship." With regard to the "lasts ship," we have already noted that the ships were recorded in the GGR at almost one-half their actual size if measured in rye lasts. Or stated another way, the ships paid galjootsgeld on their registered lastage which was two-thirds of their measured size in last of timber. But Tables II.4 show that the cargo lastage (CL) was almost always greater than the registered lastage (RL). On the other hand, for ships which came from Narva or Viborg, the cargo lastage and registered lastage are the same in the great majority of cases. What then was the cargo lastage on

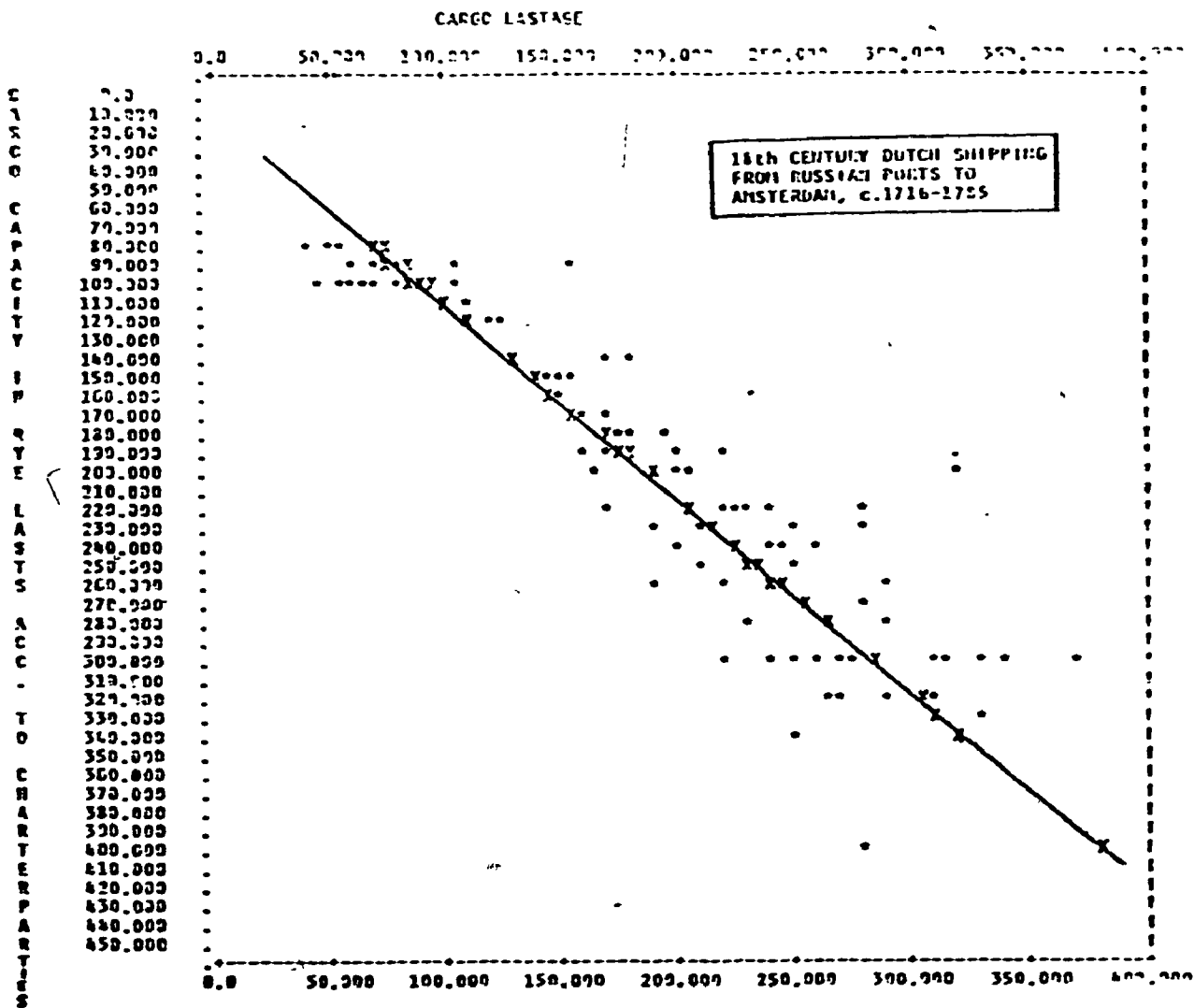
which the galjootsgeld was paid? Was it the weight of the cargo in terms of rye lasts or timber lasts? Was it simply the sum total of the lasts of different commodities carried by the ship? Was the cargo lastage also recorded at two-thirds of actual number of lasts? How do we reconcile the fact that at times, on the St. Petersburg route, the yearly total of "lasts cargo" is more than double the yearly total of "lasts ship" while on the Narva and Viborg route, they are practically the same? Neither the GGR themselves nor the archives of the D.M.H. and D.O.H. provide an answer.

GRAPH I.3 OBSERVED (+) VERSUS ESTIMATED (X) CARGO LASTAGE



Perhaps the method used for determining the relationship between the measured lastage (ML) or the cargo capacity (CC) and the registered lastage (RL) can be of assistance also for finding the relationship between the ML or CC and the lastage of cargo carried by the ships and thus give an insight in the type of last measure used to decide the galjootsgeld paid on "lasts cargo." If we take the first sample, that of 22 observations of ML versus RL and change the dependent variable from RL to CL with ML remaining as the independent variable, regression analysis will yield the results,  $r = .922$ ,  $b = .603$  and  $R^2 = .850$ . The results of this analysis are presented in the line plot labelled Graph I.3. But if we take the other sample, namely that of the cargo capacity in rye lasts and repeat the regression analysis making the same changes as before, the results are  $r = .913$ ,  $b = .954$  and  $R^2 = .834$ . Plotting the results of this second sample, Graph I.4, we notice that while there is not much difference in the variance between Graphs I.1 and I.3, the same is not true for Graphs I.2 and I.4. Secondly, in our analysis of both these samples for the lastages of cargo carried, there is a wide disparity between  $b = .603$  (for ML) and  $b = .954$  (for CC). What are the reasons for this? First of all, it must be noted that in the first sample, ML, we are dealing almost exclusively with ships carrying timber as cargo. The lastage of cargo carried and the lastage of the ship as recorded in the GGR are in many cases identical.<sup>97</sup> A regression analysis of the registered lastage versus the cargo lastage carried yields  $r = .979$ ,  $b = .930$  and  $R^2 = .958$ . Thus the difference between  $b = .567$  for ML versus RL and  $b = .603$  for ML versus CL can be accounted for by the

GRAPH I.4 OBSERVED (+) VERSUS ESTIMATED (X) CARGO LASTAGE



possibility that some ships carried extra or different cargo. But this leads us to another problem, namely, was the lastage of cargo carried also assessed at 2/3 of the actual lastage? This will be discussed after the second sample, that of cargo capacity, has been dealt with.

The relation between the cargo capacity (CC) as stated in the charterparties and that of the cargo lastage (CL) as recorded in the GGR is one in the order of  $LC = .954CC$ . This does not tell us anything except that the ships observed carried to Amsterdam a cargo almost equal to their

cargo capacity. However, if one compares CL with RL for the same ships the regression is of the order  $RL = .573LC$  ( $r = .928$  and  $R^2 = .861$ ). Even if allowance is made for the possibility that registered lasts are timber lasts and cargo lasts are rye lasts, a 20% difference, this still would not account for the fact that  $CL = .954CC$  and  $RL = .573LC$ . Thus the conclusion would be that cargo lasts were assessed at their actual value and not at the two-thirds reduction granted RL, which contradicts the first sample consisting of ships carrying timber.

Information taken from the bills of lading lead us to make the assumption that galjootsgeld was paid on the lastage of each of the commodities carried according to the manner in which the lasts of each goods were measured. Thus the difference in lastages CL versus RL, as shown in Tables II.4, presents no problem. However, the contradiction with regard to ships carrying timber confirmed by Tables II.4.B and II.4.D complicates matters. In the case of the ship "de Juffrouw Christina," for instance, which was engaged primarily in the timber trade with Narva and Viborg, the GGR consistently recorded the RL at 142 lasts, while the CL varied from 142 to 153 lasts, eight times out of ten being 142 lasts.<sup>98</sup> In 1729, the ship made a voyage to Danzig, and on its return the "lasts cargo" was recorded as 266 lasts.<sup>99</sup> This was one of the few times that the ship was not chartered bij de hoop, the usual manner for chartering ships carrying timber.<sup>100</sup> Further, for all years and all ports in Tables II.4 with few exceptions, the total lastage of cargo carried is always greater than the total registered lastage.<sup>101</sup> A solution to the relationship of the lastage of cargo carried to the measured lastage, the cargo capacity and registered

lastage probably contains the following elements:

1. Ships carrying only timber were in most cases chartered bij de hoop and thus it would not be unusual that for these ships a full load was considered equal to the registered lastage.
2. For ships carrying other commodities or mixed cargo, freight was paid per last and in most cases more than one merchant shipped cargo on the same ship. Thus here the cargo lastage would be equal to the sum total of the number of lasts of the different commodities shipped by each merchant.

At the moment, it is not possible to obtain a satisfactory solution. The cargo lastages of individual ships will have to be checked against the Sound Toll Accounts and other documents at both the port of departure and port of arrival.<sup>102</sup> The route of the ship, the duration of the voyage and the time of the season, as well as the armament, crew, provisions and equipage of the ship, all influenced the amount of cargo that the ship could carry.<sup>103</sup> For the time being, the assumption is made that the cargo lastage as recorded in the GGR is the sum total of the lasts of different commodities with the exception for ships carrying timber bij de hoop in which case the cargo lastage is usually equal to the registered lastage.

Now, that the different GGR variables and the context in which they must be used and parameters by which they must be judged have been defined and evaluated, the remaining question is that of the degree of representativity of the GGR as a whole. Does the data derived from the GGR on shipping from Russia (and the Baltic) represent all shipping from

there to Amsterdam or only that of ships carrying the Dutch flag, ships having a Dutch captain or ships controlled/chartered by Dutch merchants? The answers to these and similar questions can only be dealt with after the GGR has been tested against a source of a similar quantitative nature which pertains to all shipping to and from the Baltic, namely, the STA.

B. The Amsterdam Galjootsgeldregisters Compared with the Sound Toll Accounts

Up to now we have limited our evaluation of the GGR to comparisons on the basis of individual cases. While this approach has proved invaluable in determining dissimilarities on an individual basis and in defining the parameters of the GGR variables, such an approach cannot present an overall frame of reference by which the GGR as a whole can be evaluated. It is in this context that a comparison of the GGR with the STA is very useful not only for evaluating the GGR in terms of the STA but also vice-versa.

The magnitude of the quantitative data contained in both these sources made it necessary to limit such a comparison to specific years. Two sample periods were chosen, the years 1724 and 1725 and the years 1784 and 1785. The first period represents the final two years of the reign of Peter I and marks the level of development of trade and shipping with Russia at the end of an era of great change. The second sample period, 1784 and 1785, marks the period following the Treaty of Paris of 1783 which ended a number of interlocking wars, known as the American Revolutionary War, the Fourth Anglo-Dutch War and the War of the League

of the Armed Neutrality. Since the Bang volumes ended with 1783, Glamann and Johansen started their work on the STA with the year 1784. At the time of this study, the STA data were available for 1784 and 1785 only. Still, the choice determined by necessity does have merits. The years 1784 and 1785 were times of peace, the large scale changing of the flags of ships which had taken place during the war years had abated. The outbreak of hostilities between Sweden and Russia in 1788 and the French Revolution the following year limit the choice of "normal" years for comparison with the beginning of the eighteenth century.

Since this is the first time that such a comparison has been undertaken, the methods and value judgements used should be explained in some detail. Aside from specific problems encountered in working with some of the variables, which are presented below, some remarks of a more general nature are in order. First of all, the 1724-1725 sample includes the processing of data for these two years of the STA of ships having a Dutch port as their port of destination,<sup>104</sup> and of those in the GGR of the D.O.H.<sup>105</sup> The GGR data for the first five months of 1726 were included so that it would be possible to check for ships which passed the Sound en route to Dutch ports late in 1725 and which arrived at Amsterdam early in 1726. In this way it should be possible to present an evaluation of all ships which passed the Sound in 1724 and 1725 by determining whether a) the ship arrived at Amsterdam, b) the Baltic port of departure given in the STA and the GGR is the same and c) the homeport of the captain is the same in both sources.<sup>106</sup>



In terms of the GGR, it will be possible to test for only one complete year, namely 1725, since ships which were recorded in the GGR during the first few months of 1724 probably passed the Sound late in 1723. Nevertheless, it proved feasible to present comparative data of the GGR for the period of May through December 1724. A similar situation exists for the period 1784-1785.

The method used for comparing the STA and GGR data was as follows:

- 1) Computer print-outs were prepared of the STA data for the years 1724, 1725, 1784 and 1785, respectively, listing by port of departure all ships which passed the Sound destined for Dutch ports.<sup>107</sup> A similar print-out of the GGR data listing all ship movements by port of departure was prepared for the years 1724, 1725, 1784, 1785 and for January through May for 1726 and 1786.
- 2) Each STA entry was then noted and a search made for it in the GGR print-out for the corresponding year and port of departure, taking into account a possible time lag of up to three months.
- 3) A list was then made for each year of the ships listed in the GGR for which a corresponding STA entry had not been found.
- 4) All the uncoupled STA entries were then checked against this list which reduced the number of uncoupled GGR entries considerably.
- 5) A short list of the remaining uncoupled GGR entries was then drawn up and checked against all the west-bound STA ships up to eight months previous to the GGR entry.<sup>108</sup> Still, for a number of GGR entries, a corresponding STA entry could not be located. Part of the reason for

this lies probably in the fact that there are frequently substantial differences in the manner in which the name of the captain has been recorded in both the GGR and STA.

Before presenting the results of this comparison between the STA and GGR, it is necessary to elucidate some specific problems encountered in the coupling<sup>109</sup> of the data because the way of solving these problems has had an effect on the results obtained. The variables that the STA and GGR have in common are the date (either of passage through the Sound or registered date of arrival), the port of departure, the port of arrival (for the GGR this is a constant = Amsterdam) and the name of the captain. While the GGR record the lastage of the cargo and the registered lastage of the ship, the STA list neither but instead state the quantities of the various kinds of commodities carried by the ship. The three primary variables used to couple the STA and GGR data are then the date, the port of departure and the name of the captain. Each of these variables presented its own unique problems. At the same time the process of the STA-GGR coupling raised questions on the GGR variables and this will also be discussed. Since the date and the name of the captain precede the port of departure as coupling factors, the three variables will be discussed in that order.

1. The STA date of passage and the GGR 'registered' date of arrival

The date of passage of the ship through the Sound as recorded in the STA seems to be quite accurate. No author who has worked with the STA has questioned the date. In addition, both the ship-declarations and

judgements in general average show no discrepancies between the date that the crew declared as having passed the Sound and that recorded in the STA. We have already noted that the same cannot be said about the dates recorded in the GGR. The question then arises as to whether there exists a general difference in dates between the STA and GGR entries which will aid in the interpretation and evaluation of the GGR data. In other words, what was the average time lag in days between the date of passage of the ship through the Sound and the registered date of its arrival at Amsterdam according to the GGR? While a complete answer to this question will have to await the interfacing of the STA and GGR data, it is, nevertheless, possible to make some observations which are of use in providing some indications of the extent of this time lag.

One ship which sailed through the Sound on 13 October 1784 was registered in the GGR a scant five days later.<sup>110</sup> On the other hand, there are instances where, for ships passing through the Sound during October-November, a corresponding GGR entry did not appear till April-May of the following year.<sup>111</sup> There are also several instances where the STA recorded the captain as making two west-bound voyages for Amsterdam in one year but for which only one corresponding GGR entry could be located.<sup>112</sup> In one such instance, the date of the second passage through the Sound coincided with the date of the GGR entry.<sup>113</sup> Another possibility is that two captains having the same name passed through the Sound within a short time span, with both captains sailing from the same port of departure, having the same homeport and commanding ships of approximately the same size. In such instances, the chronological sequence

of the STA entries was maintained for coupling purposes with the GGR.<sup>114</sup>

These, then, are some of the variations and problems as far as individual entries are concerned. On a larger scale, several samples were taken in order to provide some possible answers to the range and extent of the STA-GGR time lag. The first sample consists of all entries on ships from Russia which sailed through the Sound during the month of July in 1724 and 1725 and which could also be located in the GGR. A total of 83 such observations were made. The average time lag between the date of passage of the ship through the Sound and the date on which it was recorded in the GGR was computed at 43.2 days.<sup>115</sup> A similar sample was taken for the years 1784 and 1785 and it was possible to make 119 observations. For these two years the average time lag was 46.267 days.<sup>116</sup> Combining the two samples yielded an average time lag of 45 days.<sup>117</sup> Thus during the more favourable part of the shipping season, it took about a month and one-half between the time a ship passed through the Sound and the discharge of cargo and settling of accounts as witnessed by the GGR records. A frequency distribution of the combined 199 observation shows that 42 ships or 22.2% belonged to the so-called early arrivals. The majority of ships, 98 or 49.7% were recorded in the GGR within 33 to 48 days after passing through the Sound, and 41 ships or 20.3% within the following 15 days, while 17 ships or 8.9% were recorded in the GGR more than 63 days later.<sup>118</sup>

Approaching the same problem from another direction by taking what could be considered the least favourable time of the shipping season, a totally different picture emerges. Of the 80 ships which are recorded in

the GGR for the period January through May of 1786, at least 65 are accounted for by ships which passed the Sound during the previous year.<sup>119</sup> The average time lag computed at 158.5 days is almost quadruple that of the July sample. The frequency distribution also lies very differently from the July sample. Of the 65 ships only 12 or 18.5% had a time lag of less than 101 days. The majority of ships, 32 or 49.2%, had a time lag of between 101 to 172 days while 18 ships or 27.0% were recorded in the GGR more than 200 to 300 days after the date of their passage through the Sound.<sup>120</sup>

The major contributing factor to this long time lag is the fact that ships sailing through the Sound during the last three months of the year had a good chance of either being forced to winter in a Norwegian port or elsewhere en route due to adverse winds and temperatures. Others chose to winter at a certain port, i. e., the homeport of the captain along the Frisian coast.<sup>121</sup> The large difference in the STA-GGR time lag of 45 days in July and 159 days during the winter months make it impossible to use the STA to estimate the difference between the actual date of arrival of the ship at Amsterdam and the date at which it is recorded in the GGR. The long time lag during the winter season also underlines the possibility, already suggested before in terms of the GGR themselves, that the yearly differences in data derived from the GGR may be due in large part to a combination of fluctuating weather conditions and the delay in entering the ship in the GGR records.

In view of the variation in the time lag between the passage of each ship through the Sound and its registration in the GGR, it is impossible to

state exactly the number of ships (and lastages) registered in the GGR during the first few months of each year which should actually be counted with the preceding year. Only when the STA and GGR are interfaced for a substantial number of years will it be possible to obtain such a solution. Nevertheless, in view of the comparison of the GGR with other sources on an individual basis or on a larger scale as with the STA, we may be safe to assume that the GGR data for the first three to five months of a year pertain to ships which passed through the Sound during the preceding year.

2. The name of the captain

In the coupling of the GGR and the STA data, the name of the captain serves as the key link. During the coupling process several problems arose. The first problem is the difference in the spelling of names of the same captains. Closely related to this is the practice of Dutchifying non-Dutch names by the recorders.<sup>122</sup> The second problem concerns the Christian name(s) and surname of the captain. We have found that it sometimes happened that the two names are reversed in the other source.<sup>123</sup> Another possibility was that a captain having two Christian names and a surname, was recorded with all three in one source but in the other source the two Christian names form the Christian name and surname of the captain.<sup>124</sup> A more difficult situation arose when one source uses the two Christian names as Christian name and surname, while the other uses the first of the two Christian names and a third name as surname.<sup>125</sup>

Finally, there is the problem of captains with identical or nearly identical names. If the ports of departure and/or homeports given are different and match the entries in the other source the problem is easily solved.<sup>126</sup> If on the other hand, the port of departure given in both sources is the same and the captain stated different homeports on the second or third voyage that year, the problem is more complex.<sup>127</sup> For the cases of this type which occurred in 1724 and 1725, the fact that the GGR recorded the name of the ship greatly facilitates the identification of such entries for coupling purposes.

Nevertheless, based on the experience of coupling these two-year samples, the name of the captain can be considered to be a very reliable tool for the coupling of the STA and GGR.

### 3. The port of departure

In the great majority of GGR-STA couplings, the ports of departure given in both sources are identical. By taking the GGR as a base it was possible to make 2371 couplings with the STA for our two sample periods, and by taking the STA as a base it was possible to make 2512 couplings with the GGR. The reason that the latter figure is higher than the first lies in the fact that four full years of the STA were checked against the GGR while two full years and two partial years of the GGR were checked against the STA. The degree of concordance between the STA and GGR can therefore be presented in two ways. On the one hand, the STA data can be tested against the GGR, i.e., one assumes the GGR to be correct and measures the variance of the STA. And on the other hand, the GGR can be checked against the STA, i.e., one assumes the STA to be correct and

measures the variance of the GGR. Since the two samples are not of the same magnitude the variances between the STA and GGR will differ depending on which of the two approaches to this problem is taken.

Out of a total of the 2371 couplings<sup>128</sup> there were only 376 instances<sup>129</sup> where the port of departure listed in the STA conflicted with that given in the GGR. If from these 376 cases (or 15.86%), we subtract those involving the port of Elbing, the total number of conflicts drops down to 185 or 7.8%.<sup>130</sup> Taking only the Russian ports, the number of times that the STA disagree with the GGR on ports of departure is about one-half of the percentage for the Baltic as a whole, i. e., the 31 such cases<sup>131</sup> out of a total of 903 couplings<sup>132</sup> represent a variance of 3.4%.

Looking at the same problem from the other side, that is, the number of cases where the port of departure listed in the GGR is not the same as that given in the STA, we find that out of a total of 2512 couplings,<sup>133</sup> there are 335 (or 13.3%)<sup>134</sup> such cases. If instead of Elbing, we take away the cases involving the port of Pillau, which total 199, the number of disagreements is reduced to 136 or 5.4%.<sup>135</sup> For the Russian ports only, there are 37 cases<sup>136</sup> out of a total of 989 couplings<sup>137</sup> (or 3.7%) where the GGR disagree with the STA on the port of departure.

Thus we can assume that, within the above margins of error, the ports of departure as given in the GGR are essentially correct, the more so in the case of ships from Russian ports.



4. The port of destination or arrival

Cases involving disagreement between the STA and GGR on the ports of destination (in the case of the STA) and port of arrival (in the case of the GGR—always Amsterdam) are much fewer than those involving the ports of departure. As regards the GGR, out of a total of 2371 couplings, only 32 cases<sup>138</sup> (or 1.3%) show conflicting entries. Of the ships en route to Dutch ports other than Amsterdam according to the STA, a total of 21 (or 0.8% out of the total of 2521) nevertheless did arrive at Amsterdam according to the GGR.<sup>139</sup> In the latter case, most of these ships were destined for such ports as Holsloot, Hoorn, Edam, Rotterdam, Dordrecht or Groningen.<sup>140</sup> Cases involving non-Dutch ports of destination are rare.<sup>141</sup> In the light of the fact that the charterparties have shown that it was not at all an uncommon practice to order the ship at the Sound or at Texel/Vlieland to either bypass Amsterdam and sail for another port or, conversely, sail to Amsterdam instead of another port, these percentages (0.8 - 1.3%) are surprisingly low.

As far as ships from Russian ports are concerned, the GGR contain 9 entries<sup>142</sup> of ships which, according to the STA, were destined for ports other than Amsterdam. This means that for ships from Russia the discordance of the STA with the GGR on port of arrival is of the order of 0.9%.<sup>143</sup> Of those ships sailing from Russian ports to Dutch ports other than Amsterdam, according to the STA, 11 ships<sup>144</sup> did nevertheless arrive at Amsterdam (or 1.4% out of a total of 797 ships).<sup>145</sup> Thus the degree of variance between the STA and GGR on the port of destination/arrival from Russian ports ranges from 0.9% - 1.4% which is

of the same order as that of the whole of Baltic shipping to Amsterdam.

5. The homeport of the captain

In the first works on the STA for 1497 - 1660 which appeared in 1906 and 1922 Bang equated the homeport of the captain with the nationality of the ship. Despite strong criticisms and evidence that this was not a valid assumption, she continued to present the Sound Toll data for 1661 to 1783 based on this assumption in the subsequent volumes published between 1930 and 1953. Consequently, historians, when using the data derived from the Sound Tolls as presented in the Bang volumes, talk of Dutch- or English bottoms instead of ships under the command of captains having Dutch or English homeports.<sup>146</sup> Since the utility of the homeport as an indice of the commercial maritime strength of a nation has received considerable attention and led to controversial interpretations, special attention has been paid to this variable in our comparison of the STA and GGR. The comparison of these two primary sources should shed some light on these controversies. At the same time, this comparison will be of assistance in defining the parameters of this variable not only for the STA but especially for the GGR and the implications it has for our study.

It is true that in the GGR for 1784 and 1785 the homeport of the captain was no longer recorded; but, our other two-year sample, that for 1724 and 1725, contains 1237 couplings<sup>147</sup> on the side of the GGR and 1346 couplings<sup>148</sup> on the side of the STA. This is a large enough sample for our purpose.

There are quite a few permutations to be dealt with. First of all, the homeport of the captain will be looked at from the perspective of the GGR. Secondly, it will be analyzed from the point of view of the STA. Thirdly, since Amsterdam as homeport presents a specific problem, an assessment of the degree of importance of this port as a homeport within the Netherlands will be undertaken. And finally, this procedure will be repeated, though in less detail, for shipping from Russian ports to Dutch ports.

For 1724, the total number of STA<sup>149</sup> entries which were coupled with the GGR (for May through November) of that year was 494 while the number for 1725 (the whole year) was 743, thus a total of 1237.<sup>149</sup> According to the GGR for 1724, 428 captains<sup>150</sup> (or 86.64%) of the 494 entries declared having a Dutch homeport. Likewise in 1725, 648 captains<sup>151</sup> (or 87.21%) made similar declarations, thus yielding a two-year average of 86.98% of these captains having a Dutch homeport. Out of all the GGR entries for 1724, namely 677, a total of 96 captains declared having a homeport which was not Dutch, while 142 out of 844 did so in 1725.<sup>152</sup> In other words, 15.65% of the captains listed in the whole GGR for 1724 and 1725 had non-Dutch homeports, or conversely, 84.34% of the captains had Dutch homeports.<sup>153</sup>

How does this compare with the STA? First of all by taking the same 1237 couplings, we find that the STA recorded 1018 captains<sup>154</sup> (or 82.29%) as having a Dutch homeport. Therefore, there is a difference of 4.69% or 58 conflicting entries out of 1237 between the STA and the GGR for this two-year period.

On the side of the STA, out of a total of 567 couplings<sup>155</sup> in 1724, 498 captains<sup>156</sup> ( or 87.83%) were recorded in the GGR as having a Dutch homeport, while for 1725 the number was 659<sup>157</sup> (or 84.60%) out of a total of 779 couplings.<sup>158</sup> For all of the ships to Dutch ports in 1724, 649 captains<sup>159</sup> out of a total of 764 (or 84.95%)<sup>160</sup> were recorded in the STA as having a Dutch homeport. For 1725, the number was 865 out of 1048 (or 82.54%) and the two-year average was 83.55%.<sup>161</sup>

The percentage of captains having a Dutch homeport during 1724 and 1725 can be summarized as follows:

- 1) 84.34% out of all the GGR entries;
- 2) 83.55% out of all the STA entries having a Dutch port of destination;
- 3) 85.98% according to the GGR coupled with the STA;
- 4) 86.98% according to the GGR and 82.29% according to the STA of those STA entries coupled with the GGR.

The percentage differences between these two sources are thus very small. In view of the fact that for circa 10% of the GGR entries, it was not yet possible to find the corresponding STA entries, we may assume that the STA and GGR are in agreement on whether or not the captain had a Dutch homeport. There are, nevertheless, a number of instances during this two-year period, 58 (or 4.69%), where the non-Dutch homeport of the captain according to the STA is recorded as a Dutch homeport in the GGR.

However, for this two-year sample, of the 1237 STA entries that are coupled with the GGR, there are 366 instances<sup>162</sup> (or 29.59%) where the STA differ from the GGR on the homeport of the captain. Similarly,

of the 1346 GGR entries that were coupled with the STA, there are 374 instances<sup>163</sup> (or 27.79%) where the GGR differ from the STA on this variable. Since the GGR and STA are within 4.69% of agreement on Dutch versus non-Dutch homeports, the remaining difference of circa 25% must lie within the number of homeports of the Dutch captains. During the course of the coupling process, it already became clear that in many instances where the STA recorded the homeport of the captain as Amsterdam, the corresponding GGR entry would list a different smaller Dutch homeport and vice-versa. Since Amsterdam dominated the Dutch economy, the author paid special attention to the role of Amsterdam as a homeport according to the STA and GGR.

Of all the ships sailing to Dutch ports according to the STA during 1724 and 1725, 442 captains<sup>164</sup> (or 24.39%) listed Amsterdam as their homeport, while for the same two years, of all the GGR entries, only 201 captains<sup>165</sup> (or 13.21%) came from Amsterdam. For the STA entries that were coupled with the GGR, 331 captains<sup>166</sup> (or 26.59%) declared Amsterdam as their homeport according to the STA, while according to the GGR only 174 of the same captains<sup>167</sup> (or 14.07%) did so. The difference between the STA and GGR is even greater if we state the problem in another way, namely, while of the GGR entries coupled with those of the STA, Amsterdam accounts for 32.51%<sup>168</sup> of the captains having a Dutch homeport according to the STA, but they account for only 16.16%<sup>169</sup> (according to the GGR). Thus, while according to the STA, Amsterdam accounts for nearly a third of the homeports of all Dutch captains, according to the GGR Amsterdam was the homeport for only one-sixth of all Dutch captains.

Looking at this phenomena from the perspective of the STA, we have already noted that 442 captains or 24.39% of those destined for Dutch ports listed Amsterdam as their homeport. Now if we take only those 1752 captains who said that they were sailing for Amsterdam, there were 545 (or 31.11%) who also claimed it as their homeport.<sup>170</sup> Of those 1346 STA entries<sup>171</sup> for which it has been possible to find a corresponding GGR entry, 342 captains<sup>172</sup> (or 25.41%) were recorded in the STA with Amsterdam as their homeport. But according to the GGR, only 172 captains<sup>173</sup> (12.78%) did so. Thus in both cases, that of the STA compared with the GGR and that of the GGR compared with the STA, we find that approximately one-half of those captains recorded in the STA with Amsterdam as homeport, are listed in the GGR as having another Dutch homeport. This fact reflects quite accurately the role Amsterdam played as a homeport according to all the entries listed in the STA as compared with all the GGR entries. Consequently the importance of Amsterdam as a homeport should be reduced accordingly and that of the smaller Dutch ports increased.

In the context of the concentration of this study on shipping from Russian ports, the question arises as to what degree the above-mentioned disconcordance between the STA and GGR regarding the homeport of the captain affects our interpretation of the GGR data on shipping from Russian ports. Once again starting with the GGR, we find that of the 575 ships having a Russian port of departure during 1724 and 1725, a total of 557 captains<sup>174</sup> (or 96.87%) were recorded as having a Dutch homeport, while of the 663 ships<sup>175</sup> which sailed from Russian ports and which were destined for Holland according to the STA, 625 captains<sup>176</sup> (or 94.26%)

declared Dutch homeports. Both percentages are about twelve percentage points higher than the overall percentages (of both the STA and GGR entries) of captains having a Dutch homeport.<sup>177</sup> On the basis of the STA couplings with the GGR, according to the GGR, 477 captains<sup>178</sup> (or 98.35%) out of a total of 485 couplings<sup>179</sup> listed a Dutch homeport, while according to the STA, 463 captains<sup>180</sup> (or 95.46%) did so, the difference thus being 14 or 2.89%. Again both percentages are about twelve percentage points higher than those of all the coupled entries.<sup>181</sup>

According to the GGR, of the 575 ships which arrived at Amsterdam from Russian ports during 1724 and 1725, 80 captains<sup>182</sup> (or 13.91%) listed Amsterdam as their homeport. But according to the STA, out of the 663 ships destined for Dutch ports, 195 ships<sup>183</sup> (or 29.41%) had captains who declared Amsterdam as their homeport, while of the 648 ships destined for Amsterdam, 166 captains<sup>184</sup> (or 25.62%) claimed Amsterdam as their homeport. Based on the 485 couplings of the STA with the GGR on shipping from Russian ports during this two-year period the number of the captains having a Dutch homeport according to the STA (namely, 463), 148 captains<sup>185</sup> (or 31.97%) listed Amsterdam as their homeport, while similarly only 72 captains<sup>186</sup> out of 477 Dutch captains<sup>187</sup> (or 15.09%) did so according to the GGR. Therefore we may say, firstly, that shipping from Russian ports to Amsterdam followed the general pattern of all shipping from the Baltic to Amsterdam for Amsterdam was recorded twice as frequently as the homeport in the STA than in the GGR. Secondly, ships from Russian ports had a higher component of captains having a Dutch homeport.<sup>188</sup>

Thus, of the three variables involving ports, the greatest degree of variance between the STA and GGR concerns the homeport of the captain. While this variance affects Dutch versus non-Dutch homeports only marginally, 58 cases out of 1237 or 4.69%, it is important to know that approximately one-half of those captains recorded in the STA with Amsterdam as their homeport had a Dutch port other than Amsterdam as their homeport according to the GGR.<sup>189</sup>

C. The GGR as a Basis for the Study of Russian (and Baltic) Shipping to Amsterdam

The various qualitative and quantitative tests carried out on the GGR allow us to conclude that on the whole the GGR are definitely a very reliable source for the study of Russian (and Baltic) shipping to Amsterdam during the eighteenth and first quarter of the nineteenth centuries. However, the parameters of each of the GGR variables must be defined. Of all the variables, the parameters for the date recorded in the GGR are the most difficult to establish and more study will have to be devoted to this problem. We have seen that the date of the ship arrival at Amsterdam and the date at which the ship was recorded in the GGR could be the same, but these two dates could also differ by as much as five months or more. For a ship such as "de Waakende Leeuw" the average time lag between its arrival at Amsterdam and date that it was recorded in the GGR was within ten days, which, considering that the ship had to be unloaded and the accounts settled, was not an unreasonable delay. For cases involving some sort of damage to



either the ship or cargo, the time lag was about a month and one week, again not an unreasonable delay considering the circumstances. Also the time lag of approximately three weeks indicated by the bills of lading must be taken into consideration.

In the comparison of the dates recorded in the GGR with those of the STA for ships passing the Sound in July in the years 1724 - 1725, and 1784 - 1785, the average time lag was computed to be 45 days. Since it would usually take a week or longer for a ship to sail from the Sound to Amsterdam, the sailing time from the Sound to Amsterdam and the delay of registration in the GGR can be considered as approximately 45 days.

Difficulties arise, however, when we tabulate the GGR data on a yearly basis and discover that in some instances over 50% of the ships and cargoes are registered as arriving at Amsterdam during the first four months of the year. Considering the weather and sailing conditions this is definitely not the pattern that one would expect for 18th century merchantmen. The STA show that the time of year greatly affected the way ships coped with the seasonal storms and ice. Instead of a time lag of 45 days between the passage of the ship through the Sound in July and its registration in the GGR, for ships passing through the Sound in December the difference between the date of passage and the date of registration in the GGR is on the average more than 158 days. The yearly censura of December thus coincides with the period of the greatest possible time lag and widest fluctuations in the recording of ships in the GGR in comparison with their date of passage through the Sound. The variations in

the yearly figures derived from the GGR must be evaluated in this context. Direct comparisons with other quantitative data presented on a year to year basis is also impossible except through the coupling method such as that developed and presented in this study.

The information on the port of departure as stated in the GGR proves to be on the whole quite accurate. Where differences between the GGR and other primary sources on this variable occur, they seem to be restricted to specific ports such as Elbing versus Pillau. The variance between these two ports was more the result of the historical development of these two ports than inaccuracies which might have occurred in either the STA or GGR. Due to the shallowness of the Friese Haf which connected Elbing (and also Königsberg) with the Baltic, many of the ships loaded only part of their cargo at Elbing. These ships then sailed to Pillau or the "Pillau Deep" where, lying at anchor, they loaded the remainder of their cargo.<sup>190</sup> The variance of the STA and GGR on these two ports, while statistically quite significant, does have a valid historical explanation. The validity of the information on the port of departure as recorded in either the STA or the GGR is not challenged by this variance. It should be noted that these ports are not Russian ports and the conflict between the STA and GGR on these two ports does not affect this study. The variance for Russian ports of departure as recorded in the STA and GGR is quite small, ranging from 3.4 - 3.7%.

The port of arrival proved to be the most reliable variable. In our comparison of the STA and GGR data, the degree of variance for shipping from the Baltic to Holland was very low, ranging

from 0.8 - 1.3%. For shipping from Russian ports only, the variance is of the same low order ranging from 0.9 - 1.4%.

As far as the name of the captain is concerned, it has proved to be the most valuable tool for the coupling of the individual GGR entries with other sources of a similar nature, although the fact that the GGR tend to Dutchify non-Dutch names needs to be taken into account when undertaking such coupling processes. Many of the ships carried the same names and this variable is relegated to the role of a secondary and not primary coupling tool.

The lastage of the ship can serve a similar purpose. With regard to this variable we have established that the lastage of the ship was recorded in the GGR in lasts of timber at approximately two-thirds of the load that the ship could actually carry and that to convert the registered lastage to lasts burden (deadweight lastage or cargo-carrying capacity in rye lasts), the registered lastage should be increased by a factor of 1.876, in other words, the inverse of the equation  $RL = .533ML$ .

With regard to the lastage of the cargo, it was impossible to reach any definite conclusion about the parameters of this GGR variable, except when a ship was chartered bij de hoop, the cargo lastage was considered equal to the registered lastage. For ships carrying other commodities or mixed cargo, the cargo lastage was equal to the sum of the total number of lasts of each commodity.

This brings us to the last variable, namely, the homeport of the captain and the nationality of the ship. The controversy over the question of homeport and nationality in the GGR has been rather limited in com-

parison with that in the STA. It does, nevertheless, present a problem for this controversy is connected with the question of the inclusiveness or representativeness of the GGR with regard to Russian (and Baltic) shipping to Amsterdam. In his article on judgements in average Schöffers considered that the GGR recorded only the ships which carried the Dutch flag,<sup>191</sup> while in a recent series of articles, Dekker concluded that probably since 1730 and definitely since 1760 galjootsgeld was levied on all ships coming from the Baltic to Amsterdam.<sup>192</sup> However, a comparison of the STA with the GGR presents quite a different picture. We have already established from the GGR themselves that the homeport of the captain can not be used as a criterion as to who should or should not pay galjootsgeld.<sup>193</sup> Both the charterparties, muster-rolls, and Dekker's articles have shown that ships carrying a Russian flag and registered in non-Dutch ports paid galjootsgeld. (Here Dekker would say "foreign-owned" and I would say "supposedly foreign-owned.") But does the inclusion in the GGR of ships flying foreign flags commanded by non-Dutch captains and registered in non-Dutch ports necessarily mean that all the ships arriving at Amsterdam from the Baltic paid galjootsgeld and that therefore the GGR represent the total amount of shipping from the Baltic to Amsterdam?

For our two two-year samples of coupling the STA and the GGR, it was possible to couple 89.25% for 1724 - 1725<sup>194</sup> and 94.35% for 1784 - 1785.<sup>195</sup> During the 1724 - 1725 period 1752 ships<sup>196</sup> passed through the Sound for Amsterdam. For only 1346 of these ships<sup>197</sup> was it possible to locate the corresponding GGR entries, leaving 406 ships unaccounted for. Supposing that it would be possible to find entries in the STA

corresponding to the 149 GGR entries for which no STA entry has yet been located, this would still leave 257 ships (or 14.87% of those destined for Amsterdam according to the STA) unaccounted for.<sup>198</sup> Similarly, for the second two-year sample, namely 1784 - 1785, according to the STA there were still 508 ships<sup>199</sup> which were not located in the GGR. If one subtracts the uncoupled entries of the GGR for the same period, or 68 ships,<sup>200</sup> this still leaves 440 ships (or 29.00%) unaccounted for. Let us suppose that it was possible that the number of ships destined for Amsterdam, according to the STA, which went elsewhere, exceeds the number of ships which did not intend to sail for Amsterdam but arrived there. In the light of the low degree of variance on port of destination/arrival,<sup>201</sup> this would, nevertheless, still leave a substantial number of ships which one must assume did arrive at Amsterdam but did not pay galjootsgeld. The conclusion must, therefore, be drawn that neither the homeport of the captain, the flag or nationality of the ship, nor the place where the ship was registered mattered. The criterion for the levying of galjootsgeld was that of ownership (control) of the ship or cargo. Stated more specifically, the GGR pertains to ships which were effectively controlled by Dutch shipowners regardless of the flag (of convenience) or registration of the ship. Although the GGR data give an incomplete picture of the total shipping from Russian (and Baltic) ports they do more than compensate for this by indicating the true magnitude of Dutch owned/controlled shipping. For the GGR recorded Dutch ships regardless of changes in the registration of ships or homeport of the captain, due to the desire to carry on business in times of war<sup>202</sup> or the inducements provided by Russia in order to establish its own

"national" merchant marine.<sup>203</sup>

It has been shown that it is not possible to compare, on the basis of yearly totals, the GGR data with other sources due to the time lag in recording the ship arrivals. Nevertheless, we may still attempt such a comparison. The only known Dutch source which gives a breakdown by port of departure of ships arriving at Amsterdam are the Nieuwe Nederlandse Jaarboeken for 1778, 1781, 1783, 1784, 1790, 1791, 1792 and 1793. If we take the four consecutive years, namely, 1790, 1791, 1792 and 1793 the variance between the GGR and Jaarboeken due to the GGR time lag should be reduced enough to make a comparison between these two sources possible. Only for St. Petersburg, Narva and Riga are the numbers of ships involved sufficient for such a comparison. According to the Jaarboeken for these four years, 120 ships arrived from St. Petersburg at Amsterdam via the Vlie and Texel. During the same four years the GGR recorded 115 ships arriving at Amsterdam, a difference of five ships (or 4.2%). During the same period, 296 ships arrived at Amsterdam from Narva according to the Jaarboeken while the GGR recorded 292 ships. Again the difference of four ships (or 1.4%) is small. However, in the case of ships coming from Riga, the Jaarboeken listed 534 ships while the GGR listed only 414. This difference of 120 ships (or 22%) is quite substantial and supports the assumption that the GGR do not pertain to all shipping from the Baltic but rather only to that which was controlled in one way or another by the Dutch merchants and shipowners.

One final remark must be made concerning the homeport of captains sailing on the Russia to Amsterdam route. The disagreement

between the STA and the GGR in case of Dutch versus non-Dutch home-ports is small and the number of non-Dutch captains or those having a Russian homeport is negligible. This meant that for the sake of expediency the coding and keypunching of this variable has been omitted from our study except for three sample years, namely, 1724, 1725 and 1769.<sup>204</sup> What is of importance, however, though not directly for our study but for Dutch historiography, is the finding that about one-half of the ships listed in the STA as having a captain with the homeport of Amsterdam registered a different Dutch homeport in the GGR. In his Noorderkwartier, the region immediately north of Amsterdam, van der Woude had noted an "amazing increase" in the number of Dutch captains listing Amsterdam as their homeport in the STA after 1710.<sup>205</sup> Using Simon Hart's study on the demographical changes in Amsterdam as a basis, van der Woude saw the reason for this change in the increase of foreign seamen in Amsterdam.<sup>206</sup> Both van der Woude and Faber, in the latter's study on Friesland,<sup>207</sup> used the Sound Toll data on the captain's homeport to indicate changes in the nature and structure of Dutch shipping. Consequently the tables and graphs which they presented based on the Sound Toll data will have to be revised,<sup>208</sup> the greatest increase going to Dutch ports on the northern islands and those in Friesland and Groningen.<sup>209</sup> And the whole question of the importance of the rôle played by Amsterdam within the Dutch Republic vis-à-vis the other Dutch ports will have to be reexamined.<sup>210</sup>

The GGR serve, therefore, as a reliable and accurate source for the study of Dutch shipping from Russia and the Baltic to Amsterdam. When coupled and subsequently interfaced with the STA they will also provide valuable information about the degree of control exercised by Dutch merchants on various branches of trade and routes from Russia and the Baltic to Amsterdam.



Footnotes — Chapter II

<sup>1</sup>Some small Russian ports on the White Sea such as Mosterzani (799MOS) and Mesen (792MSN) are listed only once or twice in the GGR from 1705-1825. See also Appendix B, p. 363 for a copy of a folio of the GGR for 1724 of the D.O.H. and Appendix B, p. 364 for a sample page of print-out of the GGR data as prepared for processing by computer.

<sup>2</sup>Due to time limitations, the names of the captains and of the ships sailing from Russian ports to Amsterdam as recorded in the GGR of the D.O.H. were not punched. However, the names of the captains listed in the GGR of the D.M.H. were punched as well as the names of captains and ships of the whole GGR of the D.O.H. for 1724, 1725, 1783 and 1784. For the latter two years, the name of the ship is no longer given in the GGR.

<sup>3</sup>It is true that from 1764 onward, the cargo carried was assessed at one-half stuiver per last instead of one stuiver per last. This does not, however, affect the figures presented in the tables and graphs which are based on the size of the cargo and ship. As far as the monies collected after 1764 are concerned they do show a decrease. But since the bookkeeper of the GGR continued to receive his commission on the basis of the old fee system, the GGR after 1764 give both the actual amount of money collected and the amount of money that would have been collected had the assessment remained unchanged.

<sup>4</sup>G.A.A., PA6/59. Captain Jan Martins (homeport:Silt) commanding the ship "de Wijnstok" was listed in two sequential entries on 12 April, 1753 as coming from St. Petersburg to Amsterdam carrying 75 lasts of cargo, the registered ship lastage being 62. Both entries are identical and in each case the amount paid was f.5:6:-. However, one entry is the last entry at the bottom of a folio and the other is the first entry on the following folio. It is possible that this double entry is just an error in registration although no adjustment was made in total of monies received.

<sup>5</sup>Some of these instances as found in the GGR of the D.O.H. are that after the entry of

"1724-8-29 Jan Tiebles  
Liefde

van der Schelling [Terschelling]  
van Dantzick [Danzig] 210/150,"

we find the entry

"1724-8-25 Siebe Harmans  
Witte Windbond

van Hinlopen [Hindeloopen]  
van Elsenvos [Helsingfors] 196/196";

after

"1724-11-4 Tieert Olphert  
Elisabeth

van Hinlopen  
van Elsenvos

186/156,"

(Footnotes - Chap. II)

we find

"1724-11-3 Jacob Gosses

van Mackum

van Coninbrg [Kbnigsberg] 36/21";

after

"1725-7-21 Pieter Janse Slocher  
Peerboom

van Hoorn

van Ryga [Riga]

50/125,"

we find

"1725-7-19 Haije Hayties  
het Fortuijn

van Hinlopen

van Nerva [Narva]

221/190";

after

"1819-5-21 Jan Jacobs Rare  
[n/a]

van [n/a]

van Liebau [Libau]

43/27,"

we find

"1819-5-10 Arend Fokken  
[n/a]

van [n/a]

van Memel

61/41";

and after

"1824-6-30 P.G. Losserd  
[n/a]

van [n/a]

van Dantzig

75/73,"

we find

"1824-4-22 J.G. Brouwer  
[n/a]

van [n/a]

van Dantzig

42/32."

In all the above examples, except that of 1824, the late entries were recorded in the same month. In the GGR of the D.M.H. for 1727 we find a folio marked "1726 in 1727." This seems to imply that some ships which arrived in 1726 did not pay their galjootsgeld till 1727 but were still counted with the ships for 1726. For Brakel ("Statistische," p. 38) this was just an example of sloppy bookkeeping by the D.M.H.

<sup>6</sup>Brakel, "Statistische," pp. 365 and 368-369.

<sup>7</sup>See below Tables II.1, II.1.A, II.9 through II.14, III.1, III.1.A, III.5 through III.10, IV.1, IV.1.A and IV.5 through IV.10.

<sup>8</sup>Taking St. Petersburg as an example (Table II.9.A), we find that the cumulative percentages for tonnage of cargo arriving during the months of January through April to be 61.9% in 1723, 47.7% in 1724, 51.2% in 1733, 51.0% in 1743, 50.1% in 1761, 45.5% in 1765, 48.3% in 1774 and 42.8% in 1791. As far as the total number of ships from all Russian Baltic ports is concerned (Table II.1.A), we find a percentage of 51% for 1791. As far as the total number of ships from all Russian (Baltic) ports is concerned (Table II.1.A), we find percentages of 51% in 1717 and 55% in 1799 for the first third of the year.

(Footnotes - Chap. II)

<sup>9</sup>Once more taking St. Petersburg as an example (Table II.9.A), we find percentages for tonnages of cargo carried listed as arriving in February as high as 27.9% in 1743 and 29.4% in 1770.

<sup>10</sup>Whereas in most cases the ship-declarations give a single date of arrival, there are instances where weather conditions make it difficult to decide exactly at what date the ship should be considered as arriving at Amsterdam for comparison with the GGR. A case in point is that of Captain Peder Blegen (G.A.A., N.A. 1029/225, 27 August 1759). He was in command of the ship "de Boodschap Maria" which after much difficulty reached Amsterdam on 4 December 1759. Due to low temperatures the ship was frozen in the Y from 12 December 1759 to 2 January 1760. It was not possible to start unloading till 4 January when some 18 bundles of rough hemp were unloaded. From 7 January through 15 February, the Y was once again frozen and it was not until after the last date that the rest of the cargo could be unloaded. Unfortunately, in the GGR for 1753-1760, a ship called "de Boodschap Maria" under captain Peder Blegen could not be located.

<sup>11</sup>G.A.A., N.A. 14196/831, 27 August 1784. On 15 August 1784, the ship "De Juffrouw Susanna" under the command of captain Mijndert Hendrik Boijesen (Homeport: Schellingwoude) arrived at Amsterman. It had left Viborg on 3 July. Due to adverse weather conditions, the ship did not reach the Sound till 23 July. Leaving the Sound on 25 July, the ship again encountered storms resulting in damages to cargo and ship. The GGR of the D.O.H. for 26 August 1784 list captain "Meyndert Hend: Booyesen" arriving from Viborg. The date of passage through the Sound matches that given in the STA which record a "Mendert Hendrik Boysen" (homeport: Amsterdam) coming from Viborg on 23 July 1784 on its way to Amsterdam [Nationality No. 2, Ship No. 209]. For an explanation for the difference in homeports of the captain, see Chapter II, B.5.

<sup>12</sup>G.A.A., N.A. 10830, fol. 1729, 22 December 1766. In this ship-declaration, the crew of the ship "de St. Petersburg" stated that they departed from St. Petersburg on 12 September for Amsterdam with a cargo of hemp, codilla, tallow, hides, sailcloth and other goods. Due to contrary winds, the ship did not arrive at Amsterdam until 1 December, 1766. The GGR of the D.M.H. list the "de St. Petersburg" under the command of Auke Siebles (homeport: Amsterdam) as arriving from St. Petersburg on 7 May, 1767 carrying 160 lasts of cargo the ship lastage being 78. The possibility that this might be a second voyage must be dismissed.

(Footnotes - Chap. II)

<sup>13</sup>It is possible, when more samples are located that the delay in GGR registration compared with the ship-declarations may change somewhat. At the moment, the GGR date is on the average 5.4 weeks after the date given in the ship-declarations based on 24 samples.

<sup>14</sup>Of the samples located to date (22), the average difference between the later GGR dates and the earlier dates given in the average judgements is 5.6 weeks. This compares quite favourably with the average delay derived from the ship-declarations. (The samples in both instances are taken from different cases.) Schöffler ("Vonnissen," p. 90) estimates the time lag as varying from one to two months, but this was only a rough estimate by him and not based on any calculation.

<sup>15</sup>This does not mean that in all cases the galjootsgeld was paid after the judgements in general average were passed. For example, the GGR recorded a captain Jan Lindenbergh (homeport: Karlskrona) arriving at Amsterdam from Karlskrona with the ship "d'Emmanuel" on 22 May 1724 with 20 lasts of cargo and 46 lasts being the registered size of the ship. According to the judgement in general average (G.A.A., R.A. 2826/1152, 31 August 1724) the ship was declared to have arrived at Amsterdam on 25 March 1724.

<sup>16</sup>G.A.A., PA88. The bills of lading used for comparison with the GGR can be found in letters sent to an Amsterdam merchant named David Leeuw from merchants in Narva 1724-1728 (fol. 950), from Reval 1705-1708 (fol. 951), from Riga 1705-1722 (fol. 952), from Viborg 1704-1737 (fol. 983), from Archangel 1713-1724 (fol. 984) and from Moscow 1718-1725 (fol. 985); letters sent to Jan Isaak de Neufville and Co. of Amsterdam from Riga 1741-1764 (fol. 1288) and from St. Petersburg 1742-1763 (fol. 1327); and letters sent to Simon Bevel, also of Amsterdam, from Archangel 1719-1727 (fol. 1647) and from St. Petersburg 1719-1727 (fol. 1648).

<sup>17</sup>G.A.A., PA88/984. A bill of lading is enclosed in a letter sent to David Leeuw in Amsterdam by the widow Tobias Puyteling from Archangel on 11/24 September 1720. According to the notation on the bill of lading David Leeuw paid the galjootsgeld on 14 October 1720 for a consignment consisting of 4000 large mats [hemp] carried on the ship "de Waakende Leeuw" under the command of Sible Riewer. It was not until 15 January 1721 that the GGR of the D.M.H. listed a captain Sible Riewer (homeport: Warns) in command of "de Waakende Leeuw" from Archangel as paying galjootsgeld. In a letter sent [?] August 1721 from Archangel by Bôdisco and van Dordt to David Leeuw, there was found a bill of lading for 40 rolls of hides carried on the ship "de Juffrouw St. Cilia" under the

(Footnotes - Chap. II)

command of Roger Simons. According to the bill of lading, the galjootsgeld was paid on 8 January 1722, but in the GGR it was not until 20 April that the same ship and captain were recorded, a difference of almost three months and three weeks. It must be noted that these bills of lading refer to only part of the cargo and the possibility that galjootsgeld was not paid to the D.O.H. until it had been collected from all the different shippers is a very real one. Nevertheless, these analyses do point out the possibility of a considerable time lag in some instances between the arrival of the ship and the recording of the galjootsgeld even for ships which did not suffer adverse weather conditions.

<sup>18</sup>Ibid. Enclosed in a letter sent on 19 June, 1719 from Archangel [sender unknown due to damage to manuscript], one finds a bill of lading on which it is noted that galjootsgeld was paid on 14 bundles of hemp on 26 April 1720. However, on 12 February 1720, the GGR of the D.M.H. already recorded the same ship and captain, namely, "de Juffrouw Catharina" under the command of Pieter Wijbrands, as paying galjootsgeld.

<sup>19</sup>The average difference is 3.2 weeks but the standard deviation is 1.4 weeks.

<sup>20</sup>G.A.A., PA78/1053. "Rederyboek van het schip 'de Juffrouw Christina,' 1724-1733"; PA78/1052 and 1054. "Rederyboek van het schip 'de Waakende Leeuw,' 1728-1736 and 1737-1744." The ship "de Juffrouw Christina" was purchased on 14 July 1724 for f. 10,160:- by thirteen shareholders. One of these, Dirck Leeuw, served as bookkeeper. The ship "de Waakende Leeuw" was purchased in 1728 by twenty-one shareholders. Again Dirck Leeuw served as bookkeeper.

<sup>21</sup>G.A.A., PA78/1053. The debit entry for 18 March 1729 reads "het Verstellen van de Compasfen & glazen f.8:19:-."

<sup>22</sup>G.A.A., PA78/1052. The debit entry for 3 August 1732 reads "Tabak voor de Russe arbyders f.2:-:-." Apparently, it was an accepted practice to give tobacco as a gratuity to the worker who (un)loaded the ship at a Russian port. Quite often similar entries read simply "de Russe arbyders" and they are found among other entries pertaining to the ship's purchases of supplies and victuals prior to departure from Amsterdam.

<sup>23</sup>In most instances the galjootsgeld was paid by the "convooyloper" Van Lochem who seems to have served in a stevedoring capacity. He arranged for the loading and unloading of ships, the purchase of ballast, lighter costs and paid such levies as the galjootsgeld and harbour dues. He submitted bills which ranged from f. 400 to f. 600 per voyage as the sum of these various costs.

(Footnotes - Chap. II)

<sup>24</sup>See above Chapter I, footnote 11.

<sup>25</sup>The Pampus was a shallow, submerged sandbank which lay in front of the Amsterdam harbour approaches from the Zuiderzee.

<sup>26</sup>G.A.A., PA78/1052. See the credit entries for 28 December 1727 for freight from Narva to Amsterdam paid by Thomas Agges.

<sup>27</sup>This comparison is based on the assumption that the date that this cost was incurred is the same as that entered in the account books.

<sup>28</sup>The minimum is 4 days and the maximum difference is 25 days. One arrival on 10 October 1731 is not included since it is not certain that this date is correct as the freight was not paid until 20 December. The corresponding GGR entry date is 10 December. This would make a difference of 61 days which, if included in our sample, would change the average delay to 16.8 days.

<sup>29</sup>The minimum delay is 0 days and the maximum 42.

<sup>30</sup>The basis for the coding system was developed by Johansen and Glamann for their analysis of the post-1783 STA. Many smaller ports both in Russia and Holland were used by ships listed in the GGR which do not appear in the original Johansen-Glamann coding scheme. In addition, some corrections were made as a result of the more detailed study done by the author on these two areas.

<sup>31</sup>The allocation of the number 370's for Courland facilitates computer processing and enables one to take into account such political changes as the Third Partition of Poland in 1795. While the coding system as such is based on the larger political divisions of the eighteenth century, the divisions are determined more by the principle of expediency than that of exact political boundaries which were in a constant state of flux during most of this period.

<sup>32</sup>See Appendix A.1 for an alphabetical listing of the ports including some of the alternate names used for the same port. Appendix A.2 lists the ports in numerical order and thus is useful for determining code groupings correlated to political or geographic divisions.

(Footnotes - Chap. II)

<sup>33</sup>The non-Baltic ports were found in the GGR of the D.O.H. for those years which were processed in their entirety, *i.e.*, every fourth and ninth year starting in 1709 through 1824. Considering that less than twenty such ships were culled from c. 15,000 GGR entries the non-Baltic ports form a negligible problem. Unlike the STA, the GGR do not include Copenhagen.

<sup>34</sup>G.A.A., PA78/99. The names of the ships and lastages which appear in the original manuscript have been omitted here.

<sup>35</sup>Schöffler, "Vonnissen," pp. 90-91.

<sup>36</sup>G.A.A., PA78/100. The 1779 entries in question are:  
"Juni 2 Fredik Paulse v Amstel [Amsterdam]  
v Frederikshavn

NB is Noorwegen "

but the only port in Norway which resembles this port of departure is Frederikshald and the entry definitely reads "Frederikshavn"; the other entry reads,

"Juni 16 Johan P. Engellan v ----  
v Holmstad "

NB is Noorwegen "

Again the port with closest equivalent name in Norway is Holmerstrand. It has so far not been possible to determine what is meant by these two notations.

<sup>37</sup>G.A.A., PA78/100. One case which has not been mentioned so far but which does appear in the footnotes to Tables II and Tables III is the entry in the GGR of the D.O.H. on 18 November 1779 of a ship under the command of Sybrand Bakker from Onega. This case was added to the data set of the GGR of the D.M.H.

<sup>38</sup>Schöffler, "Vonnissen," p. 91.

<sup>39</sup>Bang, Tabeller 1920, p. xii.

<sup>40</sup>Schöffler ("Vonnissen," p. 91), who has made a detailed study of the average judgements, mentions that at times the port of departure given in the judgements is not the same as that given in the GGR. He does not, however, give any further details or breakdowns to show on which routes there were discrepancies and on which routes there were none. The author has restricted his study on average judgements to those involving only Russian ports and did not find any discrepancies in the cases examined.

(Footnotes - Chap. II)

<sup>41</sup>The port books of the city of Riga for the eighteenth century will be of assistance here. They are located with the other former archives of the City of Riga in the Tsentralnyi Istoricheski Arkhiv Latviskoi SSR. I am indebted to Professor V. Doroshenko of Riga for this information.

<sup>42</sup>Christensen, Dutch Trade, p. 15; Johansen, Preliminary Manual, p. 3.

<sup>43</sup>G.A.A., PA78/100. No reason is given in the GGR for this omission. Previous to this date, only for 1773 was the homeport omitted.

<sup>44</sup>G.A.A., PA6/61.

<sup>45</sup>That is for Tables and Graphs II and III.

<sup>46</sup>See below Chapter III.B.5.

<sup>47</sup>G.A.A., PA88/1052-54. From at least 1728 till July 1734, Sjouke Piet Brouwer was captain of the ship "de Juffrouw Christina," which sailed regularly between Amsterdam and Narva. For the second voyage in 1734, Jan Jetses was in command of the ship. Similarly from 1728 till 1732 Sieble Riewers of Warns was in command of the ship "de Waakende Leeuw." In 1734, the same ship made two voyages, one to Narva and the other to Viborg, under the command of Tjeerd Jans. From 1736 till 1740, the ship was under the command of Age Ziebles, also from Warns.

<sup>48</sup>For example, the GGR of 22 May 1724 list a "Jan Lindebergh" (homeport: Karlskrona) in command of the ship "Emmanuel" arriving from Karlskrona. A judgement in general average of 31 May 1724 (G.A.A., R.A.2826, Nr. 1152) states that a captain "Jan Lundbergh" in command of the ship "Emmanuel" arrived at Amsterdam on 25 April from "CarelsCroon" [Karlskrona].

<sup>49</sup>For example, the GGR for 1784 list a Pieter Pieters on 29 October and another Pieter Pieters on 1 November, both coming from St. Petersburg. The lastages of the two ships, however, were not the same, being 209 and 239 lasts respectively. A more complicated situation involving almost identical names of captains coming from the same Baltic port is that of a Lolle Sietzes (1), a Solke Sietzes (2), a Sietse Sietzen (3), a Tierck Sietzes (4), a Lolle Sietzes (5), a Loke Sietzes (7) and a Zietse Sietzes (8) all coming from Stettin in 1724. Because of difficulties



(Footnotes - Chap. II)

in interpretation the above names could very well be of the same or totally different persons. Through the use of a combination of lastages and homeports it was possible to determine that a) Lolle Sietses (1) (homeport: 559YJL) and lastages 28/30 is the same as Lolle Setses (6); b) that Solke Sietses (2) (homeport: 554WOU) lastages 33/24 is the same as Lolke Zietses (5) and Lolke Sietses (7); c) that Sietse Sietsen (3) (homeport: 554WOU) with lastages 33/23 is the same as Zietse Sietses (8), and finally d) Tierck Sietses (4) (homeport: 559YJL) lastages 48/23 has no connections with the other captains. The assumption is made that the homeport given was not changed. The name of the ships aided in the identification. (The name of the ship is not given in the STA and thus is of no use when these records are compared with those of the GGR.)

<sup>50</sup>For example the GGR for 13 July 1725 list a "Jan Bouwes Paauw," captain of the ship "de Bok" (homeport: Riga), coming from St. Petersburg. In a judgement in general average of 30 August 1725 (G.A.A., R.A. 2826, Nr. 1184) he is referred to simply as "Jan Bouwes."

<sup>51</sup>G.A.A., N.A. 4573, 9 June 1691. Thomas van Son, an Amsterdam merchant declared having sold, on behalf of Hendrik van den Santheuvel, Willem de Wit, Paulus van Eijsch, Anthonij Walbeek, Lodewijk Terwe and Johanna Terwe, widow of Alewijn van Vollenhoven, to Liberius and Herman Pathé, merchants of Riga, a flute named "De Anna Clara" whose name was changed to "de Twee Gebroeders."

<sup>52</sup>See for example, G.A.A., N.A. 5260, 8 May 1690; N.A. 5265/113, 6 June 1692; N.A. 9412/12877, 26 September 1746; N.A. 12355/310, 28 June 1762; and N.A. 10900/278, 19 June 1781.

<sup>53</sup>G.A.A., N.A. 15823/1632, 27 September 1788. Christiaan Fraser, as proxy for Thomas Zuckerbecker, a Riga merchant, declared having sold on 23 September 1788 to Johannes de Vette, a merchant of Ostende, a hookership named "Rigaas Welvaren" for a price of Dfl. 11,500, the ship being at that time en route between Ferrol and St. Martin.

<sup>54</sup>G.A.A., PA78/96. A small spot-check was taken of the GGR for the period of 1 January through 31 May, 1724. The GGR list the following number of ships as having the same or similar names,

Maria - 4	St. Pieter - 2	Liefde - 5
Elisabeth - 3	Johannes - 2	Vrede - 5
Margareta - 3		Gerechtigheid - 3
Anna - 4		Hoop - 4
Catherina - 4		
Magdalena - 2		

(Footnotes - Chap. II)

Another example of duplicate ship-names is that of two ships named "de Juffrouw Catherina" sailing from Archangel in 1718. In letters sent by Tobias Puyteling on 27 October 1718 from Archangel to David Leeuw in Amsterdam (G.A.A., PA88/1005) there were enclosed cognossements pertaining to a ship "de Juffrouw Catherina." That there were two different ships involved here can be seen in the cognossements which list the captain of one as Pieter Wijbrandts and of the other as Claes Baaijs. This is confirmed in the two different entries in the GGR of the D.M.H. for 1719 which list a "Juffrouw Catherina" under Claes Baaijs on 1 February 1719 at 200 lasts and carrying 200 lasts of cargo, and a "Juffrouw Catherina" under Pieter Wijbrants on 26 May 1719 at 170 lasts but also carrying 200 lasts of cargo.

<sup>55</sup>For all tables and graphs the lasts given in the GGR have been converted to tons on the basis of 1 last = 2 tons. This has been done to facilitate comparison of data with that on English shipping. This approximate conversion is generally accepted and used by other authors such as Aksel Christensen (Dutch Trade, p. 98), Simon Hart ("Amsterdam," p. 5) and Frederick C. Lane, ("Tonnages, Medieval and Modern," Ec.H.R., 2nd ser., 17(1964)2:229 for the seventeenth century.

<sup>56</sup>Koopman, 1768, p. 194.

<sup>57</sup>Cornelis van Yk, De Nederlandse Scheepsbouw open Gestelt, Amsterdam, 1697, pp. 319-320; B. E. Bruggen, "Beschouwing over het aangeven van de hoofdafmetingen van de Nederlandse zeeschepen en de daarbij gebruikte maateenheden (1600-1800)," M.N.V.Z., 20(1970), p. 25. See also Koopman, p. 193 which describes the last as a ship measure as follows (in free translation): "SHIPMEASURE, the Measure of ships, barges and all cargocarrying Vessels, is found by means of Lasts and Tons interior, and by means of Feet, and elsewhere Palms, in respect of the length, depth and breadth, external: If one states that a ship in this or another Harbour is so many Last, one understands thereby, so many multiples of 4000 pounds weight. . . ."

<sup>58</sup>Koopman, 1768, 193-194 reads (in free translation): "According to these Capacities or Sizes, all Duties or Tolls, on arriving and departing Ships at most of the Sea-Harbours, or at most Cities, are determined." For the origins and meaning of the term lastgeld, see H. E. Becht, Statistische gegevens, pp. 14 ff.

<sup>59</sup>Koopman, 1768, p. 192; A.R.A., Admiraltitscollege, Aanhangsel 31 (Verzameling Bisdom), No. 217, No. 44 Meeting van Scheepen, c. 1754-55, fols. 342-386. (Hereafter cited as Meeting.)

<sup>60</sup>Koopman, 1768, p. 194.

(Footnotes - Chap. II)

<sup>61</sup>T. R. Rumsey, England, Poland and the Baltic 1550-1640: Studies in Trade and Diplomacy, unpublished Ph.D. dissertation, University of Virginia, 1972, pp. 149-150.

<sup>62</sup>When in the GGR there is a conflict between the lastage and the monies collected, the amount collected was used to determine the lastage instead of the number of lasts given. For example, in the GGR of the D.O.H. for 1725 there is an entry for 7 September according to which a Direck Schelvis arrived from Riga with 82 lasts of cargo on a ship of 18 lasts. The monies collected were f. 4:12 for the cargo and f. 1:4 for the ship which means that at one-half stuiver per last the size of the ship should read 48 lasts and not 18. The ship size of 48 lasts is thus the figure that was used in the tables.

<sup>63</sup>G. Moorsom, "On the new Tonnage Law as established in the Merchant Shipping Act of 1854," Transactions of the Institution of Naval Architects, 1(1860):128-140; Walther Vogel, "Die Grundlagen der Schiff-artsstatistik," Veröffentlichungen des Instituts für Meerkunde, 16(1911):1-9. For a succinct description of the problem of lastage or tonnage measurements, but not a solution, see the article by Frederick C. Lane, "Ton- nages, Medieval and Modern," Ec. H. R., 2nd ser., 17(1964)2:213-233.

<sup>64</sup>John J. McCusker, "Colonial Tonnage Measurements: Five Phila- delphia Merchant Ships as a Sample," J. Ec. H., 27 (March 1967) 82-91, and Christopher French, "Eighteenth-Century Shipping Tonnage Measure- ments," J. Ec. H., 33(March 1973) 434-443.

<sup>65</sup>Paul Gille, "Jauge et tonnage des navires," Le Navire et l'économie maritime du XV au XVIII<sup>e</sup> siècles, Travaux du Colloque d'Histoire Maritime, 1956, ed. Michael Mollat, Paris, 1957, p. 96. Deadweight lastage is the difference between the light displacement lastage (the weight of the water displaced by a vessel when entirely unloaded or the weight of the ship it- self) and the displacement lastage loaded (the weight of the water displaced when the ship is loaded to its designed draught).

<sup>66</sup>Lane, Tonnages, p. 225. This condition assumes that the overall specific gravity of the cargo is roughly .63.

<sup>67</sup>Meeting, fois. 342-344; Bruggen, "Beschouwing," p. 25.

<sup>68</sup>"Tractaat tusschen de Kroon van Denemarken en de Staet der Vereenighde Nederlander. . . . twaelf Februarij, 1647 Article IV" as found in Groot Placcatboek, II, 's Gravenhage, 1658, fois. 567-574. (Hereafter cited as Tractaat 1647.)

(Footnotes - Chap. II)

<sup>69</sup>Idem; Meeting, fols. 380-381. In this and subsequent formulas the terms length, width and height have been used instead of the usual breadth and depth since the first letters of these three terms correspond with their Dutch equivalents "lengte," "wijde," and "holte." Similarly the "D" is used to denote Deck or the Dutch "deck" or "verdek." The measurements used here and elsewhere are those of the Amsterdam foot of .283 Metres which is indicated as "voet" or "vt" to distinguish it from the English foot of .305 Metres. Unless otherwise indicated, the symbol " ' " likewise designates Amsterdam voeten and not English feet.

<sup>70</sup>Tractaat 1647, fols. 568-570; Meeting, fol. 343; Nicolaas Witsen, Aeloude en hedendaagse Scheepsbouw en Bestier, Amsterdam, 1871, p. 33 of the Appendix.

<sup>71</sup>Tractaat 1647, fol. 570.

<sup>72</sup>G.A.A., PA78/244, "Lyst vande uitrekeninge van alle schepen na het Concept Placaet van 23 Februarij, 1688." (Hereafter cited as Concept Placaet 1688.)

<sup>73</sup>Meeting, fol. 366. "NB the law states that the Cubic feet must be divided by 200 and one-third subtracted from that amount which is the same if one divides by 300 and then does not subtract anything" (in free translation).

Fols. 380-381 state that a ship that can carry 175 lasts pays only for 116 lasts and a ship of 144 lasts pays only on 96  $\frac{2}{3}$  lasts, thus a reduction of approximately one-third. John J. McCusker has reached the conclusion that the registered tonnage was on the average thirty-two per cent less than the measured tonnage; Simon Hart ("Amsterdam," p. 106, footnote 9) and Jorma Ahvenainen ("Some Contributions to the question of Dutch traders in Lapland and Russia at the end of the Sixteenth Century," Acta Iaponica Fenniae 6 (1967), pp. 37 ff) are of the opinion that ships were registered at one third or one half of their real size, but admit that this is only a rough estimate. One should, therefore, always treat the size of ships as given in harbour and port books with a certain degree of caution.

<sup>74</sup>Bruggen, "Beschouwing," p. 25. In this article Bruggen studies the size of East Indiamen and warships and not that of the common merchantmen. Metric equivalences were taken from Staring's Lijst van alle Binnen- en Buitenlandse Gewichten en Muntten, 3rd ed., Schoonhoven, 1885, p. 14. (Hereafter cited as Staring.)

(Footnotes - Chap. II)

<sup>75</sup>Meeting, fol. 343.

<sup>76</sup>Meeting, fol. 362-363. According to this formula, the sizes of the two ships given in footnote 78 below would be 145 lasts and 61 lasts respectively.

<sup>77</sup>Meeting, fol. 345.

<sup>78</sup>For example, the Formula (1) as applied to the sample list of ship measurements and ship sizes given in the Tractaat 1647, fols. 575-576 would place the largest ship mentioned namely, one of 125' x 25' x 14', at 146 lasts while the Tractaat 1647 states that the size of this ship was 155 lasts. Conversely, the smallest ship without a deck that is mentioned, namely, one measuring 80' x 21' x 11' would, according to Formula (1) be 61.8 while the Tractaat 1647 places the ship at 50 lasts. Just to see how accurate some of the English formulas would be, the Amsterdam voet was converted to the English foot at 1 vt./1.08 = 1 ft. Taking the English formula in common use at that time of:

$$\text{Tonnage} = \frac{\text{Length} \times \text{Breadth} \times 1/2 \text{ Breadth}}{94}$$

The larger ship would have been calculated at 326 tons or 163 lasts while the smaller ship would have measured 150 tons or 75 lasts. If instead we took the formula adopted by English merchant shipping under the tonnage law of 1773, namely,

$$\text{Tonnage} = \frac{(\text{Length} - 3/5 \text{ Breadth}) \times \text{Breadth} \times 1/2 \text{ Breadth}}{94}$$

the tonnages would be 294 and 127 respectively or the lastages 147 and 64. This is only an observation and all these methods demonstrate the danger of using a single formula for both the larger and smaller ships. For a recent attempt at establishing some conversion coefficients for the various ship sizes, see French, "Eighteenth-Century Shipping."

<sup>79</sup>Meeting, fol. 344.

<sup>80</sup>It must be noted that for ships having the same measurements the cargo-carrying capacity was affected not only by the type of construction, e.g., a flute or a frigate, but also by such influences as the date of sailing (weather conditions), the route and length of voyage (extra weight of provisions and equipage for longer voyages) and the terms of the charterparty if the ship was to be armed.

(Footnotes - Chap. II)

<sup>81</sup>One of the reasons for this low number of samples, apart from the substantial amount of time involved in locating charterparties in the notarial archives, is the fact that many ships were chartered to carry their cargo to ports other than Amsterdam. Further, the majority of the charterparties state the approximate carrying capacity of the ship instead of the measurement. Others do not give any information at all on the size of the ship. The number of ships sailing from Narva to Amsterdam is relatively small compared with shipping from such ports as Danzig or Riga but then it seems that on the whole the measurements of the ship were given only for ships engaged to fetch timber.

<sup>82</sup>Regression is a technique for obtaining a functional relationship among variables where the values of one variable can be measured in terms of associated variable(s). The relationship considered here is of the form

$$Y = a + bX$$

where "Y" is called the dependent variable, "X" is the independent variable.

The least squares methods are used to estimate the coefficients of a and b. For our purpose the formula would read:

$$RL = a + bML$$

where RL = the Registered Lastage as recorded in the GGR

a = the intercept [set at 0]

b = the regression coefficient (slope of the line)

ML = the Measured Lastage as stated in the charterparty and calculated according to Formula (2).

<sup>83</sup>The coefficient of determination ( $R^2$ ) equals the square of the correlation coefficient.  $R^2$  is the percentage of the total variation explained by the regression equation.

<sup>84</sup>Whenever the charterparties stated the cargo-carrying capacity of the ships in lasts of a certain commodity, the only commodity mentioned was rye. It was, therefore, assumed that even in those charterparties where the cargo-carrying capacity was given in lasts without any further clarification, it implied rye lasts.

<sup>85</sup>G.A.A., PASS/1053.

<sup>86</sup>*ibid.* See under the credit entries for 1729. The term "schistersgeld" could not be located in the literature relevant to this subject. The Woordenboek der Nederlandsche Taal (vol. 14, 1936) states that the term "schisten" was used in connection with the docking of ships and use of lighters.

(Footnotes - Chap. II)

<sup>87</sup>See below Tables II, III and IV. Since the manner in which the ship was constructed, or type of ship, has an effect on the relation of either the applicability of the formula to determine the measured lastage or the cargo-carrying capacity to the registered lastage of the ship, the conversion factor  $RL = .533ML$  may not be valid for many individual cases. Nevertheless, it can be assumed that the applicability of this conversion factor increases the greater the number of ships. During the past few years, J. Bruijn, F.G. Gaastra, I. Schöffer, et al., at the University of Leyden, have been working on a quantitative study of various aspects of the history of shipping and trade of the Dutch East India Company. As a rule of thumb, they use Formula (2) or  $L \times W \times H / 200$ . The search for an acceptable method for determining the lastage of a ship proved to be a continual problem for the Dutch East India Company. At one time, the Company sent an official to Batavia, c. 1690, to measure the ships so as to prevent fraud. Measuring well over 40 ships, this official established the following relations between the actual measured lastage and the official registered lastage:

Length of Ship	Actual ML	Official RL	Relation RL versus ML
130 vt.	293	100	$RL = .372ML$
145 vt.	406	140	$RL = .344ML$
160 vt.	547	180	$RL = .330ML$

That RL was put at .330 - .372 ML instead of .533ML is not surprising considering the extra armaments, crew, provisions, and equipage that a ship on the East India route had to carry compared with one sailing the Baltic route. The problem of ship lastages on the East India route still has to be solved as the various methods used by the Dutch East India Company were influenced primarily by fiscal factors and thus have almost no metrological value.

<sup>88</sup>Just as the Dutch term voet has been used to denote the linear measure of Amsterdam, so the term pond or ponden is used to denote the Amsterdam weight measure. The abbreviation "pd." is used to designate the Amsterdam pond (or ponden). The Amsterdam pond was equal to .494 Kilograms (Staring, p. 20).

<sup>89</sup>Meesting, fol. 346.

<sup>90</sup>Ibid., fols. 358-359, and Koopman, pp. 147-148. See especially Staring (pp. 14ff.) who places the Amsterdam grainlast at 3003.91 Litres.

The grainlast was divided into 27 mud = 36 sack = 108 schepel; K.M.C. Zevenboom ("Bijdrage tot de kennis van de oude Amsterdamse graanmaat," Verhandelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afd. Letterkunde, new series, 66(1959) 1:16-17) mentions that in 1807 tests were carried out to determine exactly what the old

(Footnotes - Chap. II)

Amsterdam grain measurements were. A box 5 vt. long and wide and 2 1/2 vt. high, having a volume of 62 1/2 cu. vt., was filled with rye. The rye was packed as much as possible to simulate the effect of the movement of the ship on such cargo. The box was found to contain 54 1/2 schepel which meant that 125 cu. vt. would equal 109 and not 108 schepel. This difference was considered negligible and the weight of different types of grain continued to be for wheat 120 to 130 pd. per sack of 3 schepel (or 4320 to 4680 pd. per last), for Prussian rye at 116 to 124 pd. (or 4176 to 4464 pd. per last), for dried Prussian rye at 108 to 116 pd. (or 3888 to 4176 pd. per last) and barley at 92 to 106 pd. (or 3312 to 3816 pd. per last). The average weight of a last of wheat was put at 4500 pd. (or 2226.4 Kilograms), a last of Prussian rye at 4320 pd. (or 2137.3 Kilograms), a last of dried Prussian rye at 4032 pd. (or 1994.9 Kilograms) and a last of barley at 3528 pd. (or 1745.5 Kilograms). The general standard used in Amsterdam during the eighteenth century was the Amsterdam rye last of 4250 pd. (or 2099.883 Kilograms).

<sup>91</sup>See above pp. 71 ff.

<sup>92</sup>A shippound (also 6 schip\_pund, 8 schippound or 9 schippund) was a unit of weight used in the Baltic trade varying from 300 to 400 English pounds and equalled 20 lis pounds. The abbreviation "shpd." denotes ship-pounds Amsterdam weight and "shib.", English weight.

<sup>93</sup>Staring, p. 21. One shippound of flax = 148.427 Kilograms.

<sup>94</sup>Koopman, pp. 146-196; Hart, "Amsterdam Shipping," p. 105; Staring, pp. 14 ff. Wine at 8 oxheads a last was equal to about 1863 Litres, herring at 14 casks (tonnen) loosely packed equal to about 1694 Litres and packed at 21 casks per last of about 1452 Litres.

<sup>95</sup>Staring, p. 14.

<sup>96</sup>Koopman, p. 147.

<sup>97</sup>Tables II.4.B and II.4.D show this to be true on an aggregate basis as well.

<sup>98</sup>G.A.A., PASS/1052 and 1054. The GRR entries recorded for this ship were 13 July 1728 at 142 lasts for the size of the cargo and 142 lasts for the size of the ship; 6 November 1728, 142 lasts cargo and 142 lasts ship; 25 October 1729, 153 lasts cargo and 142 lasts ship; 12 July 1730, 142 lasts cargo and 142 lasts ship; 14 August 1731, 142 lasts cargo and 142 lasts ship; 10 December 1731, 144 lasts cargo and 142 lasts ship;



(Footnotes - Chap. II)

28 August 1732, 142 lasts cargo and 142 lasts ship; 27 November 1732, 148 lasts cargo and 142 lasts ship; 3 August 142 lasts cargo and 142 lasts ship; 15 April 1734, 142 lasts cargo and 142 lasts ship; and finally, 12 July 1734, 142 lasts cargo and 142 lasts ship.

<sup>99</sup>On 15 August, 1729, the GGR recorded the "Juffrouw Christina" coming from Danzig as paying galjootsgeld on 266 lasts of cargo and 142 lasts for the size of the ship.

<sup>100</sup>G.A.A., PA88/1052. An entry for 10 October 1729 states that for the voyage from Danzig to Amsterdam there were 13 merchants who shipped cargo on this voyage.

<sup>101</sup>It was also possible for a ship to pay galjootsgeld only for the ship if it arrived with no cargo (in ballast). An example of this is the GGR for 10 April 1784 for Samuel Nuscke from Stettin. Most likely, he had come to Amsterdam early in the season with the hope of finding some cargo.

<sup>102</sup>For example, the STA list a Jan Hoolen as passing through the Sound on 26 June 1784 coming from Riga en route to Amsterdam carrying 62 lasts of rye. The GGR for 19 August of the same year record a Jan Hoolen from Riga paying galjootsgeld on 62 lasts of cargo, the size of the ship being 30 last. A ship declaration dated 25 August 1784 (G.A.A., N.A. 15512/185) states that a ship, "de Vijf Gebroeders" under captain Jan Hoolen carrying rye from Riga to Amsterdam had suffered some damage at sea due to storms.

<sup>103</sup>Meeting, fol. 354.

<sup>104</sup>The STA data for 1724 and 1725 was transcribed from the STA manuscripts located in the Rigsarkivet, Copenhagen, as "Øresundstoldregnskaberne," Ledger Books Nos. 176, 195, 196, and 198. Only the STA data on ship movements which met one of these criteria has been transcribed:

1. The port of destination or departure was Russian.
2. The port of destination or departure was Dutch.
3. The homeport of the captain was either Dutch or Russian. A ship movement involving a voyage from London to Danzig or from Stockholm to Le Havre by a non-Russian or Dutch captain was not included. Even so more than 4,600 STA ship movements were processed for the years 1724 and 1725.

(Footnotes - Chap. II)

105 The D.M.H. for 1724-1726 pertain exclusively to ships from Archangel. For 1784-1786, the D.M.H. data on shipping from St. Petersburg has been added to the GGR data used for this comparison.

106 The GGR no longer stated the homeport of the captain after 1779 and it was not possible to check for this variable in the 1784-1785 sample.

107 I am thankful to Professor Hans Chr. Johansen for supplying me with the STA computer print-outs for 1784 and 1785.

108 The reasons for using such a long possible delay are mentioned in footnotes 111 and 118 below.

109 The term "coupling" is used rather than interface since it was impossible to combine the STA and GGR into one data set for processing by computer. As a consequence, all calculations and sampling had to be done by hand. The reason for this rather laborious and inefficient manner for treating the STA and GGR data, after so much work was put into preparing and coding the data, lies in the unreliability of the Canadian postal service during the six months prior to completion of the dissertation.

110 STA-178410133825/412PIL/501AMS Dirk Hendricks (751EMD)  
GGR-17841018, /412PIL Dirk Hendriks 62/32

The system of notation used for the STA and GGR is as follows:

	1	2	3	
	1234567890	1234567890	1234567890	
	178410133825	412PIL/501AMS	for STA	
	17841018	412PIL	for GGR	

For both the STA and GGR, columns 1-4 = the year, cols. 5 & 6 = the month, cols. 7 & 8 = the day, cols. 14 - 19 = the port of departure. For the STA only, col. 9 = nationality of the ship, cols. 10 - 12 = the number of the ship, cols. 21 - 26 = the port of arrival, followed by the name of the captain. The port code in brackets after the name of the captain is his homeport. For the GGR only, the two figures after the name of the captain represent the lastage of the cargo carried and the registered lastage of the ship respectively. For 1784-1786, the GGR do not give the homeport of the captain. In the case of notations for 1724-1726, the homeport of the captain will precede the lastages.

(Footnotes - Chap. II)

111 For example:

STA-178410103896/412PIL/501AMS Harme Steven (761PAP)  
GGR-17850411 /412PIL Harme Steffens 78/42,

or

STA-178411013007/412PIL/501AMS Henrich-Jacob Scholten (761PAP)  
GGR-17850405 /412PIL Hendrick-Jacob Schulte 77/43,

or

STA-178411172333/451STT/501AMS Claas Wiggers (563GRO)  
GGR-17850420 /451STT Claas Wieger 23/23,

or even longer

STA-178409172125/352RIG/501AMS Haye-Johannes Cramer (546LEM)  
GGR-17850512 /352RIG Haye-Johannes Craamer 109/57.

It is quite possible that Craamer wintered at his homeport, Lemmer, before sailing on to Amsterdam the following spring. The time lag on his previous voyage that year was only 20 days.

(STA-178408272524/352RIG/501AMS Haye-Johannes Cramer (501AMS)  
GGR-17840717 /352RIG Haye-Johansen Cramer 129/57.)

For an explanation of the difference in homeports between the last two STA entries, see below Chapter II. B.4.

112 For example:

STA-178407062587/329NAR/501AMS Albert Cornelis (501AMS) and  
STA-178410302292/329NAR/501AMS Albert Cornelis (501AMS) for one  
GGR-17841217 /329NAR Albert Cornelis 244/244

In this case the GGR entry was coupled with the 17841030 STA entry.

Also:

STA-178405164038/319STP/501AMS Cornelis Jurgens (319STP) and  
STA-178408144199/319STP/501AMS Cornelis Jurgens (319STP) for one  
GGR-17841001 /319STP Cornelis Jurgens 150/68

Again the STA entry was coupled with the later GGR entry. In both cases and others like it, the assumption is made that the captain, though originally bound for Amsterdam was probably ordered to sail for a French or Iberian port instead.

113 For example:

STA-178407292756/411MEM/563GRO Jan Zuidema (563GRO) and  
STA-178410022196/411MEM/563GRO Jan Zuidema (563GRO) for one  
GGR-17841002 /411MEM Jan Zuidema 63/35.

Although in both cases, Zuidema stated at the sound that he was destined for Groningen, the first STA entry was coupled with the GGR entry.

114 For example:

STA-178410292284/319STP/501AMS Pieter Pieters (501AMS) (a)  
STA-178411012315/319STP/501AMS Pieter Pieters (501AMS) (b)  
and

(Footnotes - Chap. II)

GGR-17841130 /319STP Pieter Pieters 209/209 (c)  
 GGR-17841217 /319STP Pieter Pieters 234/234 (d)

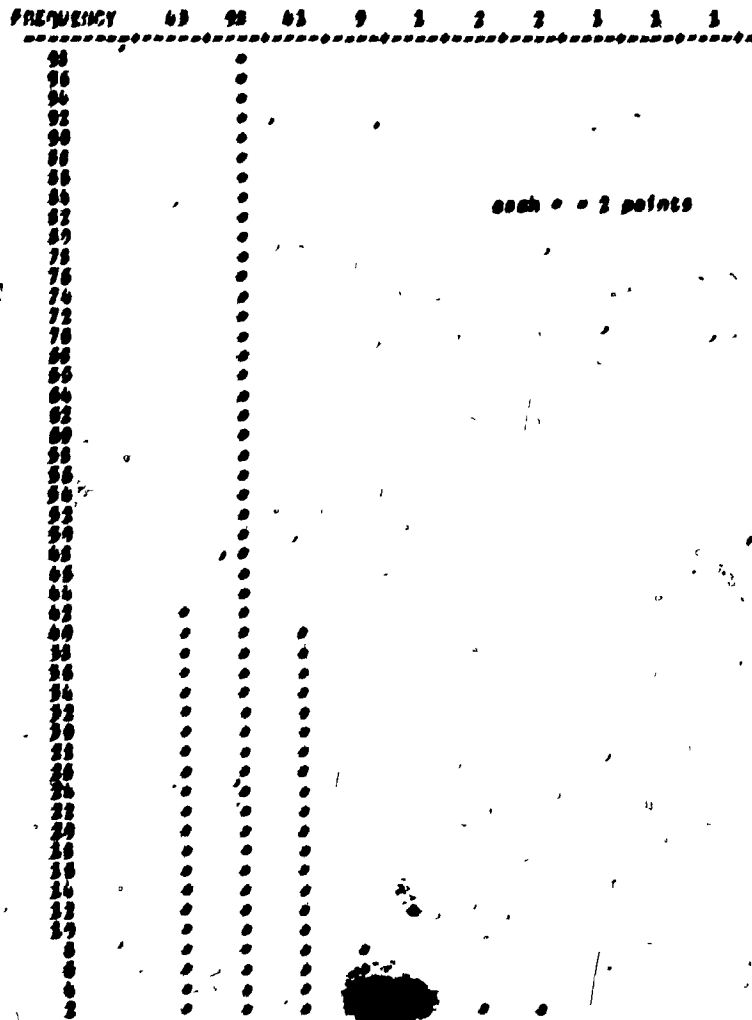
115 The standard deviation is 19.431, the minimum value, 19 days and the maximum, 167 days.

116 The standard deviation is 19.942, the minimum value 18 days and the maximum, 144 days.

117 Actually, 45.905 days, the standard deviation being 19.738 days.

118

FREQUENCY DISTRIBUTION OF TIME LAG IN DAYS BETWEEN THE PASSAGE OF SHIPS THROUGH THE CANAL IN JULY OF 1724, 1725, 1784 & 1785 AND THEIR REGISTERED DATE OF ARRIVAL IN AMSTERDAM ACCORDING TO THE GGR. (197 observations)



39,000	67,000	77,000	117,000	157,000	167,000
92,700	62,700	82,500	122,500	157,100	

TIME LAG IN DAYS

MEAN	STD. DEV.	STD. DEVS	MINIMUM	MINIMUM	MAXIMUM
69,000	19,738	1,100	167,000	19,000	167,000

(Footnotes - Chap. II)

119 That is, 65 positive couplings were made. For another five GGR entries the coupling with the STA is somewhat uncertain and these have been omitted from the sample.

120

FREQUENCY DISTRIBUTION OF TIME LAG IN DAYS BETWEEN THE PASSAGE OF SHIPS THROUGH THE SOUND DURING 1705 WHOSE REGISTERED DATE OF ARRIVAL IN AMSTERDAM ACCORDING TO THE GGR OCCURED DURING JANUARY THROUGH MAY, 1736.

( 65 observations)

FREQUENCY	2	4	9	17	10	2	3	6	6	3
13				*						
12				*						
11				*						
10				*	*					
9			*	*	*					
8	*		*	*	*					
7	*		*	*	*					
6	*		*	*	*			*	*	
5	*		*	*	*			*	*	
4	*	*	*	*	*			*	*	
3	*	*	*	*	*		*	*	*	*
2	*	*	*	*	*	*	*	*	*	*
1	*	*	*	*	*	*	*	*	*	*
	54,000	101,200	143,400	195,500	242,500	290,000				
	77,600	124,300	172,000	219,200	266,400					

TIME LAG IN DAYS

MEAN	STD. DEV.	STD. ERROR	MAXIMUM	MINIMUM	RANGE
158.531	63.314	7.914	290,000	54,000	236,000

121 A check of ship declarations showed that on the average a voyage from the Sound to Amsterdam took about twenty days. Considering that all the ships in our sample (17) suffered damage, it is likely that during the peak season the sailing time from the Sound to Amsterdam took even less time. An example of this is the ship-declaration made on 10 April 1744 by the crew of the ship "de Juffrouw Maria Elisabeth." (G.A.A., N.A. 9403/12082.) They left the Sound on 16 March, were at the Vlie on 24 March and arrived at Amsterdam on 28 March. The ship was recorded in the GGR on 17 April as carrying 51 lasts of cargo, the registered ship lackage being 28.

(Footnotes - Chap. II)

122 For example:

STA -178410193953/411MEM/501AMS	Lamert Dich	(751EMD) and
GGR-17841117 /411MEM	Lammert L. Dyk	83/91,
STA -178405316371/410KON/501AMS	Nicolai Kruse	(281HAM) and
GGR-17840723 /281HAM	Nicolaas Kruse	30/32 or
STA -172509224095/352RIG/501AMS	Sirpe Rugsboom	(352RIG) and
GGR-17251022 /352RIG	Zirck Rijnbon	(520VLI) 192/220.

Other examples could be given. Since the majority of ships sailing from Swedish ports did so under Swedish captains, the problem is more acute on this route.

123 For example:

STA -178412112350/352RIG/501AMS	Thomas Ysbrand	(501AMS) and
GGR-17850525 /352RIG	Ysbrand Thomas	99/81.

124 For example:

STA -178407083015/352RIG/501AMS	Harm Berens Sturman	(761PAP) and
GGR-17840823 /352RIG	Hamre Behrens	108/58. But the later entries

that year read:

STA -178410913994/401KON/501AMS	Harm Behrends Styrman	(761PAP) and
GGR-17841214 /401KON	Harme Behrends Stuurman	110/58.

The situation could also be reversed, as is shown in the following example:

STA -178408213429/401KON/501AMS	Luytje Luytjes	(751EMD)
GGR-17851006 /401KON	Luyte Luytjes Ruyl	84/50.

125 It is very probable that this type of situation accounts for the fact that it was not possible to locate some of the GGR entries in the STA, especially if the common Christian name is one like "Jan" or "Pieter."

126 For example, the following entries in 1725,

STA-172504161031/401KON/501AMS	Jacob Opkes	(517TES)	(a)
STA -172507181142/401KON/501AMS	Jacob Opsies	(517TES)	(b)
STA -172509081301/401KON/501AMS	Jacob Opkes	(517TES)	(c) and
GGR-17250807 /401KON	Jacob Oepkes	(517TES)	72/52 (d)
GGR-17250924 /401KON	Jacob Oepkes	(517TES)	80/52 (e)
GGR-17260427 /401KON	Jacob Oepkes	(517TES)	65/52 (f)

In all of the three GGR entries, the name of the ship is "Cornela" or "Cornelia." The problem is here that the (b) and (c) entries can be coupled with any of the GGR entries, as far as dates are concerned. Considering the problem with the time lag of the recording in the GGR of ship arrival, the same order was maintained for coupling purposes as that found in the sources, namely (a) with (d), (b) with (e), and (c) with (f).

(Footnotes - Chap. II)

127 A rather complicated situation is that found in 1725 involving shipping from the port of Stettin to Amsterdam. The relevant STA entries are as follows:

STA-172410211309/451STT/501AMS	Solcke Sietsen	(554WOU)	(a)
STA-172502231004/451STT/501AMS	Sietje Sietsen	(501AMS)	(b)
STA-172502231005/451STT/501AMS	Solcke Sietsen	(501AMS)	(c)
STA-172502231006/451STT/501AMS	Lolle Sietses	(501AMS)	(d)
STA-172505061053/451STT/501AMS	Sietse Sietses	(501AMS)	(e)
STA-172505061054/451STT/501AMS	Solcke Sietses	(501AMS)	(f)
STA-172505061061/451STT/501AMS	Lolle Sietses	(501AMS)	(g)
STA-172506211132/451STT/501AMS	Lolle Sietses	(554WOU)	(h)
STA-172506211133/451STT/501AMS	Sietse Sietses	(554WOU)	(i)
STA-172506211134/451STT/501AMS	Solcke Sietses	(501AMS)	(j)
STA-172508211269/451STT/501AMS	Solcke Sietses	(501AMS)	(k)
STA-172509261317/451STT/501AMS	Solcke Sietses	(501AMS)	(l)
STA-172509261318/451STT/501AMS	Lolke Sietses	(501AMS)	(m)

The following entries were found with the captain having the same or similar names:

GGR-17250405	/451STT	Lolle Sietses	(559YJL)	28/20	(n)
/The name of the ship = "Rosenburgh"					
GGR-17250405	/451STT	Solke Sietses	(554WOU)	33/24	(o)
"Solomons Wijsheld"					
GGR-17250406	/451STT	Sietse Sietses	(554WOU)	33/23	(p)
"Gerechtigheid"					
GGR-17250523	/451STT	Lolle Sietses	(559YJL)	25/20	(q)
"Roosenburgh"					
GGR-17250523	/451STT	Tierck Sietses	(559YJL)	48/23	(r)
"Gerechtigheid"					
GGR-17250524	/451STT	Lolke Sietses	(554WOU)	40/24	(s)
"Salomons Wijsheld"					
GGR-17250710	/451STT	Lolle Sietses	(559YJL)	46/20	(t)
"Borsenburgh"					
GGR-17250711	/451STT	Zietse Sietses	(554WOU)	46/23	(u)
"Gerechtigheid"					
GGR-17250711	/451STT	Lolle Zietes	(554WOU)	50/24	(v)
"Salomons Wijsheld"					
GGR-17250828	/329NAR	Lolke Sietses	(554WOU)	30/24	(w)
"Salomons Wijsheld"					
GGR-17251008	/451STT	Lolle Sietses	(559YJL)	36/20	(x)
"Rosenburgh"					
GGR-17251008	/451STT	Lolke Sietses	(554WOU)	33/44 [sic]	(y)
"Solomons Wijsheld"					
GGR-17251019	/491OEE	Siedse Sietses	(554WOU)	23/23	(z)
"Gerechtigheid"					

No entries were found in the GGR for January through April 1726 pertaining to a captain Sietses or variations of that name. From the GGR entries

(Footnotes - Chap. II)

we see that three ships are involved. They are the "Roosenburgh" under captain Lolle Sietzes or Setses (entries (n), (q), (t), and (x)), the "Gerechtigheid" under the command of Sietse (or Tierck, Zietse, or Siedse) Sietzes or Setses (entries (p), (r), (u) and (z)) and "Salomons Wijsheid" under captain Solke (or Lolke or Lolle) Sietzes or Zietzes (entries (o), (s), (v), (w) and (y)). The following couplings were made: (a) with (o), (b) with (p), (c) with (s), (d) with (n), (e) with (r), (f) with (t), (g) with (q), (h) with (v), (i) with (u), (j) with (w), (k) with (x), (l) with (z) and (m) with (y).

The first thing one notices about the STA entries is that with three exceptions the homeport of the captain is continually given as Amsterdam. Secondly, on one voyage the homeport of the captain is given as Woudsend, and on another a different homeport. In the GGR entries, this occurs only once, namely, entry (u) of the series (p), (r), (u) and (z) lists Woudsend instead of IJlst. (Both towns are close together in Friesland.) With the ports of departure there is only one case where the STA and the GGR conflict (entries (j) with (w)). The other case involving entries (m) and (y) can be considered a "semi-conflict" since the GGR do not state a specific port of departure.

For the years 1784 and 1785 the GGR do not give the homeport of the captain or the name of the ship. Fortunately cases like this one were not encountered. Should this have been the case, we still would have the lastage of the ship as a guide in settling coupling problems.

<sup>128</sup>This figure is based on the sum of the yearly totals of Column "N" in Tables V.1-V.4. For individual examples involving conflicts between the STA and the GGR regarding ports of departure, see footnotes 122 and 137 above and footnotes 140 and 141 below.

<sup>129</sup>Ibid., Column "O".

<sup>130</sup>Idem. Without conflicts involving the port of Elbing, the yearly totals for Column "O" would be 23 or 4.7% in 1724, 73 or 9.8% in 1725, 28 or 5.4% in 1784 and 61 or 9.9% in 1785.

<sup>131</sup>This figure is based on the yearly totals of "Total for Russia" in Column "O" in Tables V.1-V.4.

<sup>132</sup>Ibid., Column "N."

<sup>133</sup>This figure is based on the sum of the yearly totals of Column "C" in Tables V.1-V.4.

<sup>134</sup>Ibid., Column "D."



(Footnotes - Chap. II)

<sup>135</sup>Idem. Without conflicts involving the port of Pillau, the yearly totals for Column "D" would be 38 or 6.7% in 1724, 63 or 8.1% in 1725, 9 or 1.7% in 1784 and 26 or 4.2% in 1785.

<sup>136</sup>Idem. This figure is based on the sum of the yearly totals of "Totals for Russia."

<sup>137</sup>Ibid., Column "C."

<sup>138</sup>Ibid. This figure is based on the sum of the yearly totals of Column "P." Professor Hans Chr. Johansen was kind enough to check for me all the STA west-bound entries for 1784 and 1785 against the remaining uncoupled GGR entries. The figures for 1724 and 1725 do not include the possibility of a non-Dutch or Russian captain sailing from a non-Russian Baltic port to a non-Dutch port who nevertheless may have arrived at Amsterdam. For the reasons for this see footnote 104 above.

<sup>139</sup>This figure of 21 ships is based on the sum of the yearly totals of Column "E" in Tables V.1-V.4.

<sup>140</sup>For example:

STA-178407112657/352RIG/513HOR	Peter Schuring	(564PER) and
GGR-17840809 /352RIG	Abraham Pieters Schuring	72/32, or
STA-178407171686/412PIL/563GRO	Teke Roloff Swart	(563GRO) and
GGR-17840819 /431ELI	Teeke Roeloff Swart	12/12.

See also footnote 113 above.

<sup>141</sup>The numbers in "Column P" involving non-Dutch ports of destination according to the STA which were nevertheless located in the GGR is 16 for 1784 and 8 in 1785. See for example:

STA-178406224121/412PIL/652LIP	Michael Blanck	(444KOB) and
GGR-178407p5 /444KOB	Michel Blank	40/34.

<sup>142</sup>This figure is the sum of the yearly totals of "Total for Russia," Column "P" in Tables V.1-V.4.

<sup>143</sup>This percentage is the fraction that 9 is of 903. See above footnote 132.

<sup>144</sup>This figure is the sum of the yearly totals of "Total for Russia" Column "E" in Tables V.1-V.4.

<sup>145</sup>Ibid. The figure 797 is the sum of the yearly totals of Column "A" minus the yearly totals of Column "B."

(Footnotes - Chap. II)

146 See for example, Ralph Davies, The Rise of the English Shipping Industry, London, 1972, pp. 202-227.

147 The figures 494 and 743 are the yearly totals of Column "N" for 1724 and 1725 respectively in Tables V.1 and V.2.

148 Ibid. Total of Column "C."

149 See footnote 147 above.

150 This figure is the total of Column "S" in Table V.1.

151 This figure is the total of Column "S" in Table V.2.

152 G.A.A., PA78/96. The number of captains having a non-Dutch homeport in 1724 can be broken down as follows:

<u>Port</u> <u>(Code)</u>	<u>Number</u>	<u>Port</u> <u>(Code)</u>	<u>Number</u>	<u>Port</u> <u>(Code)</u>	<u>Number</u>
059JYL	- 1	401KON	- 6	751EMD	- 4
082DAG	- 4	421DAZ	- 12	758BOK	- 1
211GEL	- 4	444KOB	- 4	801LEH	- 1
221STC	- 23	451STT	- 6		<u>6</u>
233NOK	- 8	459POP	- 1		
234KAM	- 1	463STR	- 5		
239VET	- 1		<u>34</u>		
241KAK	- 5				
242KAH	- 9				
259SKP	- 1				
279HIS	- 2				
	<u>56</u>				

The total number of captains having a non-Dutch homeport in 1724 is thus 96 or 14.2% of the total number of captains recorded in the GGR for that year.

(Footnotes - Chap. II)

152 (cont'd)

The number of captains having a non-Dutch port in 1725 can be broken down as follows:

Port (Code)	Number	Port (Code)	Number	Port (Code)	Number
001KOE	- 1	319STP	- 2	632LON	- 1
061JYL	- 2	341REV	- 1	701HAU	- 1
111DRM	- 2	352RIG	- 4	721BRM	- 3
209WAA	- 1	369LIV	- 1	751EMD	- 2
211GEL	- 1		<u>8</u>	758BOK	- 2
221STC	- 25	401KON	- 8		<u>9</u>
231VIS	- 1	421DAZ	- 22		
232GOT	- 2	444KOB	- 9		
233NOK	- 8	449KAI	- 2		
234KAM	- 3	451STT	- 8		
241KAK	- 8	461GRI	- 1		
242KAH	- 10	462WOL	- 3		
243AAH	- 1	463STR	- 3		
246LAD	- 1	471ROT	- 1		
263VAR	- 1	472WIM	- 1		
299STR	- 2		<u>58</u>		
299SVG	- 1				
	<u>68</u>				

The total number of captains having a non-Dutch homeport in 1725 is thus 143 or 16.8% of the total number of captains recorded in the GGR for that year.

For the year 1769, data on the homeport of the captain has also been processed and the breakdown of captains having a non-Dutch homeport is as follows:

Port (Code)	Number	Port (Code)	Number	Port (Code)	Number
001KOE	- 1	301FRK	- 1	631HUL	- 1
061FLS	- 4	308WAM	- 1	632LON	- 2
082FOE	- 4	308WIB	- 4	701HAU	- 1
082NOA	- 2	319STP	- 2	721BRM	- 4
082SIL	- 1	343ARN	- 2	751EMD	- 10
086UTE	- 1	352RIG	- 1	758BOK	- 2
088HOS	- 3		<u>11</u>	758JUI	- 4
125FLE	- 1			758NOD	- 4
201HEN	- 2	371LIB	- 2	758SPI	- 4
203BRT	- 1			808DUK	- 1
209WAA	- 1	401KON	- 15	809MOR	- 1
211GEL	- 1	411MEM	- 1		<u>34</u>
219OER	- 1	421DAZ	- 30		
221STC	- 11	444KOB	- 9		
233NOK	- 2	451STT	- 14		
234KAM	- 1	459DEI	- 1		
239NYP	- 1	459UCK	- 2		

(Footnotes - Chap. II)

152 (cont'd)

<u>Port (Code)</u>	<u>Number</u>	<u>Port (Code)</u>	<u>Number</u>	<u>Port (Code)</u>	<u>Number</u>
241KAK	- 2	461GRI	- 1		
242KAH	- 5	462WOL	- 2		
243AAH	- 3	463STR	- 15		
247KRN	- 1	464BAP	- 12		
249TRL	- 1	471ROT	- 7		
251HES	- 1	472WIM	- 1		
269WAR	- 2	481LUE	- 5		
	<u>64</u>		<u>115</u>		

The total number of captains having a non-Dutch homeport in 1769 is thus 216 or 25.7% of the total number of captains recorded in the GGR for that year.

<sup>153</sup>It must be noted that in 1724 the homeport of 12 and in 1725 of 20 captains was not given. Similarly in 1769 this figure stood at 45. The assumption is made that these captains had Dutch homeports since the name of the captain and that of the ship suggested this. The overall percentages of 84.34% of the captains having a Dutch homeport in 1724-1725 is based on this assumption.

<sup>154</sup>This figure is the sum of the yearly totals of Column "U" in Tables V.1 and V.2.

<sup>155</sup>This figure is the total of Column "C" in Table V.1.

<sup>156</sup>Ibid. Column "J."

<sup>157</sup>This figure is the total of Column "J" in Table V.2.

<sup>158</sup>Ibid. Column "C."

<sup>159</sup>This figure is the total of Column "H" in Table V.1.

<sup>160</sup>Ibid. Column "A."

<sup>161</sup>The figure 865 is the total of Column "H" and the figure 1048 the total of Column "A" in Table V.2.

<sup>162</sup>This figure is the sum of the yearly totals of Column "Q" in Tables V.1 and V.2.

(Footnotes - Chap. II)

163 Ibid. Column "F."

164 Ibid. Column "I."

165 This figure was tabulated separately when the figures shown above in footnote 152 were being prepared.

166 This figure is the sum of the yearly totals of Column "V" in Tables V.1 and V.2.

167 Ibid. Column "T."

168 Ibid. Column "V"/Column "U."

169 Ibid. Column "T"/Column "S."

170 This figure was tabulated separately.

171 This figure is the sum of the yearly totals of Column "C" in Tables V.1 and V.2.

172 This figure was tabulated separately.

173 This figure is the sum of the yearly totals of Column "K" in Tables V.1 and V.2.

174 This figure was tabulated separately.

175 This figure is the sum of the yearly totals of "Total for Russia" in Column "A" in Tables V.1 and V.2.

176 Ibid. Column "I."

177 Name 96.87% less 84.34% (see above footnote 153) or 12.53% and 94.26% less 82.29% (see above footnote 154) or 11.97%.

178 This figure is the sum of the yearly totals of "Total for Russia" in Column "T" in Tables V.1 and V.2.

179 Ibid. Column "N."

(Footnotes - Chap. II)

180 ibid. Column "V."

181 Namely 98.35% less 86.98% (see above footnote 153) or 11.37% and 95.46% less 82.29% (see above footnote 154) or 13.17%.

182 This figure was tabulated separately.

183 This figure is the sum of the yearly totals of "Total for Russia" in Column "I" in Tables V.1 and V.2.

184 This figure was tabulated separately.

185 This figure is the sum of the yearly totals of "Total for Russia" in Column "U" in Tables V.1 and V.2.

186 ibid. Column "T."

187 ibid. Column "V."

188 Circa 95% of the shipping from Russia to Amsterdam was carried out by captains having a Dutch homeport while for shipping from the whole Baltic this percentage stood at circa 85%.

189 While historians agree that the homeport of the captain cannot be used to provide a definite outline of the changes in the structure of shipping, it may do so in a secondary role as it was used by Dutch historians Faber, Lootsma, Van der Woude and others. The use and possible misuse of the homeport of the captain as an indice is discussed in the following section.

190 Edward Carstenn, Geschiede der Hansestadt Elbing, Elbing, 1937, passim; F.B.M. Tangelder, Nederlandse Rekeningen in de Pondtol-registers van Elbing, 1585-1602 (Rijks-geschiedkundige Publicatie) 's Gravenhage, 1972, pp. ix-xxvii. An example of this can be found in the ship-declaration made on 14 January 1772 (N.A. 14108/3890) by the crew of the ship "Reeder's Welvaren" under the command of captain Liewe Sjoords. According to this declaration, the crew stated that they had loaded wheat and hemp at Königsberg, departing from there on 24 October 1771. On 28 October they arrived at Pillau where they took on the remainder of the cargo and sailed from there for Amsterdam on 3 November. Adverse winds forced the ship to return to Pillau and it was not until 5 December that they once again were able to set course for Amsterdam. On 10 Decem-

(Footnotes - Chap. II)

ber, they entered the Sound, leaving it on 15 December. Again storms tested the ship and damaged the cargo. It was not until 27 December that the ship reached Vlieland and finally on 1 January 1772 it arrived at Amsterdam. In the Galjoetguldregisters the ship was recorded on 4 February 1772 as coming from Königsberg carrying 51 lasts of cargo, the size of the ship being 101 lasts. But in the Sound Toll Accounts the ship was recorded as coming from Pillau. In view of the information given in the ship-declaration, both the STA and GGR can actually be considered correct. The pondtolregisters of the different ports in the Friese Haf and those of Pillau as the entrance to the Baltic will have to be consulted for any further research into this matter.

<sup>191</sup>Schöffer, "Vonnissen," pp. 10-11 and p. 88 above.

<sup>192</sup>Dekker, "Een nieuw licht . . .," Ons Zeewezen, (1971), 10, p. 45.

<sup>193</sup>For 1724 and 1725, the percentage of captains having a homeport which was not Dutch stood at a modest 15.7%. It rose to 25.7% by 1769 and to 40.51% by 1784 but declined to 28.66% by 1785. (The first two percentages are based on the GGR data presented in footnote 152 above while those for 1784 and 1785 are based on the STA data presented in Columns "N" and "U" of Tables V.3 and V.4 respectively using the equation of

$$\% = \frac{"N" - "U"}{"N"} \times 100.)$$

<sup>194</sup>This percentage is based on the sum of the yearly-totals of Column "N" for 1724 and 1725 (or 1237) divided by the sum of the yearly totals of Column "M" for 1724 and Column "L" for 1725 (or 1386) as found in Tables V.1 and V.2. The STA entries which were coupled with the GGR entries prior to May of 1724 and 1784 have not been included in Column "M" but are included in Column "C."

<sup>195</sup>This percentage is based on the sum of the yearly totals of Column "N" for 1784 and 1785 (or 1135) divided by the sum of the yearly totals of Column "M" for 1784 and Column "L" for 1785 (or 1203) as found in Tables V.3 and V.4.

<sup>196</sup>This figure is based on the sum of the yearly totals of Column "B" in Tables V.1 and V.2.

<sup>197</sup>Ibid. Column "C."

(Footnotes - Chap. II)

<sup>198</sup>The use of year caesuras means that the GGR entries for January through April for 1726 and 1786 were also checked. Of the 137 GGR entries for 1726 all but 36 were accounted for by the STA entries of 1725. Similarly out of the 80 GGR entries for 1786, 65 were positively accounted for by the STA of 1785 and another five tentatively. Since it is possible that some or all of these uncoupled GGR entries can be accounted for by ships which passed the Sound early in 1726 and 1786, these uncoupled GGR entries have not been subtracted from the two two-year totals of unaccounted for STA entries.

<sup>199</sup>This figure is based on the sum of the yearly totals for 1784 and 1785 of Column "C" minus the sum of the yearly totals for the same years of Column "B" in Tables V.3 and V.4.

<sup>200</sup>*ibid.* The sum of the yearly totals of Column "N" for 1784 and 1785 minus the sum of the yearly total of Column "M" for 1784 and the yearly total of Column "L" for 1785.

<sup>201</sup>It ranged from 0.8 - 1.4%. See above pp. 96-97.

<sup>202</sup>The Amsterdam Notarial Archives contain many charterparties in which it is clearly stated that captains sailing from Russian ports during time of war such as 1780-1783 would be provided with whatever documents were necessary to demonstrate without doubt that the cargo and ship were Russian in all respects and sailing on Russian account. For examples of this, see, G.A.A., N.A. 10900/254, 5 June 1781 and N.A. 10901/134, 27/29 April, 1782. Simon Hart, in his Engel van de Stadt, 1746-1819 ('s Gravenhage, 1951, pp. 125-128) describes the large number of pseudo-sales of ships during 1780-1783. In addition, the GGR for 1780-1783 show a markedly different picture than that of the disastrous decline of "Dutch" shipping presented by the STA.

<sup>203</sup>In order to encourage his fellow Russians to actively engage themselves in maritime shipping and trade, Peter I granted tariff and duty reductions and other financial inducements to ships carrying a Russian flag and crew and being registered there. The possibility that these ships might meet all of Peter I's requirements for a ship to be Russian but still remain under actual control of the Dutch is very real. Of the 1724 and 1725 STA entries pertaining to shipping from Russian ports to Holland, there are 12 which list the captain as having a Russian homeport. Out of these 12, it was possible to locate nine corresponding GGR entries. For four of these the homeport of the captain according to the GGR was identical with that given in the STA, i.e., Russian in both sources. But for the remaining five the Russian homeport according to the STA was changed to



## (Footnotes - Chap. II)

a Dutch homeport in the GGR. For an example of this, see above footnote 122. But the entry, STA-172506054094/319STP/501AMS "Michalla Kifelof" (319STP) was not located in the GGR. This is one of the rare instances where the captain had a Russian name. The fact that the GGR do not list this ship lends credence to the argument that the GGR pertain only to Dutch-owned /controlled ships, since the entry indicates not only a ship flying the Russian flag but also a Russian captain. The names of the other two captains for which it was not possible to find a corresponding GGR entry are Dutch and for one of them an earlier coupling was found.

Another illustration of a ship flying the Russian flag and registered as Russian owned but probably actually owned (controlled) by Dutch shipowners is that of the ship "de Liefde" commanded by Jan Herman de Bok. (G.A.A., PA6/84.) The ship sailing in June 1772, under a Russian flag and owned by a Russian subject, from Onega to Ostende with a cargo of timber, was shipwrecked on the north-west coast of Scotland. Lodewijk Hovy and Sons, merchants of Amsterdam, as correspondents of the owners of the ship empowered a Thomas Irvine of Edinburgh to handle the question of salvage. The Admiralty Court was thus also involved. So far everything follows normal shipping practices. What is not normal is that the D.M.H. paid the sum of f.38:14:- to the barristers, Mr. Augustinus and Sons, for the handling of the case in the Admiralty Court for the period of 23 June to 29 December 1774. Why should the D.M.H. pay the legal expenses for a salvage case involving a ship flying the Russian flag, owned by a Russian subject and sailing from Onega to Ostende (not Amsterdam) unless the ship in question was actually Dutch owned/controlled, and/or the Russian subject was also a Dutch merchant? In the GGR of the D.M.H. there are entries for the years 1768 through December of 1771 for this ship as sailing from Archangel to Amsterdam under the command of a Jan H. de Bok whose homeport was the Dutch island of Vlieland, the cargo lastage varying from 390-421 lasts and the registered lastage of the ship being constant at 201 lasts.

<sup>204</sup> See above Chapter II.A.3.

<sup>205</sup> A.M. van der Woude, Noorderkwartier, pp. 374-398. Van der Woude was, however, not entirely satisfied with this explanation and stated (pp. 397-398) that more research had to be done before a certain answer to this problem could be given.

<sup>206</sup> Simon Hart, "Zeelieden te Amsterdam," M.N.V.Z., 17(1968) 5-20 and "Historisch-demographische notities betreffende huwelijken en migratie te Amsterdam in de 17<sup>e</sup> en 18<sup>e</sup> eeuw," Maandblad Amstelodamum, 55(1968) 63-69.

<sup>207</sup> J.A. Faber, Drie Eeuwen Friesland, pp. 269-289.

(Footnotes - Chap. II)

208 That is in van der Woude's Noorderkwartier Tables 6.1 and 6.2 and Graphs 6.1, 6.2, 6.3 and 6.4, and in Faber's Drie Eeuwen Friesland, Appendix V, and Graphs V.2 and V.3, and his earlier study "Friesland en de Sontvaart," It Beaken, 21(1959)187-196. The study by S. Lootsma on the shipping of Hindeloopen ("De zeevaart van Hindeloopen in de zeventiende en achttiende eeuw," Ec. Hist. Jrbk., 21(1940)218-296) which used the Sound Toll homeport data will also have to be reappraised.

209 Exactly how these STA entries (Amsterdam as homeport versus other Dutch homeports in the GGR) are to be apportioned among the other Dutch homeports has yet to be established. One may also ask whether this can be done on the basis of just one two-year sample or whether the sample should be extended to five or ten years or whether another two-year sample should be taken at a later date, for instance 1774 and 1775. The reasons for this discrepancy between the STA and the GGR are not quite clear. One could assume that once the nationality of the captain, in this case Dutch, was established, it mattered little to the Sound Toll officials which specific small Dutch port the captain came from. It may also be that the nature of the Dutch "sea-pass" and "sea-letter" (see Christensen, Dutch Baltic Trade, pp. 76-80) played a role here.

210 See, for instance, the Dutch historian Unger who in his rather extensive article following the publication of the final Bang volume ("De publikatie der Sonttabellen voltooid," TvG, 71, pp. 147-205) tried to put aside the whole question of homeport of captains and nationality of ship, preferring instead to concentrate on the movements through the Sound of certain commodities to and from Holland.

**PART TWO: SHIPPING AND TRADE**

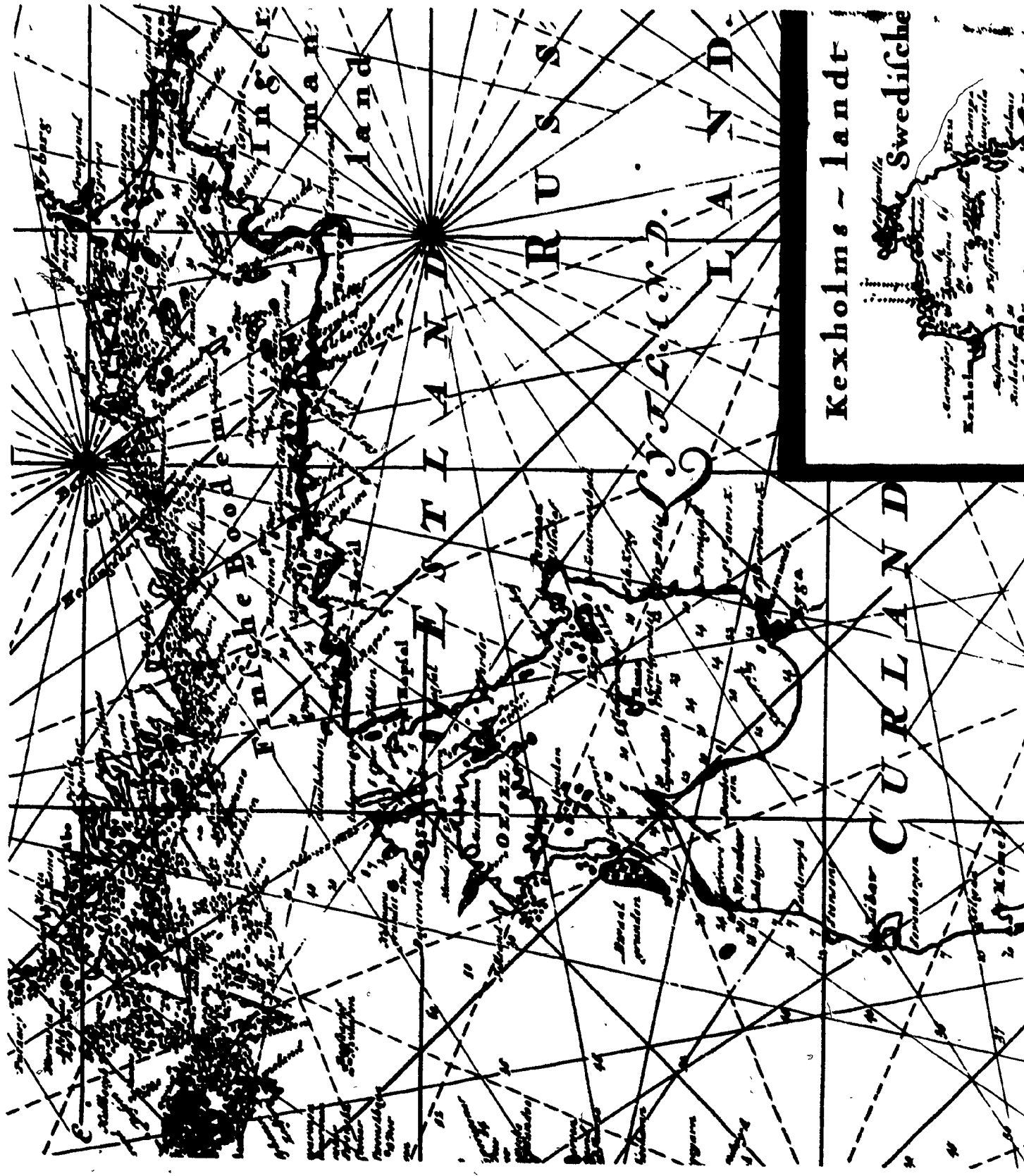
## CHAPTER III

### THE INDIVIDUAL AREAS

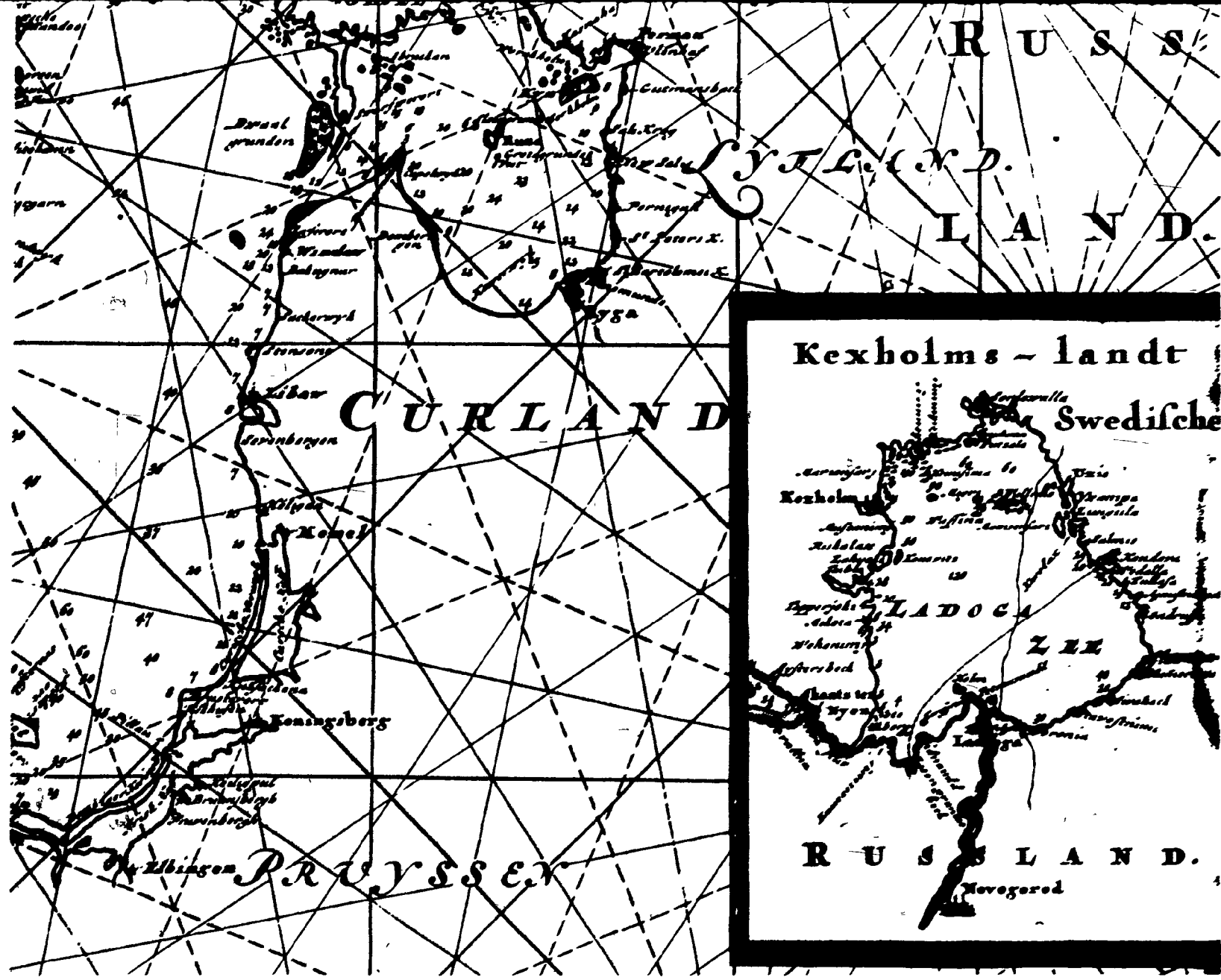
#### III.A. St. Petersburg

In November of 1703 a galjot named "d'Juffrouw Anna" sailed up the mouth of the riva Reva en route to Schansternye, a former Swedish fortified town on the banks of both the Neva and Bolshala Okhta rivers. The captain, Jan Hillebrantsz (homeport: Terschelling) had left Reval with a cargo of wine, salt and other goods upon hearing that the Swedish troops had vacated Schansferye. To his surprise, Hillebrantsz was greeted by Prince Alexander Menshikov and invited to dine with him and the Tsar. Not only did the Russian government buy the whole ship's cargo at a good price but Hillebrantsz also received a present of five hundred ducats and each of his crew, three hundred thalers. Hillebrantsz had never heard of St. Petersburg and was under the impression that the money was a prize to the first ship to sail to Schanternye or surrounding region after the Russians had conquered this territory. Apparently even the large gift did not help the captain realize that Peter I had started to build a new port which would radically change Russia's trade relations with the West.<sup>1</sup>

The idea of diverting the Archangel trade to the Gulf of Finland or even to Riga was not new. Already in the 1640's, the Swedish government had discussed this possibility. The Swedish Resident in Moscow at that time had made extensive inquiries into Russian market conditions. He was of the opinion that if a sufficient reduction in customs tariffs and



Kexholms - landt  
 Swedische



Map 1: Map of the eastern coast of the Baltic Sea, c.1697<sup>2</sup>  
 taken from, "Paskaart van de Oost-Zee" in  
 J. Loots, Paskaartboek, Amsterdam, 1697.

tolls were granted at a port such as Narva it would then be much more profitable for the West Europeans to trade via Narva instead of Archangel. However, both the Swedish and later the Dutch who made a similar proposal to the Tsar in 1647 agreed that such a change in trade patterns was applicable only to light goods. Heavy Russian goods such as tar and pitch had to go via Archangel also in the future.<sup>3</sup> The flexibility of trade routes which had existed in the sixteenth and early seventeenth centuries for the different Russian production areas was replaced during the course of the seventeenth century by increasing use of the Archangel route, which became so established that later Swedish efforts to divert the Archangel trade to the Baltic by trade policy measures did not succeed.<sup>4</sup>

Although the arrival of the first ship at St. Petersburg in 1703 was a fortuitous event and a fortunate one for the captain rather than a determined effort by the Dutch merchants to start trading via this new port, the generous award and personal recognition which Peter I bestowed could not fail to make the Dutch merchant community aware of this new development.<sup>5</sup> Nevertheless, the Dutch were loath to shift their trade from Archangel to St. Petersburg. Unlike their English counterparts who gladly abandoned Archangel for St. Petersburg because of the Dutch competition, the Dutch continued to trade via Archangel virtually ignoring St. Petersburg.<sup>6</sup> Since the main reason for Russia's war with Sweden had been to gain control of Russia's Baltic trade with Europe and to establish St. Petersburg as the new port through which this trade was to be channelled, Tsar Peter was not going to see his hard won victories

not to bear fruit simply because of the intransigence of the Dutch merchants.<sup>7</sup> On 5 November 1713 he ordered that one-half of the Archangel export trade be rerouted via St. Petersburg instead and expanded this order to cover all exports in 1715.<sup>8</sup>

As could be expected, problems plagued the development of the port of St. Petersburg from the very beginning. Aside from the difficulties of building a new port with docks and warehouses on the chosen location, the Dutch had to cope with a whole new Russian bureaucracy which was slow and perhaps too greedy.<sup>9</sup> Russian officials even tried to set the buying price for incoming goods regardless of the prices offered for the same goods at other Russian ports.<sup>10</sup> The Dutch merchants in St. Petersburg correctly placed the blame for their problems not on the Tsar but on the Russian bureaucracy. From their newly-gained experience at St. Petersburg, they knew that the Tsar was sympathetic to their plight and did his best to alleviate their difficulties and that Peter I was the only person able to improve the sad state of affairs. Even Menshikov, the governor of St. Petersburg, and Count Apraxin, the admiral of the Russian navy, constantly failed to keep agreements that the Dutch merchants had made with the Tsar.<sup>11</sup>

Not only did the Dutch not have much initial success with those officials in charge of the port of St. Petersburg, they also had difficulty in reaching the port. The shipping channel to St. Petersburg was quite shallow and new sandbars were constantly being formed due to the slowness of the current of the river Neva as it entered the Baltic. The larger ships



were therefore forced to anchor two to three miles offshore thus adding time and expense for unloading and loading.<sup>12</sup> As time progressed conditions improved. By 1715 watercamels were aiding ships in and out of the harbour.<sup>13</sup> In 1716 work was started on the dredging of a channel from St. Petersburg to Kronstadt to a depth lower than the existing 6 - 9 1/2 vt. so that ships would not be forced any longer to transfer almost all of their cargo at Kronstadt.<sup>14</sup> Nevertheless the shipping channel to St. Petersburg continued to pose an effective barrier to the larger ships for which Kronstadt remained the port of call throughout the eighteenth century.<sup>15</sup> Most of the charterparties for the larger ships stated that the ships would have to call at St. Petersburg as well as Kronstadt. The costs for lighters and barges to carry the cargo which could not be disposed of or loaded at St. Petersburg was borne by the shipowners and not the charterer. This clause ensured that the captain would load as much cargo as possible at St. Petersburg. In presenting a table on ship movements to and from Russian ports for 1761 to 1763, the eighteenth-century historian, J. P. Kilburger, did not even mention St. Petersburg but spoke instead of Kronstadt. Surprisingly both the STA and GGR hardly ever mention Kronstadt.<sup>16</sup>

In order to encourage trade to St. Petersburg, Tsar Peter offered a douceur of 4 Rijksdaalders to each captain who arrived with a full cargo and 2 Riks. to the first mate and 4 Riks. to the rest of the crew.<sup>17</sup> At the same time, Peter ordered that a fine of one ruble per 26 lasts of ballast carried be levied on ships which arrived in ballast at Kronstadt-St. Petersburg. The result was that on approaching their destination, the

crew threw the ballast overboard, usually right in the shipping channel. Finally, in 1735, the Admiralty of St. Petersburg petitioned the Tsarina for abolition of this levy and permission to fix and determine suitable locations where ships could discharge their ballast.<sup>18</sup>

Despite these difficulties and opposition to the whole idea of St. Petersburg, Dutch merchants established themselves in this port. The increase in the Dutch community was reflected in the growth of their own Protestant church. Up to 1713, the Dutch shared a church and pastor with the Lutherans but by 1717 decided to call a pastor of their own. Soon after, they asked and received permission from the Tsar to build their own church.<sup>19</sup>

Shipping to St. Petersburg increased steadily. In 1716 a convoy of over 40 Dutch and English merchantmen arrived at St. Petersburg though many had difficulty finding a return cargo.<sup>20</sup> The number of ships climbed to 75 in 1720, 109 in 1722 and 180 in 1724.<sup>21</sup> Yet by the time of Peter's death, shipping from St. Petersburg accounted for less than one-fourth of all shipping from Russia's Baltic ports via the Sound and less than one-sixth of Dutch shipping to Amsterdam.<sup>22</sup> The assertion that by the time of Tsar Peter's death St. Petersburg had become Russia's leading port must be seriously questioned.<sup>23</sup>

Although by 1797 the total number of ships which called stood near one thousand, St. Petersburg never became the leading Russian port for the Dutch, nor did the Dutch share in this increase.<sup>24</sup> If we take the last two years of Peter's reign, 1724 and 1725, as a base (Table I.1), we notice that there were only twenty-two years in the period from 1716 to

1822 when the annual number of ships arriving at Amsterdam from St. Petersburg exceeded this level. Table II.4.A and Graph II.4.A clearly

TABLE I.1 INDEX OF SHIPPING FROM ST. PETERSBURG TO AMSTERDAM, 1719-1823.  
( 1724-1729/2=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	21	19	19	36
172-	45	33	43	50	100	100	140	62	102	33
173-	64	76	62	45	86	37	83	124	200	76
174-	108	233	112	93	126	74	74	136	71	79
175-	48	88	102	112	83	55	110	112	88	98
176-	67	36	88	88	55	62	71	102	86	107
177-	52	64	86	93	88	64	38	100	169	131
178-	126	43	74	35	132	29	32	45	90	121
179-	79	88	45	62	55	10	55	-	-	-
180-	-	-	-	-	-	-	-	-	-	-
181-	-	-	-	-	-	90	71	424	40	38
182-	64	43	21	-	-	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED

SOURCE: TABLE II.4A

indicate that ship movements from St. Petersburg to Amsterdam peaked in the late 1730's with the single annual highs occurring in 1738 and 1741. After that the number of ship movements dropped quickly to the level of the late Petrine era. During the period just prior to the Wars of 1780-1783 shipping from St. Petersburg picked up but then, apart from the post-war year of 1784, declined again and never recovered. The single all-time high of 1817 should be seen as an extraordinary occurrence due primarily to the high cost of grains caused by massive crop failures in western Europe. 25

In contrast to the decline of Dutch shipping from St. Petersburg to Amsterdam, the total amount of shipping from St. Petersburg to western

Europe increased almost three-fold during the eighteenth century. Using Table V.5, it is possible to present a series showing the number of ships passing through the Sound from St. Petersburg, taking the average number of ships for every ten years:<sup>26</sup>

Average number of ships annually from:\*

	<u>Russia</u>	<u>St. Petersburg</u>	<u>St. Petersburg to Holland</u>
1720-1729	404	100(24.6% ** of those from Russia)	33 (33.6%*** of those from St. Petersburg)
1730-1739	668	143(21.5%)	41 (28.5%)
1740-1749	672	171(25.5%)	49(28.5%)
1750-1759	766	242(31.6%)	44 (18.2%)
1760-1769	831	269(32.4%)	35 (13.1%)
1770-1779	1237	471(37.0%)	51 (10.8%)
1780-1783	1115	465(41.7%)	30 ( 6.4%)

\* In this table and others based on the Sound Toll data, there is no mention of whether the ships had cargoes or not, and no differentiation in the size of the ship. The significance of this and other similar tables lies, however, not in what they tell with regard to the total trade but in what they reveal concerning the share or relative position of different ports or nations.

\*\* Percentage of number of ships from Russia.

\*\*\* Percentage of number of ships from St. Petersburg.

The above figures show quite clearly that up to the middle of the eighteenth century shipping to Holland managed to keep a certain share of the St. Petersburg export trade but then declined rapidly. The decline of Dutch shipping to the Netherlands becomes even more evident if we differentiate between the Dutch and non-Dutch ships (i. e., according to the homeport of the captain) as the following Sound Toll figures show:

Average number of ships annually from St. Petersburg:

	(St. Petersburg)	With Dutch captains	To Holland w/ Dutch captains	To Amsterdam acc. to GGR
1720-1729	100	31 (31.0%)*	30 (30.0%)	30 (30.0%)
1730-1739	143	38 (26.2%)	35 (24.1%)	37 (25.6%)
1740-1749	171	49 (28.7%)	44 (25.4%)	46 (27.1%)
1750-1759	242	48 (24.1%)	38 (15.9%)	38 (15.5%)
1760-1769	269	59 (21.7%)	31 (11.5%)	32 (11.9%)
1770-1779	471	96 (20.3%)	42 ( 8.8%)	37 (15.5%)
1780-1783	465	16 ( 3.4%)	13 ( 2.9%)	13 ( 2.7%)

\* Percentage of number of ships from St. Petersburg.

Even if all Dutch shipping from St. Petersburg is included, there is still a decline, although not so dramatic, of the Dutch share of St. Petersburg shipping. An interesting aspect of these figures is that whereas in the 1720's Dutch shipping from St. Petersburg and shipping from St. Petersburg to Amsterdam were practically synonymous, this is no longer the case by the 1760's when almost one-half of the Dutch shipping from St. Petersburg went to non-Dutch ports.

So far we have dealt with shipping through the Sound and shipping to Amsterdam but not with the total turnover of shipping at St. Petersburg itself. Continuous data for this are not presently available but several contemporary sources provide interesting comparisons with the STA and GGR data as can be seen from the following survey:<sup>27</sup>

Average number of ships annually from:

	Russia (Baltic ports)	St. Petersburg	St. Petersburg acc. to the STA	to the GGR
1714-1722	-	62	35 (56.3%)*	
1758-1764	-	403	224 (55.5%)	20 (5.0%)*
1761-1763	1887	332 (17.6%)**	208 (62.6%)	30 (8.9%)
1773-1777	2007	732 (36.5%)	488 (66.6%)	32 (4.4%)
1778-1783	-	652	478 (72.9%)	42 (6.4%)
1784-1786	-	808	-	33 (4.0%)
1793-1797	2324	1029 (44.3%)	-	19 (1.9%)

\* Percentage of St. Petersburg shipping.

\*\* Percentage of all shipping from Russia's Baltic ports.

Since we have already determined that the port of departure as given in the STA is quite accurate, the difference between the overall St. Petersburg figures and the STA figures must indicate the amount of inter-Baltic shipping, i.e., shipping between St. Petersburg and Lubeck, Danzig, Sweden or other Russian ports. Even so, it is clear that St. Petersburg was not the dominant Russian port during most of the eighteenth century. Only in the last decade of the century did St. Petersburg shipping surpass that of its main rival, Riga.

Then why has so much emphasis been placed on St. Petersburg? Because St. Petersburg was the capital of Russia, the representatives of foreign powers including the English observed the development of Russia's trade from this particular vantage point. The result was that in the dispatches sent to Western Europe this trade was equated with that of St. Petersburg, and the importance of this port where the English played a major role was overemphasized. By using the Sound Toll data, it is possible to see that from its inception the export from St. Petersburg was dominated by the English whose share increased in the course of the century as the number of ship movements clearly show:

Average number of ships annually from St. Petersburg:

	<u>(St. Petersburg)</u>	<u>With English*</u> <u>captains</u>	<u>To England**</u> <u>&amp; Scotland</u>
1720-1729	100	51(51.1%)	46(46.4%)
1730-1739	143	89(62.4%)	83(58.2%)
1740-1749	171	105(61.5%)	91(53.2%)
1750-1759	242	163(67.2%)	154(63.6%)
1760-1769	269	187(69.6%)	178(66.3%)
1770-1779	471	310(65.7%)	295(62.5%)
1780-1783	465	302(64.9%)	302(64.9%)

\* Includes Scottish captains.

\*\* Practically all ships to England and Scotland sailed under captains from these two countries.

Two observations stand out in this table. The first is that there can be no doubt that ships under the command of English/Scottish captains dominated shipping through the Sound from St. Petersburg. But as it will be seen later on this predominance was not true for shipping from all Russian ports. The second observation is that, unlike what has been asserted by Reading, the British did not serve as carriers for third parties.<sup>28</sup> One can say that all British ships from St. Petersburg went to Britain. This contrasts with the Dutch pattern where, by the 1760's and 1770's, one-half of all Dutch shipping from St. Petersburg went to countries other than Holland. The predominant position of the English at St. Petersburg is even greater if one considers the overall shipping turnover at St. Petersburg. ( For the period from 1758 to 1761, 1,769 ships came to St. Petersburg of which 627 (or 35.4%) were English, 234 (or 13.2%) Dutch and only 50 (or 2.8%) Russian. Of the Baltic ports, Lubeck accounted for 179 ships (or 10.1%), Rostock for 110 ships (or 6.2%) and Danzig for only 14 ships (or 0.8%). Of the two other Baltic maritime powers, Sweden accounted for 353 ships (or 20.0%) while for Denmark-Norway the number of ships was 169 (or 9.1%).<sup>29</sup>

In view of the uncertain parameters of the GGR "registered" date of arrival, it is difficult to define seasonal shipping patterns. Nevertheless, the data presented in Table II.1.A allow some general observations to be made. The first is that during the months of May and June ships were en route either to or from St. Petersburg. Secondly, the summer return fleet started returning to Amsterdam in late July and August with a continuous flow of ships arriving during the following months. And thirdly, it seems that a sizeable number of ships waited as late as possible at St. Petersburg (end of September through November) to load the hemp after it had been

brought to St. Petersburg. This is reflected in the high percentages of registered ship arrivals for December through April/May of the following year. The number of ships that wintered at St. Petersburg was very small<sup>30</sup> and the comparison of the GGR with the STA indicates that the GGR entries for January through April/May pertain to ships which left St. Petersburg the preceding year.

So far we have dealt only with ship movements and it may be argued quite correctly that the number of ships is a very crude indicator of the absolute and relative importance of St. Petersburg and Dutch shipping from there. Other equally and perhaps more valid indicators would be the tonnage of cargo carried, the size of the ships and the value of the goods traded. It may very well be that according to one of these variables St. Petersburg was indeed the most important Russian port.

TABLE 1.2 INDEX OF TONNAGE OF CARGO CARRIED FROM ST. PETERSBURG TO AMSTERDAM 1715-1823.  
( 1724=1725/2=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

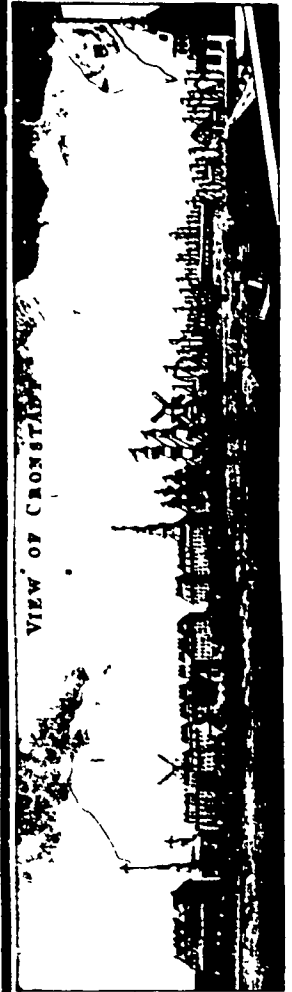
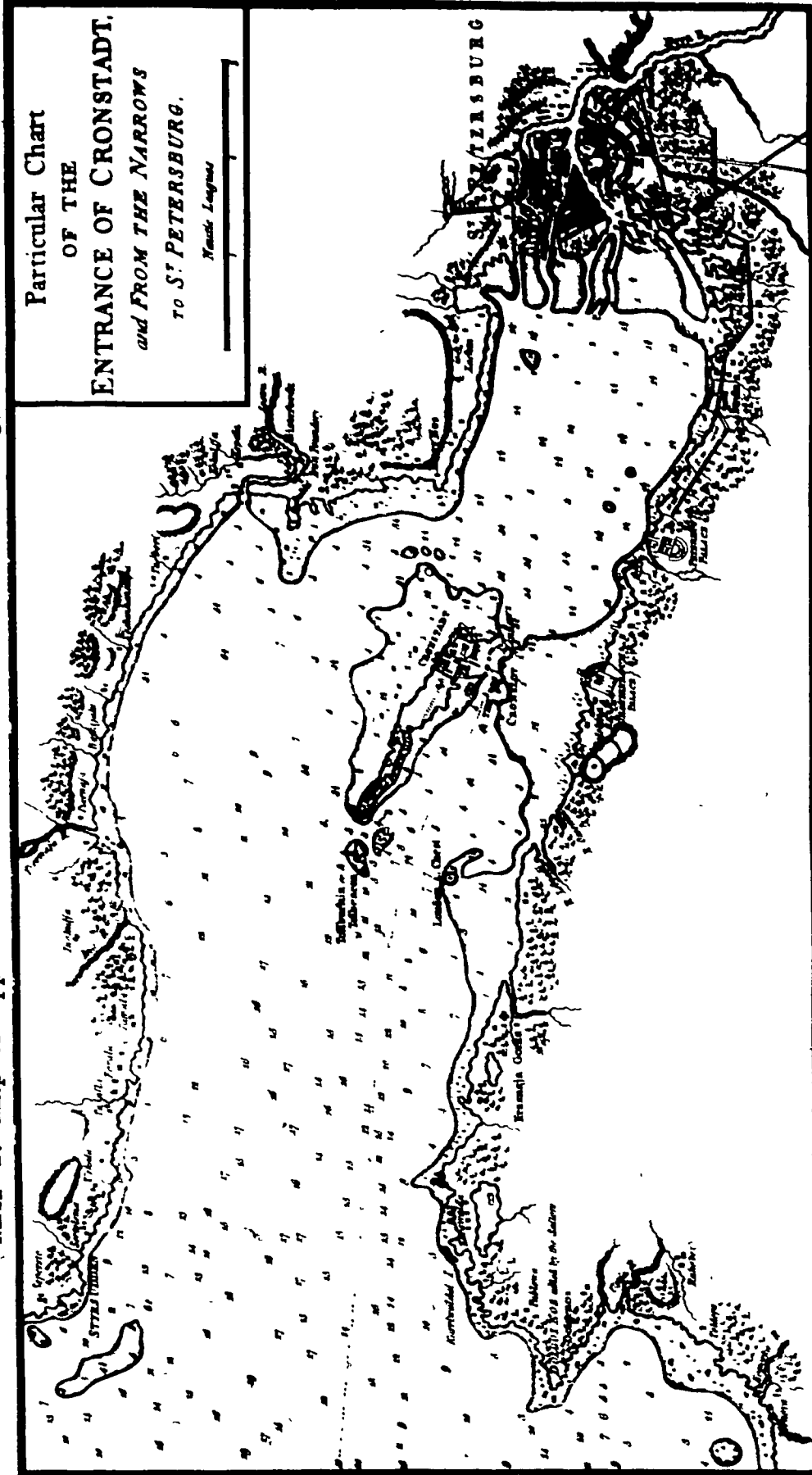
	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	32	20	37	36
172-	69	29	47	62	106	94	166	75	110	45
173-	78	106	88	53	104	73	104	212	358	123
174-	162	482	189	140	164	78	120	171	89	93
175-	61	117	130	132	93	56	120	169	126	133
176-	116	66	152	167	83	124	132	189	179	209
177-	100	114	144	149	159	103	55	148	276	216
178-	224	71	109	106	293	53	79	69	150	201
179-	141	172	91	98	90	14	78	-	-	-
180-	-	-	-	-	-	-	-	-	-	-
181-	-	-	-	-	-	134	96	674	63	52
182-	80	49	24	-	-	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE 11.4A



With regard to the tonnage of cargo carried, we have available only the GGR information.<sup>31</sup> Even if this data should prove not to be representative in later studies, which is doubtful, it does nevertheless represent a sizeable share of the tonnage of cargo exported from St. Petersburg. Taking the last two years of Peter's reign as an index (Table I.2) the tonnage of the cargo carried from St. Petersburg to Amsterdam was on the whole greater than that of the index years. In fact, there were only thirty-two years where the tonnage of cargo was more than ten points below that of the index. This is quite a contrast to the number of ships which in most years remained well below their respective index. One could assume that the increase in cargo tonnage in relation to the ship would indicate that St. Petersburg did play a more important role in Dutch trade. To the contrary, Table II.5 as well as Graphs II.5 and II.6 clearly indicate that, if judged according to cargo tonnage, St. Petersburg played an even smaller role in Dutch trade with Russia's Baltic ports. On five occasions only, namely, 1741, 1757, 1784, 1815 and 1817 did St. Petersburg account for more than 20% of the total cargo tonnage shipped from Russia's Baltic ports and each of these years can be explained by special circumstances. The outbreak of the war between Sweden and Russia in 1741 affected exports from Reval, Narva and the smaller coastal ports when the ships went in convoys to St. Petersburg. The same year the average size of the ships jumped from approximately 200 to almost 250 tons dropping down to 200 tons and lower during the following years. The reason was that the cost of convoy and armaments weighed proportionately heavier on the smaller than on the larger ships. Closely interwoven with these military developments was the sudden rise in prices in late 1740 and 1741, particularly

MAP 2: Map of Approaches to Kronstadt and St. Petersburg, c. 1796-1801. 32



of such commodities as hemp, rye, tar and tallow.<sup>33</sup> The increased share of St. Petersburg in the Russian export about 1757 must be attributed to the prohibition of the export of timber from Reval and Narva which suffered more from this measure than St. Petersburg. The years 1784 and 1814 should be considered part of the readjustment following periods of war. Thus if one measures according to the tonnage of cargo shipped, St. Petersburg did not hold a dominant share which, with few exceptions, was of the order of 7-15%.

TABLE I.3 INDEX OF TONNAGE OF SHIPPING FROM ST. PETERSBURG TO AMSTERDAM, 1715-1823. ( 1724=1725/2=100 ) FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	34	22	34	37
172-	64	27	41	61	110	90	162	71	110	50
173-	86	104	92	59	111	78	109	226	376	121
174-	165	461	193	150	157	84	86	160	89	90
175-	56	98	115	122	87	58	124	132	108	113
176-	78	46	105	113	63	74	92	116	104	135
177-	67	79	98	95	110	69	39	109	187	168
178-	135	44	69	66	177	29	51	45	86	129
179-	79	105	51	58	53	9	54	-	-	-
180-	-	-	-	-	-	-	-	-	-	-
181-	-	-	-	-	-	91	61	689	52	40
182-	67	43	22	-	-	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE II.44

Perhaps then, it was according to the tonnage of shipping that St. Petersburg played a dominant role. However, the index of the tonnage of shipping from St. Petersburg to Amsterdam (Table I.3) shows a marked similarity to the index of the number of ships (Table I.1). For only thirty-one out of a possible eighty-one years did the annual tonnage of shipping

exceed that of the 1724-1725 level. The high for 1741 (except 1817 of course) demonstrates how this index is actually a composite index (like Table I.2) of the number of ships and the size of the ships. In Table I.1 we have seen that the number of ships in 1741 was more than double the index, and in Table I.4 we see that the average size of the ship for 1741 has also doubled in comparison with the index. The net result is that for 1741,

TABLE I.4 INDEX OF AVERAGE SIZE OF SHIP IN TONS FROM ST. PETERSBURG TO AMSTERDAM, 1715-1823.  
( 1724+1725/2=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	158	114	190	103
172-	141	80	96	121	110	90	115	115	107	151
173-	134	136	149	130	129	134	131	162	188	159
174-	158	197	172	157	124	114	117	118	124	114
175-	118	111	113	109	104	106	113	118	123	116
176-	117	129	119	128	115	120	129	113	122	126
177-	127	122	114	100	125	108	104	109	111	129
178-	107	103	94	120	116	101	97	100	95	106
179-	100	120	113	94	96	91	98	-	-	-
180-	-	-	-	-	-	-	-	-	-	-
181-	-	-	-	-	-	100	84	162	129	104
182-	104	94	104	-	-	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE II.4A

the tonnage of shipping was more than quadruple of its respective index. According to this indicator of the tonnage of shipping, St. Petersburg played an even less important role among Russia's Baltic ports as can be easily discerned by looking at Graph II.7 in comparison with Graphs II.5 or II.6.

The inter-relation of the St. Petersburg and Narva-Reval trade has already been mentioned. This relationship was also perceived by the

eighteenth century historian Storch who found that St. Petersburg was Narva's and Reval's successor in the export of hemp and flax.<sup>34</sup> However, the GGR data indicate that increases in the share of St. Petersburg in Russia's Baltic trade could also have come at the expense of Riga and Viborg.<sup>35</sup>

One surprising fact about the shipping from St. Petersburg to Amsterdam is that the average size of the cargo is so remarkably higher than the average size of the ship. In contrast to the average size of the ship, the average size of the cargo stood for many years at almost double the level of 1724 and 1725. As a matter of fact, the index of the average

TABLE I.5 INDEX OF AVERAGE SIZE OF CARGO IN TONS FROM ST. PETERSBURG TO AMSTERDAM, 1715-1823.  
( 1724+1725/2=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	148	103	193	101
172-	153	88	111	124	106	94	118	121	115	135
173-	121	139	142	118	122	127	125	171	179	161
174-	155	204	169	147	130	106	162	126	125	119
175-	127	133	127	118	111	102	109	151	143	157
176-	174	185	173	189	152	200	185	185	209	195
177-	190	178	168	156	181	160	144	148	163	165
178-	177	165	148	193	192	186	152	153	166	166
179-	179	196	202	158	164	146	143	-	-	-
180-	-	-	-	-	-	-	-	-	-	-
181-	-	-	-	-	-	148	134	139	156	137
182-	124	109	111	-	-	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED

SOURCE: TABLE II.4A

size of the cargo is the only index among the five presented where the yearly levels are substantially above that of the index. In looking at Table II.4.A we are faced with the incongruity that at times the lastage of the cargo was more than twice the lastage of the ship. These figures, however, take on a completely different meaning if we analyze them in the light of the previously established relationship of Registered Lastage (RL) = .533 Measured Lastage (ML) or Cargo-carrying capacity (CC). This means that a ship should be considered "overloaded" only when the size of the cargo as recorded in the GGR is more than 87.6% greater than the size of the ship. If this percentage was exceeded the ship was loaded with more cargo than its carrying capacity. The inversion of this relation is when the size of the ship is more than 46.7% less than the size of the cargo. In this case the ship could also be considered "overloaded."

Even if we take into account the equation  $RL = .533CC$ , there remain several instances in Table II.4, namely 1765, 1768, 1785, 1788, 1792, 1793 and 1794 when the ships on an annual basis were loaded with more cargo than they could carry. Further, if we compare the last two columns of Table II.4.A with those in Table II.4, we see that the difference between size of the cargo and that of the ship is the greatest for St. Petersburg. Three factors come into play here. The first is that at present we have no information on the mix of commodities which made up the cargo lastages as recorded in the GGR. Consequently, we do not know what metrological adjustments have to be made to convert the size of the cargo into its equivalent in rye lasts.

Secondly, as has been noted in Chapter II.A.6 for ships that carried timber, the cargo lastage was held to be the same as the lastage of the ship. Thus if a substantial amount of timber was exported from St. Petersburg, this would decrease the possibility for an aggregate "overload" for any particular year. Although the primary exports from St. Petersburg, both in value and in weight, were hemp and iron, substantial quantities of timber were also exported.<sup>36</sup> For example, in early 1738, the merchant Brumberg made a contract with the Admiralty of St. Petersburg which called for the Admiralty to deliver to St. Petersburg a total of 70,000 trees and 30,000 large balken for export. By the middle of May, twenty ships had already arrived at Kronstadt to load this cargo and another eighty ships were on their way. The problem was that a fire had laid waste to a large section of St. Petersburg and Tsarina Anna was reluctant to allow so much timber, which could be used to rebuild the city, to be exported. This caused great consternation in the merchant community for if the deal fell through the financial losses just for the charterparties which would have to be cancelled could easily exceed 300,000 rubles. Brumberg had been advanced large sums of money by the merchants of Amsterdam and Zaandam and he in turn had advanced both money and credit to the Russians. It was also feared that cancellation of the contracts would cause a problem on the Amsterdam exchange. The Russian Senate advised Anna that the contracts once made should be honoured and Brumberg was allowed to export the timber to Amsterdam.<sup>37</sup> The large size of this single shipment is reflected in the GGR (Table II.4.A) as the number of ships jumped from fifty-two in 1737 to eighty-four in 1738 with a corresponding increase in

the cargo and shipping tonnages. Brumberg continued to export large quantities of timber and with the rise of the Russian sawmill industry slowly switched to exporting sawn planks instead of trees. In 1754, he dealt only in planks, over 310,000, but then an export prohibition on timber terminated his activities at St. Petersburg.<sup>38</sup> It is interesting to note that in Table II.4 the percentages given in the last two columns increase after that date and do not return to the lower pre-1756 (pre-timber export prohibition) levels. When the prohibitions on the export of timber were lifted, the St. Petersburg to Amsterdam timber trade was not revived. Most likely the timber exports from other ports such as Narva and Viborg as well as Norway sufficed to meet Dutch demands. This does not mean, however, that the Dutch did not export timber from St. Petersburg. Charterparties for the late 1780's indicate that considerable quantities of timber were exported from St. Petersburg. But these no longer went to Amsterdam but instead to France and the Iberian peninsula.

The third factor which influenced the figures given in the last two columns in Table II.4.A can be explained by the export of two products, hemp and iron. Most of the charterparties dealing with St. Petersburg stated that iron was to be carried franco vragt (free of freight charges). With compact and heavy ballast such as iron, the captain could load his ship to the maximum (and perhaps even more) without endangering the sailing stability of the ship. None of the other Russian ports offered such a perfect combination of commodities for freighting purposes. It was this "free ride" given to Russian iron which made it so competitive on the western European markets.<sup>39</sup>

During the eighteenth century, the average size of ships from St. Petersburg increased in the 1730's and 1740's, most likely because of the export of timber in larger ships. From this high level it decreased and stayed more or less on the same level as that of the index for the rest



of the period. Undoubtedly the shallowness of the approaches to St. Petersburg played a role here. Nevertheless, Tables I.4 and I.5 do not tell us anything about shifts in either the size of the cargo or that of the ship which may have taken place but are masked by the use of averages. When the GGR were being processed, it became evident that there were substantial shifts in the sizes of cargoes and ships which required further investigations. Since this is the first time that a long series of data on cargo and ship sizes have become available for the study of Baltic shipping, this problem has been dealt with in some detail. The results can be seen in the series of tables and graphs labelled No. 2 and No. 3 in sets II, III, and IV.

There are two approaches to the problem of cargo and ship sizes. The first is to simply count the number of ships in each size category. The second is to count the number of tons in each size category. As we are dealing with both the size of the cargo and that of the ship, this means that there are four possibilities for presenting these frequency distributions and all have been utilized.

Initially both the size of the cargo and of the ships from St. Petersburg were small. Until the time of Peter I's death the ships under 100 tons in size were in the majority (Table II.3.A, Cols. I & II and Graph II.3.A(1)). But this size category was decreasing until, by the 1730's and 1740's, ships larger than 200 tons at times accounted for more than 50% of the ships. Thereafter, the 200 ton+ ships almost disappear, making a brief reappearance in 1817. However, the number of ships according to the size of the cargo present a different picture (Table II.2.A,

Cols. I & II and Graph II.2.A(1)). Instead of a great number of ships falling under 100 tons in size, the majority of ships, according to the size of cargo, lie in the 101 to 300 ton range, thus 100 tons higher. The fluctuations between the 101 to 200 and 201 to 300 ton size ranges are greater. From 1755 and on, the smallest size, that of up to 100 ton cargo size practically disappeared and did not reëmerge again till the end of the century.

In terms of shipping tonnage the 101 to 200 size range accounted for the clear majority of ships throughout the eighteenth century, (Table II.3.A, Cols. III & IV and Graph II.3.A(2) ) while ships of under 100 tons represented most of the remaining shipping tonnage. Most of the cargo tonnage was carried by ships whose cargo size fell in the 101 to 300 ton size range (Table II.2.A, Cols. III & IV and Graph II.2.A(2)). The picture presented does not differ much from that depicted in Graph II.2.A(1) except that the 201 to 300 ton size cargo played a slightly more important role, and there was a corresponding small shift right across the graph to a larger cargo size.

Two further analyses of the size of the cargo and size of the ship were undertaken. First of all, Tables II.15 represent an attempt to determine whether any significant shifts took place within the size categories themselves. The GGR data, computed in Table II.15.A, show that both the average cargo size and average ship size in Category A (up to 100 tons) lay in the upper half of the category, while in the other categories the two averages remained in the lower half of their respective categories. Further,

there are no discernible shifts from one category to another.

Secondly, an additional attempt was made to find out in what size categories and to what extent the average size of the cargo was greater or smaller than the average size of the ship. In Tables II.16 this relation is analyzed from the point of view of the ship. With regard to St. Petersburg, Table II.16.A clearly demonstrates that the two smallest size categories (A & B) of ships carried larger additional cargoes in relation to their respective ship sizes. Nevertheless, there were also a few instances where, for very large ships, the size of the cargo was much greater than that of the ship. Again the pattern of shipping after 1756 was markedly different from that of the preceding years as is clearly shown in Cols. II & III of Table II.16.A.

Tables II.9 through II.14 provide an insight into the seasonal fluctuations of shipping from Russia. The only noticeable pattern so far (further and more sophisticated analyses may find more) is that shipping from St. Petersburg occurred mainly during the late summer and fall. The relative lack of tonnage movements arriving at Amsterdam during May through July indicates that there was no spring or early summer fleet. The majority of the ships waited for hemp to be brought to St. Petersburg, a large part of which was carried by barges via Lake Ladoga and the Ladoga Canal.<sup>40</sup>

In comparing the shipping from St. Petersburg with that of the other Russian Baltic ports, our attention is drawn to several distinct features.

The first is that although the number of ships which visited St. Petersburg was quite substantial, it was not till the late 1770's that it can be considered as having caught up with Riga in terms of export through the Sound. According to the GGR not once during the whole 1705 to 1823 period did St. Petersburg rank first in terms of number of ships. As a matter of fact, except for the post-Napoleonic period, St. Petersburg ranked third, or even at times fourth.

Secondly, if according to the STA St. Petersburg became a contender with Riga for the role of the primary port for Russia's exports, it must be remembered that the ships which sailed from St. Petersburg were on the whole 25-50% smaller than the average size of ships sailing from other Russian ports. Even if we take into account that the difference between the average size of the cargo and of the ship was the highest for St. Petersburg, the average size of the cargo was still about 25-40% smaller than that for the rest of Russia. With four exceptions, the years 1778, 1779, 1781 and 1782, St. Petersburg never ranked higher than third in terms of either cargo or shipping tonnage from Russia to Amsterdam. The only indicator according to which St. Petersburg may have ranked first is in the value of imported goods. But in terms of exports, she ranked well behind Riga, and often behind Narva.<sup>41</sup>

By means of the charterparties, it was possible to establish some preliminary figures on the freight prices of shipping from St. Petersburg to Amsterdam and other European ports. For the purpose of computing freight prices, the charterparties were divided into three groups. The first group consisted of those charterparties which stated the freight price

per last of one or more commodities. In charterparties of this sort, the freight price of one of the major commodities was given with the freight price for other commodities to be determined "in proportion." It was possible to establish a relation between the freight prices of the more common commodities. The freight price for hemp of the second quality was 6-10% higher than that for the first-quality or dressed hemp, but for hemp of the third or lowest quality (called codilla) the shipping cost was 29-33% more. If sailcloth was loaded, the price was usually 9-12% more than that for hemp while for tallow it was 12-21% more, and for hides, 20-30%. So far very few charterparties for St. Petersburg have been located stating both the price of hemp and that of one of the cereals such as rye, wheat or barley. For this reason it was not possible to establish a relationship between the freight price for hemp and that for rye on the St. Petersburg route.

The second group of charterparties were those which stated the estimated cargo capacity in rye lasts and hired the ship bij de hoop. In some of these charterparties only the total sum to be paid for freight was given. This limited the sample. The freight price for these charterparties was obtained by dividing the total sum by the cargo capacity. Freight prices presented in Tables I.6 and I.7 below, which do not state any specific commodity, are taken from this group of charterparties and therefore given in rye lasts.

The third type of charterparties are those which were chartered bij de hoop but where instead of the cargo capacity the measurements of the ship were given. The formula used for establishing the freight price was Formula 2 or,

$$\frac{L \times W \times H}{200} + \left( \frac{L \times 1/2W \times 1/2D}{200} \right)$$

Insofar, the existing methods for the computation of the cargo capacity in lasts for individual ships show too many deviations, so that freight prices which have been computed in this manner are annotated with an asterisk, e.g., f. 28\*. The commodity most commonly carried by ships under this type of charterparty was timber and thus, even if freight prices computed in this manner may not be accurate in absolute terms, they are of use in indicating relative changes.

The freight prices for shipping from St. Petersburg have been divided into two categories, namely, those sailing for Dutch ports (primarily Amsterdam) and those sailing for non-Dutch ports, labelled Table I.6 and I.7 respectively.

TABLE I.6: Freight prices per last for shipping from St. Petersburg to Amsterdam, c. 1695-1789 contracted at Amsterdam

(Numbers in parentheses indicate number of charterparties consulted. Freight prices with asterisks indicate computation based on measured lastages. Unless otherwise indicated freight prices are per last of rye. Years pre-St. Petersburg are for shipping from Schans-ternye. Most charterparties were contracted between March and June.)

<u>YEAR</u>	
1690	timber f. 16.4-18.5*(5)
1695 f. 21-27	
1697	timber f. 13.4*(1)
1701	timber f. 11.9-12.7*(3)
1702	timber f. 12.5-15.1*(12)
1703	timber f. 11.5-15*(9)
1718 f. 38(2) for the Tsar	
1719 f. 37(1) for the Tsar	f. 15.2*(1)
1720	f. 33*(1)
1724 f. 17-19(10) one contract in September at f. 28	
1725 f. 16-18(3)	hemp f. 29-32(2)
1726 f. 24-27(9)	
1727 f. 20-21.5(2)	
1730 f. 24(3)	
1738	hemp f. 17, hides f. 19(6)
1740 f. 40 (3)	hemp f. 24(2)
1741 f. 40-42 (for February)	
1742	hemp f. 26-30(6)

TABLE I.6 (cont'd)

<u>YEAR</u>	
1744	hemp f. 22-28(19)
1746 f. 30-33. 3(4)	
1747	hemp f. 20-30(6)
1748 f. 21-22	hemp f. 28(1) in September
1749	hemp f. 23-26(6)
1751	hemp f. 25(1)
1752	hemp f. 23-24(2)
1755 f. 20(1)	
1757	hemp f. 22.5-30(2)
1758	hemp f. 28(1)
1759 f. 40(August) <sup>42</sup>	hemp f. 27(1)
1760	hemp f. 34(2) and f. 30 (September) <sup>43</sup>
1762	hemp f. 30(3), iron f. 27(1)
1767 f. 18.5-19(2)	
1769 f. 19(1)wheat	
1771	hemp f. 22
1784 f. 31(2)	linseed f. 30-30 1/2(5)
1789	hemp f. 30-32(5)

The nature of the charterparties and the large number of variations on routes prevented the presentation of continuous data. A special effort was made, however, to obtain as many charterparties as possible for the 1780's for comparison with the early eighteenth century.

TABLE I.7: Freight prices per last for shipping from St. Petersburg to non-Dutch ports, c. 1726-1790 as contracted at Amsterdam.

(The same conditions which applied to Table I.6 apply here also.)

YEAR	
1726	hides and caviar 24 ducats to Livorno
1732	hemp f. 20 to Bordeaux
1746	hides and wax f. 65-75 to Livorno
1747	hides f. 66 to Livorno
1758	hides f. 65 to Livorno
1761	hemp f. 40 to Jersey
1762	f. 43 to Lisbon; hides, caviar, wax and sailcloth f. 76 to Livorno; hemp f. 34 to Guernsey
1763	f. 34 to Genoa
1765	hemp f. 28, hides and sailcloth f. 30 to Nantes; hemp f. 22 to Rochefort
1768	
1770	f. 18 to Dunkirk
1770	hemp or flax f. 28 to Bayonne or Bordeaux
1771	flax f. 28 and tallow f. 35 to Bayonne
1772	hemp f. 44 to Marseilles
1773	hemp f. 25-26 to France (3)
1777	hemp f. 23 to Nantes(3), timber f. 24.5* to Nantes; hemp f. 30, sailcloth f. 40 and wheat f. 42 to Livorno; hemp or flax f. 50, and wheat f. 65 to Lisbon.
1778	hemp f. 41 to France; hemp f. 48-50 and wheat f. 65 wheat to Lisbon (3); hemp f. 65 to Livorno
1779	wheat f. 65 to Lisbon(3)
1780	hemp f. 60 and wheat f. 75 to Lisbon (3)
1782	hemp f. 73 to Nantes; flax f. 72 to Lisbon
1783	hemp f. 36 to Bordeaux
1784	hemp f. 30-33 to Rivadeo or Bilbao(3); hides and caviar f. 75, and flax f. 50 to Venice; hemp f. 30 to Dunkirk
1785	hemp f. 30 to Bayonne, San Sebastian or Bilbao(3)
1788	hemp f. 27, tallow f. 30 and sailcloth f. 27 to Bilbao; masts and timber f. 32-33* to Naples(3)
1789	f. 36 to Ostende or Bruges; hemp f. 40 to St. Malo; f. 34 to Le Havre; f. 35 to Bordeaux
1790	timber f. 27-34* to Cadiz(5); hemp f. 33, wax and sailcloth f. 36 to San Sebastian

Both tables show a changing picture. The freight prices were influenced by supply and demand both of the goods and of available ships, risk of piracy or privateers and conditions of war. Although prices in Europe rose by more than 50% between 1725 and 1789, the freight price



for hemp from St. Petersburg remained practically on the same level despite changes in the interim. Likewise the cost of shipping timber to Cadiz or hemp to San Sebastian in 1790 did not differ that much from freight prices early in the eighteenth century. Whether improved ship design, better "ton per man" ratios, stable wages or competition or a combination of these was the main factor remains a problem that requires further investigation. Although the data are far from complete, it does seem that freight prices were most adversely affected by times of war. One has only to look at the freight prices to Amsterdam of f. 40 per last of rye in 1740 and 1741 and the jump in freight prices for hemp to Bayonne and Bordeaux in the late 1770's to see the influence of war time conditions on freight rates. With the Peace of Paris in 1783 the freight rate for hemp to French ports fell from f. 73 to f. 30.

### III. B. Narva

Of all the information derived from the GGR so far, the figures for Narva are, perhaps, the most surprising. The GGR leave no doubt that Narva played a much more important role in Russia's export trade to Amsterdam than had been thought previously.<sup>44</sup> Three factors probably account for this. The first is that historians who have written on Russia's eighteenth century trade tended to concentrate on ports such as St. Petersburg, Riga, Archangel and even Reval.<sup>45</sup> Secondly, known sources on Narva's trade are few. For this study, and probably for others as well, information on Narva had to be gleaned from reports and correspondence of diplomats and merchants writing from either St. Petersburg or Riga.

Thirdly, timber, the principal export from Narva, was classified in many different ways. No effort was made in the Sound to differentiate between the various kinds of timber such as wainscoting, clapboard, deals and planks, staves for barrels, mats, oars, ship-nails and the like.<sup>46</sup> There also existed a great difference in value for the various kinds of timber, e.g., that of the "great Riga masts" versus an equal volume of staves.

Nevertheless, timber was one of the most important export commodities from Russia and the Baltic. The vital economic and political aspects of the Russian and Baltic timber trade during this period have been well described by Albion and Bamford.<sup>47</sup> For the first half of the eighteenth century, Narva exported over one-half of all the timber from Russian ports. The following figures give an indication of the role played by Narva:

Exports of timber through the Sound from Russia and Narva<sup>48</sup>  
(annual averages in thousands of pieces)

Years	Total through the Sound	From Russia	% of Baltic	From Narva	% of Russia	% of Baltic
1721-1730	758	280	37.0	264	94.2	33.6
1731-1740	1565	504	32.2	438	86.9	28.0
1741-1750	1538	523	34.0	406	77.6	26.4
1751-1760	1947	561	28.8	312	55.7	16.0
1761-1770	2776	795	28.6	287	36.1	10.3
1771-1780	3707	919	24.8	277	30.1	7.5
1781-1783	3208	661	61.8	115	17.3	3.6

The above figures for Russia do not include timber exports from ports such as Viborg and Frederikshamn which in the Bang volumes were grouped with the other Finnish ports under the heading "Finland." And it should be noted that "Finland" as early as the 1720's accounted for over one-quarter of all Baltic timber exports, a share which rose to over one-half by the

early 1760's. Consequently if Viborg and Frederikshamn could be included the percentages for Russia's overall share in the Baltic timber trade would be higher and Narva's share in the Russian timber trade proportionately lower. Further, the above figures do not differentiate between staves, planks, masts and other kinds of timber. Anyway, there can be no doubt that Narva occupied a primary position in the Russian timber trade. Figures of timber exports from the other Russian ports support this fact.

Exports of timber through the Sound from Russian ports other than Narva  
(annual averages in thousands of pieces)

Years	From Russia	From St. Petersburg	%	From Riga	%	From Livonia & Estonia	%
1721-1730	280	3		-			
1731-1740	504	28	5.5	28	5.5	11	2.1
1741-1750	523	31	6.0	51	9.7	35	6.7
1751-1760	561	71	12.6	40	7.0	38	6.8
1761-1770	795	246	31.0	201	25.8	57	7.1
1771-1780	919	241	26.3	284	30.9	117	12.7
1781-1783	661	138	32.8	281	42.4	15	7.5

Although it is not possible at this moment to advance figures on the quantities of timber which went from Russian ports to Holland, the distribution of Baltic timber exports among the Western European nations is known and can be of assistance here.

Destination of timber shipped through the Sound  
(annual average in thousands of pieces)

Years	Total through the Sound	To Holland	%	To England	%	To France	%	To Spain & Portugal	%
1721-1730	758	493	64.9	121	16.0	39	5.1	19	2.5
1731-1740	1565	955	61.0	197	12.6	91	5.8	93	5.9
1741-1750	1538	910	59.2	164	10.6	119	7.7	220	14.3
1751-1760	1947	712	36.6	413	21.2	169	8.7	252	13.0
1761-1770	2776	762	27.4	954	34.4	275	9.9	543	19.6
1771-1780	3707	799	21.6	956	25.8	346	9.3	493	13.3
1781-1783	3208	583	18.2	751	23.4	133	4.2	617	19.2

The Sound Toll data clearly indicate that it was not until the 1770's that England replaced Holland as the principal consumer of Baltic timber. Of course, some of the Baltic timber imported into Holland found its way up the Rhine to the German states while other timber was carried by ships sailing to France to fetch wine.<sup>49</sup> The importance of the timber trade to Amsterdam is illustrated by events which took place prior to the outbreak of the Fourth Anglo-Dutch War. In 1778 the Anglo-American-French conflict was threatening the Dutch carrying trade. Prince Willem V suggested that convoys be formed for the protection of all Baltic shipping except those ships carrying timber. Amsterdam protested vigorously, asserting that it was exactly the ships with timber which needed protection and not the other ships. A compromise of limited convoys was reached which in turn infuriated the French who were counting on the neutral Dutch carriers to bring naval supplies from the Baltic to France.<sup>50</sup>

Even in terms of shipping per se, Narva was an important Russian port accounting for about one-fifth to one-third of Russia's shipping for the first half of the eighteenth century.

Shipping through the Sound from Narva to Holland  
(annual average of number of ships)

Years	From Russia	From Narva	From Narva to Holland	
1720-1729	414	103(25.1%)*	86(21.3%)*	(83.5%)**
1730-1739	668	202(30.2%)	177(26.5%)	(87.6%)
1740-1749	672	146(21.7%)	109(16.2%)	(74.7%)
1750-1759	766	134(17.5%)	91(11.9%)	(67.9%)
1760-1769	831	103(12.4%)	56( 6.7%)	(54.4%)
1770-1779	1237	91( 7.4%)	50( 4.0%)	(55.9%)
1780-1783	1115	53( 4.8%)	22( 2.8%)	(41.5%)

\* Percentage of ships from Russia.

\*\* Percentage of ships from Narva.

Aström believes that by the end of the seventeenth century the English were the leading foreign colony in Narva, but the Sound figures suggest that the Dutch still held the dominant position there right up to the outbreak of war in 1780.<sup>51</sup>

Shipping from Narva through the Sound to England and with English captains  
(annual averages of number of ships including Scotland)

Years	From Narva	With English & Scottish captains	To England & Scotland
1720-1729	103	16(15.5%)	19(18.4%)
1730-1739	221	42(19.0%)	39(17.6%)
1740-1749	146	20(13.7%)	22(15.1%)
1750-1759	134	27(20.1%)	26(19.4%)
1760-1769	103	34(33.0%)	30(29.1%)
1770-1779	91	31(34.1%)	28(30.8%)
1780-1784	53	22(41.5%)	21(39.6%)

Almost all the Dutch ships went to Holland, and there were very few ships that sailed from Narva to Holland with non-Dutch captains.

Shipping from Narva through the Sound to Holland and with Dutch captains  
(annual average of number of ships)

Years	From Narva	With Dutch captains	To Holland with Dutch captains	To Amsterdam acc. to the GGR
1720-1729	103	84(81.3%)	83(80.5%)	75(72.8%)
1730-1739	221	174(78.6%)	173(78.3%)	152(68.8%)
1740-1749	146	115(78.8%)	106(72.6%)	103(70.5%)
1750-1759	134	93(69.0%)	87(64.9%)	72(53.7%)
1760-1769	103	58(56.3%)	54(52.4%)	45(43.7%)
1770-1779	91	51(56.0%)	50(54.9%)	38(41.8%)*
1780-1783	53	7(13.2%)	7(13.2%)	17(32.1%)

\*Adjustment made for 1775 missing GGR data.

The bulk of timber exports by the English and the Dutch from Narva was destined for their respective countries. Very little, about 2%, of the English shipping went to non-English ports while the percentage for the Dutch was somewhat higher, about 10%. However, prior to the

1750's it had also been 2%. The timber that the Dutch carried to France, Spain, Portugal and the Mediterranean must therefore have come from ports other than Narva.

The index for shipping from Narva (Table I. 8), as was the case of St. Petersburg, was also based on the figures for the last two years of Peter I's reign.

TABLE I.8 INDEX OF SHIPPING FROM NARVA TO AMSTERDAM,  
1715-1825.  
( 1724+1725/2=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	-	-	-	-
172-	23	48	53	31	76	124	99	100	120	94
173-	141	163	213	202	196	129	87	123	167	131
174-	102	99	116	199	88	123	88	89	66	97
175-	135	122	100	98	104	87	5	0	26	53
176-	7	0	26	56	66	54	77	48	73	56
177-	49	26	34	43	46	-	53	42	31	24
178-	29	0	6	36	63	73	79	88	82	82
179-	92	101	89	16	78	1	18	31	9	0
180-	7	1	45	7	7	20	7	7	-	-
181-	-	-	-	-	-	9	26	9	18	31
182-	18	11	14	20	27	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE II.4.B

Both this index and those presented in Tables I. 9 and I. 10 as well as in Table II. 4. B and Graph II. 4. B show that the trade from Narva to Amsterdam reached its zenith between 1730 and 1735, continuing at a fairly high level till the middle of the next decade. Perhaps no other trade route relied so much on a single commodity as Narva. It is therefore not surprising that when Tsarina Elizabeth prohibited the export of timber from Narva in 1756 (existing contracts were honoured), the number of ships dropped in one year from 90 to 1.<sup>52</sup> After the pro-

hibition was partly rescinded, and even after most restrictions on timber exports were lifted in 1761, Narva's timber trade did not recover its previous position.<sup>53</sup> One of the main reasons given by Elizabeth for the export prohibition of timber was the depletion of the timber supply and the serious deforestation of Narva's hinterland. It is not unreasonable to assume that even though the demand for timber rose, Narva no longer was able to supply timber in the same quantities as she had done during the first half of the eighteenth century and before.<sup>54</sup> By 1793-1797, the number of ships which visited Narva still stood at a respectable 87 ships per annum, but in terms of the value of its timber export Narva accounted for just 3.5% of the total value of timber exports from Russia.<sup>55</sup> By the end

TABLE I.9 INDEX OF TONNAGE OF CARGO CARRIED FROM NARVA TO AMSTERDAM, 1715-1825.  
( 1724+1725/2=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	-	-	-	-
172-	25	52	54	33	78	122	99	88	99	81
173-	117	137	180	176	175	119	80	112	151	119
174-	97	93	97	175	82	116	85	67	61	92
175-	119	115	98	97	102	87	5	0	25	53
176-	7	0	28	59	70	56	81	53	81	64
177-	57	29	40	50	53	-	65	52	38	31
178-	33	0	8	45	78	89	94	108	101	103
179-	114	119	111	17	96	1	22	35	10	0
180-	12	2	84	13	4	13	7	3	-	-
181-	-	-	-	-	-	11	28	20	26	27
182-	25	18	19	23	17	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED

SOURCE: TABLE II.4.8

of the eighteenth century, it was St. Petersburg which had become the principal exporter of timber, holding a 52.1% share of the total value of Russia's timber exports while Riga's share stood at 33.3%.<sup>56</sup>

The index of cargo tonnage (Table I.9) and of shipping tonnage (Table I.10) presents a similar pattern as that of the number of ships.

TABLE I.10 INDEX OF TONNAGE OF SHIPPING FROM NARVA TO AMSTERDAM, 1715-1825.  
( 1724-1725/7-100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	-	-	-	-
172-	24	49	54	33	77	123	97	88	102	84
173-	122	142	185	181	179	122	82	115	157	123
174-	97	94	102	182	85	122	88	70	63	95
175-	124	120	102	102	106	91	5	0	26	55
176-	7	0	29	62	74	59	85	58	85	68
177-	60	31	42	52	56	-	68	55	41	33
178-	38	0	8	47	82	94	99	113	106	108
179-	120	124	117	18	101	1	23	37	11	0
180-	9	1	60	10	3	9	5	3	-	-
181-	-	-	-	-	-	9	22	20	28	28
182-	27	19	20	25	18	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE II.4.8

On the whole the figures lie somewhat higher than those in Table I.8 indicating that the average size of the cargo and of the ship increased during the eighteenth century. But this increase did not take place until the second half of the eighteenth century. One wonders to what extent this development was affected by the decision of the Russians in 1761 to limit the annual number of ships from Narva to sixty but not specifying any size. During the years following the export prohibitions, the average size of ships sailing from Narva remained constantly above the index level (Table I.11) until the first years of the nineteenth century when a curious phenomenon took place. For the decades preceding the turn of the century the average size of ships from Narva fluctuated around four



TABLE I.11 INDEX OF AVERAGE SIZE OF SHIP IN TONS FROM  
NARVA TO AMSTERDAM, 1715-1825.  
( 1724+1725/2=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	-	-	-	-
172-	101	103	102	106	102	99	98	88	85	89
173-	85	87	87	90	91	95	95	93	94	94
174-	96	95	87	92	97	99	101	101	95	98
175-	92	98	102	104	102	105	98	0	102	103
176-	104	0	114	110	111	109	112	116	115	121
177-	123	120	125	122	122	-	129	131	133	134
178-	135	0	125	132	129	128	126	129	129	133
179-	130	123	132	107	130	127	126	119	117	0
180-	132	146	134	136	35	46	77	38	-	-
181-	-	-	-	-	-	94	86	214	151	93
182-	147	172	139	120	68	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR  
MISSING HAVE BEEN OMITTED

SOURCE: TABLE II.4.3

hundred tons and the difference between the average size of the cargo and the average size of the ship was negligible. However, in 1800, a marked change took place. Not only did the average size of the ship increase by thirty tons (see the figures for 1802 in Table II.4.B) but the difference between the ship size and cargo size also became much greater, about 36-46% more, than the average size of the ship. Table I.12 shows that for the years 1800 to 1803 the index for the average size of ships from Narva stood at nearly double that of the 1724 and 1725 level. Then suddenly in 1804 with the resumption of hostilities after the Peace of Amiens, the average size of the ship and of the cargo dropped by almost three hundred tons. At the same time the number of ships from Narva became much smaller than that for the previous years. Although the numbers of ships were small, it is possible to make a few suggestions

TABLE I.11 INDEX OF AVERAGE SIZE OF CARGO IN TONS FROM  
NARVA TO AMSTERDAM, 1715-1825.  
( 1724+1725/2=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	-	-	-	-
172-	104	107	102	109	103	98	100	88	82	86
173-	83	84	84	87	89	93	92	91	91	91
174-	96	94	83	88	93	94	97	97	92	95
175-	89	94	98	99	98	100	93	0	97	99
176-	104	0	108	105	106	104	106	110	111	115
177-	117	114	119	116	116	-	122	125	126	128
178-	132	0	124	126	123	122	120	123	124	127
179-	124	117	126	102	124	121	119	113	111	0
180-	171	200	187	181	54	65	102	49	-	-
181-	-	-	-	-	-	121	109	215	144	88
182-	139	163	132	114	65	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE II.4.B

as to what occurred to induce these changes. The ships that came to Amsterdam from Narva from the time of the Armed Neutrality of 1800 to the imposition of the Continental Blockade by Napoleon must have loaded rye, hemp and other cargo besides timber. Prices in Holland for rye were very high at that time. This would account for the difference in cargo and ship size. The sudden disappearance of the larger ships in 1804 indicates that the larger Dutch ships were effectively shut out from the Baltic waters by war-time conditions.

With regard to the distribution of cargo and ship sizes [as shown in Tables II.2.B and II.3.B and Graphs II.2.B(1) and (2) and II.3.B(1) and (2)], it seems that the 401 to 500 ton ship which accounted for about 20% of the shipping tonnage disappeared from the Narva to Amsterdam route by the time of Tsar Peter's death. And the boom in the Narva timber trade in

the 1730's and 1740's attracted a smaller ship size, primarily that in the 201 to 300 ton class. The reappearance of the 401 to 500 ton class coincided with the restrictions on timber exports in the late 1750's. From that time on even the number of ships in the 301 to 400 ton size, which had been the most common size used, slowly declined until they had all but disappeared by the end of the 1770's. The outbreak of war in 1780 and the French Revolutionary period witnessed some minor fluctuations in the frequency distribution by size, but on the whole the 401 to 500 size ship continued to maintain a share of about 90% of shipping on this route.

The beginning of the nineteenth century marks the sudden appearance of much larger ships at Narva, namely those in the 501 to 600 ton and the 601+ ton sizes, with individual ships carrying cargoes of almost 900 tons. Whether this development reflects the building of larger ships or the use of East Indiamen or other larger trans-ocean sailing vessels in the Baltic remains to be investigated.

As far as shifts within the individual size categories are concerned (Table II.15.B), the number of ships in each category in many instances is too small to permit any definite conclusions. Nevertheless, it seems that in both the 301 to 400 ton and the 401 to 500 ton categories there was a gradual shift to a larger size for both the cargo and the ship. Regarding the differences between the size of the cargo and the size of the ship in each of the ship size categories, Table II.15.B indicates a fairly stable pattern until 1800. From then on till 1817, the tonnage of cargo carried in each ship size category was substantially higher than the tonnage of the ship. After 1817 shipping from Narva to Amsterdam reverted back to the eighteenth century pattern with one exception. The year 1817 marked the first arrival at Amsterdam from Narva of a ship carrying over 700 tons

of cargo and the size of cargoes in this size category increased to 850 tons in 1824.

Freight prices for shipping from Narva were computed in the same manner as those for St. Petersburg. The number of charterparties, located so far, which stipulated a port of destination other than Amsterdam was rather small and therefore have been incorporated in the table on freight prices (Table I. 13) of shipping from Narva to Amsterdam.

TABLE I. 13: Freight prices per last for shipping from Narva to Amsterdam and elsewhere, c. 1690-1784 contracted at Amsterdam. (Numbers in parentheses indicate number of charterparties consulted. Freight prices with asterisks indicate computation based on measured lastages. Unless otherwise indicated freight prices are per last of rye.)

YEAR	
1690	timber f. 16.2*(12)
1694	hemp f. 33.5*(2)
1695	f. 23*-f. 27(3) timber f. 20*+1)
1698	St. Ubes salt f. 50-54(3) [included with salt from Setubal to Narva and return with a full load of timber to Amsterdam.]
1699	timber f. 13.3*(2)
1701	timber f. 13.3-15*(5)
1702	timber f. 13*(3) and f. 15.5*(3) in June
1703	timber f. 14.5*(7)
1704	timber f. 23*(1)
1724	timber f. 12* - 16*(11)
1725	timber f. 18*(1)
1748	St. Ubes salt f. 40, timber f. 21* - 23*(5) and one at f. 17*
1771	flax and other cargo to Livorno f. 38. [The captain to pick up iron as ballast at St. Petersburg. 57]
1777	timber f. 24 to Dordrecht
1778	timber f. 11.2*(1) to Dordrecht
1779	timber f. 34(1) to Dordrecht
1784	timber f. 23.5*(2) and f. 32(1)

Except for two which carried other commodities, all the above charterparties were for timber and of them only two quoted the freight price of timber in lasts (of a great

hundred deals or 126 pieces each 12 vt. x 11" x 1 1/2").<sup>58</sup> All the other charterparties were by de hoop stating the measurements and not the carrying capacity of the ships. It would be presumptuous to reach any conclusion on the basis of the data presented in Table I.13. Nevertheless, the indication is that freight prices remained stable throughout most of the eighteenth century and when changes occurred, they were more the result of maritime conditions, i. e., times of war, than increases in shipping costs per se.

### III. C. Riga

From the Middle Ages onward, Riga dominated the whole of the Dvina area.<sup>59</sup> The research of E. Dunsdorfs, V. V. Doroshenko and others have shown that flax and hemp formed the bulk of Riga's export. During the first two decades of the eighteenth century, these agricultural products and their seeds accounted for 86.7% of the total value of Riga's exports.<sup>60</sup> The flax and hemp were drawn from Lithuania, Estonia and White Russia. Hemp came even from the northern Ukraine for its hemp was of the highest quality, second only to that grown in Italy.<sup>61</sup> This pattern continued throughout most of the eighteenth century with cereals such as wheat and rye, timber (especially the "great Riga masts"), rough cloth, wax, tallow, some hides and, later on in the century, ropes and cables being the other more noticeable export products.<sup>62</sup>

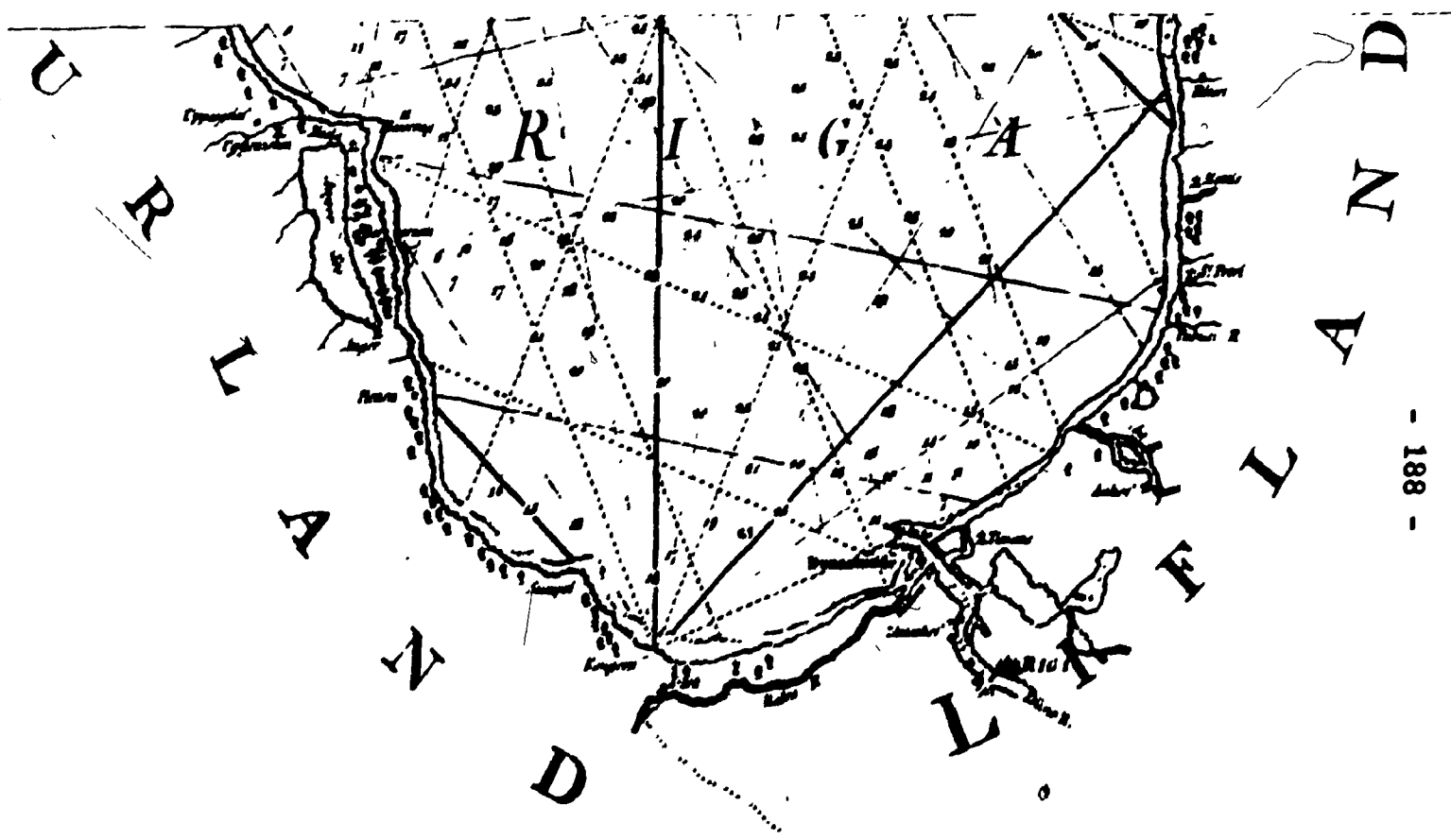
Beside the composition of her export commodities, Riga differed from the other Russian ports in a much more substantial way. When the city capitulated to Tsar Peter on 14 July 1710 she managed to

preserve the privileges granted her by the Swedes in 1690.<sup>63</sup> Thereby, Riga maintained her role as a middleman between the foreign merchants and the merchants of the hinterland. These privileges were reaffirmed in 1768 by Catherine II.<sup>64</sup>

Included in the articles of capitulation of 1710 was the right of Riga to maintain her "wrack" or "brack," a system of official sorting and grading of goods. The mark of the brack of Riga on a consignment of goods was recognized throughout Europe as a sign of trustworthy quality control and no doubt assisted in the acceptance of Riga's products and higher prices for them.<sup>65</sup> So zealous was Riga of the good name of its brack that when in 1774 a quantity of linseed had been exported from Riga without going through the brack, the burgomasters immediately wrote to their colleagues in Amsterdam. In this letter they asked that notices be posted at all public places in Amsterdam advising those intending to buy linseed from Riga that they would be doing so at their own risk and that the City of Riga would not guarantee the quality of linseed exported from Riga that year.<sup>66</sup> The English who traded mainly at St. Petersburg tried in vain for many years to have the Russian government establish at St. Petersburg a brack based on, and conducted according to, the Riga brack. This, it was hoped, would greatly reduce the endless disputes about the quality of goods delivered versus those contracted for.<sup>67</sup>

Riga considered her main competitors to be, not the other Russian ports, but other Baltic ports, such as Königsberg, Danzig and Memel. It is therefore not surprising that when Russia imposed new tolls on exports

MAP 3: Map of the Baltic coastline near Riga. 68

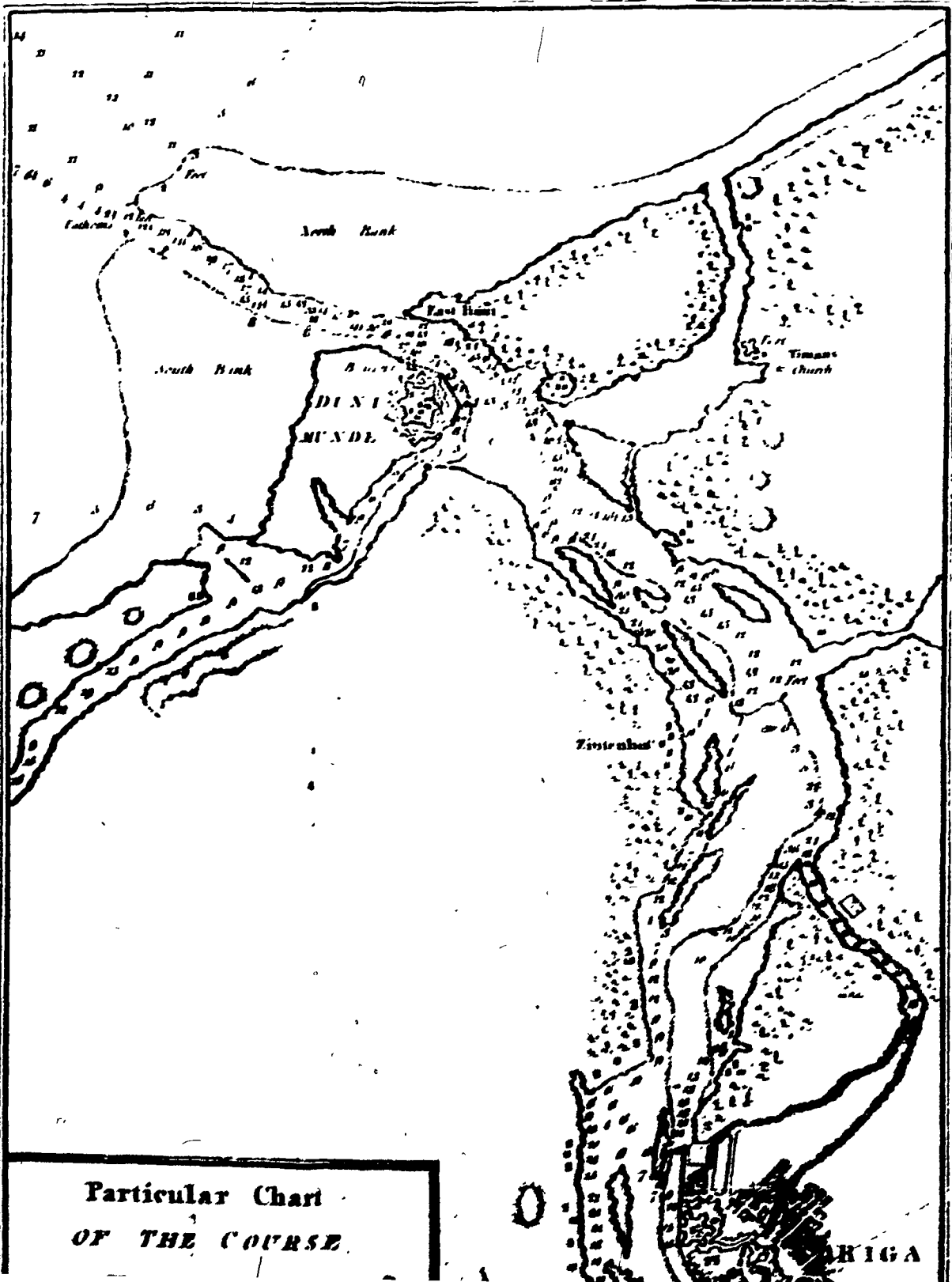


in 1713 that the Riga merchants complained not so much about the tolls themselves but what these tolls would do to Riga's competitive position vis-à-vis these other ports. If Riga were to remain competitive as an exporter, the tolls would have to be reduced by one-third to one-half. However, it was not until 1731 that the tolls at Riga were reduced to the same level as those at Königsberg and Danzig primarily to promote the export of grains through Riga.<sup>69</sup>

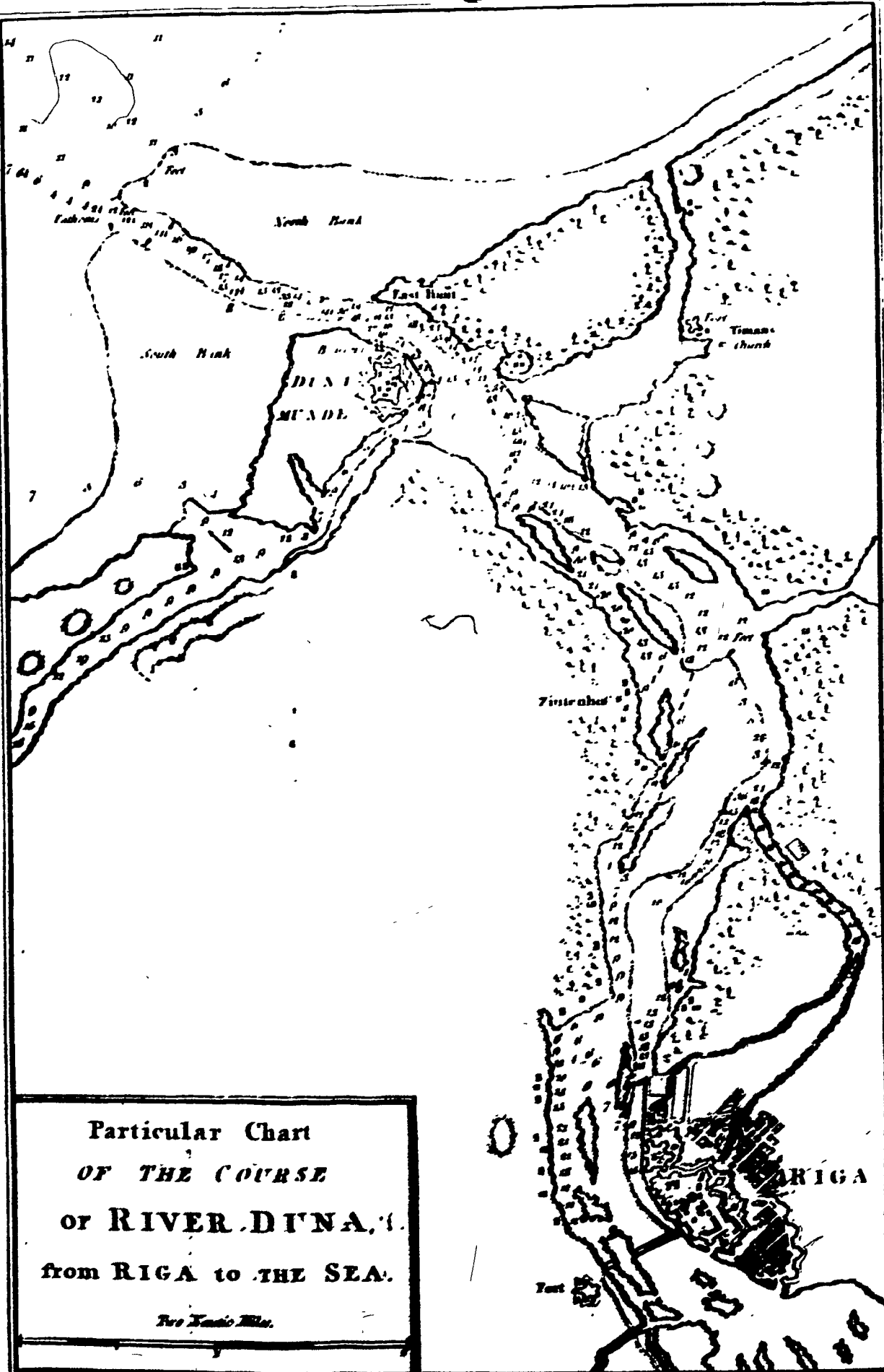
Of all the foreign nations trading at Riga, the Dutch were the most powerful. So powerful in fact that the Riga merchants complained time and time again to the Russian government that, contrary to law, the Dutch were dealing directly with the Russians and by-passing the Riga merchant as middleman. In addition, the Dutch had special privileges at Riga. Some of these were obtained as early as 1679 and 1686 and were incorporated in the privileges Riga obtained from Sweden in 1690. During the Northern War the Dutch were able to strengthen their position in Riga even further by lending the sum of f. 755,000 to Charles XII in 1702. As collateral for this war loan Charles XII pledged the income from the Riga tolls for the next twenty years. And in 1709, the Dutch, in a commercial treaty with Sweden, gained the privilege of paying the tolls at Riga in current silver coin while all other foreign merchants paid the toll in Albert thalers. When in 1731 the sum of f. 164,175 was still outstanding on the loan, the Dutch envoy at St. Petersburg asked the Tsarina to pay this amount. At first Anna replied that she would not pay a debt incurred by Sweden which the latter had used to finance a war against Russia. However, as part of a defensive alliance signed between Russia and Sweden on 5 August



MAP 4: Map of the Dvina River channel from Riga to the Baltic. 70



106



Particular Chart  
 OF THE COURSE  
 OF RIVER DINA,  
 from RIGA to THE SEA.  
 Two Nautical Miles.

1735, Russia agreed to pay the remaining capital and interest on this loan.<sup>71</sup>

Throughout the eighteenth century, the Dutch held a dominant position in Riga while Riga maintained a special position among Russia's Baltic ports until 1793 when Russia established a single unified toll for all her ports. Even as late as 1811, the Rigasche Stadtblätter complained that "the citizens of Riga have and feed a cow but it is the Dutch who milk her."<sup>72</sup>

It was only during the 1790's that St. Petersburg surpassed Riga in the number of ships which annually visited the Russian ports. And as far as shipping to Holland was concerned, Riga remained the primary Russian port. The Sound Toll data illustrate Riga's role.

<u>Years</u>	<u>From Russia</u>	<u>From Riga</u>	<u>From Riga to Holland</u>	
1720-1729	441	205(49.8%) <sup>*</sup>	127(30.8%) <sup>**</sup>	(61.9%) <sup>*</sup>
1730-1739	668	276(41.2%)	166(24.8%)	(60.1%)
1740-1749	672	313(46.6%)	159(23.6%)	(50.6%)
1750-1759	766	366(47.7%)	134(17.4%)	(36.5%)
1760-1769	831	427(51.4%)	187(22.5%)	(43.7%)
1770-1779	1237	525(42.5%)	228(18.4%)	(43.4%)
1780-1783	1115	543(48.7%)	160(14.7%)	(30.2%)

\* Percentage of ships from Russia.

\*\* Percentage of ships from Riga.

According to these figures (based on Table V.5) shipping from Riga increased gradually reaching its first peak in 1740 and 1741. The partial ban on the export of grain in 1742 and the bad weather in 1743 undoubtedly were two reasons for the decline in Riga's exports during the following years.<sup>73</sup> By 1750 the ban on grain exports was causing much of the grain from the hinterland to be diverted for export through the Prussian

ports.<sup>74</sup> Nevertheless, shipping through the Sound from Riga increased but at first Amsterdam did not share in this increase. Table I.14 shows that for the second half of the 1740's and through the 1750's, the index

TABLE I.14 INDEX OF SHIPPING FROM RIGA TO AMSTERDAM, 1715-1825.  
( 1724-1725/2=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	62	87	60	55
172-	64	70	74	69	78	122	118	70	95	79
173-	119	113	61	68	95	96	97	81	104	103
174-	157	135	127	75	100	66	75	72	72	73
175-	57	34	66	70	90	51	59	78	93	95
176-	121	156	113	100	109	96	114	69	73	126
177-	95	75	155	120	140	-	85	103	100	87
178-	95	59	124	136	89	91	76	83	64	76
179-	100	-	80	104	91	-	115	80	56	2
180-	29	24	126	109	42	104	32	9	-	-
181-	-	-	-	-	-	60	100	271	32	42
182-	51	56	24	48	33	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE 11.4.C

was constantly below its 1724-1725 base level. It is not certain at this moment what exactly caused this decline in shipping from Riga to Amsterdam but war does not seem to be an overriding factor here. The Seven Year's War, for example, did not dampen the rapid increase in Riga's shipping in the late 1750's. Instead we must look to Russian export policies for an answer. There seems to be a very strong case that the restrictions placed on Narva's timber exports led to a shift in the timber trade from Narva to Riga. The peak of 191 ships (Index = 156) in 1761 and the sharp one year decline thereafter coincide with the lifting of the most stringent

limitations on timber exports from Narva. For the next twenty years shipping from Riga to Amsterdam stayed at a fairly high level. It was only at the time of war in 1780 that this shipping dropped below its index level and never recovered. Thus the 1760's mark the high point both for all shipping from Riga vis-à-vis shipping from other Russian ports and for shipping from Riga to Amsterdam (Tables III.1.A and Graph II.5).

The Sound Toll data also demonstrate that the English captains never supplanted their Dutch counterparts at Riga during the eighteenth century.

Shipping through the Sound from Riga by English & Scottish captains  
(average number of ships annually for each decade)

<u>Years</u>	<u>From Riga</u>	<u>With English &amp; Scottish captains</u>	<u>To England &amp; Scotland</u>
1720-1729	205	55(26.6%)	43(21.1%)
1730-1739	276	47(17.1%)	70(25.3%)
1740-1749	313	79(25.2%)	109(34.9%)
1750-1759	366	123(33.7%)	144(39.3%)
1760-1769	427	131(30.5%)	131(30.8%)
1770-1779	525	155(29.5%)	152(29.0%)
1780-1783	543	106(19.5%)	117(21.5%)

The Sound Toll data indicate that up to the 1760's English shipping did not have the capacity to carry all the goods imported from Riga to England. It appears that captains with homeports in Schleswig-Holstein played an active role here, accounting for over one-third of the ships that went to England from Riga in 1749 and 1751.<sup>75</sup>

Dutch captains, on the other hand, sailed not only to Holland from Riga but as time went on also elsewhere in increasing numbers.

Shipping through the Sound from Riga by Dutch captains  
(average number of ships annually for each decade)

<u>Years</u>	<u>From Riga</u>	<u>With Dutch captains</u>	<u>To Holland</u>	<u>To Amsterdam acc. to the GGR</u>
1720-1729	205	127(62.0%)*	121(58.9%)	105(51.3%)
1730-1739	276	164(59.4%)	157(57.4%)	115(41.5%)
1740-1749	313	158(50.6%)	144(45.8%)	117(37.3%)
1750-1759	366	164(44.9%)	125(34.2%)	85(23.2%)
1760-1769	427	226(52.8%)	182(42.5%)	134(31.5%)
1770-1779	525	266(50.7%)	206(39.2%)	131(24.9%)**
1780-1783	543	76(14.1%)	58(10.7%)	126(23.2%)

\* Percentage of ships from Riga.

\*\* Adjusted for missing 1775 data.

In the 1720's about 4% of the Dutch captains sailed to non-Dutch ports but from 1750 onwards about 10% did so. The number of non-Dutch captains only occasionally exceeded 10% (Table V.6). Further, the Dutch clearly outdistanced the English at Riga right up to 1780. Whether or not the Dutch regained their position in Riga after the Treaty of Paris has yet to be investigated. But if the Sound Toll data for 1784 and 1785 can be considered to provide some indication, it is not unreasonable to assume that Dutch shipping and shipping to Holland did not suffer gravely. It should also be noted that on the whole the British ships were much smaller than those of the Dutch at least for the first part of the eighteenth century.<sup>76</sup>

By combining the information given by Storch, the Sound Toll and the GGR, it is possible to present the following series:<sup>77</sup>

Shipping from Riga  
(average number of ships annually for each decade)

<u>Years</u>	<u>Storch</u>	<u>STA</u>	<u>GGR</u>
1716-1719	165	103(62.4%)*	81(49.1%)*
1720-1729	295	205(69.5%)	105(35.6%)
1730-1739	398	276(69.3%)	115(28.9%)
1740-1749	446	313(70.2%)	117(26.2%)
1750-1759	541	366(67.8%)	85(15.7%)
1760-1769	701	427(60.9%)	134(19.1%)
1770-1774	790	561(71.0%)	144(18.2%)
1784-1786	875	-	105(14.7%)
1793-1797	802	-	120(15.0%)**

\* Percentage of all ships from Riga.

\*\* Adjusted for missing 1795 data.

Several conclusions can be drawn from these figures. First of all it is clear that Storch was speaking of all ships that visited Riga and made no distinction between those which sailed through the Sound or not. Thus, approximately one-third of all the ships which visited Riga were involved

TABLE 1.15 INDEX OF TONNAGE OF CARGO CARRIED FROM RIGA TO AMSTERDAM, 1715-1925.  
(1726+1725/2=1725)  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	67	105	79	50
172-	76	77	87	77	78	122	125	97	106	105
173-	133	124	67	77	107	120	129	102	134	142
174-	194	142	133	83	107	78	94	78	78	76
175-	62	39	69	79	102	61	83	121	130	152
176-	192	247	187	135	160	153	167	125	124	195
177-	158	104	221	182	223	-	132	173	173	142
178-	173	68	147	185	126	125	116	102	91	111
179-	134	-	109	114	91	-	122	94	57	2
180-	32	26	157	132	69	115	34	7	-	-
181-	-	-	-	-	-	62	116	326	36	64
182-	55	63	23	50	33	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED

SOURCE: TABLE 11.4.2

in inter-Baltic shipping. No doubt these were smaller ships and included a large number of Russian coastal vessels and barges which brought goods to Riga for export from there. In terms of all shipping from Russian Baltic ports, Storch's figures indicate that, for most of the eighteenth century, Riga accounted for over one-half of all shipping. As late as 1793-1797 Riga still accounted for more than one-third of Russia's shipping.<sup>78</sup>

According to the number of ships, Riga was the primary port for shipping from Russia to Amsterdam but in terms of cargo tonnage it held second place after Narva until the 1750's (Table II.5). The index of cargo tonnage (Table I.15) shows that the second half of the eighteenth century was better for trade from Riga to Amsterdam. The same holds true for the tonnage of shipping from Riga to Amsterdam (Table I.16).

TABLE I.16 INDEX OF TONNAGE OF SHIPPING FROM RIGA TO AMSTERDAM, 1715-1825.  
(1724-1725/7=100)  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	10	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	62	103	73	67
172-	74	72	84	73	77	123	112	81	87	73
173-	116	106	62	67	91	98	109	83	111	129
174-	145	109	124	82	96	69	78	70	73	72
175-	57	33	62	75	98	59	76	111	128	143
176-	179	222	151	116	145	142	156	84	102	167
177-	128	82	100	146	174	-	112	151	145	122
178-	147	44	113	147	90	95	103	86	65	81
179-	85	-	77	83	71	-	82	72	46	2
180-	21	10	101	83	32	74	21	6	-	-
181-	-	-	-	-	-	41	90	287	32	38
182-	51	55	22	50	33	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE II.4.C



According to all three indicators, namely, the number of ships, the tonnage of cargoes and the tonnage of ships, Riga differed from the overall pattern of shipping from Russia's Baltic ports to Amsterdam. A quick glance at Graphs II.4 and II.4.C shows that whereas the high point for Russian Baltic shipping lay in the 1730's and early 1740's, that of Riga occurred during the 1760's and lasted to about 1780. No doubt the general increase in prices in Western Europe during that time and the restrictions on the Narva trade were the main factors here. Especially striking was the way Dutch shipping maintained itself during the War of the Armed Neutrality in 1780. The high number of ships which arrived at Amsterdam during 1782 and 1783 was surpassed only a few times during the whole period covered by the GGR. In comparing Table II.4.C with Tables V.5 and V.6 there can be no doubt that almost all the Dutch captains had changed their domicile (and most likely registration of the ship as well) by 1781, the second year of the war. During the years 1781 to 1783 a total of 58 captains were recorded in the STA as sailing from Riga to Holland and having a Dutch homeport. For the same years, the GGR listed 342 ships arriving at Amsterdam from Riga. During the year following the Peace of Paris already one-half of the captains passing through the Sound from Riga to Amsterdam listed a Dutch port as their domicile. While the ships which sailed from Riga to Amsterdam were not as large as those which sailed from Narva, they definitely were larger than those which sailed from St. Petersburg. The difference in size of ships between St. Petersburg and Riga became even more pronounced in the second half

of the eighteenth century. The increase in the average size of the ship, as reflected in Table I.17, from about 1756 and on coincides with the export restrictions at Narva and thus serves as another indication that the larger ships which till then had fetched their timber from Narva now began to do so at Riga. The War of 1780-1783 and the period of hostilities following the French Revolution marked a general decrease in the average size of the ship. But the average size of the cargo did not decline as much as that of the ship and remained above the index level. No doubt the same factors which influenced shipping from Narva during this time especially from 1800 to 1807 affected shipping from Riga too. During these years the percentage by which the average size of the cargo was greater than the average size of the ship was constantly above 50%. In 1807 it even reached 95.14% (Table II.4.C).

TABLE I.17 INDEX OF AVERAGE SIZE OF SHIPS IN TONS  
FROM RIGA TO AMSTERDAM, 1715-1825.  
( 1726-1775/2=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	100	119	170	122
172-	114	103	113	107	99	101	95	90	92	93
173-	97	94	98	98	96	104	112	102	108	106
174-	92	81	97	104	96	104	103	97	101	99
175-	100	98	94	106	110	114	132	143	137	151
176-	148	142	134	116	132	147	135	123	110	133
177-	133	110	116	122	125	-	132	145	146	140
178-	153	75	91	109	101	104	135	103	101	137
179-	85	-	97	80	77	-	71	90	82	91
180-	74	73	80	77	77	70	67	63	-	-
181-	-	-	-	-	-	68	81	105	100	90
182-	90	97	91	103	99	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED

SOURCE: TABLE II.4.C

Of the different ship sizes which served on the Riga to Amsterdam route, those in the 101 to 200 ton and 201 to 300 ton sizes accounted for the great majority of ships (Table II.3.C and Graph II.3.C(1)). And of these two sizes the 101 to 200 ton size accounted for one-third to one-half of the number of ships. By the time of the French Revolution, the 201 to 300 ton ship size had almost disappeared. It reappeared again after 1817.

TABLE 1.48 INDEX OF AVERAGE SIZE OF CARGO IN TONS  
FROM RIGA TO AMSTERDAM, 1715-1825.  
( 1724-1725/77=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	109	122	131	127
172-	110	110	117	117	99	100	105	109	112	132
173-	117	110	100	114	115	120	133	126	129	139
174-	124	105	104	110	107	110	124	107	109	105
175-	109	114	105	113	114	110	144	156	140	160
176-	159	159	166	134	147	159	146	153	133	155
177-	164	139	142	151	160	-	155	165	172	163
178-	185	115	119	136	142	136	153	123	141	147
179-	134	-	135	109	100	-	106	117	103	91
180-	112	105	125	121	115	110	108	78	-	-
181-	-	-	-	-	-	104	114	120	115	105
182-	107	112	99	104	98	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED

SOURCE: TABLE 11.4.2

The sudden appearance of the 301 to 400 ton size ships and to a lesser degree those in the 401 to 500 ton size at Riga coincides with the imposition of export restrictions at Narva. From then till the late 1780's these size ships played a marked role in Riga's trade.

As far as shifts within the individual ship sizes are concerned, there really seem not to have been any. Ships of the 100 tons and under class averaged 75 to 90 tons, those in the 101 to 200 size, 125 to 150 tons,

while the average size of the ships in the 201 to 300 tons size category lay mostly in the 220's and 230's (Table II.16.C). Except for the period from 1756 to 1779 the annual number of ships in the 301 to 400 size, and the other larger sizes as well, was too limited to permit any conclusions but it might be noted that during these particular years their average size was about 350 tons. The fact that the harbour at Riga suffered from silting due to the slow current of the Dvina meant that the larger ships had to load outside the harbour at the Boldera. This probably was the main factor inhibiting the use of the larger size ships at Riga for the timber trade.

According to the size of the cargo, ships in the 101 to 200 and 201 to 300 ton sizes accounted for most of the cargo tonnage up to 1756 and again after 1779. During this interlude, 1756 to 1779, the 301 to 400 ton size cargo and to a lesser degree those in the 401 to 500 ton category made their appearance. In terms of percentage of cargo tonnage rather than number of ships the 301 to 400 ton size accounted for a greater share of Riga's exports than those of 100 tons and under. With the advent of the French Revolution the 301 ton+ sizes almost disappear. This decline would have been more dramatic had not the average size of the cargo been 50 to 95% larger than the average size of the ship. In all cargo sizes except the smallest, namely those in size category 'A', the average size of the cargo lay in the lower third or half of each size category (Table II.15.C). And, as was the case with ships from St. Petersburg

and Narva, the smallest size ships carried proportionately more cargo in relation to the size of the ship. Very noticeable is the almost total lack of difference between the size of the cargo in relation to the size of the ship in categories 'D' and 'E' from 1754 onward (Table II.16.C). Only during those years of war when Holland herself was directly involved did the cargo in these ship size categories become appreciably larger than the size of the ship.

With regard to seasonal shipping patterns, it is apparent that ships from Riga arrived at Amsterdam somewhat earlier than those from St. Petersburg and Narva (Tables II.9 - 14.C). This is not surprising since the harbour of Riga was usually free of ice two weeks to one month earlier than those of the other two cities. Further, in terms of both cargo tonnage and shipping tonnage, most arrivals at Amsterdam from Riga took place between July and December. Only rarely did the first four months of the year account for a substantial percentage of arrivals according to the GGR. As far as the average size of either the cargo or the ship was concerned there seem to have been no clear cut seasonal distinctions except that ships arriving before July were on the whole somewhat smaller than those which arrived later in the year.

As far as freight prices are concerned quite a number of charter-parties were located for shipping from Riga. The information that they provided on freight prices is given below in Tables I.19 and I.20.

TABLE I.19: Freight prices per last for shipping from Riga to Amsterdam, c. 1690-1789 contracted at Amsterdam

(Numbers in parentheses indicate number of charterparties consulted. Freight prices with an asterisk indicate computation based on measured lastages. Unless otherwise indicated freight prices are per last of rye. Freight price followed by a double asterisk indicate freight prices quoted at Riga with footnote numbers at the end of the line.)

YEAR			
1690	f. 29*	(2)	
1698	f. 13*	(2)	
1701			flax and hemp f. 20-24(3)
1703			hemp f. 25(2) timber f. 14*-21*(3)
1704			timber f. 18*-23*(14)
1705	f. 24(1)		timber f. 20*(2)
1706	f. 24(2)		
1707			tar and pitch f. 20-22(6)
1708	f. 23-24(3)		tar and pitch f. 29(6)
1709	f. 30(1)		masts and timber f. 22*-25*(3)
1744			hemp f. 16-18(11)
1746			timber f. 14.7*(1)
1748			linseed f. 20(1)
1755	f. 25**		hemp f. 11.4** **79
1760			timber f. 16*-19*(4)
1769			timber f. 18*(2)
1771	f. 23(2)		timber f. 18*-19*(3)
1774	f. 22(3)		hemp f. 19(1) timber f. 16*-18*(6)
1776	f. 24**		hemp f. 21.6** linseed f. 36** **80
1777	f. 22(2)		hemp f. 19(3) timber f. 18*-19*(3)
1778	f. 18-20(5)		timber f. 20*-23*(4) in November f. 30*
1779			timber f. 22*-25*(14)
1780	f. 36(4)		hemp f. 31 linseed f. 35(3) timber f. 26*-35*(4)
	f. 37**		hemp f. 36** **81
1781	f. 55(3)		
1782	f. 48-50(5)		
1784	f. 24		timber f. 23*(2)
	f. 25**		hemp f. 25** **82
1785	f. 24**		hemp f. 24** **83
1787	f. 18**		hemp f. 18** in June rye f. 16** and hemp f. 15.7**84
1789			hemp f. 24(2)

Very few charterparties listed the freight price for more than one commodity and therefore it was not possible to establish a relation between the freight prices for different commodities. The only exceptions were that the freight price for hemp and flax were usually the same and that codilla was

30% to 50% more expensive to ship than dressed hemp. With regard to differences between the Amsterdam-Riga freight rates and those for some of the other Baltic ports, the rates for Danzig were about 11-15% lower, those for Königsberg 4-5% lower, while those for Reval were 8-14% higher. Although the voyage to Narva was longer than to Reval it was a more widely travelled route and thus the freight price for Narva was only 5-7% higher than that for Riga.

TABLE I. 20: Freight prices per last for shipping from Riga to non-Dutch ports, c. 1737-1784 contracted at Amsterdam.

(Numbers in parentheses indicate number of charterparties consulted. Freight prices with an asterisk indicate computation based on measured lastages. Unless otherwise indicated freight prices are per last of rye.)

<u>YEAR</u>	
1737	flax f. 27 to Port-a-Port (1)
1769	hemp f. 26 to Port-a-Port(2); timber f. 25* to Malta (1)
1777	flax f. 29 to Lisbon
1778	timber f. 21* to Bruges
1779	flax and hemp f. 39-49 to Lisbon (3)
1780	flax and hemp f. 48 to Port-a-Port(3); hemp and flax f. 50 to Lisbon(1)
1782	f. 75-89 to Port-a-Port(3)
1783	flax and hemp f. 36 to Port-a-Port(3); timber f. 33* to Cadiz
1784	hemp f. 27 to Dunkerque; timber f. 36*-37* to Brest, l'Orient or Rochefort(6)

Both tables give evidence of the same pattern in freight prices as that which has already been presented for St. Petersburg and Narva. Only during the War of the Armed Neutrality, a war in which the Dutch were forced to take sides with the French against the British, thus losing their role as neutral carriers, did freight rates rise dramatically. Otherwise, the freight price of f. 24 for hemp in 1789 was the same as that quoted at the beginning of the eighteenth century.

### III.D Viborg and Frederikshamn

The bulk of the export from Viborg and Frederikshamn consisted of timber and timber products such as tar and pitch. In a typical voyage a ship would bring salt either from St. Ubes or Amsterdam to Viborg and return with a cargo of timber. A large portion of the products from Viborg and Frederikshamn was shipped directly by the Dutch to ports in France, Spain or Portugal. Unfortunately, the Sound Toll data as prepared by Bang treated Finland as a single unit. No distinction was made for the individual ports of Viborg and later Frederikshamn, after the Russian conquest. Consequently, it had not been possible to provide comparative figures on the role played by these two ports in Russia's foreign trade. However, information on timber movements through the Sound indicate that Finnish timber exports increased sharply during the eighteenth century. In judging these figures one should keep in mind that the domestic consumption of the Swedish and Russian capitals required considerable part of timber which might otherwise have been shipped through the Sound. The increase in timber exports seems to have been at the expense of the export of tar and pitch. Figures prepared by Aström show that after the Northern War production of tar and pitch did not rise to more than one-third of the pre-war levels.<sup>85</sup>

Exports of tar and pitch to Holland in lasts from:

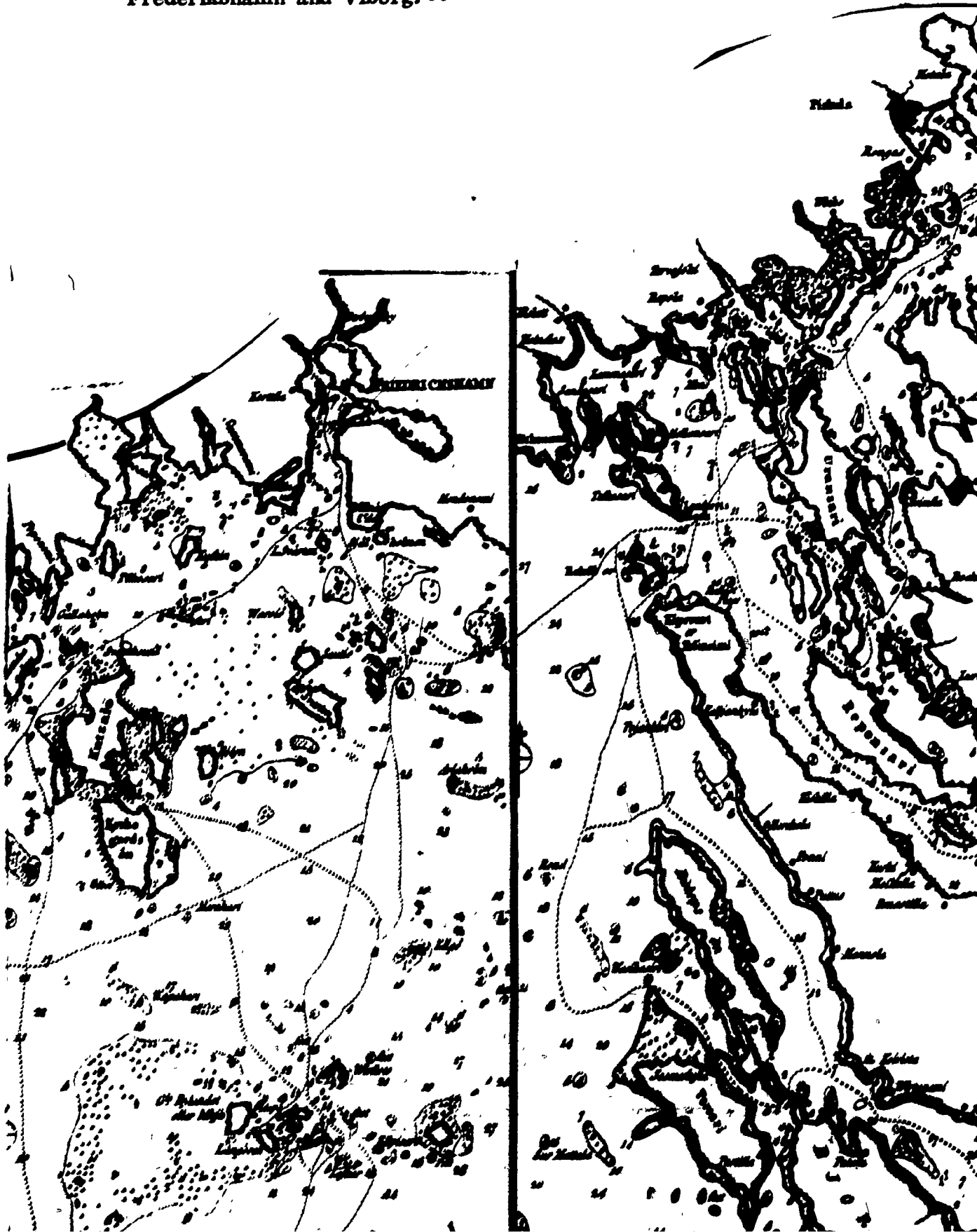
<u>Years</u>	<u>Narva</u>	<u>Viborg-Fredrikshamn-Helsingfors (VFH)</u>
1681-1690	796	20,258
1691-1700	1	14,767
1701-1710	-	12,990
1711-1720	7	1,040
1721-1730	-	5,646
1731-1740	-	5,632

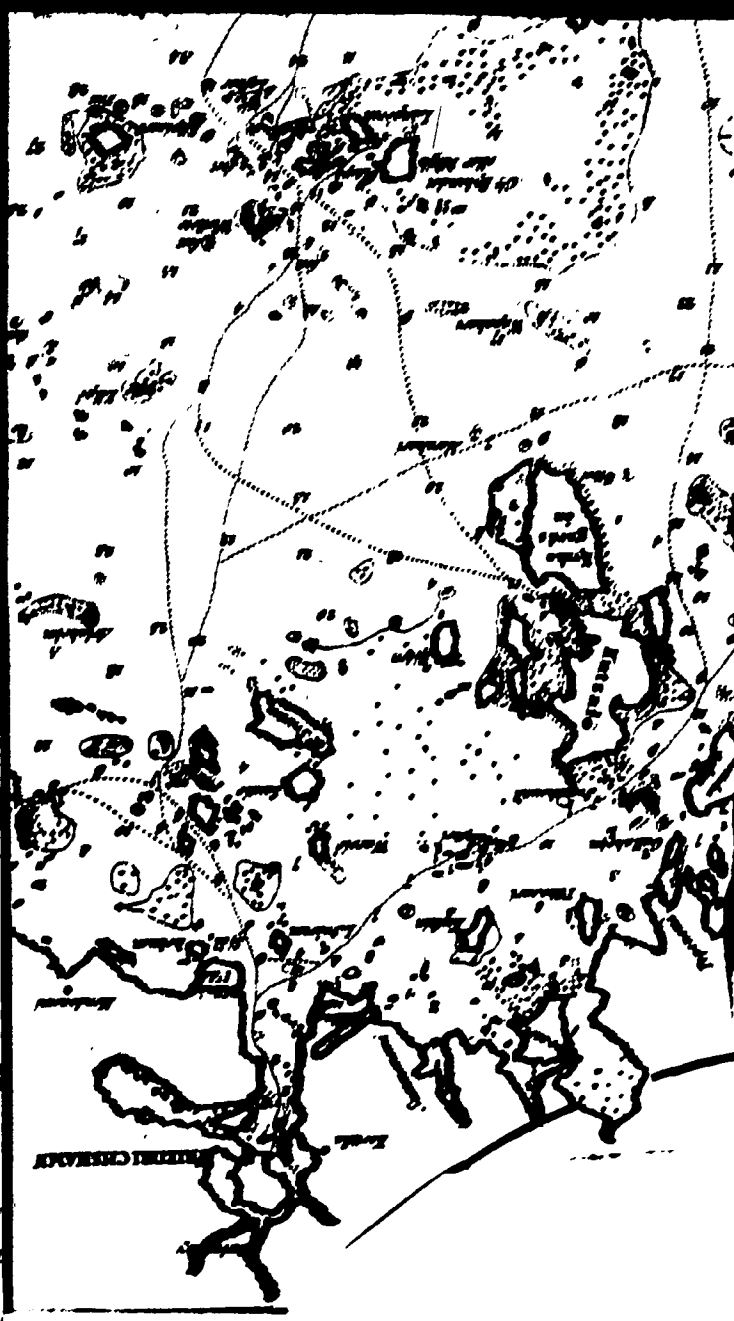
On the other hand, exports of timber rose dramatically after the Northern War.



MAP 5: Maps of the harbours and surrounding areas of the ports of Frederikshavn and Viborg. 86

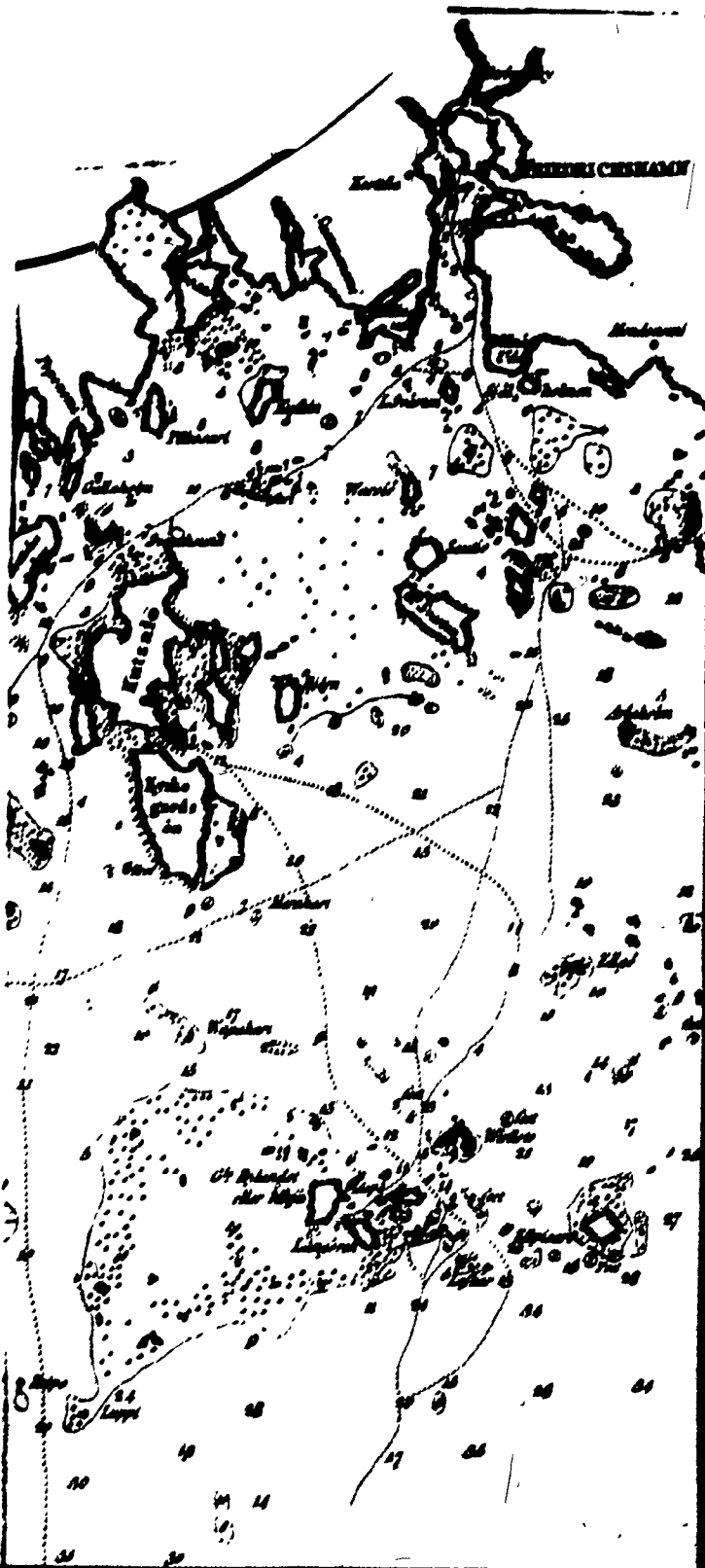
106





MAP 5: Maps of the harbours and surrounding areas of the ports of Frederikshavn and Viborg. 86

207



Particular Chart  
 OF THE  
**ENTRANCE OF FRIEDRICHSHAMN,**  
 within and without *THE ASPO ISLANDS*  
 South. Longues



Particular  
 OF THE  
**ENTRANCE OF**  
 To North

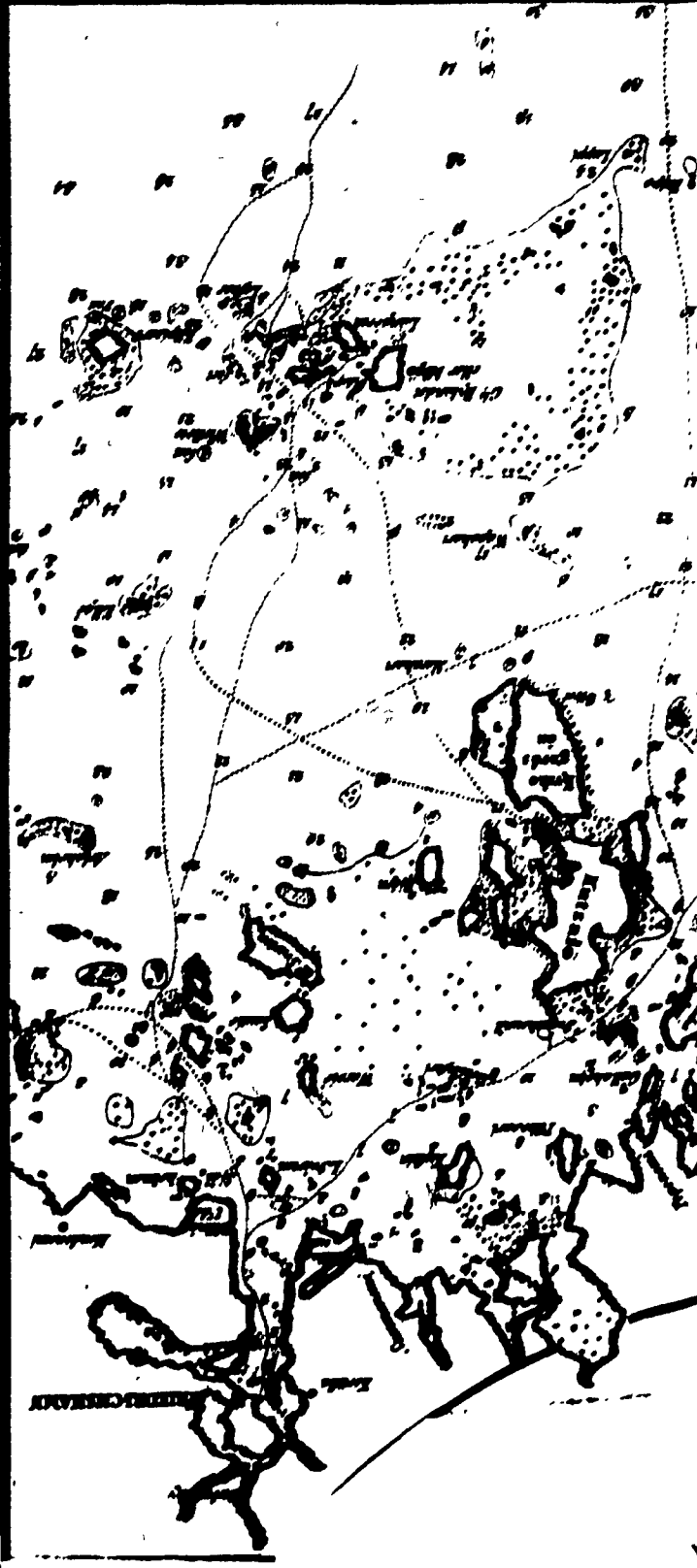
Particular Chart  
OF THE  
ENTRANCE OF WIBURG

Scale Lengths



Particular Chart  
OF THE  
ENTRANCE OF FRIDRICHSHAMN,  
WITHIN AND WITHOUT THE ASPO ISLANDS

Scale Lengths



Exports of timber to Holland in pieces from these towns:

Years	Balks		Spars		Deals	
	Narva	VHF	Narva	VHF	Narva	VHF
1681-1690	35,612	800	12,072	-	459,228	52,620
1691-1700	154,647	13,388	8,767	-	1,275,864	34,260
1701-1710	16,270	122,410	-	-	44,544	137,292
1711-1720	23,152	69,418	10,606	74,506	21,636	95,064
1721-1730	792,107	263,713	621,314	159,436	375,660	1,138,620
1731-1740	1,450,247	330,271	1,961,522	139,794	311,736	1,360,656

Years	Boards		Planks	
	Narva	VHF	Narva	VHF
1681-1690	638,940	16,344	7,258	-
1691-1700	28,560	8,004	468	-
1701-1710	-	2,004	-	2,710
1711-1720	-	-	690	11,665
1721-1730	6,348	29,004	1,692	18,898
1731-1740	386,784	2,965,416	8,035	48,196

The decline in the tar/pitch trade was thus matched by an increase in timber exports. The fact that tar and pitch production did not recover after the war is somewhat surprising for Finnish tar was considered to be of the highest quality and a product much in demand in Europe. The Russian government sent Viborg tar makers to all parts of Russia to introduce the production of tar or upgrade the quality.<sup>87</sup> The lower prices for tar in Russia after 1726 following the expiration of the tar monopoly held by the Dutch merchant, Jan Lups, the large quantities exported by Sweden and Archangel as well as decreased demand, all these factors depressed prices for tar on the European market. In addition, during the first half of the eighteenth century falling freight rates and rising timber prices in Europe increased the export of timber from Viborg at the expense of tar.<sup>88</sup> It was not until the Seven Year's War when demand increased that prices for tar started to rise and large quantities of tar were once again exported from these ports.<sup>89</sup>

Furthermore, Russian commercial policy was liberal in contrast with mercantilist Sweden,<sup>90</sup> so that there were no restrictions on the saw-milling industry in the hinterland of Viborg. It was thus a combination of the above mentioned factors which explain the phenomenal rise in timber exports from Viborg.

One should keep in mind, however, that most of the deals exported from Viborg were under 15 feet in length and those from the other Russian ports tended to be 15 to 20 feet or longer and consequently more expensive. A table prepared by Aström on exports through the Sound of timber for 1784 illuminates this.<sup>91</sup>

Exports of deals through the Sound in 1784\*

	<u>14 feet and under</u>	<u>15-20 feet</u>	<u>over 20 feet</u>
<b>Total from the Baltic*</b>	29,220	2,272	1,451
<b>From:</b>			
Frederikshamn	2,374( 8.1%)	-	-
Narva	1,936( 6.6%)	279(12.3%)	142( 9.8%)
Pernau	174( 0.6%)	72( 3.2%)	81( 5.6%)
Riga	582( 2.0%)	81( 3.6%)	52( 3.6%)
St. Petersburg	4,785(16.4%)	1,145(50.4%)	-
Viborg	11,687(40.0%)	699(30.8%)	-
<b>Total from Russia</b>	<u>21,538(73.7%)</u>	<u>2,246(98.9%)</u>	<u>275(19.0%)</u>
<b>To:</b>			
Amsterdam	3,473(11.9%)	163( 7.2%)	-
Dordrecht	840( 2.9%)	65( 2.9%)	47( 3.2%)
Rotterdam	179( 0.6%)	-	-
<b>Total Dutch Ports</b>	<u>4,492(15.4%)</u>	<u>228(10.0%)</u>	<u>47( 3.2%)</u>
English Ports	10,399(35.6%)	1,508(66.4%)	296(20.4%)
French Ports	5,992(20.5%)	42( 1.8%)	118( 8.1%)
Spanish Ports	2,525( 8.6%)	77( 3.4%)	30( 2.6%)
Portuguese Ports	2,223( 7.6%)	-	-
Italian Ports	-	-	112( 7.7%)

\*Deals are a long hundred or 120 pieces and only the major ports have been included.

At the beginning of the eighteenth century, the export trade of Viborg was in the hands of the Dutch, a situation which remained practically unaltered during the entire century.<sup>92</sup> However, the pattern of shipping from Viborg changed during this time. According to Büsching's Magazine forty-one ships visited Viborg in 1759. Of these twenty-two came from Amsterdam but only thirteen returned there with timber. Two other Dutch ships arrived from Reval. These and the other Dutch ships sailed from Viborg to non-Dutch ports, primarily Cadiz and Lisbon. Five ships came from England and five ships sailed for England. Of all the ships departing from Viborg only two were loaded with a sizeable quantity of tar, the others carried timber mostly in lengths of less than 12 feet.<sup>93</sup>

The average number of ships that annually visited Viborg during 1761 to 1763 was eighty. For the period 1773 to 1777 this number rose to 171 ships annually. Even so these numbers represented only 4.3% and 7.9% respectively of Russia's Baltic shipping. By the end of the century, 1793 to 1797, Viborg's share dropped to 2.7% or 63 ships annually.<sup>94</sup>

Likewise, shipping from Viborg to Amsterdam never did account for a sizeable portion of shipping to Amsterdam (Table II.1.A and Graph II.5). Only for the years 1718 to 1723, 1735 to 1737, 1756 and 1799 did Viborg hold a share larger than 10% of either the total cargo tonnage or the total shipping tonnage that went from Russia's Baltic ports to Amsterdam (Tables II.5 and II.7 and Graphs II.6 and II.7). It does seem, however, that Viborg served as an alternate port when conditions warranted. In 1756, Viborg probably received some of the timber ships originally destined for Narva. By the following year the timber trade adjusted to the

closure of Narva. In 1757 the number of ships from Viborg dropped from twenty-four to thirteen and the following year it fell to five (Table II. 1). In 1782, the number of ships from Viborg jumped to sixteen but the average size of the ship dropped to 158.87 tons (Tables II. 4.D and II. 6 and II. 8).

The years from 1718 to 1739 were the most prosperous for trade with Amsterdam with the year 1736 representing the high water-mark. Thereafter shipping from Viborg declined to a level of roughly fifteen ships annually. After 1766 the number of ships was rarely more than ten per year. Ships which sailed from Viborg to Amsterdam were in the intermediate size categories with ships in categories 'C' and 'D' accounting for the lion's share up to 1762 (Table II. 3.D). From then on the 301 to 400 ton size ship almost disappeared but occasionally a 401+ ton size ship visited Viborg.

With regard to the size of the cargo, it is interesting to note that the overload factor in the late 1710's and early 1720's was fairly high, representing a marked contrast to that for the rest of the century. It can be assumed that this reflected tar and pitch exports, the lowering of the overload factor marking the shift to timber exports. Further, the periods from 1800 to 1807 and 1814 to 1817 present a similar pattern of size of cargo in relation to the size of the ship as had already been noted for other Russian ports. After 1817 exports from Viborg to Amsterdam seem to have once again consisted almost exclusively of timber.



Frederikshamn must be ranked as one of the minor ports of Russia and like Narva and Viborg was an exporter of timber.<sup>95</sup> The number of ships from Frederikshamn to Amsterdam normally ranged from three to seven annually and at times these were even ships of less than 200 tons (Tables II.1, II.2.F, II.3.F and II.4.F and Graphs II.1.C and II.4.F). The largest number of ships that sailed from there to Amsterdam in any one year were the twelve ships which arrived in 1785. Even then these ships accounted for only 3.79% of the total tonnage of cargo shipped from Baltic Russia. On the whole the share of Frederikshamn of either the cargo tonnage or shipping tonnage was about 2%. Most of the ships from Frederikshamn lay in the 101 to 200 and 201 to 300 ton size ranges, although up to 1782 ships in the 301 to 400 ton class were not uncommon. Noticeable is the appearance of a few ships in the 401 to 500 ton size between 1778 and 1780 and the lack of ships smaller than 201 tons after the Napoleonic Wars.

The numbers of ships for both Frederikshamn and Viborg are very small, often less than the number of months in the year. While the data on seasonal fluctuations in shipping has been presented in Tables II.9-14.D and F, it suffices to say that no deviations from the normal patterns have been signalled in these tables.

Freight prices derived from the charterparties for shipping from Viborg and Frederikshamn to Dutch and non-Dutch ports have been combined into a single table, namely, Table I.21:

TABLE I. 21: Freight prices per last for shipping from Viborg and Frederikshamn to Dutch and non-Dutch ports, c. 1695-1784 contracted at Amsterdam.

(Numbers in parentheses indicate number of charterparties consulted. Freight prices with asterisks indicate computation based on measured lastages. Unless otherwise indicated freight prices are in lasts of rye. Freight prices that are underlined are for Frederikshamn. Unless otherwise specified freight prices are for Amsterdam.)

<u>YEAR</u>		
1695		tar f. 26(4)
1701		tar f. 17(2)
1702.		tar f. 17-19(4)
1703		tar f. 19(7)
1704		tar f. 29(4)      timber f. 18* -21 1/2*(6)
1705		tar f. 31(7)
1706		tar f. 25 1/2-28 1/2(4) timber f. 19(1)
1707		tar f. 22-25(11)
1708		tar f. 27(6)
1709		tar f. 25-32(7)
1710		tar f. 25(3)
1725	f. 35	timber f. 14 1/2*(1)
1726		timber f. 25 per deal of 126 pieces
1744	f. 19 1/4-f. 23(2)	
1760		tar f. <u>25</u> (1)      timber f. <u>23-25</u> per deal(2)
		timber f. <u>40</u> per deal to Cadiz (1)
		timber f. 23 per deal(1)
1761		timber f. <u>28</u> per deal (1)
		timber f. <u>43</u> per deal to Cadiz(1)
1768		timber f. <u>27</u> per deal to Sendras(1)
		ditto to St. Marten or Rochefort(1)
1769 (from Wammelsu	f. 33 per deal)	timber f. <u>23</u> per deal or f. <u>22</u> per deal to Dordrecht(1)
1772		timber f. <u>26</u> <u>bij de hoop</u>
1782		timber f. <u>71</u> per deal to Bordeaux(1)
1783		timber f. <u>60</u> per deal to Cadiz or Seville(1)
1784	f. 32	

The freight rate for tar, one of the heaviest goods, was lower compared with most other commodities. On the average the freight price for tar was f. 2-3 per last less than that for rye. From 1725 onwards charterparties for tar were very rare, the fact which supports the state-

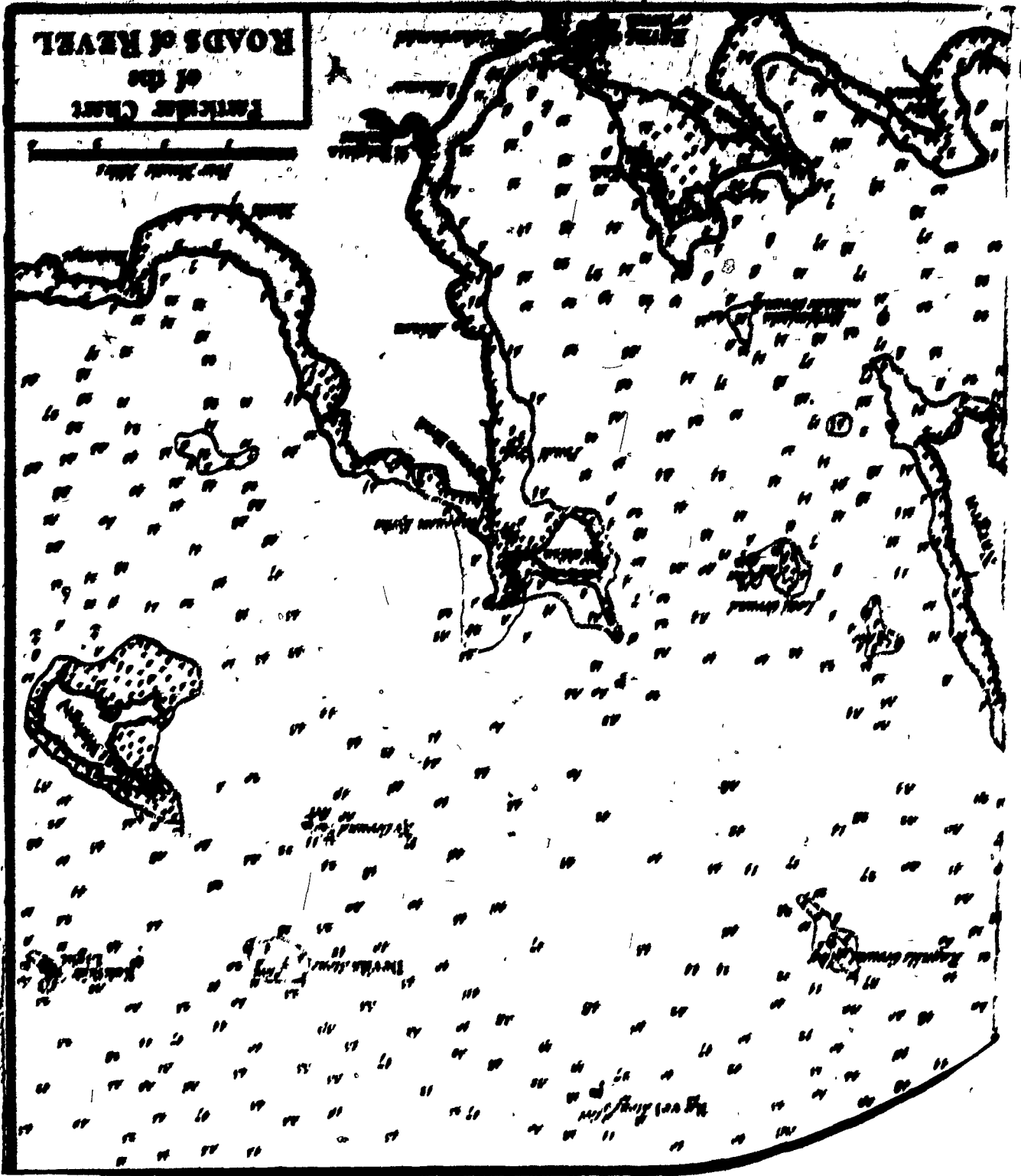
ments made above regarding the switch from tar to timber exports.

Another noticeable feature about Table I.21 is that all the charterparties located so far for the second half of the eighteenth century stated the freight price in deals of 126 pieces. The timber trade from St. Petersburg, Narva and Riga was usually freighted bij de hoop and the size of the ship was given according to its measurements. The fact that most of the timber exported from Viborg and Frederikshamn were in lengths of less than fifteen feet may have been a factor here.

#### E. Reval and Lesser Ports in Estonia and Courland<sup>96</sup>

The Baltic provinces constituted the northernmost region of the world in which grain production was not only sufficient for the local population but also left a considerable surplus for export. From the end of the fifteenth century onwards the market of Holland began to play a decisive role and the market prices for rye in Reval (Tallinn) began to depend on the fluctuations of prices in Amsterdam.<sup>97</sup> The first years of the 1690's witnessed a great increase in the grain trade with almost 50,000 lasts exported in 1694. In 1699, 68% of the grain, mainly rye, barley and wheat, from Riga was supplied by the Baltic provinces. Among the consignees Amsterdam obtained the lion's share.<sup>98</sup> Next to grains, flax represented the most important export product. Most of this flax was of Russian and not Estonian origin. Timber was also exported but in small quantities.

After the incorporation of the Baltic provinces into the Russian state, this situation changed. Although grains continued to be exported to Western



MAP 6: Map of the harbour of Revel and surrounding area. 99

Europe, dependence on this market decreased. The main reason for this was the increasing demand for foodstuffs by the growing city of St. Petersburg. A secondary factor was a greater demand for grain because of the increase in the manufacture of liquor, a monopoly of the nobility, and especially after 1766 when Russia's market was opened to liquor imports from her Baltic provinces.<sup>100</sup> This trend gained further momentum after 1782 when all the inland tolls between the Russian and Baltic provinces were abolished.<sup>101</sup>

The Northern War and the plague of 1710-1711 decimated the population. Not till the middle of the eighteenth century was the 1695 population level regained and the production of grains restored to its previous level. Grain exports remained at a low level until 1740-1741 when record prices for grain in Amsterdam attracted increased exports from the Baltic provinces.<sup>102</sup> In the early 1770's the price rose again in Amsterdam but this time it seems to have been other Estonian ports and not Reval which exported the grain.<sup>103</sup>

The Sound Toll Accounts indicate that exports from Livonian and Estonian ports were almost totally in Dutch hands (Table V.6).

Shipping through the Sound from Livonian and Estonian\* ports by Dutch captains  
(average number of ships annually for each decade)

Years	From Liv- & Estonia	With Dutch captains	To Holland with Dutch captains
1720-1729	8	7(86.3%)	6(77.5%)
1730-1739	27	23(84.1%)	23(83.3%)
1740-1749	43	36(84.2%)	36(84.2%)
1750-1759	24	17(70.4%)	16(65.8%)
1760-1769	32	19(59.3%)	16(50.0%)
1770-1779	70	44(63.1%)	41(57.9%)
1780-1783	24	9(37.5%)	8(31.2%)

\*Unfortunately, Bang did not provide a breakdown for the individual ports except for Riga which is therefore not included in here.

The turnover of shipping in these Baltic provinces was small, also in relation to the other Russian ports.

Shipping from Livonia and Estonia through the Sound  
(average number of ships annually for each decade)

<u>Years</u>	<u>From Russia</u>	<u>From Liv- &amp; Estonia</u>	<u>To Holland</u>	
1720-1729	411	8(0.2%)*	7(0.2%)*	(87.5%)**
1730-1739	668	27(4.0%)	24(3.6%)	(88.9%)
1740-1749	672	43(6.4%)	39(5.8%)	(90.6%)
1750-1759	766	24(3.1%)	17(2.2%)	(70.8%)
1760-1769	831	32(3.9%)	17(2.0%)	(53.1%)
1770-1779	1,237	70(5.7%)	44(3.6%)	(62.9%)
1780-1783	1,115	55(4.9%)	27(2.4%)	(49.1%)

\* Percentage of Russia

\*\* Percentage of Liv- & Estonia

Storch, on the other hand, gave much higher figures for the number of ships which visited ports in the Baltic provinces. He named four ports, namely, Reval, Hapsal, Pernau and Arensburg. The data on these four ports combined yield the following figures:<sup>104</sup>

(average number of ships per annum)

<u>Years</u>	<u>Storch</u>	<u>Sound Liv- &amp; Estonia</u>	<u>GGR Reval &amp; Estonia</u>
1761-1763	258(14.5%)*	41(15.9%)**	18(7.0%)**
1773-1777	179(8.9%)	82(45.9%)	44(24.6%)
1793-1797	89(3.8%)	-	9(10.1%)

\* Percentage of all ships from Baltic Russia according to Storch.

\*\* Percentage of Storch's figures.

What is apparent from these figures is that about four-fifths of the ships that visited these ports were engaged in inter-Baltic trade. Most likely these ships were small and plied between the Baltic provinces and Riga

or St. Petersburg carrying their products to these ports for export and taking merchandise in return. Other ships were involved in the grain trade with Sweden.

The share of Estonia and Reval in shipping from Russia was usually less than 6%. Only in a few years, namely, 1715-1716, 1740, and 1775 did this region account for more than 10% (Table V.6). The situation was much the same for shipping to Amsterdam as may be seen from Tables II.1.A, II.5 and II.7.

Even in Reval's peak year of 1740, its share of the number of ships that sailed from Russia to Amsterdam was just 12%, that of the tonnage of cargo carried 16% and that of the tonnage of ships 12%. For most of the period covered by the GGR, Reval's portion of the trade with Amsterdam stood at 5% or less. The size of most ships ranged from 201 to 300 tons in 1716-1717 dropping down to 101 to 200 tons during the next peak period, that of 1729 to 1731. The year 1740, which marked the high point, saw the number of ships divided about equally between those in categories 'B' and 'C' (Table II.3.E). From then on the few ships that sailed to Amsterdam from Reval were mostly of the size categories 'A' and 'B.' The 1730's and 1740 saw the appearance at Reval of ships carrying cargoes of 500 and even as large as 708 tons (Table II.2.E and II.15.E). Thereafter till 1825, only five such large cargoes were brought from Reval to Amsterdam and three of these seem to have consisted of timber (Table II.16.E). As far as seasonal fluctuations in shipping from Reval are concerned, for the years that the number of ships was large enough to offer meaningful percentages, it seems that most of

the ships arrived at Amsterdam between June and October with the majority arriving in July through September (Tables II.10.E and II.14.E).

For shipping from the other ports in Estonia, the pattern was different. The high point was in the years 1772 to 1778 when prices for grain were once again high on the Amsterdam market. From 1738 to 1752 there was a gradual increase in the size of ships when the ships in the 201 to 300 ton and 301 to 400 ton categories accounted for an increasing share of the shipping tonnage. The 101 to 200 ton size ship disappeared altogether during the years 1746 to 1749 (Table II.3.F). The years 1756 to 1758 marked the absolute low point with only one ship per annum arriving at Amsterdam from Estonia. The revival of trade from Estonia after 1758 also signalled increasing grain exports in relation to timber exports which were coming mainly from Pernau. This is reflected in the fact that prior to 1758, the overload factor was near 0% on many occasions, whereas after 1758 it was almost constantly over 60% (Tables II.4.F and II.16.F). Even for the larger ships, those in the 401 to 500 ton size, the overload factor averaged more than 50% from 1769 to 1779. The seasonal shipping pattern was, however, very similar to that of Reval (Tables II.1.A and II.9-14.F).

Exports from Courland, which was formally incorporated into Russia under the terms of the Third Partition of Poland in 1795, consisted mainly of flax, hemp, grains and timber. However, a sizeable portion of Courland's timber export was shipped via Memel.<sup>105</sup> Although the number of ships which sailed from Courland to Amsterdam was substantial, usually over 20%, the ships were small, averaging less than 100 tons with many even less than 75 tons (Tables II.1, II.1.A, II.2-4.H, II.15.H and II.16.H).



Surprising are the large percentages of ship arrivals at Amsterdam in the month of May. Until comparisons have been made with the STA for these years, it is difficult to say whether these ships passed through the Sound the previous year or were among the early arrivals in the year in which they were registered in the GGR.

With the aid of the charterparties, it was possible to present information on freight prices from Reval and Pernau. The results are presented in Tables I.22 and I.23.

**TABLE 22: Freight prices per last for shipping from Reval to Amsterdam and other ports, c. 1690-1788 contracted at Amsterdam**

(Numbers in parentheses indicate number of charterparties consulted. Freight prices with asterisks indicate computation based on measured lastages. Unless otherwise indicated freight prices are in lasts of rye and for Amsterdam.)

<u>YEAR</u>	
1690	f.13 1/2(1) salt f.88(1) in January and f.102(1) in November for voyages from Setubal-Reval-Amsterdam.
1692	salt f.80(1)
1694	f.30(3) salt f.135 hemp f.29 1/2*(2)
1695	f.21(3) in May and f.26(2) in August
1698	f.14(1) salt f.43-50(3)
1699	f.30 salt f.49(2)
1701	f.19(3) salt f.48(1) tar f.17 1/2(1) timber f.14*-16*(3)
1705	f.20(1) timber f.24*(1)
1706	timber f.18*(2)
1707	f.24(4)
1708	timber f.20 1/2*(1)
1709	tar f.32 1/2(14)
1744	salt f.55(1)
1746	f.22
1760	salt f.47(2)
1784	f.25
1788	hemp f.29 to Porto <sup>106</sup>

The pattern of the seventeenth century and earlier, namely that a ship sailing from Amsterdam to fetch salt in Portugal for the Baltic and returning from the Baltic with cargo for Amsterdam, remained the same on the Reval route for most of the eighteenth century. In addition, even for these longer

voyages, in comparison with the shorter Amsterdam-Russia-Amsterdam route, the freight prices remained stable. Admittedly, the information which is presently available is scarce but freight prices of f.43, f.48 and f.49 per last of salt at the beginning of the eighteenth century can be considered the same as those of f.47 in 1760.

**TABLE 23: Freight prices per last for shipping from Pernau to Amsterdam and other ports, c.1701-1784 contracted at Amsterdam**

(Numbers in parentheses indicate number of charterparties consulted. Freight prices followed by an asterisk indicate computation based on measured lastages. Unless otherwise indicated freight prices are in lasts of rye and for Amsterdam.)

<u>YEAR</u>	
1701	f.22 in May and October but f.28 in August (3)
1701	timber f.17 1/2* (1) from the Oesel Islands
1702	timber f.11* (2)
1704	timber f.20 1/2* (3)
1707	timber f.21* (2)
1746	timber f.15 1/2(1)
1748	timber f.20 1/2*-22 1/2* (5)
1777	f.29 to Port-a-Port flax f.48 to Lisbon
1780	salt f.83(1) from Lisbon to Oernua to Amsterdam flax f.49(1) to Lisbon
1782	flax f.57(1) to Lisbon and f.54(1) to Port-a-Port
1783	flax f.38(3) to Lisbon, Figueres or Port-a-Port
1784	f.24.* (1) grains and timber

Noticeable in these charterparties is the switch from timber exports to flax from Pernau in the second half of the eighteenth century and the fact that this flax was shipped directly to southern Europe.

### **III. F Archangel**

The significance of the Archangel or White Sea route was that ships could reach Russia independently of the Baltic powers and that Russia could send without interference diplomats, agents and traders to Western

Europe. From the time of Ivan the Terrible to the rise of St. Petersburg the history of Russia's foreign trade was synonymous with that of Archangel.<sup>107</sup> After St. Petersburg came into being and the Baltic provinces were conquered this situation fundamentally changed and Russia's trade via the White Sea became of secondary importance and was even considered harmful competition for St. Petersburg.

As early as the beginning of the seventeenth century, the Dutch effectively replaced the English as the dominant trading nation at Archangel.<sup>108</sup> The main reason for this was that the Dutch and foreign merchants were able to pay for their purchases in specie. The Dutch were not hampered like the English in exporting silver coin and Amsterdam quite easily supplied the quantities needed for trade with the Russians. In addition, the Dutch were not bound by the regulations of a single company like that of the English with which they competed as hard as they did among themselves. Like the English, the Dutch also managed to obtain privileges for a select number of their merchants to trade in the interior, and some of them even made their way into the ranks of gosti.<sup>109</sup> Dutch trading houses existed at Yaroslav, Moscow, Novgorod, Pskov, and Vologda.<sup>110</sup>

At the end of the seventeenth century, Archangel exports consisted of hides or Russian leather, commonly known as juchten, furs, tallow, caviar, flax, tar, potash, woad-ash, honey, beaver skins, salted meat, hemp, flax and grains. Imported were salt, wines, brandy, fruits, linens, paper, and other European manufactures as well as colonial goods.<sup>111</sup> Especially prominent among the imports were Canadian beaver skins car-

ried to Archangel by the Dutch from France or, even though illegally, directly from New France.<sup>112</sup> The Russians had a secret process by which they combed out the beaver wool from the undercoat of the beaver skin leaving only the fine guard hairs on the skin. Both the combed beaver skins and the beaver wool were highly prized commodities in Europe, especially in Paris. At the beginning of the eighteenth century about 100,000 beaver skins were carried annually by the Dutch to Archangel. During the 1720's this trade all but died out. The secret process had become known in Europe and the fashions at Paris had changed. In the 1770's Canadian and American beaver skins were once again exported to Russia in large quantities. The reason this time was not the changing fashion in Paris but those of the Chinese among whom the beaver fur had suddenly become quite popular.<sup>113</sup>

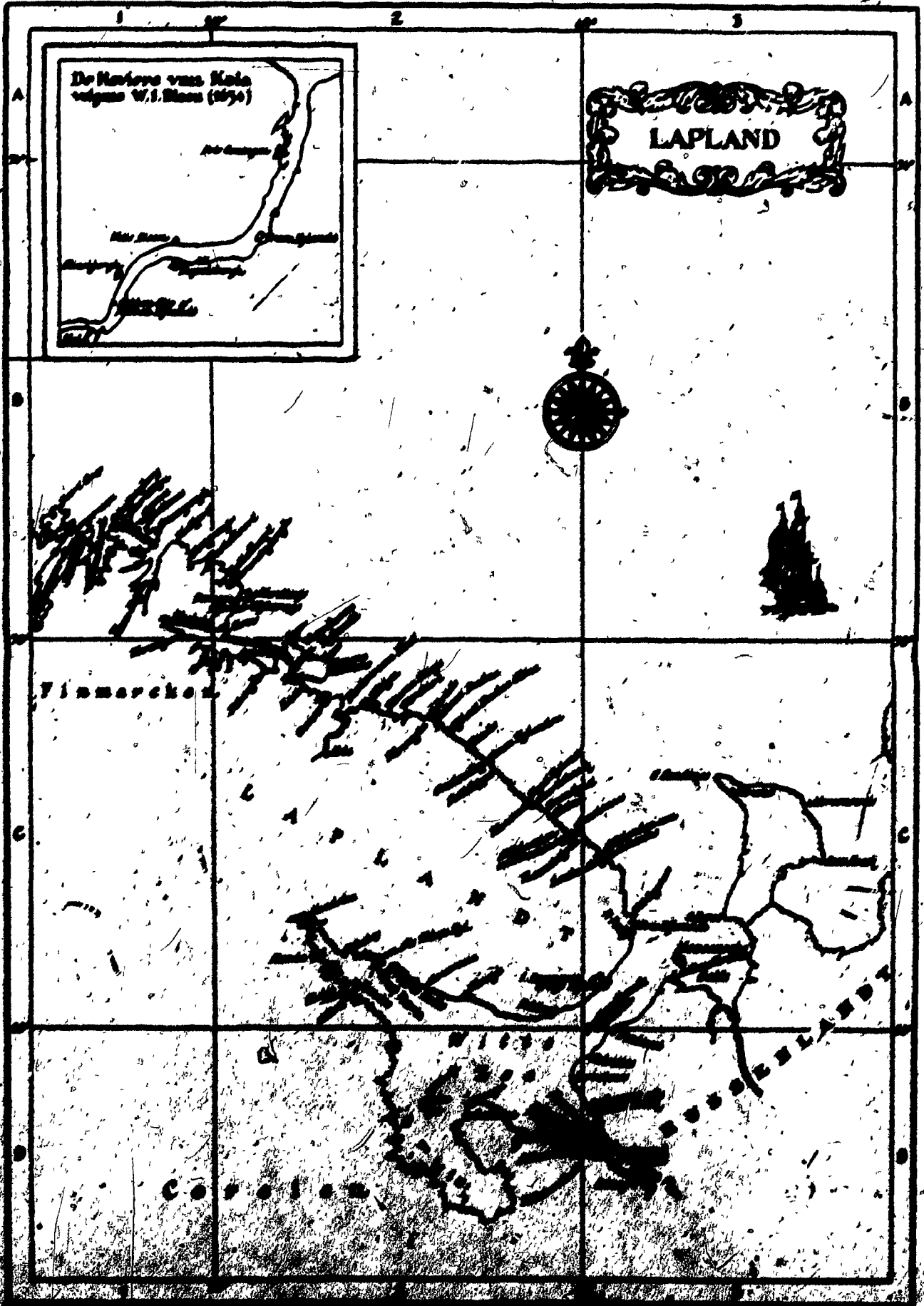
During the Northern War, trade with Archangel increased dramatically. From 1693 to 1699 about 47 ships visited Archangel annually. During the following decade the number of ships jumped to 135 per annum while for the years 1710 to 1718 it rose even higher, averaging 158 ships per year. The high point was reached in 1716 when 233 ships arrived at Archangel.<sup>114</sup> This increase ran directly counter to the policy of Peter I of redirecting this trade via St. Petersburg. But until the war freed his hands to grapple with foreign and domestic economic policies and the Baltic route became as safe as the Archangel route, there was little that Peter could do.

When in 1713, Tsar Peter issued an ukas ordering that the Archangel export be diverted via St. Petersburg, the Dutch merchants at

Archangel began to fear that their trade would decline.<sup>115</sup> The reopening of the port of Riga had already caused a great portion of the hemp to be exported from there, which was the normal route for this product.<sup>116</sup> The following year the ban on exports via Archangel was amplified and specified. Hemp, juchten, caviar, potash, woad-ash, pigs' bristles were permitted to be exported via St. Petersburg only and hemp was not available at all until the needs of the Russian navy were met first.<sup>117</sup> In 1718, these restrictions were eased somewhat as Archangel was allowed to handle up to one third and St. Petersburg two thirds of Russia's foreign trade.<sup>118</sup> The Baltic provinces were not included in this. Three years later, Archangel was given permission to export all goods from the region drained by the river Dvina except grains. And in 1727, the Archangel trade was restored to its former basis but the inland tolls to Archangel were raised from 5% to 7% while those to St. Petersburg were reduced from 5% to 3%.<sup>119</sup>

It seems that the cessation of war between Sweden and Russia had a greater effect on the Archangel trade than the orders issued by Peter I in 1713. It is also possible that with the end of the war Peter was able to devote more effort to the re-routing of Archangel's trade. In any case while in 1721 the foreign merchants paid 139,421 Rijkdaalder in dues at Archangel, they paid only 21,713 in 1724.<sup>120</sup> And whereas in 1721, only 28 ships passed through the Sound from St. Petersburg this number jumped to 78 the following year and ~~100~~ in 1723. On the other hand, the number of ships which sailed from Archangel to Amsterdam dropped from an average of 53 per annum between 1710 and 1719 to an average of only

MAP 7: Map of Archangel and the White Sea region, 121



22 ships yearly between 1720 and 1729.

Dutch merchants like Bodisco and van Dort moved their business to St. Petersburg in 1723 after having protested together with other Archangel merchants almost incessantly since 1713. It should be remembered that Archangel was an active commercial centre for only a few months each year. Both the Russian and Dutch merchants travelled to Archangel in the late summer having spent the winter and spring in their houses in Moscow, Vologda, Yaroslav and other Russian cities. The journey took about fourteen days. For ten to twelve weeks from the end of August, Archangel held its iarmarka or annual trade fair. At the end of October when ice froze the harbour the merchants returned to Moscow leaving only their factors at Archangel. Vologda and Yaroslav played a key role in the transshipment of Russian goods to Archangel. Situated at the upper reaches of the Dvina and Volga rivers, they served the function of staples. During the summer the goods were sent down the Dvina on barges and rafts to Archangel and in the winter by sleighs. The merchandise that the Dutch and other foreign merchants brought to Archangel were taken back by sleighs to Vologda for further distribution. <sup>122</sup>

Important at Archangel as well as at other ports was the commodity mix offered for export. For example in 1719 hemp and hides were available for export but no heavy cargo such as tar which forced the captains to carry large bricks (non-paying freight) as ballast. On the other hand, in 1724 there was plenty of tar but very small quantities of light goods. <sup>123</sup>

Most of the Russian goods were bought on term, that is, the Dutch contracted with the Russians in December for delivery at Archangel by

the following summer. The greater part of this merchandise was then brought to Vologda on sleighs over the winter roads to be floated down the Dvina once the ice broke. Quite often the Dutch transported the goods themselves to and from the interior albeit under the name of Russian merchants in order to avoid the heavy inland tolls.<sup>124</sup> The advantage of goods bought on future contracts being cheaper was offset somewhat by the fact that the quality was not always guaranteed.

On the whole the balance of trade at Archangel was in favour of the Dutch. This trade imbalance was evened out through the use of bills of exchange rather than through actual transfer of specie although it is impossible to determine the role played by each of these two methods for settling the imbalance. Usually, the English, whose trade balance with Russia was in Russia's favour, needed money to pay for their purchases of Russian goods. Since they were not permitted to export specie from England, the Dutch in Russia made an additional profit by providing the English with credit through bills of exchange drawn on Amsterdam.<sup>125</sup> The large English trade imbalance did, therefore, not necessarily mean that great quantities of silver and gold bullion were sent to Russia as the bill of exchange market of Amsterdam went a long way in evening out the various bilateral trade imbalances. If the rate of exchange was unfavourable for remittance to Holland the Dutch merchant would lend his money in Russia with interest as long as it was profitable.<sup>126</sup> Only occasionally was trading done at Archangel by means of barter. The Russian preferred ready cash and agreed to barter only when few ships reached Archangel in relation to the goods available for export.



Complicating trade with Russia was the fact that from time to time, often without previous warning, the Tsar would claim an export or import monopoly on such goods as caviar, potash, tar, rhubarb, woad-ash, fish, vodka and even dice. However, with the conquest of the Baltic provinces trade became more diffused and monopolies on goods less frequent. Quite often they pertained only to a single port and thus the hope for increase in prices did not materialize as the commodity was exported via another port or by other nations. Exceptions to this were such goods as salt, brandy, sugar, rhubarb and certain cloths which were crownmonopolies or had their import severely restricted by means of high tariffs.

Like all Russian ports, Archangel was also situated at the mouth of a river and although the White Sea was not as shallow as the Baltic, a sandbar called the Sollebol forced ships larger than 400 tons to (un-)load at sea. And like at St. Petersburg, the ship had to bear the expenses for the lighters.<sup>127</sup> A special levy was collected by the Russians to maintain the shipping channel. However, as far as the Dutch were concerned, little was done by the Russians to maintain the harbour at Archangel or the approaches to it. The Dutch therefore offered to maintain and improve the harbour for the Russians in return for the abolition of this levy but nothing came of that suggestion.<sup>128</sup> In addition, the Dutch asked for permission to load their ships also at night since harbour regulations allowed them to load only between sunrise and sunset. Due to the fact that daytime in the fall was short and contrary winds quite often made unloading and loading impossible, this regulation added to the turn-around time of the ship, thus adding extra expenses.

No continuous data is available on Archangel's trade and shipping during the eighteenth century. Nevertheless, it is apparent that the Archangel trade managed to maintain itself throughout the course of the century despite the dramatic decline following the settlement of the Northern War. We have already mentioned that between 1710 and 1718 an average of 158 ships per annum visited Archangel. Storch, from whom these figures were taken, put the number of ships visiting Archangel in 1745 at 25. During the years from 1760 to 1763, the number of ships annually averaged 41. For the period from 1773 to 1777 the number rose to 133 and by the end of the century, 1793 to 1797, 141 ships on the average came to Archangel every year.<sup>129</sup> This indicates that the Archangel trade increased during the eighteenth century especially during its second half, since in the seventeenth century, the number of ships had averaged 30 to 45 per year.<sup>130</sup> For the year 1773, Marbeault put the number of Dutch ships visiting Archangel at 180 in addition to quite a few ships from Hamburg and Bremen.<sup>131</sup> According to Büsching's Magazine, 35 ships sailed with cargo from Archangel in 1760 and two ships, newly-built at Archangel, went to Onega to load timber. Of the 35 ships, 24 (or 68.6%) left for Amsterdam, 4 went to Bremen, 2 to Hamburg, and one each to London, Bergen, Dublin, Londonderry and the West Indies.<sup>132</sup> And according to Ronimous, in 1802 when the total turnover of Russia's foreign trade amounted to 119.8 million rubles, the White Sea trade accounted for 7.5% of the exports and just 1.0% of the imports. On the other hand, 74.1% of the exports and 58.8% of the imports was carried via the Baltic route.<sup>133</sup> The question thus arises as to what role Archangel played in Russia's foreign trade

during the eighteenth century and to what extent St. Petersburg supplanted Archangel. But before discussing these problems it is necessary to examine first the development of the Archangel trade during this time.

TABLE I.24 INDEX OF SHIPPING FROM RUSSIAN (WHITE SEA) PORTS  
(PRIMARILY ARCHANGEL) TO AMSTERDAM,  
1723-1724/2=100  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	-	-	222	100
172-	191	104	96	113	97	-	-	87	87	74
173-	82	68	70	87	122	87	87	63	63	133
174-	261	235	182	143	109	87	83	91	78	78
175-	143	39	133	126	122	126	174	239	139	104
176-	78	113	78	133	161	96	161	139	174	161
177-	122	213	274	217	233	213	191	133	233	91
178-	139	113	117	133	126	87	139	143	182	161
179-	117	87	126	61	148	43	87	-	-	-
180-	-	-	-	-	-	-	-	-	-	-
181-	-	-	-	-	-	117	104	317	100	82
182-	61	61	78	-	-	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED

SOURCE: TABLE 121.4

The Galjoetsgeldregisters are for the moment the only available source by which one can chart the course of Archangel's shipping during the eighteenth century. Because the GGR of the D.M.H. were incomplete for the year 1725, the years 1723 and 1724 were chosen as the base for the indices (Tables I.24 through 28). The index on shipping (Table I.24) shows that shipping from Archangel to Amsterdam was also very much influenced by high prices or exceptional circumstances. The high index figures of 261 for 1740 and 235 for 1741 reflect the high grain prices at Amsterdam. The next increase in shipping occurred at the end of the 1750's due to the prohibitions of timber exports from Narva and rising

tar prices. Various attempts were made to cut and export timber from the White Sea when Narva was closed. But these attempts, especially those at Kola and Mezen, were unsuccessful. During the whole period covered by the GGR a total of 16 ships were recorded at coming from White Sea ports other than Archangel or Onega (Table III.1). The reasons

TABLE 1.25 INDEX OF TONNAGE OF CARGO CARRIED FROM RUSSIAN WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM, 1723-1724/25-1731  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	-	-	248	161
172-	199	121	108	113	87	-	-	46	40	63
173-	46	49	36	98	131	110	104	91	83	166
174-	204	248	149	119	89	97	88	98	87	83
175-	120	48	133	123	138	131	198	294	189	141
176-	119	172	121	169	234	132	194	183	285	247
177-	198	338	332	278	363	314	223	183	334	124
178-	194	181	188	193	193	131	138	207	208	214
179-	162	113	166	78	191	83	89	-	-	-
180-	-	-	-	-	-	-	-	-	-	-
181-	-	-	-	-	-	132	93	336	108	47
182-	43	47	89	-	-	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE III.4

for this were that this timber was not of first class quality, being too short and too thin to obtain a good price. At the same time the numerous waterfalls on the rivers in the region made it difficult to float the timber down the river. There was also a lack of experienced woodcutters, horses and labourers in northern Russia, although some of the Narva woodcutters who had lost their jobs travelled north to seek employment.<sup>134</sup> And in 1758 the timber export from Kola also was banned.<sup>135</sup>

In 1762, Archangel obtained all the advantages of St. Petersburg.<sup>136</sup> Two years later, it was allowed to ship up to 200,000 chetvert' of rye annually provided that in times of scarcity the citizens of Archangel could claim 50,000 chetvert' for domestic consumption. Previous to 1764 under a decree issued by Elizabeth in 1740 grain was allowed to be exported only if the domestic price was less than one ruble per chetvert'.<sup>137</sup> The high index figures during the 1770's were the result of increased tar exports and rising grain prices.<sup>138</sup>

In terms of tonnage of cargo carried the index figures for 1740 and 1741 were even higher, standing at 284 and 248 respectively, but the index

TABLE III.4 INDEX OF TONNAGE OF SHIPPING FROM RUSSIAN WHITE SEA PORTS (PRIMARILY ARCHANGEL TO AMSTERDAM, 1723-1794/1813)  
FIGURES FOR EACH DECADE ARE PLOTTED ON A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	-	-	280	165
172-	209	127	108	108	92	-	-	42	42	63
173-	47	88	49	71	93	76	80	54	64	114
174-	105	176	117	99	88	81	71	82	70	68
175-	101	34	105	94	158	103	175	229	123	151
176-	77	112	92	124	160	92	151	135	149	192
177-	119	192	217	188	215	194	161	130	214	87
178-	127	112	108	121	123	83	101	131	134	128
179-	101	68	104	82	119	38	48	-	-	-
180-	-	-	-	-	-	-	-	-	-	-
181-	-	-	-	-	-	94	68	384	118	82
182-	42	49	68	-	-	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED

SOURCE: TABLE III.4

figures of tonnage of shipping stood at only 195 and 179, thus indicating a higher overload factor (Table III.4). From the early 1750's to the 1790's, the index of cargo tonnage was constantly twenty points or more above the index level and most of the time also for the number of ships and the ton-

nage of shipping. In 1771, 1772, 1774, 1775 and 1817, the index of cargo tonnage stood at nearly three times the 1723/1724 level.

The index of the average size of ships sailing from Archangel to Amsterdam is remarkably stable, showing none of the large fluctuations which have been found for the other major Russian ports. The average point spread per year in Table I.27 for the period of 1717 - 1822 was only 14.8 points. Most of the ships from Archangel were in the 201 to 300 ton size and together with the 301 to 400 ton class made up the majority of the shipping tonnage (Table III.3). During the period from about 1755 to about 1790 as well as that from 1718 to 1722, ships in the 401 to 500 ton category were also quite common at Archangel. For a few years, from

TABLE I.27 INDEX OF AVERAGE SIZE OF SHIP IN TONS FROM RUSSIAN (NORTH SEAS) PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM. (1723=1724/2=100)  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	-	-	117	111
172-	100	116	112	95	103	-	-	74	73	88
173-	90	84	69	61	76	87	91	90	79	87
174-	74	74	76	68	78	93	86	93	89	83
175-	68	96	80	73	76	79	100	95	88	97
176-	98	98	104	91	99	98	93	96	107	94
177-	97	89	79	85	91	90	84	96	91	98
178-	91	98	92	89	97	93	92	98	88	79
179-	86	78	82	83	80	79	84	-	-	-
180-	-	-	-	-	-	-	-	-	-	-
181-	-	-	-	-	-	79	61	111	117	100
182-	69	80	76	-	-	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE III.4

1755 to 1764, ships in the 501 to 600 ton size also visited Archangel. The fluctuations in the size of the ship and the proportion of

shipping tonnage have been presented graphically in Graphs III.3(1) and (2). For the whole period, ships in the 201 to 400 ton size categories dominated shipping from Archangel to Amsterdam. And while the average size of the ships declined after the Napoleonic wars, a number of very large ships, those of 601 tons or greater, sailed from Archangel to Amsterdam.

Seen from the perspective of the size of the cargo, the picture is totally different. While the average size of the ship remained relatively stable from year to year, the average size of the cargo went up suddenly in the 1760's and with few exceptions stayed at that high level right into the 1790's (Table I.28). Table III.2 and Graph III.2(1) show how in the course of the eighteenth century, the 201 to 300 ton and later, even the 301 to 400 ton size cargoes account for a diminishing share of Archangel shipping and the pattern was much the same for the proportions of cargo tonnage carried according to the size of the cargo (Graph III.2(2)).

TABLE I.28 INDEX OF AVERAGE SIZE OF CARGO IN TONS FROM RUSSIAN WHITE SEAL PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM, 1770-1799 (POL.)  
 FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	-	-	111	110
172-	104	111	113	133	133	-	-	81	71	93
173-	88	75	81	109	107	126	120	124	101	122
174-	109	106	98	93	82	101	103	134	111	106
175-	82	114	102	99	114	134	114	123	114	133
176-	132	133	154	128	146	138	121	133	161	184
177-	163	143	115	127	148	147	117	136	133	136
178-	132	160	138	143	148	133	142	144	133	133
179-	130	126	132	129	129	122	122	-	-	-
180-	-	-	-	-	-	-	-	-	-	-
181-	-	-	-	-	-	113	90	106	138	91
182-	71	77	78	-	-	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE III.4

Too little is known about the quantities of the various commodities which were available from year to year for export from Archangel to draw any definite conclusion about the fluctuations in cargo size. But one can surmise on the basis of the charterparties and of the correspondence of the merchants that the reasons are to be found in the relation of the availability of "heavy" and "light" goods for export in any particular year as well as in the prices. What is remarkable is that on the Archangel route one finds proportionately the largest cargo sizes. For a number of years cargoes of more than 601 tons each accounted for more than 40% of all cargo shipped from Archangel to Amsterdam. The cargoes of 100 tons and under and to some extent those in the 101 to 200 size range seem to have been practically nonexistent on the Archangel route.

For almost all the years covered, except those following the Napoleonic Wars, the sizes of the cargoes were bigger than the size of the ships in all the ship size categories (Tables III.11 and 12). From 1817 onwards a few of the larger ships, those measuring 301 tons or more, carried cargoes of a smaller lastage than the size of the ship. That year the percentages in all the ship size categories by which the size of the cargo was bigger than the size of the ship dropped considerably and remained small right up to 1823.

Archangel is the only Russian port for which contemporary sources inform us that a distinct seasonal shipping pattern existed. Normally there were two annual fleets or convoys to Archangel, those that left early or vroegschepen and those that left Amsterdam at a later date or naschepen. According to these sources, the vroegschepen constituted the smaller of the



two fleets. Leaving Holland in the early spring and arriving at Archangel in the middle or late July, they arrived to fetch the cargo left over from the previous year and that brought to Archangel during the winter on sleighs. The main fleet consisting of twenty to thirty ships sailed the middle of July arriving at Archangel in early September. It departed from there by the end of the same month.<sup>130</sup> Many of the charterparties mention that if the ship had not taken in cargo by 15 September O.S., and had not left between then and 1 October O.S., an extra f. 1 to f. 2 per last would be paid for freight. On the other hand, the charterparties disclaimed any financial responsibility if the ship was trapped in the ice and forced to winter at Archangel.

It was also possible both on the outward and return voyage that ships sailed without the protection of convoy. This fact plus the varying time lag of those who recorded arrivals in the Galjoetsgeldregisters diffuse somewhat this seasonal pattern. Nevertheless, some observations are possible. During the first half of the eighteenth century the naschepen seem to have been in the majority as is witnessed by the high percentages for December through April in Table III.1.A. In the second half of the eighteenth century, the balance seems to have shifted in favour of the vroegschepen. The percentages of ship arrivals in October, November and December increased, while the percentages for January through May dropped drastically (Tables III.5 through 10). These are only general observations as the percentages vary widely from year to year. It may also be noted that the great majority of charterparties consulted from 1768 onwards were contracted during the months of March through May.

In the charterparties pertaining to Archangel, the size of the ship was usually given in rye lasts. An exception to this was the first quarter of the eighteenth century when freight contracts bij de hoop were quite common and the measurements of the ship were given. Thereafter, the freight prices were usually given in lasts for each commodity, with freight prices for as many as four or five different commodities being quoted in each charterparty. This made it possible to convert the freight prices to that for rye. The most common commodities listed were, first of all, tar, linseed and rye followed by wheat, tallow, juchten and hemp. Usually the freight price for tar was about f. 3 per last less than that for rye while linseed was f. 1 per last less. The freight price for hemp was almost one-half of that for rye while wheat and tallow cost about 10% more to ship. Hides were f. 6 to f. 8 per last more expensive to ship than tallow at the beginning of the eighteenth century, but by 1780 they were f. 15 per last cheaper to send than tallow or wheat. Also noticeable was that while very few of the charterparties mentioned hides, correspondence from merchants and captains in Archangel to the Brants family in Amsterdam indicated that juchten were a popular export article. Perhaps the Brants specialized in this commodity.

Most charterparties were made in April and May. It was not unusual that freight prices contracted in June were f. 1 or those in July even f. 6 per last higher. To go to Lisbon instead of Amsterdam meant a 28-30% increase in freight and to the Mediterranean 36-40% more. The information given in these charterparties on the different commodities made it possible to convert most of the freight prices to those for rye. Freight

prices obtained from the correspondence of merchants and bills of lading have not been integrated with those of the charterparties. There are two reasons for this. First of all, they are all freight prices quoted at Archangel and quite often are for small quantities of goods as a large shipment was spread over several ships to minimize the risk of loss. And second, most of these freight prices were contracted in August and September in the light of conditions existing at Archangel and not those of Amsterdam in the spring. The results have been tabulated in Table I. 29 for ships returning to Amsterdam and sailing to non-Dutch ports.

**TABLE I. 29: Freight prices per last for shipping from Archangel to Amsterdam and non-Dutch ports, c. 1710-1784, contracted at Amsterdam.**

(Numbers in parentheses indicate number of charterparties consulted. Freight prices with an asterisk indicate computation based on measured lastages. Freight prices that are underlined have been taken from correspondence of merchants or bills of lading at Archangel. Unless otherwise indicated freight prices are in lasts of rye and for Amsterdam.)

YEAR

1710	f. 29*(1)	
1713	f. 28*(1)	but f. 500 or f. 2 per last extra if to Hamburg
1716	f. 23 1/2*(3)	hides <u>f. 20-22</u>
1717	f. 20(3)	but only f. 0.3 more if to Lisbon
1718	f. 21(2)	hides <u>f. 42 1/2</u>
1719	f. 30	in June and f. 40 in September (2)
1720		tallow <u>f. 22</u> hides <u>f. 30</u>
1721	f. 20(2)	hides <u>f. 30</u> tallow <u>f. 22</u>
1722	f. 18(2)	tar <u>f. 20</u>
1723		timber <u>f. 16*(2)</u>
1744	f. 26(1)	
1748	f. 29(2)	
1768	f. 25(4)	
1769	f. 26(3)	tar and hemp f. 30 to Le Havre(1)
1777	f. 28-31 1/2(9)	
1778	f. 50-51(16)	f. 63 3/4 to Lisbon and f. 4 extra if to Mediterranean (1)
1779	f. 44-46(6)	wheat or rye f. 65 to Lisbon or f. 68 to Livorno (2)
1780	f. 50-54(17)	wheat f. 80 to Lisbon or f. 85 to Barcelona (2)

TABLE I.29 (cont'd):

YEAR

1781 f.74-75(6)	
1782 f.75-76(6)	wheat f.100 to Barcelona
1783 f.42-43(10)	wheat f.56-63 to Barcelona(4), f.66 to Livorno(1), f.50-58 to Lisbon(4), f.60-63 to Marseille(3) and f.3 extra if to another Mediterranean port
1784 f.30-31(11)	

Since Hart has computed freight prices for shipping from Archangel for the seventeenth century it is possible to compare these with those presented in Table I.29.<sup>140</sup> The lowest average freight prices quoted for the seventeenth century by Hart were those of f.17.1 - f.17.6 for the years 1658 to 1660. The highest average price was that of f.52 in 1674, the time of the Third Anglo-Dutch War. During the last two years of the seventeenth century, freight prices from Archangel to Amsterdam averaged f.18 to f.20 per last. In the eighteenth century during the War of the Spanish Succession prices rose to f.28 - f.29 dropping to f.23 1/2 in 1716 and f.20 in 1716. From then till the late 1770's freight prices seem to have ranged between f.20 and f.30 per last. But in 1778 they climbed to f.50 - f.51 and during the Fourth Anglo-Dutch War stood as high as f.76 falling again to f.42 - f.43 in 1783 and f.30 - f.31 in 1784. Apart from this last period the freight prices in the eighteenth century were only marginally higher than those in the seventeenth century. The freight price of f.23 - f.25 for 1647 to 1650 did not differ much from those of f.25 - f.28 for the years 1744 to 1769.

The average cargo capacity in lasts during the first half of the seventeenth century was 120 lasts or 240 tons (for 592 ships having charterparties). For the period 1718 to 1749 the GGR list a total of

805 ships averaging 269 tons according to the size of the ship. Converting this to cargo carrying capacity by using the Formula of  $RL = .533CC$  changes 269 tons registered to 505 tons or 252 1/2 lasts cargo carrying capacity, which represents an increase of 132 lasts or 264 tons. The average size of the ship for the period following the Napoleonic Wars (or 260 ships from 1815 to 1822) computed in the same manner yielded an average cargo carrying capacity of 531 tons or 265 1/2 lasts. The average increase in the size of ships sailing on the Archangel-Amsterdam route must therefore have occurred during the second half of the seventeenth century. In view of the fact that the ratio of ships in the various ship size categories could differ while the average remained the same, it would be interesting to know the frequency distribution by size of ship of the 592 ships for which Hart has found charterparties. Except for times of war freight prices remained relatively static during these two centuries. This can be explained in part by the fact that increased shipping costs per last were compensated for the use of larger ships. The Fourth Anglo-Dutch War affected drastically the freight prices which almost tripled in cost. The reason for this must lie in the fact that by that time the Dutch navy was almost totally incapable of protecting the Dutch merchant fleet. During the three previous wars between the English and the Dutch in the seventeenth century, freight prices did not undergo the same high percentage increase.

Another interesting aspect of Table I.29 is the sudden appearance of wheat shipments to the Iberian Peninsula and the Mediterranean at the end of the 1770's. Again the war had the greatest influence on freight prices

as the price for wheat to Barcelona rose to a high of f.100 in 1782.

Further, in some charterparties, notably those quoting the lower prices in 1783, it was specified that the ship was to carry a Danish and not a Dutch flag.

Throughout the period covered by the GGR, Archangel continued to play a substantial role in shipping from Russian ports to Amsterdam, especially during the first quarter and second half of the eighteenth century. Since the average ship from Archangel was larger than those from the Baltic Russian ports and the average size of the cargo from Archangel could be quite large, each of the three variables (number of ships, cargo tonnage and shipping tonnage) presents the role of Archangel in a different light. If we measure the shipping from Archangel against Russia's Baltic shipping the greatest share that Archangel ever held was in 1781 when it accounted for 70.3% in terms of cargo tonnage. This was, of course, a war year, but in 1771 the same percentage stood at 54.6% (Table III.13). On the whole, if for the moment we imagine Archangel as a Baltic port, it would have accounted for 18.7% of the ships and 31.0% of the cargo tonnage for the period 1718 to 1724. After that Russia's Baltic trade increased while that from Archangel went into a slump, recovering slowly from 1730 to 1739. During the period from 1739 to 1743, Archangel's share in the Baltic trade would have been 11.2% of the ships, 16.7% of the cargo carried and 12.4% of the shipping tonnage.

In all categories except the number of ships Archangel's share was greater than that of St. Petersburg. During the second half of the eighteenth century, Archangel almost always accounted for one-tenth of all shipping

from Russia's Baltic and White Sea ports to Amsterdam and in many cases for more than one-fifth.

How did then the shipping from Archangel compare with that from St. Petersburg and did St. Petersburg overtake Archangel in this respect? On the whole there can be little doubt that shipping from St. Petersburg surpassed that of Archangel but this answer may not be applicable to all routes especially the one to Amsterdam. With the aid of the Galjootsgeld-registers it is possible to reach some conclusions on this matter.

First of all there are three variables by which the position of Archangel vis-à-vis St. Petersburg can be evaluated, namely the number of ships, the tonnage of cargo and the tonnage of shipping. All three have been used and the results are presented in Table III.14. For the sake of simplification, Table I.30 has been included here for it groups the data for each decade. Judging by the number of ships which sailed to Amsterdam, St. Petersburg ranks well ahead of Archangel in all but one decade, that of 1770 to 1779. According to the tonnage of shipping, St. Petersburg was more important than Archangel in only two decades, namely the 1730's and the 1740's. But if measured according to the amount of cargo that was carried to Amsterdam, Archangel ranked first during the whole period from 1720 to 1822. It was especially during the second half of the eighteenth century that Dutch trade with Archangel greatly exceeded that with St. Petersburg. In both cases the Dutch ships that sailed to ports other than Amsterdam is an unknown factor. But it is a well known fact that a substantial amount of shipping from Archangel went directly from there to the Iberian Peninsula and the Mediterranean,

TABLE I. 30: A comparison of shipping from Archangel and St. Petersburg to Amsterdam from 1720-1822

(Figures are annual averages per decade. Percentages are St. Petersburg > Archangel.)

Years	<u>Number of Ships</u>			<u>Tons of cargo carried</u>			<u>Tons of shipping</u>		
	Arch.	St. Pete.	%	Arch.	St. Pete.	%			%
1720-1729*	22	24	8.3	7,617	4,099	-85.8	6,312	3,507	-80.0
1730-1739	20	37	45.9	7,303	6,553	-11.4	5,237	5,237	13.9
1740-1749	30	46	34.8	10,280	8,517	-20.7	7,160	7,300	1.9
1750-1759	31	38	18.4	11,760	5,832	-101.6	8,299	4,527	-83.3
1760-1761	30	32	6.3	14,673	7,148	-105.3	8,995	4,141	-117.2
1770-1779	44	37	-18.9	20,391	7,383	-176.2	12,122	4,566	-165.5
1780-1789	30	33	9.9	14,388	6,837	-110.4	8,246	3,706	-122.5
1790-1796*	21	24	12.5	9,399	4,933	-90.5	5,299	2,265	-134.0
1815-1822*	26	42	38.1	8,553	7,390	-15.7	7,365	5,944	-23.9

\* Adjustments made for missing years or missing data. See Table III.14 for this information on a year by year basis.



by-passing Amsterdam altogether. Even if this number was greater for St. Petersburg than for Archangel, which seems unlikely, the fact that the Archangel ships were much larger than those which sailed from St. Petersburg and the difference in cargo tonnages so vast, one must conclude that St. Petersburg never did replace Archangel as far as the Dutch were concerned. Secondly, there are no indications that the Dutch did not continue to maintain their dominant position in Archangel throughout the eighteenth century. Thirdly, all things being equal as far as Russian trade and tariff policies were concerned, the Dutch preferred to ship their goods via Archangel than via St. Petersburg.

Footnotes — Chapter III

<sup>1</sup>G.A.A., N.A. 6869, pp. 29-30. Affidavit of Jan Hillebrantsz 5 January 1704. This story has been widely quoted in a variety of ways. Chulkov (Istoria, vol. 4, p. 15), J.-B. Scherer (Histoire raisonnée du commerce de la Russie, Paris, 1788, vol. 1, pp. 143-145), and Storch mentioned neither the name of the ship nor the name of the captain. Scheltema (Rusland, vol. 4, pp. 154-156), however, stated that the name of the first captain was Auke Wybes (homeport: Hindeloopen) and that "de Juffrouw Anna" was the second ship under the command of captain Jan Born who also received a gift of five hundred ducats. In the light of the affidavit of Jan Hillebrantsz and the subsequent dispute as to whether or not the shipowners should receive a share of the gift, Scheltema's story must be questioned. Neither in the letters of registry nor the GGR could an Auke Wybes be located.

In addition, all the above authors mentioned that in gratitude for the gift the captain renamed his ship "de Stadt St. Petersburg." This must also be doubted for Hillebrantsz would have said so in his affidavit. No ship by this name was found in either the letters of registry for 1705 to 1710 or in the GGR for 1705-1719. However, the award for the first ship had not been a reaction by Peter at a spur of the moment for, as early as 23 May 1703, he had written personally to the Dutch Resident, H. van der Hulst, that the first ship which arrived at Slotburg [Kronstadt] would receive five hundred ducats, the second ship, three hundred ducats and the third, one hundred. (G.A.A., A.B.D.M. 30, Letter of H. van der Hulst, Moscow, to the States General of the Dutch Republic 23 May 1703 O.S.). Nevertheless, it appears that the Dutch merchants and shipowners were not informed of this. The notarial derogation also shows that the Dutch shipowners thought that Hillebrantsz received the award because he was the first to reach Schansternye or some other port nearby, whose name they did not know, after the conquest of this area by the Russians.

<sup>2</sup>Map by courtesy of the Library of the University of Amsterdam.

<sup>3</sup>Attman, Russian and Polish Markets, pp. 27-29.

<sup>4</sup>Ibid., p. 31.

<sup>5</sup>Scherer (Histoire, p. 143) speaks of an "heureux hasard." The fact is that any ship going to Schansternye had to sail up the Neva. If winds forced it south of the normal channel it sailed past the site chosen by Peter I for his new port (see Map 1).

(Footnotes - Chap. III)

<sup>6</sup>G.A.A., A.B.D.M. 31, Letter of De Bie to the Burgomasters of Amsterdam from St. Petersburg, 16 July 1714. De Bie who was the Dutch Resident in Russia wrote that "For the greater part the English have moved out of Moscow and Archangel to St. Petersburg and placed themselves and all they had under the protection of Menshikov. . . ." See also Kellenbenz, "Economic Significance," p. 574.

<sup>7</sup>For agreement of opinion amongst Russian, German and Swedish historians over the economic motives behind Russia's attack on Sweden and the establishment of St. Petersburg, see L.N. Nikiforov, Russisch-Englische Beziehungen unter Peter I, Weimar, 1954, pp. 8 ff.; S. Svensson, "Czar Peters motiv för kriget med Sverige," Hist. Tidskr. (1931)457 ff.; R. Wittram, "Peter der Grosse und Livland. Zur Kernfrage des Nordischen Krieges," in Deutschland und Europa. Festschrift für Hans Rothfels, Düsseldorf, 1951, pp. 233 ff. This is also the main theme of Aström's work, From Stockholm to St. Petersburg.

<sup>8</sup>Chulkov, vol. IV, p. 33 and p. 466; G.A.A., A.B.D.M. 31, Letters of De Bie, St. Petersburg to the Burgomasters of Amsterdam, 14 December 1714 and 29 October 1717.

<sup>9</sup>G.A.A., A.B.D.M. 31, Letter of De Bie of 27 July 1714. While the Dutch were accustomed to petty bribes and favours, De Bie wrote that the burgomasters of St. Petersburg and the inspectors of customs "engage in so much chicanery that the merchants and shippers have become very dejected and discouraged."

<sup>10</sup>G.A.A., A.B.D.M. 31, Letters of De Bie of 16 and 23 November 1714. In these letters De Bie describes the case of the Dutch merchant, Lambert Rutgers (well-known from many Archangel charterparties) who arrived on the galley "Maria" with 13 casks (1 cask = 1138 pd.) of tobacco. Rutgers unloaded the cargo and paid the required custom dues but then was not allowed to sell these goods. The custom official who forbade Rutgers to sell the tobacco was the same person who had tried to buy the tobacco from Rutgers while it was still on the ship but at a very low price of 11 copecks per pond (while merchants at Viborg were offering 20 copecks per pond for the best and 17 copecks for tobacco of average quality). When Rutgers tried to leave with his merchandise for Viborg, he was informed by the same official that he would have to pay an export duty of 5 copecks. Finally through the intercession of Menshikov (De Bie had threatened to report this incident to the Tsar upon the latter's return to St. Petersburg), Rutgers was allowed to sell his tobacco at St. Petersburg at the going market price but only as an exception. De Bie concludes his letters with the comment that before, i.e., while Sweden

(Footnotes - Chap. III)

controlled Narva, Viborg and Schansternye, the Dutch merchants were allowed to import tobacco and Spanish salt:

"If the present policy of prohibition of the import of these two articles is maintained it would mean that ships sailing to St. Petersburg would have to do so in ballast. . . . [This would] cause considerable loss to the shipowners in freight income especially since because of the war they carried extra armaments and crew." (In free translation.)

<sup>11</sup>G.A.A., A.B.D.M. 31, Letter of De Bie of 16 July 1714.

<sup>12</sup>Id. In a letter written 27 July 1714, De Bie focussed attention on the poor facilities for loading at St. Petersburg. An arriving ship would have to wait below Kronstadt for custom officials to inspect the cargo. Then after a wait of another couple of days, a tjalk (lighter) would come to unload some of the cargo. As the lighters often had unuseable sails and tackle, the captain was forced to use his own crew for the loading. Since the ships usually carried small crews this led to "murmuring" by the crew against the captain as they were forced to do this strenuous work in addition to their normal duties as sailors. In another letter dated 3 August 1714, De Bie wrote that, although since the time of his last letter (27 July) only one ship, a small galley named the "Anna Brigitta" had arrived at St. Petersburg, it nevertheless had taken her five to six weeks to unload and load.

<sup>13</sup>Id. Letter of De Bie of 10 May 1715; Algarotti, Brieven behelzende een berigt aangaande den koophandel, de scheepvaart, inkomsten en krygsmacht van Rusland, Haarling, 1770, p. 52. The English merchant Harvey, in a letter written from Kronstadt 21 June 1739 O.S. stated that:

"The water twixt St. Petersburg and Cronstadt is undeeep and in one place even less than eight feet. Therefore, the Russians are forced to bring their ships to sea in the Dutch manner with a large crowd of people and machines, which is hard and costly." [Harvey was probably alluding to the water-camels.]

<sup>14</sup>Id. Letters of De Bie of 24 and 31 August 1716.

<sup>15</sup>J.J. Oddy, European Commerce Showing New and Secure Channels of Trade with the Continent of Europe, London, 1805, vol. I, p. 114; Büsching's Magazine, 2(1761)600.

(Footnotes - Chap. III)

<sup>16</sup>J.P. Kilburger, "Kurzer Unterricht von dem Russischen Handel wie selbiger mit aus- und eingehenden Waaren 1664 durch ganz Rusland getrieben worden," Büsching's Magazine, 3(1769)343.

<sup>17</sup>G.A.A., PA78/399. Manuscript copy of the Dutch version of Zeeereglement voor de Russische Vloot, uitgegeven op last van Tsaar Peter den Groote, St. Petersburg, 1720. Article XXXVI describes these "douceurs" and states that the funds for them were to be drawn from the monies received from the tolls (most likely the import duties).

<sup>18</sup>G.A.A., PA78/25. Copy of a letter from the College of the Admiralty of St. Petersburg to the Tsarina, 19/30 August 1735.

<sup>19</sup>J.P. Gargon, "Historisch Berigt aangaande Hollandse Gereformeerde Kerken in Rusland," MSS. ed. by N.C. Kist in Nieuw Archief voor Kerkelijke Geschiedenis, 1(1825)1-83. Gargon served as a pastor of the Reformed Church in St. Petersburg in the latter part of the eighteenth century. The church, pastor and schoolmaster were financed by a levy of five rubles on each Dutch ship arriving at St. Petersburg. Since this church and other churches in Russia fell under the resort of Classis Amsterdam, a special effort was made to find records of this levy in the archives of the Classis (G.A.A., PA379, Archief van de Classis Amsterdam van de Nederlandsche Hervormde Kerk). Unfortunately, these efforts did not meet with success.

<sup>20</sup>G.A.A., A.B.D.M. 31, Letter of De Bie of 31 August 1716. According to the STA (Bang 1945, p. 80), only 16 ships passed through the Sound from St. Petersburg that year (see also Table V.5). It must be noted here that figures on St. Petersburg shipping as found in the works of authors such as Chulkov, Hermann, Kilburger, Storch, and others include inter-Baltic shipping and are therefore higher than the corresponding figures of shipping through the Sound. The yearly censura do not play such a great role here since most ships left St. Petersburg by the end of November/early December at the latest so as to avoid being trapped in the winter's ice. The same observation regarding shipping data applies also to other Russian ports.

<sup>21</sup>Storch, vol. 5, pp. 30-31.

<sup>22</sup>See Tables III.1.A and V.6.

(Footnotes - Chap. III)

<sup>23</sup>E. V. Spirodonova Ekonomicheskaja politika i ekonomicheskie vzgliadly Petra I, Moscow, 1952, pp. 216-217) thinks that at the time of Peter's death St. Petersburg had become the most important Russian port. Walter Kirchner (Collected Essays, p. 16) asserts that "by the middle of the eighteenth century the turnover at St. Petersburg was more than three times that of Riga."

<sup>24</sup>Storch, Supplementband, Table VII.

<sup>25</sup>This is reflected in the high prices paid for grains in Amsterdam at that time. Upon the arrival of the ships from Russia and the Baltic in July 1817, the price of rye dropped to f. 170 from an all-time high of f. 431 per last in June. See N. W. Posthumous, Nederlandse Prijs-geschiedenis, vol. 1, p. 22.

<sup>26</sup>For these and other similar tables, the ten-year annual averages are rounded off to the nearest whole number while the percentages are based on the ten year totals.

<sup>27</sup>Storch, Supplementband, pp. 27-28. The figures for 1761-1763 were taken from Kilburger ("Kurzer Unterricht," p. 343), and those for 1778-1786 from Herman (Statistische, p. 430).

<sup>28</sup>Reading, Chapter I.

<sup>29</sup>Kilburger, "Kurzer Unterricht," p. 334. It must be noted that the figures for Sweden are somewhat inflated. In 1759, 263 Swedish ships came in ballast to St. Petersburg where they took on provisions for the Russian army in Prussia (see Storch, vol. V, p. 204).

<sup>30</sup>Ibid., p. 343. For example in 1764 only 55 ships (or 4.4%) of the 1245 that visited St. Petersburg stayed there during the winter.

<sup>31</sup>From the STA data it is possible to calculate the tonnage of cargo but that is beyond the scope of this study.

<sup>32</sup>Laurie and Whittle, New Survey of the Baltic and Gulf of Finland. The charts were based on the Hydrographic Survey of the Baltic or East Sea with the Gulf of Finland made by order of Gustavus III, King of Sweden under the direction of Vice-Admiral Nordenankar, Stockholm, 1788 and 1789 with several additions from the Draughts, Journals, etc. of British Navigators, 1796. [London], 1801. Courtesy of the Department of Rare Books and Special Collections, McGill University Libraries.

(Footnotes - Chap. III)

<sup>33</sup>Posthumous, Prijsgeschiedenis, vol. I, Tables 5, 104, 130 and 214. The rise of prices was not confined to Holland alone. (See the "Index of Prices since 1661" prepared by The Economist and reprinted in the Montreal Star of 11 April 1975, p. B-6.

<sup>34</sup>Storch, vol. V, p. 187.

<sup>35</sup>This can be shown by calculating the correlation coefficients for each pair of ports for every ten years. Both negative and positive correlations between St. Petersburg and other ports were observed depending on the ten-year period which was analyzed. For any of this or further statistical analysis to be meaningful, the supply and demand of each commodity and its price will have to be investigated.

<sup>36</sup>Storch, Supplementband, Table 10. B.

<sup>37</sup>G.A.A., A. B. D. M. 31, Letters of 17 and 24 May 1738 by M. de Swart from St. Petersburg to the Burgomasters of Amsterdam. Swart was the Secretary to the Dutch Resident at the Russian Court since 1720. In a letter written 3 April 1756 he asked to be allowed to return home. Swart served in Russia for such a long time that although a secretary, he was called "Minister Swart" or "Envoyé Extraordinaire et Ministre Plénipotentiaire" at the Russian Court.

<sup>38</sup>G.A.A., A. B. D. M. 31, Copy of an order of Empress Elizabeth regarding timber exports 9 July 1754 O.S.

<sup>39</sup>On the role played by iron as cargo and ballast, see M. K. G. Hildebrand, "Exportation du fer et navigation en Baltique, un problème de l'histoire économique de la Suède et de la Russie au XVIII<sup>e</sup> siècle," Le Navire et l'Economie Maritime du XV<sup>e</sup> au XVIII<sup>e</sup> siècles, 3 (1960) 117-118.

<sup>40</sup>G.A.A., A. B. D. M. 31, Letter of 3 July 1716 by De Bie, St. Petersburg to the Burgomasters of Amsterdam. De Bie wrote that more than 300 vessels had recently arrived at St. Petersburg via the Ladoga Sea. They carried all sorts of provisions for the city and about 60,000 puds of hemp and flax.

<sup>41</sup>Algarotti, p. 68. In a letter sent to London from St. Petersburg on 25 June 1739 O.S., the English merchant Harvey wrote: "One sees very few Dutch in St. Petersburg as they carry most of their trade at Narva and Riga."

(Footnotes - Chap. III)

<sup>42</sup>This freight price was quoted in St. Petersburg in August 1759 (G.A.A., PA88/1327). Letter of 5 August 1759 by Pieter Gottlieb Keyser, St. Petersburg, to J.I. de Neufville, Amsterdam.

<sup>43</sup>This lower freight price was quoted in St. Petersburg in September 1760 (G.A.A., PA88/1327). Letter 26 September 1760 by Van Brouwe and Brugge to J.I. de Neufville. In another letter written by Jan Bartels on 30 August 1760 mention was made of a very depressed freight market. Ships were leaving St. Petersburg in ballast to seek cargo elsewhere.

<sup>44</sup>This view is shared by Soviet historians. Professor V.V. Doroshenko of Riga made this observation in a review of a paper presented by the author to the C.H.A. in Edmonton, 6 June 1975. (Kratkii otryv na dissertatsiiu Dzh. Knoppersa "Kvantitativnoe issledovanie gollandskogo sudokhodstva iz Rossii v XVIII veke," predstavlenulu Kanadskoi Istoricheskoi Assotsiatsii v Edmontone 7. 06. 1975, Riga, 20 May, 1975.)

<sup>45</sup>For example, Storch who presented a table on the four most important ports of Russia listed St. Petersburg, Riga, Archangel and Reval. (Supplementband, Table VII.A.) One of the few books on the history of Narva was written in 1853 by H.J. Hansen, Geschichten der Stadt Narva, Dorpat, 1853.

<sup>46</sup>The most common unit was a shock of 60 pieces.

<sup>47</sup>R.G. Albion, Forests and Seapower; the Timber Problem of the Royal Navy (Harvard Economic Studies, 29), Cambridge, 1926, especially Chapter 4; R.W. Bamford, Forests and French Seapower 1660-1789, Toronto, 1956. On Baltic timber trade, see also Gideonse, pp. 112 ff.

<sup>48</sup>Figures on timber exports through the Sound were taken from Unger, "Publikatie voltooid," Appendices XI - XIII.

<sup>49</sup>S.C. van Kampen, De Rotterdamse Particuliere Scheepsbouw in de tijd van de Republiek, published Ph.D. dissertation, University of Rotterdam, 1953, pp. 138-139.

<sup>50</sup>J.S. Bartstra, Vloetherstel en Legeraugmentatie 1770-1780, published Ph.D. dissertation, University of Leiden, 1952, pp. 223-224.

<sup>51</sup>Aström, From Stockholm, p. 24.



(Footnotes - Chap. III)

<sup>52</sup>G.A.A., A.B.D.M. 31, Copy of Orders of the Russian Senate in the name of Empress Elizabeth, St. Petersburg, 7 March 1756 O.S. All export of timber was forbidden, but the 113,462 beams already contracted for and the 38,401 trees which still had to be cut were allowed to be exported. In 1754 there were already strong rumours that the timber trade from Narva would be stopped as well as that from Pernau, Riga, Viborg and Frederikshamn. (G.A.A., A.B.D.M. 31, Letter of 25 February 1755 by Swart from St. Petersburg to the Burgomasters of Amsterdam.)

The number of ships was taken from Table II.1. Since four of the ships listed in the GGR as arriving in 1756 were listed during the months of January through April, we must assume that they left Narva the previous year, raising the total for 1755 to 90 and reducing that for 1756 to 1.

<sup>53</sup>Ibid. Letter of 16 January 1761 by D. Meinertshagen (the Dutch Resident at the Russian Court) to the Burgomasters of Amsterdam. The exports of timber from Narva were to be restricted to sixty shiploads but no restrictions were placed on the size of the ship or the number of pieces.

<sup>54</sup>Ibid. Letter of 27 March 1756 by Swart from St. Petersburg to the Burgomasters of Amsterdam. Swart wrote that:

"... there can be no doubt about the fact that the forests of the Neva have been denuded due to large exploitation and lack of management has had a great influence on the ban and even if there was no ban trade would be limited because of the devastation of the forests." (In free translation. )

<sup>55</sup>Storch, Supplementband, p. 40 and Table X.E.1.

<sup>56</sup>Ibid., Table X.E.1.

<sup>57</sup>G.A.A., N.A. 10858/521, 24 May 1771.

<sup>58</sup>For example, see G.A.A., N.A. 10893/201, 12 April 1779 and N.A. 15773/1322, 27 July 1784.

<sup>59</sup>For various aspects of the history of Riga and its economic development prior to the eighteenth century, see V.V. Doroshenko, "Export Rygi na zachod w okresie przynaloznosci do Rzeczypospolitej (1562-1620)," Zapiski Historyczne, 31(1966)7-44; E. Dunsdorfs, "Riga Grain Trade in the Seventeenth Century," Baltic and Scandinavian Countries, 3(1937)5:26-35; G. Jensch, Der Handel Rigas im 17 Jahrhundert. Ein Beitrag zur

(Footnotes - Chap. III)

livländischen Wirtschaftsgeschichte in swedischen Zeit, Riga, 1913;  
E. Dunsdorfs, Der Aussenhandel Rigas im 17. Jahrhundert, Riga, 1938;  
A. Soom, Der Handel Revels im 17. Jahrhundert, Wiesbaden, 1969;  
and M.J. Zoutis, "Riga dans la commerce maritime en Baltique aux  
XVII<sup>e</sup> siècle," La Navire et L'Economie Maritime du Nord de l'Europe  
du Moyen Age aux XVIII<sup>e</sup> siècle, 3(1960)81-92.

<sup>60</sup>Dunsdorf, Aussenhandel, p. 457; V.V. Doroshenko, "Tseni," p. 73.

<sup>61</sup>For a definition of Riga's 'official' hinterland and that of the other Russian Baltic ports, c. 1724-1735, see G.A.A., PA78/27, which contains a translation in Dutch of the Ukas of 20 September 1735 O.S. A later description can be found in a letter of Swart of 1 April 1768 which contains a printed copy in Dutch of "Handelsverordering der Stadt Riga, December 1765" (G.A.A., A.B.D.M. 31). These new trade and tariff regulations had been drawn up by the Russian Senate at the command of Catherine II. See also Udo Handrach, Der Handel der Stadt Riga im 18. Jahrhundert, published Ph.D. dissertation, Landesuniversität, Jena, 1913.

<sup>62</sup>For example, in a letter of 20 January 1787 sent by Frantz and Krüger from Riga to Quinrijn Brantsz and Sons in Amsterdam (G.A.A., PA88/505), there was enclosed a list of goods exported from Riga in 1786 of which the main commodities were:

hemp	52,296 shpd.	wheat	546 lasts
flax	69,042 shpd.	rye	6,575 lasts
hemp and flax seeds		peas	2,307 lasts
	139,088 barrels		

In other words, Riga exported about 20,000 lasts of flax and hemp plus half that amount in seeds versus a little over 7,000 lasts of grains. (A last of hemp was about twice as expensive as a last of rye.)

<sup>63</sup>Handrach, pp. 29 ff.

<sup>64</sup>See footnote 61 above.

<sup>65</sup>Handrach, p. 31.

<sup>66</sup>G.A.A., A.B. 4, Missiven van Riga, 17 October 1774.

<sup>67</sup>Reading, pp. 306 ff.

<sup>68</sup>See footnote 32 above.

(Footnotes - Chap. III)

<sup>69</sup>G.A.A., PA78/396; PA78/416 Letter of 20 August 1731 by Swart, St. Petersburg, to the Burgomasters of Amsterdam.

<sup>70</sup>See footnote 32 above.

<sup>71</sup>R.A.G., Archief Staten Generaal 8734, No. 38 Bijlage; J. Rousset, Supplement au Corps Universel diplomatique du droit des gens contenant un recueil des traitez, Amsterdam, 1732, vol. 2, pp. 536 ff.

<sup>72</sup>Rigasche Stadtsblatter, 1811, p. 171, as quoted in Jensch, p. 103, footnote 3.

<sup>73</sup>G.A.A., PA88/1288, Heinrich Meyer Jacobsz, Riga to J.I. de Neufville, Amsterdam, on 2/13 October 1743.

<sup>74</sup>R.A.G., Archief Adm., Verzameling Bisdrom 241, fols. 81-83.

<sup>75</sup>The number of captains from Schleswig-Holstein on ships sailing from Riga to England/Scotland totalled 27 in 1747, 29 in 1748, 48 in 1749, 57 in 1750 and 52 in 1751.

<sup>76</sup>Jensch, p. 88, footnote 1. In 1688 the Riga town council wrote that the number of English ships to Riga was increasing but these ships were very small and badly built so that one Dutch ship equalled three or four English ships and almost all the English ships arrived in ballast. No doubt the situation improved for the English during the eighteenth century.

<sup>77</sup>Storch, Supplementband, Table VII.A.

<sup>78</sup>Ibid., Table VII.B. Out of the average 2,324 ships which visited Russia's Baltic ports annually from 1793 to 1797, 826 or 35.5% went to Riga. From 1761 to 1763 the percentage had been 53.8% or 319 out of an annual average of 593 ships.

<sup>79</sup>G.A.A., PA88/1288, Wilhelm Grote, Riga, to J.I. de Neufville, Amsterdam, on 23 February 1755.

<sup>80</sup>Ibid., 25 March, 1755.

<sup>81</sup>G.A.A., PA88/505, Blankenhagen & Comp., Riga, to Quinriijn Brantsz & Zoon, Amsterdam, on 5 May 1780.

(Footnotes - Chap. III)

<sup>82</sup>Ibid., 8 May 1784.

<sup>83</sup>Ibid., 21 May 1785.

<sup>84</sup>Ibid., 24 April 1787.

<sup>85</sup>S.-E. Aström, "Holländischer Holzhandel am Finnischen Meerbusen um 1700," paper presented at the Sixth International Congress on Economic History, Copenhagen, 1974, Table 1.

<sup>86</sup>See footnote 32 above.

<sup>87</sup>G.A.A., PA6/80, Letter of 25 February 1741 by Swart, St. Petersburg, to the Grand Pensionary, 's Gravenhage.

<sup>88</sup>S.-E. Aström, "English Timber Imports from Northern Europe in the Eighteenth Century," Sc. Ec. H. R., 18(1970)1:23-26.

<sup>89</sup>Aulis J. Alanen, Der Aussenhandel und die Schiffahrt Finnlands im 18. Jahrhundert (Annales Academiae Scientiarum Fennicae, Ser. B, Nr. 103), Helsinki, 1957, p. 109. Despite its title this work covers only the trade of the Swedish part of Finland.

<sup>90</sup>H.K. von Boerries, Die Handels- und Schifffahrtsbeziehungen zwischen Lübeck und Finland, Jena, 1923, pp. 93-95.

<sup>91</sup>Aström, "English Timber," Appendix A.

<sup>92</sup>Boerries, p. 100.

<sup>93</sup>"Handel der Stadt Wyburg," Büsching's Magazine, 9(1775)229-252.

<sup>94</sup>Storch, Supplementband, pp. 29-30.

<sup>95</sup>Hermann, p. 434.

<sup>96</sup>See Appendix A for a definition of the term "Estonia" as it has been used in this study in connection with the data derived from the GGR and STA.

(Footnotes - Chap. III)

<sup>97</sup>V.V. Doroshenko, J. Kahk, H. Ligi et al., Trade and Agrarian Development in the Baltic Provinces 15th-19th Centuries, Tallinn, 1974, preprint, pp. 1-11; G. Mickwitz, Aus Revaler Handelsbüchern. Zur Technik des Ostseehandels in der ersten Hälfte des 16. Jahrhunderts (Societas Scientiarum Fennica. Commentationes Humarum Litterarum Ser. IX, 8), Helsingfors, 1938, Tables I-IV.

<sup>98</sup>Soom, Der Handel Revals, p. 27.

<sup>99</sup>See footnote 32 above.

<sup>100</sup>A.R.A. Archief stadhouderlijke Secretariat No. 110, Letter of 6 May 1766 by Swart, St. Petersburg, to the Grand Pensionary, 's Gravenhage.

<sup>101</sup>Storch, vol. VI, p. 353.

<sup>102</sup>Posthumus, Prijsgeschiedenis, pp. 2-3 and 8. The average price of wheat stood at f.131 in 1739. In 1740 it rose to f.308 declining to f.240 in 1741 and reaching a more normal price of f.145 in 1742. Similarly rye which stood at f.95 in 1739 went up to f.227 1/2 by December of 1740 and dropped to an average of f.175 in 1741. By 1743 the price of rye stood again at f.91 per last.

<sup>103</sup>Idem. The following average yearly prices for wheat were quoted in Amsterdam from 1765 to 1777:

1765- f.170	1770- f.171	1775- f.233
1766- f.194	1771- f.218	1776- f.196
1767- f.203	1772- f.241	1777- f.169
1768- f.238	1773- f.232	
1769- f.198	1774- f.221	

<sup>104</sup>Storch, Supplementband, Table VII.A and B.

<sup>105</sup>Aström, "English Timber," p. 27.

<sup>106</sup>Roland Seeberg-Elverfeldt, Revaler Regesten. Beziehungen Niederländischer und Scandinavischer Städte zu Reval in den Jahren 1500-1795 (Veröffentlichungen der Niedersächsischen Archivverwaltung, 26), Göttingen, 1966, Act No. 260, p. 119.

<sup>107</sup>J. Kulischer, Russische Wirtschaftsgeschichte, Jena, 1925, p. 321; see also Arne Öhberg, "Russia and the World Market in the 17th Century: a discussion of the connection between prices and trade routes," Sc. Ec. H. R., 3(1955):123-162.

(Footnotes - Chap. III)

<sup>108</sup>Hart, "Amsterdam Shipping," pp. 26-27; Kellenbenz, "Economic Significance," pp. 551-552; Lubimenko, "Struggle of the Dutch," pp. 49-51.

<sup>109</sup>On the gosti see Erik Amburger, "Zur Geschichte des Grosshandels in Russland: die gosti," Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte, 46(1959), 248-261.

<sup>110</sup>Gargon, "Historisch beright," passim. The names of places are of those visited by the Dutch protestant minister to celebrate communion, baptize children and perform marriage ceremonies. Most of these places, especially Vologda and Moscow were frequently mentioned in the commercial correspondence.

<sup>111</sup>P. J. Marperger, Moscowitischer Kaufman, Lubeck, 1723, p. 217; Royal Library, Copenhagen, Mémoire touchant le Negoce et la Navigation de Hollandois, Amsterdam, 1699; Kellenbenz, "Economic Significance," pp. 568, 571, 577 and 578. Descriptions of the products imported and exported via Archangel can also be found in Jean Pierre Ricard, Le Négoce d'Amsterdam, 3rd ed., Amsterdam, 1723, pp. 428-432 and in Isaac le Long, De Koophandel van Amsterdam, 3rd ed., vol. I, Amsterdam, 1719, pp. 181-205, 6th ed., Vol. II, Amsterdam, 1744, pp. 181-220, the 8th ed., Vol. II, Amsterdam, 1763, pp. 191-220 and the 9th ed. Vol. II, Amsterdam, 1780, pp. 357-437. Each edition also gives a short summary of Dutch trade with Archangel up to the date of the edition. A definition of Archangel's "official" hinterland can be found in the Ukas of 20 September, 1735 O.S., a Dutch translation of which was located in G.A.A., PA78/24.

<sup>112</sup>Documents on this trade can be found in Jan Kupp, Collection of Dutch Documents Relating to the North-American Fur Trade and Cod Fisheries, vols. 7-15, Public Archives of Canada, Ottawa.

<sup>113</sup>William Tooke, Views of the Russian Empire during the Reign of Catherine the Second and to the Close of the Present Century, London, 1799, p. 567; William Coxe, Travels into Poland, Russia, Sweden and Denmark, London, 1785, p. 235; Alfred W. Crossby Jr., America, Russia, Hemp and Napoleon. American Trade with Russia and the Baltic, 1783-1812, Ohio State University Press, 1965, p. 6. For the Russian fur trade see R.H. Fisher, The Russian Fur Trade, 1550-1700, Berkeley, 1943 and E.G. Rich, "Russia and the Colonial Fur Trade," Ec.H.R., 2nd ser., 7(1954)3:307-328.

<sup>114</sup>Storch, Supplementband, Table VII.A, p. 27.

<sup>115</sup>G.A.A., PA88/984. Letter of 31 December 1713 from Hendrick Swellengrebel, Archangel, to David Leeuw, Amsterdam.

(Footnotes - Chap. III)

116 Ibid. Letter of 19 November 1713.

117 G.A.A., PA78/397. Letter of 7 February 1714 by Prince Kurakin to the States General.

118 G.A.A., A.B.D.M. 31, Letter of 3 March 1718 by de Bie to the Burgomasters of Amsterdam; Scherer, Histoire, vol. I, p. 149.

119 G.A.A., PA6/73 and PA78/40. Copies of the ukas to this effect issued at St. Petersburg 9/20 January 1727; Amsterdamse Courant, 8 March 1727, contains a printed letter of Prince Golofkin explaining the ukas. Storch, vol. IV, p. 177.

120 Scherer, Histoire, vol. I, p. 172.

121 Hart, "Amsterdam Shipping," p. 10.

122 L.H. van Eeghen, Onze handel op Archangel in het begin der 18e eeuw (Scriptie 106, Economisch-Historisch Institute), unpub. typed MS., University of Amsterdam, 1936, passim; Scheltema, Rusland, vol. I, pp. 284-286. For the economic relations between the Archangel iarmarka and the rest of Russia at the beginning of the eighteenth century, consult P.I. Kozintseva, "Vneshnetorgovii oborot Archangelogorodskoi iarmarki i ee rol v razvitii vserossiiskogo rynka," Issledovaniia po istorii feodalno-krepostnicheskoi Rossii (Akademiia Nauk SSSR), Moscow, 1964, pp. 116-162.

123 Eeghen, Onze Handel, pp. 10 ff.

124 G.A.A., PA/988. Letter of 12 March 1719 by Tobias Puytelingh, Archangel, to David Leeuw, Amsterdam; PA6/66, Letter of 29 April/10 May 1715 by the Dutch merchants in Moscow to the D.M.H.

125 G.A.A., PA88/989. Letter of 10 April 1712 by Jan Leeuw, Amsterdam, to Tobias Puytelingh, Archangel.

126 Ibid. Letters of 9 January and 6 May 1718 by Tobias Puytelingh, Archangel, to David Leeuw, Amsterdam. For a discussion of international payment mechanisms and the settlement of the English trade balances with the Baltic and Russia, see the articles by Jacob M. Price ("Multilateralism and/or Bilateralism: the Settlement of British Trade Balances with 'the North,' c. 1700," Ec.H.R., 2nd ser., 14(1961)2:254-274) and by J. Sperling ("The International Payments Mechanism in the Seventeenth and Eighteenth Centuries," Ec.H.R., 2nd ser., 14(1962)3:446-468).

(Footnotes - Chap. III)

127 G.A.A., PA6/66, 1715.

128 A.R.A., Archief Staten Generaal 8734, Bijlage 27, "Representatie der uitheemsche Kooplieden te Archangel aan de Hooge aangestelde Commissie over de Commercie," Archangel [?] May 1713.

129 Storch, Supplementband, Table VII.A and B, pp. 25-27.

130 Marperger, p. 217. See also Oddy, European Commerce, pp. 94-95.

131 Marbeault, A., Essai sur le commerce de Russie avec l'histoire de ses découvertes, Amsterdam, 1777, p. 133.

132 Peter von Haven, "Nachrichten von dem russischen Reich," Büsching's Magazine, 10(1776)308-313.

133 H. E. Ronomois, Russia's Foreign Trade and the Baltic Sea, London, 1946, pp. 11-14 and Table 2.

134 G.A.A., A.B.D.M. 31, Letters of 25 February 1755 and 27 March 1756 by Swart, St. Petersburg, to the Burgomasters of Amsterdam.

135 G.A.A., PA78/9, fol. 24, 4 May 1756.

136 Kellenbenz, "Economic Significance," p. 573. There are some indications that Archangel may even have had certain trade advantages over St. Petersburg as early as 1731. A copy of the Tarif portoboi 1731 goda enclosed in a letter sent by the Dutch resident, Daniel de Dieu from Moscow (G.A.A., A.B.D.M. 31, 20 August 1731) to the Burgomasters of Amsterdam has as Appendix B a list of the tolls paid on the export of masts at both Archangel and St. Petersburg. Surprisingly, the tolls at Archangel were about one-third less than those at St. Petersburg. Similarly, in a letter sent by Swart to the Burgomasters, there was enclosed a list of calculations of the export duties on various grains from Riga, Arensburg, Hapsal, Reval and Archangel. The actual tariffs at Archangel were about two-thirds of those paid at Riga. (G.A.A., A.B.D.M. 31, 30 October, 1731).

137 G.A.A., PA6/88. Letter of 23 February 1740 by Swart, St. Petersburg, to the D.M.H.

138 Alanen, Aussenhandel, pp. 409 ff.; Posthumous, Prijsgeschiedenis, vol. I, Tables for tar, rye and wheat.



(Footnotes - Chap. III)

<sup>139</sup> Mémoire Touchant, pp. 4-6; Koopman, vol. IV, 1773, p. 271.

<sup>140</sup> Hart, "Amsterdam Shipping," pp. 6-12.

## CHAPTER IV

### SHIPPING AND TRADE IN THE BALTIC-EUROPEAN CONTEXT

Shipping from Russia's Baltic ports tripled between the 1720's and the 1770's.<sup>1</sup> While this rate of growth of shipping from Russia was greater than that for shipping from the entire Baltic, Russia's share of Baltic shipping increased only marginally. During the same period the number of ships that sailed from the Baltic to Holland also increased by 30%. But this branch of shipping grew at a much slower rate than that of the whole Baltic with the result that Holland's share in shipping from the Baltic declined from about one-half to less than one-quarter. The Sound Toll data illustrate these developments.<sup>2</sup>

Shipping through the Sound from the Baltic and Russia to  
Holland and to Amsterdam.  
(average annual number of ships)

<u>Years</u>	<u>From the Baltic</u>	<u>From Russia</u>	<u>To Holland</u>	<u>To Amsterdam acc. to the GGR</u>	
1710-1719	816	-	416(50.9%)*		
1720-1729	1,782	404(22.7%)*	860(48.3%)	698(48.3%)*	(81.1%)**
1730-1739	2,146	668(31.1%)	1,015(47.3%)	777(36.2%)	(76.5%)
1740-1749	2,129	672(31.6%)	912(43.3%)	730(34.3%)	(79.2%)
1750-1759	2,637	766(29.0%)	960(36.4%)	692(26.2%)	(72.1%)
1760-1769	3,104	831(26.8%)	980(31.6%)	726(23.4%)	(74.1%)
1770-1779	4,008	1,237(30.9%)	1,122(24.1%)	765(19.1%)	(68.2%)
1780-1783	4,624	1,115(24.1%)	981(21.2%)	611(13.2%)	(62.3%)
1784-1785	-	-	1,127	591	(52.4%)
1794-1797	10,074	-	-	734( 7.3%)	
1803-1807	9,425	-	-	708( 7.5%)	

\* Percentage of ships from the Baltic.

\*\* Percentage of ships to Holland adjusted for missing or incomplete data for 1775 and 1795.

The number of ships from the Baltic both to Amsterdam and other ports of Holland remained relatively the same during the eighteenth century despite yearly fluctuations. Yet, at the same time, according to the GGR, Amsterdam's share of shipping to Holland decreased from 81.1% in the 1720's to 52.4% for 1784 and 1785. Since the GGR pertain to ships that were Dutch owned/controlled, this percentage decrease does not necessarily mean that fewer ships from the Baltic visited Amsterdam. It could mean simply that more of the ships that sailed from the Baltic to Amsterdam were foreign owned/controlled.

On the other hand, the Zee tijdingen show that an increasing number of vessels sailed from Russian ports to Rotterdam during the last quarter of the eighteenth and first quarter of the nineteenth centuries. Compared with shipping from Russia to Amsterdam, Rotterdam played an increasingly greater role.<sup>3</sup> As a matter of fact, it seems that following the Napoleonic Wars, Rotterdam became the primary port for shipping from Russia to Holland.

Shipping from Russian ports to Amsterdam and Rotterdam  
(average annual number of ships)

Years	Total number of ships from these two ports	To Amsterdam according to the GGR	To Rotterdam according to the Zee tijdingen
1778-1779	305	245(80.3%)*	60(19.7%)* ( 24.5%)**
1780-1789	267	220(82.4%)	47(17.6%) ( 21.3%)
1790-1799	255	147(57.6%)	108(42.4%) ( 73.4%)
1800-1807	421	300(71.3%)	121(28.7%) ( 40.3%)
1815-1822	409	186(45.5%)	223(54.5%) (119.9%)

\* Percentage of total number of ships from both ports.

\*\* Percentage Rotterdam is of Amsterdam.

Whether the same assumption applies to shipping from the whole Baltic region remains to be seen. There can be no doubt, however, that Amsterdam's portion of Dutch trade with the Baltic and Russia declined quite noticeably by the end of the eighteenth century. During the years 1724 and 1725 Amsterdam accounted for 96.7% of all the ships that sailed from the Baltic to Holland. By 1784/1785 this percentage had dropped to 67.3%.<sup>4</sup> The rapid decline of shipping from Russia to Amsterdam during the period of the French Revolution as reflected in the GGR was no longer as representative of commerce between Russia and Holland as it was at the beginning of the eighteenth century. For if one adds the number of ships that arrived at Rotterdam from Russia to those that went to Amsterdam for the years 1815 to 1822, the annual average number of ships is 409 which compares quite favourably with the peak period of the 1730's when an average of 407 ships sailed each year from Russia to Holland according to the Sound Toll data. Certainly the role of Rotterdam in Russian and Baltic shipping warrants further investigation.

An insight into the relative importance of shipping from the Baltic and Russia to Amsterdam can be gained by comparing two sets of figures. On the one hand, there are figures on the total turnover of shipping at Amsterdam for the years 1662 to 1747 and 1778 to 1805 provided by Dutch historians on the basis of various sources, and, on the other hand, there are those found in the Sound Toll Accounts and the Galjootsgeldregisters.<sup>5</sup>

Shipping through the Sound to Holland compared with ship arrivals at Amsterdam  
(average annual number of ships)

<u>Years</u>	<u>Ship arrivals at Amsterdam</u>	<u>Baltic shipping to Holland</u>	<u>Shipping from the Baltic to Amsterdam acc. to the GGR</u>
1670-1679	2,470	549(22.1%)	-
1680-1689	3,070	916(29.8%)	-
1690-1699	3,371	644(19.0%)	-
1700-1709	3,119	393(12.6%)	-
1710-1719	2,898	416(14.4%)	-
1720-1729	2,126	860(40.5%)	698(32.8%)
1730-1739	2,672	1,015(38.0%)	777(29.1%)
1740-1747	2,290	939(40.9%)	738(32.2%)
1778-1783	2,331	1,032(44.3%)	607(26.0%)
1780-1789	2,407	-	567(23.6%)
1790-1799	2,461	-	583(23.7%)
1801-1805	2,760	-	378(13.7%)

Shipping through the Sound from Russian ports compared with ship arrivals at Amsterdam.  
(average annual number of ships)

<u>Years</u>	<u>Ship arrivals at Amsterdam</u>	<u>Shipping from Russia to Holland</u>	<u>Shipping from Russia to Amsterdam according to the GGR<sup>6</sup></u>
1720-1729	2,126	252(11.9%)	217(10.0%)
1730-1739	2,672	407(15.2%)	322(12.1%)
1740-1747	2,290	435(19.0%)	250(10.9%)
1778-1783	2,331	305(13.1%)	207( 8.9%)
1780-1789	2,407	-	206( 8.6%)
1790-1799	2,461	-	167( 6.8%)
1801-1805	2,760	-	150( 5.4%)

The two tables above assume that all vessels sailing from the Baltic and Russia to Holland went to Amsterdam. This assumption can be considered valid within a small margin of error for the end of the seventeenth and the beginning of the eighteenth centuries, but the situation changed during the second half of the eighteenth century. According to our com-

parison of the STA and GGR for 1724 and 1725, Amsterdam was the port of destination for 96.7% of all the ships that sailed from the Baltic to Holland and 97.8% for those that sailed from Russia. Sixty years later, in the years 1784 and 1785, these percentages dropped to 67.3% and 67.6% respectively.<sup>7</sup> If we reduce the average yearly figures for the years 1778 to 1783 in the two preceding tables accordingly, shipping from the Baltic to Amsterdam would account for just 29.8% of the annual shipping turnover at Amsterdam. Similarly, the ships which arrived at Amsterdam from Russia would have accounted for only 8.8% instead of 13.1%.<sup>8</sup> Seen in this light and also on the basis of the GGR figures there can be no doubt that shipping from the Baltic and from Russia to Amsterdam declined in importance, especially during the last quarter of the eighteenth century. Since the GGR have been shown to understate the total volume of this shipping and, on the other hand, the STA data available at present overstates the role of shipping to Amsterdam since not all ships that were destined for Holland went to Amsterdam, it is possible to look at the STA figures as representing the upper limits and the GGR as giving the lower limits of the importance of Baltic and Russian shipping to Amsterdam. If the ships that sailed from Archangel, Viborg and Frederikshamn are added to those which sailed to Amsterdam from Russia's other Baltic ports, the total number of ships from Russia and the percentages these represent of all ship arrivals at Amsterdam would be:

1720-1729	333( 9.5%)
1730-1739	383(14.3%)
1740-1747	370(18.2%)
1778-1779	283(10.8%)
1780-1789	249(10.3%)
1790-1794	251( 9.6%)

Thus for shipping from all the Russian ports to Amsterdam, the peak period, both absolutely and relatively, was from the 1730's to the 1740's. Shipping from the Baltic as a whole, however, followed a different pattern. From the time of the Nine Years' War through the Northern War shipping from the Baltic accounted for less than one-fifth of shipping to Amsterdam. During the following three decades this doubled to two-fifths. At the end of the 1770's vessels arriving at Amsterdam from the Baltic represented about 29.3% of all ships calling at this port. And if the GGR is used as a basis for measuring subsequent developments during the beginning of the nineteenth century, shipping from the Baltic accounted for no more than one-seventh to one-sixth of the total shipping turnover at Amsterdam, while Russia's share in this lay somewhere between one-eighteenth to one-fifteenth.

TABLE 1.31 INDEX OF SHIPPING FROM RUSSIAN (BAL TIC PORTS) TO AMSTERDAM, 1715-1825.

( 1724-1725/2=100 )  
 FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	39	46	34	38
172-	58	60	67	55	81	119	116	91	105	82
173-	127	135	125	119	137	106	104	116	153	124
174-	152	150	125	129	107	99	87	91	85	97
175-	95	82	93	92	90	72	56	58	67	83
176-	74	83	83	86	89	79	99	69	90	106
177-	79	63	110	100	112	-	81	88	94	80
178-	81	37	80	95	92	81	74	82	75	86
179-	93	-	79	67	84	-	92	65	48	3
180-	22	20	86	67	32	69	24	11	-	-
181-	-	-	-	-	-	55	77	205	34	44
182-	46	46	22	-	31	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED

SOURCE: TABLE 11.4

According to the index figures on shipping from Russia's Baltic ports to Amsterdam, there were only five occasions after 1744 when this shipping equalled or surpassed the index level of 1724/1725 (Table I.31). Both Table II.1 and Graphs II.1 and II.4 as well as the above index indicate clearly that from 1730 to 1744, shipping from Russia to Amsterdam reached a level which was never again achieved during the remainder of the eighteenth and first quarter of the nineteenth centuries. Seen as a percentage of Baltic shipping to Amsterdam Russia's peak period was also the 1730's and 1740's with one addition, namely, the decade of the 1780's. From the last decade of the eighteenth century onwards Russia's share of shipping from the Baltic was lower than that of the preceding years.

Shipping from the Baltic and Russia to Amsterdam according to the Galjootsgeldregisters.

(average number of ships per year. Index = 1724 + 1725 / 2.)

Years	From the Baltic	Index	From Russia	Index
1720-1729	698	92	235(33.7%)	84
1730-1739	777	102	350(45.1%)	125
1740-1749	730	96	315(43.1%)	112
1750-1759	692	91	224(32.4%)	86
1760-1769	726	96	241(33.2%)	86
1770-1779	765	101	252(32.9%)	90
1780-1789	587	77	269(45.8%)	95
1790-1799	620	82	183(29.5%)	65
1800-1807	536	71	117(21.8%)	42
1815-1824	634	83	171(27.0%)	61

In terms of the overall development of shipping from Russia to Western Europe and Holland by captains having a Dutch homeport, several observations can be made on the data derived from the Sound Toll Accounts. First of all, the number of all ships which sailed from Russia, including those under the command of Dutch captains, increased, but the number of Dutch captains who went to Holland did not.



Shipping from Russia by captains having a Dutch homeport  
(average number of ships per year)

<u>Years</u>	<u>From Russia</u>	<u>From Russia with Dutch captains</u>	<u>From Russia to Holland with Dutch captains</u>	
1716-1719	148	91(61.5%)*	87(58.8%)*	(95.6%)**
1720-1729	404	245(60.6%)	241(59.7%)	(98.4%)
1730-1739	668	398(59.6%)	388(58.1%)	(97.5%)
1740-1749	672	359(53.4%)	330(49.1%)	(91.9%)
1750-1759	766	333(43.5%)	267(34.9%)	(80.1%)
1760-1769	831	361(43.4%)	283(34.1%)	(78.4%)
1770-1779	1,237	457(36.9%)	338(27.3%)	(74.0%)
1780-1783	1,115	117(10.5%)	95( 8.5%)	(81.2%)

\* Percentage of ships from Russia.

\*\* Percentage of ships from Russia with Dutch captains.

Secondly, the number of ships from Russia tripled between the 1720's and the 1770's but the number of ships under Dutch captains just doubled. Thus, Dutch captains accounted for a smaller though still major share of all shipping from Russia through the Sound. And thirdly, an increasing number of Dutch captains sailed from Russia but by-passed Holland as a port of destination. During the 1770's over one-quarter of the Dutch captains did so. Finally, with the advent of the Fourth Anglo-Dutch War, the majority of Dutch captains were forced to seek refuge under a neutral flag, a procedure which was repeated during the French Revolutionary Wars. Consequently, the homeport of the captain can no longer be used as an indicator of the maritime commercial strength of a nation or port.<sup>9</sup>

TABLE I. 32 INDEX OF TONNAGE OF SHIPPING FROM RUSSIAN  
(BAL TIC PORTS) TO AMSTERDAM, 1715-1825.  
( 1724+1725/2=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	31	41	33	36
172-	61	63	73	56	80	120	111	87	97	82
173-	124	133	137	133	146	117	110	124	164	129
174-	137	136	123	147	104	112	92	90	87	103
175-	104	95	97	98	103	80	52	55	68	93
176-	78	82	85	87	99	91	111	71	94	112
177-	89	57	101	97	111	-	90	98	95	83
178-	87	22	56	91	94	94	95	97	88	101
179-	100	-	96	46	89	-	54	52	26	2
180-	15	12	72	40	17	38	14	4	-	-
181-	-	-	-	-	-	32	50	167	34	36
182-	42	38	22	-	27	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE 11.4

The index of tonnage of shipping from Russia to Amsterdam exhibits a similar pattern (Table I. 32). Due to a change in 1764 of the amount of galjootsgeld levied on the lasts of cargo by the D.O.H., it was possible to find information for the years 1764 to 1825 on the total tonnage of cargo carried as well as the total tonnage of shipping from the Baltic (Table IV.14).

Total tonnage of shipping from the Baltic and Russia to Amsterdam.

(average number of tons per year. Index = 1724 + 1725 / 2.)

Years	From the Baltic	Index	From Russia	Index
1724-1725	127,477	100	59,525(46.7%)	100
1764-1769	114,093	90	57,273(44.9%)	96
1770-1779	104,403	82	48,785(38.3%)	82
1780-1789	89,984	71	49,079(38.5%)	82
1790-1799	59,897	47	34,549(27.1%)	58
1800-1807	43,677	34	15,732(12.3%)	26
1815-1824	70,270	55	28,667(22.5%)	48

The tonnage of shipping from the Baltic and from Russia saw an absolute decline in the second half of the eighteenth century. Relatively, Russia's

share of Baltic shipping tonnage declined even more. During the first years of the nineteenth century shipping tonnage from Russia's Baltic ports represented just one-eighth of the tonnage from all the Baltic ports and, although this portion increased to almost one-quarter during the post-Napoleonic period, it was still much smaller than what it had been during the eighteenth century. The index level of 1724/1725 was not attained during any decade between 1764 and 1825 by either the shipping tonnage from the entire Baltic or just from Russia. Instead, there was an almost continuous decline.

TABLE I.33 INDEX OF TONNAGE OF CARGO CARRIED FROM RUSSIAN (BAL TIC PORTS) TO AMSTERDAM, 1715-1825. ( 1724+1725/2=100 ) FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	36	43	36	37
172-	63	64	75	58	81	119	117	93	103	91
173-	130	139	137	132	149	122	115	128	12	141
174-	7	153	123	142	106	111	100	93	87	102
175-	103	95	98	98	102	78	55	41	70	98
176-	86	94	103	97	104	97	117	83	107	127
177-	101	70	121	114	135	-	101	112	115	98
178-	107	32	72	107	114	104	99	102	99	114
179-	118	-	106	59	95	-	74	63	32	2
180-	22	17	107	63	25	57	21	7	-	-
181-	-	-	-	-	-	47	70	26	36	39
182-	44	42	22	-	26	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR MISSING HAVE BEEN OMITTED SOURCE: TABLE II.4

In terms of tonnage of cargo carried, the picture of Dutch trade with Russia was somewhat more positive. More often than not, the index figures of the tonnage of cargo carried were about 100 from the 1760's to the early 1790's (Table I. 33). The index figures went as high as 135 in

1774 compared with the index figure of 99 of the tonnage of shipping and 112 for the number of ships for the same year. Nevertheless, when presented on an aggregate basis for the years 1764 to 1824, a decline is also noticeable in the tonnage of cargo carried. Most striking is the fact that Russia's share of the total tonnage of cargo from the Baltic remained much higher than that indicated by either the number of ships or the total shipping tonnage. The reason for this can be found in the fact that the

Total tonnage of cargo carried from the Baltic and Russia  
to Amsterdam.

(average number of tons per year. Index = 1724 + 1725 / 2.)

<u>Years</u>	<u>From the Baltic</u>	<u>Index</u>	<u>From Russia</u>	<u>Index</u>
1724-1725	153,901	100	63,334(41.2%)	100
1764-1769	149,884	97	66,940(44.7%)	106
1770-1779	147,106	96	62,271(42.3%)	97
1780-1789	124,049	81	60,163(48.5%)	95
1790-1799	103,271	67	43,557(42.2%)	69
1800-1807	73,981	48	25,326(34.2%)	40
1815-1824	89,506	58	34,518(38.6%)	55

average size of both the cargoes and the ships from Russia was much larger than that from the Baltic as a whole. For the years 1724/1725, the average size of cargoes from the Baltic to Amsterdam was 202.50 tons while that from Russia was 225.39 tons, a difference of 22.89 tons or 11.3% (Tables II.4 and IV.4). However, in 1729, this difference rose to 79.04 tons or 46.5%, and from 1729 to 1824, for each fifth year, there was a marked difference between the average size of cargoes from the Baltic and that from Russia, the latter always being larger, going as high as 96.43 tons or 47.9% in 1789. And while this difference declined after the Napoleonic Wars as far as number of tons are concerned, it increased as a percentage because the average size of cargoes from Russia

was more than 50% greater than that from the Baltic as a whole:

TABLE I.34 INDEX OF AVERAGE SIZE OF CARGO IN TONS FROM  
RUSSIAN (BALTIC PORTS) TO AMSTERDAM, 1715-1825.  
( 1724-1725/2-100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	92	96	106	99
172-	109	110	112	105	99	100	100	102	98	111
173-	102	103	109	111	109	115	110	111	111	114
174-	108	102	98	111	98	112	115	102	102	105
175-	108	114	106	106	104	109	98	105	105	118
176-	117	113	123	112	117	123	118	120	119	119
177-	129	112	110	115	120	-	124	127	122	122
178-	133	88	89	113	124	128	133	124	132	133
179-	127	-	134	88	114	-	81	98	82	67
180-	98	86	124	93	80	83	87	64	-	-
181-	-	-	-	-	-	85	91	89	106	90
182-	96	93	100	-	85	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR  
MISSING HAVE BEEN OMITTED SOURCE: TABLE II.4

During the peak period of trade between Russia and Amsterdam in the 1730's and 1740's, the average size of the cargoes from Russia did not rise much above the index level (Table I.34). Only during the 1760's to 1792 do we find that the average cargo size was more than 20 points above the index level. Therefore, during the first half of the eighteenth century Russia's share of the Baltic cargo tonnage was brought about mainly by the number of ships, while in the second half the increased size of cargoes played a role in maintaining Russia's share of cargo movements from the Baltic to Amsterdam.

To a lesser degree, this statement is also true for the average size of the ship (Table I.35). The average size of the ship remained fairly constant until the time of the French occupation of Holland.

TABLE 1.35 INDEX OF AVERAGE SIZE OF SHIP IN TONS FROM  
RUSSIAN (BAL TIC PORTS) TO AMSTERDAM, 1715-1825.  
( 1724+1725/2=100 )  
FIGURES FOR EACH DECADE ARE ALONG A HORIZONTAL LINE

	0	1	2	3	4	5	6	7	8	9
171-	-	-	-	-	-	-	81	89	98	96
172-	105	105	109	101	99	101	95	95	92	99
173-	98	99	110	112	107	110	106	107	107	104
174-	90	90	98	114	96	113	106	100	102	106
175-	109	116	105	107	105	111	93	94	102	112
176-	106	99	102	101	111	115	112	103	105	106
177-	113	91	92	97	99	-	110	111	101	104
178-	108	59	69	95	102	116	128	118	117	117
179-	108	-	122	69	106	-	59	80	65	50
180-	68	58	63	60	53	54	58	39	-	-
181-	-	-	-	-	-	57	65	82	99	82
182-	91	84	99	-	86	-	-	-	-	-

YEARS FOR WHICH DATA IS INCOMPLETE OR  
MISSING HAVE BEEN OMITTED

SOURCE: TABLE 11.4

From 1796 and on the average size of the ships from Russia never again surpassed the index level of 1724/1725. Instead, the "overload" factor jumped from an average of 20% (cargo > ship) to 50.63% in 1795 and from 1800 to 1815 never once was below 50%. Thus, in terms of our three<sup>4</sup> GGR variables, namely the number of ships, the size of the ships and the size of the cargoes, the overall pattern of shipping from Russia to Amsterdam and its relation to shipping from the Baltic as a whole can be summed up as follows:

1. The 1730's and 1740's marked the high point of shipping from Russia.
2. The second half of the eighteenth century was a period of decline for shipping from both the Baltic and Russia to Amsterdam, the decline of shipping from Russia being greater.

IMPORTANT NOTICE

Sections of this thesis have already been published. This applies especially to several tables and graphs in Volume II. In addition a number of graphs employ the use of colour which if reproduced in black and white tones only will be difficult to interpret. Therefore, those interested in a copy or partial reproduction of the thesis are asked to contact the author c/o Department of History McGill University Montreal, Quebec

3. This decline in shipping from the Baltic and Russia, according to the GGR, was partly compensated by three trends. Firstly, an increasing number of ships sailed to Dutch ports other than Amsterdam, mainly to Rotterdam which, after the Napoleonic Wars, might have even surpassed Amsterdam as the primary port for Dutch trade with Russia.<sup>10</sup> Secondly, an unknown but growing number of foreign owned/controlled ships called at Amsterdam from the Baltic and Russia and, therefore, were not recorded in the GGR. And thirdly, the Sound Toll data indicate that an increasing number of Dutch captains were bypassing Amsterdam and Holland altogether and sailed directly to Southwestern Europe. The pattern of Dutch trade with Russia and the Baltic as obtained from the GGR is therefore not as representative of the total Dutch trade at the end of the eighteenth century as it had been at the beginning of the century.

4. Although the average size of the ships from Russia remained fairly constant during most of the eighteenth century, the size of the cargo carried increased relative to the size of the ship. When the average size of the ship declined at the end of the eighteenth century, the corresponding loss in shipping tonnage was partly compensated by an increase in the average size of the cargo in terms of the "overload" factor.

The average size of the cargo of Baltic shipping from Russia increased slowly from the beginning of the eighteenth century until by the end of the 1780's and first few years of the 1790's it stood at about 300 tons. In 1793, there was a sudden decline in the average size of the cargo which, except for a few single years, stayed near the 200 ton level until 1825. At the same time, radical changes were taking place in the proportions of



the various cargo size categories (Table II.2). Up to 1725, the distribution of ships according to the size of the cargo was that ships of 100 tons or less accounted for one-fifth of the number of ships and a little more than one-fifteenth of the cargo tonnage. From the late 1720's to 1740 the share of ships with cargoes in this size range was reduced by one-third. From 1740 to 1756 there was a short but limited increase and then, with the exception of the years from 1781 to 1792, the portion of shipping from Russia represented by cargoes in this category was negligible. From 1793 onwards, there were quite a few years when this size category once again accounted for 10% or more of the ships though it never did so if measured according to the cargo tonnage. Thus, it can be said that after the Petrine era ships carrying cargoes of less than 101 tons practically disappeared from the Russia to Amsterdam route.

The next larger size category, namely, those cargoes of 101 to 200 tons, remained quite popular throughout the whole period representing roughly from one-quarter to one-third of the ships and one-seventh to one-fifth of the cargo tonnage carried. The years 1781 and 1782 also saw a marked increase in this size category. From 1793 on, the number of ships carrying cargoes of this size increased, a change which lasted until 1825. During this last period, ships carrying cargoes of 101 to 200 tons almost always accounted for 50% or more of all the vessels which sailed from Russia's Baltic ports to Amsterdam and one-third to one-half if assessed according to the total cargo tonnage.

Cargoes of 201 to 300 tons also represented a sizeable portion of shipping from Russia to Amsterdam, a portion which was usually equal to

those in the 101 to 200 ton class as far as the number of ships was concerned and slightly larger in terms of cargo tonnage. The outbreak of war between Holland and France in 1793 did not lead to an increase of cargoes in this size category. There was even a slight decrease. Of all the cargo size categories, the 201 to 300 ton class was perhaps the most constant throughout the period covered by the GGR and accounted for about one-third of the shipping from Russia.

The size category of cargoes measuring 301 to 400 tons show a totally different pattern. Representing well over a third of all the ships and almost one-half of the cargo tonnage during the first half of the eighteenth century, the importance of this size suddenly started to diminish considerably in the early 1770's while, at the same time, the portion of cargoes in the 401 to 500 ton size increased, a development which is clearly illustrated in Graphs II.2(1) and (2). The year 1793 saw a further decrease of cargoes in category 'D' which after that date never again accounted for more than 9% of the number of ships and rarely more than 10% of the cargo tonnage.

Ships carrying cargoes of 401 to 500 tons represented about one-seventh of the ships and one-fourth of the cargo tonnage during the last few years of the Petrine era but then almost totally disappeared until their re-emergence in the 1750's. However, when Holland itself was at war as in the early 1780's and after 1793, ships carrying cargoes of this size vanished almost completely and never did reappear after the Napoleonic Wars. Undoubtedly, these developments reflect changes in the pattern of shipping from Narva.

The largest two size categories, namely, ships carrying cargoes of 501 tons or more were used rather infrequently from Russia to Amsterdam throughout the eighteenth century. Only in the nineteenth century, more than just a few cargoes of this size were registered for each year. The greatest number of such ships and their relative share of shipping from Russia occurred in 1802, the year of the Peace of Amiens. In terms of cargo tonnage, cargoes of more than 600 tons made a brief appearance in the 1770's only to disappear again until 1800 from which year onward they accounted for a noticeable portion of the cargo tonnage.

As could be expected the relative proportions of Baltic shipping from Russia to Amsterdam according to the size of the ship were approximately a size category lower than those of the size of the cargo (Table II.3). With the exception of the years 1730 to 1739 and 1764-1765, ships of under 101 tons always accounted for more than 10% of the shipping from Russia, and for the whole period it can be said to have represented about 20%. Quite popular during the Petrine era, use of these small ships remained limited until the time of the Fourth Anglo-Dutch War and that of the French Revolutionary Wars when circa 40% of the ships were of this size. But if evaluated according to the shipping tonnage represented by these ships, they accounted for a much smaller portion, one which rarely rose above 20% even during the two periods just mentioned when Holland was at war.

The same pattern holds true for ships in the 101 to 200 ton class which, although accounting for one-fourth to one-third of all ships up to the 1760's, were responsible for only one-sixth to one-fifth of the shipping tonnage. From the 1760's to 1793, the number of these ships increased.

From 1776 onwards they usually represented 40% or more of the shipping from Russia to Amsterdam and the same percentage of shipping tonnage but only during the first quarter of the nineteenth century.

Ships of 201 to 300 and 301 to 400 tons accounted for nearly one-half of all ships from Baltic Russia and well over two-thirds of the shipping tonnage during the first half of the eighteenth century. The late 1750's marked the beginning of the replacement of these medium size ships first by larger ships and later during the wars also by smaller ships. In either case, the use of these two classes of ships which was so predominant was reduced to about one-fourth or one-fifth during the last quarter of the eighteenth century and even less thereafter, a development well illustrated by Graphs II.3(1) and (2). Nor did ships in these two size categories make a come-back in the post-Napoleonic period. Noticeable also is the appearance in 1817 of ships larger than 601 tons. Though few in number, through their great size, they accounted for one-fourth to one-third of the total shipping tonnage from Russia during the last few years of the GGR.

Seen in the light of all the ships that sailed from the Baltic to Amsterdam according to the GGR, those from Russia were larger whether measured according to the size of the cargo or size of the ship (Tables II.4 and IV.4). The only exception occurred during the Northern War when the reverse was true. In addition to the data provided in the tables, it was also possible to compute figures on the average sizes of cargoes and ships from the Baltic for each decade from 1764 onwards. The comparison of the figures given in Table IV.4 with those for the corresponding years in Table II.4 for the period prior to 1764 indicates that the average size

of cargoes from Russia was about one-third larger than those from the Baltic and that the ships were 40% to 50% bigger.

Average annual size of cargoes and of ships sailing from the Baltic and Russia to Amsterdam according to the GGR.

Years	Average size of the cargo		Average size of the ship	
	From the Baltic	From Russia	From the Baltic	From Russia
1724-1725	202.50	225.39(11.3%)*	167.73	211.83(26.3%)*
1764-1769	198.26	268.84(35.6%)	150.92	230.01(52.4%)
1770-1779	192.30	247.11(28.5%)	183.53	215.10(17.2%)
1780-1789	211.33	233.65(10.6%)	153.29	182.45(19.0%)
1790-1799	166.37	283.02(70.1%)	96.61	188.79(95.4%)
1800-1807	138.02	216.46(56.8%)	81.49	134.46(65.0%)
1815-1824	141.18	201.86(43.0%)	111.55	167.64(50.3%)

\*Percentage average size Russia > Baltic  
 During the decades of the 1770's and 1780's this difference declined as far as the size of ships was concerned and in the 1780's also for the size of the cargoes. But in the last decade of the century, the average size of cargoes from Russia was 70.1% greater than that from the entire Baltic while the ships were almost twice as large.

In terms of number of ships, those which carried cargoes of 101 to 200 tons were the most numerous, accounting for one-third to almost one-half of all the ships from the Baltic and about one-third of the cargo tonnage until the end of the eighteenth century when the latter's share increased by nearly one-half (Tables IV.2). The next larger cargo size, namely, that of 201 to 300 tons, seems to have been more common on the Russian route than on routes from other Baltic ports. For shipping from Russia, cargoes of this size accounted for one-fourth to one-third of both the number of ships and cargo tonnage, while for shipping from the Baltic the share of this size ranged from one-seventh to one-fourth in terms of the number of

ships and from one-fifth to one-fourth of the cargo tonnage. At the end of the eighteenth century, cargoes of this size became rarer, a development which continued after the Continental Blockade.

Ships which carried cargoes in the 301 to 400 ton size were about twice as popular for shipping from Russia than from the Baltic in general and, if evaluated according to cargo tonnage, almost three times as popular. With the advent of the French Revolutionary Wars, this cargo size also played a smaller role. Cargoes of between 401 and 500 tons were not an uncommon sight during the first quarter of the eighteenth century, but it was not until the last two decades of that century that they once again accounted for 10% or more of the ships from the Baltic. Their reappearance was but a brief phenomenon for from 1799 onwards they once again practically disappeared.

The two largest cargo sizes, those of 501 to 600 tons and 601 or more tons, seem also to have been used in cycles, the first such cycle coinciding early in the century with those in the 401 to 500 ton class. During the middle of the century ships carrying cargoes of more than 500 tons vanished altogether from the Baltic. They emerged again in the 1760's though, with the exception of 1789, they were always less than ten per year. The wars at the end of the century drove ships carrying cargoes of this size once more from the Baltic and when they reappeared after the Napoleonic Wars they were still few in number.

If measured according to the size of the ship as recorded in the GGR, the pattern was somewhat different, primarily in a shift in favour of the smaller categories. About one-half of all vessels which carried

goods from the Baltic to Amsterdam were 100 tons or less in size (Table IV.3). At the end of the eighteenth century the portion of these ships went higher than four-fifths of all the ships. But if instead, we look at the shipping tonnage represented by this ship size category, we find that in most years it was less than 25%. On the other hand, ships measuring 101 to 200 tons in size accounted for a greater share of Baltic shipping tonnage and represented about one-third of the ships, almost the opposite relation between the number of ships and shipping tonnage which existed for ships of 100 tons or less. Ships of 101 to 200 tons were also frequently used on the Russia route, the percentages for the number of ships matched closely those for the Baltic. The same cannot be said, however, for ships in the smallest size category, as these were used two or three times more frequently for sailing from Baltic than from Russian ports.

During the eighteenth century there was a decline in registrations in the GGR of ships of between 201 and 300 tons in size. Whereas from 170 to 193 vessels in this size category were used yearly between 1724 and 1739, the next decade saw a drop to about 100, and the number continued to diminish till by the end of the years covered by the GGR it had dropped down to about 15 to 17 such ships annually. Ships of this size seem to have been more popular on the Russia to Amsterdam route than on other Baltic routes, but in terms of shipping tonnage the portions for each route were about equal. The use of ships measuring 301 to 400 tons was much the same as that for the size category just mentioned. Surprising is the relatively small number of ships in this size category in 1729. Whether

this was just a particular case or part of a short cycle that occurred between the years 1725 and 1734, when the number of ships in this size class was more than a hundred annually, remains to be investigated. Certainly, during the second half of the eighteenth century, ships of 301 to 400 tons were being employed less and less to carry goods from the Baltic to Amsterdam. Ships of 301 to 400 tons were used more frequently for shipping from Russia than from the Baltic as a whole. At times the share of these ships in numbers and shipping tonnage was almost three times greater than that for the whole Baltic. Nevertheless, the use of these ships on both the Baltic and Russian routes declined rapidly from the 1770's onwards.

The demise of ships ranging from 201 to 400 tons coincided with an increase not only in the use of smaller ships but also in the utilization of ships ranging from 401 to 500 tons. Employed infrequently during the first quarter of the eighteenth century, ships of this size were not seen again on the Baltic to Amsterdam route till the 1760's when their numbers climbed from just a few to about 25 per annum. By the end of the 1770's their number rose to 55 per year and in the years prior to the French invasion of Holland stood in the low seventies,<sup>o</sup> representing one-tenth of the number of ships and about one-sixth of the shipping tonnage. The overwhelming majority of these ships, about 90%, came from Narva and were therefore engaged in the timber trade.

The years of war at the turn of the century seem to have eliminated from the Baltic all but a handful of ships of more than 200 tons. When peace was restored over 90% of the ships plying the Baltic to Amsterdam



route continued to be those measuring 200 tons or less.

As it has been shown, the average size of ships which sailed from Russia to Amsterdam was approximately 50% to 70% greater than that from the Baltic as a whole while the average size of the cargo was from 30% to 60% more. The question arises as to how these particular branches of Dutch shipping compare with those on other routes, by other nations and in different time periods. Secondly, in comparing information on the size of the ships from different sources, care must be taken to define whether the sizes noted are those of the cargo-carrying capacity or of the official registered size of the ship which was about 53.3% of the former.

Bogucka's investigation on Amsterdam shipping in the Baltic during the first half of the seventeenth century has been based on the charter-parties. These stated the carrying capacity of the ship and should therefore be compared with the "lasts cargo" as recorded in the GGR. Bogucka computed the average size of all shipping from the Baltic to Amsterdam for the period 1597 to 1651 to be 123.9 lasts or 247.8 tons.<sup>11</sup> This compares quite favourably with the Sound Toll data for 1644 by means of which Snapper estimated the average size of Dutch ships to be 142 lasts since the average size of Dutch ships increased during this period.<sup>12</sup> A table drawn up by the province of Holland in 1636 noted that there were 1050 ships involved in Baltic shipping averaging 120 lasts.<sup>13</sup> Now if the GGR data are taken for the years from 1709/1710 to 1749 as given in Table IV.4, the average size of the cargoes one century later was 209.1 tons or 104.6 lasts, while the average registered size of the ship was 171.4 tons or 85.7 lasts. For the period 1754 to 1779 the average size of the cargo

declined marginally to 192.6 tons or 96.3 lasts but that of the ships dipped to 148 tons or 74 lasts. During the last quarter of the eighteenth century the average size of the cargo declined to 172.2 tons or 86.1 lasts while the average size of the ship increased slightly to 162.5 tons or 81.2 lasts.

After the Napoleonic Wars, the size of the cargoes were even smaller, averaging 130.8 tons or 65.4 lasts, while that of the ship dropped to 101.8 tons or 50.9 lasts. Considering the fact that from the 1750's onward an increasing number of larger ships were being used in the timber trade, the average size of cargoes and ships engaged in carrying commodities other than timber must have declined even more than that indicated in the tables presently offered.<sup>14</sup>

Bogucka also presented information on the average ship's carrying capacity from several individual Baltic ports. Compared with the GGR data as taken from Tables II.4 and IV.4, most ports except those which were involved in the timber trade, namely, Narva and Viborg, show a decrease in the average size of the cargo carried.

Average size of Baltic shipping with individual Baltic ports during the first halves of the seventeenth and eighteenth centuries.<sup>15</sup>

	<u>Bogucka (1597-1651)</u>			<u>GGR (1709/1710-1749)</u>		
	<u>No. of ships</u>	<u>Aver. carrying capacity</u>	<u>No. of ships</u>	<u>Aver. size of cargo carried</u>	<u>Aver. size of ship</u>	<u>Estimated carrying capacity</u>
Danzig	950	127.4	1,245	115.9	82.5	154.8
Riga	366	123.7	764	98.8	79.3	148.8
Konigsberg & Elbing	103	119.3	1,101	79.6	56.1	105.2
Reval	66	125.2	142	51.9	33.0	61.9
Libau & Windau	72	128.9	162	63.3	43.2	81.1
Viborg	41	103.5	127	132.9	124.5	233.6
Narva	15	76.3	676	155.9	152.1	285.4
Stettin	29	90.4	247	42.0	36.2	67.9
Overall	1,784	123.9	5,961	94.0	77.0	144.1

Since Bogucka took her information from the charterparties, her figures pertain to the maximum carrying capacity of the ship, while the GGR give the size of the cargo that was actually carried. If the formula  $RL = .533 CC$  is applied to the GGR data on the average ship size ("Estimated carrying capacity"), then there was a small overall increase as well as limited increase for ships from the ports of Danzig and Riga, but still a decrease in size of those ships which came from Konigsberg/Elbing, Reval, Libau/Windau and Stettin. The outstanding exceptions were the ships from Narva and Viborg, the sizes of which quadrupled and tripled respectively from a century earlier.

Vogel, in his studies of the size of European merchantmen in the fifteenth through eighteenth centuries, placed the average cargo capacity of the 249 Dutch ships that visited Danzig in 1688 at 140 lasts.<sup>16</sup> Four decades later in 1729 the average size of 331 Dutch ships that sailed from Danzig declined to 115 lasts, while by 1752 it dropped to an average of 91 lasts for 473 ships. Vogel's average of 115 lasts for 1729 compares very favourably with that of 226.66 tons or 113.33 lasts for the same year according to the GGR. The figure of 91 lasts for 1752 is quite close to that of the GGR's 183.71 tons or 91.85 lasts for 1749, but somewhat further away from the 166.2 tons or 83.46 lasts for 1754 (Table IV.4.D).

In his examination of the Baltic grain trade during the second half of the seventeenth century, Faber estimated the average carrying capacity of Dutch ships going to Danzig to be only 80 lasts of grain.<sup>17</sup> This figure is smaller than that given by Vogel. The question remains, therefore, if the average tonnage which doubled from about 80 lasts in the first decade

of the seventeenth century to about 140 lasts in the 1640's remained at this level or returned to the average of the beginning of the seventeenth century of 80 lasts as stated by Faber or stayed at about 140 lasts as claimed by Vogel.

Snapper also gives the figure of 140 lasts but his work was published well before that of Faber. In addition to estimating the cargo capacity of Baltic shipping to Amsterdam at 140 lasts up to 1705, Snapper also prepared figures on the average carrying capacity of Dutch ships up to 1730. From 1705 onwards the average size dropped by about one last per year till 1730 when it stood at 114 lasts. The comparison of Snapper's data with that derived from the GGR as presented in Table IV.4 gives the following picture:<sup>18</sup>

Dutch Baltic shipping to Amsterdam

Year	Aver. cargo capacity acc. to Snapper	Aver. cargo lastage	Aver. ship lastage	Estimated cargo capacity*
1709/1710	134.5	126.34	125.62	235.68
1714	130	93.50	91.39	171.46
1719	125	67.35	61.45	115.29
1724	120	69.70	62.51	117.28
1725	119	67.25	61.33	115.07
1729	115	56.00	55.36	103.86

\* Based on the formula  $RL = .533 CC$  or  $CC = RL \times 1.87$ .

While there can be no doubt that the size of ships arriving at Amsterdam from the Baltic declined during this period, the figures obtained from the GGR differ enough to warrant further investigation into the sources used by Snapper.

Apart from the information presented by Vogel and Snapper not much is known either about the development of the size of cargoes or

of ships at the end of the seventeenth and beginning of the eighteenth centuries. This makes it difficult to evaluate the GGR data as a continuation of earlier trends in terms of shift from the use of larger to smaller ships and vice versa as well as the relative importance of the various size categories. Information on this for the eighteenth centuries is even more scarce. The notarial archives at both Amsterdam and Rotterdam await investigations of the Bogucka-Hart type. So far the only source are the GGR. A limited insight into this problem is given by a survey of Dutch shipping in 1783 which stated that the Dutch merchant fleet consisted of 50 flutes of 400, 450 and 500 lasts engaged primarily in the Baltic and Norwegian timber trade. They were returning to Holland or, if more profitable, sailing directly to France or Spain. The same was true for ships from Archangel. There were also 30 flutes of 250 to 300 lasts which did the same, and 18 flutes of 160 to 200 lasts engaged in the whaling fishery, Archangel, Mediterranean and West Indies trades. Aside from the flutes there were 16 katschepen of 160 to 180 lasts which carried masts from the Baltic to Amsterdam, France or Spain. There were also 80 hoekers or galjootschepen of the following sizes: 13 at 300 to 350 lasts, 18 at 240 to 280 lasts, 12 at 200 to 220 lasts, 17 at 160 to 180 lasts and 20 at 110 to 150 lasts. All these ships sailed either on the Archangel, Baltic, Mediterranean or West Indies routes, depending on which one yielded the greatest profits.<sup>19</sup> In addition, there were 90 kof- or galjootschepen of 70 to 100 lasts and 120 hoekers, galjootschepen and kofschepen of 100 to 150 lasts. And there were 50 kof- and smakschepen of 50 to 70 lasts involved primarily in the trade with England and the Baltic plus hundreds

of vessels smaller than 100 lasts.<sup>20</sup>

One last observation on the size of ships was that of Oddy who stated that in 1802 a total of 2,632 ships loaded cargo at Russian ports. Of these 98 ships were Russian and loaded an average of 125 tons each. There were also 758 English ships with an average load of 201 tons and 379 Prussian vessels averaging 158 tons, while the 146 Lubeckers averaged 114 tons. Of the Scandinavian merchantmen the Swedish ships were more numerous than those of the Danes. But the 424 Swedish vessels averaged only 96.3 tons each, while the 336 Danish ships were slightly bigger at 108 tons. Finally, there were 171 Dutch vessels with an average load of 217 tons. This figure of 217 tons is much lower than the 279.8 tons average size of the cargo stated in the GGR for the same year. If we take the average size of the ships from Russian ports from May 1802 to April 1803 in order to make the GGR figures as close as possible to ship departures from Russia in 1802 the average size of the cargoes was even larger, standing at 289.6 tons (Table II.1 and II.9). Oddy's figures on the size of the cargoes carried by Dutch ships and perhaps those given for the other nations as well must therefore be doubted.<sup>21</sup>

If we put aside for the moment the employment of larger ships to carry timber from Narva, the picture that emerges clearly for both shipping from the Baltic and from Russia is that there was a shift to the use of smaller instead of larger ships, a phenomenon which runs counter to the developments of Dutch shipping of the previous century and to what one might also have expected for the eighteenth.<sup>22</sup> In his study on the English shipping industry during the seventeenth and eighteenth centuries, the English historian Ralph Davis found a marked increase in the

average size of merchantmen from the middle of the eighteenth century onwards. He noted that in "the Baltic trade, the typical 300-350 ton trader was being replaced in the sixties by ships of 400-500 tons, and a few giants of 600 and even 700 tons were appearing in the North Russian timber trade." According to Davis, ships of 200 to 350 tons made up the majority of the Baltic merchantmen.<sup>23</sup> He ascribed the greater use of larger ships to an increase in the margin of efficiency of the larger ships over the smaller due to changes in the 1760's in hull designs patterned closely on those of the Dutch flute. The results were a higher average tons per man ratio and thus decreased operating costs.

While the GGR show a similar development in Dutch shipping as far as the use of larger ships to carry timber was concerned, they present just the opposite pattern for all other shipping. The question thus arises as to why the Dutch switched to smaller ships. Although this is a matter that should be investigated by nautical archaeologists, it might be useful to make a few tentative suggestions about the nature of these changes. It should be remembered that during the eighteenth century two developments occurred which might provide some clues. The first is that as the century progressed an increasing number of Dutch captains had homeports in Friesland and Groningen. Our comparison of the STA and GGR for the years 1724 and 1725 has shown that the number of Frisian and Groninger captains was even higher than presently indicated in the Sound Toll Accounts.<sup>24</sup> At the same time the building of ships at Zaandam, the centre of Dutch shipbuilding, decreased while that of Friesland and Groningen increased. The Frisians seem to have built an increasing number of vessels

smaller than the flute. These had only one deck and were called koffen or kofschepen, and if they were smaller they needed fewer men per ton than the flute.<sup>25</sup> Further, an increasingly large number of small vessels were being used to carry peat from Groningen to the nearby Baltic ports.<sup>26</sup> Certainly, the probability that the Dutch who pioneered the development of the larger flute which revolutionized the maritime trade of Europe should afterwards have developed a smaller ship type with a greater margin of efficiency warrants further investigation.<sup>27</sup> A combination of more detailed STA and GGR data will be of use here.

Table IV.11 does not indicate any gradual increase or decrease within the ship size categories. As a matter of fact, the average sizes of ships in each size category were surprisingly uniform and stable, the more so when the number of ships in a particular category was fairly large. The average size of ships in the 101 to 200 ton class remained in the 130 ton range throughout the eighteenth century and a similar pattern existed for those ships which were either one size larger or smaller. Only during times of war was there a marked change in the average sizes of the ships and cargoes in the various size categories. A tentative conclusion therefore would be that changes in the average size of the ships for shipping from the Baltic and Russia or Amsterdam were influenced more by the switch over to the use of distinctly smaller or larger types of ships than by any gradual changes in the size of certain types of ships.<sup>28</sup>

In terms of seasonal distribution of registered ship arrivals at Amsterdam from the Baltic, the high percentages for the first few months



of the year seem to have been unique for ships from Russia. In a few scattered instances only were more than 5% of the ships from the Baltic registered during the months of January through April (Table IV.1.A). The same pattern holds true also if the ship arrivals were evaluated according to either the cargo tonnage (Table IV.7) or the shipping tonnage (Table IV.10). July, August and September seem to have been the busiest months. During the months of May, June, October and November ship arrivals were less frequent and in December even rarer, though at times still substantial. Ships which arrived in either May or June were on the whole smaller than the average size for that particular year (Table IV.6 and IV.9). While during the first half of the century a substantial number of ships which reached Amsterdam in January were above average size, this was not so for the period from 1754 to 1789. For the months of February, March and April the pattern was less precise. For about one-fourth of the years was the average size of the cargoes and of the ships larger than those of their respective yearly averages for the month of February and about one-half for the other two months. During the months of July, October, November and December, the average size was almost always larger than the annual average while for the months of August and especially September more often than not the average size was smaller. Because of the uncertain limits of the parameters of the registered date of arrival, it is difficult to draw any definite conclusion on the seasonal patterns of shipping from the Baltic and Russia. It does seem, however, that the smaller ships entered the Baltic as early as possible, made a short voyage and returned to Amsterdam in May and June. They were

already on their way again to the Baltic when the larger ships started to arrive at Amsterdam in July. Most of the larger ships seem to have made two and possibly three voyages, and the smaller ships four trips or more per year. But the frequency of voyages per year can only be determined if we follow all ships or a sample number of ships individually for a number of years. While such an investigation is possible, it is beyond the scope of this study.<sup>29</sup> The length of the voyage as well as the ship size also need to be taken into account here and it would not be too presumptuous to surmise that the ships which made one or two voyages per year were the larger ships. They undertook longer voyages, e. g., Amsterdam-Narva-Amsterdam, while those which made four or five trips to the Baltic per annum were the small ships sailing the shorter routes, e. g., Amsterdam-Kiel-Amsterdam.<sup>30</sup>

There is also the distinct possibility that the increasing numbers of Dutch ships which by-passed Holland and sailed directly from the Baltic and Russia to France, the Iberian Peninsula or the Mediterranean were the larger ships, those of 200 tons or more. The Frisian-built kofschepen were unsuited for such longer voyages.<sup>31</sup> The increase in the use of larger ships on the Narva route seems to have been due not so much to the building of larger ships as the fact that these ships were former East Indiamen too old to make the long voyages to the Dutch East Indies but still quite suitable for fetching Baltic timber.<sup>32</sup> But it could also happen that the Dutch East India Company chartered some of the larger ships engaged in the Archangel or Narva trade, meaning to use them in their shipping to the East Indies.<sup>33</sup>

To what degree the silting of the Dutch harbour approaches and shipping channels played a role in the trend to use smaller ships is difficult to determine. Schilleman for one did not see this as the main fact in the decline of the shipbuilding industry at Zaandam.<sup>34</sup> In contemporary sources there were constant complaints about the shallowness of the shipping channels, especially at Rotterdam.<sup>35</sup> Nevertheless, a substantial number of large ships continued to be used for both Baltic and White Sea shipping.

The question of the flag carried by the ship and the homeport of the captain makes it difficult to assess the rise or decline of the maritime merchant strength of any particular nation or port. The Dutch, with their tradition of free trade and absence of any legislation in the Republic similar to the English Navigation Acts, conducted their shipping trade under whatever guise and by whatever means was the most profitable and/or least dangerous. With the decline and almost total disappearance of the Dutch navy during the eighteenth century, the Dutch merchants became like chameleons ready to change their flags whenever conditions warranted. Even in the 1730's, they made use of the Russian flag to cover some of their Baltic shipping.<sup>36</sup> During the Seven Years' War the Dutch tried to enforce and maintain their role and rights as neutrals.<sup>37</sup> But, by the time of the Fourth Anglo-Dutch War, the Dutch navy was no longer able to protect its merchant fleet at all and the consequence was that Dutch shipping practically disappeared overnight to re-emerge under different colours. The Sound Toll data tell the story:

Shipping through the Sound from the Baltic by captains  
declaring a Dutch homeport.<sup>38</sup>

(average annual number of ships)

Years	From the Baltic	With Dutch captains	To Holland with Dutch captains
1710-1719	816	412(50.5%)*	372(45.6%)* (90.3%)**
1720-1729	1,782	758(42.5%)	688(38.6%) (91.0%)
1730-1739	2,146	893(41.6%)	828(38.6%) (92.7%)
1740-1749	2,129	803(37.7%)	722(33.9%) (89.9%)
1750-1759	2,637	921(34.9%)	750(28.4%) (81.4%)
1760-1769	3,104	1,067(34.4%)	827(26.6%) (77.5%)
1770-1779	4,008	1,142(28.5%)	860(21.5%) (75.3%)
1780-1783	4,624	308( 6.7%)	256( 5.5%) (83.1%)
1792	12,114	2,181(18.0%)	-
1794	10,510	1,117(10.6%)	-
1795-1797	9,930	0 -	-
1800-1801	9,018	0 -	-
1803-1807	9,425	13( 0.1%)	-
1814-1816	8,624	722( 8.4%)	-

\* Percentage of ships from the Baltic.

\*\* Percentage of all Dutch captains.

As already mentioned, during the Fourth Anglo-Dutch War the number of ships which sailed from Russian ports to Holland with captains having a Dutch homeport and therefore presumably on ships carrying a Dutch flag diminished considerably. The picture is much the same for Dutch shipping in the Baltic. According to Hart, during the years from 1781 to 1783 at least, 512 ships were sold in Amsterdam to foreigners. Of these 512 ships, 94 were sold to persons residing in Denmark-Norway, 192 to Germany and 242 to the Austrian Netherlands. One hundred and fifty three ships alone were sold to residents of the port of Ostende where the number of ships visiting annually jumped from 481 in 1777 to 2,636 in 1782.<sup>39</sup> Ships were also sold to Russian merchants.<sup>40</sup> Even such small entities as Papenburg and Kniphausen became ports of refuge for Dutch

captains and ships seeking a safe new nationality and flag under which they could continue to trade. Even the crew of the ship were made foreign citizens. The income in Amsterdam of the 2 1/2% tax on the sale of ships (40ste penning) jumped from an annual average of f.20,000 in the 1770's to f.98,918 in 1782, and to f.51,116 in 1802 from f.18,493 and f.10,437 during the previous two years. For Rotterdam the income from this tax in 1802 rose to f.7,751 compared with f.1,958 and f.1,649 during 1800 and 1801 respectively.<sup>41</sup>

But these were pseudo or simulated sales. The ships were sold to foreign merchants acta in forma in return for a credit of equal value payable on call. For lending his name the foreign merchant received a 2% commission on the sale price of the ship plus an equal commission on the freight income. However, the original owner continued to manage the affairs of the ship. No effort was spared to provide a neutral alibi should the British capture a former Dutch ship. Papers and documents were provided to show that not only the ship was neutral but also that the cargo was purchased at and destined for a neutral port. Charterparties contracted at Amsterdam even stipulated that the captains would be provided with the necessary documentation to show without doubt that the whole cargo was owned and shipped by Russian merchants.<sup>42</sup> Booklets were even printed containing the "Standing Interrogations," the questions asked by the High Court of the British Admiralty, together with the answers that should be given regarding the flag of the ship, the neutrality of the cargo and residence of the crew.<sup>43</sup> When the wars of the last two decades of the eighteenth and the first decade of the nineteenth were finally over and peace

was restored, there was no revival of Dutch shipping. Most of the foreign trade with Rotterdam in 1816 was carried by vessels sailing under foreign flags as there was little advantage to the Dutch merchants to use the Dutch flag.<sup>44</sup>

The problem of war and neutral shipping, which became very real at the end of the eighteenth century, changed the situation so that neither the flag of the ship nor the homeport could be used any longer as a yardstick of the maritime strength of a nation or port. Otherwise, the United States would have had the world's largest merchant fleet during the time of the Continental Blockade, a situation akin to labelling Liberia as the greatest maritime trading power in present times.<sup>45</sup>

By the war years of the 1770's and early 1780's, another change had taken place in the nature of Dutch shipping. During the second half of the seventeenth century a division started to develop between the merchant-shipowner and the merchant-trader. The merchant-trader was no longer necessarily also the merchant-shipowner. This led to the development of a group of shipowners who, apart from the trade in shipping to and from Holland, oriented themselves to the international trade from a foreign port directly to another foreign port.<sup>46</sup> When the D.O.H. was formed at the beginning of the eighteenth century, this development had reached the stage where the question had arisen whether or not a body such as the D.O.H. devoted to the maintenance and protection of trade should include the shipowners. Although the assertion was made that merchants and shipowners constituted a single body, each of the two groups was nevertheless given separate but equal representation on the Board of Directors of the D.O.H.<sup>47</sup>

This change was also reflected in the charterparties. At the beginning of the eighteenth century, the vast majority of charterparties were made by a single merchant directly with the captain of the ship, a pattern much like that of a century earlier.<sup>48</sup> However, as the century progressed this direct link was broken on two sides. On the side of the merchants, the single merchant was slowly being replaced by the trading firm although one of the partners of the firm still contracted the charterparties. From time to time the Amsterdam merchant also acted as an agent for merchants from elsewhere. On the side of the ship the captain was replaced more and more often as signatory to the charterparty by either the bookkeeper and part-owner of the ship or an agent in Amsterdam acting on the written instructions of a foreign bookkeeper and part-owner of a non-Dutch ship. An early example of this was already found in 1729 when an Amsterdam merchant named Antony Waterman chartered a ship on behalf of two Dutch merchants of Lisbon, Cremer and Braamcamp. Not only was the ship hired Swedish, but it was also lying at Stockholm. The charterparty was signed by another Amsterdam merchant representing the Swedish owners of the ship. Under the terms of the charterparty the ship would sail from Stockholm to Riga in ballast where it would load a cargo of masts and sprits destined for Lisbon.<sup>49</sup>

While charterparties such as this were still a rarity in the first half of the eighteenth century, they became more frequent in the second half of the century. Quite common were charterparties where an agent in Amsterdam, acting in accord with written orders from the shipowners in Hamburg, would lease a ship to an Amsterdam firm acting for itself or

for others, the ship at the time of signing the charterparty being en route, for example, from Danzig to Chatham or from Riga to Dunkirk. Upon completing its present voyage the ship was then to sail for either Archangel, St. Petersburg or Riga to load a cargo for Lisbon, Barcelona or another port in Southwestern Europe.<sup>50</sup> At times it was even expressly mentioned that on its voyage from the Baltic the ship was not to touch a Dutch port.<sup>51</sup>

In other words, in the course of the eighteenth century but more rapidly in the second half, the role of Amsterdam changed from solely being an active trading and shipping centre for Baltic and Russian commerce to that of a shipping exchange. No longer was it necessary for Dutch ships sailing to and from Russia and the Baltic to bring their cargo first to Amsterdam for further distribution. Instead of being a staple port Amsterdam became more and more a clearing house for commercial and shipping transactions.<sup>52</sup> The number of charterparties located so far for the 1770's and 1780's involving Russian ports are divided about equally between those that required the ship to go to Amsterdam or another Dutch port such as Rotterdam or Dordrecht and those where the ship was to sail for a port in France, the Iberian Peninsula or the Mediterranean.<sup>53</sup> The direct trade route between Russia and the Mediterranean, which had been so flourishing at the end of the fifteenth and early sixteenth centuries but had since declined, seems to have been revived during this period.<sup>54</sup>

It is therefore not surprising that when Holland became directly involved in a war in the 1780's that her merchant fleet was able to change identity almost overnight. Apart from the risks common to all neutral



carriers during times of war, trade between Holland and the Baltic seems to have suffered hardly at all.<sup>55</sup>

The Dutch merchant, trader and shipowner, was an enigma not easily classified. To the Dutch historian, Johannes de Vries, the concept of the eighteenth-century Dutch merchant was a fiction. He claimed that it would be more proper to speak of merchants residing in the Republic.<sup>56</sup> To the French historian, Michel Morineau, the outstanding feature of eighteenth-century Amsterdam was the cosmopolitan nature of its capital and trade, capital movements and bills of exchange that were not embarrassed by frontiers. The cooperation of Dutch merchants in Hamburg, London, St. Petersburg, Riga, Nantes and Lisbon had nothing to do with patriotism. Morineau concluded that not enough attention has been paid to the flexibility and complexity of the Dutch commercial organization.<sup>57</sup>

It is in this context that the development, or rather lack of development, of formal commercial relations between Holland and Russia must be evaluated. Long after Britain, France, Spain, Denmark, Prussia and Sweden had concluded commercial treaties with Russia, Holland had not signed any such agreements.<sup>58</sup> While Peter I was Tsar of Russia, the Dutch still held a position of great significance, probably greater than that enjoyed by any foreign power.<sup>59</sup> Although they were unsuccessful in reversing Peter's decision to divert Russia's trade via St. Petersburg at the expense of Archangel, the Dutch nevertheless managed to soften the impact on their vested interests. Yet during Peter's reign when time for a commercial treaty was most opportune and the expectations for increased trade and privileges were at the highest point the Dutch did not appoint an am-

bassador to Russia. To the Russians this was an insult as they had sent a full ambassador to The Hague, and the lack of Dutch reciprocation could mean only that the Dutch held the Russians in low esteem.<sup>60</sup> As late as 1788, the Dutch had only a resident at the Russian Court. Apparently a full ambassadorship was still considered too expensive.<sup>61</sup>

Even so, the records of the D.O.H., the D.M.H. and of the Burgomasters of Amsterdam as well as the resolutions of the States of Holland and the States General leave the singular impression that throughout the eighteenth century Dutch diplomatic activity directed at Russia was inspired solely by commercial motives. For a long time the Dutch overestimated the influence they had in Russia under Peter I and his successors and consequently demanded trade privileges as part of a commercial treaty which Russia could not and would not give. In addition to what could today be considered "most favoured nation status" the Dutch demanded that they be given a status equal to that of the Russian and Armenian merchants and the right to trade directly with Persia. In other words, the Dutch merchants wanted to be allowed to trade inside Russia itself. Magnanimously, the Dutch offered reciprocal privileges to the Russians. To this the Russians could not agree and no treaty was signed.<sup>62</sup>

When in 1735 the Tsarina offered the Dutch Republic the same commercial treaty that had been signed the year earlier with England, the Dutch repeated their demands of a decade earlier and the treaty negotiations finally petered out in the 1740's. In 1760, the Dutch decided to try again for a commercial treaty with Russia but these negotiations, like those in the 1790's, came to naught. Thus Dutch-Russian commercial relations

remained undefined and unformalized throughout the eighteenth century.<sup>63</sup>

While the reasons for the refusal of Russia to the demands of the Dutch can be readily understood, the attitude of the Dutch as the active partners in Russo-Dutch trade needs further explanation. First of all, in the face of the more powerful and more cohesive national units which emerged in Europe, the military and naval impotence of the Dutch Republic was revealed more and more clearly. Always trying to steer a middle and neutral course through the political and military entanglements of English and French diplomacy, Holland's passive rearguard diplomacy did not have any mutual interests with Russia. Mutual interest was found only in the League of the Armed Neutrality when the Republic, having been the first to receive an offer from Catherine II, was the last to join the League and then only because it had no other choice. Even then it was France, so dependent on the neutral carriers for its naval supplies, that fought the hardest in convincing and pressuring Catherine II to assert the right of neutrals vis-à-vis the English. The only action taken by the Republic was to appeal to Catherine II for assistance. The weak military and naval situation of the Dutch during the last decades of the eighteenth century was summed up by the Grand Pensionary van der Spiegel in 1791 when he stated that, "There is probably not a state in Europe the conditions of which render it more unfit to take an active part in a war than ours."<sup>64</sup>

The lack of mutual military or diplomatic interest between Russia and Holland and the weakness of the latter in both spheres meant that any commercial treaty between the two nations would have to be based on

purely commercial motives. But the correspondence, both official and unofficial, of the Dutch does not indicate any strong desire for a commercial treaty. As a matter of fact, one is struck by the lack of any noticeable pressure of these merchants in Russia and Holland on their Resident in Russia or through their respective trading organizations, the D.O.H. and the D.M.H., on the Dutch government for a commercial treaty. Unless the Dutch merchants obtained privileges equal to those of their Russian and Armenian counterparts, they did not feel that a commercial treaty would give them any advantages which they did not already enjoy. Through Dutch agents who had acquired Russian citizenship, or through Russian and Armenian merchants, the Dutch avoided paying the higher duties, harbour tolls and other levies. Goods were ordered, shipped, bought and sold in the name of these front-men. No treaty could be as advantageous to the Dutch as the manner in which they managed to conduct business in Russia.<sup>65</sup> When, in 1782, Catherine II liberalized the procedure whereby foreigners acquired and relinquished Russian citizenship, the opportunity was grasped by many foreign merchants.<sup>66</sup> The practice of Dutch shipowners to sail under whatever "flag of convenience" such as the Russian in order to get a reduction in tariff rates or that of the Austrian Emperor in time of war demanded as few restrictions as possible. Any formal arrangement between Holland and Russia could only interfere with this flexibility.<sup>67</sup> It is therefore not surprising that linked to Russia solely by the commercial activities of her traders who desired to be as free as possible, and ruled by an impoverished States General not able to grant subsidies in the manner of the

French or British, Holland never established any formal relations with Russia during the eighteenth century. On the other side, the interesting fact is that Russia was willing to grant the Republic, without any effort by the latter, the same commercial treaty England had worked so hard to obtain in 1734. When the Dutch finally felt the need for a commercial treaty in the early 1790's, Russo-Dutch trade had dwindled and the Dutch could offer nothing in return in the way of any noticeable reciprocal tariff reductions and privileges.<sup>68</sup>

The Russian merchants did not play an active role in the foreign trade between Russia and Holland. Attempts were made by the Russian government to participate actively in the trade with Western Europe through the establishment of a Russian merchant marine.<sup>69</sup> But Russian harbours were ice-locked for a substantial part of the year and foreign trade was firmly in control of the Dutch, English and other foreign merchants determined not to lose their lucrative role as middlemen.<sup>70</sup> Nevertheless, as early as 1717, Peter I had tried to establish direct trade connections with foreign ports as far away as Venice. Lacking merchantmen he even planned to use his navy to establish these trade links. The scarcity of trained Russian sailors forced Peter to reduce his plan and send just one ship instead of a squadron of eleven ships loaded with juchten, flax and tar to Venice. And even then the captain of the ship was a Dutchman named Bleury.<sup>71</sup>

Beside his personal efforts to establish a merchant marine, Peter tried to encourage Russian participation in foreign trade by reducing to less than one-third the customs tariffs on those goods which were exported



from or imported into Russia in Russian merchantmen manned by a crew of which at least two-thirds were Russians.<sup>72</sup> But this measure and other attempts to set up Russian trading companies and to establish schools for training young Russians to become sailors and international traders failed.<sup>73</sup> Even the Russian coastal trade in the Baltic remained small. In 1759 Russia had to rely on the Swedes to carry the provisions and military supplies from St. Petersburg to the Russian army in Prussia.<sup>74</sup> By the end of the 1770's the Russian merchant marine consisted of some 12 to 15 ships of about 200 tons each. About three-fourths of these sailed to Holland and Bordeaux and, although at least two-thirds of the crew were Russians, the captains and the pilots were all foreigners.<sup>75</sup> Despite official encouragement, active Russian maritime trade remained negligible throughout the eighteenth century.<sup>76</sup>

The trade between Russia and Holland was therefore almost entirely in Dutch hands. Dutch trade with Russia was neither hindered nor protected by political, military or commercial treaties. The import of Russian goods into Holland was thus dependent on the market of Holland and the interaction between Amsterdam and the European economy. Only when the Republic itself became involved in war did other factors play a predominant role as can be seen in the sudden contraction in trade and the rise of freight prices and insurance premiums during those times (Table VI.2). The rise and decline in Russian exports to Amsterdam must be seen in the relation to the demand of Holland herself and that of Amsterdam as a staple port.

On the whole the Dutch trade from Russia to Amsterdam can be divided into five periods. The first, from about 1716 to 1743, was one of increasing trade and marks the high point of this commerce from the beginning of the eighteenth century to 1825. Timber exports from Narva and Viborg contributed greatly to these high figures. The diversion of trade away from Danzig and the surrounding regions during the Polish War of Succession (1734-1737) probably also played a role.<sup>77</sup> A short decline after 1734 was halted by an increase in grain prices which lasted till 1743 marking the end of this first period. The Russo-Swedish War of 1741-1743 did not affect the economic force of market conditions at Amsterdam. The second period was one of decline (1744-1758), interrupted by a short time of stabilization (1749-1754). Reasons for the first decline can be found in falling grain prices, decreased demand for timber and the War of the Austrian Succession (1740-1748) in which Russia participated during the last two years. The short levelling off coincides with the years of peace till the outbreak of the Seven Years' War in 1756 when the decline continued. However, the figures for Russia seem to have been influenced more by the ban on timber exports than the effect of this war as shipping from both St. Petersburg and Riga increased during this time.

The third period which lasted from about 1759 to 1775 was one of recovery.<sup>78</sup> The Seven Years' War did not prevent Dutch-Russian trade from sharing in the general economic upturn taking place in Holland. The fourth period from 1776 to the time of the French invasion of Holland in 1795 was one of relative stability despite the interruption by the Fourth Anglo-Dutch War. The fifth period from 1795 to 1825 marks the decline



and end of Dutch trade with Russia. Despite the fact that in 1817 the economic conditions at Amsterdam could still exercise a considerable pull on exports from Russia and the Baltic, the trend was unmistakable as Amsterdam was no longer an important market for Russian exports.

The increase of Dutch trade with Russia during the 1720's and 1730's contrasted with the general stagnation and slump in the Dutch economy due partly to the tremendous decrease in population, almost as much as 50% in some parts of Noord-Holland.<sup>79</sup> The depression of the 1730's was not confined to Holland but covered most of Europe as well.<sup>80</sup> And if exports from Russia to Amsterdam managed to increase despite this depression, why did this trade not increase even more with the general recovery of the Dutch and European economies during the second half of the eighteenth century? A proper answer to this problem forms a major study by itself but there are several main factors which can be outlined here.

First of all, the grain imported from the Baltic and Russia formed only a small portion of the total consumption of grains in Western and Southern Europe. This meant that a relatively small decrease in demand and/or a small rise in total production of cereals in Europe sufficed to provide a radical shrinking of this trade via Amsterdam. Conversely, a sudden crop failure in one region of Europe could trigger a rapid increase in prices and consequently draw greatly increased quantities of cereals from the Baltic and Russia.<sup>81</sup> The second half of the eighteenth century saw a rise in import of American rice and later wheat into Europe, increasing production of rice in northern Italy, the introduction of the cultivation of maize in Italy, Spain and Portugal and of potatoes and buckwheat in the

sandy soils of Western and Central Europe.<sup>82</sup> And at the end of the eighteenth century Russian grain was being exported via Odessa and the Black Sea.<sup>83</sup> Consequently, the need for foodstuffs from the Baltic diminished.

Secondly, Dutch foreign trade together with several related industries did not share in the revival of the Dutch economy in the second half of the eighteenth century. Points of discussion among historians are whether this was due primarily to lack of new sources of energy, e.g., water power and coal instead of windmills and peat or to pollution of the surface waters, the relatively high wages in labour-intensive industries such as shipping, warehousing and handling of goods and heavy taxation as well as to political institutions incapable of dealing with the changing economic situation.<sup>84</sup> But there can be no doubt that all these factors played a role. An additional factor which could be called environmental or ecological was the reappearance of the herring off the coast of Sweden near Marstrand in 1748. The result was that although the consumption of herring in the Baltic region increased as did Dutch herring imports into the Baltic, the Norwegians and especially the Swedes dominated the Baltic herring trade forcing more Dutch ships to sail to the Baltic and Russia in ballast.<sup>85</sup>

Thirdly, during the eighteenth century, the political institutions which had fostered the growth of Dutch commerce during the previous two centuries due to their policy of non-interference in commercial matters and vigorous protection of Dutch maritime trade by maintaining a strong navy

were found wanting in the eighteenth century. The energetic merchant-regents of the seventeenth century were replaced in the eighteenth century by diplomats with little insight into economic and financial matters.<sup>86</sup> Through their wealth the merchant-shipowners remained powerful notables but those who stayed active in trade no longer participated in the government. The eighteenth-century Dutch leaders tried to preserve trade on the basis of treaties for which earlier generations had fought. The States General, the governing body of the Republic, was described by the Dutch historian Fruin as more a congress of envoys than a legislative body.<sup>87</sup> Lacking any effective authority in questions of sovereignty, religion and most of all taxation, it was a government of persuasion through the means of letters and delegations which caused endless delays. The result was, as Pieter Geyl put it, that the government sank in a morass of little questions, minor interests and small intrigues leading to compromise based on expediency instead of decisions, and considerations of national interest were lost in the bickering over local and personal advantages.<sup>88</sup> One should not forget that the Republic was composed of seven sovereign provinces, and the constitutional link between them was only the Union of Utrecht of 1579, a defensive alliance against Spain.<sup>89</sup> During the eighteenth century the States General were hopelessly split between the interests of the land-locked provinces favouring a strong army and the sea-bound provinces advocating the need for a strong navy. The result was a mutual checkmate and the Dutch had neither an effective army nor a powerful navy that could protect her maritime trade.<sup>90</sup> Even if taxes were agreed upon for the outfitting of a fleet the provinces, which for whatever reasons did not live up to

their financial obligations, could not be forced to pay.<sup>91</sup> The result was that the State itself was bankrupt although the general welfare and individual riches were great. Only by being able to borrow money at low interest because of the huge accumulation of capital in Holland was it possible for the government to exist. But this only postponed the detrimental effects of these institutional defects.<sup>92</sup>

The neglect of the fleet was not only crippling from a diplomatic point of view but also from that of commerce.<sup>93</sup> The tendency to vacillate, compromise and delay decisions when and wherever possible meant that the maritime trade, with Russia among others, was not protected. At the outbreak of the Fourth Anglo-Dutch War not a single man-of-war was available to sail and warn the fishing and merchant fleets.<sup>94</sup> Both the D.O.H. and the D.M.H. asked for protection of their respective trades through the use of convoys. Immediately the question arose as to who would pay the costs. The D.O.H. and the D.M.H. were willing to double the galjootsgeld but felt that the Republic as a whole should bear the rest of the costs. The delays and the necessity for lengthy correspondence with the individual provinces, even in time of war, meant that in the end nothing was done.<sup>95</sup> The Dutch trade with Russia was carried out under foreign flags or via foreign ports with the result that once having carried their commodities via these other ports the merchants were likely to do so again in the future. A similar situation had occurred in 1742 during the Russo-Swedish war. The D.O.H. knowing that it would take too long to obtain consent from all seven provinces for funds for convoy to the

Baltic decided to submit their request for a reduced convoy only to the Admiralties of Holland.<sup>96</sup>

In addition, by the eighteenth century the merchant fleet had become practically useless as a weapon of war and the influence on politics the Dutch merchants enjoyed disappeared. Since the merchant no longer had an available naval force of his own he had to rely on the navy for protection but an appeal for assistance automatically would entail higher expenses. If on the short run it was expedient to avoid this problem the shipowner registered his ship elsewhere and if necessary also conducted his business from a foreign port.<sup>97</sup>

Fourthly, the Dutch merchants seem to have lost much of their enterprising and aggressive spirit in the eighteenth century. Instead of taking new risks they switched to the safer and less challenging business of lending capital to others. Of course there were still merchants such as Hope and Company, one of the largest Dutch financiers, who still took an active part in trade and shipping. However, the preservation of the wealth gained in earlier times through low-risk loans characterized a large segment of the Dutch business community.<sup>98</sup> Proposals were judged on their short-term benefits and once the danger was passed the matter was quickly forgotten.<sup>99</sup> Even sound suggestions such as the establishment of commercial agencies in the "two most important Russian trading centres, Archangel and Riga," were rejected. The reason for this and other opportunities that were turned down was that the merchants had no need of this in the past and therefore could not see why they should have in the future. Official representation would mean only added expenses.<sup>100</sup>

And finally, the conditions which existed prior to the eighteenth century were changing. The Dutch received more and more competition from others who also began to serve as middlemen. The voorbylandvaart or direct trade and shipping between countries of production and consumption was increasing. Active Dutch trade was being replaced more and more by the commission trade. All these structural changes as well as the shifts in consumption patterns led to a declining need to use Holland as a transit point.<sup>101</sup> The rivals of the Dutch in their role of middlemen were especially the Danes, Swedes and Hamburgers.<sup>102</sup> With the occupation of Holland by the French in 1795 a great part of Amsterdam's commerce was diverted to Hamburg.<sup>103</sup> Having come to terms with each other the Danes and Swedes were able to develop and expand their merchant fleets. The increase in the Dutch voorbylandvaart which went directly from Russia to France and vice versa or from Archangel to the Iberian Peninsula and Mediterranean is difficult to evaluate until further investigation has been done. Apart from the sources which may be available in Russia and France, the only source concerned immediately available for such a study are the Sound Toll Accounts. However, the usefulness of the homeport of the captain as a measurement decreased in validity as the century progressed. Nevertheless, it does seem that a noticeable switch from the use of Amsterdam as a staple port and to Dutch-carrying trade bypassing Holland started about the middle of the eighteenth century.<sup>104</sup> This is indicated by both the Sound Toll Accounts and the Galjoetsgeld-registers. The latter show a marked structural change in the shipping patterns with regard to the size of ships. The use of medium size ships

on the Russia to Amsterdam route starts to decline at this time to be replaced by smaller ships. And it is not at all unlikely that the medium size ships continued to be used but now went directly from Russia to ports in France, the Iberian Peninsula and the Mediterranean.<sup>105</sup>

The increased sophistication by which the merchants and shipowners conducted their business in terms of credit facilities, bills of exchange mechanisms and a reliable postal service as well as the financial strength of the Amsterdam exchange made possible an expanding commission trade instead of active trade.<sup>106</sup> According to Elias Luzac, by the 1780's the commission trade became the most important trade for the Dutch.<sup>107</sup> The charterparties have shown an increase in the function of Amsterdam as a shipping exchange. The trend of Amsterdam of becoming a brokerage centre for shipping, the voorbylandvaart and the commission trade went hand in hand. While there can be no doubt that profits of those in the commission trade were much lower, usually 2% to 5%, than of those who traded for their own account, but they were more certain of their profit which depended on volume.

It is difficult to reach any definite conclusions on the average rate of profits. One would have to know the purchase and selling prices including rates of exchange for the various currencies involved. The Dutch quite often bought goods from the Russians on future contracts. Some goods were bought 12, 16 or even 18 months in advance. The purchase price paid for the goods bought in Russia could differ by as much as 60% to 100% depending on the speculative nature of these future contracts.<sup>108</sup> In addition, regulations such as those at Archangel that merchants who

bought 100 lasts of rye could ship out only 80 lasts the same year and the remaining 20 lasts the following year, in order to provide a cushion against a possible scarcity of foodstuffs at Archangel, meant that part of the merchant's working capital was tied up for an extra year.<sup>109</sup> And the merchant had to pay additional costs for warehousing, risk possible spoilage and hope that prices would not fall.<sup>110</sup>

In addition to the purchase and selling prices, it is necessary to know the expenses added en route. The correspondence of the merchants indicates that the expenses of loading and unloading, warehousing, packaging, weighing, commission for the agent or factor in Russia and some other incidentals usually added 10% to 25% to the purchase price.<sup>111</sup> With customs dues and added port charges, it could happen that, by the time the cargo was loaded aboard ship, the expenses were more than equal the purchase price.<sup>112</sup> Freight prices ranged between 10% to 25% of the selling price at Amsterdam, the fluctuation in percentages were due more to changing commodity prices than varying freight rates. Yet depending on the time of year and the supply and demand of shipping, freight prices could deviate by as much as 25% in a single week.<sup>113</sup> Insurance rates usually did not exceed 2% but could go as high as 20% in times of war (Table VI.2), when profits were also higher, especially if vital naval supplies such as masts were shipped. In the late 1770's it was said that if one out of four ships was successful in reaching France from Russia with timber a profit was ensured.<sup>114</sup>

With so many permutations, it is difficult to establish an average rate of profit on the Russia to Amsterdam route. The few transactions



that could be reconstructed yielded an average profit of 10% to 17% but these were for small quantities of hemp and juchten.<sup>115</sup> For the Archangel to Amsterdam route in the seventeenth century, Hart estimated the profit on grain transactions to range from 17 1/2% to 30%, but also cited cases when the merchants suffered losses instead.<sup>116</sup> Bogucka claims an average profit of 40% on the Danzig to Amsterdam grain trade.<sup>117</sup> Martin Buist in his recent study on Hope and Co. places the net profit on hemp from Riga at 12% and on flax at 9% while on iron from St. Petersburg he estimates the net profit at 11%.<sup>118</sup> Buist considers the total costs of customs dues, handling, shipping and other expenses to average 70% of the purchase value of the commodity with those for hemp being somewhat lower.<sup>119</sup> This is not that far off the 81% cited by Kirchner on wine and salt shipments from France to Russia.<sup>120</sup>

As far as the profits of the shipowners were concerned these seem to have ranged from 8% to 25% annual return on investment depending on how successful the ship was in obtaining charters and avoiding damage.<sup>121</sup> If the merchant-trader was also the merchant-shipowner this meant that he was in a position to make a "double" profit although a shipment was customarily spread over several ships to reduce the risk of loss. Normally, six to twelve different merchants loaded cargo on the same ship but the number of merchants could go as high as fifty as was the case of the ship "De Jonge Jacob" in 1766.<sup>122</sup>

Even if it is possible to trace a shipment from producer to consumer and knowing the increases in price and expenses along the way, the different measures used present an added problem. In his recent study on the trade of early eight

eenth century Riga and the Russian hinterland, Doroshenko shows that the metrological factor, that is, the differences in the weights and measures used, may have yielded profits as great as those gained from differences in price.<sup>123</sup> Much more information will have to be gathered before the rate of profits in the Dutch-Russian trade can be established with accuracy. But even if the Dutch had the lowest profit margins, the high volume of the trade ensured large accumulation of monies which in turn made capital available for further investments.<sup>124</sup>

In the eighteenth century the Dutch started to invest their capital more and more in loans either at home or abroad.<sup>125</sup> The most important stimulus to the Dutch lending activities abroad lay in the difference in the rate of interest in the Republic and other countries. The vast capital accumulation of the Amsterdam merchants tended to keep the interest rate in Holland as low as 2 1/2% to 3% or even 2% to 1 3/4%.<sup>126</sup> In addition, many commission traders made a practice of advancing part of an agreed price in cash by bill of exchange to the owners of the goods before they were actually disposed of, taking interest on the advance in addition to the commission fee for the sale.<sup>127</sup>

Two facts illustrate the importance of the Amsterdam money market and banking facilities to Russia despite the decreasing share of the Dutch in Russia's foreign trade. In the first place, Amsterdam was the sole European financial centre on which one could draw or accept bills of exchange from Russia.<sup>128</sup> A bill of exchange issued by an English or French merchant in St. Petersburg or Moscow would have to be drawn on a correspondent in Amsterdam. The Russo-English trade imbalance was thus

settled via bills of exchange drawn on the Amsterdam exchange.<sup>129</sup> In the long run, however, it proved impossible to maintain this financial position without a corresponding dominance in trade and shipping. The crisis in 1763 rocked the Amsterdam financial establishment.<sup>130</sup> It occurred as a result of exchange operations during the Seven Years' War and of the failures of some Hamburg banking houses, which had a domino effect on the Amsterdam banking community. This led to the breaking of the Dutch monopoly as Russia's sole European banker.<sup>131</sup> From 1763 on it became possible to draw Russian bills of exchange also on Hamburg and London.<sup>132</sup>

Nevertheless, Amsterdam remained a centre of dominant financial strength. The best illustration of this was the reliance of Russia on the Dutch bankers who floated the huge government loans for Russia at the end of the eighteenth century. Between 1787 and 1793 Hope & Co. issued eighteen series of loans of f. 3,000,000 each on behalf of the Russian government.<sup>133</sup> This amounted to a total of f. 54,000,000 and raised the total sum of loans outstanding at the turn of the century to more than f. 88,000,000.<sup>134</sup> By the time of the Congress of Vienna in 1815, Russia's indebtedness to the Dutch banking houses had increased to f. 101,486,000.<sup>135</sup> Thus, at a time when trade between Holland and Russia was rapidly declining, the Russian government began to rely more and more on the Dutch for financial assistance. Early in the nineteenth century, the Dutch still possessed a remarkable amount of financial power and the greater part of Russia's foreign loans were with Holland.<sup>136</sup>

Footnotes - Chapter IV

<sup>1</sup>It should be kept in mind that the Sound Toll figures on shipping from Russia do not include the ports of Viborg and Frederikshamn.

<sup>2</sup>Figures for 1784 and 1785 were taken from Tables V.3 and 4 while those for 1794 to 1797 and 1803 to 1807 from the General Extracts über die bein bresundischen Zollamte klaristen Schiffe as found in the correspondence from Elseneur by J.J. Aller to the D.O.H. (G.A.A., PA78/284).

<sup>3</sup>Figures for Rotterdam were taken from Table VI.1. The figures for Amsterdam have been adjusted for missing data in 1791 and 1795 and do not include St. Petersburg for the years 1797 to 1807.

<sup>4</sup>The percentages are based on the sum of Column 'B' divided by that of Column 'A' x 100 of Tables V.1-4.

<sup>5</sup>H. T. Colenbrander, Gedenkstukken der Algemeene Geschiedenis van Nederland van 1795 tot 1840, vol. I, 's Gravenhage, 1905, pp. 199-200; Oldenweldt, "Scheepvaartstatistiek," pp. 126-128. Colenbrander's figures are for ships that arrived at Texel and the Vlie and do not include whaling and fishing boats nor vessels of the Dutch East India Company. No Amsterdam data were available for 1800 which has therefore been omitted.

<sup>6</sup>Only from this set of GGR figures on shipping from Russia have Viborg and Frederikshamn been excluded.

<sup>7</sup>The percentages are based on "Total for Russia" and "Total from Baltic" respectively in Tables V.3 and 4.

<sup>8</sup>That is out of the 1,127 ships per annum which sailed from the Baltic to Holland only 67.3% or 759 were destined for Amsterdam where they accounted for 28.7% of all ship arrivals. Similarly, of the 305 ships per year that passed the Sound for Holland in 1784 and 1785 only 67.7% or 206 were destined for Amsterdam representing 8.8% of the annual shipping turnover at Amsterdam.

<sup>9</sup>See below, pp. 291-294.

<sup>10</sup>As far as shipping from Russia to Rotterdam is concerned only figures on the number of ships are available. The findings with regard to St. Petersburg in relation to shipping from Russia show that the number of ships alone is not a very good indicator as it does not tell us the total of the cargo carried or amount of shipping tonnage involved.

(Footnotes - Chap. IV)

<sup>11</sup>Bogucka, "Amsterdam shipping," pp. 433-435.

<sup>12</sup>Snapper, Oorlogsinvloeden, pp. 303-315.

<sup>13</sup>Elias, Voorspel, vol. I, p. 61.

<sup>14</sup>By combining the STA data on commodities with that of the GGR on sizes of cargo and ship, it should be possible to estimate the average sizes of cargoes and ships, excluding those involved in the timber trade.

<sup>15</sup>The GGR figures are based on those presented at five-year intervals in Tables IV.4.A-H and the corresponding years for the Russian ports as found in Tables II.4.B-E.

<sup>16</sup>Walter Vogel, "Beiträge zur Statistik der deutschen Seeschiffahrt im 17 und 18 Jahrhundert," H.G., 57(1932)129. See also by the same author, "Zur Grösse der europäischen Handelsflotten im 15., 16. und 17. Jahrhundert. Ein historisch-statistischer Versuch," in Festschrift D. Schäfer zum 70. Geburtstag dargebracht, Jena, 1915, pp. 268-333.

<sup>17</sup>Faber, "Het probleem van de daalende graanuitvoer uit de Oostzeelanden in de tweede helft der zeventiende eeuw," A.A.G. Bijdragen, 9(1963)7.

<sup>18</sup>Snapper, Oorlogsinvloeden, Tabel B, pp. 312-315.

<sup>19</sup>For example, the ship "d'Zendracht" which in 1720 was chartered by Tsar Peter's Dutch resident Christoffel Brants for a return voyage Amsterdam - St. Petersburg (G.A.A., N.A. 6626/-, 20 May 1720) also made voyages to Curaçao (G.A.A., PA88/559, Journal van Quirijn Brantsz, 1715-1731). According to the charterparty the ship measured 125 vt. long by 33 3/9 vt. wide, by 14 1/2 vt. height and a deck of 7 vt. and thus, according to Formula (2), measured 338 lasts or 676 tons. It was thus quite a large merchantman.

<sup>20</sup>Dirk van Hogedorp, Stukken raakende den tegenwoordige toestand der Batavische Republiek, Den Haag, 1801, Appendix LAH, p. 315.

<sup>21</sup>Soom (Der Handel Revals, p. 2) quotes a Swedish source which places the average size of Dutch ships visiting Reval in 1692 at 200 to 300 lasts. This figure differs considerably from the information in the

(Footnotes - Chap. IV)

GGR (Table II.4.E) where the largest average size of the cargo in the first quarter of the eighteenth century was 155 lasts in 1716 and that of the ship 112 lasts. However, the change in ship sizes on this route might have been a result of the Northern War. Sources used by Walter Kresse on shipping with Danzig indicate that, in 1781, 186 Hamburg ships averaged 95.6 lasts and, in 1823, 131 ships were found to average 110 lasts. (Walter Kresse, Materialen zur Entwicklungsgeschichte der Hamburger Handelsflotte, 1765-1823, Hamburg 1966, pp. 68-69.) According to the GGR (Table IV.4.E) the 68 ships that sailed from Danzig to Amsterdam in 1779 averaged 75.2 lasts while the average size of the cargo carried by them was 119.5 lasts. The average size of the 127 ships and cargoes for the years 1783 to 1785 were 80.6 lasts and 127.1 lasts respectively. Both these sets of figures do not differ that much from those presented by Kresse. However, for the year 1824 the average size of ships from Danzig was only 39.7 lasts and that of the cargoes 46.4 lasts, both of these differing considerably from Kresse's average of 110 lasts for 1823.

<sup>22</sup>Jeannin, "Les comptes du Sund," pp. 77-78.

<sup>23</sup>Davis, English Shipping, pp. 57-60.

<sup>24</sup>E. Luzac, Holland's Rijkdom, Leiden, 1781, Vol. II, p. 321; see also Chapter II.5.

<sup>25</sup>Faber, Drie Eeuwen Friesland, pp. 278-289; S. Haagsma, Een blik op Friesland's Koopvaardij, Leeuwarden, n.d., p. 36; Lootsma, "De zeevaart van Hindeloopen," p. 229; de Vries, Economische Achteruitgang, p. 37. See also A.J. Deurlo, "Bijltjes en Klouwers. Een bijdrage tot de geschiedenis der Amsterdamse Scheepshouw in het bijzonder in de tweede helft der achttiende eeuw," Ec.H. Jrbk., 34(1971)11-71; S.C. van Kampen, De Rotterdamse Particuliere Scheepsbouw in de tijd van de Republiek, published Ph.D. dissertation, University of Rotterdam, 1953; A.G. Malcolm, De Houthandel van Nederland, Amsterdam, 1920; and C.A. Schillemans, De Houtveilingen van Zaandam in de jaren 1695-1811, 's Gravenhage, 1947 on the Dutch shipbuilding industry at Zaandam and elsewhere.

<sup>26</sup>Keuning, De Groninger Veenkolonien, Amsterdam, 1933, p. 179; de Vries, Economische Achteruitgang, p. 191.

<sup>27</sup>Dr. Frits Snapper, currently working on the problem of the Frisian kofschip.

(Footnotes - Chap. IV)

<sup>28</sup>The fact that the Dutch developed different types of ships to meet the requirements of a particular trade rather than by increasing or decreasing the size of the flute was also noted by William Petty who wrote in his Political Arithmetic in 1691 (London, pp. 19ff.) that,

"The Dutch built long slight ships for carrying masts, timber, barks, etc., and short ones for loading iron, stones, etc. One sort of vessels to trade at ports where they need lie at the ground, others where they must jump upon sand every twelve hours; one sort of vessels and way of manning in time of peace, and cheap gross goods, another for war and precious commodities. One sort of vessels for the turbulent seas, another for inland waters and rivers. One sort of vessels and riggings where haste is requisite for the maiden head of a market, another where one-fifth or one-fourth of the time makes no matter . . . some for Northern navigation among ice and some for the South against worms etc. . . ."

<sup>29</sup>This would entail adding the name of the captain and of the ship to the data set and coding information of all Baltic shipping for a number of years since a captain who went to Danzig on his first voyage could very well visit Riga\* instead on his second trip. Professor Johansen in his study on the Sound Toll Accounts for 1784 to 1807 has prepared some preliminary figures on the frequency of voyages per year to the Baltic. According to his data out of the 4,185 west-bound passages through the Sound by Dutch captains during the years 1784 to 1786, 6.6% of the passages were by captain making a single journey per year while 47.4% of the passages were accounted for by captains who made two voyages yearly. The percentage of those making three passages per year was rather low at 9.0% but much higher at 30.4% for those who undertook four trips to the Baltic in a single year. The remaining 6.6% of the passages were accounted for by those making five or more journeys per annum.

<sup>30</sup>For example, in 1804 thirty ships came to Amsterdam from the port of Kiel. These ships ranged in size from 28 to 50 tons averaging 41.54 tons. Similarly in 1819 Kiel was listed as the port of departure for nineteen ships averaging 38.84 tons in size, the average size of the cargo being 54.42 tons.

<sup>31</sup>Faber, Drie Eeuwen Friesland, p. 285. Dillen (Van Rijkdom en Regenten, p. 514) suggests that the smaller Frisian ships also engaged in the voorbilandsvaart.

<sup>32</sup>W.H.D. Brink, Bidrag tot de kennis van den economischen toestand van Nederland in de jaren 1813-1816, published Ph.D. dissertation, University of Amsterdam, 1916, p. 80.

(Footnotes - Chap. IV)

<sup>33</sup>Professors J.R. Bruijn and I. Schöffer are presently preparing a computer based data bank on the ships of the East India Company.

<sup>34</sup>Schillemans, p. 29.

<sup>35</sup>Nederlandse Jaarboeken, 1747, p. 896.

<sup>36</sup>Kirchner, Collected Essays, p. 135.

<sup>37</sup>Alice C. Carter, "The Dutch as neutrals in the Seven Years' War," International and Comparative Law Quarterly, 12(1963)818-834.

<sup>38</sup>The figures for 1784 and 1785 are taken from Tables V.3 and 4 while those for 1794 to 1797 and 1803 to 1807 and 1814 to 1816 can be found in the correspondence of J.J. Aller to the D.O.H. (G.A.A., PA78/284) which contain General Extract über die beim öresundischer Zoll-  
amte kloristen Schiffe.

<sup>39</sup>Simon Hart, Engel van de Stadt, pp. 125-126; B. Kolf, "Achter de schermen van het onder onzijdig vlag brengen van koopvaardijochapen ten tijde van de Bataafsche Republiek," Rotterdamse Jaarboekje, 5th ser., 2(1944)81-107. The Dutch East India Company used the Danish flag and Danish merchants to carry their colonial trade. See Ole Feldbaek's, India Trade under the Danish Flag 1772-1808. European Enterprise and Anglo-Indian Remittance and Trade, Copenhagen, 1961 and his recent article, "Dutch Batavia Trade via Copenhagen 1795-1807. A Study of Colonial Trade and Neutrality," Sc. Ec. H. R., 21(1973)44-75.

<sup>40</sup>A.R.A., Archief van de Levantschen Handel 114, Letter of 26 March 1793 by Van Dedem to the Directors of the Levant Trade. G.A.A., PA38/23, 24 and 25, Muster rolls for 1783. The muster rolls for 1783 list a total of 828 ships of which 414 ships mention the flag flown by the ship. Of these 17 flew the Russian flags. One hundred and seventy six ships stated one of the Russian ports as their port of destination and the different flags under which these ships sailed were as follows:

Russian	-	3	Hamburg	-	10
Prussian	-	222	Bremen	-	10
Rostock	-	2	Emden	-	1
Lubeck	-	6	Dutch	-	10
Denmark	-	89	England	-	1
Sweden	-	8	Munster	-	2
Oldenburg	-	1	Austrian Emperor	-	145
			Venice	-	3
			American	-	4

Even in 1784 ships not sailing to Russia and which were probably Dutch



(Footnotes - Chap. IV)

owned/controlled were sailing under the Russian flag. For example a muster roll of 3 April 1784 (PA38/26) stated that captain Volkert Lolkes in command of the ship "de Gewaapende Neutraliteit" signed on a crew to sail from Amsterdam to Bordeaux under a Russian flag. See also Isabel de Madariaga, Britain, Russia and the Armed Neutrality of 1780, New Haven, 1962, pp. 363-386.

<sup>41</sup>W. F. H. Oldewelt, "De Scheepvaartstatistiek van Amsterdam in de 17de en 18de eeuw," Jrbk. Amstelodamum, 45(1953)77-78.

<sup>42</sup>See, for example, G.A.A., N.A. 10900/252, 5 June 1781, N.A. 10901/134, 27 and 29 April 1782 and N.A. 10901/168, 22 and 24 May 1782 regarding ships sailing from Archangel to Amsterdam; N.A. 10901, 20 and 21 June 1782 for a ship sailing from Archangel to Barcelona; N.A. 10901/95, 28 March 1782 for a ship sailing from St. Petersburg to Lisbon; and N.A. 10901/145, 2 May 1782 for a ship sailing from Riga to Port-a-Port.

<sup>43</sup>Kolff, pp. 102-103.

<sup>44</sup>Z. Sneller, "De Toestand der Nijverheid te Amsterdam en Rotterdam volgens de Enquete van 1816," B.V.G.O., 6th ser., 3(1926)149.

<sup>45</sup>On the use of the American flag by European merchants during the time of the Continental Blockade as a neutral flag covering the trade with Russia see Alfred W. Crosby Jr., America, Russia, Hemp and Napoleon. American Trade with Russia and the Baltic, 1783-1812, Ohio State University Press, 1965.

<sup>46</sup>Ernst Baasch, Holländische Wirtschaftsgeschichte, Jena, 1927, p. 165; Keuning, Scheepsbouw, p. 13.

<sup>47</sup>See above p. 3.

<sup>48</sup>Bogucka, "Amsterdam shipping," p. 435.

<sup>49</sup>G.A.A., N.A. 8651/681, 12 May 1729.

<sup>50</sup>See for example, G.A.A., N.A.A. 10890/159, 2 April 1778 for a ship from Bristol to Archangel to Amsterdam; N.A. 10893/262, 22 May 1779 for a ship from Dunkirk to Archangel to Lisbon or Barcelona; N.A. 10895/195, 24 May 1780 for a ship from Ostende to St. Petersburg to

(Footnotes - Chap. IV)

Lisbon; N.A. 10798/613, 10 May 1765 for a ship from Bremen to St. Petersburg to Lisbon; N.A. 10864/460, 11 May 1772 for a ship from Calais to St. Petersburg to Marseilles; N.A. 10893/181, 29 March 1779 for a ship from Ostende to Riga to Lisbon; and N.A. 10893/261, 18 & 21 May 1779 for a ship from Chatham to Archangel to Lisbon.

<sup>51</sup>G.A.A., N.A. 10815/637, 21 June 1764, a ship from Hamburg to St. Petersburg to Ancona.

<sup>52</sup>The role of Amsterdam as a staple market and its decline during the eighteenth century still awaits its historian. A somewhat dated but still useful description in English can be found in Chapter V of Gideonse's unpublished thesis. Gideonse based his interpretation on the dissertation by the Dutch historian T. P. van der Kooy, Hollands stapelmarkt en haar Verval, published Ph.D. dissertation, University of Amsterdam, 1931. Van der Kooy's analysis of the roles and function of various groups or classes of the merchant-financier-trader-shipowner has been criticized and improved upon by later Dutch historians such as Joh. de Vries (Economische Achteruitgang) and Pieter W. Klein (Van Stapelmarkt tot Welvaartstaat, Rotterdam, 1970).

<sup>53</sup>The number of charterparties located to date is too small and the different notarial protocols consulted too limited to allow for any definite conclusions as to the number of ships that sailed from Russia to Holland and that bypassed it. One can very well argue that the charterparties give a pessimistic picture of direct trade between Russia and Amsterdam since a substantial amount of this trade was carried out by merchants who used their own ships and therefore did not appear in the charterparties.

<sup>54</sup>Bogucka, "Amsterdam shipping," pp. 438-442; Hart, "Amsterdam Shipping," pp. 15-19.

<sup>55</sup>See Table IV.14. It seems that only the trade from Russia to Amsterdam was severely affected by this war. In 1781 the cargo tonnage from Russia dropped from 67,798 tons the previous year to 20,480 tons while that for the Baltic as a whole dipped only slightly remaining at 131,522 tons. The previous year it had stood at 135,726 tons (Table III.14). An example of the adaptability of the Dutch to the hazards of war and their ability to continue carrying vital war materials during this period is that during the period from 1778 to 1782 France was supplied with more masts than England (Albion, Forests and Sea Power, pp. 193-194). See also, Frank Fox, French-Russian Commercial Relations in the Eighteenth Century and the French-Russian Commercial Treaty of 1787, unpublished Ph.D. dissertation, University of Delaware, 1966, pp. 148 ff.; Kampen, p. 121; Madariaga, pp. 360-386; and Menke, pp. 276-284.

(Footnotes - Chap. IV)

<sup>56</sup>De Vries, Economische Achteruitgang, p. 17.

<sup>57</sup>Michel Morineau, "La balance du commerce Franco-Néerlandais et le resserrement économique des Provinces-Unies au XVIII<sup>ème</sup> siècle," Ec.H.Jrbk., 30(1965)232-233.

<sup>58</sup>The first commercial treaty between Russia and the Netherlands was not concluded till 1846. ("Verdrag van Handel en Zeevaart tusschen Rusland en de Nederlanden gesloter 1/13 September 1846," Staatscourant, No. 281, 25 November 1846.)

<sup>59</sup>Scheltema, Rusland, vol. 4, pp. 210-219.

<sup>60</sup>G.A.A., A.B.D.M. 31, Letters of 15 February and 20 September 1715 written by de Bie to the Burgomasters of Amsterdam.

<sup>61</sup>Letter 17 October 1788 from the States General to the Grave van Rechteren at St. Petersburg as reported in the Nieuwe Nederlandse Jaarboeken, 1788, pp. 564 and 760. In this letter which recalled van Rechteren who was Extraordinary Envoy at the Russian Court, the reason for the recall given was simply that it was too expensive to have two ministers (actually they were the envoy and the Dutch secretary Swart) at the Russian court.

<sup>62</sup>Scherer, Commerce, vol. II, p. 147.

<sup>63</sup>For a review of treaty negotiations between the Dutch and Russia for the period up to 1729 consult Verbaal van den Heer de Dieu, 1729-1732, Appendix 2(A.R.A., Legatie Archief, No. 580). For a survey of these negotiations for the period 1734 to about 1760 with copies of the treaty proposals appended see Retroacta over een Commerce Tractaat met Rusland (A.R.A., Collectie van der Heim, Nr. 500). A good summary in English as well as translation into English of the concept treaty proposed by de Dieu in 1729 can be found in Gideonse, pp. 173-203. See also the article by Otto Eichelman, "Zur geschichte des diplomatischen Verkehr in Russland im XVII Jahrhundert," Russische Revue 6(1877)535-557 and "Die rechtliche Ordnung des internationalburgerlichen Verkehrs Russlands im achtzehnten Jahrhunderts seit Peter I," Russische Revue, 7(1787)209-246.

<sup>64</sup>A.R.A., Archief van der Spiegel, No. 175, 6 July 1791.

(Footnotes - Chap. IV)

<sup>65</sup>G.A.A., PA78/1327, Letter of 18 March 1749 from Hartwijk Schaub and Co. in St. Petersburg to I. de Neufville in Amsterdam. In this letter Schaub described the techniques of the Dutch who used the names of Russian and Armenian merchants so that goods could be brought aboard ship free of the extraordinary charges and paying tolls according to the rates applicable to Russian merchants.

<sup>66</sup>A.R.A., States General, Liassen Moscovie, No. 6655. Letter of 19 March 1784 written by the Grave van Wassenaar to the States General.

<sup>67</sup>Koopman, 1770, vol. II, p. 14. In reviewing the Dutch trade with Russia the Koopman noted that although the Dutch had no commercial treaty with Russia and the possibility for a treaty in the near future was dim, this did not seem to have affected Dutch trade which was "prospering strongly."

<sup>68</sup>Gideonse, pp. 202-205.

<sup>69</sup>An attempt to explain the lack of interest in foreign trade by the Russians as a matter of choice rather than economic backwardness may be found in N.L. Rubenstein, "Vneshnaja trgovlia Rossii i russkoe kupechestvo vo vtoroi polovine XVIII v." Istoricheskie zapiski, 55(1955) 343-361.

<sup>70</sup>Some indication of the profitability of the role of the Dutch and others as middlemen was that the Spanish figured that they would save up to 30% by dealing directly with the Russians instead of via the Dutch or Hamburg merchants (G.A.A., A.B.D.M. 31, Letter from Moscow of 17/28 February 1729 written by De Wilde to the Burgomasters of Amsterdam). Storch stated that in 1775 when the Reval merchants started to sail their own ships to Lubeck freight charges declined by 40% (Storch, vol. VII, p. 42).

<sup>71</sup>G.A.A., A.B.D.M. 31, Letters from St. Petersburg of 29 April, 10 May, 24 May and 27 August 1717 by de Bie to the Burgomasters of Amsterdam.

<sup>72</sup>Ukas of 8 November 1723 quoted in J.M. Letiche, ed., A History of the Russian Economy from the Ninth to Eighteenth Century, Berkeley, 1964, pp. 262-263.

<sup>73</sup>Storch, Vol. V, pp. 200-202. For example, in 1766 some Russians including the Tsarina established a company to trade directly with Spain and Portugal. As a test they sent several vessels with cargo to Livorno but

(Footnotes - Chap. IV)

on this venture the Russians lost a great deal of money (A. R. A., Archief Stadhouderslijk Secretariat, No. 110, Letter of 22 August 1766 from St. Petersburg written by Swart to the Grand Pensionary in The Hague). On their part, the Spanish also tried to trade directly with Russia either by using their own ships or chartering some from the Dutch (Koopman, 1775, vol. IV, p. 51).

<sup>74</sup>Ibid., p. 203.

<sup>75</sup>Marbault, p. 135.

<sup>76</sup>A. R. A., Archief Admiraliteits College, Verzameling Bisdom N. 260, fols. 504-506. Enclosed in a letter from St. Petersburg on 13 February 1751 by Swart and received at 's Gravenhage 5 June 1751, was a written opinion of a "Concept to improve Russian Trade" drawn up by an anonymous Russian author. According to Swart, the Russian merchant does not know how to equip and run ships, does not trust strangers to look after his affairs and deals only in goods which he can "have in his hands." Further there are practically no Russian sailors and a Russian merchant marine would be locked in ice while the ships of other European nations continue trading. On the lack of initiative of Russian merchants to engage in other foreign trade see Hans Halm, Habsburgischer Osthandel im 18. Jahrhundert (Veröffentlichungen des Osteuropa-Institutes, vol. 7), Munich, 1954, pp. 133-140.

<sup>77</sup>Gideonse, Chapter IV. It should be noted that despite wartime conditions a considerable number of ships reached Amsterdam from Danzig in 1734 (Table IV.4. E). Further investigation into the GGR on the port of Danzig should provide a more definite answer.

<sup>78</sup>Alice C. Carter, "Dutch Foreign Investments 1738-1800, in the light of the Amsterdam 'Collateral Succession' Inventories," TvG, 66(1953) 27-38; De Vries, Economische achteruitgang, p. 27. Although the Galjoetsgeldregisters for 1775 are missing, the Sound Toll data (Table V.5) indicate that 1775 was the last year of growth in this cycle since the following year the number of ships to Holland from Russia dropped by almost 200. Van Dillen (Van Rijkdom en Regenten, pp. 559-560) was of the opinion that the upturn in 1759 should be linked to the death of the Gouvernante Anna, wife of the deceased Willem IV. Anna had tied the building of warships to expansion of the army. With her death, this block was removed and the Republic started building warships which protected the merchantmen. See also Bartstra, p. 33.

<sup>79</sup>J.A. Faber et al., "Population changes and economic developments in the Netherlands: a historical survey," A.A.G. Bijdragen, 12(1965)47-113. See also Faber, Drie Eeuwen Friesland, Chapter III and van der Woude, Noordekwartier, Chapters II and III.

(Footnotes - Chap. IV)

<sup>80</sup>B.H. Slicher van Bath, De agrarische geschiedenis van West-Europa (500-1850), Utrecht, 1960, pp. 227 ff.; Walter Vogel, "Handelsconjunctuur und Wirtschaftskrisen in ihrer Auswirkung auf den Seehandel der Hansestädte, 1560-1806," H.G., 74(1956)50-64; De Vries, Economische achteruitgang, p. 26; and Pieter W. Klein, "Stagnation économique et emploi du capital dans la Hollande des XVIII<sup>e</sup> et XIX<sup>e</sup> siècles," Revue du Nord, 52(1970)33-41.

<sup>81</sup>Dillen, Van Rijkdom en Regenten, p. 338; J.A. Faber, "Het probleem van de dalende graanaanvoer uit de Oostzeelanden in de tweede helft van de zeventiende eeuw," A.A.G. Bijdragen, 9(1963)21-23; L. van Buyten, "Graanprijzen in de Zuidelijke Nederlanden," Spiegel Historiaal, 2(1967) 2:67-77; L.G.J. Verberne, "Hooge Graanprijzen 1789," Rotterdamse Jrbk. 8(1940)132-141. The English grain trade showed the same characteristics. See William F. Galpin, The Grain Supply of England during the Napoleonic Period, published Ph.D. dissertation, University of Philadelphia, 1925. Considerable quantities of grain were also being exported from England to Holland. See David Omrod, Anglo-Dutch Commerce, 1700-1760, unpublished Ph.D. dissertation, Cambridge, England, 1973, pp. 405-408.

<sup>82</sup>Dillen, Van Rijkdom en Regenten, pp. 336-338; Faber, "Probleem," pp. 21-23.

<sup>83</sup>For a discussion of Russia's grain exports via the Black Sea, see P.A.M. Herlihy, Russian Grain and Mediterranean Markets, 1774-1861, unpublished Ph.D. dissertation, University of Pennsylvania, 1963.

<sup>84</sup>On the negative effects of high taxes and relatively high wages see E. Luzac, 1783, vol. IV, p. 82; Dillen, Van Rijkdom en Regenten, pp. 272-282; W.H.F. Oldenweldt, "De Hollandse Imposten en ons beeld van de conjunctuur," Jrbk. Amstelodamum, 47(1955)58-59; F.H. Sickenga, Bijdrage tot de geschiedenis der belasting in Nederland, Leiden, 1864; De Vries, Economische achteruitgang, pp. 172-180; and especially, Charles Wilson, "Taxation and the Decline of Empires, an unfashionable theme," B.M.H.G., 77(1963), 10-26.

That pollution and the lack of new sources of energy were factors in arresting Dutch industrial growth and prevented a 'take-off' similar to that which occurred in England in the second half of the eighteenth century is argued by H.A. Diedericks, J.A. Faber and S. Hart in "Urbanisation, Industrialization and Pollution in the Netherlands, 1500-1800," (trans. fr. Dutch by J. Knoppers), paper presented at the Vith International Congress on Economic History, Theme 3: Urbanisation and Environment, Copenhagen, August 1974. A slightly modified version in Dutch can be found in A.A.G. Bijdragen, 11(1973)251-271.

(Footnotes - Chap. IV)

<sup>85</sup>H.A.H. Kranenburg-Boelmans, "De Haring export naar de Oostzeegebied in de 18e eeuw," TvG, 72(1959) 251-259; H. Wätjen, "Zur Statistik der Holländischen Heringfischerei im 17. und 18. Jahrhundert," H.G., 16(1910)129-186. See also Unger, "Publikatie Volktooid," pp. 189-191.

<sup>86</sup>Snapper, Oorlogsinvloeden, p. 262.

<sup>87</sup>Robert Fruin, Geschiedenis der Staatsinstellingen in Nederland, (uitgegeven door H.T. Colenbrander), 's Gravenhage, 1922, p. 183.

<sup>88</sup>Pieter Geyl, Willem IV en Engeland tot 1748, 's Gravenhage, 1924, p. 8 and pp. 235-236.

<sup>89</sup>Bartstra, pp. 1-2.

<sup>90</sup>Ibid., p. ix.

<sup>91</sup>Fruin, pp. 394-395; Snapper, Oorlogsinvloeden, p. 121.

<sup>92</sup>Bartstra, pp. 20-21; Snapper, Oorlogsinvloeden, p. 122.

<sup>93</sup>Snapper, Oorlogsinvloeden, p. 231.

<sup>94</sup>M.A. Byl, De Nederlandse Convooidienst 1300-1800, 's Gravenhage, 1951, p. 70.

<sup>95</sup>G.A.A., PA78/108.

<sup>96</sup>G.A.A., PA78/25. Letter from 's Gravenhage of 22 March 1742 to the D.O.H. written by van Gemmert. Van Gemmert, who was the representative of the D.O.H. at the States General, wrote: "If the land provinces continue to condition their consent on the expenses for the navy and a sea province is forever questioning the cost of the army who knows when agreement can be reached. My greatest fear is that while we are continually debating without reaching a conclusion our enemies will swallow us"; Bartstra, p. ix.

<sup>97</sup>Snapper, Oorlogsinvloeden, p. 160.

<sup>98</sup>Ibid., pp. 161 and 262; Bartstra, p. 278; Geyl, p. 10.

(Footnotes - Chap. IV)

- <sup>99</sup>De Vries, Economische achteruitgang, pp. 172-175.
- <sup>100</sup>G.A.A., PA78/9.
- <sup>101</sup>Dillen, Van Rijkdom en Regenten, p. 554; De Vries, Economische achteruitgang, pp. 29ff.
- <sup>102</sup>Ernst Baasch, "Hamburg und Holland im 17. und 18. Jahrhundert," H.G., 16(1910)45-102; Dillen, Van Rijkdom en Regenten, p. 559; Madariaga, pp. 361-368; Menke, pp. 276-294; Hans C. Johansen, "Trade and Merchant Shipping between the Baltic Area and South-Western Europe in the Late Eighteenth Century," paper presented at the Vith International Congress on Economic History, Copenhagen, August 1973.
- <sup>103</sup>Baasch, Quellen, pp. 229-246.
- <sup>104</sup>Morineau (p. 211) states that the years 1748 to 1753 were the critical years in the switch to the voorbijlandvaart from Russia to France.
- <sup>105</sup>H.H. van den Heuvel, A. Rogge en C. Zillesen, Verhandelingen uitgegeven door de Hollandse Maatschappye der Wetenschappen, Haarlem, 1775, p. 227; Koopman, vol. IV, 1773, pp. 436-438.
- <sup>106</sup>Kooy, p. 49; Wilson, Anglo-Dutch Commerce, p. 11. According to the Koopman (vol. II, 1770, p. 190) the time required for letters to reach Amsterdam from the following places was:
- |               |           |                |           |
|---------------|-----------|----------------|-----------|
| Archangel     | - 60 days | St. Petersburg | - 38 days |
| Danzig        | - 16 days | Reval          | - 28 days |
| Frederikshamn | - 42 days | Riga           | - 18 days |
| Moscow        | - 48 days | Stockholm      | - 18 days |
- Especially noticeable are the short times for Danzig, Riga and Stockholm. Compared with Riga mail from St. Petersburg took more than twice as long.
- <sup>107</sup>Luzac, vol. II, 1781, p. 301; J.B. Manger, Recherches sur les relations économiques entre la France et la Hollande pendant la Révolution Française (1785-1795), published Ph.D. dissertation, University of Amsterdam, 1923, p. 43.
- <sup>108</sup>Doroshenko, "Tseni," p. 81; G.A.A., PA88/984. In a letter written on 14 May 1713 by Tobias Puyteling to David Leeuw in Amsterdam, Puytelingh states that hemp "can be bought now at 4 1/4 to 4 1/2 ruble but will probably cost 7 1/2 to 8 ruble at the time of the larmarka."



(Footnotes - Chap. IV)

<sup>109</sup>Baasch, Quellen, pp. 349-351.

<sup>110</sup>An example of a transaction on which very little was earned and probably incurred a loss was the following:

On 11 September 1720 Tobias Puyteling loaded 1651 3/4 chetvert' or 103.2 lasts of linseed at Archangel for David Leeuw in Amsterdam on the ship "de Waakende Leeuw" (G.A.A., PA88/1005). The purchase price was 3055:7:8 rubles which at an exchange rate of 80 stuivers = 1 ruble equalled f.9167:4:4 (G.A.A., N.A. 7985/129 and 7994/168. Bills of exchange protests of 29 January and 26 October 1720 respectively.) The costs incurred at Archangel for tolls and loading the cargo on board the ship were f.601:6:3 (or 6.6% of the purchase price). The shipping costs were f.2036:17 (or 22.2% of the purchase price). The expenses at Amsterdam for unloading, weighing, harbour and other charges were f.333:9 (or 3.6% of the purchase price). An extra f.203:17 was paid for warehousing (or 2.2% of the purchase price). Thus the total cost of the 1651 3/4 chetvert' of linseed now lying ready for sale in an Amsterdam warehouse December 1720 was about f.13,004 (or the purchase price plus 41.9%). Prices for linseed at Amsterdam in 1721 were about f.5 1/2 per tun which at 21.6 tuns per last equalled f.118:16 per last (Posthumus, Prijsgeschiedenis, Vol. I, p. 55). At this price the linseed would have a total sales value of about f.12,260 which means that on the surface David Leeuw lost about f.744 on the transaction. He probably recovered some of this via the freight paid as the linseed was shipped on a ship of which he was part-owner.

<sup>111</sup>G.A.A., PA88/1005 and 1288. Based on the bills of lading, invoices and other documents contained in a letter sent by Dutch merchants in Russia to their counterparts in Amsterdam.

<sup>112</sup>G.A.A., PA78/1005. A purchase of 3430 barrels of "extra rich Moscovian" tar on 13 October 1722 cost 2613:1:- rubles. The tolls (85.8%), labour, handling and packing charges and commission added an extra 2683:6:- rubles to the cost of the tar or 102.6%. Harbour charges, loading costs and the like were not included.

<sup>113</sup>J.G. van Dillen, "Een boek van Phoonsen over de Amsterdamsche Wisselbank," Ec.H.Jrbk., 7(1921)225.

<sup>114</sup>J.A. van Hamel, Nederland tusschen de mogendheden, Amsterdam, 1918, p. 225.

(Footnotes - Chap. IV)

<sup>115</sup>See above footnote 111. P. Butel, "Bordeaux et la Hollande au XVIII<sup>e</sup> siècle: l'exemple du négociant Pellet (1694-1772)," Revue d'Histoire Economique et Sociale, 45(1967)58-86. Butel stated (p. 62) that profits as high as 200% were made on a cargo of 2/3 salt and 1/3 wine from Bordeaux to Riga and that if a return cargo of hemp was obtained the profit on the whole voyage could go as high as 300%. Bogucka ("Amsterdam shipping," p. 439) also lists possible profits from 200% to more than 300% but explains that these should be considered theoretical being based solely on price differences between the ports concerned and that in practice profits rarely reached such heights.

<sup>116</sup>Simon Hart, "De handelsbetrekkingen van Amsterdam met Archangel en Lapland (Kola) in de 17de eeuw," Nederlands Archievenblad, 73(1969)77-79.

<sup>117</sup>Maria Bogucka, "Profits in Gdansk. Foreign Trade in the First Half of the 17th Century," Acta Poloniae Historica, 13(1971)82.

<sup>118</sup>Martin Buist, At Spes Non Fracta. Hope & Co. 1770-1815. Merchant Bankers and Diplomats at Work, The Hague, pp. 237-239.

<sup>119</sup>Ibid., pp. 193-194.

<sup>120</sup>Kirchner, Collected Essays, p. 286, footnote 15. According to the source quoted by Kirchner on a shipment of salt and wine from France to Russia in terms of the purchase price one paid 6% export taxes, 5% commission, 12% for packing and loading at the port of departure and shipping, 6% for maritime risks, 6% insurance and 42% for Russian customs.

<sup>121</sup>G.A.A., PA88/559. Journal van Quirijn Brants 1715-1731. For example in 1716, Brants bought a 1/48 share in a new ship called the "Juffrouw Josanna" for f. 300. According to the dividends recorded in this ledger book his return on capital invested ranged from no dividends in a year to dividends as high as 24.3% in a single year. For the period 1716 to 1728, the average return per annum was 8.7%.

<sup>122</sup>G.A.A., N.A. 12373/322. In this procuration dated 30 May 1766, Tamme Beth Ybrandsz, bookkeeper of the ship "De Jonge Jacob" authorized Ns. Sahlgrén and Aug. Alstromer, merchants of Gothenburg, to look after the salvage of the ship which was shipwrecked. The procuration was signed by fifty merchants and the total value of the cargo estimated at about f. 200,000. The ship was en route to St. Petersburg from Amsterdam.

(Footnotes - Chap. IV)

<sup>123</sup>Doroshenko, "Tseni," pp. 78-81. Doroshenko gives the following breakdown of profits of Riga merchants buying goods from the Russians:

<u>Commodity</u>	<u>Price Profit</u>	<u>Metrological Profit</u>	<u>Total Profit</u>
Hemp	5.0%	7.3%	12.3%
Hempseed	15.5%	14.8%	30.3%
Linseed	9.4%	10.7%	20.1%
Crushed linseed	12.5%	6.5%	19.0%
Rye	16.8%	10.1%	26.9%
Potash	10.0%	11.7%	21.7%

<sup>124</sup>Nederlandsche Jaarboeken (1747, p. 906) stated "no nation is as happy with such small profits as the Dutch."

<sup>125</sup>Geyl, p. 10.

<sup>126</sup>Dillen, Van Rijkdom en Regenten, p. 460; Samuelson, "International Payments," pp. 171-172.

<sup>127</sup>Wilson, Anglo-Dutch Commerce, pp. 24-27.

<sup>128</sup>J.G. van Dillen, "The Bank of Amsterdam" in History of the Principal Public Banks, The Hague, 1934, pp. 105-106; W.P. Sauttijn-Kluit, De Amsterdamse Beurs in 1763 en 1773. Een bijdrage tot de geschiedenis van den handel, Amsterdam, 1865, p. 41; Anon., "Das Russische Reich," Büsching's Magazine, 2(1766)30.

<sup>129</sup>Koopman, vol. V, 1775, p. 84. According to Le Long (5th ed., 1734, vol. I, pp. 136-137) the following number of days of grace (including holidays) for foreign bills of exchange was:

- London = 3 days
- Danzig = 10 days
- Hamburg = 12 days
- St. Petersburg and all other Russian ports = 10 days

Usually bills of exchange issued in Riga and Danzig were payable on sight from one month to 41 days after issue while those from St. Petersburg were payable 65 days after date of issue. The difference in time for bills of exchange issued at St. Petersburg and Riga was due to the longer time it took for the mail to travel from St. Petersburg to Amsterdam (see above footnote 106).

<sup>130</sup>J.G. van Dillen, "De Beurscrisis te Amsterdam in 1763," TvG, 37(1922) 32-46; Sauttijn-Kluit, Amsterdamse Beurs, pp. 89ff.

(Footnotes - Chap. IV)

131 Leydse Courant, 19 September 1763.

132 Storch (Vol. VI, p. 22) stated that circa 1777 the Russian bill of exchange market was still firmly in Dutch hands.

133 Buist, At Spes Non Fracta, Chapters V through VIII.

134 Ibid., p. 168; Baasch, Quellen, p. 405. The f. 88,000,000 includes the Polish loans which Tsar Paul I had agreed to convert to Russian loans.

135 Buist, At Spes Non Fracta, pp. 270-274.

136 J. T. Weveringh, Geschiedenis der Staatsschulden, Vol. I, Haarlem, 1852, p. 670.

## CONCLUSION

The eighteenth century was one of withdrawal by the Dutch from an active and assertive role in European diplomatic and military affairs. The Republic therefore did not cooperate with Russia in this respect while Russia made an effort just in these fields. Under Peter I and his successors Russia became both a Baltic and European power. Dutch trade with Russia in this period was neither hindered nor protected by political, military or commercial treaties. The direct trade between Russia and Holland and the interaction between Amsterdam and the European economy was determined as far as Holland was concerned primarily by commercial motives. Only when the Republic was involved in war did other factors play a role as can be seen from the rise in freight prices and insurance premiums during those times. The decline in Russian exports to Amsterdam must be looked at as part of the decreased demands of Holland herself and that of Amsterdam as a staple port. And since Russia failed to participate actively in her foreign trade, the study of Russo-Dutch trade requires investigation of the Dutch as carriers of Russia's foreign trade with Holland as well as with the rest of Europe.

The utilization of the Galjootsgeldregisters—the investigation of which is far from being exhausted in this study—enables us to gain an insight for the first time into the Dutch maritime connections with Russia. Past experiences with the use of quantitative methods in history have indicated the necessity for careful evaluation and determination of the parameters of the different variables of the source material in order

that the conclusions based on such sources can withstand criticism.

The confrontation of the Galjootsgeldregisters with other Dutch sources as well as with the Sound Toll Accounts has been beneficial in a number of ways.

First of all, we now know much more about the validity of the Galjootsgeldregisters as a quantitative source for the study of Dutch shipping from the Baltic and Russia to Amsterdam. All the measurable variables, the "registered" date of arrival, the port of departure, the port of arrival, the homeport of the captain, the lastage of the cargo carried and the size of the ship in lasts, have been tested against other equally convincing sources. At the same time, a solution has been found to one of the more puzzling aspects of the Galjootsgeldregisters and of eighteenth century shipping in general, that is, the difference between the amount of cargo carried and the size of the ship. The relation between these two measurements has been put forward in the form of the equation,  $RL = .533ML$  or  $CC$ . This equation provides the linkage between the way in which the merchants and shipowners judged the size of the ship, namely, in terms of measured lastage or carrying capacity and the manner in which government or port authorities registered the size of the ship for toll purposes. Aside from providing the key to a particular problem related to the interpretation of the Galjootsgeldregisters data, this equation should be of assistance to those studying various aspects of the maritime trade of Holland and of northern Europe.

The methods developed for comparing the Galjootsgeldregisters with the Sound Toll Accounts—which is the first time that the latter source

has been tested on such a large quantitative basis—also yielded valuable results. While the question of the underdeclaration of the cargo at the Sound remains to be investigated, the Galjootsgeldregisters have shown that the Sound Toll Accounts exhibit a very high degree of reliability as far as the routes taken by the ships are concerned. The confrontation of the actual data as taken from the manuscripts of these two sources with the assistance of the computer has brought to light some interesting changes in the eighteenth century patterns of shipping from the Baltic and Russia to Dutch ports. For the first sample years, namely, 1724 and 1725, the port of Amsterdam accounted for 96.7% of the ships that sailed to Holland from all the Baltic ports and for 97.7% for those ships which came from Russia's Baltic ports. Sixty years later, after the Fourth Anglo-Dutch War, the picture had altered noticeably. By 1784/1785 only 67.3% of the vessels which passed through the Sound en route to the Republic were destined for Amsterdam, and the situation was much the same (67.6%) for those which came from Russia. Just as the Dutch share of the shipping from the Baltic and Russia declined so had the share of Amsterdam of that part of this shipping which went to Holland. According to the Zee tijdingen Rotterdam began to play an increasingly important role in Dutch-Russian trade, especially from the last decade of the eighteenth century onwards, and perhaps even surpassed Amsterdam in this respect after the Napoleonic Wars.

Another notable finding resulting from the comparison of these two sources is that while both the Galjootsgeldregisters and the Sound Toll Accounts exhibited a high degree of concordance as to whether the captain

had a Dutch or non-Dutch homeport, the Sound Toll Accounts tended to overemphasize the importance of Amsterdam as a homeport versus ports in Friesland and Groningen. Consequently, the conclusions of studies which have used the homeport of the captain as an index for charting the role of the different Dutch provinces will have to be re-examined.

With the aid of the Galjootsgeldregisters, it was possible to establish for the first time the relative significance of each Russian port for Dutch trade. The statistical data derived from the Galjootsgeldregisters set out in tables and graphs show that the pattern and structure of shipping from each Russian port had its own characteristics and was influenced by particular as well as by more general factors. Throughout the eighteenth century, shipping from Archangel formed a separate branch of Dutch trade with Russia. And while the Sound Toll Accounts were used to present information on the commerce of Russia's Baltic ports, this is the first time that a quantitative appraisal has been carried out on Archangel shipping in the eighteenth century. It is important to keep in mind that the Archangel ships were much larger than those from Russia's Baltic ports and especially those from St. Petersburg, a fact which will have to be taken into account in any further examination of the distribution of Russia's foreign trade. Certainly, as far as the Dutch were concerned, St. Petersburg never replaced Archangel during the eighteenth century and in most years ranked even well behind Riga and Narva.

The data presented in this dissertation also indicate a fundamental change in Dutch trade with Russia from the middle of the eighteenth



century onwards. It seems that the changes in the size of ship were related to basic changes in the role of Amsterdam and the Dutch in the European carrying trade. Therefore, the various yardsticks by which the role of the Dutch in maritime commerce was measured before start to lose their validity. The voorbijlandvaart and the commission trade marked the change of the Dutch role from that of serving as a transit point for Russia's commerce with Europe to the role of providing more efficient and direct links between consumer and producer. Even so, the Dutch market remained important for Russia until after the Napoleonic Wars when Dutch imports from Russia seem to have been mainly for local consumption. But this decrease in trade was offset partly by the increased reliance of the Russian government on the Dutch as bankers for the floating of Russia's large foreign loans.

Through the use of charterparties, ship-declarations, judgements in general average, ship assurance and private merchant archives a beginning has been made in describing the various factors affecting this commerce and the manner in which it was conducted. The research suggests that the study of Dutch trade with Russia is much more complex than might be assumed at first glance. Precisely because there were no overriding political or military factors binding Holland and Russia, the commerce between these two countries was conducted in the most convenient and most profitable way for the Dutch. Regardless of the changing nature of this commerce, the Galjootsgeldregisters have proved themselves to be a useful tool not only for measuring this trade for almost a century and a quarter from the point of view of Holland herself, but also for the

changing pattern of shipping from each of the Russian ports. The data and methods presented in this dissertation open opportunities for further investigation of other aspects of Dutch-Russian commerce or that of a particular Russian port, all of which offer fruitful fields of inquiry.

## APPENDIX A

### Geographical Demarcations<sup>1</sup>

In this study, the terms Holland, the Dutch Republic and the United Provinces of the Netherlands are used interchangeably. When particular reference is made to the province of Holland proper, it will be identified as such. Since the primary concern of this dissertation lies with the maritime aspects of Dutch commerce and shipping with Russia, changes in the landlocked eastern and southern boundaries of Holland which occurred during the period under investigation do not concern us.

The same cannot be said for Russia for her conquests along the Baltic coastline during the eighteenth century radically changed her western boundaries. Each territorial acquisition included the transfer of ports from either Sweden or Poland to the Russian Empire. The Treaty of Nystadt of 1721 formally recognized the territory taken by Peter I from Sweden during the Great Northern War. Ceded were the southeastern parts of the former Finnish provinces of Kexholm and Viborg, the southern coast of the Gulf of Finland including Ingria and Estonia and Livonia, as well as the Oesel and Dago Islands. An unsuccessful attempt two decades later by Sweden to recoup her losses of 1721 led to the Treaty of Abo in 1743. Under the terms of the treaty, Russia acquired territory west and north of Viborg and pushed her frontier to the Kymi River, the western limit of Novgorod's ancient sphere of commercial influence. Thus the Galjoots-geldregisters information for ports in this territory, primarily Frederikshamn, have been included with Russia from 1744 on. With the Third

Partition of Poland in 1795, Courland and the remainder of Lithuania were formally integrated into the Russian Empire. The main ports in this new acquisition were Pillau and Windau. Data for these and other ports have been added for 1796 and onwards under the heading "Courland." In 1808, Russia invaded Swedish Finland and annexed the territory in 1809. Here an exception has been made as these ports have not been added to the figures on Russia when formal trade resumed after the lifting of the Continental Blockade in 1814.

In order to conserve space and to make the data more manageable some of the minor ports were grouped under a more important port in their immediate vicinity while others were grouped under headings which do not necessarily coincide exactly with the geographical units. In the case of Russian ports, certain simplifications have been made. Unless otherwise specified, Archangel comprises all the other Russian White Sea ports such as Kem, Kola, Mesen and Onega. Kronstadt has been combined with St. Petersburg, while Narva includes all the other ports in Ingria. Under the heading of "Estonia" all other ports in Estonia proper have been put together as well as the Oesel and Dago Islands and all other ports in Livonia except Reval and Riga with some minor ports on the Dvina River. Ports such as Heiligen Aa, Libau and Pillau are grouped under the heading "Courland" which embraces all territory acquired by Russia in 1795. The same principle holds true for the heading "Frederikshamn," which covers the whole area gained in 1743. Finally, the heading "Viborg" includes the port itself as well as all other ports between Frederikshamn and St. Petersburg. Throughout this study, these groupings of Russian ports as presented

in the Tables and Graphs have been used unless otherwise specified.

In the case of Holland, the situation is much simpler since all the ships listed in the GGR were destined for Amsterdam. Only in those instances where either other sources, such as the Sound Toll Accounts or Rotterdam Zeetijdingen, were consulted or where the homeport or domicile of the captain was involved does the division of Holland into certain sectors play a role in the coding of information. The main divisions are Friesland, Groningen, Westfriesland, the Noorderkwartier, Zeeland and the islands in the Waddenzee as well as some more prominent individual ports.<sup>2</sup> The numerical index of the codes for these and all other ports presents a more detailed picture of these divisions, the numerical portion of the codes indicating the major and minor groupings (Appendix A. 2).

With regard to the placenames and their spelling, there is a great variety of them in the eighteenth century and later sources. This is further complicated by the fact that atlases and geographic dictionaries give different names or spellings for the same port. Consequently, a uniform system of spelling of placenames was impossible. Since the major guide for identifying the placenames has been the work of Nina Bang on the Sound Toll Accounts, the rule of thumb has been to follow her system wherever possible.<sup>3</sup> Where this was not possible, as in the case of some obscure port sometimes no longer existing, either the Dutch or German spelling has been used. The names of some well-known ports have been given according to English usage. The spelling of ports is consistent with spellings in the alphabetical index of port codes (Appendix A. 1). In this index the different names or spellings ascribed to a particular port are also noted with cross-references.

Footnotes — Appendix A

<sup>1</sup>Some of the major atlases and works not mentioned or maps not presented in the thesis are:

A. J. vander Aa, Aardrijkskundig woordenboek der Nederlanden, 13 vols., Gorichem, 1839-1851;

A. E. Adams et al., An Atlas of Russian and East European History, New York, 1967;

K. V. Bazilevich, et al., Atlas Istorii SSSR, 3 vols., Moscow, 1959;

A. F. Chew, An Atlas of Russian History, rev. ed., New Haven, 1970;

B. C. Damsteegt, Nieuwe Spiegel der Zeevaart. Nederlandse namen op zeekaarten uit de 16e en 17e eeuw, Amsterdam, 1942;

----, Grosser Historischer Weltatlas, 2nd ed., Munich, 1962;

----, Ritter's geographisch-statistisches Lexikon, fünfte Auflage von A. Strack, 2 vols., Leipzig, 1864-1865;

A. Spekke, The Baltic Sea in Ancient Maps (trans. fr. Latvian by A. J. Grinsberg et al.), Stockholm, 1959;

F. B. M. Tangelder, Nederlandse Rekeningen in de Pondtolregisters van Elbing, 1585-1602, 's Gravenhage, 1972, pp. 16-21; and

P. H. Winkelman, Nederlandse Rekeningen in de Tolregisters van Konigsbergen, 1588-1602 (Rijksgeschiedkundige Publicatiën 133), vol. I, 's Gravenhage, 1971, pp. 40-45.

<sup>2</sup>The division of the Dutch ports was based on a combination of both the frequency (importance) of the individual ports and the historico-geographical divisions. Two recent works which describe in detail the boundaries and historical developments of the two most important divisions are van der Woude's Noorderkwartier, pp. 19-31 and 845-856, and Faber's Drie Eeuwen Friesland, pp. 17-18 and 754-758.

<sup>3</sup>Bang 1930, pp. 452-467.

APPENDIX A-1

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE SUND TOLL REGISTERS (COPENHAGEN) & THE GALJOTSJELDRØISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, ALPHABETIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
007	AAB	AABENRAA, HERTUGO.	459	AMK	ANKLAW, POLN.
008	AAD	AABO, FJERLAND	379	ANS	ANSEKUL, COURLAND
009	AAM	AAMUS, SWEDEN	609	ANT	ANSTRUTNER, SCOTLAND
010	AAL	AALBERG, DENMARK	829	SAN	ST. ANTONIO, SPAIN
011	AAL	AALBERG, DENMARK	779	SAW	ANTWERPEN, BELGIUM
012	AAL	AALBERG, DENMARK	067	AAP	APENNADE, HERTUGO.
013	AAL	AALBERG, DENMARK	561	APP	APPINGENDAM, NEDERL.
014	AAL	AALBERG, DENMARK	603	ARB	ARMDATH, SCOTLAND
015	AAL	AALBERG, DENMARK	791	ARC	ARCHANGEL, RUSSIA
016	AAL	AALBERG, DENMARK	121	ARE	ARENDAL, NORWAY
017	AAL	AALBERG, DENMARK	343	ARN	ARENSBURG, GESSEL
018	AAL	AALBERG, DENMARK	259	ARI	ARILD, SWEDEN
019	AAL	AALBERG, DENMARK	609	ARS	ARNIS, HERTUGO.
020	AAL	AALBERG, DENMARK	019	ART	ARTHOLMENE, DENMARK
021	AAL	AALBERG, DENMARK	559	ARU	ARUM, NEDERL.
022	AAL	AALBERG, DENMARK	649	ARD	ARUNDEL, ENGLAND
023	AAL	AALBERG, DENMARK	619	ARY	ARY, SCOTLAND
024	AAL	AALBERG, DENMARK	039	ASS	ASSENS, DENMARK
025	AAL	AALBERG, DENMARK	849	AUG	AUGUSTA, ITALY
026	AAL	AALBERG, DENMARK	789	AUR	AURISCH, OSTPR.
027	AAL	AALBERG, DENMARK	819	AVE	AVETRO, PORTUGAL
028	AAL	AALBERG, DENMARK	529	AVN	AVENHORN, NEDERL.
029	AAL	AALBERG, DENMARK	529	AVX	AVVIJK, NEDERL.
030	AAL	AALBERG, DENMARK	909	AZO	AZORES, AFRICA
031	AAL	AALBERG, DENMARK	254	BAA	BAASTAD, SWEDEN
032	AAL	AALBERG, DENMARK	559	BAA	BAKUIZEN, NEDERL.
033	AAL	AALBERG, DENMARK	999	BAH	BAHAMA, AMERICA
034	AAL	AALBERG, DENMARK	849	BAI	BAIA, ITALY
035	AAL	AALBERG, DENMARK	559	BAL	BALK, NEDERL.
036	AAL	AALBERG, DENMARK	689	BAN	BALLINRAE, IRELAND
037	AAL	AALBERG, DENMARK	081	BAU	BALLUM, HERTUGO.
038	AAL	AALBERG, DENMARK	689	BAY	BALLYCASTLE, IRELAND
039	AAL	AALBERG, DENMARK	943	BAM	BALTIC SEA SEE OSTZEE
040	AAL	AALBERG, DENMARK	759	BAT	BALTINORE, AMERICA
041	AAL	AALBERG, DENMARK	017	BAD	BANDHOLM, DENMARK
042	AAL	AALBERG, DENMARK	609	BAP	BANFF, SCOTLAND
043	AAL	AALBERG, DENMARK	889	BAR	BARBARIE, AFRICA
044	AAL	AALBERG, DENMARK	829	BAC	BARCELONA, SPAIN
045	AAL	AALBERG, DENMARK	689	BAL	BARESONT SEE BAROSUND
046	AAL	AALBERG, DENMARK	659	BAS	BARFLEUR, FRANCE
047	AAL	AALBERG, DENMARK	299	BRS	BARNSTAPLE, ENGLAND
048	AAL	AALBERG, DENMARK	484	BAP	BARTH, POMMERN
049	AAL	AALBERG, DENMARK	919	BAY	BATAVIA, ASIA
050	AAL	AALBERG, DENMARK	809	BAO	BAYONNE, FRANCE
051	AAL	AALBERG, DENMARK	529	BEZ	BEETS, NEDERL.
052	AAL	AALBERG, DENMARK	139	BEK	BEKJARVIK, NORWAY
053	AAL	AALBERG, DENMARK	689	DEL	DELFAST, IRELAND
054	AAL	AALBERG, DENMARK	912	BEI	BELZIEL SEE BILOTZEIL
055	AAL	AALBERG, DENMARK	829	BEI	BENICARLO, SPAIN
056	AAL	AALBERG, DENMARK	929	BEI	BENINSSROEK, NEDERL.
057	AAL	AALBERG, DENMARK	789	BEI	BENSERSIEL, OSTPR.
058	AAL	AALBERG, DENMARK	131	BER	BERGEN, NORWAY
059	AAL	AALBERG, DENMARK	929	BEY	BERGEN, NEDERL.
060	AAL	AALBERG, DENMARK	469	BEU	BERGEN, RUSSEN
061	AAL	AALBERG, DENMARK	559	BEH	BERGUR, NEDERL.
062	AAL	AALBERG, DENMARK	529	BEH	BERMOUTH, NEDERL.
063	AAL	AALBERG, DENMARK	449	BER	BERLIN, PRUSSIA
064	AAL	AALBERG, DENMARK	949	BEV	BEVERICK, ENGLAND
065	AAL	AALBERG, DENMARK	699	BEV	BEVERLY, AMERICA
066	AAL	AALBERG, DENMARK	699	BID	BIDFORD, ENGLAND
067	AAL	AALBERG, DENMARK	829	BIL	BILBAO, SPAIN
068	AAL	AALBERG, DENMARK	559	BIT	BILOTZEIL, NEDERL.
069	AAL	AALBERG, DENMARK	699	BIS	BISCAGLIE, ITALY
070	AAL	AALBERG, DENMARK	219	BJO	BJOERKOE, SWEDEN
071	AAL	AALBERG, DENMARK	203	BJR	BJOERNEBORG, FINLAND
072	AAL	AALBERG, DENMARK	309	BJK	BJORNO, RUSSIA
073	AAL	AALBERG, DENMARK	649	BLA	BLAKENEY, ENGLAND
074	AAL	AALBERG, DENMARK	086	BLN	BLANKENESE, HERTUGO.
075	AAL	AALBERG, DENMARK	379	BLU	BLAUBERGE, COURLAND
076	AAL	AALBERG, DENMARK	889	BLY	BLAYE, FRANCE
077	AAL	AALBERG, DENMARK	559	BLG	BLONZIJL, NEDERL.
078	AAL	AALBERG, DENMARK	649	BLY	BLYTH, ENGLAND
079	AAL	AALBERG, DENMARK	589	BOG	BODAGA, NEDERL.
080	AAL	AALBERG, DENMARK	039	BOG	BODENSE, DENMARK
081	AAL	AALBERG, DENMARK	289	BOH	BOHUS, SWEDEN
082	AAL	AALBERG, DENMARK	559	BOL	BOLDERA WITH NIGA
083	AAL	AALBERG, DENMARK	684	BOH	BOLSWARD, NEDERL.
084	AAL	AALBERG, DENMARK	804	BOB	BO-MESS, SCOTLAND
085	AAL	AALBERG, DENMARK	849	BOB	BORDIGHERA, ITALY
086	AAL	AALBERG, DENMARK	289	BOB	BORGÅ, FINLAND
087	AAL	AALBERG, DENMARK	234	BOB	BORGÅ, SWEDEN
088	AAL	AALBERG, DENMARK	759	BOB	BORKUM, OSTPR.
089	AAL	AALBERG, DENMARK	019	BOA	BORHOLM, DENMARK
090	AAL	AALBERG, DENMARK	684	BOV	BOROVSTONESS, SCOTLAND

CONTINUED:





APPENDIX A.1

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BAL TIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 SUND TOLL REGISTERS (COPENHAGEN) & THE GALLIOTSCELDREGISTERS (AMSTERDAM) (UPDATE 1978-JUN-10, ALPHABETIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
019	DUN DUNBAR, SCOTLAND	098	FAN FANO, DENMARK	109	FRY FREDERIKSTAD, NORWAY
019	DUN DUNBRIE, SCOTLAND	089	FAR FARO, IRELAND	931	FRY FREDERIKSTED, WEST INDIES
009	DUN DUNBAR, SCOTLAND	019	FARO FARO, PORTUGAL	022	FRY FREDERIKSBUND, DENMARK
009	DUN DUNDALS, IRELAND	129	FAS FANSUND, NORWAY	024	FRY FREDERIKSVASK, DENMARK
008	DUN DUNDELS, SCOTLAND	019	FAY FAYAL, PORTUGAL	082	FRY FREDERIKSTAD, HERTUGO.
000	DUN DUNPERLINE, SCOTLAND	009	PEC PECAMP, FRANCE	999	FRL FRIESLAND, NEDERL.
000	DUN DUNPEROU, FRANCE	129	FED FEDA, NORWAY	092	FAR FARO ISLANDS
009	DUN DUNREPAR, IRELAND	017	PEJ PEJO, DENMARK	999	GSN GAASMEER, NEDERL.
009	DUN DUNREPAR, IRELAND	072	PER PERON, HERTUGO.	999	GAA GAAST, NEDERL.
009	DUN DUNREPAR, IRELAND	017	PEO PENO, DENMARK	049	GAI GAINSBOROUGH, ENGLAND
009	DUN DUNREPAR, IRELAND	029	ELF EL FERROL, SPAIN	829	GAL GALICIE, SPAIN
009	DUN DUNREPAR, IRELAND	999	PRE PERVERDA, FRIESLAND	879	GAL GALLPOLI, TURKEY
009	DUN DUNREPAR, IRELAND	999	PEU SEE FONS	019	GAL GALLOWAY, SCOTLAND
012	EDA EDAN, NEDERL.	009	PIP PIPE, SCOTLAND	082	GAM GALLSBOG, HERTUGO.
009	EDI EDINBURGH, SCOTLAND	019	FIO FIGEIRA, PORTUGAL	009	GAM GALWAY, IRELAND
009	EDI EDINBURGH, SCOTLAND	009	FIM FIMMORN, SCOTLAND	009	GAR GARDENSTOWN, SCOTLAND
199	EEZ EGERUND, NORWAY	009	FIL FINLAND	999	GEF GEFFEN, NEDERL.
199	EEZ EGERUND, NORWAY	199	FIM FINMARKEN, NORWAY	211	GEL GEFLE, SWEDEN
209	EEN EENAM, SWEDEN	009	FIR FIRTH, SCOTLAND	799	GEN GENNUM, OSTER.
209	EEN EENAM, SWEDEN	202	FIS FISKESACK (SKUL), SWEDEN	779	GEN GENT, BELGIUM
209	EEN EENAM, SWEDEN	209	FJA FJALLACKA, SWEDEN	949	GEU GENUA, ITALY
209	EEN EENAM, SWEDEN	041	FLA FLAOSTRAND, DENMARK	499	POM GESTLEAKEN, POMN.
209	EEN EENAM, SWEDEN	779	FLM FLANDERS	029	GIB GIBALTAR, SPAIN
209	EEN EENAM, SWEDEN	129	FLE FLEKEFJORD, NORWAY	009	STG ST. GILLES, FRANCE
209	EEN EENAM, SWEDEN	129	FLK FLEKNERO, NORWAY	011	OLA GLASGOW, SCOTLAND
209	EEN EENAM, SWEDEN	001	FLS FLENSBORG, HERTUGO.	009	OLA GLOUCHESTER, ENGLAND
209	EEN EENAM, SWEDEN	009	LAF LA FLOTTE, FRANCE	009	OLU GLUCKSTADT, HERTUGO.
209	EEN EENAM, SWEDEN	002	FOE FOME, HERTUGO.	999	COE GOES, NEDERL.
209	EEN EENAM, SWEDEN	799	FON FONKZIJL, OSTER.	510	GOR GORINCHEN, NEDERL.
209	EEN EENAM, SWEDEN	799	FON FORSLOF, SWEDEN	599	GOM GORREDIJK, NEDERL.
209	EEN EENAM, SWEDEN	009	FOR FORT GEORGE, SCOTLAND	009	GOS GOSPORT, ENGLAND
209	EEN EENAM, SWEDEN	019	FOT FORT WILLIAM, SCOTLAND	232	GOT GOTLAND, SWEDEN
209	EEN EENAM, SWEDEN	009	POV POWAY, ENGLAND	929	GOU GOUVA, NEDERL.
209	EEN EENAM, SWEDEN	999	FRA FRANKER, NEDERL.	929	GRA GRAFTDIJK, NEDERL.
209	EEN EENAM, SWEDEN	999	FRA FRANCE	009	ORG GRANGEMOUTH, SCOTLAND
209	EEN EENAM, SWEDEN	999	FES FRANSUM, NEDERL.	009	CRP GRANVILLE, FRANCE
209	EEN EENAM, SWEDEN	009	FRE FRASERBURGH, SCOTLAND	999	GRAU GRAUWIEP, SEE GADU
209	EEN EENAM, SWEDEN	119	FRE FRESBERGVIK, NORWAY	008	GRV GRAVELINES, FRANCE
209	EEN EENAM, SWEDEN	082	FRY FREDERIKSTAD, HERTUGO.	049	GRV GRAVESEND, ENGLAND
209	EEN EENAM, SWEDEN	009	FRD FREDERICIA, DENMARK	019	GRD GREEROCK, SCOTLAND
209	EEN EENAM, SWEDEN	011	FRY FREDERIENAGOR, INDIA	401	GRI GRIEFSWALD, POMMERN
209	EEN EENAM, SWEDEN	101	FRY FREDERIKSHALD, NORWAY		
209	EEN EENAM, SWEDEN	001	FRY FREDERIKSHALD, FINLAND/RUSSIA		
209	EEN EENAM, SWEDEN	001	FRS FREDERIKSHAVN, DENMARK		
209	EEN EENAM, SWEDEN	009	PRO FREDERIKSBORT, HERTUGO.		

CONTINUED



APPENDIX A.1

GEOGRAPHICAL CODBS USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 DUND TOLL REGISTERS (COPENHAGEN) + THE GALJOOTSGELDRBEGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, ALPHABETIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
449	KAI KAHMIN, POMN.	123	KRT KRISTIANSAND, NORWAY	371	LIB LIBAU, COURLAND
665	KAP KAPPELN, HERTUGD.	247	KRN KRISTANSTAD, SWEDEN	609	LIO LIBOURNE, FRANCE
289	KAE KARINGON, SWEDEN	931	KRE KRISTIANSTED, WEST INDIES		LIEPAJA SEE LIBAU
209	KAR KARLEBY, FINLAND	149	KRU KRISTIANSUND, NORWAY	129	LIL LILLESAND, NORWAY
209	KAE KARLEBY, GAMMEL, FINLAND	019	KRO KRISTIANSO, DENMARK	609	LIM LIMKILNS, SCOTLAND
209	KAB KARLEBY, NY, FINLAND	209	KRF KRISTINA, FINLAND	609	LIE LIMERICK, IRELAND
210	KAS KARLSBORG, SWEDEN	209	KRL KRISTINESTAD, FINLAND	129	LIN LINESNES, NORWAY
242	KAH KARLSHAMN, SWEDEN	529	KRO KROMMENIEDIJK, NEDERL	609	LIL LIMLITHGOW, SCOTLAND
241	KAJ KARLSKRONA, SWEDEN	339	KRD KRONSTADT, RUSSIA	811	LIS LISSARON, PORTUGAL
627	KAA KARREBAEKSHINDE, DENMARK	559	KUI KUINRE, NEDERL	081	LIT LIST, HERTUGD
209	KAS KASKO, FINLAND	252	KUL KULLEN, SWEDEN	129	LIE LISTER, NORWAY
529	KAT KATWIJK, NEDERL	279	KUN KUNGELF, SWEDEN	081	LIR LISTERDYB, HERTUGD
	KAUNUS SEE	269	KUG KUNGSBACKA, SWEDEN	652	LIP LIVERPOOL, ENGLAND
793	KEM KEM, RUSSIA(WHITE SEA)		KURLAND SEE COURLAND		LIVLAND SEE LIVONIA
649	KEN KENT, ENGLAND	129	KVI KVINESDAL, NORWAY	369	LIV LIVONIA
671	KIE KIEL, HERTUGD.	529	KWA KWADIJK, NEDERL.	643	LII LIVORNO, ITALY
619	KIL KILBERRY, SCOTLAND	269	LAM LAHOLM, SWEDEN	249	LJU LJUNGBY, SWEDEN
609	KIO KILLOUGH, IRELAND	528	LAM LAMBERTSCHAAG, NEDERL.	619	LOC LOCHINVER, SCOTLAND
609	KIY KILLYBEGS, IRELAND	651	LAN LANCASTER, ENGLAND	619	LOH LOCHWINNOCH, SCOTLAND
559	KIM KIMSVERO, NEDERL.	659	LAC LANCASTERSHIRE, ENGLAND	017	LOL LOLLAND, DENMARK
613	KIN KINA	246	LAD LANDSKRONA, SWEDEN	632	LON LONDON, ENGLAND
609	KIC KINCARDINE, SCOTLAND	529	LAS LANDSMEER, NEDERL.	609	LOD LONDONDERRY, IRELAND
609	KIG KINGHORN, SCOTLAND	032	LAG LANGELAND, DENMARK	609	LOR LORIENT, FRANCE
607	KIR KIRKCALDY, SCOTLAND	129	LAE LANGESUND, NORWAY	209	LOV LOVISA, FINLAND
619	KIK KIRKCUDBRIGHT, SCOTLAND	559	LAW LANGWEER, NEDERL.	649	LOW LOEWSTOFT, ENGLAND
609	KIH KIRKHAM, SCOTLAND	529	LAR LAREN, NEDERL.	825	SLU ST.LUCAR, SPAIN
609	KIW KIRKVALL, SCOTLAND	609	LAI LARNE, IRELAND	219	LUL LULEA, SWEDEN
639	KJE KJERTEMINDE, DENMARK	116	LAV LARVIK, NORWAY	249	LUN LUND, SWEDEN
269	MLA KLAEDESHOLMEN, SWEDEN	469	LAS LASSAN, POMN.	481	LUE LUBECK, GERMANY
	KLAIPEDA SEE MEMEL	411	LER LEBBA, POMN.	079	LUT LUTJENBURG, HERTUGD.
012	KOG KOGE, DENMARK	649	LEE LEEDS, ENGLAND	609	LYM LYMINGTON, ENGLAND
799	KOL KOLA, RUSSIA		LEEK SEE OOSTERLEEK	129	LYN LYNGDAL, NORWAY
444	KOB KOLBERG, POMN.	758	LER LEER, OSTFR.	633	LYE LYNN, ENGLAND
046	KOD KOLDING, DENMARK		LEEUV SEE LEEUWARDEN	284	LYS LYSEKIL, SWEDEN
559	KOU KOLLUM, NEDERL.	547	LEU LEEUWARDEN, NEDERL.	659	LYT LYTHAM, ENGLAND
259	KON KONGBYK, NORWAY	762	LEH LEHE, GERMANY	049	LAE LAESO, DENMARK
401	KON KONIGSBERG, EAST PRUSSIA	608	LEI LEITH, SCOTLAND	052	LOE LOGSTOR, DENMARK
679	KOS KONSTANTINOPEL, TURKEY	559	LKU LEK, NEDERL.	579	MAA MAAS, NEDERL.
	KOBENHAVN SEE COPENHAGEN		LEKKUM SEE LEK	589	MSL MAASLAND, NEDERL.
129	KOR KORSHAVN, NORWAY	546	LEM LEMMER, NEDERL.	589	MAS MAASLUIS, NEDERL.
627	KOD KORSOR, DENMARK	052	LEV LEMVIG, DENMARK	609	MAC MACDUFF, SCOTLAND
559	KOU KODUM, NEDERL.		LENINGRAD SEE ST.PETERSBURG	909	MAD MADEIRA, AFRICA
129	KRA KRAGERO, NORWAY	609	LEW LERWICK, SCOTLAND	829	MAH MAHON, SPAIN
103	KRI KRISTIANIA, NORWAY	609	LEN LEVEN, SCOTLAND	548	MAK MAKKUM, NEDERL.
249	KRS KRISTIANSPEL, SWEDEN	619	LES LEWIS, SCOTLAND	627	MAL MALAGA, SPAIN

CONTINUED

APPENDIX A.1

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 SUNO TOLL REGISTERS (COPENHAGEN) + THE GALJOOTSGELDRREGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, ALPHABETIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
649	MAO MALDON, ENGLAND	529	MII MIDDELIE, NEDERL.	949	NEP NEWPORT, AMERICA
829	MAR MALLORCA, SPAIN	909	BMI ST. MIGUEL, AFRICA	689	NEO NEWTOWN, IRELAND
248	MAM PALMO, SWEDEN	659	MIF MILFORD, ENGLAND	689	NEY NEWRY, IRELAND
809	STM ST. MALO, FRANCE	669	MIT MILTON, ENGLAND	942	NEI NEW YORK, AMERICA
859	MAT MALTA, ITALY	379	MIA MITAU, KURLAND	052	NIB NIBE, DENMARK
859	MAM MAN, ENGLAND	149	MOL MOLDE, NORWAY	849	NIC NICE, ITALY
124	MAG MANDAL, NORWAY	559	MOK MOKWERUM, NEDERL. MOLQUEREN SEE MOKWERUM	814	NIE NIEUWENDAM, NEDERL.
849	MAI MANNINGTREE, ENGLAND	840	MON MONACO, ITALY	569	NIU NIEUWESCHANS, NEDERL.
849	MAZ MARAZION, ENGLAND	529	MOI MONNIKENDAM, NEDERL.	859	NIV NIEUVE ZIJLEN, NEDERL.
809	MAE MARENNES, FRANCE	609	MOT MONTROSE, SCOTLAND MOONSUND WITH OESSEL	569	NIO NIEUWOLDA, NEDERL.
849	MAX MARGATE, ENGLAND	809	MOB MORBIHAN, FRANCE	779	NIP NIEUWPORT, BELGIUM
849	MAI MARIAGER, DENMARK	809	MOA MORLAIX, FRANCE	809	NOI NOIRMOUTIER, FRANCE
017	MAK MARIBO, DENMARK	809	MOC MORNAC, FRANCE	528	NRE NOORDEINDE, NEDERL. NOORKOPPING SEE NOORKOPING
828	NAP NARIN, SPAIN	809	MOR MORTAGNE, FRANCE	529	NDK NOORDKWARTIER, NEDERL.
849	MAY MARLOW, ENGLAND	102	MOS MOSS, NORWAY	529	NOO NOORDWIJK, NEDERL.
989	MAC MARDCCO, AFRICA	799	MOS MOSTERZARY, RUSSIA	959	NOA NORTH AMERICA (CANADA ONLY)
849	MRA MARBALA, ITALY	809	LAM LA MOTTE, FRANCE MURMANSK SEE KOLA	528	NRE NOORDEINDE, NEDERL.
831	MRS MARSEILLE, FRANCE	689	MUS MUSSELBURGH, SCOTLAND	068	NOR NORDBOURG, HERTUGD.
864	MRT MARSTAL, HERTUGD.	259	MOE MOLLE, SWEDEN	758	NOD NORDEN, OSTFR.
529	MAS MARSTENSLIJS, NEDERL. MARSTENSLUIJS SEE MAASSLUIS	018	MON MON, DENMARK	758	NOE NORDERNEY, OSTFR.
201	MRR MARSTRAND, SWEDEN	017	NAK NAKSKOV, DENMARK	159	NOK NORKAP, NORWAY
809	STM ST. MARTIN, FRANCE	809	NAN NANTES, FRANCE	082	NOA NORDMARSCH, HERTUGD.
934	MRI MARTINIQUE, WEST INDIES	949	NAJ NANTUCKET, AMERICA	082	NOS NORDSTRAND, HERTUGD.
859	MAY MARYPORT, ENGLAND	849	NEA NAPELS, ITALY	789	NON NORTH SEA
989	MAU MAURITIUS, AFRICA	329	NAR NARVA, RUSSIA	649	NOP NORFOLK, ENGLAND NORTWIJK OP ZEE SEE NOORDWIJK
609	MYS MAY, SCOTLAND	809	STM ST. NAZAIRE, FRANCE	169	NOG NORWAY
779	MEC MECHELEN, BELGIUM	159	NET NEATH, ENGLAND	809	NOM NORMANDY, FRANCE
828	MED MEDEMLIN, NEDERL.	122	NED NEDENAES, NORWAY	233	NOK NORRKOPING, SWEDEN
569	NEE NEEDEN, NEDERL.	589	NEE NEDERLANDEN	609	NOH NORTH BERWICK, SCOTLAND
928	MWU MEER, NEDERL.	019	NEK NEKSO, DENMARK NERVA SEE NARVA	582	NTG NOT GIVEN
119	MEL NELSONVIN, NORWAY	758	NES NESBE, OSTFR.	039	NYB NYBORG, DENMARK *
411	MEN MENEL, EAST PRUSSIA	758	NEM NESSMERSIEL, OSTFR. NETHERLANDS SEE NEDERLANDEN	940	NYE NEW ENGLAND, AMERICA
829	MEN MENORCA, SPAIN	479	NEB NEUBUCHOU, MECKLENBURG	017	NYK NYKOBING FALSTER, DENMARK
849	MET MENTON, ITALY	422	NEF NEUFAMWASSER, WEST PRUSSIA	052	NYO NYKOBING MORS, DENMARK
129	MER MERDO, NORWAY	758	NEU NEUMARLINGERSIEL, OSTFR.	024	NYB NYKOBING SJAELLAND, DENMARK
809	MES MESCHERS, FRANCE	076	NES NEUSTADT, HERTUGD.	239	NYP NYKOPING, SWEDEN
792	MSN MEBEN, RUSSIA (WHITE SEA)	459	NEW NEUWART, POMM.	21.	NYL NYLAND, SWEDEN
809	MEO MESOUERS, FRANCE	809	NER NEWBURGH, SCOTLAND	209	NYS NYSTAD, FINLAND
849	MEI MESSINA, ITALY	634	NEC NEWCASTLE, ENGLAND	017	NYT NYSTED, DENMARK
609	MEN METHIL, SCOTLAND MEZEN SEE MEBEN	669	MEN NEWHAVEN, ENGLAND	027	NAE NAESTVED, DENMARK
831	MIO MIDDELBURG, NEDERL.			289	NOE NOSUND, SWEDEN
839	MIE MIDDELPART, DENMARK			113	NOT NOTTERO, NORWAY
899	MIL MEDITERRAN SEA			559	OBE OBNHUIZEN, NEDERL.

CONTINUED:

ANNEX 1

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 SUND TOLL REGISTERS (COPENHAGEN) + THE GALJDOTSGELDRBGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10. ALPHARETIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
649	NAO MALDON, ENGLAND	829	NII MIDDLEIE, NEDERL	949	NEP NEWPORT, AMERICA
629	NAR MALLORCA, SPAIN	909	SMI ST. MIGUEL, AFRICA	689	NEO NEWTOWN, IRELAND
248	NAN PALMO, SWEDEN	689	NIF MILFORD, ENGLAND	689	NEY NEWRY, IRELAND
889	STH ST. MALO, FRANCE	669	MIT MILTON, ENGLAND	942	NEI NEW YORK, AMERICA
889	NAT MALTA, ITALY	379	NIA MITAU, KURLAND	052	NIB NIBE, DENMARK
689	NAN MAN, ENGLAND	149	NOL NOLDE, NORWAY	849	NIC NICE, ITALY
124	NAG MANDAL, NORWAY	859	NOK NOLKWERUM, NEDERL. NOLQUEREN SEE NOLKWERUM	514	NIE NIEUWENDAM, NEDERL.
649	NAI MANNINGTREE, ENGLAND	849	NON NORAQUO, ITALY	569	NIU NIEUWESCHANS, NEDERL.
689	NAZ MARAZION, ENGLAND	529	NOI NONNIKENDAM, NEDERL.	859	NIU NIEUWE ZIJLEN, NEDERL.
689	NAE MARENNE, FRANCE	609	MOT MONTROSE, SCOTLAND	869	NID NIEUWOLDA, NEDERL.
649	NAX MARGATE, ENGLAND		MOONSUND WITH DESEL	779	NIP NIEUWPORT, BELGIUM
649	NAI MARIAGER, DENMARK	809	MOB MORBIHAN, FRANCE	809	NOI NOIRNOUTIER, FRANCE
017	NAK MARIBO, DENMARK	809	MOA MORLAIX, FRANCE	528	NRE NOORDEINDE, NEDERL. NOORKOPPEN SEE NORRKOPING
828	NAP MARIN, SPAIN	809	MOC MORNAC, FRANCE	529	NOK NOORDKWARTIER, NEDERL.
649	NAW MARLOW, ENGLAND	809	MOC MORNAC, FRANCE	529	NOO NOORDWIJK, NEDERL.
989	NAC MAROCCO, AFRICA	809	MOR MORTAGNE, FRANCE	959	NOA NORTH AMERICA (CANADA ONLY)
649	NRA MARSALA, ITALY	102	MOS MOSS, NORWAY	528	NRE NOORDEINDE, NEDERL.
831	NRS MARSEILLE, FRANCE	799	MOS MOSTERZARY, RUSSIA	068	NOR NORDSBORG, HERTUGD.
644	NRT MARSTAL, HERTUGD.	809	LAM LA MOTTE, FRANCE MURMANSK SEE KOLA	758	NOD NORDEN, OSTFR.
529	NAS MARSTENSLIJS, NEDERL. MARSTENSLIJS SEE MAASLUIS	609	MUS MUSSELBURGH, SCOTLAND	758	NOE NORDERNEY, OSTFR.
281	NRR MARSTRAND, SWEDEN	259	MOE MOLLE, SWEDEN	159	NOK NORDKAP, NORWAY
809	STH ST. MARTIN, FRANCE	018	MON MON, DENMARK	082	NOA NORDMARSCH, HERTUGD.
934	MRI MARTINIQUE, WEST INDIES	017	NAK NAKSKOV, DENMARK	082	NOS NORDSTRAND, HERTUGD.
689	MAY MARYPORT, ENGLAND	809	NAN NANTES, FRANCE	789	NON NORTH SEA
909	MAU MAURITIUS, AFRICA	949	NAT NANTUCKET, AMERICA	649	NOP NORFOLK, ENGLAND NORTWIJK OP ZEE SEE NOORDWIJK
609	MYS MAY, SCOTLAND	849	NEA NAPELS, ITALY	169	NOC NORWAY
779	MEC MECHELEN, BELGIUM	329	NAR NARVA, RUSSIA	809	NOM NORMANDY, FRANCE
828	MED MEDEHLEN, NEDERL.	809	STH ST. NAZAIRE, FRANCE	233	NOK NORRKOPING, SWEDEN
809	MEE MEEDEN, NEDERL.	679	NET NEATH, ENGLAND	609	NOM NORTH BERWICK, SCOTLAND
828	MRE MEER, NEDERL.	122	NED NEDENAES, NORWAY	502	NTG NOT GIVEN
119	MEL MELSDYVIN, NORWAY	589	NEE NEDERLANDEN	039	NYB NYSBORG, DENMARK
411	MEM MEMEL, EAST PRUSSIA	019	NEK NEKSO, DENMARK NERVA SEE NARVA	949	NYE NEW ENGLAND, AMERICA
829	MEN MENORCA, SPAIN	758	NES NESSE, OSTFR.	017	NYK NYKOBING FALSTER, DENMARK
849	NET NENTON, ITALY	758	NEM NESSMERSIEL, OSTFR. NETHERLANDS SEE NEDERLANDEN	052	NYO NYKOBING MORS, DENMARK
129	NER NERDO, NORWAY	479	NEB NEUBUCHOU, MECKLENBURG	024	NYB NYKOBING SJAELLAND, DENMARK
609	NES NEECHERS, FRANCE	422	NEF NEUFABRWASSER, WEST PRUSSIA	239	NYP NYKOPING, SWEDEN
792	NSN NESEN, RUSSIA (WHITE SEA)	758	NEU NEUMARLINGERSIEL, OSTFR.	21.	NYL NYLAND, SWEDEN
809	NEO NESOUERS, FRANCE	075	NES NEUSTADT, HERTUGD.	209	NYB NYSTAD, FINLAND
849	NEI NESSINA, ITALY	459	NEW NEUWARP, POMM.	017	NYT NYSTED, DENMARK
609	NEH NETHIL, SCOTLAND NEZEN SEE NESEN	609	NER NEWBURGH, SCOTLAND	027	NAE NAESTVED, DENMARK
831	NID NIDDELBURG, NEDERL.	634	NEC NEWCASTLE, ENGLAND	289	NOE NOSUND, SWEDEN
839	NIE NIDDELPART, DENMARK	669	NEH NEWHAVEN, ENGLAND	113	NOT NOTTERO, NORWAY
809	NIL MEDITERRAN SEA			559	OBE OBENHUIZEN, NEDERL.

CONTINUED:

APPENDIX A.1

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 BUND TOLL REGISTERS (COPENHAGEN) + THE GALJOOTSGELDREGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, ALPHABETIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
031	ODE ODENSE, DENMARK	528	PED PETTEN, NEDERL.	055	RIB RIBE, DENMARK
343	OES OESSEL ISLANDS, RUSSIA	949	PHI PHILADELPHIA, AMERICA		RIELST SEE RIJLST
189	OKS OKSEFJORD, NORWAY	809	PIC PICARDIE, FRANCE	473	RIN RIBNITZ, MECKLEBURG
239	OLA OLAND, SWEDEN	809	STP ST. PIERRE, FRANCE	352	RIG RIGA, LIVLAND
659	OLD OLDEBOORN, NEDERL.	412	PIL PILLAU, EAST PRUSSIA	559	RIJ RIJLST, NEDERL.
731	OLE OLDENBURG, GERMANY	219	PIT PITEA, SWEDEN	529	DER DE RIJ, NEDERL
809	OLR OLERON, FRANCE	619	PIE PITTENWEEN, SCOTLAND		RIJSVALDE SEE RUGENVALDE
819	OLH OLHAO, PORTUGAL	669	PLY PLYMOUTH, ENGLAND	055	RIK RINGKOBING, DENMARK
799	OME OMEGA, RUSSIA	859	PLA POLA, ITALY	708	RIT RITZERUYTEL, GERMANY
269	ONS ONSALA, SWEDEN	660	POO POOLE, ENGLAND	826	RIV RIVADEO, SPAIN
819	OOS OOST, NEDERL.	459	POP POMERANIA	809	ROB LA ROCHEBERNARD, FRANCE
589	OSS OOSTERSEEK, NEDERL.	826	POV PONTEVEDRO, SPAIN	809	ROC ROCHEFORT, FRANCE
528	OOR OOSTERBLOKKER, NEDERL.	129	POS PORSHUND, NORWAY	809	LAR LA ROCHELLE, FRANCE
629	OOT OOSTERBLEEK, NEDERL.	809	POR PORNIC, FRANCE	649	ROM ROCHESTER, ENGLAND
829	OON OOSTHUTZEN, NEDERL.	689	POT PORTAFERRY, IRELAND	081	ROM ROMD, HERTUGD.
828	OOW OOSTWOUDE, NEDERL.	812	PRT PORT-A-PORT, PORTUGAL	249	RON RONNEBY, SWEDEN
829	OQZ OOSTZAAN, NEDERL.	933	POA PORT-AU-PRINCE, WEST INDIES	809	ROS ROSCOFF, FRANCE
859	OSZ OOSTZEE	809	POL PORT LUIS, FRANCE	024	ROK RØSKILDE, DENMARK
828	OPH OPHEER, NEDERL.		PORT UNKNOWN SEE NOT GIVEN	471	ROT ROSTOCK, MECKLENBURG
828	OPP OPPERDOES, NEDERL.	812	OPO PORTO, PORTUGAL	518	ROE ROTTERDAM, NEDERL.
219	ORR OREGRUND, SWEDEN	669	POM PORTSMOUTH, ENGLAND	809	ROU ROUEN, FRANCE
849	ORI ORISTANO, ITALY	609	POY PORTSOY, SCOTLAND	032	RUD RUDKOBING, DENMARK
609	ORK ORKNEY, SCOTLAND	819	POG PORTUGAL	469	RUE RUGEN, POMM.
289	ORU ORUST, SWEDEN	826	POU PORTUGALETTE, SPAIN	443	RUG RUGENVALDE, POMM.
771	OST OSTENDE, BELGIUM	799	POS POSLAG, RUSSIA	219	RUN RUNHALLEN, SWEDEN
129	OET OSTERRISOR, NORWAY	809	LEP LE POUUGUEN, FRANCE	399	RUS RUSSIA
491	OEE OSTERBOEN(BALTIC)	659	PON POULTON, ENGLAND	669	RYE RYE, ENGLAND
759	DEF OSTFRIESLAND	469	PRE PREROW, POMMERN	017	ROE ROOBY, DENMARK
	OUDESBOON SEE OLDEBOORN	609	PRS PRESTONPANS, SCOTLAND	019	RON RONNE, DENMARK
859	ONE OUDEGA, NEDERL.	015	PRA PRAESTO, DENMARK	024	ROR RØRVIG, DENMARK
829	DUN DUDENDIJK, NEDERL.	529	PUR PURNEREND, NEDERL.	809	LES LES SABLES D'OLONNE, FRANCE
829	DUO DUDDORP, NEDERL.	459	POE POLITZ, POMM.	049	SAE SAEBY, DENMARK
828	OVI OVIEDO, SPAIN	609	QUE QUEENSFERRY, SCOTLAND	017	SAK SAKSKOBING, DENMARK
809	PAI PAINBOEUF, FRANCE	809	QUI QUITPER, FRANCE	829	SAL SALOU, SPAIN
829	PAL PALMA, MALLORCA, SPAIN	669	RAM RAMSGATE, ENGLAND	619	SAT SALTCOATS, SCOTLAND
809	LAS LAS PALMAS, AFRICA	219	RAS RÅMSJÖ, SWEDEN	879	SAM SAMOS, TURKEY
761	PAP PAPENBURG, GERMANY	042	RAN RANDERS, DENMARK	049	SAS SANSØ, DENMARK
879	PAR PAROS, TURKEY	529	RAS RANSDOORP, NEDERL.	129	SAN SAND, NORWAY
864	PEK PEKELA, NEDERL.	219	RAT RATHAN, SWEDEN	115	SAD SANDEFJORD, NORWAY
669	PEN PENRYN, ENGLAND		REM SEE ROMO	129	SAE SANONES, NORWAY
669	PEZ PENZANCE, ENGLAND	849	SAN SAN REMO, ITALY	019	SAY SANDVIG, DENMARK
361	PER PERNAU, LIVLAND	081	REN RENDSBORG, HERTUGD.	669	SAI SANDWICH, ENGLAND
609	PET PERTH, SCOTLAND	619	REF RENFREW, SCOTLAND	619	SAC SANDWICK, SCOTLAND
609	PZE PETERHEAD, SCOTLAND	341	REV REVAL, ESTONIA	825	SAA SANTANDER, SPAIN
319	STP ST. PETERSBURG, RUSSIA	949	RHO RHODE ISLAND, AMERICA	879	SAD SANTORIN, TURKEY

CONTINUED

APPENDIX A.1

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 SUND TOLL REGISTERS (COPENHAGEN) + THE GALJOOTSGELDREGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, ALPHABETIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
869	SAP SAPPENEER, NEDERL.	559	SLO SLOOTEN, NEDERL.	299	STR STRAVESOND, SWEDEN
849	SAR SARDINIEN, ITALY	529	SLT SLOTERDIJK, NEDERL.	589	DES DE STREEK, NEDERL.
835	SCA SCARBOROUGH, ENGLAND	539	SLU SLUIS, NEDERL.	609	SRO STROMNESS, SCOTLAND
826	SCH SCHAGEN, NEDERL.	249	SLA SLATTAKRA, SWEDEN	619	SRN STRONTIAN, SCOTLAND
	SCHANSTERNYE WITH ST.PETERSBURG	679	SMY SHYRNA, TURKEY	286	SRM STROMSTAD, SWEDEN
829	SCD SCARDAN, NEDERL.	559	SNE SNEEK, NEDERL.	017	STU STUBBEKOBING, DENMARK
	SCHELLING SEE TERSCHELLING	219	SOD SODERHAMN, SWEDEN	279	STY STYRSO, SWEDEN
829	SCG SCHELLINGROOD, NEDERL.	239	SOR SODERKOPING, SWEDEN	015	DEE SUND (DANISH COAST)
829	SCE SCHELLINGROUDE, NEDERL.		SOLLEBOL WITH ARCHANGEL	638	SUN SUNOERLAND, ENGLAND
829	SCL SCHELLINHOUT, NEDERL.		SOLOMBOLA WITH ARCHANGEL	219	SUD SUNDSVALL, SWEDEN
829	SCR SCHERMER, NEDERL.	249	SOL SOLVITSBORG, SWEDEN	929	SUR SURINAM, AMERICA
829	SCN SCHERMERHORN, NEDERL.	062	SOM SONDERBORG, HERTUGD.	019	SVA SVANEKE, DENMARK
829	SCV SCHEVENINGEN, NEDERL.	055	SOE SONDERHO, DENMARK	119	SVE SVELVIK, NORWAY
816	SCI SCHIEDAM, NEDERL.	129	SOO SOGDAL, NORWAY	039	SVN SVENDBORG, DENMARK
840	SCD SCHIERPONNIKODG, NEDERL.	669	SOU SOUTHAMPTON, ENGLAND	291	SVR SWEDEN (SAILING NORTHWARD)
849	SEA SEATON, ENGLAND	649	SOT SOUTHWOLD, ENGLAND	291	SVR SWEDEN (SAILING SOUTHWARD)
828	SEB ST. SEBASTIAN, SPAIN	649	SRA SPALDING, ENGLAND	109	SVS SVINESUND, NORWAY
827	SEJ SEJERO, DENMARK	828	SPN SPANBROEK, NEDERL.	659	SVA SWANSEA, ENGLAND
849	SEL SELBY, ENGLAND	829	SPE SPAIN	299	SVG SWEDEN (OVERIG)
911	SER SERANPORA, INDIA	788	SPI SPIEKERDOG, OSTFR.	459	SWI SWINEMUNDE, POMM.
813	SET SETUBAL, PORTUGAL	669	SPH SPITHEAD, ENGLAND	129	SWN SWINOR, NORWAY
809	SEU SEUDRE, FRANCE	093	SPT SPITZBERGEN		SYLD SEE SILO
825	SEV SEVILLA, SPAIN	713	STA STADE, GERMANY		SYSTERBAK WITH ST.PETERSBURG
849	SHE SHEERNESS, ENGLAND	609	STN STANLEY, SCOTLAND	015	TAR TARBAEK, DENMARK
809	SHT SHETLAND ISLANDS, SCOTLAND	126	STV STAVANGER, NORWAY		TALLINN SEE REVAL
836	SNI SHIELDS, ENGLAND		STAVERN SEE STAVOREN	039	TAS TASINGE, DENMARK
869	SNO SHOREHAM, ENGLAND	549	STO STAVOREN NEDERL.	809	TAL TALMONT, FRANCE
849	SIC SICILY, ITALY	015	STE STEGE, DENMARK	829	TAA TARRAGONA, SPAIN
828	SIJ SIJBEKARSPEL, NEDERL.	451	STT STETTIN, POMM.	659	TEN TENBY, ENGLAND
882	SIL SIL, HERTUGD.	159	STU ST. JERNESUND, NORWAY	879	TEE TENEDOS, TURKEY
249	SIM SIMRISHARN, SWEDEN	159	STJ STJERNESUND, NORWAY	909	TER TENERIFE, AFRICA
849	SIR SYRACUSE, ITALY	015	STB STEVNS, DENMARK	551	TEM TER HENNE, NEDERL.
849	SIZ SICILY, ITALY	609	STI STIRLING, SCOTLAND	551	TEM TERHORNE, NEDERL.
849	SKG SKAGEN, DENMARK	221	STC STOCKHOLM, SWEDEN	308	TRJ TERJOKI, RUSSIA
849	SKA SKANE, SWEDEN	637	STK STOCKTON, ENGLAND	569	TEM TERMUNTEN, NEDERL.
249	SKN SKANOR, SWEDEN	119	STE STOKKE SOGN, NORWAY	517	TES TERSCHELLING, NEDERL.
827	SKE SKELSKOR, DENMARK	442	STP STOLPE, POMM.	519	TEX TEXEL, NEDERL.
129	SKI SKIEN, NORWAY	449	STL STOLPMUNDE, POMM.	649	TMA THAMES, ENGLAND
269	SKP SKIPPERKROGEN, SWEDEN	609	STH STONEHAVEN, SCOTLAND	052	THI THISTED, DENMARK
852	SKV SKIVE, DENMARK	015	STG STOREHEDINGE, DENMARK	931	STT ST. THOMAS, WEST INDIES
829	SKD SCOTLAND	619	STW STORNOWAY, SCOTLAND	649	THO THORNE, ENGLAND
615	SKS SKOVSHOVED, DENMARK		STRAALSOND SEE STRALSUND	619	THU THURSO, SCOTLAND
129	SKU SKUDENES, NORWAY	463	STR STRALSUND, POMM.	559	TJU TJUMMARUM, NEDERL.
887	SLE SCHLESWIG	689	STF STRANGFORD, IRELAND	114	TJO TJONO, NORWAY
689	SLI SLIGO, IRELAND	619	SRA STRANRAER, SCOTLAND	932	TOB TOBAGO, WEST INDIES

CONTINUED:

APPENDIX A.1

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 SUND TOLL REGISTERS (COPENHAGEN) + THE GALJOOTSGELDRREGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, ALPHABETIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
002	TND TONDER, HERTUGD.	085	VAA VARDE, DENMARK	649	WEL WELLS, ENGLAND
002	TNI TONNINGEN, HERTUGD.	159	VAN VARDHUS, NORWAY	609	WEM WEMYSS, SCOTLAND
112	TNS TONSBERG, NORWAY	969	VEE VEENDAM, NEDERL.	528	WER WERWERSHOEF, NEDERL.
469	TOP TOPSHAM, ENGLAND	539	VER VEERE, NEDERL.	528	WSF WEST FRIESLAND
283	TOR TOREKOV, SWEDEN	045	VEJ VEJLE, DENMARK	939	VEI WEST INDIES
209	TOM TORNEA, SWEDEN	052	VEN VENICE, ITALY	729	WES WESER, GERMANY
029	TOE TORREVIEJA, SPAIN	028	VEN VENHUIZEN, NEDERL.	528	WET WESTERBLOKKER, NEDERL.
039	TOU TOULON, FRANCE	129	VES VESTERRISOR, NORWAY		WESTERYCK SEE VESTERVIK
308	TRS TRAANGSUND, RUSSIA	239	VET VESTERVIK, SWEDEN	529	WFR WIERINGEN, WESTFRIESLAND
249	TRL TRABURG, SWEDEN	308	VIB VIBORG, RUSSIA	528	WEW WESTWOOD, NEDERL.
011	TRA TRANQUEBAR, INDIA	025	VIG VIGO, SPAIN	529	WEZ WESTZAAN, NEDERL.
044	TRP TRAPANI, ITALY		VIIPURI SEE VIBORG	689	WEX WEXFORD, IRELAND
009	TRE TREGUIER, FRANCE	259	VIK VIKEN, SWEDEN	669	WEY WEYMOUTH, ENGLAND
049	TRL TRELLEBORG, SWEDEN	308	VIL VILAJOKI, RUSSIA	639	WHI WHITBY, ENGLAND
009	LAT LA TRENTLAD, FRANCE	019	VIL VILLA DE CONDE, PORTUGAL	659	WHT WHITEHAVEN, ENGLAND
009	TRO TREPOT, FRANCE		VILNIUS SEE		VIBORG SEE VIBORG
449	TRT TREPTOW, BAGROMERN	949	VIR VIRGINIA, AMERICA		WIEBORGH SEE VIBORG
469	TRI TRINSESS, POMM.	231	VIS VISBY, SWEDEN	609	WIC WICK, SCOTLAND
001	TRS TRIEST, AUSTRIA	025	VIV VIVERO, SPAIN		WIEROJOKA WITH VIBORG
009	TRP TRIPOLIS, AFRICA	529	VLA VLAARDINGEN, NEDERL.	308	WIE WIEROKKA, RUSSIA
299	TRO TRONGSUND, SWEDEN	520	VLI VLIELAND, NEDERL.	669	WIG WIGHT, ENGLAND
189	TRN TRONSD, NORWAY	532	VLS VLISSINGEN, NEDERL.		WIJBURCH SEE VIBORG
141	TRD TRONDHJEM, NORWAY	529	VOL VOLENDAM, NEDERL.	528	VIJ VIJOENES, NEDERL.
669	TRU TRURO, ENGLAND		VONKZIJL SEE FONKZIJL	529	VIK WIJK AAN ZEE, NEDERL.
009	TUN TUNIS, AFRICA	019	VOR VORDINGSBORG, DENMARK		WIJRO JOCKIJ WITH VIBORG
	TURKU SEE ABO		WAARBERG SEE VARBERG	579	VIL WILLENSTAD, NEDERL.
039	TUR TURD, DENMARK		WALMOUT SEE WARNERMUNDE	086	VIS WILSTER, HERTUGD.
028	TWI TWISK, NEDERL.	308	WAM WAMMELSU, RUSSIA	372	VIN WINDAU, COURLAND
649	TYN TYNMOUTH, ENGLAND		WAMMELSU WITH VIBORG	528	VIE WINKEL, NEDERL.
	ST. UBES SEE SETUBAL	329	WAR WARDER, NEDERL.	569	VIM WINSCHOTEN, NEDERL.
469	UCK UCKERMUNDE, POMM.	569	WAF WARFFUM, NEDERL.	649	VIA WISBECH, ENGLAND
202	UDD UDDEVALLA, SWEDEN	529	WRG WARGA, NEDERL.	472	VIN WISMAR, MECKLENBURG
029	UIT UITGEEST, NEDERL.	479	WAN WARNERMUNDE, MECKLENBURG	439	VIT WITTENBERG, WEST PRUSSIA
069	UTH UTHWIZEN, NEDERL.	299	WRN WARNEN, SWEDEN	559	VIV WITTEVEEN, NEDERL.
004	ULE ULEABORG, FINLAND	559	WAS WARNS, NEDERL.	758	VIU WITTMUND, OSTFR.
009	ULV ULVENSTONE, ENGLAND	489	WAP WARP, POMMERN	462	VOL WOLGAST, POMM.
019	UME UMEA, SWEDEN	552	WAE WARREGA, NEDERL.	459	WOL WOLLIN, POMM.
	USTERD SEE UTERSEN	559	WAT WARTENA, NEDERL.	649	WOO WOODBRIDGE, ENGLAND
006	UTE UTERSEN, HERTUGD.	209	WAA WASA, FINLAND	649	WOW WOOLWICH, ENGLAND
189	VAD VADSO, NORWAY	689	WAO WATERFORD, IRELAND	659	WOR WORCESTER, ENGLAND
239	VAL VALDEMARSVIK, SWEDEN	529	WAG WATERGANG, NEDERL.	659	WOK WORKINGTON, ENGLAND
009	STV ST. VALEAY, FRANCE	529	WAL WATERLAND, NEDERL.	653	WOK WORKUM, NEDERL.
119	VAN VALLO, NORWAY	609	WAK WATS-NESS, SCOTLAND	529	WOM WORKER, NEDERL.
009	VAE VANNES, FRANCE	301	WED WEDERLAKS, RUSSIA	529	VOE WORMERVEER, NEDERL.
263	VAR VARBERG, SWEDEN		WEDERLAKS WITH FREDERIKSHAMN	554	WOU WOUSEND, NEDERL.

CONTINUED



APPENDIX A.1

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
DUND TOLL REGISTERS (COPENHAGEN) + THE GALJOOTSGELDREGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, ALPHABETIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
	WYBORG SEE VIBORG	244	YST YSTAD, SWEDEN	565	ZOU ZOUTKAMP, NEDERL.
849	YAR YARMOUTH, ENGLAND	518	ZAA ZAANDAM, NEDERL.	569	ZUI ZUIDBROEK, NEDERL.
889	YJL IJLST, NEDERL.	539	ZEE ZEELAND, NEDERL.	529	ZUD ZUIDERWOUDE, NEDERL.
849	STY ST. YVES, ENGLAND	539	ZIR ZIERIKSEE, NEDERL.	526	ZUH ZUNDERDORP, NEDERL.
849	YOR YORK, ENGLAND	459	ZIE ZIEGENORT, POMM.	528	ZVA ZVAAG, NEDERL.
879	YPE YPERN, BELGIUM	469	ZIN ZINGST, POMM.		

APPENDIX A.2

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC-SHIPPIING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
SUND TOLL REGISTERS (COPENHAGEN) + THE GALJOOTSGELDREGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, NUMERIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
001	NOE KOBENHAVN, DENMARK	027	KAU KALUNDBORG, DENMARK	055	HJE HJERTING, DENMARK
011	ORA DRAGOR, DENMARK	027	KOO KORSOR, DENMARK	055	HJO HJORRING, DENMARK
012	NO6 KOGE, DENMARK	027	NAE NAESTVED, DENMARK	055	RIB_RIBE, DENMARK
013	HEA HELSINGOR, DENMARK	027	SEJ SEJERO, DENMARK	055	RIK RINGKOBING, DENMARK
015	ANA ANAGER, DENMARK	027	SKE SKELSKOR, DENMARK	055	SOE SONDERHO, DENMARK
015	NON NON, DENMARK	031	ODE ODENSE, DENMARK	055	VAA VARDE, DENMARK
015	ORE SUND (DANISH COAST)	032	LAG LANGELAND, DENMARK	059	DAN DENMARK
015	PRA PRAESTO, DENMARK	032	RUD RUDKOBING, DENMARK	059	JYL JYLLAND
015	SKE SKOVSHOVED, DENMARK	039	ASS ASSENS, DENMARK	061	FLS FLENSBORG, HERTUGD.
015	STE STEGE, DENMARK	039	BOG BOGENSE, DENMARK	062	SON SONDERBORG, HERTUGD.
015	ST6 STOREHEDINGE, DENMARK	039	FAA FAABORG, DENMARK	063	AER AERO, HERTUGD.
015	ST8 STEVNS, DENMARK	039	KJE KJERTEMINDE, DENMARK	064	AES AEROSKOBING, HERTUGD.
015	TAR TARSBAEK, DENMARK	039	MIE MIDDELFART, DENMARK	064	MRT. MARSTAL, DENMARK
015	VOR VORDINGSBORG, DENMARK	039	NYB NYBORG, DENMARK	065	ALS ALS, HERTUGD.
017	AAL AALHOLM, DENMARK	039	SVN SVENDBORG, DENMARK	065	FR0 FREDERIKSORT, HERTUGD.
017	SAD SANDHOLM, DENMARK	039	TAS TASINGE, DENMARK	065	HAD HADERSLEV, HERTUGD.
017	FAS FALSTER, DENMARK	039	TUR TUR0, DENMARK	065	KAP KAPPELM, HERTUGD.
017	FEJ FEJO, DENMARK	041	FLA FLADSTRAND, DENMARK	065	NOR NORDBORG, HERTUGD.
017	FEO FEHO, DENMARK	041	FRS FREDERIKSHAVN, DENMARK	067	AAB AABENRAA, HERTUGD.
017	GRS GR0NSUND, DENMARK	042	RAN RANDERS, DENMARK	067	AAP APENRADE, HERTUGD.
017	LOL LOLLAND, DENMARK	043	AAR AARHUS, DENMARK	069	ARS ARNIS, HERTUGD.
017	NAK NARISO, DENMARK	044	HOS HORSSENS, DENMARK	069	ECK ECKENFORDE, HERTUGD.
017	NAK NAKSKOV, DENMARK	045	VEJ VEJLE, DENMARK	071	KIE KIEL, HERTUGD.
017	NYK NYKOBING FALSTER, DENMARK	046	KOD KOLDING, DENMARK	072	BUR BURG, HERTUGD.
017	NYT NYSTED, DENMARK	049	AEB AEBELTOFT, DENMARK	072	FEM FEMERN, HERTUGD.
017	ROE ROOBY, DENMARK	049	ANH ANHOLT, DENMARK	078	NES NEUSTADT, HERTUGD.
017	SAK SAKSKOBING, DENMARK	049	FRD FREDERICIA, DENMARK	079	HAF HAFKRUG, HERTUGD.
017	STU STUBBEKOBING, DENMARK	049	GRD GRENAA, DENMARK	079	MEL HEILIGENHAFEN, HERTUGD.
019	ART ARTHOLMENE, DENMARK	049	HAS HADSUND, DENMARK	079	LUT LUTJENBURG, HERTUGD.
019	BOA BORNHOLM, DENMARK	049	HIR HIRTSHOLMENE, DENMARK	081	AMR AMRUM, HERTUGD.
019	HAS HASLE, DENMARK	049	HOB HOBRO, DENMARK	081	BAU BALLUM, HERTUGD.
019	KRO KRISTIANSO, DENMARK	049	KAO KALO, DENMARK	081	BRE BRE0STEDT, HERTUGD.
019	NEK NEKSO, DENMARK	049	LAE LAESO, DENMARK	081	EMM EMNERELEFF, HERTUGD.
019	RON RONNE, DENMARK	049	MAI MARIAGER, DENMARK	081	HEO HELGOLAND, HERTUGD.
019	SAV SANDVIG, DENMARK	049	SAE SAEBY, DENMARK	081	HOJ HOJER, HERTUGD.
019	SVA SVANEKE, DENMARK	049	SAS SANSO, DENMARK	081	LIR LISTERDYB, HERTUGD.
022	FRU FREDERIKSSUND, DENMARK	049	SKG SKAGEN, DENMARK	081	LIT LIST, HERTUGD.
024	FRK FREDERIKSVAERK, DENMARK	051	AAL AALBORG, DENMARK	081	REN RENSBORG, HERTUGD.
024	HOC HORNBEAK, DENMARK	052	LEV LEMVIG, DENMARK	081	ROM ROM0, HERTUGD.
024	HOL HOLBAEK, DENMARK	052	LOE LOGSTOR, DENMARK	082	DAG DAGERDL, HERTUGD.
024	ISS ISSEFJORD, DENMARK	052	NIB NIBE, DENMARK	082	FOE FOHR, HERTUGD.
024	NYR NYKOBING SJAELLAND, DENMARK	052	NYO NYKOBING MORS, DENMARK	082	FRR FRIEDERICHSTAD, HERTUGD.
024	ROK ROSKILDE, DENMARK	052	SKV SKIVE, DENMARK	082	GAM GALMSBOL, HERTUGD.
024	ROR RORVIG, DENMARK	052	THI THISTED, DENMARK	082	HOS HOOGE (ISLE), HERTUGD.
027	NAA KARREBAEKSHINDE, DENMARK	055	FAN FANO, DENMARK	082	HUS HUSUM, HERTUGD.

CONTINUED:

APPENDIX A.2

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 SUND TOLL REGISTERS (COPENHAGEN) + THE GALJOOTSGELOREGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, NUMERIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
002	NOA NORDMARSCH, HERTUGD.	125	FLE FLEKKEFJORD, NORWAY	201	HEN HELSINGFORS, FINLAND
002	NOS NORDSTRAND, HERTUGD.	126	STV STAVANGER, NORWAY	202	AAO AABO, FINLAND
002	SIL SILD, HERTUGD.	129	AAE AALESUND, NORWAY	203	BJR BJOERNEBORG, FINLAND
002	TND TONDER, HERTUGD.	129	AGN AGNEFEST, NORWAY	204	ULE ULEABORG, FINLAND
002	TNI TONNINGEN, HERTUGD.	129	BRV BREVIK, NORWAY	209	BOO BORGA, FINLAND
004	ALT ALTONA, HERTUGD.	129	EGE EGERSTAD, NORWAY	209	BRH BRAHESTAD, FINLAND
005	GLU GLUCKSTADT, HERTUGD.	129	FAS FARSUND, NORWAY	209	EKE EKENAS, SWEDEN
006	BLN BLANKENESE, HERTUGD.	129	FED FEDA, NORWAY	209	FIL FINLAND
006	UTE UTENSEN, HERTUGD.	129	FLK FLEKKERO, NORWAY	209	HAN HANGO, FINLAND
006	WIS WILSTER, HERTUGD.	129	GRS GRIMSTAD, NORWAY	209	JAK JAKOBSSTAD, FINLAND
007	BLE SCHLESWIG	129	HIE HITTERO, NORWAY	209	KAB KARLEBY, NY, FINLAND
008	MOS HOLSTEIN	129	JOM JOMFRULAND, NORWAY	209	KAE KARLEBY, GAMMEL, FINLAND
009	ISL ICELAND	129	KOR KORSHAVN, NORWAY	209	KAR KARLEBY, FINLAND
009	FAE FARO ISLANDS	129	KRA KRAGERO, NORWAY	209	KAS KASKO, FINLAND
009	DAV DAVIS STRAITS	129	KVI KVINESDAL, NORWAY	209	KRF KRISTIINA, FINLAND
009	GRN GREENLAND	129	LAE LANGESUND, NORWAY	209	KRL KRISTINESTAD, FINLAND
009	SPT SPITZBERGEN	129	LIE LISTER, NORWAY	209	LOV LOVISA, FINLAND
101	FRI FREDERIKSHALD, NORWAY	129	LIL LILLESAND, NORWAY	209	NYS NYSTAD, FINLAND
102	MOS MOSS, NORWAY	129	LIN LINDESNES, NORWAY	209	TOM TORNEA, SWEDEN
103	KRI KRISTIANIA, NORWAY	129	LYN LYNGDAL, NORWAY	209	WAA WASA, FINLAND
109	DRB DROMAK, NORWAY	129	NER NERDO, NORWAY	211	GEL GEFLA, SWEDEN
109	FRT FREDERIKSSTAD, NORWAY	129	OET OSTERRISOR, NORWAY	219	BJO BJOERKOE, SWEDEN
109	GRU GRUE, NORWAY	129	POS PORSHUND, NORWAY	219	BRC BRACKE, SWEDEN
109	HVI HVIDSTEN, NORWAY	129	SAE SANDNES, NORWAY	219	ENO ENKOPING, SWEDEN
109	SVS SVINESUND, NORWAY	129	SAN SAND, NORWAY	219	HEV HERNOSAND, SWEDEN
111	DRN DRAMMEN, NORWAY	129	SKI SKIEN, NORWAY	219	HUD HUDIKSVALL, SWEDEN
112	TNS TONSBERG, NORWAY	129	SKU SKUDENES, NORWAY	219	KAS KARLSBORG, SWEDEN
113	NOT NOTTERO, NORWAY	129	SOG SOGDAL, NORWAY	219	LUL LULEA, SWEDEN
114	TJO TJOMO, NORWAY	129	SWN SWINOR, NORWAY	219	NYL NYLAND, SWEDEN
115	SAD SANDEFJORD, NORWAY	129	VES VESTERRISOR, NORWAY	219	DER OREGRUND, SWEDEN
116	LAV LARVIK, NORWAY	131	BER BERGEN, NORWAY	219	PIT PITEA, SWEDEN
119	AAS AASGAARDSSTRAND, NORWAY	139	BEK BEKKJARVIK, NORWAY	219	RAS RAMSJO, SWEDEN
119	BRG BRAGENAES, NORWAY	141	TRD TRONDHJEM, NORWAY	219	RAT RATHAN, SWEDEN
119	FRE FREBERGSVIK, NORWAY	149	KRU KRISTIANSUND, NORWAY	219	RUN RUNHALLEN, SWEDEN
119	HOM HOLMESTRAND, NORWAY	149	MOL MOLDE, NORWAY	219	SOD SODERHAMN, SWEDEN
119	HOT HORTEN, NORWAY	159	FIM FINMARKEN, NORWAY	219	SUD SUNDSVALL, SWEDEN
119	MUR MURUM, NORWAY	159	HEG HELGELAND, NORWAY	219	UME UMEA, SWEDEN
119	MEL MELSONVIK, NORWAY	159	NOK NORDKAP, NORWAY	221	STC STOCKHOLM, SWEDEN
119	STE STOKKE SOGN, NORWAY	159	OKS OKSEFJORD, NORWAY	231	VIS VISBY, SWEDEN
119	SVE SVELVIK, NORWAY	159	STJ STJERNESUND, NORWAY	232	GOT GOTLAND, SWEDEN
119	VAN VALLO, NORWAY	159	STU ST. JERNESUND, NORWAY	233	NOK NORRKOPING, SWEDEN
121	ARE ARENDAL, NORWAY	159	TRM TROMSO, NORWAY	234	KAM KALMAR, SWEDEN
122	NED NEDENAES, NORWAY	159	VAD VADSO, NORWAY	239	BOM BORGHOLM, SWEDEN
123	KNT KRISTIANSAND, NORWAY	159	VAM VARDOMUS, NORWAY	239	DAL DALARO, SWEDEN
124	MAG MANDAL, NORWAY	169	NOG NORWAY	239	NYP NYKOPING, SWEDEN

CONTINUED:

APPENDIX A.2

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 SUND TOLL REGISTERS (COPENHAGEN) + THE GALJOOTSGELDRREGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10. NUMERIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
239	OLA OLAND, SWEDEN	269	ONS ONSALA, SWEDEN	349	HAP HAPSAL, ESTONIA
239	SOR SODERKOPING, SWEDEN	271	GOT GOTEBOG, SWEDEN	352	RIG RIGA, LIVLAND
239	VAL VALOENARSVIK, SWEDEN	279	HIS HISSINGEN, SWEDEN	361	PER PERNAU, LIVLAND
239	VET VESTERVIK, SWEDEN	279	KUM KUNGELF, SWEDEN	362	EST ESTONIA (OVERIG)
241	NAK KARLSKRONA, SWEDEN	279	STV STYRSO, SWEDEN	369	LIV LIVLAND
242	NAH KARLSHAMN, SWEDEN	281	MRR MARSTRAND, SWEDEN	371	LIB LIBAU, KURLAND
243	AAH AAHUS, SWEDEN	282	UDD UDDEVALLA, SWEDEN	372	WIN WINDAU, KURLAND
244	YST YSTAD, SWEDEN	283	PIS FISKEBACK (SKUL), SWEDEN	379	ANG ANGERN, KURLAND
245	NAH NALMO, SWEDEN	284	LYS LYSEKIL, SWEDEN	379	ANS ANSEKUL, KURLAND
246	LAD LANDSKRONA, SWEDEN	285	HOF HOFBOGN, SWEDEN	379	BLU BLAUESBERGE, KURLAND
247	KRN KRISTANSTAD, SWEDEN	286	SRM STROMSTAD, SWEDEN	379	OOM DOMESNAS, KURLAND
249	FAT FALSTERBO, SWEDEN	289	AAV AASTOL, SWEDEN	379	HEI HEILIGEN AA, KURLAND
249	NRS KRISTIANOPOL, SWEDEN	289	BOM BOMUS, SWEDEN	379	KUR KURLAND
249	LJU LJUNGSBY, SWEDEN	289	FJA FJALLBACKA, SWEDEN	379	MIA MITAU, KURLAND
249	LUN LUND, SWEDEN	289	MAE HALSO, SWEDEN	399	RUS RUSSIA
249	NON RONNEBY, SWEDEN	289	HAV HAVSTENSUND, SWEDEN	401	KON KONIGSBERG, EAST PRUSSIA
249	SIN SINDRISHAMN, SWEDEN	289	KAE KARINGON, SWEDEN	411	MEM MEMEL, EAST PRUSSIA
249	SKA SKANE, SWEDEN	289	KAL KALFSUND, SWEDEN	412	PIL PILLAU, EAST PRUSSIA
249	SKN SKANOR, SWEDEN	289	KLA KLAEDESHOLMEN, SWEDEN	421	DAZ DANZIG, WEST PRUSSIA
249	SLA SLATTAKNA, SWEDEN	289	NOE NOSUND, SWEDEN	422	NEF NEUFAMNWASSER, WEST PRUSSIA
249	SOL SOLVITSBOG, SWEDEN	289	ORU ORUST, SWEDEN	431	ELI ELBING, WEST PRUSSIA
249	TRL TRELLEBOG, SWEDEN	291	SVR SWEDEN (SAILING SOUTHWARD)	439	BRU BRAUNSBURG, WEST PRUSSIA
260	OST OSTSEE	299	BRB BAROSUND, SWEDEN	439	CAU CASSUBEN, WEST PRUSSIA
260	OSZ OOSTZEE	299	STR STRAVESOND, SWEDEN	439	VIT WITTENBERG, WEST PRUSSIA
261	HES HELSINGBOG, SWEDEN	299	SVG SWEDEN (OVERIG)	441	LEB LEBA, POMM.
262	KUL KULLEN, SWEDEN	299	TRO TRONGSUND, SWEDEN	442	STP STOLPE, POMM.
263	TOR TOREKOV, SWEDEN	299	WRN WARNEN, SWEDEN	443	RUG RUGENWALDE, POMM.
264	BAA BAASTAD, SWEDEN	301	FRK FREDERIKSHAMN, FINLAND/RUSSIA	444	KOB KOLBERG, POMM.
269	ARI ARILD, SWEDEN	301	WED WEDERLAKS, RUSSIA	449	BEP BERLIN, PRUSSIA
269	ENG ENGELHOLM, SWEDEN	308	BJK BJORKO, RUSSIA	449	BRN BRANDENBURG, PRUSSIA
269	FOR FORSLOP, SWEDEN	308	TRJ TERJOKI, RUSSIA	449	KAI KAMMIN, POMM.
269	HAH HALSHAVN, SWEDEN	308	TRS TRAANGSUND, RUSSIA	449	STL STOLPMUNDE, POMM.
269	HIT HITTARP, SWEDEN	308	VIB VIBORG, RUSSIA	449	TRT TREPTOW, BAGROMERN
269	HOE HOGANAS, SWEDEN	308	VIL VILAJOKI, RUSSIA	451	STT STETTIN, POMM.
269	NON NONGSVIK, NORWAY	308	WAM WAMMELSU, RUSSIA	459	ANK ANKLAN, POMM.
269	HOE HDLLE, SWEDEN	308	WIB WYBURG, RUSSIA	459	DEI DEMMIN, POMM.
269	SKP SKIPPERKROGEN, SWEDEN	308	WIE WIEROKKA, RUSSIA	459	DIV DIEVENOW, POMM.
269	VIK VIKEN, SWEDEN	319	STP ST, PETERSBURG, RUSSIA	459	JAS JASPNITZ, POMM.
261	NAM MALMSTAD, SWEDEN	329	NAR NARVA, RUSSIA	459	NEV NEUWARP, POMM.
262	FAL FALKENBERG, SWEDEN	330	ING INGRIA (OVERIG)	459	POE POLITZ, POMM.
263	VAR VARBERG, SWEDEN	339	KRD KRONSTADT, RUSSIA	459	POP POMERANIA
269	HAA HALLAND, SWEDEN	341	REV REVAL, ESTONIA	459	SWI SWINEMUNDE, POMM.
269	HAH HANHALS, SWEDEN	342	DAE DAGERORT, DAGO	459	UCK UCKERMUNDE, POMM.
269	KUG KUNGSBACHA, SWEDEN	343	ARN ARENSBURG, OESSEL	459	WAP WARP, POMMERN
269	LAM LAMOLM, SWEDEN	343	OES OESSEL ISLANDS, RUSSIA	459	WOL WOLLIN, POMM.

CONTINUED

156

APPENDIX A.2

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 SUND TOLL REGISTERS (COPENHAGEN) & THE GALJDOTSELORDBOIGERS (AMSTERDAM) (UPDATE 1975-JUN-10, NUMERIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
489	ZIEGENORT, POMM.	528	MED DEN HELDER, NEDERL.	529	GOU GOUDA, NEDERL.
491	GRI GRIJSWALD, POMMERN	528	HEM MEER, NEDERL.	529	GRA GRAFTDIJK, NEDERL.
492	MOL VOLGAST, POMM.	528	HOG HOOGKARSPEL, NEDERL.	529	HAA HAARLEM, NEDERL.
493	STR STRALSUND, POMM.	528	HOU HOUWERT, NEDERL.	529	HEV HELLEVOETSLUIS, NEDERL.
494	BAP BARTH, POMMERN	528	HOU HOOGSTOND, NEDERL.	529	HOZ HOLZSLOOT, NEDERL.
499	BEU BERGM, RUGEN	528	HUI HUISDUJNEN, NEDERL.	529	ILP ILPENDAM, NEDERL.
499	DAN DANGARTEN, POMM.	528	LAM LAWERTSCHAAG, NEDERL.	529	JIS JISP, NEDERL.
499	DAS DARS, POMM.	528	LER LEEK, NEDERLAND	529	KAT KATWIJK, NEDERL.
499	LAS LASSAN, POMM.	528	MED MEDEMBLIK, NEDERL.	529	KRO KROMMIEDIJK, NEDERL.
499	PNE PRENOV, POMMERN	528	MRE MEER, NEDERL.	529	KVA KWADIJK, NEDERL.
499	RUE RUGEN, POMM.	528	MRE NOODDEINDE, NEDERL.	529	LAR LAREN, NEDERL.
499	TRI TRIBESS, POMM.	528	OOE OOSTERBLOKKER, NEDERL.	529	LAS LANDMEER, NEDERL.
499	ZIN ZINGST, POMM.	528	OOV OOSTVOND, NEDERL.	529	MAS MARSTENSLIJS, NEDERL.
471	ROT ROSTOCK, MECKLENBURG	528	OPM OPMER, NEDERL.	529	MII MIDDELE, NEDERL.
472	WIM WISMAR, MECKLENBURG	528	OPP OPPERDOES, NEDERL.	529	MOI MONNIKENDAM, NEDERL.
473	RIM RIENITZ, MECKLENBURG	528	PED PETEN, NEDERL.	529	NDK NOORDKWARTIER, NEDERL.
479	NEB NEUBUCHOU, MECKLENBURG	528	SCH SCHALLINHOUT, NEDERL.	529	NOO NOORVIJK, NEDERL.
479	MAN MARNEHUNDE, MECKLENBURG	528	SCL SCHALLINGHROU, NEDERL.	529	OOH OOSTHUIZEN, NEDERL.
481	LAM LAMBECK, GERMANY	528	SII SIEBKARSPEL, NEDERL.	529	OOT OOSTERLEEK, NEDERL.
491	OOE OOSTERBALTIC)	528	SPN SPANBROEK, NEDERL.	529	OOZ OOSTZAAN, NEDERL.
501	AMS AMSTERDAM, NEDERL.	528	SSE ST. SEBASTIAN, SPAIN	529	OUO OUDOOP, NEDERL.
502	NTG NOT GIVEN	528	TBI TWISK, NEDERL.	529	OUN OUDENDIJK, NEDERL.
510	GDR GORINGHEN, NEDERL.	528	VEH VENHUIZEN, NEDERL.	529	PUR PURMENDO, NEDERL.
511	DDR DORDRECHT, NEDERL.	528	VER VERBERSHOEF, NEDERL.	529	RAS RANSDORP, NEDERL.
512	SDA SDAM, NEDERL.	528	VEY WESTERBLOKKER, NEDERL.	529	SCD SCARDAM, NEDERL.
513	MOR MORN, NEDERL.	528	VEN WESTVOND, NEDERL.	529	SCG SCHELLINGWOUDE, NEDERL.
514	NIE NIEUWENDAM, NEDERL.	528	WIE WINKEL, NEDERL.	529	SCG SCHELLINGROOD, NEDERL.
515	RDE ROTTERDAM, NEDERL.	528	VIJ VIJENES, NEDERL.	529	SCM SCHERMHORN, NEDERL.
516	SCI SCHIEDAM, NEDERL.	528	WBF WEST PRIELAND	529	SCR SCHERMER, NEDERL.
517	TES TERSCHELLING, NEDERL.	528	ZWA ZWAAG, NEDERL.	529	SCV SCHEVENINGEN, NEDERL.
518	ZAA ZAANDAM, NEDERL.	529	ABB ABBEKERK, NEDERL.	529	SLT SLOTERDIJK, NEDERL.
519	OOS OOST, NEDERL.	529	AKE AKERSLOOT, NEDERL.	529	UIT UITGEEST, NEDERL.
519	TER TEKEL, NEDERL.	529	ALK ALKMAAR, NEDERL.	529	VLA VLAARDINGEN, NEDERL.
520	VLI VLIELAND, NEDERL.	529	AXV AXWIJK, NEDERL.	529	VOL VOLENDAM, NEDERL.
526	ZUN ZUNBERDORP, NEDERL.	529	BEE BEETS, NEDERL.	529	WAG WATERGANG, NEDERL.
528	AAT AARTSWOUDE, NEDERL.	529	BRL BRIELLE, NEDERL.	529	WAL WATERLAND, NEDERL.
528	AVN AVENMORN, NEDERL.	529	BRO BROEK-OP-WATERLAND, NEDERL.	529	WAN WARDER, NEDERL.
528	BEG BENNINGBROEK, NEDERL.	529	BUI BUIKSLOOT, NEDERL.	529	WEZ WESTZAAN, NEDERL.
528	BEM BERKHOUT, NEDERL.	529	CAD CADDELEN, NEDERL.	529	VIK VIJK AAN ZEE, NEDERL.
528	BET BERGEN, NEDERL.	529	DEL DELFTSHAVEN, NEDERL.	529	WOE WORMERVEER, NEDERL.
528	BOV BOVENKARSPEL, NEDERL.	529	DER DE RIJP, NEDERL.	529	VON VORMER, NEDERL.
528	CAN CALLANTSOOG, NEDERL.	529	DRI DRIEHUIZEN, NEDERL.	529	WRC WARGA, NEDERL.
528	DHO D'HOEF, NETHERLANDS	529	DUG DURGERDAM, NEDERL.	531	MID MIDDELSBURG, NEDERL.
528	ENK ENKHUIZEN, NEDERL.	529	EGM EGMOND, NEDERL.	532	VLS VLISSINGEN, NEDERL.
528	BRT GROOTERBROEK, NEDERL.	529	GEF GEFFEN, NEDERL.	539	BRV BROUWERSHAVEN, NEDERL.

CONTINUED

APPENDIX A.2

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 SUND TOLL REGISTERS (COPENHAGEN) & THE GALJOOTSGELOREGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, NUMERIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
529	GOE GOES, NEDERL.	559	KUI KUINRE, NEDERL.	689	OSB OOSTERBEEK, NEDERL.
529	SLU SLUIS, NEDERL.	559	LAW LANGVEER, NEDERL.	601	ABE ABERDEEN, SCOTLAND
529	VER VEENE, NEDERL.	559	LKU LEK, NEDERL.	602	ALL ALLOA, SCOTLAND
529	ZER ZERLAND, NEDERL.	559	MOK MOLKWERUM, NEDERL.	603	ARR ARBROATH, SCOTLAND
529	ZIR ZIERIKSEE, NEDERL.	559	NIE NIEUWE ZIJLEN, NEDERL.	604	BON BO'NESS, SCOTLAND
540	SCO SCHIERMONNINGOO, NEDERL.	559	OSE OENHUIZEN, NEDERL.	604	BOW BOROWSTONESS, SCOTLAND
541	AME AMELAND, NEDERL.	559	OLD OLDEBOORN, NEDERL.	605	DUE DUNDEE, SCOTLAND
542	DOK DOKKUM, NEDERL.	559	OUW OUDSGA, NEDERL.	606	DYS DYSART, SCOTLAND
543	GRU GROW, NEDERL.	559	RIJ RIJST, NEDERL.	607	KIR KIRKCALDY, SCOTLAND
544	HAR HARLINGEN, NEDERL.	559	SLO SLOOTEN, NEDERL.	608	LEI LEITH, SCOTLAND
545	HIN HINDELOOPEN, NEDERL.	559	SLU SLUIS, NEDERL.	609	ABD ABERDOUR, SCOTLAND
546	LEN LENNER, NEDERL.	559	SNE SNEEK, NEDERL.	609	AIR AIRTH, SCOTLAND
547	LEU LEEUWARDEN, NEDERL.	559	TJU TJUNHARUM, NEDERL.	609	ANT ANSTRUTHER, SCOTLAND
548	MAK MAKUM, NEDERL.	559	VAS VARNIS, NEDERL.	609	BAP BANFF, SCOTLAND
549	STO STAVOREN, NEDERL.	559	WAT WARTENA, NEDERL.	609	BUN BURNTISLAND, SCOTLAND
551	YEN YERHORNE, NEDERL.	559	WIV WITTEVEEN, NEDERL.	609	CRA CRAIL, SCOTLAND
552	VAE VAREGA, NEDERL.	559	YJL IJLST, NEDERL.	609	CRO CROMARTY, SCOTLAND
553	NOX NOKKUP, NEDERL.	561	APP APPINGENDAM, NEDERL.	609	CUR CURRIE, SCOTLAND
554	WOU WOUDEBEND, NEDERL.	562	DEF DELFZIJL, NEDERL.	609	DUN DUMBAR, SCOTLAND
556	NER NEEVENVEEN, NEDERL.	563	ORO GRONINGEN, NEDERL.	609	DUR DUNFERMLINE, SCOTLAND
559	AKK AKKRUP, NEDERL.	564	PEK PEKELA, NEDERL.	609	EDI EDINBURGH, SCOTLAND
559	ANJ ANJUM, NEDERL.	568	ZOU ZOUTKAMP, NEDERL.	609	ELE ELIE, SCOTLAND
559	ARU ARUM, NEDERL.	569	FRS FRANSUM, NEDERL.	609	EYE EYEMOUTH, SCOTLAND
559	BAK BAKHUIZEN, NEDERL.	569	GRU GRIJPSKERK, NEDERL.	609	FIF FIFE, SCOTLAND
559	BAL BALK, NEDERL.	569	GRV GRONINGEN(OVERIG), NEDERL.	609	FIN FINDHORN, SCOTLAND
559	BEN BERGUM, NEDERL.	569	HOO HOOGEZAND, NEDERL.	609	FIR FIRTH, SCOTLAND
559	SIT SELOTZIJL, NEDERL.	569	MEE MEEGEN, NEDERL.	609	FOR FORT GEORGE, SCOTLAND
559	SLO SLONZIJL, NEDERL.	569	NIO NIEUWOLDA, NEDERL.	609	FRE FRASERBURGH, SCOTLAND
559	BOL BOLSWAARD, NEDERL.	569	NIU NIEUWESCHANS, NEDERL.	609	GAR GARDENSTOWN, SCOTLAND
559	BRN BEERS, NEDERL.	569	SAP SAPPEHEER, NEDERL.	609	GRG GRANGEMOUTH, SCOTLAND
559	DES DE STREEK, NEDERL.	569	TEM TERMUNTEN, NEDERL.	609	INE INVERNESS, SCOTLAND
559	FRA FRANEKER, NEDERL.	569	UTH UITHUIZEN, NEDERL.	609	INV INVERKEITHING, SCOTLAND
559	PRL PRIESLAND, NEDERL.	569	VEE VEENDAM, NEDERL.	609	JOH JOHNHAVEN, SCOTLAND
559	GAA GAAST, NEDERL.	569	WAF WARPFUM, NEDERL.	609	KIC KINCARDINE, SCOTLAND
559	GOR GORREDIJK, NEDERL.	569	WIM WINSCHOTEN, NEDERL.	609	KIG KINGHORN, SCOTLAND
559	GRU GRAUDDIJK, NEDERL.	569	ZUI ZUIDROEK, NEDERL.	609	KIW KIRKWALL, SCOTLAND
559	GSN GAASNEER, NEDERL.	579	HAA HAAS, NEDERL.	609	LEN LEVEN, SCOTLAND
559	MEE MEEG, NEDERL.	579	WIL WILLENSTAD, NEDERL.	609	LEW LERWICK, SCOTLAND
559	HEM HEEM (FR.) NEDERL.	589	ABT ABT, NEDERL.	609	LIL LINLITHGOW, SCOTLAND
559	HON HONNERTS, NEDERL.	589	BOG BODEGA, NEDERL.	609	LIM LIMEKILNS, SCOTLAND
559	HUY HOLLARD, NEDERL.	589	MOA HOLLAND	609	MAC MACDUFF, SCOTLAND
559	IDA IDAARDEDEL, NEDERL.	589	HWL HEEREWALL, NEDERL.	609	MEH METHIL, SCOTLAND
559	JOU JOURE, NEDERL.	589	MAS MAASLUIS, NEDERL.	609	MOT MONTROSE, SCOTLAND
559	KIM KINSBERG, NEDERL.	589	MSL MAASLAND, NEDERL.	609	MUS MUSSELBURGH, SCOTLAND
559	NOU ROUBW, NEDERL.	589	NEE NEDERLANDEN	609	MYS MAY, SCOTLAND

CONTINUED:

APPENDIX A.2

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 SUND TOLL REGISTERS (COPENHAGEN) + THE GALJOOTSGELDRREGISTERS (AMSTERDAM) (UPDATE 1974-JUN-10. NUMERIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
609	NER NEWBURGH, SCOTLAND	632	LON LONDON, ENGLAND	649	WOW WOOLWICH, ENGLAND
609	NOH NORTH BERWICK, SCOTLAND	633	LYE LYNN, ENGLAND	649	YAR YARMOUTH, ENGLAND
609	ORK ORKNEY, SCOTLAND	634	NEC NEWCASTLE, ENGLAND	649	YOR YORK, ENGLAND
609	PEE PETERHEAD, SCOTLAND	635	SCA SCARBOROUGH, ENGLAND	651	LAM LANCASTER, ENGLAND
609	PET PERTH, SCOTLAND	636	SHI SHIELDS, ENGLAND	652	LIP LIVERPOOL, ENGLAND
609	POY PORTSOY, SCOTLAND	637	STK STOCKTON, ENGLAND	659	BAS BARNSTAPLE, ENGLAND
609	PRS PRESTONPANS, SCOTLAND	638	SUN SUNDERLAND, ENGLAND	659	BID BIDEFORD, ENGLAND
609	QUE QUEENSPERRY, SCOTLAND	639	WHI WHITBY, ENGLAND	659	BRI BRIDGWATER, ENGLAND
609	SHT SHETLAND ISLANDS, SCOTLAND	649	BEW BERWICK, ENGLAND	659	BRT BRISTOL, ENGLAND
609	SNO STROMNESS, SCOTLAND	649	BLA BLAKENEY, ENGLAND	659	CAH CARMARTHEN, ENGLAND
609	STA ST. ANDREWS, SCOTLAND	649	BLT BLYTH, ENGLAND	659	CAI CARDIFF, ENGLAND
609	STH STONEHAVEN, SCOTLAND	649	BOI BOTTISHAM, ENGLAND	659	CAS CARLISLE, ENGLAND
609	STI STIRLING, SCOTLAND	649	BOS BOSTON, ENGLAND	659	CHS CHESTER, ENGLAND
609	STN STANLEY, SCOTLAND	649	BRD BRIDLINGTON, ENGLAND	659	DOG DOUGLAS, ISLE OF MAN
609	WAK WATSON, SCOTLAND	649	CHT CHATHAM, ENGLAND	659	GLO GLOUCESTER, ENGLAND
609	WEM WEMYSS, SCOTLAND	649	COL COLCHESTER, ENGLAND	659	HAG HARRINGTON, ENGLAND
609	WIC WICK, SCOTLAND	649	CRM CROMER, ENGLAND	659	HOY HOLYHEAD, ENGLAND
611	GLA GLASGOW, SCOTLAND	649	CUE CULLERCOATS, ENGLAND	659	KIM KIRKHAM, SCOTLAND
619	ARY ARY, SCOTLAND	649	DAR DARLINGTON, ENGLAND	659	LAC LANCASTERSHIRE, ENGLAND
619	CAC CAMBRICK, SCOTLAND	649	GAI GAINSBOROUGH, ENGLAND	659	LYT LYTHAM, ENGLAND
619	CAN CAMPBELLTOWN, SCOTLAND	649	GRE GRAVESEND, ENGLAND	659	NAN NAN, ENGLAND
619	CRO CARRON, SCOTLAND	649	GRM GRIMSBY, ENGLAND	659	MAY MARYPORT, ENGLAND
619	CUN CUNNINGHAM, SCOTLAND	649	HAL HARTLEY, ENGLAND	659	HIF MILFORD, ENGLAND
619	DUF DUMFRIES, SCOTLAND	649	HAT HARTEPOOL, ENGLAND	659	NET NEATH, ENGLAND
619	DUN DUMBARTON, SCOTLAND	649	HAV HARWICH, ENGLAND	659	PON POULTON, ENGLAND
619	FOT FORT WILLIAM, SCOTLAND	649	IPS IPSWICH, ENGLAND	659	STI ST. IVES, ENGLAND
619	GAL GALLOWAY, SCOTLAND	649	LEE LEEOS, ENGLAND	659	STJ ST. JUST, ENGLAND
619	GRD GREENOCK, SCOTLAND	649	LOW LOEWSTOFT, ENGLAND	659	SWA SWANSEA, ENGLAND
619	IRV IRVINE, SCOTLAND	649	MAI MANNINGTREE, ENGLAND	659	TEN TENBY, ENGLAND
619	KIK KIRKCUDBRIGHT, SCOTLAND	649	MAL MALDON, ENGLAND	659	ULV ULVENSTONE, ENGLAND
619	KIL KILBERRY, SCOTLAND	649	MAR MARLOW, ENGLAND	659	WHT WHITEHAVEN, ENGLAND
619	LES LEVIS, SCOTLAND	649	MAR MARGATE, ENGLAND	659	WOK WOKINGTON, ENGLAND
619	LOC LOCHINVER, SCOTLAND	649	NOP NORFOLK, ENGLAND	659	WOR WORCESTER, ENGLAND
619	LON LOCHWINNOCH, SCOTLAND	649	ROH ROCHESTER, ENGLAND	660	POO POOLE, ENGLAND
619	PIE PITTENVEEM, SCOTLAND	649	SEL SELBY, ENGLAND	669	ARD ARUNDEL, ENGLAND
619	REF RENFREW, SCOTLAND	649	SHE SHEERNESS, ENGLAND	669	CHI CHICHESTER, ENGLAND
619	SAC SANDWICK, SCOTLAND	649	SOT SOUTHWOLD, ENGLAND	669	COW COWES, ENGLAND
619	SAT SALTCOATS, SCOTLAND	649	SPA SPALDING, ENGLAND	669	DAT DARTMOUTH, ENGLAND
619	SRA STRANRAER, SCOTLAND	649	STY ST. YVES, ENGLAND	669	DEA DEAL, ENGLAND
619	SRN STRONTIAN, SCOTLAND	649	THA THAMES, ENGLAND	669	DOV DOVER, ENGLAND
619	STW STORNOWAY, SCOTLAND	649	THO THORNE, ENGLAND	669	EXE EXETER, ENGLAND
619	THU THURSO, SCOTLAND	649	TYN TYNEMOUTH, ENGLAND	669	FAM PALMOUTH, ENGLAND
629	ALD ALDERNRY, ENGLAND	649	VEL WELLS, ENGLAND	669	FOW FOWEY, ENGLAND
629	SNO SCOTLAND	649	WIA WISBECH, ENGLAND	669	GOS GOSPORT, ENGLAND
631	MUL HULL, ENGLAND	649	WOO WOODBRIDGE, ENGLAND	669	GUE GUERNSEY, ENGLAND

CONTINUED

APPENDIX A.2

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 SUND TOLL REGISTERS (COPENHAGEN) + THE GALJOOTSGELDREGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, NUMERIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
649	HAI HASTINGS, ENGLAND	689	NEY NEWRY, IRELAND	759	FON FONKZIJL, OSTFR.
649	JER JERSEY, ENGLAND	689	POT PORTAFERRY, IRELAND	759	GEM GENGUM, OSTFR.
649	KEN KENT, ENGLAND	689	SLI SLIGO, IRELAND	759	DEF OSTFRIESLAND
649	LYN LYNINGTON, ENGLAND	689	STP STRANFORD, IRELAND	761	PAP PAPENBURG, GERMANY
649	MAZ MARAZION, ENGLAND	689	WAO WATERFORD, IRELAND	762	LEH LEHE, GERMANY
649	NIT NILTON, ENGLAND	689	WEX WEXFORD, IRELAND	769	ENS ENS, GERMANY
649	NEH NEUHAVEN, ENGLAND	699	ENL ENGLAND	771	OST OSTENDE, BELGIUM
649	PEN PENRYN, ENGLAND	701	HAU HAMBURG, GERMANY	779	ANV ANTWERPEN, BELGIUM
649	PEZ PENZANCE, ENGLAND	708	CUX CUSHAVEN, GERMANY	779	BRG BRUGES, BELGIUM
649	PLY PLYMOUTH, ENGLAND	708	RIT RITZEBUTTEL, GERMANY	779	FLN FLANDERS
649	PSM PORTSMOUTH, ENGLAND	709	ELB ELSEN, GERMANY	779	GEN GENT, BELGIUM
649	RAN RAMSGATE, ENGLAND	713	BRY BRUNHAUSEN, GERMANY	779	MEC MECHELEN, BELGIUM
649	RYE RYE, ENGLAND	713	OUK OUXTEHUDE, GERMANY	779	NIP NIEUWPORT, BELGIUM
649	SAB SANDWICH, ENGLAND	713	HAE HAMELWOLDEN, GERMANY	779	YPE YPERN, BELGIUM
649	SEA SEATON, ENGLAND	713	MOE HORNEBURG, TURKEY	789	NON NORTH SEA
649	SHO SHOREHAM, ENGLAND	713	STA STADE, GERMANY	791	ARC ARCHANGEL, RUSSIA
649	SOU SOUTHAMPTON, ENGLAND	719	MOA HANNOVER, GERMANY	792	MSN MUSEN, RUSSIA(WHITE SEA)
649	SPH SPITHEAD, ENGLAND	721	BRM BREMEN, GERMANY	793	KEM KEM, RUSSIA(WHITE SEA)
649	TOP TOPHAM, ENGLAND	729	WES WESER, GERMANY	799	KOL KOLA, RUSSIA
649	TRU TRURO, ENGLAND	731	BRK BRAKE, OLDENBURG	799	MOS MOSTERZARY, RUSSIA
649	WEY WEYMOUTH, ENGLAND	731	DEH DELMENHORST, GERMANY	799	OME OMEGA, RUSSIA
649	WIG WIGHT, ENGLAND	731	ELB ELSFLETH, OLDENBURG	799	POS POSLAG, RUSSIA
689	BAN BALLINTRA, IRELAND	731	JAD JADE, GERMANY	801	LEH LE HAVRE DE GRACE, FRANCE
689	BAY BALLYCASTLE, IRELAND	731	OLE OLDENBURG, GERMANY	802	HON MONFLEUR, FRANCE
689	BEL BELFAST, IRELAND	741	HOK HOONSIEL, TURKEY	803	BRS BREST, FRANCE
689	CAP CARLINGFORD, IRELAND	741	JEV JEYERLAND, GERMANY	804	BOR BORDEAUX, FRANCE
689	CPE CARRICKFERGUS, IRELAND	751	END EMDEN, OSTFR.	808	DUK DUNKERQUE, FRANCE
689	COE COLERAINE, IRELAND	758	ACK ACKERMERZIEL, OSTFR.	808	GRV GRAVELINES, FRANCE
689	COR CORR, IRELAND	758	AUR AURICH, OSTFR.	809	ABE ABSEVILLE, FRANCE
689	DON DONAGHADEE, IRELAND	758	BAT BALTRUN, OSTFR.	809	BAL BARFLEUR, FRANCE
689	DOU DUNMOREPARK, IRELAND	758	BES BENSERSIEL, OSTFR.	809	BAD BAYONNE, FRANCE
689	DOW DOWNS, IRELAND	758	BOK BORKUM, OSTFR.	809	RLY BLAYE, FRANCE
689	DRO DROGHEDA, IRELAND	758	CAZ CAROLINENSIEL, OSTFR.	809	BOE BOURGNEUF, FRANCE
689	DUB DUBLIN, IRELAND	758	DOU DORNUMERSIEL, OSTFR.	809	BOU BOULOGNE, FRANCE
689	DUB DUNDALK, IRELAND	758	ESE ESENS, OSTFR.	809	CAA CALLAC, FRANCE
689	FAR FARD, IRELAND	758	GRT GRETSIEL, OSTFR.	809	CAE CAEN, FRANCE
689	GAV GALWAY, IRELAND	758	JUI JUIST, OSTFR.	809	CAL CALAIS, FRANCE
689	IRL IRELAND	758	LER LEER, OSTFR.	809	CHA CHARENTE, FRANCE
689	JAC JACL, IRELAND	758	NEM NESSMERSIEL, OSTFR.	809	CHE CHERBOURG, FRANCE
689	KID KILLOUGH, IRELAND	758	NES NESSE, OSTFR.	809	DIE DIEPPE, FRANCE
689	KIL KILLYBEGS, IRELAND	758	NEU NEUMARLINGERSIEL, OSTFR.	809	ETA ETAPLES, FRANCE
689	LAI LARNE, IRELAND	758	NOD NORDEN, OSTFR.	809	PEC FECAMP, FRANCE
689	LIE LIMERICK, IRELAND	758	NDE NORDERNEY, OSTFR.	809	FRN FRANCE
689	LON LONDONDERRY, IRELAND	758	SPI SPIKERODD, OSTFR.	809	GRF GRANVILLE, FRANCE
689	NED NEWTOWN, IRELAND	758	WIU WITTMUND, OSTFR.	809	ILE ILE DE RE, FRANCE

CONTINUED



APPENDIX A.2

GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
 SUND TOLL REGISTERS (COPENNAGEN) + THE GALJOOTSGELDRBGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, NUMERIC SEQUENCE)

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
809	LAF LA FLOTTE, FRANCE	813	SET SETUBAL, PORTUGAL	839	TOU TOULON, FRANCE
809	LAM LA MOTTE, FRANCE	819	AVE AVEIRO, PORTUGAL	841	CAG CAGLIARI, ITALY
809	LAR LA ROCHELLE, FRANCE	819	ESP ESPERANCE, PORTUGAL	842	GEU GENOVA, ITALY
809	LAT LA TRENTLADE, FRANCE	819	FAO FARO, PORTUGAL	843	LII LIVORNO, ITALY
809	LEC LE CROISIC, FRANCE	819	FAY FAYAL, PORTUGAL	844	TRP TRAPANI, ITALY
809	LEP LE POUUGUEN, FRANCE	819	FIG FIGUEIRA, PORTUGAL	849	ALA ALASSIO, ITALY
809	LIE LES SABLES D'OLONNE, FRANCE	819	OLM OLHAO, PORTUGAL	849	AUG AUGUSTA, ITALY
809	LIO LISBOURNE, FRANCE	819	POG PORTUGAL	849	BAI BAIA, ITALY
809	LOR LORIENT, FRANCE	819	VIL VILLA DE CONDE, PORTUGAL	849	BOD BORDIGNERA, ITALY
809	MAE MARENNES, FRANCE	821	CAO CAOIX, SPAIN	849	CER CERVO, ITALY
809	MEO MESQUERS, FRANCE	825	ALM ALMONTE, SPAIN	849	CIV CIVITA VECCHIA, ITALY
809	MES MESCHERS, FRANCE	825	BIL BILBAO, SPAIN	849	CNI CARONIA, ITALY
809	MOA MORLAIX, FRANCE	825	ELF EL FERROL, SPAIN	849	CRL CARLOFORTE, ITALY
809	MOR MORBIHAN, FRANCE	825	GAL GALICIE, SPAIN	849	MEI MESSINA, ITALY
809	MOC MORNAC, FRANCE	825	NAP NARIN, SPAIN	849	MET MENTON, ITALY
809	MOR MORTAGNE, FRANCE	825	OVI OVIEDO, SPAIN	849	MON MONACO, ITALY
809	NAN NANTES, FRANCE	825	POU PORTUGALETTE, SPAIN	849	MRA MARSALA, ITALY
809	NOI NOIRMOUTIER, FRANCE	825	POV PONTEVEDRO, SPAIN	849	NEA NAPELS, ITALY
809	NOM NORMANDY, FRANCE	825	RIV RIWADEO, SPAIN	849	NIC NICE, ITALY
809	OLR OLERON, FRANCE	825	SAA SANTANDER, SPAIN	849	ORI ORISTANO, ITALY
809	PAI PAIMBOEUF, FRANCE	825	SEV SEVILLA, SPAIN	849	SAN SAN REMO, ITALY
809	PIC PICARDIE, FRANCE	825	SLU ST.LUCAR, SPAIN	849	SAR SARDINIEN, ITALY
809	POL PORT LUIS, FRANCE	825	VIG VIGO, SPAIN	849	SIC SICILY, ITALY
809	POR PORNIC, FRANCE	825	VIV VIVERO, SPAIN	849	SIR SYRACUSE, ITALY
809	QUI QUIMPER, FRANCE	826	ALI ALICANTE, SPAIN	849	SIZ SICILY, ITALY
809	ROB LA ROCHEBERNARD, FRANCE	827	MAL MALAGA, SPAIN	851	TRS TRIEST, AUSTRIA
809	ROC ROCHEFORT, FRANCE	829	BAC BARCELONA, SPAIN	852	VEN VENICE, ITALY
809	RDS ROSCOFF, FRANCE	829	BEI BENICARLO, SPAIN	859	ANC ANCONA, ITALY
809	ROU ROUEN, FRANCE	829	CAT CARTEGENA, SPAIN	859	BIS BISCEGLIE, ITALY
809	SEU SEUDRE, FRANCE	829	CUL CULLERA, SPAIN	859	CEB CESENATICO, ITALY
809	STB ST.BREVIN, FRANCE	829	GIB GIBRALTAR, SPAIN	859	MAT MALTA, ITALY
809	STG ST.GILLES, FRANCE	829	IBI IBIZA, SPAIN	859	PLA POLA, ITALY
809	STJ ST. JEAN DE LUZ, FRANCE	829	IWI IWIZA, SPAIN	879	COC CONSTANTINOPEL, TURKEY
809	STM ST. MALO, FRANCE	829	LAC LA CORUNA, SPAIN	879	GAP GALIPOLI, TURKEY
809	STN ST. NAZAIRE, FRANCE	829	MAM MAMON, SPAIN	879	KOS KONSTANTINOPEL, TURKEY
809	STP ST. PIERRE, FRANCE	829	MAR MALLORCA, SPAIN	879	PAR PAROS, TURKEY
809	STR ST.BRIEUC, FRANCE	829	MEN MENORCA, SPAIN	879	SAM SAMOS, TURKEY
809	STV ST. VALERY, FRANCE	829	PAL PALMA, MALLORCA, SPAIN	879	SAD SANTORIN, TURKEY
809	TAL TALMONT, FRANCE	829	SAL SALOU, SPAIN	879	SMY SMYRNA, TURKEY
809	TRE TREGUIER, FRANCE	829	SAN ST. ANTONIO, SPAIN	879	TEE TENEDOS, TURKEY
809	TRO TREPONT, FRANCE	829	SPE SPAIN	889	ALG ALGIER, N.AFRICA
809	VAE VANNES, FRANCE	829	TAA TARRAGONA, SPAIN	889	BAR BARBARIET, AFRICA
811	LIS LISSABON, PORTUGAL	829	TOE TORREVIEJA, SPAIN	889	TRF TRIPOLIS, AFRICA
812	OPD PORTO, PORTUGAL	831	MRS MARSEILLE, FRANCE	889	TUN TUNIS, AFRICA
812	PRT PORT-A-PORT, PORTUGAL	832	CET CETTE, FRANCE	899	MIL MEDITERRANEAN SEA

CONTINUED:

**APPENDIX A.2**

**GEOGRAPHICAL CODES USED IN COMPUTER ANALYSIS OF BALTIC SHIPPING IN THE 18TH CENTURY FOR CODING DATA CONTAINED IN THE  
DUND TOLL REGISTERS (COPENHAGEN) + THE GALJOOTSGELDRGISTERS (AMSTERDAM) (UPDATE 1975-JUN-10, NUMERIC SEQUENCE)**

CODE	NAME OF PORT	CODE	NAME OF PORT	CODE	NAME OF PORT
909	AFR AFRICA	913	CAK CANTON, CHINA	942	NEI NEW YORK, AMERICA
909	AZO AZORES, AFRICA	913	KIN KINA	943	BAM BALTIMORE, AMERICA
909	BOB BOURBON ON MAURITUS, AFRICA	919	BAV BATAVIA, ASIA	949	BEY BEVERLY, AMERICA
909	BUE BUENAVISTA, CANARY ISLANDS	929	BRS BRAZIL, AMERICA	949	CHR CHARLESTOWN, AMERICA
909	CAR CANARY ISLANDS, AFRICA	929	SUR SURINAM, AMERICA	949	CRO CAROLINA, AMERICA
909	GUI GUINEA, AFRICA	931	FRV FREDERIKSSTED, WEST INDIES	949	GEO GEORGIA, AMERICA
909	LAS LAS PALMAS, AFRICA	931	KRE KRISTIANSTED, WEST INDIES	949	NAT NANTUCKET, AMERICA
909	MAC MAROCCO, AFRICA	931	STC ST. CROIX, WEST INDIES	949	NEP NEWPORT, AMERICA
909	MAD MADEIRA, AFRICA	931	STT ST. THOMAS, WEST INDIES	949	NYE NEW ENGLAND, AMERICA
909	MAU MAURITIUS, AFRICA	932	TOB TOBAGO, WEST INDIES	949	PHI PHILADELPHIA, AMERICA
909	SHI ST. MIGUEL, AFRICA	933	POA PORT-AU-PRINCE, WEST INDIES	949	RHO RHODE ISLAND, AMERICA
909	TER TENERIFE, AFRICA	933	SDD ST. DOMINIQUE, WEST INDIES	949	SOU SOUTH CAROLINA, AMERICA
911	FRF FREDERIKNAGOR, INDIA	934	GUA GUADALOUPE, WEST INDIES	949	VIR VIRGINIA, AMERICA
911	SER SERAMPOR, INDIA	934	MRI MARTINIQUE, WEST INDIES	959	BAH BAHAMA, AMERICA
911	TRA TRANQUEBAR, INDIA	939	JAM JAMAICA, WEST INDIES	959	CAN CANADA
912	BEN BENGAL, ASIA	939	VEI WEST INDIES	959	HAL HALIFAX, CANADA
912	OSI EAST INDIES	941	BOT BOSTON, AMERICA	959	NOA NORTH AMERICA(CANADA ONLY)

APPENDIX B

B.1. Reproduction of the Galjootsgeldregisters of the D.O.H., Fol. 1.\*

1724

Fi

Rekening aenghende de Heeren  
 Gecommitteerden tot den Oosterschen  
 Handel en Rederye Wegens den Onroefang  
 gehad by Rijnix Liefinck van een  
 Stuyver vande Koopmanschappen en een halve  
 Stuyver van deschepen in maniere hijs  
 Naer volgende

goden. Redery. Lieve

Zaterdag 7 primo January 1724

1 Januari	Johan Ponsel vander Pegeeling gehoudt van Oostersche							
6	Jong Elias	goden 2 00 + schip 5 of 3	4	1	5	4	9	
	Jan Douma cremer v. d' Oostsee							
3	de Jongh Cremsel	goden 2 00 + schip 1 00	2	6	1	9	9	
4 die	deet oopst van workim							
6	8 Pival	goden 2 00 + schip 2 00	2	10	18	3	8	
6 die	Clas Pisch Wals van waide van Dautrice							
11	Emilia	goden 2 00 + schip 2 00	12	13	5	19	13	
6 die	Anke Pijmont van de Joudal van Keltym							
11	Jong Tobias	goden 2 00 + schip 1 00	1	5	9	1	14	
								30 13

\* Source: G.A.A., PA78/94.

APPENDIX B.2

SHIPPING FROM BALTIC PORTS TO AMSTERDAM, 1724. SAMPLE PRINT-OUT OF DATA CODED FOR COMPUTER PROCESSING  
 SOURCE: 'D.O.M. GALJOOTSGELDREGISTERS', MSS. PA 78/94. GEMEENTE ARCHIEF, AMSTERDAM.

REGISTERED DATE OF ARRIVAL	PORT OF DEPARTURE	HOMEPORT OF CAPTAIN	LASTAGE OF CARGO SHIP	NAME OF CAPTAIN	NAME OF SHIP	(NUMBER OF SHIP)
1724-01-01	319 STP	517 TES	064 050	JOCHEN	CORNELIS	JONGE ELISABETH (1)
1724-01-01	250 CSZ	242 KAM	046 042	JAN	DOUWES	JONGE CRAMER (2)
1724-01-01	411 NEM	553 WOR	050 037	MALLE	DEGES	ST PIETER (3)
1724-01-06	421 DAZ	529 WAR	253 200	CLAES PIETERSZ	WEKER	EMELIA (4)
1724-01-06	451 STT	559 JOU	025 019	AUKE	SYMONS	JONGE TOBIAS (5)
1724-01-08	221 STC	519 TEX	053 036	GERRIT	SLUYSMAN	THEOCRA (6)
1724-01-08	352 RIG	519 TEX	080 076	JAN JANS	SCHULTIS	MARIA (7)
1724-01-10	352 RIG	501 AMS	050 040	PIETER MARTENSE	SNEED	JOSUA (8)
1724-01-10	319 STP	501 AMS	036 025	JACOB	ROELOLFE	MARGARETA (9)
1724-01-13	319 STP	501 AMS	086 086	EWOUT	DIRCKSE	MARGARETHA (10)
1724-01-13	421 DAZ	517 TES	210 140	OBBE	LIEWES	KOORNBEURS (11)
1724-01-13	352 RIG	501 AMS	054 054	JAN WYNDERTSE	RUYTER	LEVINA (12)
1724-01-16	421 DAZ	513 WOR	180 144	DIRCK	GROOT	KOKER (13)
1724-01-19	352 RIG	513 WOR	134 124	WOUTER	RENTENIER	TWEE GEBROEDERS (14)
1724-01-19	421 DAZ	529 WAR	250 190	DIRCK JANSE	PAUW	JOMANNA CATHARINA (15)
1724-01-19	401 WDN	541 AME	140 100	HARMAN	THEUNIS	BONTE MANTEL (16)
1724-01-19	421 DAZ	520 VLI	235 170	ARIS JANSE	VISSER	TIMMERMAN (17)
1724-01-19	234 KAM	545 HIN	164 164	HAYE	BONNES	ANNA (18)
1724-01-21	421 DAZ	545 HIN	196 160	TIEERT	BARENS	MAGDALENA HILLEGOM (19)
1724-01-22	319 STP	520 VLI	120 180	CORNELIS	ROER	PRINS WENKIKOF (20)
1724-01-22	421 DAZ	517 TES	150 110	STEVEN	YSEL	GERTRUYD (21)

## BIBLIOGRAPHY

### RESEARCH AIDS

- Aa, Abraham, Jacob vander, Aardrijkskundig woordenboek der Nederlanden, 13 vols., Gorinchem, 1839-51.
- \_\_\_\_\_, Biographisch woordenboek der Nederlanden, 21 vols., Haarlem, 1852-78.
- Adams, A. E. et al., An Atlas of Russian and Eastern European History, New York, 1967.
- Akademia Nauk SSSR, Institut istorii, Bibliografiia russkoi bibliografii po istorii SSSR, Moscow, 1957.
- Albion, R. G., Naval and Maritime History: An Annotated Bibliography, 3rd ed., Mystic, Conn., 1963.
- Bazilevich, K. V., et al., Atlas Istorii SSSR, 3 vols., Moscow, 1959.
- Black, C. E. ed., Rewriting Russian History, New York, 1962.
- Elejwas, S. A., East Central European Studies: A Handbook for Graduate Students—A Preliminary Edition, Columbia University, 1974.
- Brouwers, H., Atlas voor Nederlandsche paleographie, Amsterdam, 1945.
- Brugmans, H., Verslag van een onderzoek in Engeland naar archivalia belangrijk voor de geschiedenis van Nederland in 1892, 's Gravenhage, 1895.
- Buck, H. de, Bibliografie des Geschiedenis van Nederland, Leiden, 1968.
- Chadoir, S. de, Aperçu sur les monnaies russes et sur les monnaies étrangères que ont en cours en Russie, 2 vols., St. Petersburg, 1836.
- Cherepin, L. V., "Russian 17th-Century Baltic Trade in Soviet Historiography," S. E. E. R., 43(Dec. 1964)1-23.
- Chew, Allen F., An Atlas of Russian History: Eleven Centuries of Changing Borders, rev. ed., London, 1970.

- Clark, G.N., "Guide to English Commercial Statistics 1696-1782,"  
Royal Historical Society, Guides and Handbooks No. 1, London,  
1938.
- Damsteegt, B.C., Nieuwe Spiegel der Zeevaart. Nederlandse namen op  
zeekaarten uit de 16e en 17e eeuw, Amsterdam, 1942.
- Dollar, C.M. and Jensen, R., Historian's Guide to Statistics, New York,  
1971.
- Eeghen, I.H. van, Inventarissen van de archieven van de Directie van de  
Moscovischen Handel, Directie van de Oostersche Handel en  
Reederijen, Commissarissen tot de Graanhandel en Commissie  
van de Graanhandel, Amsterdam, 1961.
- \_\_\_\_\_, Inventaris van het Familie Archief Brants, Amsterdam,  
1959.
- Fessenko, Tatiane, Catalog of 18th Century Russian Publications in the  
Library of Congress, Washington, 1965.
- Formsma, W.J. and B. van't Hof, Repertorium van inventarissen van  
Nederlandse archieven, Groningen, 1947.
- Fruin, R., Handboek der chronologie voornamelyk Nederland, Alphen  
a/d Rijn, 1934.
- \_\_\_\_\_, Register van academische dissertatiën en oratiën betreffende  
de geschiedenis des vaderlands, Leiden, 1862.
- \_\_\_\_\_, Repertorium der verhandelingen en bydragen betreffende de  
geschiedenis des vaderlands in mengel werken en tijdschriften tot  
of 1860 verschene, Leiden, 1863+.
- Gapanovitch, J.J., Historiographie russe hors de la Russie, Paris, 1946.
- Gelder, Enno van, De Nederlandse Munten, Utrecht, 1965.
- Geschiedkundige Atlas van Nederland, 42 vols., 's Gravenhage, 1911-1938.
- Gids voor de Archieven van gemeenten en waterschappen in Nederland,  
2 vols., Amsterdam, 1942-44.
- Grimsted, P.K., Archives and Manuscript Repositories in the U.S.S.R.:  
Moscow and Leningrad, Princeton, 1972.
- Grosser Historischer Weltatlas, 2nd ed., Munich, 1962.

- Hansen, Gotthard von, Alte russische Urkunden, die im Revaler Stadt-  
archive aufbewahrt werden, Reval, 1890.
- \_\_\_\_\_, Katalog des Revaler Stadtarchives, Reval, 1896.
- Hoff, B. van het, Het Archief van Anthonie Heinsius, 's Gravenhage,  
1950.
- Huller, J. de, De Archieven der Admiraliteits Colleges, 's Gravenhage,  
1925.
- Inventaris van het archief der Maatschappij van Assurantie, 1720-1784,  
unpublished typed MS ., G.A.R., n.d.
- Inventaris van het archief van het voormalige Zeegerecht te Rotterdam,  
Rotterdam, 1894.
- Japikse, N.M., Het Archief van de Familie Fagel, The Hague, 1964.
- Kerner, R.J., Slavic Europe; A Selected Bibliography in the Western  
European Languages, London, 1918.
- Kernkamp, G.W., Baltische Archivalia. Onderzoek naar Archivalia  
belangrijk voor de geschiedenis van Nederland in Stockholm, Kopen-  
hagen en de Duitse Oostzeesteden, 's Gravenhage, 1908.
- \_\_\_\_\_, Verslag van een Onderzoek in Zweden, Noorwegen, en  
Denemarken naar Archivalia belangrijk voor de Geschiedenis van  
Nederland, 's Gravenhage, 1903.
- Koeman, C., Collections of Maps and Atlases in the Netherlands, published  
Ph.D. dissertation, University of Utrecht, Utrecht, 1961.
- Kuehl, W.F., Dissertations in History: An Index to Dissertations Com-  
pleted in History Departments of United States and Canadian  
Universities 1873-1960, University of Kent Press, 1965.
- Lang, A.W., Seekarten der südlichen Nord- und Ostsee, Ihre-Entwicklung  
von den Anfängen bis zum Ende des 18. Jahrhunderts, Hamburg,  
1968.
- Laurie and Wittle, New Survey of the Baltic and the Gulf of Finland,  
London, 1801.
- Lesure, Michel, Les sources de l'histoire de Russie aux Archives  
Nationales, Paris, 1970.

- Marchel, K., Guide to Russian Reference Books, 2 vols., Stanford, 1962.
- Mazour, A.G., Modern Russian Historiography, Princeton, 1958.
- \_\_\_\_\_, On the Writing of History in the Soviet Union, Stanford, 1971.
- Mintslov, Sergei R., Obzor zapisok, dnevnikov, vospominanii, pisem i puteshestvii, otnosiashchikhsia k istorii Rossii i napechatennykhe na russkom iazyke, Novgorod, 1911.
- Minzloff, R., Pierre le Grand dans la littérature étrangère d'après les notes du Comte de Korff, St. Petersburg, 1872.
- Morley, C., Guide to Research in Russian History, Syracuse, N.Y., 1951.
- Muller, F., Essai d'une Bibliographie Neerlandico-Russe. Catalogue d'une Collection Remarquable de livres, atlas, cartes, portraits, planches, manuscrits hollandais et de plusieurs livres étrangers tous concernant la Russie et la Pologne, Amsterdam, 1859.
- Nomina Geographica Neerlandica, 8 vols., Leiden, 1924-1932.
- Oldewelt, W.H.F., Amsterdamse Archiefvondsten, Amsterdam, 1942.
- (The) Oxford English Dictionary, The Compact Edition of, Oxford, 1971.
- Petit, L.D., Ruys, H.J.A. et al., Repertorium der verhandelingen en bijdragen betreffende de geschiedenis des vaderlands, in tijdschriften 14 vols., Leiden, 1907-1969.
- Polovtsov, A.A. ed., Russkii Biograficheskii Slovar, 25 vols., Moscow, 1896-1918.
- Recueil van all de placaten, ordonnantiën, resolutiën, instructiën, lysten en waarschouwingen betreffende de admiralityten, convoyen, licenten en verdere zee-saaken: met index . . . 1492 tot . . 1771 incl., 12 vols., 's Gravenhage, 1701-73.
- Ritter's geographisch-statistisches Lexikon, fünfte Auflage von A. Strack, 2 vols., Leipzig, 1864-1865.
- Röding, Johann Heinrich, Allgemeines Wörterbuch der Marine in allen europäischen Seesprachen nebst vollständigen Erklärungen, 4 vols., Hamburg, 1794-1798, reprinted Amsterdam, 1969.



Scheltema, Pieter, Amstels Oudheid en Gedenkswaardigheden, 6 vols., Amsterdam, 1855-1872.

Shapiro, D., A Selected Bibliography of works in English on Russian History 1801-1917, Oxford, 1962.

Shorter, E., The Historian and the Computer: A Practical Guide, Englewood Cliffs, N.J., 1971.

Smirnitsky, A.I., ed., Russko-Angliiskii Slovar, Moscow, 1971.

Spekke, Arnolds, The Baltic Sea in Ancient Maps (tr. from Latvian by A.J. Grinsberg a.o.), Stockholm, 1961.

Staring's Lijst van alle Binnen- en Buitenlandse Maten, Gewichten en Munten, 3rd ed., Schoonhoven, 1885.

Uhlenbeck, C.C., Verslag aangaande een onderzoek in de archieven van Rusland ten bate der Nederlandsche geschiedenis, 's Gravenhage, 1949.

Wheeler, M., The Oxford Russian-English Dictionary, Oxford, 1972.

PRIMARY SOURCES

A. Manuscripts

In Denmark:

Riksarchivet, Copenhagen  
(Danish National Archives)

Øresundstoldregnskaberne

Kongelige Bibliotek  
(Danish National Library)

Mémoire touchant le Négoce et la Navigation de Hollandois.  
Dressée à Amsterdam en 1699 au mois de Juin.

In The Netherlands:

Algemeen Rijksarchief te 's Gravenhage  
(Dutch National Archives)

Archieven der Admiraliteitscolleges

Collectie van den Velden

Collectie Bisdom

Collectie Van der Heim

Collectie De Jonge

Archief Fagel

Archief Generaliteits-Rekenkamer

Archief Heinsius

Archief van der Spiegel

Archief der Stadhoudelijke Secretarie

Archieven der Staten-Generaal

Liassen Moscovie

Resoluties en Secrete Resoluties

Archieven van de Staten van Holland

Resoluties en Secrete Resoluties der Staten van Holland en  
West-Friesland

Legatie Archief

Gemeente Archief van Amsterdam  
(Amsterdam City Archives)

Archief Brants

Archief Burgemeesters

Archief van de Directie van de Moscovische Handel

Archief van de Directie van de Oostersche Handel en Reederijen  
Archief Thesaurier ordinarius  
Archief van de Waterschout  
Notarieel Archief

Notaries:	Numbers of the Notarial Protocols Consulted
Salomon Henrix . . . . .	21
Jacob Gijsberts . . . . .	28
Jan Fransen Bruijningh . . . . .	86, 94, 116, 128, 142, 152, 199
Jacob Meerhout . . . . .	235
Jacob and Nicolaes Jacobs . . . . .	398
Jan Warnaeztz . . . . .	669
Joost van de Ven . . . . .	1058, 1059, 1098
Jan Volkertsz Oli . . . . .	1533, 1534, 1545
Pieter de Bary . . . . .	1671, 1700, 1705
Jacob Winter . . . . .	2297
Pieter van Buijtene . . . . .	2745
Henrick Outgers . . . . .	3347, 3351, 3354, 3355, 3359, 3362, 3363, 3365, 3369, 3370
Willem van Ceulen . . . . .	3575, 3576
Adriaan van Santen . . . . .	3837, 3840, 3842, 3860, 3872, 3873
Nicolaes Brouwer . . . . .	3972
Dirk van der Groe . . . . .	4167, 4185, 4192, 4206, 4212, 4240
Joannes Backer . . . . .	4573, 4584, 4597, 4623, 4630, 4635, 4638
Michael Servaes . . . . .	5021
Simon van Sevehoven . . . . .	5260, 5262, 5277, 5280, 5283, 5284, 5287-5296, 5302, 5303, 5306, 5307, 5309, 5311, 5316
Simon Hoff . . . . .	5598
Amelis van Paddenberg . . . . .	5780
Cornelis van Buren . . . . .	5788
David Walsehaert . . . . .	5810, 5818A, 5823, 5828, 5829
Joan Hoekeback . . . . .	5855, 5876, 5881, 5883, 5888, 5902, 5912
Christoffel Hellerus . . . . .	5954
Pieter Schabaelje . . . . .	5994, 6002-04, 6007, 6013-16, 6019, 6023, 6024, 6028-32, 6035, 6036, 6038-41, 6043, 6045-48, 6053, 6055, 6059, 6069, 6132, 6152, 6156, 6160, 6162A, 6167, 6172
Hendrik de Wilde . . . . .	6431B, 6510
Gerrit van der Groe . . . . .	6581, 6588, 6610, 6616, 6618B, 6624, 6631-40
Cornelis Winter . . . . .	6720, 6721, 6723
Pieter van der Meulen . . . . .	6760, 6767, 6768, 6770-74, 6776-78, 6781, 6782, 6784, 6785, 6787, 6807, 6816, 6824, 6847, 6854
Gijsbert van Schoonderwoert . . . . .	6869

Notaries (cont'd):	Numbers of the Notarial Protocols Consulted
Pieter Outgers . . . . .	6934, 6939, 6941, 6943, 6944
Cornelis van Loon . . . . .	6981
Willem Jan van Midlum . . . . .	7162, 7163, 7170, 7171, 7173, 7174
Adrian Buijs . . . . .	7269, 7270
Adriaan Karreman . . . . .	7273, 7275, 7277, 7279, 7285, 7287, 7289, 7290, 7293, 7306, 7307, 7315
Pieter van den Bergh . . . . .	7529
Johannes van Vilekens . . . . .	7547, 7554
Abraham Tzeewen . . . . .	7591, 7593, 7598, 7600, 7614, 7617, 7618, 7619, 7623, 7624, 7626, 7627, 7629, 7632, 7633, 7639, 7642, 7645, 7647, 7653, 7654, 7658, 7659, 7672, 7679
Hilbrand van der Heijden . . . . .	7712, 7713, 7720, 7726
Gerard Burghout . . . . .	7851B
Philippe de Marolles . . . . .	7946A, 7949B, 7953B, 7970, 7976, 7977, 7989, 8000, 8002, 8007, 8008, 8012, 8015, 8025, 8029, 8030, 8036, 8037, 8040, 8043, 8045, 8047, 8054
Hendrik van Aken . . . . .	8085, 8092, 8098, 8127
Rombout van Padeenburg . . . . .	8206
Paulus van den Emde . . . . .	8232
Jan de Vicq Jr. . . . .	8317
Philippus Roos . . . . .	8359
Adrian Baars . . . . .	8568, 8569, 8570, 8587, 8590, 8591, 8600, 8618, 8624, 8626, 8629, 8638, 8639, 8650, 8651, 8661, 8663-65, 8671, 8677, 8689, 8690, 8698, 8716, 8722, 8723, 8735, 8751, 8755, 8761, 8767, 8768, 8778, 8784, 8789
Hermanus de Wolff . . . . .	8952, 8954, 8956, 8957, 8959, 8966, 8970, 8978, 8979, 8983, 8985, 8992, 8993, 8995, 8996, 8997, 8999, 9000, 9001, 9004, 9006
Mathijs Maten de Jonge . . . . .	9387, 9388, 9390, 9391, 9392, 9393, 9394, 9395, 9396, 9398, 9399, 9402, 9403, 9406, 9411, 9412, 9414, 9415, 9417, 9419, 9420, 9422, 9427, 9431, 9434, 9436, 9437
Benjamin Phaff . . . . .	10216, 10217, 10220, 10223, 10226, 10227, 10228, 10280, 10281, 10282, 10283, 10286, 10287, 10288, 10289, 10291, 10292, 10293, 10294, 10295

Notaries (cont'd): Numbers of the Notarial Protocols Consulted	
Daniel van den Brink . . . . .	10299, 10314, 10326, 10331, 10333, 10334, 10338, 10339, 10341, 10343, 10354, 10355, 10356, 10357, 10358, 10363, 10365, 10370, 10371, 10372, 10374, 10376, 10378, 10380, 10381, 10382, 10383, 10384, 10386, 10390, 10391, 10392, 10393, 10394, 10395, 10403, 10407, 10408, 10412, 10414, 10415, 10417, 10433, 10434, 10436, 10439, 10440, 10441, 10445, 10446, 10447, 10448, 10449, 10452, 10453, 10454, 10457, 10458, 10459, 10461, 10462, 10467, 10468, 10469, 10474, 10475, 10478, 10479, 10480, 10482, 10483, 10487, 10488, 10490, 10491, 10492, 10493, 10495, 10496, 10500, 10501, 10502, 10503, 10504, 10516, 10518, 10519, 10522, 10527, 10528, 10532, 10534, 10543, 10546, 10547, 10549, 10550, 10551, 10552, 10557, 10563, 10564, 10580, 10581, 10601, 10620, 10633, 10636, 10637, 10651
Salom Dorper . . . . .	10695, 10696, 10699, 10701, 10702, 10704, 10706, 10707, 10709, 10711, 10712, 10713, 10716, 10718, 10720, 10722, 10723, 10726, 10727, 10729, 10730, 10732, 10733, 10739, 10743, 10744, 10747, 10748, 10749, 10755, 10756, 10757, 10759, 10760, 10762, 10764, 10765, 10768, 10769, 10773, 10774, 10777, 10780, 10781, 10785, 10786, 10787, 10792, 10793, 10797, 10798, 10799, 10800, 10812, 10815, 10818, 10824, 10825, 10830, 10832, 10837, 10838, 10839, 10841, 10843, 10844, 10845, 10846, 10847, 10848, 10849, 10851, 10852, 10855, 10856, 10857, 10858, 10859, 10860, 10861, 10862, 10863, 10864, 10865, 10867, 10869, 10870, 10871, 10874, 10875, 10876, 10877, 10878, 10879, 10880, 10882, 10883, 10886, 10887, 10888, 10889, 10890, 10891, 10892, 10893, 10894, 10895, 10896, 10897, 10899, 10900, 10901, 10903, 10904, 10905, 10906
Thierry Daniel de Marolles . .	11346, 11347

Notaries (cont'd): Numbers of the Notarial Protocols Consulted	
Cornelis van Homrigh . . . . .	12332, 12336, 12342, 12349, 12355, 12358, 12364, 12369, 12371, 12372, 12373, 12379, 12380, 12389, 12394, 12395, 12399, 12405, 12424, 12427, 12432, 12436, 12439, 12440, 12457, 12464, 12467, 12471, 12472, 12473, 12483, 12514
Dominicus Geniets. . . . .	13650, 13699, 13704, 13740, 13840, 13843, 13837
Paulus Huntum . . . . .	14144, 14147, 14148, 14149, 14150, 14151, 14153, 14154, 14155, 14160, 14161, 14168, 14169, 14170, 14171, 14175, 14178, 14184, 14191, 14193, 14196, 14208, 14214
Pieter de Wilde . . . . .	14332, 14338, 14343, 14344, 14345, 14361, 14362, 14363, 14374, 14375, 14376
Jacob Campen . . . . .	14744
Dominicus van Vianen . . . . .	14839
Nicolaus Brahé . . . . .	15512
Anthonij Mijlius . . . . .	15622, 15634, 15641
Engelbertus Marinus Dorper . .	15686, 15695, 15696, 15697, 15708, 15717, 15718, 15722, 15723, 15730, 15731, 15734, 15750, 15768, 15771, 15772, 15773, 15774, 15775, 15778, 15779, 15782, 15783, 15784, 15786, 15787, 15790, 15791, 15795, 15796, 15797, 15799, 15802, 15804, 15806, 15816, 15817, 15818, 15820, 15821, 15823, 15827, 15829, 15830, 15831, 15832, 15834, 15835, 15836, 15837, 15838, 15839, 15841, 15842, 15843, 15844, 15845, 15846, 15849, 15884
Pieter Galemus van Hole . . . .	16341, 16343, 16344
Pierre Fraissinet Jr. . . . .	16517
Cornelius Willem Decker . . . .	17082
Jan Hendrik Zilver . . . . .	17301, 17303

Rechterlijk Archief

Gemeente Archief van Rotterdam  
(Rotterdam City Archives)

Archief der Maatschappij van Assurantie, Discontering en Belening  
Archief van het Voormalige Zeegerecht  
Notarieel Archief  
Financiële Archieven

B. Printed Sources

Algarotti, Brieven behelzende een berigt aangaandeden koophandel, de scheepvaart, inkomsten en krygsmacht van Rusland, Haarlingen, 1770.

Algemeene Verhandeling van de Heerschappy der Zee en een compleet lichaam van de Zee-rechten (tr. fr. English by Pieter leClercq), Amsterdam, 1757.

d'Alphonse, M., Aperçu sur la Hollande, 1811 (Published by the Centraal Bureau voor de Statistiek), Amsterdam, 1900.

Amsterdamse Courant, 1693-1825.

Anderson, Adam, Of the Origins of Commerce, 4 vols., London, 1801, repr. New York, 1967.

Baasch, Ernst, Quellen zur Geschichte von Hamburgs Handel und Schiffahrt im 17., 18., und 19. Jahrhundert, Hamburg, 1910.

Blomberg, C.J.F., An Account of Litvonia etc., London, 1701.

Bridge, C.A.G. ed., History of the Russian fleet during the reign of Peter the Great by a contemporary Englishman, 1724 (Publications of the Navy Records Society), 15(1899).

Büsching's Magazine, or Magazine für die neue Historie und Geographie angelegt von Dr. Anton Büsching, Hamburg, 1767-1771 and Halle, 1773-1793.

Chalmers, George, A Collection of Treaties between Great Britain and Other Powers, London, 1790.

Chulkov, M.D., Istoricheskoe opisanié rossijskoi kommertsii pri vsekh portakh i granitsakh . . ., 7 vols., Moscow, 1781-1788.

Coxe, William, Travels into Poland, Russia, Sweden and Denmark, London, 1785.

Essay sur le Commerce de Russie avec l'Histoire de ses Découvertes, Amsterdam, 1777.

Gee, Joshua, The Trade and Navigation of Great Britain Considered, 5th ed., Glasgow, 1750.

Häpke, Rudolf, Niederländische Akten und Urkunden zur Geschichte der Hanse und zur Deutsche Seegeschichte 1531-1669, 2 vols., Munich, 1913-1922.

- Heeringa, K. and Nanninga, J.S., Bronnen tot de Geschiedenis van den Levantschen Handel, 1590-1826, 4 vols., The Hague, 1910-1964.
- Hermann, B. F., Statistisches Schilderung von Russlands, St. Petersburg, 1790.
- Hogedorp, Dirk van, Stukken raakende den tegenwoordige toestand der Bataafsche besittingen, Den Haag, 1801.
- Huet, P.D., Mémoires sur le commerce des Hollandais, Amsterdam, 1717.
- Jaarboeken, Nederlandse, Amsterdam, 1747-1765.
- Jaarboeken, Nieuwe Nederlandse, Amsterdam, 1766-1798.
- Kilburger, J. P., "Kurzer Unterricht von dem russischen Handel wie selbiger mit aus- und eingehenden Waaren 1674 durch ganz Russland getrieben worden," Büsching's Magazine, 3(1769)245-363.
- Kluit, A., Iets over den laatsten Engelschen Oorlog met de Republiek en over Nederlands Koophandel, deszelfs Bloei, Amsterdam, 1794.
- De Koopman, of weekelyksche bijdragen ten opbouw van Neerlands koop-handel en zeevaart, 6 vols., Amsterdam 1768-76.
- Kupp, Jan, Collection of Documents Relating to the North-American Fur Trade and Cod Fisheries, vols. 7-15, Public Archives of Canada, Ottawa.
- Long, Isaac le, and Le Moine de l'Espine, Jacques, De Koophandel van Amsterdam of verhandeling van deszelfs wisselbank wisselhandel, enz., 10th ed., 4 vols., Amsterdam, 1801-1802.
- Luzac, El., Holland's Rijkdom, 4 vols., Leiden, 1780-83.
- MacPherson, D., Annals of Commerce, Manufactures, Fisheries and Navigation, 4 vols., London, 1805.
- Marbault, A., Essai sur le commerce de Russie avec l'histoire de ses découvertes, Amsterdam, 1777.
- Marperger, P.J., Moscowitischer Kaufman, Lubeck, 1723.
- Martens, C. de and Cussy, F. de, eds., Recueil manual et pratique de traités, conventions et autre acts diplomatiques, sur lesquels sont établis les relations et les relations et les rapports existant aujourd'hui entre les divers états souverains du globe, depuis l'année 1760 jusqu'a l'époque actuelle, 6 vols., Leipzig, 1846-1856.



- Martens, F., Recueil des Traités et Conventions conclus par la Russie avec les Puissances Etrangères, St. Petersburg, 1874-1909.
- Oddy, J., European Commerce, shewing new and secure Channels of Trade with the Continent of Europe, detailing the Commerce of Russia, Prussia, Sweden, Denmark and Germany, 2 vols., London, 1805.
- Perry, J., The State of Russia under the Present Czar, London, 1716.
- Poelman, H.A., Bronnen tot de geschiedenis van de Oostzeehandel 1122-1499, 2 vols., 's Gravenhage, 1917.
- Posthumus, N.W., Nederlandse prijsgeschiedenis, 2 vols., Leiden, 1943-1964.
- \_\_\_\_\_, De Oosterse handel te Amsterdam. Het oudst bewaarde koopmansboek van een Amsterdamse vennootschap betreffende de handel op de Oostzee 1485-90, Leiden, 1953.
- Postlethwayt, Malachy, Universal Dictionary of Trade and Commerce, Translated from the French of the Celebrated Monsieur Savary, etc., with Additions and Corrections, 2 vols., London, 1757.
- Ricard, J.P., Le Négoce d'Amsterdam, contenant tout ce qui doit savoir les Marchands et Banquiers, etc., Rouen, 1723.
- Ricard, S., Traité général du commerce, 3 vols., Amsterdam, 1799-1800.
- Rumiantsev, Count Nikolai P., Tableaux du Commerce de l'Empire de Russie: Années 1802, 1803, 1804, 1805, St. Petersburg, 1808.
- Sbornik imperatorskago russkago istoricheskago obshestva, 148 vols., St. Petersburg, 1887-1916.
- Scherer, J.-B., Histoire raisonnée du commerce de la Russie, 2 vols., Paris, 1788.
- Seeberg-Elverfeldt, R., Revaler Regesten. Beziehungen Niederländischer und Scandinavischer Städte zu Reval in den Jahren 1500-1795, Göttingen, 1968.
- Storch, Heinrich, Historisch-Statistisches Gemälde des russischen Reichs em Ende des achtzehnten Jahrhunderts (mit Supplementband), 8 vols., Riga, 1797-1803, Suppl. Leipzig, 1803.

- Tangelder, F. B. M., Nederlandse Rekeningen in de Pondtolregisters van Elbing, 1585-1602, 's Gravenhage, 1972.
- Tooke, William, Views of the Russian Empire during the Reign of Catherine the Second and to the Close of the Present Century, London, 1799.
- Wagenaar, J., Hedendaagse Historie of Tegenwoordige Staat der Vereenigde Nederlanden, 23 vols., Amsterdam, 1739-1803.
- Weber, Friedrich C., The Present State of Russia, 2 vols., London, 1723.
- Whitworth, Charles L., An Account of Russia as it was in the year 1710, Strawberry Hill, 1710.
- Winkelman, P. H., Nederlandse Rekeningen in de Tolregisters van Koningsbergen, 1588-1602. Bronnen voor de Geschiedenis van de Oostzeehandel in de zeventiende eeuw, 's Gravenhage, 1971.
- Witsen, Nicolaes, Architectura Navalis et Regiman Nauticum, ofte Aaloude en Hedendaagsche Scheepsbouw en Bestier, Amsterdam, 1671.
- \_\_\_\_\_, Noord en oost Tartaryen, behelzende eene beschrijving van verscheidene . . . gewesten, in de noorder en oostelyke deelen Azzeñ en Europe, 2 vols., Amsterdam, 1685.
- Woensel, P. van, Beschrijving van Rusland, Haarlem, 1804.
- Yk, Cornelis van, De Nederlandse Scheepsbouw open Gestelt, Amsterdam, 1697.

SECONDARY SOURCES

A. Books

Alanen, Aulis J., Der Aussenhandel und die Schifffahrt Finnlands im 18. Jahrhundert. Unter besonder Berücksichtigung der Umbruchsperiode der Handelsfreiheit im Bottnischen Meerbusen und der grossen Seekriege, Wiesbaden/Helsinki, 1957.

Algemeene Geschiedenis der Nederlanden, 12 vols., Utrecht, 1955.

Amburger, E., Die Familie Marselis, Studien zur russischen Wirtschaftsgeschichte, Giessen, 1957.

\_\_\_\_\_, Geschichte der Berhöördenorganisation Russlands von Peter dem Grossen bis 1917, Leiden, 1966.

\_\_\_\_\_, Geschichte der Protestantismus in Russland, Stuttgart, 1961.

\_\_\_\_\_, Russland und Sweden 1762-1772, Katherina II, die schwedische Verfassung und die Ruhe des Nordens, Berlin, 1934.

Anderson, M.S., Britain's Discovery of Russia, 1553-1815, New York, 1958.

Anderson, R., Naval Wars in the Baltic during the Sailing Ship Epoch, 1522-1850, London, 1850.

Ashton, T.S., Economic Fluctuations in England, 1700-1800, Oxford, 1959.

\_\_\_\_\_, An Economic History of England: The 18th Century, London, 1955.

Aström, S.E., From Cloth to Iron. The Anglo-Baltic Trade in the late 17th Century, Helsingfors, 1963.

\_\_\_\_\_, From Stockholm to St. Petersburg: Commercial Factors in the Political Relations between England and Sweden, 1675-1700, Helsinki, 1962.

Attman, A., The Russian and Polish Markets in international trade, 1500-1650, Göteborg, 1973.

\_\_\_\_\_, Den Ryska Marknaden i 1500—Talets Baltiska Politik 1558-1595, Lund, 1944.

\_\_\_\_\_, Ryssland och Europa. En handelshistorik översikt,  
Goteburg, 1973.

Aydelotte, W.O., Bogue, A.G., Fogel, R.W., The dimensions of quantitative research in history, Princeton, 1972.

Baasch, E. Holländische Wirtschaftsgeschichte, Jena, 1927.

\_\_\_\_\_, Hamburgs Convoyschiffahrt und Convoywesen: Ein Beitrag zur Geschichte des Schiffahrt und Schiffahrtseinrichtungen im 17. und 18. Jahrhundert, Hamburg, 1896.

Balbian Verster, J.F.L. de, Burgemeesters van Amsterdam in de 17de en 18de eeuw, Zutphen, 1932.

Bamford, P.W., Forests and French Sea Power 1660-1789, Toronto, 1956.

Bang, Nina E., Tabeller over Skibsfart og Varetransport gennem Øresund, 1497-1600, 2 vols., Copenhagen, 1906-1922.

Bang, Nina and Korst, Knud, Tabeller over skibsfart og varetransport gennem Øresund 1661-1783, 4 vols., Copenhagen, 1930-53.

Barbour, Violet, Capitalism in Amsterdam in the 17th century, Ann Arbor, Michigan, 1963.

Bartstra, J.S. Vloothertsel en Legeraugmentatie 1770-1780, Assen, 1952, published Ph.D. dissertation, University of Leiden, 1952.

Beaujon, A., Overzicht der geschiedenis van de Nederlandsche Zeevisscherijen, Leiden, 1885.

Becht, H.E., Statistische gegevens betreffende den handels omzet van de Republiek der Vereenigde Nederlanden gedurende der 17de eeuw, (1579-1715), published Ph.D. dissertation, University of Amsterdam, 1908.

Bel, G.G. van, De linnenhandel van Amsterdam in de XVIIIe eeuw, Amsterdam, 1940.

Beskrovnyi, L.G., Russkaia armia i flot v XVIII veke, Moscow, 1958.

Beveridge, W., Prices and Wages in England from the twelfth to the nineteenth century, London, 1939.

Blok, P.J., Geschiedenis van het Nederlandsche Volk, 8 vols., Groningen, 1899-1908.

- Bloom, H.I., The Economic Activities of the Jews in Amsterdam in the 17th and 18th centuries, Williamsport, 1937.
- Blum, Jerome, Lord and Peasant in Russia from the Ninth to the Nineteenth Century, Princeton, 1961.
- Boekel, P.N., De Zuivelexport van Nederland tot 1813, Utrecht, 1929.
- Boelen, J., Amsterdam, 1733-1958: Bijdrage tot de geschiedenis van den wijnhandel, 2 vols., Amsterdam, 1933.
- Boerries, H.K. von, Die Handels- und Schiffahrtsbeziehungen zwischen Lübeck und Finnland: Ein Beitrag zur Geschichte der Ostseewirtschaft, Jena, 1923.
- Bogucka, M., Handel zagraniczny Gdanska w Pierwszel Potowie XVII wieku, Warsaw, 1970.
- Boiteux, L.A., La fortune de mer, le besoin de sécurité et les débuts de l'assurance maritime, Paris, 1968.
- Boxer, C.R., The Dutch Seaborne Empire, 1600-1800, London, 1965.
- Braam, A. van, Bloei en verval van het economisch-sociale leven aan de Zaan in de 17de en 18de eeuw, Wormerveer, 1944.
- Braam, A. van, Hart, S. et al. eds., Historische Atlas van de Zaanlanden, Zaandam, 1970.
- Brakel, S. van, De Hollandsche Handelscompagnieën der 17e eeuw, published Ph.D. dissertation, University of Amsterdam, 1908.
- Brink, W.H.D., Bijdrage tot de kennis van den economischen toestand van Nederland in de jaren 1813-1816, published Ph.D. dissertation, University of Amsterdam, 1916.
- Brugmans, H., Geschiedenis van Amsterdam, 2nd ed., 4 vols., Utrecht, 1972-1973.
- Brugmans, H. et al., Geschiedenis van Nederland, 8 vols., Utrecht, 1930.
- Buist, M.G., At spes non fracta. Hope & Co. 1770-1815. Merchant Bankers and Diplomats at Work, The Hague, 1974.
- Bunk, W., Staathuishoudkundige Geschiedenis van den Amsterdamschen Graanhandel, published Ph.D. dissertation, University of Leiden, 1856.
- Burema, L., De Voeding in Nederland van de Middeleeuwen tot de Twintigste Eeuw, published Ph.D. dissertation, University of Amsterdam, 1953.

- Byl, M.A., De Nederlandse Convooidienst 1300-1800, 's Gravenhage, 1951.
- Carstenn, Edward, Geschiede der Hansestadt Elbing, Elbing, 1937.
- Christensen, Aksel E., Dutch Trade to the Baltic about 1600. Studies in the Sound Toll Register and Dutch Shipping Records, Copenhagen, 1941.
- Clark, G.N., Dutch Alliance and the War against the French Trade, 1688-1697, Manchester, 1923.
- Colenbrander, H. T., Gedenkstukken der Algemeene Geschiedenis van Nederland van 1795 tot 1840, vol. I, 's Gravenhage, 1905.
- Crosby, A.W. Jr., America, Russia, Hemp and Napoleon: A Study of Trade between the United States and Russia 1783-1814, University of Ohio, 1965.
- Davies, D.W., A Primer of Dutch 17th Century Overseas Trade, The Hague, 1961.
- Davis, Ralph, English overseas trade, 1500-1700, London, 1973.
- \_\_\_\_\_, The Rise of the Atlantic Economies (1550-1750), London, 1973.
- \_\_\_\_\_, The Rise of the English Shipping Industry, London, 1972.
- Deardorff, W.R., English Trade in the Baltic during the Reign of Elizabeth, New York, 1912.
- Diferee, H.C., Geschiedenis van den Nederlanschen Handel tot den val der Republiek, Amsterdam, 1908.
- \_\_\_\_\_, Een onuitgevoerde Maatregel tot Herstel van den Koophandel in de 18e eeuw, Amsterdam, 1908.
- Dillen, J.G. van, Bronnen tot de geschiedenis van het bedrijfsleven en het gildewezen van Amsterdam, 2 vols., Den Haag, 1922-1933.
- \_\_\_\_\_, Van rijkdom en regenten. Handboek tot de economische en sociale geschiedenis van Nederland tijdens de Republiek, 's Gravenhage, 1970.
- Doorman, G., Octrooien voor uitvindingen in de Nederlanden uit de 16e-18e eeuw, 2 vols., 's Gravenhage, 1940.

- Doroshenko, V., Kahk, J., Ligi, H., Piirimäe, & Tarvel, E., Trade and Agrarian Development in the Baltic Provinces, 15th-19th Centuries, Tallinn, 1974. Preprint.
- Dunsdorfs, E., Merchant Shipping in the Baltic during the 17th Century, Pinneberg, 1947.
- Elias, Jeanette, Bijdrage tot de kennis van de historiographie der Bataafse Republiek, published Ph.D. thesis, University of Utrecht, 1906.
- Elias, J.E., De Vroedschap van Amsterdam, 1578-1795, 2 vols., Haarlem, 1903-1905.
- Engelhard, J.F.L., Het generaal-plakkaat van 31 juli 1725 op de con-vooen en licenten en het lastgeld op de schepen, published Ph.D. dissertation, University of Amsterdam, 1970.
- Faber, J.A., Drie Eeuwen Friesland: Economische en sociale ont-wikkelingen van 1500 tot 1800, published Ph.D. dissertation, 2 vols., University of Utrecht, 1972.
- Feldbaek, Ole, India Trade under the Danish Flag 1772-1808. European Enterprise and Anglo-Indian Remittance and Trade, Copenhagen, 1969.
- Firsov, N.N., Pravitel'stovo i obshchestvo v ikh otnosheniakh k vneshnei torgovlie Rossie v tsarstvovanie imperatritsy Ekateriny II: ocherki iz istorii torgovoi politiki, Kazan, 1902.
- Fisher, R.H., The Russian Fur Trade 1550-1700, Berkeley, 1943.
- Florinsky, M.T., Russia: A History and Interpretation, 2 vols., New York, 1953.
- Floud, R., An Introduction to Quantitative Methods for Historians, Princeton, 1973.
- Foust, C.M., Sino-Russian Trade Relations 1727-1805, unpublished Ph.D. dissertation, University of Chicago, 1957.
- Fox, Frank, French-Russian Commercial Relations in the Eighteenth Century and the French-Russian Commercial Treaty of 1787, unpublished Ph.D. dissertation, University of Delaware, 1966.
- Fruin, Robert, Geschiedenis der Staatsinstellingen in Nederland tot den val der Republiek, 's Gravenhage, 1901.
- Galpin, W.F., The Grain Supply of England During the Napoleonic Period, Philadelphia, 1925.

- Gebhard, J.F. Jr., Het Leven van m. Nicholas Cornelisz Witsen (1641-1717), 2 vols., Utrecht, 1881-82.
- Geyl, Pieter C.A., Willem IV en Engeland tot 1748, 's Gravenhage, 1924.
- Gideonse, Max, Dutch Baltic Trade in the Eighteenth Century, unpublished Ph.D. dissertation, Harvard University, 1932.
- Glamann, K., Dutch-Asiatic Trade 1620-1740, The Hague, 1958.
- Gosses, J.H. & Japikse, N., Handboek tot de Staatkundige Geschiedenis van Nederland, 3rd ed., 's Gravenhage, 1947.
- Groeneveldt, F. Th., De economische crisis van het jaar 1720, published Ph.D. dissertation, University of Amsterdam, 1940.
- Haagsma, Een blik op Frieslands koopvaardij in het midden der 18e eeuw, Leewarden, n.d.
- Hagedorn, B., Die Entwicklung der Wichtigsten Schiffstypen bis ins 19. Jahrhundert, Berlin, 1914.
- Hamel, J.A. van, Nederland tussen de Mogendheden, Amsterdam, 1918.
- Handrach, Udo, Der Handel der Stadt Riga im 18. Jahrhundert, published Ph.D. dissertation, Landesuniversität, Jena, 1913.
- Hansen, Heinrich J., Geschichte der Stadt Narva, Dorpat, 1858.
- Hart, S., Engel van de Stadt 1746-1819; zijn voor en zijn nageslacht, 's Gravenhage, 1951.
- Hautala, Kustaa, European and American Tar in the English Market during the Eighteenth and early Nineteenth Centuries, Helsinki, 1963.
- Heckscher, E.F., Economic History of Sweden, Cambridge, Mass., 1955.
- Heckscher, O., The Continental System: An Economic Interpretation, Oxford, 1922.
- Hill, C.E., The Danish Sound Dues and the Command of the Baltic, Durham, 1926.
- Hinton, R.W.K., The Eastland Trade and the Common Weal in the Seventeenth Century, Cambridge, 1957.
- Hoeven, F.A. van der, Bijdragen tot de Geschiedenis van den Sonttol, published Ph.D. dissertation, University of Leyden, 1855.



- Hoon, E.E., The Organization of the English Customs Systems, 1696-1786, New York, 1938.
- Hovy, J., Het voorstel van 1751 tot instelling van een beperkt vrijhavenstelsel in de Republiek (propositie tot een gelimiteerd porto-franco), Groningen, 1966.
- Jeane, J.G.W., Le, Het brieven-postwezen in de Republiek der Verenigde Nederlanden, Utrecht, 1851.
- Jones, E.L., Agriculture and Economic Growth in England 1650-1815, London, 1967.
- Jonge, J.C., Geschiedenis van het Nederlandsche Zeewezen, 5 vols., Haarlem, 1833-48.
- Kalton, G. Introduction to Statistics for Social Scientists, 3rd ed., London, 1969.
- Kampen, S.C. van, De Rotterdamse Particuliere Scheepsbouw in de tijd van de Republiek, published Ph.D. dissertation, University of Rotterdam, 1953.
- Kent, H.S.K., War and Trade in Northern Seas. Anglo-Scandinavian economic relations in the mid-eighteenth century, Cambridge, 1973.
- Kerner, R.J., The Urge to the Sea, Berkeley,, 1946.
- Kernkamp, G.W., De Sleutels van de Sont, published Ph.D. dissertation, University of Utrecht, 1890.
- Ketner, F., Handel en Scheepvaart van Amsterdam in de vijftiende eeuw, Leiden, 1946.
- Keuning, H.J., De Nederlandsche Scheepvaart, Gorichem, 1944.
- \_\_\_\_\_, De Groninger Veenkolonieën, published Ph.D. dissertation, University of Utrecht, 1933.
- Kirchhoff, H. von, Seemacht in der Ostsee, Ihre Einwirkung auf die Geschichte der Ostseeländer im 17. und 18. Jahrhundert, 2 vols., Kiel, 1907.
- Kirchner, W., Commercial Relations between Russia and Europe 1400-1800: Collected Essays, Bloomington, 1966.
- Klein, P.W., Van stapelmarkt tot welvaartstaat, Rotterdam, 1970.

- \_\_\_\_\_, De Trippen in de 17de eeuw. Een studie over het ondernemers gedrag op de Hollandsche stapelmarkt, published Ph.D. dissertation, University of Rotterdam, 1965.
- Knoppers, J.V.Th., The Visits of Peter the Great to the United Provinces in 1696-97 and 1716-17 as seen in the light of the Dutch Sources, unpublished M.A. thesis, McGill University, 1969.
- Kooy, T.P., Hollands Stapelmarkt en Haar Verval, published Ph.D. dissertation, Amsterdam, 1931.
- Kracht, F., Die Rotterdamse Seeversicherungsbröse. Ihre Entwicklung, Bedeutung und Bedingen, Weimar, 1922.
- Kranenburg, H.A.H., De Zeevisscherij van Holland in den tijd der Republiek, published Ph.D. dissertation, University of Rotterdam, 1946.
- Kresse, Walter, Materialien zur Entwicklungsgeschichte der Hamburger Handelsflotte, 1765-1823, Hamburg, 1966.
- Kruys, B. De Nederlandse Hervormde Gemeente te St. Petersburg, 1717-1898, n.p., 1900.
- Krypton, C. The Northern Sea Route: Its Place in Russian Economic History before 1917, New York, 1953.
- Kulischer, J.M., Russische Wirtschaftsgeschichte, Jena, 1925.
- Laine, Edward W., Finland's Road from Autonomy to Integration in the Russian Empire, 1808-1910, unpublished Ph.D. dissertation, McGill University, 1974.
- Lauber, J.M., The Merchant-Gentry Conflict in Eighteenth Century Russia, unpublished Ph.D. dissertation, University of Iowa, 1967.
- Letiche, J.M. ed., A History of the Russian Economy, from the Ninth to Eighteenth Century, Berkeley, 1964.
- Levasseur, E., Histoire du Commerce de la France, 2 vols., Paris, 1911-1912.
- Lipson, E., The Economic History of England, 3 vols., London, 1931.
- Lisk, J., The Struggle for Supremacy in the Baltic, 1600-1725, London, 1967.
- Lobanov-Rostovsky, A.A., Russia and Europe 1789-1825, Durham, N.C., 1947.
- Locher, Th.J.G., Peter de Grote, Leiden, 1947.

- Lodge, R., Great Britain and Russia in the Eighteenth Century, Oxford, 1923.
- \_\_\_\_\_, Studies in Eighteenth Century Diplomacy, 1740-1748, London, 1930.
- Lodyzhenskii, K., Istoriia Russkogo Tamozhennogo Tarifa, St. Petersburg, 1886.
- Lorwin, V.R. and Price, J.M. eds., The Dimensions of the Past: Materials, Problems, and Opportunities for Quantitative Work in History, New Haven, 1972.
- Lubimenko, Inna, Les Relations Commerciales et Politiques de l'Angleterre avec la Russie avant Pierre le Grand, Paris, 1933.
- Lyashchenko, Peter I., History of the National Economy of Russia to the 1917 Revolution (trans. by L.M. Herman), New York, 1949.
- Madariaga, Isabel de, Britain, Russia and the Armed Neutrality of 1780, Sir James Harris' Mission to St. Petersburg during the American Revolution, New Haven, 1962.
- Mahan, A.T., The Influence of Sea Power upon History, 1600-1783, London, 1890.
- \_\_\_\_\_, The Influence of Sea Power upon the French Revolution, 2 vols., London, 1892.
- Malcolm, A.G., De Houthandel van Nederland, published Ph.D. dissertation, University of Rotterdam, 1930.
- Manger, J.B., Recherches sur les relations économiques entre la France et la Hollande pendant la Révolution Française (1785-1795), published Ph.D. dissertation, University of Amsterdam, 1923.
- Marriott, J.A.R., Anglo-Russian Relations, 1689-1943, London, 1944.
- Mavor, J., An Economic History of Russia, Toronto, 1914.
- Melvin, F.E., Napoleon's Navigation System: A Study of Trade Control During The Continental Blockade, New York, 1919.
- Menke, Christoph F., Die wirtschaftlichen and politischen Beziehungen der Hansestädte zu Russland im 18. und frühen 19. Jahrhundert, unpublished Ph.D. dissertation, University of Göttingen, 1959.
- Mentink, G.J. en Woude, A.M. van der, De demografische ontwikkeling te Rotterdam en Cool in de 17de en 18de eeuw, Rotterdam, 1965.

- Meyers, H., The Nationality of Ships, published Ph.D. dissertation, University of Amsterdam, 1967.
- Mickwitz, G., Aus Revaler Handelbüchern. Zur Technik des Oostsee-handels in der ersten Hälfte des 16. Jahrhunderts, Helsingfors, 1938.
- Minichinton, W.E. (ed.), The Growth of English Overseas Trade in the 17th and 18th centuries, London, 1969.
- Mitchell, M., Russian Maritime History, London, 1949.
- Mollema, J.C., Geschiedenis van Nederland ter zee, 3 vols., Amsterdam, 1941.
- Nikiforov, L.N., Englische Beziehungen unter Peter I, Weimar, 1954.
- Omrod, David J., Anglo-Dutch Commerce 1700-1760, unpublished Ph.D. dissertation, Cambridge, 1973.
- Pares, R.W., Colonial Blockade and Neutral Rights 1739-1763, Oxford, 1938.
- Pernet, D., Pierre le Grand Mercantiliste, Paris, 1913.
- Pokrovsky, S.A., Vneshnaia torgovlia i vneshiaia torgovnaia politika Rossii, Moscow, 1947.
- Posthumus, N.W., De Geschiedenis van de Leidse haken industrie, 3 vols., 's Gravenhage, 1939.
- Pringsheim, Otto, Beiträge zur wirtschaftlichen Entwicklungsgeschichte der Vereinigten Niederlande im 17. und 18. Jahrhundert, Leipzig, 1890.
- Prokrovskii, Mikhail N., History of Russia, from the Earliest Times to the Rise of Commercial Capitalism (trans. and ed. by J.D. Clarkson and H.R.M. Griffiths), New York, 1931.
- Ptukha, M., Ocherki po istorii statistiki XVII-XVIII vekov, Moscow, 1945.
- Raeff, M., Imperial Russia, 1682-1825: The coming of age of modern Russia, New York, 1971.
- Reesse, J.J., De suikerhandel van Amsterdam van het begin der 17de eeuw tot 1813. Bijdragen tot de handelsgeschiedenis der vaderlands, 2 vols., 's Gravenhage, 1908-11.

- Riasanovsky, N.V., A History of Russia, New York, 1963.
- Romimois, H.E., Russia's Trade and the Baltic Sea, London, 1946.
- Rooy, E.W. de, Geschiedenis van den Nederlandschen Handel, Amsterdam, 1856.
- Rumsey, T.R., England, Poland and the Baltic, 1550-1640: Studies in Trade and Diplomacy, unpublished Ph.D. dissertation, University of Virginia, 1972.
- Saul, N.E., Russia and the Mediterranean, 1797-1807, Chicago, 1970.
- Sautijn-Kluit, W.P., De Amsterdamse Beurs in 1763 en 1773. Een bijdrage tot de geschiedenis van den handel, Amsterdam, 1865.
- Scheltema, J., Peter de Groote, Keizer van Rusland in Holland en Zaandam, 2 vols., Amsterdam, 1814.
- \_\_\_\_\_, Rusland en de Nederlanden, 4 vols., 's Gravenhage, 1837-1839.
- Schillemans, C.A., De houtveiling van Zaandam in den jaren 1885-1811, published Ph.D. dissertation, University of Amsterdam, 1947.
- Schumpeter, E.B., English Overseas Trade Statistics, 1697-1808, Oxford, 1960.
- Scott, W.R., The Constitution and Finance of English, Scottish and Irish joint-stock companies to 1720, 2 vols., Cambridge, 1912.
- Semenov, Aleksei V., Izucheniie istoricheskikh svedenii o rossiiskoi vneshnei torgovle i promyshlennosti XVII-go stoletia do 1858 goda, 3 vols., St. Petersburg, 1859.
- Shepherd, J.F. and Walton, G.M., Shipping, Maritime Trade and the Economic Development of Colonial North America, London, 1973.
- Shipman, H.R., Russia's Foreign Policy under Catherine I, unpublished Ph.D. dissertation, Harvard University, 1962.
- Slicher, B.H. van Bath, De agrarische geschiedenis van West-Europa (500-1850), Utrecht, 1960.
- Snapper, F., Oorlogsinvloeden op de Overzeese Handel van Holland 1551-1719, published Ph.D. dissertation, University of Amsterdam, 1959.
- Soom, A., Der Baltische Getreidehandel im 17. Jahrhundert, Stockholm, 1962.

- \_\_\_\_\_, Der Handel Revels im 17 Jahrhundert, Wiesbaden, 1969.
- Spiridovna, E. V., Ekonomicheskaja politika i ekonomicheskie vzgliady Petra I, 1952.
- Sumner, B. H., Peter the Great and the Emergence of Russia, London, 1951.
- Sviatlovskii, V. I., K Istorii Politicheskoi Ekonomii i Statistiki v Rossii, St. Petersburg, 1906.
- Syrett, D., Shipping and the American War 1775-83: A Study of British Transport Organization, London, 1970.
- Thomas, M. Simon, Onze Ijslandvaarders in de 17e en 18e eeuw, Bijdrage tot de Geschiedenis van de Nederlandsche Handel en Visscherij, published Ph.D. dissertation, University of Utrecht, 1935.
- Tveite, S. Engelsk-norsk trelasthandel 1640-1710, Oslo, 1961.
- Unger, R. W., The Rise of the Dutch Shipbuilding Industry ca. 1400-ca. 1600; technical and institutional sources of Dutch economic development, unpublished Ph.D. dissertation, Yale University, 1971.
- Vergouwen, J. P., De Geschiedenis der makelaardij in assurantie hier ter lande tot 1815, Amsterdam, 1945.
- Vernadsky, G., A History of Russia, New Haven, 1964.
- Vignols, L., La piraterie sur l'Atlantique au XVIIIe siècle, Rennes, 1890.
- Visser, Cornelius, Verkeers industrieën te Rotterdam in de tweede helft der achttiende eeuw, Rotterdam, 1927.
- Vries, Joh. de, De economische achteruitgang der Republiek in de achttiende eeuw, Leiden, 1968.
- Wallerstein, Immanuel, The Modern World System. Capitalist Agriculture and the Origins of the European World-Economy in the sixteenth century, New York, 1974.
- Warner, Oliver, The Sea and the Sword, The Baltic 1630-1945, London, 1965.
- Wee, H. vander, The Growth of the Antwerp Market and the European Economy, 3 vols., The Hague, 1963.

Weeveringh, J.J., Geschiedenis der Staats schulden, 2 vols., Haarlem, 1852-1855.

West, Dalton A., "La Question Francaise" in Russia 1806-1812, unpublished Ph.D. dissertation, McGill University, 1972.

Wilson, Charles H., Anglo-Dutch Commerce and Finance in the Eighteenth Century, 2nd printing, London, 1966.

Wittram, R., Peter der Grosse, Czar und Kaiser. Der Eintritt Russlands in die Neuzeit, 2 vols., Berlin, 1954.

Wittschewski, Valentin, Russlands Handels-, Zoll-, und Industrie politik von Peter dem Grossen bis auf die Gegenwart, Berlin, 1905.

Woodward, D., The Russians at Sea. A History of the Russian Navy, London, 1965.

Woude, A.M. van der, Het Noorderkwartier. Een regionaal historisch onderzoek van westelijk Nederland van de late middeleeuwen tot het begin van de negentiende eeuw, published Ph.D. dissertation, 3 vols., University of Utrecht, 1972.

Zins, H., England and the Baltic in the Elizabethan Era, trans. from the Polish, Manchester, 1972.

Zuiden, D.S. van, Bijdrage tot de Kennis van de Hollandsch-Russische Relaties in de 16e-18e Eeuw, Amsterdam, 1911.

B. Articles

- Adamsen, R., "Swedish Iron Exports to the United States, 1783-1860," Sc. Ec. H. R., 17(1969)1:58-114.
- Ahvenainen, J. "Some Contributions to the Question of Dutch Traders in Lapland and Russia at the end of the Sixteenth Century," Acta Lapponica Fennica, 6(1967)1-62.
- Aldridge, D.D., "The Victualling of British Naval Expeditions to the Baltic Sea between 1715 and 1727," Sc. Ec. H. R., 12(1964)1:1-25.
- Amburger, Erik, "Zur Geschichte des Groshandels in Russland: die 'gosti'", Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte, 46(1959)248-261.
- Anderson, M.S., "Great Britain and the Growth of the Russian Navy in the 18th century," Mariner's Mirror, 42(1956)132-146.
- \_\_\_\_\_, "Great Britain and the Russian Fleet, 1769-70," S. E. E. R., 31(December 1952)128-148.
- Arntz, W.J.A., "Export van Nederlandsche Baksteen in vroegere eeuwen," Ec. H. Jrbk., 23(1947)57-133.
- Aström, S.-E., "The English Navigation Laws and the Baltic Trade, 1660-1700," Sc. Ec. H. Rev., 8(1960)1-18.
- \_\_\_\_\_, "Holländischer Holzhandel am finnischen Meerbusen um 1700," paper presented at the Vith International Congress on International Economic History, Copenhagen, 1974.
- \_\_\_\_\_, "The Transatlantic tar trade," Sc. Ec. H. R., 12(1964)1:86-90.
- \_\_\_\_\_, "English Timber Imports from Northern Europe in the Eighteenth Century," Sc. Ec. H. R., 18(1970)1:12-32.
- Baasch, Ernst, "Hamburg und Holland im 17. und 18. Jahrhundert," H. G., 16(1910)45-102.
- Bamford, P.W., "French Shipping in Northern European Trade, 1660-1789," J. M. H., 26(September, 1954)3:207-219.
- Belov, M.I., "Rossia i Gollandia v posledne chetverti XVII v.," Mezhdunarodnye svyazi Rossii v XVII-XVIII vv., 1966, pp. 58-83.



- Bijlsma, R., "Rotterdam's scheepvaartverkeer in de achttiende eeuw," Nieuwe Rotterdamsche Courant, 25 November, 1905, Eerste Blad A.
- Blok, P.J., "Mémoire touchant le négoce et la navigation des Hollandois," B.M.H.G., 24(1903)203-342.
- Bogucka, M. "Handel Baltycki Amsterdamu w pierwszej potowie XVII w. swietle kontraktow frachowych," Zapiski Historyczne, 34(1969)2:1-33.
- \_\_\_\_\_, "Merchants' profits in Gdansk foreign trade in the first half of the 17th Century," Acta Poloniae Historica, 23(1971)73-90.
- \_\_\_\_\_, "Amsterdam and the Baltic in the First Half of the Seventeenth Century," Ec.H.R., 2nd ser., 26(1973)3:433-447.
- Bowman, F.J., "Dutch Diplomacy and the Baltic Grain Trade 1600-80," Pacific Historical Review (Dec. 1936)337-348.
- Brakel, S. van, "De Directie van den Oosterschen Handel en Rederijen te Amsterdam," B.V.G.O., 4th ser., 9(1910)329-364.
- \_\_\_\_\_, "Rostocker Scheepvaartstatistieken; een controlemiddel op de Sonttolregisters," B.V.G.O., 5th ser., 2(1915)223-233.
- \_\_\_\_\_, "Schiffsheimat und Schifferheimat in den Sundzoll registern," H.G., 21(1915)211-228.
- \_\_\_\_\_, "Statische en anders gegevens betreffende onze handel en scheepvaart op Rusland gedurende de 18de eeuw," B.M.H.G., 34(1913)350-404.
- Broeze, F.J.A., "The New Economic History, the Navigation Acts, and the continental tobacco market, 1770-1790," Ec.H.R., 2nd ser., 26(1973)1280-1301.
- Bruggen, B.E. van, "Beschouwing over het aangegeven van de hoofdmetingen van de Nederlandschen zeeschepen en de daarbij gebruikte maateenheden, 1600-1800," M.N.V.Z., 20(1970)25-34, 62-63.
- Brugmans, H., "De Koopman: Mercurius als spectator," Jrbk. Amstelodamum, 10(1917)61-135.
- \_\_\_\_\_, "Statistiek van den in en uitvoer van Amsterdam, 1 October 1667- 30 September 1668," B.M.H.G., 19(1896)125-183.
- Brugmans, M.I.J., "Rapporten over den economischen toestand van Nederland in 1816," Ec.H.Jrbk., 31(1967)151-192.
- \_\_\_\_\_, "Les sources de l'évolution quantitative du trafic maritime des Pays-Bas (XVIIe-XVIIIe siècles)," Les sources de l'histoire maritime Européenne (Quatrième Colloque), (1982)417-429.

- Bruijn, J.R., "Voeding op de Staatse Vloot," Spiegel Historiae, 2(1967) 3:175-183.
- Brünner, E.C.G., "De ontwikkeling van het handelsverkeer van Holland met Oost-Europa tot het einde van de 16de eeuw," TvG, 1926 41:353-371.
- \_\_\_\_\_, "De waarde der Skibsfart-Tebellen van Nina Ellinger Bang voor de kennis der handelsgeschiedenis van Holland in de 16e eeuw," B.V.G.O., 5th ser., 9(1922)269-280.
- Brunner, Otto, "Europäisches und russisches Bürgertum," Vierteljahrsschrift für Sozial- und Wirtschaftsgeschichte, 40(1953)1-27.
- Brüsse, E., "Amsterdams Tabakhandel in de 17e en 18e eeuw," unpublished MS. No. 169, Economisch-Historisch Institute, University of Amsterdam, 1941.
- Buist, M.G., "Merchants or Bankers? Loans and Their Issuers," paper presented at the Vth International Congress of Economic History, Leningrad, August, 1970.
- \_\_\_\_\_, "Russia's Entry on the Dutch Capital Market 1770-1815," paper presented at the Vth International Congress of Economic History, Leningrad, August, 1970.
- Butel, P., "Bordeaux et la Hollande au XVIIIe siècle: l'exemple du négociant Pellet (1694-1772)," Revue d'histoire économique et sociale, 45(1967)58-86.
- Buyten, L. van, "Graanprijzen in de Zuidelijke Nederlanden," Spiegel Historiae, 2(1967)2:67-77.
- Bylsma, R., "De opkomst van Rotterdams koopvaardij," B.V.G.O., 5th ser., 1(1913)56-87.
- \_\_\_\_\_, "Rotterdamse Oostvaart in de eerste helft der zeventiende eeuw," Rotterdams Jaarboekje (1915)35-41.
- Cannenburg-Voorbeytel, W., "De Nederlandse scheepsbouw in het midden der achttiende eeuw," Jaarverslag, Vereniging Nederlands Historisch Scheepvaart Museum, 1924.
- Carter, A.C., "Dutch Foreign Investment 1738-1800, in the light of the Amsterdam 'Collateral Succession' inventories," TvG, 66(1953)27-38.
- \_\_\_\_\_, "The Dutch as neutrals in the Seven Years' War," The International and Comparative Law Quarterly, 12(1963)816-834.

- Chance, J.F., "The Northern Policy of George I to 1718," Royal Historical Society Transactions, N.S., 20(1906)79-109.
- Christensen, Aksel, "Der handelgeschichtliche Wert der Sundzollregister," H.G., 59(1934)28-142.
- Clark, G.N., "War trade and trade war, 1701-1713," Ec.H.R., I(1927-28)262-280.
- Cole, W.A., "Trends in Eighteenth Century Smuggling," Ec.H.R., 2nd ser., 10(1958)3:395-409.
- Cresswell, J., "British Shipping at the End of the Eighteenth Century," Mariners Mirror, 25(1939)2:197-208.
- Daly, R., "Operations of the Russian Navy during the Reign of Napoleon I," Mariners Mirror, 34(1948)3:169-183.
- Davis, R., "English Foreign Trade 1660-1700," Ec.H.R., 2nd ser., VII, 7(1954)2:150-166.
- \_\_\_\_\_, "English Foreign Trade 1700-1774," Ec.H.R., 2nd ser., XV, 15(1962)2:285-303.
- Dekker, P., "Friese schepentableaus in Sleeswijk-Holstein," Ons Zeewezen (1971)2:26-31.
- \_\_\_\_\_, "Een nieuw licht op de Amsterdamse Oostzeehandel. Het driemastgaljoetschip 'Victoria'," Ons Zeewezen (1971)10:41-45.
- \_\_\_\_\_, "Een nieuw licht op de Amsterdamse Oostzeehandel ("vervolg")," Ons Zeewezen (1972)1:83-89.
- Deurloo, A.J., "Bijltjes en Klouwers. Een bijdrage tot de geschiedenis der Amsterdamse scheepsbouw, in het bijzonder in de tweede helft der achttiende eeuw," Ec.H.Jrbk., 34(1971)4-71.
- Devèze, M., "Contribution à l'histoire de la Forêt Russe," C.M.R.S., 5(1964)3:303-319.
- Diedericks, H.A., Faber, J.A., Hart, S., "Urbanization, Industrialization, and Pollution in the Netherlands, 1500-1800," trans. fr. Dutch by J.V.Th. Knoppers, paper presented at the Vith International Congress on Economic History, Theme 3: Urbanization and Environment, Copenhagen, August, 1974.
- Dillen, J.G. van, "Amsterdam als wereldmarkt der edele metalen in de 17e en 18e eeuw," De Economist, 72(1923)538-550, 583-598, 717-730.

- \_\_\_\_\_, "De Amsterdamsche Wisselbank," Ec.H.Jrbk., 11(1925)  
245-250.
- \_\_\_\_\_, "The Bank of Amsterdam," in History of the Principal  
Public Banks, The Hague, 1934.
- \_\_\_\_\_, "Duurte-Maatregelen in de laatste jaaren der zeventiende  
eeuw," Onze Eeuw, 18(1918)3:60-80.
- \_\_\_\_\_, "Effectenkoersen aan de Amsterdamsche Beurs 1723-  
1794," Ec.H.Jrbk., 17(1931)1-46.
- \_\_\_\_\_, "Naschrift. De achtiende eeuw," TvG, 61(1948).
- \_\_\_\_\_, "Stukken betreffende den Amsterdamsche graanhandel  
omstreeks het jaar 1681," Ec.H. Jrbk., 3(1917)70-106.
- Dobbelaar, P.J., "Een statistiek van den in- en uitvoer van Rotterdam  
c.a. in 1753," Ec.H.Jrbk., 7(1921)210-213.
- \_\_\_\_\_, "Statistische opgaven van de in- en uitgevoerde granen  
in de Maashavens gedurende de 2e helft der 18e eeuw," Ec.H.Jrbk.,  
6(1920)134-167.
- Doroshenko, V.V., "Riga and its Commercial Area in 16th-18th Centuries,"  
paper presented at the VIIth International Congress on Economic History,  
August, 1974.
- Drew, R., "The Siberian Fair: 1600-1750," S.E.E.R., 39(1961)423-499.
- Dunsdorfs, E., "Riga Grain Trade in the seventeenth century," Baltic  
and Scandinavian Countries, 3(1937)5:26-35.
- Eeghen, L.H. van, "Onze handel op Archangel in het begin der 18e eeuw,"  
unpublished typed MS., Script 106, Economisch-Historisch Institute,  
University of Amsterdam, 1936.
- Eichelman, Otto, "Die rechtliche Ordnung des internationalbürgerlichen  
Verkehrs Russlands im achtzehnten Jahrhunderts seit Peter I,"  
Russische Revue, 7(1878):209-246.
- \_\_\_\_\_, "Zur Geschichte des diplomatischen Verkehr in Russland  
im XVIII Jahrhundert," Russische Revue, 6(1877)11:535-557.
- Elink Schuurman, W.H.A., "Korte aantekeningen betreffende verzekering  
in de dagen der Republiek," Ec.H.Jrbk., 3(1917)108-123.
- Faber, J.A., "Cattle-plague in the Netherlands during the eighteenth century,"  
Med. Landbouw Hogeschool Wageningen, 11(1962)1-7.

- \_\_\_\_\_, "Friesland en de Sontvaart," Il Beaken, 21(1959)187-198.
- \_\_\_\_\_, "Graanhandel, graanprijzen en tarievenpolitiek in Nederland gedurende de tweede helft der zeventiende eeuw," TvG, 74(1981)532-539.
- \_\_\_\_\_, "Het probleem van de dalende graanaanvoer uit de Oostzeelanden in de tweede helft der zeventiende eeuw," A.A.G. Bijdragen, 9(1983)3-29.
- Faber, J.A. et al., "Population changes and economic developments in the Netherlands: a historical survey," A.A.G. Bijdragen, 12(1965)47-113.
- Feldbaek, Ole, "Dutch Batavia Trade via Copenhagen 1795-1807. A Study of Colonial Trade and Neutrality," Sc.Ec.H.R., 21(1973)1:44-75.
- Fogel, R.W., "The New Economic History. I. Its Findings and Methods," Ec.H.Rev., 29(1986)642-656.
- Frederickson, O.T., "Virginia Tobacco during the time of Peter the Great," A.S.E.E.R., 1:40-56, March, 1943.
- French, Christopher, "Eighteenth-Century Shipping Tonnage Measurements," J.Ec.H., 33(March 1973)434-443.
- Gargon, J., "Historisch Bericht aangaande Hollandsche Gereformeerde Kerken in Rusland," MS. ed. by N.C. Kist for Nieuw Archief voor Kerkelijke Geschiedenis inzonderheid van Nederland 1(1852)1-83.
- Gille, Paul, "Jauge et tonnage des navires," Le Navire et l'économie maritime du XV. au XVIII. siècles, Travaux du Colloque d'Histoire Maritime, 1956, ed. Michael Mollat, Paris, 1957.
- Gromyko, M.M., "Russko-niderlandskaja torgovlja na murmanskom beregu v XVI v.," Srednie Veka, 17(1960)225-255.
- Hallema, A., "Briefwisseling tusschen Hendrik Swellengrebel te Moskou en zijn zoon Johannes alsmede tusschen Nicolaas Witsen te Amsterdam en Johannes Swellengrebel, 1687-1715: Een bijdrage tot de Nederlandsch-Russische en Nederlandsch-Kaapsche betrekkingen," De Navorscher, (July 1931)1-31.
- Halm, Hans, "Habsburgischer Osthandel im 18 Jahrhundert," Veröffentlichungen des Osteuropa-Institutes, München, 7(1954)
- Harder, E., "Seehandel zwischen Lübeck und Russland im 17./18. Jahrhundert nach Zollbüchern der Novgorodfahrer," Zeitschrift des Vereins für Lübeckische Geschichte und Altertumskunde, Erster Teil, 41(1981)44-114, Zweiter Teil, 42(1982)6-53.

- Harder-Gersdorff, E., "Changes in the Structure of Russian Exports to the Baltic in the 18th Century," paper presented to Vith International Congress on Economic History, Copenhagen, August, 1974.
- Hart, Simon, "Amsterdam shipping and trade to Northern Russia in the Seventeenth Century," M.N.V.Z., 26(1973)5-30 and 105-116.
- \_\_\_\_\_, "De Handelsbetrekkingen van Amsterdam met Archangel en Lapland (Kola) in de 17de eeuw," Nederlands Archievenblad, 73, 1969.
- \_\_\_\_\_, "Historisch-demographische notities betreffende huwelijken en migrate te Amsterdam in de 17e and 18e eeuw," Maanblad Amstelodamum, 55(1968)63-69.
- Haven, P. von, "Nachrichten von dem russischen Reich," Büsching's Magazine, 10(1776)287-317.
- Hazenwinkel, H.C., "Een memorie over den handel van Rotterdam uit 1729," Rotterdams Jaarboekje (1937)127-139.
- Heeringa, K., "Overzicht van de betrekkingen van Rusland tot Nederland tot aan het jaar 1800, door N.N. Bantys-Kamenskij," B.M.H.G., 51(1930)35-103.
- Hildebrand, M.K.G., "Exportation du fer et navigation en Baltique, un problème de l'histoire économique de la Suède et de la Russie au XVIIIe siècle, Le Navire et l'Economie Maritime du XVe au XVIIIe siècles, 3(1960)111-118.
- \_\_\_\_\_, "Foreign Markets for Swedish Iron in the Eighteenth Century," Sc. Ec. H. R., 6(1958)3-52.
- Ijzerman, J.W., "Amsterdamsche bevrachtingscontracten 1591-1602," Ec. H. Jrbk., 17(1931)163-291.
- Jansma, T.S., "Oliver Brunel te Dordrecht: De Noordoostelijke doorvaart en het Westeuropeesch-Russisch Contact in de zestiende eeuw," TvG, 59(1946)337-362.
- Jeannin, P., "Les comptes du Sund comme source pour la construction d'indices généraux de l'activité économique en Europe (XVIe-XVIIIe siècles), Revue Historique, 231(1964)55-102, 307-340.
- \_\_\_\_\_, "Die Hansestädte im Europäischen Handel des 18. Jahrhunderts," H.G., 89(1971)41-73.

- Jensch, Georg, "Der Handel Rigas im 17 Jahrhundert. Ein Beitrag zur livländischen Wirtschaftsgeschichte in swedischer Zeit," Mitteilungen aus der livländischen Geschichte, 24(1928-1933)49-146.
- Kahan, Arcadius, "Continuity in Economic Activity and Policy during the Post-Petrine Period in Russia," J.E.H., 25(1965)1:61-84.
- Kellenbenz, Hermann, "The Economic Significance of the Archangel Route (from the late 16th to the late 18th century), Journal of European Economic History, 2(1973)3:541-581.
- \_\_\_\_\_, "Marchands en Russie aux XVIIe-XVIIIe siècles," C.M.R.S., 11(1970)576-620 and 12(1971)76-109.
- Kernkamp, J.H., "De Nederlanders op de Oostzee," Vragen des Tijds, 35(1909)7:76-83.
- Kirby, David, "The Royal Navy's quest for pitch and tar during the reign of Queen Anne," Sc.Ec.H.R., 22(1974)2:97-114.
- Kirchner, W., "Über den russischen Aussenhandel zu Beginn der Neuzeit," Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte, 42(1955)40-56.
- Klein, P.W., "Stagnation économique et emploi du capital dans la Hollande des XVIIIe et XIXe siècles," Revue du Nord, 52(1970)33-41.
- Kleintjes, J., "Relations Between Latvia and Holland: XIII-XIX Centuries," Baltic and Scandinavian Countries, 4(1938)3:306-314.
- Knoppers, Jake V.Th., "A Quantitative Study of Dutch Shipping from Russia in the Eighteenth Century," paper presented at the Annual Meeting of the Canadian Historical Association, Edmonton, June 1975.
- Kolff, B., "Achter de schermen van het onder onzijdig vlag brengen van koopvaardigschepen ten tijde van de Bataafsche Republiek," Rotterdamsch Jaarboekje, 5th ser., 2(1944)81-107.
- Konopczynski, W., "Le problème baltique dans l'histoire moderne," Revue d'Histoire, 162(1929)305-320.
- Kozintseva, P.I., "Vneshnetorgovii oborot Archangelogorodskoi iarmarki i ee rol v razvitií vserossiiskogo rynka," Issledovania po istorii feodalnokrepostnitseskoj rossii, (Akademii Nauk SSSR), Moscow, 1964, pp. 116-162.
- Kranenburg-Boelmans, H.A.H., "De haringexport naar het Oostzeegebied in de 18e eeuw," TvG, 72(1959)251-259.

- Lane, F.C., "Tonriages, Medieval and Modern," Ec.H.R., 2nd ser., 17(1964)2:213-233.
- Lingelback, W.E., "Historical Investigation and the Commercial History of the Napoleonic Era," American Historical Review, 19(1914)256-279.
- Lootsma, S., "De zeevaart van Hindeloopen in de seventiende en achttiende eeuw," Ec.H.Jrbk., 21(1940)218-296.
- Louwman, J., "De handel in meekrap te Rotterdam in de achttiende eeuw," Rotterdams Jaarboekje 1943(171-184).
- Lubimenko, I., "The Struggle of the Dutch with the English for the Russian Market in the Seventeenth Century," Royal Hist. Society Transactions, 4th ser., 7(1924)27-51.
- Malowist, M. "Poland, Russia and Western Trade in the 15th and 16th centuries," Past and Present, 13(April, 1958)26-41.
- \_\_\_\_\_, "Les sources relatives de l'histoire de la navigation et du commerce maritime depuis le XVe siècle jusqu'au XVIIIe siècle dans les Archives et les Publications polonaises," Les Sources de l'Histoire Maritime, Quatrième Colloque d'Histoire Maritime (1959)403-416.
- Mauro, François, "Toward an 'International Model': European Overseas Expansion Between 1500-1800," Ec.H.R., 2nd ser., 14(1961)1:1-17.
- McCusker, John J., "Colonial Tonnage Measurements: Five Philadelphia Merchant Ships as a Sample," J.Ec.H., 27(March 1967)82-91.
- Meulen, R. van der, "De Hollandsche Zee- en Scheepstermen in het Russisch," Verhandelingen der Koninklijke Akademie van Wetenschappen te Amsterdam, Afdeling Letterkunde, new ser., 10(1909)2:1-282.
- Misiunas, Romuald J., "The Baltic Question after Nystad," in Baltic History, ed. by Arvids Ziedonis et al., Ohio State University Press, 1974, pp. 71-98.
- Mladenovic, M., "Towards a new approach to Military History," New Review, 5(1965)4:59-64.
- Moorsom, G., "On the new Tonnage Law as established in the Merchant Shipping Act of 1854," The Institution of Naval Architects Transactions, 1(1860)128-140.



- Moquette, N.C.H., "Rotterdamse Kaaprederij en in 1781," Rotterdams Jaarboekje, 2nd ser. 5(1917)67-73.
- Morineau, M., "La balance du commerce Franco-Néerlandais et le ressèrrement économique des Provinces-Unies aux XVIIIème siècle," Ec.H.Jrbk., 30(1965)170-235.
- Mulder, R.J., "Vriezenveen en St. Petersburg in de 18de eeuw," Verslagen en Mededelingen, Vereeniging tot beoefening van Overijsselsch Regt en Geschiedenis, 84(1969)60-116.
- Murray, J.J., "Baltic Commerce and power politics in the early eighteenth century," The Huntington Library Quarterly, 6(1942/43)81-92.
- Nierop, L. van, "Uit de Bakermat der Amsterdamsche Handelsstatistiek," Jrbk. Amstelodamum, 12(1913)105-172 and 16(1917)35-110.
- North, D.C., "Sources of Productivity Change in Ocean Shipping, 1600-1850," Journal of Political Economy (Chicago), 76(1968)953-970.
- Ohberg, A., "Russia and the World Markets in the 17th Century," Sc. Ec. H. R., 3(1955)2:127-162.
- Oldeweldt, W.F.H., "De Hollandse Imposten en ons beeld van de conjunctuur tijdens de Republiek," Jrbk. Amstelodamum 47(1955)48-80.
- \_\_\_\_\_, "De Scheepvaartstatistiek van Amsterdam in de 17de en 18de eeuw," Jrbk. Amstelodamum, 45(1953)114-151.
- Pattison, G., "Observations on the History of the Bill of Lading," Mariners Mirror 50(1964)283-296.
- Posthumus, N.W., "Statistiek van den in- en uitvoer van Amsterdam in het jaar 1774," B.M.H.G., 34(1913)516-528.
- Price, J.M., "Multilateralism and/or Bilateralism: the Settlement of British Trade Balances with 'The North,' c. 1700," Ec.H.R., 2nd ser., 14(1961)2:254-274.
- Rauch, Georg von, "Zur Geschichte des russischen Handels und der kolonialen Expansion im 17. Jahrhundert," Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte, 40(1953)119-145.
- Rich, E.E., "Russia and the Colonial Fur Trade," Ec.H.R., 2nd ser. 7(1954) 3:307-328.
- Rijn, G. van, "De Actiehandel in 1720 to Rotterdam en de Maatschappij van Assurantie," Rotterdamsch Jaarboekje, (1899)1-75.

- Rosch, A., "American Trade in the Baltic 1783-1807," Sc. E. H. R., 13(1965)31-64.
- Rubinstein, N. L., "Vneshniaia torgovlia Rossii i russkoe kupechestvo vo vtoroi polovine XVIII v.," Istoricheskie zapiski, 54(1955)343-361.
- Rusink, W., "The Role of Polish Territories in the European Trade in the Seventeenth and Eighteenth Centuries," Studia Historiae Oeconomica, 3(1969)115-134.
- Samuelson, K., "International Payments and Credit Movements by the Swedish Merchant Houses 1730-1815," Sc. Ec. H. R., 3(1955)2:163-202.
- Sautijn-Kluit, W. P., "De Amsterdamsche Prijs-courantiers in de 17de en 18de eeuw," B. V. G. O., new ser., 8(1875)58-66.
- Schmidt, K. R., "The Treaty of Commerce Between Great Britain and Russia 1766. A Study on the Development of Count Panin's Northern System," Scando-Slavia, 1(1954)115-134.
- Schöffer, I., "De Vonnissen in Averij Grosse van de Kamer van Assurantie en Averij te Amsterdam in de 18de eeuw: Onderzoek naar hun economisch-historische waarde voor de geschiedenis van de handel en scheepvaart van Amsterdam op de Oostzee 1700-1770," Ec. H. Jrbk., 26(1956)73-132.
- \_\_\_\_\_, "Viel onze Gouden Eeuw in een tijdvak van crisis?" B. M. H. G., 78(1964)45-74.
- Schreiner, J., "Die Niederländer und die Norwegische Holzausfuhr im 17. Jahrhundert," TvG, 49(1934)303-328.
- Slicher, B. H. van Bath, "De Oogstopbrengsten van verschillende gewassen, voornamelijk granen in verhouding tot het zaaizaad, c. 810-1820," A. A. G. Bijdragen, 9(1963)29-126.
- \_\_\_\_\_, "Report on the Study of Historical Demography in the Netherlands," A. A. G. Bijdragen, 11(1964)182-190.
- Smith, D. B. S., and Bonner, D., "Authorship of the Russian Fleet under Peter the Great," Mariners Mirror, 20(1934)3:373-376.
- Snapper, F., "Statistische gegevens betreffende de Zeeuwse convooien en liventen uit de 17e- en 18e eeuw," Ec. H. Jrbk., 29(1963)260-271.
- Sneller, Z. W., "Drie cargasoenen regge, van Daniel van der Meulen c. c. anno 1592, en hun verzekering," Jrbk. Amstelodamum, 32(1935) 89-118.

- \_\_\_\_\_, "De Toestand der Nijverheid te Amsterdam en Rotterdam volgens de Enquete van 1816," B.V.G.O., 8th ser., 3(1926)129-165.
- Sperling, J., "The International Payments Mechanism in the Seventeenth and Eighteenth Centuries," Ec.H.R., 2nd ser., 14(1962)3:446-468.
- Svensson, S., "Czar Peters motiv för kriget med Sverige," Historisch Tidskrift (1931)453-473.
- Unger, W.S., "De publikatie der Sonttabellen voltooid," TvG, 71(1958)147-205.
- Vernadsky, G., "The Baltic Commerce of the West Russian and Lithuanian Cities during the Middle Ages," Baltic and Scandinavian Countries, 3(1937)3:399-409.
- Vinter, E., "Niderlandy i Rossii nakanune Svernoi voyny. Nikolae Vitsen i Petr. I," Mezdunarodnye svyazi Rossii v. XVII-XVIII vv., 1966, pp. 291-302.
- Vogel, Walter, "Beiträge zur Statistik der deutschen Seeschiffahrt im 17 und 18 Jahrhundert," H.G., 57(1932)78-151.
- \_\_\_\_\_, "Die Grundlagen der Schiffahrtstatistik," Veröffentlichungen des Instituts für Meerkunde, 16(1911)1-9.
- \_\_\_\_\_, "Handelskonjunkturen und Wirtschaftskrisen in ihrer Auswirkung auf den Seehandel der Hansestädte, 1560-1806," H.G., 74(1956)50-64.
- \_\_\_\_\_, "Zur Grösse der europäischen Handelsflotten im 15., 16. und 17. Jahrhundert. Ein historisch-statistischer Versuch" in Festschrift D. Schäffer zum 70. Geburtstag dargebracht, Jena, 1915.
- Vries, J. de, "De Ontduiking der Convooen en Licenten in de Republiek tijdens de achtiende eeuw," TvG, 71(1958)349-361.
- \_\_\_\_\_, "De Statistiek van in- en uitvoer van de Admiraliteit op de Maze, 1784-1793," Ec.Hist.Jrbk., I, 29(1963)188-259; II, 30(1965)236-307.
- \_\_\_\_\_, "The Role of the Rural Sector in the Development of the Dutch Economy 1500-1700," J.Ec.H., 31(March 1971)1:246-268.
- \_\_\_\_\_, "Van der Spiegel's 'Schets tot een verhoog over de intrinsieke en relative magt van de Republiek' (1782)," Ec.H.Jrbk., 26(1958)81-100.

Wätjen, H., "Zur Geschichte des holländischen Walfischfanges von der zweiten Hälfte des 17. bis zum Beginn des 19. Jahrhunderts," H.G., 45(1910)247-290.

\_\_\_\_\_, "Zur Statistik der Holländischen Heringfischerel im 17. und 18. Jahrhundert," H.G., 18(1910)129-180.

Westerman, J.C., "Statistische gegevens over den handel van Amsterdam in de zeventiende eeuw," TvG, 61(1948)3-30.

Wilson, C., "Taxation and the Decline of Empires, an unfashionable theme," B.M.H.G., 77(1963)10-26.

Wittram, R., "Peter der Grosse und Livland. Zur Kernfrage des Nordischen Krieges" in Deutschland und Europa. Festschrift für Hans Rothfels, Düsseldorf, 1951.

Zevenboom, K.M.C., "Bijdrage tot de kennis van de oude Amsterdamsche graanmaat," Verhandelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afdeling Letterkunde, new ser., 66(1959) 1:1-96.

Zoutis, M.J., "Riga dans le commerce maritime en baltique au XVIIe siècle," Le Navire et l'Economie Maritime du Nord de l'Europe du Moyen Age au XVIIIe siècle, 3(1960)81-92.

Zuiden, D.S. van, "Nieuwe Bijdragen tot de kennis van de Hollandsch-Russische relaties in de 16e-18e eeuw. Bronnen-publicatie uit de Amsterdamsche notaris protocollen," Es.H.Jrbk., 2(1916)258-295.

**VOLUME II**

**TABLES AND GRAPHS**

IMPORTANT NOTICE

Sections of this thesis have already been published. This applies especially to several tables and graphs in Volume II. In addition a number of graphs employ the use of colour which if reproduced in black and white tones only will be difficult to interpret. Therefore, those interested in a copy or partial reproduction of the thesis are asked to contact the author c/o Department of History McGill University Montreal, Quebec

Explanatory Note to Tables and Graphs

The scheme used for the tables and graphs in this dissertation is basically as follows:

**Tables I and Graphs I.** . . . . . This series pertains to tables and graphs which appear in the body of the dissertation. They are either based on data found in the subsequent sets of tables and graphs or derived from other archival sources.

**Tables II and Graphs II.** . . . . . These tables and graphs are based on the Galjootsgeldregisters of the D.O.H. in addition to those of the D.M.H. on St. Petersburg for 1753 and thereafter. They therefore represent Russia's Baltic shipping to Amsterdam. Each of the Russian ports has been assigned a specific letter. For example Table II. 2. C, II. 9. C and Graph II. 3. C(1) all contain information on shipping from Riga. The only exception to this rule is Table II. 1. A.

**Tables III and Graphs III** . . . . . These tables and graphs are based on the Galjootsgeldregisters of the D.M.H. and present information on Russia's White Sea shipping, primarily Archangel.

**Tables IV.** . . . . . Tables IV are based on the same sources as those mentioned for Tables II but pertain to shipping to Amsterdam from all the Baltic and not from the Russian ports only.

**Tables V** . . . . . These tables are based on the Sound Toll Accounts. The data for 1724 and 1725 were taken from the MS., that for 1784 and 1785 has been received from Professor Johansen and for other years the work of Nina Bang was consulted.

**Tables VI.** . . . . . These tables are based on data taken from the Rotterdam City Archives and offer information on Rotterdam shipping with Russia.

Insofar as possible the data derived from the sources in each series of Tables II, III and IV have been presented in the same sequence and with matching numbers. In the same manner the graphs are presented so that their number and sequence correspond to that of the tables on which they are based. In the graphs which plot absolute data the years for which data were missing or incomplete have been omitted. In those graphs which show percentage frequency distributions, only those years for which there were no data have not been plotted. The years 1705 to 1714 have been omitted for all graphs.

In tables and graphs which present frequency distributions, the percentages can be misleading. If the total number of cases under consideration are few, small differences in absolute terms are magnified by being converted into percentages. One should, therefore, interpret these percentages in terms of the absolute figures on which they are based.

Tables in series II, III, IV and V are preceded by a page listing the notes which pertain to that series. Since all the graphs presented are based on corresponding tables the same notes apply to them as well.

Figures for St. Petersburg from 1753 on (Series 'A' in Tables II) and those for Archangel (Tables III) which differ from those given by Brakel ("Statistische," pp. 380-393) have been "double-checked" with the Galjoetsgeldregisters.



Notes to Tables II and Graphs II

- 1705, 1706, 1707 <sup>1</sup> Individual ports of departure are not given.
- 1709 <sup>2</sup> Data available for November and December only.
- 1710 <sup>3</sup> Data available for January through October only.
- 1711, 1713 <sup>4</sup> Data available for January through May only.
- 1712 <sup>5</sup> No data available for January through March.
- 1714, 1814 <sup>6</sup> No data available for January through April.
- 1715 <sup>7</sup> Data available for October through December only.
- 1744 <sup>8</sup> Treaty of Abo in 1743. Frederikshamn becomes a Russian port and is added to the data for 1744 and on.
- 1753 <sup>9</sup> For 1753 and on, data for St. Petersburg are taken from the D. M. H. Galjootsgeldregisters (G. A. A., PA6/59-62).
- 1753 <sup>10</sup> St. Petersburg. Includes one ship counted and listed twice in sequence since it paid galjootsgeld twice, and one ship departing from Kronstadt listed in the D. O. H. Galjootsgeldregisters.
- 1775 <sup>11</sup> D. O. H. Galjootsgeldregisters are missing. Data available only for St. Petersburg.
- 1779 <sup>12</sup> One ship listed as coming from Omega not included here but added to the data on White Sea shipping instead.
- 1791, 1799 <sup>13</sup> For ports other than St. Petersburg, no data available for January through March.

Notes to Tables II and Graphs II (Cont'd)

- 1796 <sup>14</sup>Third partition of Poland in 1795. Ports in Courland become Russian ports and are added to the data for 1796 and on.
- 1797 <sup>15</sup>No data available for St. Petersburg for 1797 through 1813.
- 1803 <sup>16</sup>Two ships are listed in the D.O.H. Galjootsgeldregisters instead of those of those of the D.M.H. as coming from St. Petersburg and are not included here.
- 1808 <sup>17</sup>Continental Blockade. No data available from 1808 through 1813.
- 1816 <sup>18</sup>Frederikshamn. Includes one ship from Frederikshamn named "Klein Oost" whose captain George Windt paid no galjootsgeld as both the size of the cargo and of the ship are listed as "0 last."
- 1823 <sup>19</sup>No data available for January through March. The D.M.H. Galjootsgeldregisters from which the St. Petersburg data were taken end 26 March.
- 1825 <sup>20</sup>End of the D.O.H. Galjootsgeldregisters. Data available for January through September only.

TABLE 1101 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	LINES	ST. PETERSBURG	NUMBER OF SHIPS												TOTAL						
			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC							
1902 <sup>1</sup>	ST. PETERSBURG	WARVA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		NEVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		RIGA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1903 <sup>1</sup>	ST. PETERSBURG	WARVA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		NEVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		RIGA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1904 <sup>1</sup>	ST. PETERSBURG	WARVA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		NEVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		RIGA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1905 <sup>2</sup>	ST. PETERSBURG	WARVA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		NEVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		RIGA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1906 <sup>3</sup>	ST. PETERSBURG	WARVA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		NEVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		RIGA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

NO DATA AVAILABLE













TABLE II-1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS												TOTAL	
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1928	ST. PETERSBURG	1	1	2	1	2	2	3	6	2	2	5	3	0	35
	MARVA	-	-	1	1	1	1	13	7	7	9	25	3	0	60
	REVAL	-	-	-	-	-	-	3	5	5	1	1	-	-	0
	ESTONIA	4	1	-	-	2	0	14	37	25	11	2	-	-	0
	RIGA	2	-	2	-	-	0	2	2	0	2	10	5	0	119
TOTAL	10	2	5	2	5	5	22	58	38	21	27	43	13	329	
1929	ST. PETERSBURG	1	2	1	2	3	2	1	4	9	13	9	0	0	52
	MARVA	-	-	1	6	1	6	10	10	6	33	11	2	2	101
	REVAL	-	1	-	1	1	1	1	3	3	2	2	-	-	11
	ESTONIA	2	1	1	7	-	1	1	1	-	1	-	-	-	9
	RIGA	2	1	2	7	3	7	4	17	19	10	10	6	0	99
TOTAL	6	6	5	17	8	17	26	47	52	56	56	37	13	309	
1930	ST. PETERSBURG	2	5	2	1	5	1	22	17	13	7	6	0	0	60
	MARVA	1	-	3	7	-	7	57	7	11	36	33	0	0	104
	REVAL	-	-	2	7	-	7	5	2	1	1	-	-	-	10
	ESTONIA	-	1	-	1	-	1	-	2	4	3	1	2	2	14
	RIGA	1	3	10	6	1	6	19	24	22	23	10	5	0	127
TOTAL	6	9	15	28	9	28	108	62	53	73	53	8	2	322	
1931	ST. PETERSBURG	-	2	2	-	2	-	-	1	2	7	0	0	0	32
	MARVA	-	-	1	-	1	-	20	39	11	6	0	1	1	120
	REVAL	-	-	-	5	-	5	4	10	2	0	1	1	1	30
	ESTONIA	-	-	-	1	-	1	1	6	-	1	0	-	-	10
	RIGA	2	5	7	13	2	13	10	23	32	9	12	7	7	126
TOTAL	2	7	10	26	10	26	45	83	48	23	21	9	9	317	
1932	ST. PETERSBURG	1	-	-	1	-	1	0	2	13	10	4	0	0	34
	MARVA	1	-	-	4	-	4	36	37	17	6	20	17	17	100
	REVAL	-	-	-	4	-	4	15	13	13	7	1	2	2	52
	ESTONIA	-	-	-	9	-	9	6	6	6	4	4	4	3	31
	RIGA	9	0	0	13	2	13	30	60	60	10	21	21	21	192
TOTAL	11	10	10	31	2	31	92	127	111	48	64	64	64	417	

SOURCES: GAA, PA 78/94-102

CONTINUED...

TABLE II.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	COUNTRY OF DEPARTURE	NUMBER OF SHIPS												TOTAL	
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1781	ST. PETERSBURG	3	1	4	3	1	-	7	17	26	11	17	0	0	90
	NARVA	-	-	-	2	1	-	40	10	9	4	19	0	0	97
	REVAL	-	-	1	1	-	6	11	2	2	-	-	-	23	
	ESTONIA	-	-	1	-	-	3	10	4	5	3	-	-	26	
	RIGA	1	6	6	4	3	16	39	22	24	19	19	0	169	
	VIBORG	-	-	-	-	-	-	-	2	-	-	-	-	2	
	TOTAL	4	7	14	10	5	34	107	72	68	37	46	0	382	
1782	ST. PETERSBURG	-	-	2	2	1	-	3	0	2	9	12	7	47	
	NARVA	-	-	3	1	-	-	4	12	20	40	10	10	114	
	REVAL	-	-	-	-	-	-	2	-	1	-	-	-	4	
	ESTONIA	-	-	-	-	-	-	-	11	-	-	2	2	16	
	RIGA	1	9	9	4	6	2	10	57	21	16	17	2	136	
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	0	
	TOTAL	1	9	14	10	7	2	13	74	24	65	31	11	286	
1783	ST. PETERSBURG	2	10	3	2	5	1	1	3	1	1	4	0	40	
	NARVA	2	2	7	4	2	-	79	12	7	26	29	11	199	
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	
	ESTONIA	-	-	1	-	-	-	-	1	2	4	4	-	14	
	RIGA	8	10	6	1	3	2	7	13	16	9	9	9	92	
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	0	
	TOTAL	12	22	16	7	12	3	89	34	26	46	46	11	342	
1784	ST. PETERSBURG	-	-	1	1	3	1	3	9	0	9	7	9	53	
	NARVA	1	-	-	6	-	-	23	35	0	2	7	2	64	
	REVAL	-	-	-	-	-	-	1	1	-	-	-	-	2	
	ESTONIA	1	1	1	-	-	-	2	5	-	-	2	2	14	
	RIGA	2	1	4	6	3	6	15	34	20	14	15	3	123	
	VIBORG	1	-	-	-	1	-	-	9	4	3	3	2	23	
	ERENSHIMMANN	-	-	-	-	-	-	-	-	-	-	-	-	0	
	TOTAL	5	2	9	13	7	7	43	97	24	38	34	14	204	
1785	ST. PETERSBURG	-	-	4	2	3	-	4	2	4	0	1	2	21	
	NARVA	1	1	-	6	-	-	54	3	9	9	6	26	121	
	REVAL	-	-	-	-	-	-	-	2	-	-	-	-	2	
	ESTONIA	2	-	-	1	-	-	11	3	1	2	-	1	21	
	RIGA	2	2	4	6	2	2	17	17	27	6	1	10	81	
	VIBORG	-	-	-	-	1	-	1	6	1	2	3	-	17	
	ERENSHIMMANN	-	-	-	-	-	-	-	-	-	-	-	-	0	
	TOTAL	5	4	11	15	10	2	73	33	41	28	11	48	278	

TABLE 11.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS												TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1726	ST. PETERSBURG	5	1	2	2	1	1	2	2	3	5	4	0	31
	NARVA	5	1	4	2	1	1	2	14	26	20	0	3	66
	REVAL	-	-	2	-	-	-	5	-	-	3	-	5	10
	ESTONIA	1	1	-	-	-	-	-	22	18	9	17	14	92
	RIGA	2	-	4	1	-	-	-	4	-	1	1	3	13
	VIBORG	1	-	2	-	1	-	-	2	-	1	-	1	4
	ESERELSKMANN	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	13	3	13	5	3	12	12	58	53	33	38	31	208
1727	ST. PETERSBURG	3	7	9	4	1	1	1	12	6	11	9	2	97
	NARVA	-	1	1	1	-	-	30	9	6	4	10	6	69
	REVAL	-	-	1	-	-	1	-	-	-	-	1	-	3
	ESTONIA	-	3	-	-	-	9	2	2	1	1	1	2	18
	RIGA	-	2	5	4	1	11	13	18	18	10	11	2	86
	VIBORG	-	-	-	1	1	-	5	1	1	-	2	-	10
	ESERELSKMANN	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	3	13	15	10	3	20	32	62	38	35	33	13	208
1728	ST. PETERSBURG	1	2	-	1	6	2	-	-	3	7	1	7	30
	NARVA	-	-	-	5	-	1	11	16	17	3	6	5	65
	REVAL	-	-	-	1	1	-	2	1	1	-	1	-	9
	ESTONIA	-	0	1	1	-	2	13	13	-	4	0	5	30
	RIGA	5	-	11	11	5	1	9	29	29	7	8	17	88
	VIBORG	-	-	-	-	2	-	3	3	3	1	1	2	14
	ESERELSKMANN	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	6	13	12	18	15	12	32	68	68	22	22	28	228
1729	ST. PETERSBURG	1	1	2	2	2	2	1	9	6	8	-	1	33
	NARVA	-	-	1	-	-	1	41	7	9	25	2	0	98
	REVAL	-	-	-	1	-	-	-	1	-	-	-	-	3
	ESTONIA	-	-	-	1	-	4	6	2	6	7	2	7	32
	RIGA	-	1	4	4	2	6	13	20	12	3	3	14	69
	VIBORG	-	-	-	-	2	1	5	4	4	1	-	-	13
	ESERELSKMANN	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	1	2	9	10	11	12	68	52	52	53	11	21	218

SOURCES: GAA, PA 78/90-102

CONTINUED...

TABLE 11.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS												TOTAL			
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC				
1928	ST. PETERSBURG	2	1	1	1	1	2	3	3	2	2	2	2	2	2	2	20
	NARVA	-	-	-	-	-	2	40	10	6	6	6	6	6	6	11	126
	REVAL	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	9
	ESTONIA	-	2	1	1	1	2	2	2	2	2	2	2	2	2	2	16
	RIGA	3	2	2	2	6	2	6	11	7	7	10	10	10	12	12	70
1929	VIBORG	-	-	1	-	-	2	5	6	1	1	1	1	1	1	1	19
	ERESBEEKSMANN	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	27
	TOTAL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	248
	ST. PETERSBURG	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	27
	NARVA	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	120
1930	REVAL	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	9
	ESTONIA	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
	RIGA	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
	VIBORG	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
	ERESBEEKSMANN	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	27
1931	TOTAL	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	27
	ST. PETERSBURG	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	27
	NARVA	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	120
	REVAL	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	9
	ESTONIA	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
1932	RIGA	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
	VIBORG	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
	ERESBEEKSMANN	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	27
	TOTAL	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	27
	ST. PETERSBURG	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	27
1933	NARVA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
	REVAL	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	9
	ESTONIA	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
	RIGA	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
	VIBORG	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
1934	ERESBEEKSMANN	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	27
	TOTAL	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	27
	ST. PETERSBURG	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	27
	NARVA	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	120
	REVAL	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	9
1935	ESTONIA	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
	RIGA	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
	VIBORG	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
	ERESBEEKSMANN	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	27
	TOTAL	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	27

SOURCES: GAA, RA 78/90-102

CONTINUED...

TABLE 11.1. BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS												TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1799	ST. PETERSBURG	1	2	4	1	4	4	3	0	9	2	1	29	
	NARVA	1	1	3	0	1	26	20	10	0	19	7	102	
	REVAL	2	1	1	1	1	1	1	2	1	1	2	3	
	ESTONIA	4	5	7	3	4	9	20	19	9	10	16	110	
	RIGA	1	1	1	2	1	2	1	1	1	1	1	13	
	VIBORG	1	1	1	1	1	1	1	1	1	1	1	11	
TOTAL	12	16	19	14	18	41	34	34	34	31	24	273		
1798	ST. PETERSBURG	1	1	1	0	2	1	2	3	1	2	2	23	
	NARVA	1	1	1	2	1	12	27	11	17	0	2	82	
	REVAL	1	1	1	1	1	1	2	1	1	1	2	3	
	ESTONIA	1	1	2	0	3	1	3	0	1	1	1	6	
	RIGA	1	1	1	1	2	3	1	0	19	9	9	43	
	VIBORG	1	1	1	1	1	1	1	1	3	0	0	17	
TOTAL	8	8	8	8	10	16	16	23	23	15	13	206		
1796	ST. PETERSBURG	1	2	2	3	2	0	2	0	0	23	9	40	
	NARVA	1	1	1	1	1	1	1	1	1	1	1	5	
	REVAL	1	1	1	1	1	1	1	1	1	1	1	4	
	ESTONIA	1	1	1	1	1	1	1	1	1	1	1	1	
	RIGA	3	4	4	1	2	17	6	11	6	10	9	71	
	VIBORG	1	1	1	1	1	10	3	2	3	3	2	26	
TOTAL	8	12	12	12	12	27	15	28	28	21	18	192		
1792	ST. PETERSBURG	1	1	0	3	2	3	9	4	11	0	1	47	
	NARVA	1	1	1	1	1	1	1	1	1	1	1	1	
	REVAL	1	1	1	1	1	1	1	1	1	1	1	1	
	ESTONIA	1	1	1	1	1	1	1	1	1	1	1	1	
	RIGA	2	2	16	7	2	6	16	10	16	9	4	99	
	VIBORG	1	1	1	1	1	2	4	2	2	2	2	13	
TOTAL	7	7	20	11	11	19	36	36	36	17	9	163		

SOURCES: GAA, PA 79/94-102

CONTINUED...

TABLE 1.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS												TOTAL	
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1928	ST. PETERSBURG	2	1	5	5	3	-	1	9	6	3	3	3	3	37
	MARVA	-	-	-	-	-	-	13	2	2	2	1	7	26	
	REVAL	-	-	-	-	-	-	1	-	-	-	-	-	1	
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RIGA	7	7	11	2	1	21	20	12	7	3	17	17	110	
	VIBORG	-	-	1	1	-	-	2	1	-	-	-	-	5	
ESCHERLSHAMM	-	-	-	-	-	-	-	-	-	-	-	-	-		
TOTAL	-	11	17	18	13	22	43	43	13	13	13	13	13	187	
1929	ST. PETERSBURG	6	1	1	-	-	1	3	3	3	14	-	2	41	
	MARVA	-	-	-	-	2	-	2	3	9	10	-	-	26	
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	9	
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	9	
	RIGA	5	2	1	2	5	35	9	14	27	12	3	3	110	
	VIBORG	-	-	-	-	-	-	-	-	-	1	-	-	1	
ESCHERLSHAMM	-	-	-	-	-	-	-	-	-	-	-	-	-		
TOTAL	11	3	2	2	7	35	10	16	31	34	27	3	3	187	
1930	ST. PETERSBURG	-	-	5	3	-	-	2	1	1	9	3	3	20	
	MARVA	1	1	1	-	-	-	-	-	-	-	-	-	7	
	REVAL	-	-	-	-	2	-	-	-	-	-	-	-	2	
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	2	
	RIGA	2	11	12	9	1	20	14	20	23	19	17	17	140	
	VIBORG	-	-	-	-	-	1	1	6	2	-	-	-	10	
ESCHERLSHAMM	-	-	-	-	-	-	-	-	-	-	-	-	-		
TOTAL	3	12	13	11	3	21	18	23	33	33	33	33	33	207	
1931	ST. PETERSBURG	3	1	1	3	-	1	1	1	1	1	3	-	19	
	MARVA	-	-	-	-	-	-	-	-	-	-	-	-	-	
	REVAL	-	-	-	-	-	-	3	1	1	-	-	-	7	
	ESTONIA	-	1	1	-	-	1	-	2	2	2	1	1	11	
	RIGA	6	5	2	6	3	17	20	37	30	30	4	4	191	
	VIBORG	-	-	-	-	-	-	1	1	2	-	-	-	6	
ESCHERLSHAMM	-	-	-	-	-	-	-	-	-	-	-	-	-		
TOTAL	9	7	4	9	3	21	18	42	42	42	41	41	41	207	

SOURCE: GAA: PA 78/94-102

CONTINUED...

TABLE 11.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORT OF DEPARTURE	NUMBER OF SHIPS												TOTAL	
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1768	ST. PETERSBURG	4	-	1	1	-	-	3	1	1	3	2	2	2	27
	NARVA	-	-	1	1	-	-	3	14	1	1	1	2	2	29
	REVAL	1	-	1	1	-	-	-	1	1	1	1	1	1	10
	ESTONIA	2	-	-	-	-	-	3	1	1	3	3	-	-	11
	RIGA	3	1	3	-	-	15	27	22	23	33	10	10	130	
	VIBORG	-	-	-	-	-	-	2	1	1	3	3	-	-	7
	CEKRELSHAMN	-	-	1	-	-	-	-	-	-	-	-	-	-	1
TOTAL	18	1	7	7	3	28	48	48	53	53	53	53	53	328	
1769	ST. PETERSBURG	1	2	11	-	0	1	1	1	1	1	1	3	0	37
	NARVA	-	-	1	-	-	-	10	19	0	0	3	6	6	95
	REVAL	-	-	-	-	-	-	-	1	1	1	1	1	1	6
	ESTONIA	-	-	-	-	1	-	-	1	1	2	4	2	2	10
	RIGA	1	-	7	1	1	14	14	10	10	12	27	20	20	123
	VIBORG	-	-	1	-	-	1	1	1	1	2	3	3	3	9
	CEKRELSHAMN	-	-	1	-	-	-	-	-	-	-	-	-	-	1
TOTAL	2	2	21	1	1	28	36	36	43	43	43	43	43	263	
1768	ST. PETERSBURG	2	2	1	4	3	1	1	4	3	1	1	1	1	23
	NARVA	-	1	2	4	-	1	9	9	2	0	2	4	4	65
	REVAL	-	-	-	-	-	-	1	1	1	1	1	1	1	6
	ESTONIA	-	-	-	1	-	1	1	1	1	1	1	1	1	9
	RIGA	10	3	9	11	1	13	22	6	6	11	12	24	24	134
	VIBORG	-	1	1	1	-	2	1	1	1	1	1	1	1	9
	CEKRELSHAMN	-	-	1	-	-	-	-	-	-	-	-	-	-	1
TOTAL	12	7	18	22	5	43	58	58	63	63	63	63	63	363	
1768	ST. PETERSBURG	2	2	5	2	1	-	-	2	4	2	3	2	3	26
	NARVA	1	-	-	2	3	-	9	10	9	1	10	0	0	53
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	1	-	-	1	1	3	3	3	1	1	1	9
	RIGA	11	2	4	10	4	4	24	24	24	9	12	14	14	116
	VIBORG	-	1	1	-	-	1	2	1	1	2	3	1	1	12
	CEKRELSHAMN	-	-	1	-	-	-	-	-	-	-	-	-	-	1
TOTAL	14	5	11	15	8	18	48	48	48	48	48	48	48	323	

SOURCES: GAA, PA 78/94-102

CONTINUED...

1 421 1

TABLE 11.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS												TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1768	ST. PETERSBURG	-	2	2	7	5	1	-	2	3	4	0	2	30
	MARVA	-	2	2	4	-	-	45	1	-	6	0	7	75
	REVAL	-	-	-	1	-	-	-	-	-	-	1	1	3
	ESTONIA	1	-	-	-	-	-	1	-	-	5	-	-	7
	RIGA	11	3	12	5	1	4	32	17	3	26	14	11	140
	VIBORG	-	3	1	2	1	-	2	2	1	-	2	1	15
<b>EBERLESMANN</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>TOTAL</b>	<b>12</b>	<b>9</b>	<b>18</b>	<b>19</b>	<b>8</b>	<b>5</b>	<b>82</b>	<b>24</b>	<b>7</b>	<b>32</b>	<b>38</b>	<b>23</b>	<b>378</b>	
1769	ST. PETERSBURG	2	-	2	-	4	5	3	0	0	11	4	-	43
	MARVA	1	-	2	1	1	10	20	3	6	1	1	1	47
	REVAL	1	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	1	-	-	-	1	2	3	1	1	2	-	10
	RIGA	6	3	4	9	2	7	17	29	6	6	2	7	64
	VIBORG	-	-	-	-	-	-	-	-	-	1	1	1	3
<b>EBERLESMANN</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>TOTAL</b>	<b>10</b>	<b>4</b>	<b>8</b>	<b>8</b>	<b>7</b>	<b>23</b>	<b>48</b>	<b>48</b>	<b>33</b>	<b>25</b>	<b>18</b>	<b>25</b>	<b>198</b>	
1768	ST. PETERSBURG	1	-	3	9	1	4	1	7	3	5	9	-	36
	MARVA	-	1	4	4	-	20	9	1	20	6	6	2	72
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	1	1	1	1	2	1	3	1	1	5	1	17
	RIGA	2	2	26	7	1	9	23	7	20	14	14	5	114
	VIBORG	-	1	-	-	-	-	1	2	1	1	-	2	7
<b>EBERLESMANN</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>TOTAL</b>	<b>3</b>	<b>7</b>	<b>33</b>	<b>22</b>	<b>3</b>	<b>38</b>	<b>58</b>	<b>34</b>	<b>28</b>	<b>36</b>	<b>38</b>	<b>18</b>	<b>288</b>	
1769	ST. PETERSBURG	1	1	2	7	1	2	4	0	0	12	3	0	48
	MARVA	-	-	2	2	1	15	13	11	5	0	0	-	56
	REVAL	-	-	-	-	-	2	1	-	-	-	-	-	3
	ESTONIA	3	-	-	-	-	1	5	4	2	4	4	-	24
	RIGA	6	6	9	6	-	18	22	9	29	18	18	6	194
	VIBORG	-	-	1	-	-	1	1	2	1	4	1	-	9
<b>EBERLESMANN</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>TOTAL</b>	<b>10</b>	<b>8</b>	<b>13</b>	<b>16</b>	<b>2</b>	<b>37</b>	<b>48</b>	<b>33</b>	<b>47</b>	<b>54</b>	<b>38</b>	<b>11</b>	<b>388</b>	

SOURCES: GAA, PA 70/94-102

CONTINUED...





TABLE 11.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS													
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
1972	ST. PETERSBURG	1	0	7	5	1	1	3	2	2	2	9	1	2	37
	NARVA	-	-	3	2	-	0	17	0	0	0	0	2	0	20
	REVAL	-	-	1	-	1	1	1	1	2	0	3	2	1	13
	ESTONIA	1	1	1	2	1	2	15	3	0	3	3	1	0	43
	RIGA	1	2	10	10	0	17	20	27	20	23	12	11	1	173
	VISBOG	-	-	-	1	-	-	-	1	1	1	-	-	-	5
<b>TOTAL</b>		<b>3</b>	<b>2</b>	<b>22</b>	<b>28</b>	<b>2</b>	<b>28</b>	<b>50</b>	<b>48</b>	<b>42</b>	<b>48</b>	<b>48</b>	<b>18</b>	<b>318</b>	
1973	ST. PETERSBURG	-	2	3	5	-	-	2	5	6	2	2	2	37	
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-	
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RIGA	3	3	1	2	1	7	10	9	16	1	5	12	1	60
	VISBOG	-	-	-	-	-	-	-	-	-	-	-	-	-	9
<b>TOTAL</b>		<b>3</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>8</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>69</b>	
1974	ST. PETERSBURG	1	1	1	1	2	0	17	7	2	2	2	1	10	
	NARVA	1	1	1	1	2	0	17	2	2	4	7	2	52	
	REVAL	1	-	-	-	1	-	2	4	10	1	1	1	20	
	ESTONIA	3	3	1	2	1	7	10	7	16	1	5	12	40	
	RIGA	5	3	6	10	7	3	9	16	22	1	5	5	100	
	VISBOG	-	-	-	-	-	1	1	-	-	1	-	-	3	
<b>TOTAL</b>		<b>11</b>	<b>8</b>	<b>9</b>	<b>12</b>	<b>10</b>	<b>2</b>	<b>39</b>	<b>38</b>	<b>32</b>	<b>16</b>	<b>23</b>	<b>76</b>		
1975	ST. PETERSBURG	2	-	6	1	1	1	5	0	12	2	4	1	42	
	NARVA	-	-	-	1	-	1	24	-	2	1	13	2	41	
	REVAL	-	-	-	-	-	1	1	-	-	-	-	-	2	
	ESTONIA	2	1	1	1	1	1	16	-	4	1	3	5	38	
	RIGA	2	1	6	0	1	7	44	-	11	10	30	0	100	
	VISBOG	-	-	-	-	-	-	2	-	-	-	-	-	2	
<b>TOTAL</b>		<b>4</b>	<b>2</b>	<b>13</b>	<b>3</b>	<b>3</b>	<b>32</b>	<b>52</b>	<b>28</b>	<b>28</b>	<b>19</b>	<b>48</b>	<b>184</b>		

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS												TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1778	ST. PETERSBURG	-	-	0	2	1	1	3	13	17	15	3	12	71
	NARVA	-	-	0	-	-	-	3	3	2	3	1	30	
	REVAL	-	-	-	-	-	2	-	-	-	-	-	2	
	ESTONIA	1	2	0	1	-	-	0	0	0	1	2	3	
	RIGA	1	0	0	0	1	3	17	22	20	20	9	123	
	VIBORG	-	-	-	-	-	-	-	-	2	3	-	-	5
EMGELISSHANN	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL	-	2	2	11	2	8	22	32	32	31	17	23	208	
1779	ST. PETERSBURG	-	-	5	1	1	7	2	10	-	0	0	11	
	NARVA	-	-	2	-	-	12	2	-	-	0	0	20	
	REVAL	1	-	-	-	-	-	-	-	-	-	-	1	
	ESTONIA	1	-	1	1	-	2	7	1	6	2	0	29	
	RIGA	5	3	2	0	1	10	23	0	0	0	27	107	
	VIBORG	-	-	-	-	-	-	2	2	2	1	2	7	
EMGELISSHANN	-	-	-	-	-	-	-	-	-	-	-	-		
TOTAL	-	3	10	3	2	11	32	32	22	16	11	23	208	
1780	ST. PETERSBURG	-	3	7	1	3	1	3	7	13	9	3	53	
	NARVA	1	-	-	-	-	-	7	0	2	1	5	20	
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	
	ESTONIA	-	-	2	1	1	-	1	0	3	2	7	21	
	RIGA	2	3	0	3	1	1	10	20	10	0	0	110	
	VIBORG	-	-	-	-	-	-	-	-	-	-	1	1	
EMGELISSHANN	-	-	-	-	-	-	-	-	-	-	-	-		
TOTAL	-	4	10	3	2	2	12	23	23	23	11	23	208	
1781	ST. PETERSBURG	1	3	0	-	-	2	-	0	2	-	2	10	
	NARVA	-	-	-	-	-	-	-	-	1	-	-	1	
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	
	ESTONIA	2	-	1	1	-	1	-	-	-	-	-	5	
	RIGA	1	1	7	4	2	4	6	7	20	17	0	72	
	VIBORG	-	-	1	1	-	1	-	-	-	1	-	4	
EMGELISSHANN	-	-	-	-	-	-	-	-	-	-	-	-		
TOTAL	-	4	11	3	2	8	13	13	13	18	5	23	208	

SOURCES: GAA, PA 70/94-102

CONTINUED...

TABLE 11.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS												REG	TOTAL	
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC			
1782	ST. PETERSBURG	3	2	3	5	-	2	3	-	-	6	9	2	-	-	31
	NARVA	-	-	1	-	-	2	-	-	1	-	-	-	-	-	6
	REVAL	-	-	-	-	-	1	-	-	2	-	-	-	-	3	
	ESTONIA	1	-	-	1	1	-	1	-	-	1	-	-	2	-	10
	RIGA	11	-	6	4	6	3	17	29	20	17	1	9	12	3	100
1783	ST. PETERSBURG	6	1	1	1	1	1	1	1	1	1	1	1	1	1	23
	NARVA	1	-	-	-	-	1	1	1	1	1	1	1	1	1	13
	REVAL	-	-	-	-	-	1	1	1	1	1	1	1	1	1	10
	ESTONIA	3	1	1	1	1	1	1	1	1	1	1	1	1	1	20
	RIGA	10	2	6	7	9	2	11	20	20	15	1	1	30	30	100
1784	ST. PETERSBURG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
	NARVA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	ESTONIA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
	RIGA	10	2	6	7	9	2	11	20	20	15	1	1	30	30	100
1785	ST. PETERSBURG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
	NARVA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	ESTONIA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
	RIGA	10	2	6	7	9	2	11	20	20	15	1	1	30	30	100
1786	ST. PETERSBURG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
	NARVA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	ESTONIA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
	RIGA	10	2	6	7	9	2	11	20	20	15	1	1	30	30	100
1787	ST. PETERSBURG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
	NARVA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	ESTONIA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
	RIGA	10	2	6	7	9	2	11	20	20	15	1	1	30	30	100

SOURCES: GAO, PA 76/90-102

CONTINUED...



TABLE 11.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS												TOTAL				
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1790	ST. PETERSBURG	2		4	2	1										9	2	33
	NARVA			2				16	16							14	14	90
	REVAL																	
	ESTONIA	1		2		2										3	3	13
	RIGA		2	5	3	3	10	15	22	23	16	9	14			14	14	122
	VIBORG			1								1	2			1	2	4
1791	ST. PETERSBURG	3	6	2	1		1	1	2	3	9	5	3	3	23	13	9	99
	NARVA					1		20	32	1								
	REVAL																	
	ESTONIA				1			1	3	3	2	2	1	2	2	1	1	13
	RIGA				2	2	4	5	16	16	4	11	6	4	11	6	6	64
	VIBORG																	
1792	ST. PETERSBURG	2	2	2		2			1									19
	NARVA	2	1		1	1	21	24	3	16	4	14						67
	REVAL							1										1
	ESTONIA		1				1			1	5							9
	RIGA		10	5	4		6	10	11	12	10	30						90
	VIBORG		1	1				2			2	1						7
1793	ST. PETERSBURG	3	18	7	5	1	28	37	15	38	55	28	28	55	32	35	242	
	NARVA																	
	REVAL																	
	ESTONIA	1	1	1														5
	RIGA	3	3	5	5	1	4	7	19	13	16	15	37	16	15	37	37	128
	VIBORG	1							2	2	3	2						12
1794	ST. PETERSBURG	3	3	3	3	2	19	27	15	22	31	28	28	38	32	35	242	
	NARVA																	
	REVAL																	
	ESTONIA																	
	RIGA																	
	VIBORG																	

SOURCES: GAA, PA 78/94-102

CONTINUED...

TABLE 11.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS												TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1728	ST. PETERSBURG	3	-	2	2	1	-	1	2	5	6	-	1	23
	NARVA	2	-	-	-	1	7	27	3	10	21	5	-	76
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	1	-	1	1	1	1	-	-	5
	RIGA	1	6	6	3	-	12	16	27	13	6	10	10	112
	VIBORG	-	-	2	1	-	2	1	1	2	2	2	1	13
ESSEBIESMANN	-	-	-	1	-	-	-	-	1	1	-	-	3	
TOTAL		6	8	18	7	3	21	58	31	32	38	18	12	228
1729	ST. PETERSBURG	1	-	1	-	-	-	-	1	-	-	-	-	4
	NARVA	-	-	-	-	-	-	-	1	-	-	-	-	1
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	-	-	3	1	3	3	8	7	12	6	3	66
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-
ESSEBIESMANN	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL		1	1	1	3	1	3	18	7	12	6	3	12	81
1730	ST. PETERSBURG	1	-	1	1	1	-	-	3	10	6	-	-	23
	NARVA	-	-	-	1	-	5	4	3	3	4	-	-	16
	REVAL	-	-	-	-	2	3	1	3	3	1	1	-	10
	ESTONIA	-	1	-	-	-	-	1	5	5	1	-	-	6
	RIGA	9	6	3	5	1	8	39	21	20	12	7	6	141
	VIBORG	-	-	-	-	-	-	-	1	-	2	-	-	3
FREDERIKSMANN	-	-	-	-	-	-	-	-	-	1	3	-	4	
COURLAND	2	-	3	2	18	1	1	8	-	2	1	2	28	
TOTAL		12	9	7	19	1	11	51	37	41	28	18	18	252
1731	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	-	-	-	-
	NARVA	1	-	1	1	-	-	10	6	3	1	5	2	30
	REVAL	1	-	-	-	-	1	1	-	-	-	-	-	2
	ESTONIA	1	-	1	-	-	1	1	1	-	-	1	-	5
	RIGA	4	5	9	5	1	1	4	11	7	23	17	11	98
	VIBORG	-	-	1	-	-	-	-	-	-	-	2	-	3
FREDERIKSMANN	-	-	-	-	-	1	2	-	-	-	-	-	3	
COURLAND	2	3	3	8	7	3	2	2	1	3	4	4	31	
TOTAL		9	8	18	12	8	28	28	28	11	21	23	12	165

CONTINUED...

SOURCES: GAA, PA 78/94-102

TABLE 11.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS												TOTAL				
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1798	ST. PETERSBURG																	
	NARVA										1							1
	REVAL																	
	ESTONIA	1																
	RIGA	8	3	6	2	5	11	14	7	1	4							68
	VIBORG	1			1													
FREDERIKSMANN																		
CONSLAND																		
TOTAL		18	3	6	2	18	14	7	1	4								
1799	ST. PETERSBURG																	
	NARVA																	
	REVAL																	
	ESTONIA																	
	RIGA	1																1
	VIBORG																	
FREDERIKSMANN																		
CONSLAND																		
TOTAL		1																
1800	ST. PETERSBURG																	
	NARVA																	
	REVAL																	
	ESTONIA																	
	RIGA		1		1	1	6	7	11	3	2							28
	VIBORG																	
FREDERIKSMANN																		
CONSLAND																		
TOTAL		1	1	1	1	8	7	11	3	2								
1801	ST. PETERSBURG																	
	NARVA																	
	REVAL																	
	ESTONIA																	
	RIGA	1	2			1	3	11	4	5								30
	VIBORG																	
FREDERIKSMANN																		
CONSLAND																		
TOTAL		1	2		1	4	3	11	4	5								

SOURCES: GAA. PA 70/90-102

CONTINUED...



TABLE 11.2 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORT OF DEPARTURE	NUMBER OF SHIPS												TOTAL				
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1892	ST. PETERSBURG																	
	NARVA	NO DATA AVAILABLE	1				6	1			6	12	3		11			44
	REVAL						1	1			1	1			1			4
	ESTONIA						2				2	2	2		1			7
	RIGA	2	5	7		4	26	26	11		19	26	26		24			194
	VIBORO																	
1893	ST. PETERSBURG																	
	NARVA	NO DATA AVAILABLE	1															
	REVAL	3				2												7
	ESTONIA						1				3	1	1					2
	RIGA	2	1	4		2	22	61	13		5	13	13	7	7			133
	VIBORO																	2
1894	ST. PETERSBURG																	
	NARVA	NO DATA AVAILABLE	1															
	REVAL																	7
	ESTONIA																	2
	RIGA	1	1			2					3	5	13	7	7			10
	VIBORO																	2
1895	ST. PETERSBURG																	
	NARVA	NO DATA AVAILABLE	1															
	REVAL																	7
	ESTONIA																	3
	RIGA	1					12	10			10		10					62
	VIBORO																	3
1896	ST. PETERSBURG																	
	NARVA	NO DATA AVAILABLE	1															
	REVAL																	7
	ESTONIA																	3
	RIGA	1					12	10			10		10					62
	VIBORO																	3
1897	ST. PETERSBURG																	
	NARVA	NO DATA AVAILABLE	1															
	REVAL																	7
	ESTONIA																	3
	RIGA	1					12	10			10		10					62
	VIBORO																	3
1898	ST. PETERSBURG																	
	NARVA	NO DATA AVAILABLE	1															
	REVAL																	7
	ESTONIA																	3
	RIGA	1					12	10			10		10					62
	VIBORO																	3

SOURCES: GAA, PA 78/94-102

CONTINUED...



TABLE 11.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

NUMBER OF SHIPS

YEAR	PORTS OF DEPARTURE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1814	ST. PETERSBURG	1	2	2	2	-	1	4	11	-	10	8	-	38
	NARVA	-	-	1	-	-	-	-	1	1	1	3	2	9
	REVAL	-	-	-	-	-	-	-	-	2	4	-	-	6
	ESTONIA	-	-	-	-	-	-	-	1	1	-	-	-	2
	RIGA	-	-	6	5	3	4	4	17	13	5	11	5	73
	VIBORG	-	-	-	-	-	1	1	-	1	-	2	2	7
FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	-	
1815	ST. PETERSBURG	1	2	2	2	2	2	1	6	2	3	2	-	23
	NARVA	-	-	1	1	1	-	2	3	3	5	-	7	30
	REVAL	-	-	-	-	-	-	3	3	4	6	4	1	29
	ESTONIA	-	-	1	-	-	-	1	1	1	-	1	-	5
	RIGA	1	1	4	5	2	1	12	12	14	29	30	11	122
	VIBORG	-	-	1	1	2	-	-	-	-	1	-	-	4
FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	2	-	3	
1816	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	1	1	4	5	2	1	12	12	14	29	30	11	122
	VIBORG	-	-	1	1	2	-	-	-	-	1	-	-	4
FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	2	-	3	
1817	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1818	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1819	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1820	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1821	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1822	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1823	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1824	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1825	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1826	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1827	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1828	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1829	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41	93	31	16	12	332
	VIBORG	-	-	1	-	-	-	1	-	1	-	-	-	3
FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	1	
1830	ST. PETERSBURG	2	2	2	2	2	2	2	2	2	2	2	2	22
	NARVA	-	-	1	1	1	-	-	-	-	-	-	-	4
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	1	1	1	1	1	-	5
	RIGA	5	5	1	3	4	53	108	41</					

TABLE 11.1 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL

YEAR	PORTS OF DEPARTURE	NUMBER OF SHIPS												TOTAL	
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1818	ST. PETERSBURG	1	-	1	1	-	-	-	1	2	5	3	2	2	16
	NARVA	2	-	-	-	3	7	9	6	-	-	-	-	-	30
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	1	-	-	-	-	3	1	1	1	-	-	-	6
	RIGA	-	1	1	-	3	4	16	6	6	6	7	6	-	91
	VIBORG	-	-	-	-	-	-	4	-	-	-	-	1	-	5
	FREDERIKSMANN	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COWSLAND	1	-	-	-	2	2	6	2	2	2	1	-	-	18	
TOTAL	4	2	2	1	3	8	14	39	18	18	11	8	8	123	
1820	ST. PETERSBURG	3	-	2	1	-	-	-	7	7	6	2	4	4	27
	NARVA	2	2	-	3	-	1	3	-	-	4	2	1	1	16
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	3	3	6	2	9	7	11	1	9	4	6	6	63
	VIBORG	-	-	-	-	1	2	2	1	-	1	-	-	-	7
	FREDERIKSMANN	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COWSLAND	-	-	-	-	-	2	1	2	-	1	-	-	-	1	
TOTAL	5	5	5	13	3	18	13	28	28	23	8	7	7	128	
1821	ST. PETERSBURG	-	-	1	-	-	1	2	6	3	3	1	2	19	
	NARVA	-	-	1	-	-	2	2	2	2	2	1	1	11	
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	
	ESTONIA	-	-	-	-	-	2	1	-	-	1	-	-	-	
	RIGA	-	2	2	1	6	16	9	10	16	16	4	1	4	69
	VIBORG	-	-	-	-	-	1	1	1	-	-	-	-	-	4
	FREDERIKSMANN	-	-	-	-	-	1	-	-	-	-	-	-	-	2
COWSLAND	2	1	1	1	3	1	1	1	1	2	-	-	-	15	
TOTAL	2	3	5	12	9	29	29	48	48	37	8	8	8	188	
1822	ST. PETERSBURG	-	-	3	-	-	-	-	2	2	1	2	1	9	
	NARVA	-	2	-	-	-	5	-	2	2	1	1	1	14	
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	
	ESTONIA	-	-	-	-	-	1	-	1	-	-	-	-	-	
	RIGA	2	5	2	2	2	9	1	1	1	5	-	-	29	
	VIBORG	-	-	-	-	1	1	-	-	-	-	-	-	2	
	FREDERIKSMANN	-	-	-	-	-	1	-	-	-	-	-	-	1	
COWSLAND	2	1	1	2	2	1	1	1	1	1	-	-	1		
TOTAL	2	8	6	6	6	17	8	8	8	8	8	8	8	63	

SOURCES: GAA. PA 78/94-102

CONTINUED...



TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1783 <sup>1</sup>	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	-	-	-	-
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	<u>YIBORG</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>% OF YEAR TOTAL</u>		<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
1784 <sup>1</sup>	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	-	-	-	-
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	<u>YIBORG</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>% OF YEAR TOTAL</u>		<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
1787 <sup>1</sup>	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	-	-	-	-
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	<u>YIBORG</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>% OF YEAR TOTAL</u>		<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
1788	NO DATA AVAILABLE													
1789 <sup>2</sup>	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	-	-	-	-
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	-	-	-	-	-	-	-	-	-	8	41	50
	<u>YIBORG</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>8</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>18</u>	<u>25</u>	<u>50</u>
<u>% OF YEAR TOTAL</u>		<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>8</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>25</u>	<u>66</u>	<u>100</u>	
1719 <sup>3</sup>	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	-	-	-	-
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	-	-	-	7	-	-	-	-	-	-	7
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	15	15	7	7	-	11	7	-	7	-	-	-	73
	<u>YIBORG</u>	<u>15</u>	<u>15</u>	<u>7</u>	<u>7</u>	<u>---</u>	<u>11</u>	<u>7</u>	<u>---</u>	<u>7</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>73</u>
<u>% OF YEAR TOTAL</u>		<u>15</u>	<u>15</u>	<u>11</u>	<u>11</u>	<u>---</u>	<u>23</u>	<u>11</u>	<u>---</u>	<u>11</u>	<u>---</u>	<u>---</u>	<u>100</u>	

TABLE 11.1.A BAL TIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1711 <sup>4</sup>	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	-	-	-	-
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	16	16	66	-	-	-	-	-	-	-	-	-
	<u>YIBORG</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>% OF YEAR TOTAL</u>		<u>---</u>	<u>16</u>	<u>16</u>	<u>66</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>100</u>
1712 <sup>5</sup>	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	-	-	-	-
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	-	-	-	22	-	11	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	-	-	-	-	22	-	11	-	33	-	-	-
	<u>YIBORG</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>44</u>	<u>---</u>	<u>22</u>	<u>---</u>	<u>33</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>% OF YEAR TOTAL</u>		<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>44</u>	<u>---</u>	<u>22</u>	<u>---</u>	<u>33</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>100</u>
1713 <sup>4</sup>	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	-	-	-	-
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	3	3	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	9	41	29	12	-	-	-	-	-	-	-	-
	<u>YIBORG</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>% OF YEAR TOTAL</u>		<u>---</u>	<u>9</u>	<u>41</u>	<u>29</u>	<u>12</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>93</u>
1714 <sup>6</sup>	ST. PETERSBURG	-	-	-	-	-	-	2	2	2	-	-	-	-
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	-	-	2	5	2	-	2	2	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	-	-	-	2	9	8	14	8	-	14	14	-
	<u>YIBORG</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>% OF YEAR TOTAL</u>		<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>17</u>	<u>17</u>	<u>17</u>	<u>---</u>	<u>17</u>	<u>17</u>	<u>100</u>
1715 <sup>7</sup>	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	-	-	-	-
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	-	-	-	-	-	-	-	-	-	3	3
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	-	-	-	-	-	-	-	-	18	9	63	90
	<u>YIBORG</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>% OF YEAR TOTAL</u>		<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>90</u>

SOURCES: GAA, PA 78/94-102

CONTINUED...

- 437 -

TABLE 11.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1716	ST. PETERSBURG	-	1	1	1	1	-	-	-	-	-	-	-	8
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	7	6	3	2	-	-	-	-	-	-	21
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	12	19	11	17	7	-	-	-	-	-	-	69
	Y1898G	-	-	-	-	-	-	-	-	-	-	-	-	-
	% OF YEAR TOTAL	-	15	28	19	22	11	-	-	-	-	-	-	100
1717	ST. PETERSBURG	1	2	-	-	-	-	-	-	-	-	-	1	6
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	3	-	-	-	-	-	-	1	-	-	-	7
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	6	33	3	8	3	1	-	2	7	2	3	7	81
	Y1898G	-	-	-	2	-	-	-	-	-	-	-	-	3
	% OF YEAR TOTAL	7	38	4	11	4	1	1	2	18	2	3	18	100
1718	ST. PETERSBURG	-	-	-	-	1	2	1	-	-	-	-	4	8
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	-	-	1	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	1	1
	RIGA	2	-	12	2	4	5	1	-	-	-	12	37	77
	Y1898G	-	-	-	-	-	-	-	-	-	-	1	11	12
	% OF YEAR TOTAL	2	-	12	2	4	7	2	-	-	-	13	34	100
1719	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	5	4	-	14
	NARVA	-	-	-	-	-	-	-	-	-	-	6	-	8
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	1	-	-	1
	RIGA	4	5	2	-	3	-	-	5	4	13	17	3	63
	Y1898G	-	-	-	-	-	-	-	1	-	3	1	-	18
	% OF YEAR TOTAL	7	9	2	-	3	-	-	8	8	24	31	6	100
1720	ST. PETERSBURG	-	3	-	1	-	-	-	-	1	-	-	-	11
	NARVA	-	-	1	-	-	-	-	4	2	2	1	-	14
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	1	-	-	-	-	1	1	-	-	1	5
	RIGA	1	4	-	-	-	1	6	6	10	8	3	3	48
	Y1898G	-	-	1	1	-	-	-	2	3	4	3	3	18
	% OF YEAR TOTAL	2	8	4	4	1	2	7	15	19	17	7	8	100

SOURCES: GAA, PA 78/94-102

CONTINUED...



TABLE 11.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS-OF-DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL				
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1721	ST. PETERSBURG	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	8
	MARVA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90
	RIGA	2	-	1	1	2	-	5	10	11	-	-	-	-	-	-	-	11
	YIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
	3-QU-YEAR-TOTAL	2	-	1	1	2	-	5	10	11	-	-	-	-	-	-	-	100
1722	ST. PETERSBURG	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
	MARVA	1	-	-	-	-	-	-	9	6	-	-	-	-	-	-	-	27
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48
	RIGA	6	2	2	1	-	-	2	6	10	-	-	-	-	-	-	-	12
	YIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
	3-QU-YEAR-TOTAL	7	3	2	1	-	-	2	16	20	-	-	-	-	-	-	-	100
1723	ST. PETERSBURG	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	13
	MARVA	-	-	-	-	-	-	-	5	2	-	-	-	-	-	-	-	19
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
	RIGA	3	1	1	1	1	3	7	10	10	-	-	-	-	-	-	-	94
	YIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
	3-QU-YEAR-TOTAL	3	1	1	1	1	3	7	10	10	-	-	-	-	-	-	-	100
1724	ST. PETERSBURG	2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	18
	MARVA	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	32
	REVAL	-	-	-	-	-	-	-	7	4	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42
	RIGA	2	2	2	1	2	2	4	3	11	-	-	-	-	-	-	-	5
	YIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
	3-QU-YEAR-TOTAL	4	2	2	1	2	2	4	3	11	-	-	-	-	-	-	-	100
1725	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
	MARVA	-	-	-	-	-	-	1	1	2	-	-	-	-	-	-	-	36
	REVAL	-	-	-	-	-	-	6	14	4	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44
	RIGA	-	-	-	-	-	-	2	13	10	-	-	-	-	-	-	-	44
	YIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
	3-QU-YEAR-TOTAL	1	1	1	1	1	1	2	13	10	-	-	-	-	-	-	-	100

SOURCE: GAA, PA 76/94-102

CONTINUED...

TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1726	ST. PETERSBURG	-	-	1	-	-	-	1	2	1	2	2	3	18
	NARVA	-	-	-	-	-	-	10	4	3	1	4	2	29
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	3	-	2	-	1	2	3	7	9	5	1	6	44
	<u>YISORG</u>	<u>3</u>	<u>-</u>	<u>2</u>	<u>-</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>7</u>	<u>9</u>	<u>5</u>	<u>1</u>	<u>6</u>	<u>44</u>
	<u>% OF YEAR TOTAL</u>	<u>3</u>	<u>-</u>	<u>4</u>	<u>-</u>	<u>2</u>	<u>3</u>	<u>16</u>	<u>16</u>	<u>15</u>	<u>12</u>	<u>12</u>	<u>13</u>	<u>100</u>
1727	ST. PETERSBURG	1	-	-	1	-	-	-	3	1	-	-	-	10
	NARVA	-	-	1	2	-	-	19	2	1	2	1	5	38
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	3	4	1	-	-	-	5	5	10	6	1	2	42
	<u>YISORG</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>5</u>	<u>5</u>	<u>10</u>	<u>6</u>	<u>1</u>	<u>2</u>	<u>42</u>
	<u>% OF YEAR TOTAL</u>	<u>3</u>	<u>4</u>	<u>3</u>	<u>-</u>	<u>1</u>	<u>-</u>	<u>27</u>	<u>13</u>	<u>14</u>	<u>9</u>	<u>3</u>	<u>2</u>	<u>100</u>
1728	ST. PETERSBURG	1	1	-	-	1	-	2	-	1	2	1	1	14
	NARVA	-	-	-	-	-	-	17	-	2	14	3	-	39
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	1	2	2	-	-	1	13	-	3	10	2	1	39
	<u>YISORG</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>1</u>	<u>13</u>	<u>-</u>	<u>3</u>	<u>10</u>	<u>2</u>	<u>1</u>	<u>39</u>
	<u>% OF YEAR TOTAL</u>	<u>3</u>	<u>4</u>	<u>3</u>	<u>-</u>	<u>1</u>	<u>2</u>	<u>15</u>	<u>-</u>	<u>6</u>	<u>10</u>	<u>3</u>	<u>2</u>	<u>100</u>
1729	ST. PETERSBURG	-	-	1	-	-	-	-	-	1	-	-	-	6
	NARVA	-	-	-	-	-	-	3	15	3	9	3	1	39
	REVAL	-	-	-	-	-	-	-	-	2	-	-	-	4
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	1
	RIGA	-	1	1	-	-	-	3	7	13	7	3	1	41
	<u>YISORG</u>	<u>-</u>	<u>1</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>3</u>	<u>7</u>	<u>13</u>	<u>7</u>	<u>3</u>	<u>1</u>	<u>41</u>
	<u>% OF YEAR TOTAL</u>	<u>-</u>	<u>3</u>	<u>3</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>8</u>	<u>25</u>	<u>22</u>	<u>21</u>	<u>8</u>	<u>2</u>	<u>100</u>
1730	ST. PETERSBURG	-	-	-	-	-	-	1	-	-	1	-	-	7
	NARVA	-	-	-	-	-	2	17	2	2	4	7	-	38
	REVAL	-	-	-	-	-	1	-	1	-	-	-	-	4
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	2
	RIGA	1	1	-	-	-	1	7	7	6	6	5	2	40
	<u>YISORG</u>	<u>1</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1</u>	<u>7</u>	<u>7</u>	<u>6</u>	<u>6</u>	<u>5</u>	<u>2</u>	<u>40</u>
	<u>% OF YEAR TOTAL</u>	<u>1</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>3</u>	<u>27</u>	<u>13</u>	<u>11</u>	<u>14</u>	<u>15</u>	<u>4</u>	<u>100</u>

SOURCES: GAA, PA 78/94-102

CONTINUED...



TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1736	ST. PETERSBURG	-	-	-	-	1	-	1	2	-	1	1	2	11
	NARVA	-	-	-	-	-	-	6	4	2	3	6	1	29
	REVAL	-	-	-	-	-	-	-	1	-	-	-	2	
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	1	
	RIGA	1	-	-	2	-	2	5	9	6	3	4	1	40
	YIBORG	-	-	-	-	-	-	-	3	2	1	6	1	15
	% OF YEAR TOTAL	1	-	1	2	2	3	16	12	13	10	20	6	100
1737	ST. PETERSBURG	-	-	-	2	-	-	-	1	1	4	2	1	16
	NARVA	-	-	-	-	-	1	13	5	1	10	3	-	37
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	3
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	1
	RIGA	-	-	-	4	-	2	1	5	4	5	3	1	30
	YIBORG	-	-	-	1	-	-	-	2	-	2	1	1	11
	% OF YEAR TOTAL	-	1	1	6	2	5	15	14	2	22	11	5	100
1738	ST. PETERSBURG	-	1	-	-	-	-	5	3	3	1	1	1	19
	NARVA	-	-	-	-	-	1	13	1	2	6	7	2	36
	REVAL	-	-	-	-	-	1	1	-	-	-	-	-	4
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	3
	RIGA	-	-	2	1	-	1	3	5	5	5	2	1	29
	YIBORG	-	-	-	-	-	-	-	1	-	-	-	-	3
	% OF YEAR TOTAL	-	2	3	2	-	5	23	13	12	16	12	6	100
1739	ST. PETERSBURG	-	-	-	1	-	-	-	-	-	2	2	-	9
	NARVA	-	-	-	-	-	-	6	11	3	2	12	-	36
	REVAL	-	-	-	-	-	1	1	2	-	1	-	-	6
	ESTONIA	-	-	-	-	-	-	-	1	-	-	1	-	4
	RIGA	-	1	2	1	-	3	2	6	9	2	3	2	36
	YIBORG	-	-	-	-	-	-	-	1	-	-	-	-	4
	% OF YEAR TOTAL	-	2	3	3	1	5	11	24	14	9	20	4	100
1740	ST. PETERSBURG	-	-	-	-	-	-	1	-	3	2	-	1	10
	NARVA	-	-	-	-	-	-	-	6	3	1	4	3	23
	REVAL	-	-	-	1	-	-	-	3	3	1	-	-	12
	ESTONIA	-	-	-	-	-	-	2	1	1	-	-	-	7
	RIGA	2	-	-	1	-	1	3	8	14	4	4	4	44
	YIBORG	-	-	-	-	-	-	-	-	-	-	-	-	1
	% OF YEAR TOTAL	2	-	-	3	-	2	7	22	25	10	11	11	100

SOURCES: GAA, PA 78/94-102

CONTINUED..

TABLE II-1.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1791	ST. PETERSBURG	-	-	-	-	-	-	1	4	6	2	4	1	23
	NARVA	-	-	-	-	-	-	9	4	2	-	3	1	22
	REVAL	-	-	-	-	-	1	2	-	-	-	-	-	5
	ESTONIA	-	-	-	-	-	-	2	-	1	-	-	-	6
	RIGA	-	1	1	-	-	3	9	5	5	4	3	1	39
	<u>VIBORG</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2</u>
	% OF YEAR TOTAL	<u>-</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>6</u>	<u>25</u>	<u>17</u>	<u>16</u>	<u>6</u>	<u>11</u>	<u>5</u>	<u>100</u>
1792	ST. PETERSBURG	-	-	-	-	-	-	-	2	-	2	3	1	13
	NARVA	-	-	-	-	-	-	1	3	5	13	5	2	32
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	3	-	-	-	-	5
	RIGA	-	2	2	1	1	-	2	16	5	5	4	-	44
	<u>VIBORG</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>2</u>
	% OF YEAR TOTAL	<u>-</u>	<u>2</u>	<u>4</u>	<u>2</u>	<u>1</u>	<u>-</u>	<u>3</u>	<u>25</u>	<u>12</u>	<u>22</u>	<u>15</u>	<u>6</u>	<u>100</u>
1793	ST. PETERSBURG	-	2	-	-	1	-	-	-	-	-	1	1	11
	NARVA	-	-	1	1	-	1	21	3	1	7	10	3	53
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	1	1	-	3
	RIGA	2	2	1	-	-	-	1	3	4	2	2	2	25
	<u>VIBORG</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>5</u>
	% OF YEAR TOTAL	<u>3</u>	<u>6</u>	<u>4</u>	<u>2</u>	<u>3</u>	<u>2</u>	<u>25</u>	<u>9</u>	<u>7</u>	<u>11</u>	<u>16</u>	<u>7</u>	<u>100</u>
1794 <sup>b</sup>	ST. PETERSBURG	-	-	-	-	-	-	-	2	2	2	2	2	17
	NARVA	-	-	-	1	-	-	7	11	2	-	2	-	28
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	1	-	-	-	-	4
	RIGA	-	-	1	1	-	1	4	11	6	4	4	-	40
	<u>VIBORG</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>7</u>
	<u>FREDERIKSMANN</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1</u>
	% OF YEAR TOTAL	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>14</u>	<u>30</u>	<u>13</u>	<u>9</u>	<u>11</u>	<u>8</u>	<u>100</u>
1795	ST. PETERSBURG	-	-	1	-	1	-	1	-	1	2	-	1	11
	NARVA	-	-	-	2	-	-	19	1	3	3	2	10	43
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	3	1	-	-	-	-	7
	RIGA	-	-	1	2	-	-	-	6	9	2	-	3	29
	<u>VIBORG</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>1</u>	<u>-</u>	<u>6</u>
	<u>FREDERIKSMANN</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1</u>	
	% OF YEAR TOTAL	<u>1</u>	<u>1</u>	<u>3</u>	<u>6</u>	<u>2</u>	<u>1</u>	<u>25</u>	<u>11</u>	<u>15</u>	<u>10</u>	<u>3</u>	<u>15</u>	<u>100</u>

SOURCES: GAA, PA 78/94-102

CONTINUED

TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTENDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1796	ST. PETERSBURG	2	-	-	-	-	-	-	-	1	2	1	2	12
	NARVA	2	-	1	-	-	-	-	5	10	8	3	1	38
	REVAL	-	-	-	-	-	-	2	-	-	-	-	-	3
	ESTONIA	-	-	-	-	-	-	-	-	-	1	-	2	4
	RIGA	-	-	1	-	-	2	2	9	6	2	6	5	37
	VIBORG	-	-	-	-	-	-	-	1	-	-	-	1	5
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	1
% OF YEAR TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	100
1797	ST. PETERSBURG	1	2	1	1	-	-	-	4	2	4	1	-	22
	NARVA	-	-	-	-	-	-	11	3	2	1	3	2	26
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	1	-	-	-	1	1	-	-	-	-	-	7
	RIGA	-	-	1	1	-	1	4	5	7	6	4	-	34
	VIBORG	-	-	-	-	-	-	-	1	-	-	-	-	3
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	1	-	1	-	3
% OF YEAR TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	100
1798	ST. PETERSBURG	-	-	-	-	2	-	-	-	1	2	-	2	12
	NARVA	-	-	-	2	-	-	4	6	7	1	2	2	27
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	2
	ESTONIA	-	-	-	-	-	-	-	5	-	1	2	2	12
	RIGA	2	-	-	4	2	1	-	3	9	2	3	7	36
	VIBORG	-	-	-	-	1	-	-	1	1	-	-	-	5
	FREDERIKSHAMN	-	-	-	-	-	-	-	1	-	-	-	-	2
% OF YEAR TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	100
1799	ST. PETERSBURG	-	-	-	-	-	-	-	1	2	2	-	-	12
	NARVA	-	-	-	-	-	-	15	2	3	9	1	2	34
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	1	-	2	2	-	2	11
	RIGA	-	-	1	1	-	-	2	4	11	4	1	5	32
	VIBORG	-	-	-	-	-	-	-	1	1	-	-	-	4
	FREDERIKSHAMN	-	-	-	-	-	-	-	1	-	-	-	-	2
% OF YEAR TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	100

SOURCES: GAA, PA 78/94-102

CONTINUED...

TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1780	ST. PETERSBURG	-	-	-	-	-	-	-	1	-	-	1	1	7
	NARVA	-	-	-	-	-	-	14	6	1	17	3	4	49
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	1	1	-	5
	RIGA	1	-	1	-	2	1	2	4	2	3	1	4	26
	VIBORG	-	-	-	-	-	-	1	2	-	-	-	-	7
	<u>EBERIKSHAMN</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>1</u>	<u>--</u>	<u>--</u>	<u>2</u>
<u>% OF YEAR TOTAL</u>	<u>--1</u>	<u>--1</u>	<u>--2</u>	<u>--1</u>	<u>--2</u>	<u>--3</u>	<u>--20</u>	<u>--15</u>	<u>--6</u>	<u>--20</u>	<u>--7</u>	<u>--10</u>	<u>--100</u>	
1781	ST. PETERSBURG	-	1	-	1	-	-	-	-	-	1	6	2	16
	NARVA	-	-	-	-	-	-	14	11	3	3	16	1	52
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	2	-	-	-	1	1	7
	RIGA	-	1	-	-	-	1	1	2	4	-	3	-	18
	VIBORG	-	-	-	-	-	-	-	-	-	1	-	-	3
	<u>EBERIKSHAMN</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>1</u>
<u>% OF YEAR TOTAL</u>	<u>--</u>	<u>--4</u>	<u>--</u>	<u>--2</u>	<u>--1</u>	<u>--2</u>	<u>--12</u>	<u>--16</u>	<u>--12</u>	<u>--7</u>	<u>--28</u>	<u>--5</u>	<u>--100</u>	
1782	ST. PETERSBURG	1	-	1	-	-	-	-	1	4	3	3	-	16
	NARVA	-	-	-	-	-	6	7	3	8	3	6	-	37
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	1	-	1	-	-	2	-	6
	RIGA	2	1	2	-	-	1	4	10	3	-	1	1	31
	VIBORG	-	-	-	-	-	-	-	1	-	-	-	-	3
	<u>EBERIKSHAMN</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>2</u>
<u>% OF YEAR TOTAL</u>	<u>--4</u>	<u>--3</u>	<u>--4</u>	<u>--1</u>	<u>--</u>	<u>--10</u>	<u>--13</u>	<u>--18</u>	<u>--18</u>	<u>--8</u>	<u>--14</u>	<u>--2</u>	<u>--100</u>	
1783 <sup>9</sup>	ST. PETERSBURG <sup>10</sup>	-	-	2	-	-	1	1	6	1	1	1	-	18
	NARVA	-	-	-	-	-	8	11	-	1	-	10	2	37
	REVAL	-	-	-	-	-	-	1	-	-	-	-	-	2
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	1
	RIGA	-	-	5	-	1	1	3	4	3	1	7	1	33
	VIBORG	-	-	-	-	-	-	1	-	-	-	-	-	6
	<u>EBERIKSHAMN</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>2</u>
<u>% OF YEAR TOTAL</u>	<u>--</u>	<u>--</u>	<u>--8</u>	<u>--3</u>	<u>--2</u>	<u>--12</u>	<u>--20</u>	<u>--19</u>	<u>--7</u>	<u>--3</u>	<u>--20</u>	<u>--4</u>	<u>--100</u>	

SOURCES: GAA, PA 78/94-102

CONTINUED...

TABLE 11.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1785	ST. PETERSBURG	-	-	1	-	1	-	1	1	2	1	-	-	12
	NARVA	-	-	1	2	-	-	9	7	3	2	6	2	37
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	3
	RIGA	1	1	2	1	-	1	3	10	6	1	3	8	40
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	4
	EBERIKSHAMN	-	-	-	-	-	-	-	-	1	-	-	-	1
% OF YEAR TOTAL	3	3	5	5	2	1	14	19	18	6	12	8	100	
1786	ST. PETERSBURG	-	-	-	2	-	-	-	2	1	-	-	-	11
	NARVA	-	-	-	2	-	1	5	13	5	8	2	-	42
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	1	-	-	-	-	2
	RIGA	-	-	-	3	1	1	-	2	2	9	2	4	31
	VIBORG	-	-	-	-	-	-	1	-	-	1	2	-	6
	EBERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	2
% OF YEAR TOTAL	-	-	1	10	3	3	7	22	18	21	9	8	100	
1788	ST. PETERSBURG	-	1	1	1	1	-	-	1	3	-	14	3	29
	NARVA	-	-	-	1	-	-	-	-	-	-	-	-	3
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	2
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	1	-	2	-	-	1	10	3	7	5	8	3	45
	VIBORG	-	-	-	-	-	-	6	1	1	1	1	-	15
	EBERIKSHAMN	-	-	-	-	-	-	-	2	-	-	-	-	3
% OF YEAR TOTAL	3	1	5	5	1	3	17	9	12	7	26	6	100	
1787	ST. PETERSBURG	-	-	4	1	1	1	1	3	2	6	4	-	28
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	1	9	4	1	1	4	11	6	9	5	2	58
	VIBORG	-	-	-	-	-	1	1	2	1	1	-	-	7
	EBERIKSHAMN	-	-	-	-	-	-	-	1	1	-	-	-	4
% OF YEAR TOTAL	-	1	14	6	3	4	8	18	11	17	19	3	100	

SOURCES: GAA, PA 78/94-102

CONTINUED...



TABLE 11.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1799	ST. PETERSBURG	1	-	2	2	1	-	-	2	3	1	1	1	19
	NARVA	-	-	-	-	-	-	-	6	1	1	-	3	13
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	3	3	5	1	-	-	11	13	6	3	1	9	60
	VIBORG	-	-	-	-	-	-	-	1	-	-	-	-	2
	FREDERIKSHAMN	-	-	-	-	-	-	-	1	-	-	-	-	2
% OF YEAR TOTAL	1	1	2	2	2	-	11	20	11	6	3	11	100	
1799	ST. PETERSBURG	2	-	-	-	-	-	2	1	3	5	-	17	
	NARVA	-	-	-	-	-	-	11	-	1	3	4	22	
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	
	ESTONIA	-	-	-	-	-	-	-	-	1	-	-	3	
	RIGA	2	-	-	-	2	2	14	2	5	11	5	49	
	VIBORG	-	-	-	-	-	-	1	-	-	-	1	3	
	FREDERIKSHAMN	-	-	-	-	-	-	1	-	-	-	-	3	
% OF YEAR TOTAL	2	1	-	-	2	2	12	4	13	23	11	2	100	
1799	ST. PETERSBURG	-	-	2	1	-	-	-	-	-	4	2	13	
	NARVA	-	-	-	1	-	-	-	-	-	-	-	3	
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	2	
	RIGA	-	5	5	2	-	-	9	6	13	11	7	71	
	VIBORG	-	-	-	-	-	-	-	-	2	-	-	4	
	FREDERIKSHAMN	-	-	-	-	-	-	-	1	-	-	-	2	
% OF YEAR TOTAL	1	5	5	3	-	-	11	9	18	17	11	9	100	
1791	ST. PETERSBURG	1	-	-	1	-	-	-	-	-	-	1	6	
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	
	REVAL	-	-	-	-	-	-	-	1	-	-	-	3	
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	4	
	RIGA	2	2	-	2	1	8	7	12	15	12	14	81	
	VIBORG	-	-	-	-	-	-	1	-	-	-	-	2	
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	1	
% OF YEAR TOTAL	2	2	1	3	1	9	9	15	18	15	17	2	100	

SOURCES: GAA, PA 78/94-102

CONTINUED...

- 447 -

TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1782	ST. PETERSBURG	1	-	-	-	-	-	1	-	1	3	5	-	15
	NARVA	-	-	-	-	-	-	1	5	-	-	-	-	10
	REVAL	-	-	-	-	-	-	-	-	-	1	-	-	4
	ESTONIA	-	-	-	-	-	-	1	-	-	1	-	-	4
	RIGA	1	-	1	-	-	-	6	11	9	9	14	4	58
	VIBORG	-	-	-	-	-	-	-	-	-	-	1	-	2
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	2
	% OF YEAR TOTAL	1	-	2	1	-	-	11	12	11	17	22	8	100
1783	ST. PETERSBURG	-	-	4	-	1	-	-	-	-	1	3	-	15
	NARVA	-	-	-	-	-	-	4	7	3	2	2	1	22
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	-	1	-	4
	RIGA	-	-	2	3	-	-	5	5	7	4	11	8	50
	VIBORG	-	-	-	-	-	-	-	-	-	-	1	-	3
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	2
	% OF YEAR TOTAL	-	-	8	3	1	-	11	14	11	10	20	10	100
1784	ST. PETERSBURG	-	-	-	1	1	-	-	1	1	-	-	-	9
	NARVA	-	-	-	1	-	-	12	3	-	3	-	1	26
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	1	3
	RIGA	7	1	2	4	-	3	5	8	2	4	4	9	53
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	3
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	2
	% OF YEAR TOTAL	7	2	3	8	1	3	12	18	3	7	7	13	100
1785	ST. PETERSBURG	-	-	2	-	-	-	-	-	1	-	1	1	11
	NARVA	-	-	-	-	1	-	4	4	4	-	4	3	23
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	1	1	-	-	4
	RIGA	4	-	1	4	1	-	1	10	10	4	5	6	53
	VIBORG	-	-	-	-	-	-	-	-	-	-	1	-	5
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	1
	% OF YEAR TOTAL	4	2	3	8	3	-	8	18	18	7	13	12	100

SOURCES: GAA, PA 78/94-102

CONTINUED...

TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1768	ST. PETERSBURG	-	-	-	2	1	-	-	-	1	1	1	-	10
	NARVA	-	-	-	1	-	-	16	-	-	2	2	2	26
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	1	-	-	2
	RIGA	3	1	4	1	-	1	11	6	1	9	5	3	50
	VIBORG	-	1	-	-	-	-	-	-	-	-	-	-	5
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	2
	% OF YEAR TOTAL	3	3	6	6	2	1	22	8	2	12	10	7	100
1767	ST. PETERSBURG	1	-	1	-	2	2	2	1	4	5	2	-	22
	NARVA	-	-	1	-	-	-	5	10	1	3	-	-	24
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	1	1	-	1	-	5
	RIGA	3	1	2	2	1	-	3	8	12	3	1	3	43
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	1
	FREDERIKSHAMN	-	-	-	1	-	-	-	1	-	-	-	-	2
	% OF YEAR TOTAL	3	2	4	4	3	2	11	23	20	12	5	4	100
1766	ST. PETERSBURG	-	-	1	3	-	-	1	-	2	1	1	-	14
	NARVA	-	-	1	1	-	-	9	3	-	7	2	-	28
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	1	-	1	-	6
	RIGA	-	-	9	2	-	-	3	9	2	7	5	1	45
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	2
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	2
	% OF YEAR TOTAL	1	2	13	8	1	1	12	19	7	18	11	3	100
1765	ST. PETERSBURG	-	-	-	2	-	-	-	1	2	4	1	1	15
	NARVA	-	-	-	-	-	5	4	-	3	1	1	-	18
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	1	-	-	-	-	-	1	1	1	-	1	-	8
	RIGA	2	2	3	2	-	6	7	3	7	9	6	2	51
	VIBORG	-	-	-	-	-	-	-	-	-	1	-	-	3
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	1
	% OF YEAR TOTAL	3	3	5	5	-	12	15	7	18	18	10	3	100

SOURCES: GAA, PA 78/94-102

CONTINUED...

TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1770	ST. PETERSBURG	-	2	-	1	-	-	-	-	1	1	1	-	9
	NARVA	-	-	-	-	-	-	9	4	-	4	-	21	
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	
	ESTONIA	-	-	-	-	-	-	1	2	-	2	2	9	
	RIGA	1	1	2	3	-	-	4	14	3	4	7	8	53
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	2
	FREDEBIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	2
	% OF YEAR TOTAL	1	2	4	6	1	5	17	21	4	10	11	11	100
1771	ST. PETERSBURG	-	-	2	1	1	-	1	-	3	2	1	-	15
	NARVA	-	-	-	1	-	-	9	-	1	-	-	-	14
	REVAL	-	-	-	-	-	-	2	-	-	-	-	-	2
	ESTONIA	1	-	-	-	-	-	5	3	2	-	-	-	13
	RIGA	3	-	1	5	-	3	13	17	6	-	-	-	52
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-
	FREDEBIKSHAMN	-	-	-	-	-	-	1	-	-	-	-	-	1
	% OF YEAR TOTAL	5	3	3	9	1	5	14	21	12	2	1	-	100
1772	ST. PETERSBURG	-	-	-	1	-	2	-	1	1	-	-	-	11
	NARVA	-	-	-	-	-	-	2	2	-	1	-	2	10
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	1	-	-	-	1	2	-	1	-	-	2	12
	RIGA	-	3	3	-	3	5	13	11	4	5	5	3	61
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-
	FREDEBIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	1
	% OF YEAR TOTAL	1	5	4	2	3	2	12	18	6	11	7	2	100
1773	ST. PETERSBURG	-	-	-	3	-	-	1	1	3	-	-	1	14
	NARVA	-	-	-	-	-	6	1	-	4	-	-	1	15
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	1	2	1	1	-	-	5	13
	RIGA	1	2	1	1	-	8	12	5	4	3	-	10	52
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	1	1
	FREDEBIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	1
	% OF YEAR TOTAL	2	3	3	6	1	17	17	8	13	4	1	12	100

SOURCES: GAA, PA 78/94-102

CONTINUED

TABLE 11.1.A BAL TIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1774	ST. PETERSBURG	-	1	2	1	-	-	-	-	-	2	-	-	11
	NARVA	-	-	-	-	-	2	5	1	-	2	-	-	14
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	2
	ESTONIA	-	-	-	-	-	-	4	-	2	-	-	1	13
	RIGA	-	-	3	4	1	5	6	8	6	7	3	3	54
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	1
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	2
<u>S. OF YEAR TOTAL</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
1775 <sup>1</sup>	ST. PETERSBURG	-	7	11	18	-	-	7	18	22	7	7	-	100
	NARVA	NO DATA AVAILABLE												
	REVAL	NO DATA AVAILABLE												
	ESTONIA	NO DATA AVAILABLE												
	RIGA	NO DATA AVAILABLE												
	VIBORG	NO DATA AVAILABLE												
	FREDERIKSHAMN	NO DATA AVAILABLE												
<u>S. OF YEAR TOTAL</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
1776	ST. PETERSBURG	-	-	-	-	-	-	-	3	-	-	-	-	6
	NARVA	-	-	-	-	-	2	7	-	6	1	3	-	22
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	1	-	-	-	-	3	4	3	-	-	2	3	19
	RIGA	2	1	2	4	3	1	3	6	9	2	5	2	45
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	2
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	1	-	-	1
<u>S. OF YEAR TOTAL</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
1777	ST. PETERSBURG	-	-	2	-	-	-	2	3	4	-	1	-	16
	NARVA	-	-	-	-	-	-	9	-	-	-	4	-	16
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	6	-	1	-	1	2	14
	RIGA	-	-	2	2	-	2	17	-	4	4	12	3	50
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>S. OF YEAR TOTAL</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>

SOURCES: GAA, PA 78/94-102

CONTINUED.

- 451 -

TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1778	ST. PETERSBURG	-	-	1	-	-	-	1	4	6	5	1	4	26
	NARVA	-	-	1	-	-	-	5	1	-	1	1	-	11
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	2	-	-	-	2	1	2	-	-	1	12
	RIGA	-	-	2	3	-	1	6	8	9	7	3	4	46
	VIBORG	-	-	-	-	-	-	-	-	-	1	-	-	1
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	-
% OF YEAR TOTAL	-	-	7	4	-	2	15	15	19	15	6	10	100	
1779 <sup>1,2</sup>	ST. PETERSBURG	-	-	2	-	-	3	-	8	-	2	1	4	24
	NARVA	-	-	-	-	-	5	-	-	-	1	1	-	10
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	2	1	-	2	-	8	3	2	-	1	-	-	11
	VIBORG	-	-	-	-	-	-	10	2	3	3	12	-	47
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	3
% OF YEAR TOTAL	3	1	4	3	-	17	17	12	6	9	18	4	100	
1780	ST. PETERSBURG	-	1	3	-	1	-	1	3	5	2	1	3	23
	NARVA	-	-	-	1	-	-	3	3	-	-	2	-	12
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	1	1	-	3	-	9
	RIGA	-	1	2	1	-	-	6	12	6	2	17	-	51
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-
	FREDERIKSHAMN	-	-	-	-	-	-	-	1	-	-	-	-	2
% OF YEAR TOTAL	-	2	6	3	2	-	12	21	14	6	25	3	100	
1781	ST. PETERSBURG	-	2	3	-	-	1	-	3	1	-	1	-	17
	NARVA	-	-	-	-	-	-	-	-	-	-	-	-	-
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	1	-	-	-	-	-	-	-	-	-	-	-	4
	RIGA	-	-	6	-	1	3	5	6	19	16	5	-	69
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	3
	FREDERIKSHAMN	-	-	-	-	-	-	-	1	-	-	-	-	2
% OF YEAR TOTAL	3	3	12	2	1	7	5	12	22	17	8	-	100	

SOURCES: GAA, PA 78/94-102

CONTINUED.

TABLE 11.1.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL			
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC				
1782	ST. PETERSBURG	1	-	1	2	-	-	1	-	-	-	2	-	-	-	-	13
	MARVA	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	2
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
	RIGA	4	-	3	1	2	1	7	11	12	8	7	5	2	1	7	67
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
	ESSEBILSKHAMN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
	3-DE-YEAR-TOTAL	5	1	4	4	3	3	18	14	18	12	12	7	12	7	108	100
1783	ST. PETERSBURG	2	-	-	-	-	-	-	-	-	-	1	-	-	-	-	8
	MARVA	-	-	-	-	-	-	4	3	1	-	1	1	-	-	-	13
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	1	-	-	-	-	-	-	2	1	1	1	-	-	-	-	9
	RIGA	3	-	2	2	1	2	4	8	11	8	5	11	5	11	61	61
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	ESSEBILSKHAMN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	3-DE-YEAR-TOTAL	7	1	4	4	2	3	9	16	16	11	8	16	8	16	108	100
1784	ST. PETERSBURG	-	-	2	4	1	-	-	-	-	-	1	4	5	3	-	24
	MARVA	-	-	-	-	-	-	1	9	-	-	-	-	-	6	3	23
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2
	RIGA	-	-	3	4	1	4	2	6	6	6	3	6	6	4	4	42
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	ESSEBILSKHAMN	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2
	3-DE-YEAR-TOTAL	3	1	7	8	3	4	4	18	13	13	13	11	13	13	9	100
1785	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
	MARVA	-	-	-	1	-	-	14	3	-	4	4	4	6	2	2	31
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	5
	RIGA	-	1	-	-	1	2	8	9	9	4	5	9	4	5	4	49
	VIBORG	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2
	ESSEBILSKHAMN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	3-DE-YEAR-TOTAL	3	1	3	3	2	2	28	17	13	9	11	13	11	7	100	100

SOURCES: GAA, PA 76/94-102

CONTINUED.

TABLE 11.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

		PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
YEAR	PORTS OF DEPARTURE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	ST. PETERSBURG	-	-	-	1	-	-	-	1	2	1	-	-	10
	NARVA	-	-	-	1	-	-	10	8	1	3	6	3	36
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	-	1	4	3	-	-	8	6	2	4	10	44
	VIBORG	-	-	-	-	-	-	-	-	-	-	1	-	3
	EREDBIKSHANN	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>TOTAL</u>		-	-	1	6	6	13	18	11	2	13	14	100	
1787	ST. PETERSBURG	-	-	-	-	-	-	-	-	-	1	1	1	8
	NARVA	-	-	1	-	-	-	14	3	-	6	8	1	37
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	4
	RIGA	-	1	9	3	-	-	9	6	8	2	4	4	44
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	3
	EREDBIKSHANN	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>TOTAL</u>		-	2	10	3	2	22	12	18	11	15	10	100	
1788	ST. PETERSBURG	-	-	3	3	-	-	-	-	2	4	1	-	18
	NARVA	-	-	-	1	-	1	15	3	-	12	-	1	37
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	1
	RIGA	-	1	3	1	-	-	2	7	3	9	4	-	37
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	2
	EREDBIKSHANN	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>TOTAL</u>		1	2	7	8	1	12	12	8	20	8	3	100	
1789	ST. PETERSBURG	-	-	2	1	-	-	-	-	4	3	4	2	21
	NARVA	-	-	-	-	-	-	13	1	2	8	3	2	33
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	1	1	-	-	5
	RIGA	-	2	2	3	-	-	2	9	3	3	4	4	36
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	1
	EREDBIKSHANN	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>TOTAL</u>		2	4	9	5	1	16	12	12	16	12	10	100	

SOURCES: GAA, PA 78/94-102

CONTINUED...



TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1720	ST. PETERSBURG	-	-	1	-	-	-	-	-	1	3	1	-	12
	NARVA	-	-	-	-	-	-	6	6	4	4	5	5	34
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	1	1	4
	RIGA	-	-	1	1	1	3	5	8	8	6	3	5	46
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	1
	<u>FREDERIKSMANN</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>% OF YEAR TOTAL</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	
1721 <sup>13</sup>	ST. PETERSBURG	1	3	-	-	-	-	-	2	-	1	2	2	17
	NARVA	-	-	-	-	-	-	9	14	-	3	10	6	48
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	1	1	-	-	-	6
	RIGA	-	-	-	-	-	1	2	7	7	1	5	2	30
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-
	<u>FREDERIKSMANN</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>% OF YEAR TOTAL</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	
1722	ST. PETERSBURG	-	-	-	-	-	-	-	-	2	1	2	-	8
	NARVA	-	-	-	-	-	9	10	1	7	1	6	-	39
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	2	-	4
	RIGA	-	4	2	1	-	2	4	4	5	4	13	-	44
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	3
	<u>FREDERIKSMANN</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>% OF YEAR TOTAL</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	
1723	ST. PETERSBURG	-	-	-	-	-	-	1	1	2	1	4	3	13
	NARVA	-	-	1	-	-	-	-	2	3	-	-	1	8
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	1	1	2	2	-	2	3	10	6	8	7	19	68
	VIBORG	-	-	-	-	-	-	-	1	1	1	1	1	6
	<u>FREDERIKSMANN</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>% OF YEAR TOTAL</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	

SOURCES: GAA, PA 78/94-102

CONTINUED...

TABLE II.1.4 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1791	ST. PETERSBURG	1	-	-	-	-	-	-	-	2	2	-	-	9
	NARVA	-	-	-	-	-	2	11	1	4	8	2	-	32
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	2
	RIGA	-	2	2	1	-	5	7	11	5	2	4	4	47
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	5
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	2
<u>% OF YEAR TOTAL</u>	<u>-2</u>	<u>-2</u>	<u>-4</u>	<u>-2</u>	<u>-1</u>	<u>-8</u>	<u>-20</u>	<u>-14</u>	<u>-13</u>	<u>-16</u>	<u>-7</u>	<u>-8</u>	<u>-100</u>	
1792 <sup>13</sup>	ST. PETERSBURG	1	-	1	-	-	-	-	1	-	-	-	1	7
	NARVA	-	-	-	-	-	-	-	1	-	-	-	-	1
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIGA	-	-	-	5	1	5	5	15	13	23	11	5	90
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>% OF YEAR TOTAL</u>	<u>-1</u>	<u>-</u>	<u>-1</u>	<u>-5</u>	<u>-1</u>	<u>-5</u>	<u>-5</u>	<u>-12</u>	<u>-13</u>	<u>-23</u>	<u>-11</u>	<u>-7</u>	<u>-100</u>	
1793 <sup>14</sup>	ST. PETERSBURG	-	-	-	-	-	-	-	1	3	2	-	-	8
	NARVA	-	-	-	-	-	-	1	1	1	1	-	-	6
	REVAL	-	-	-	-	-	-	1	1	1	-	-	-	3
	ESTONIA	-	-	-	-	-	-	-	-	1	-	-	-	3
	RIGA	3	3	1	1	-	3	15	8	7	4	2	3	54
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	1
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	1	-	1
<u>COWSLAND</u>	<u>-</u>	<u>-</u>	<u>-1</u>	<u>-2</u>	<u>-6</u>	<u>-</u>	<u>-1</u>	<u>-2</u>	<u>-</u>	<u>-</u>	<u>-1</u>	<u>-2</u>	<u>-20</u>	
<u>% OF YEAR TOTAL</u>	<u>-4</u>	<u>-3</u>	<u>-2</u>	<u>-5</u>	<u>-6</u>	<u>-4</u>	<u>-12</u>	<u>-14</u>	<u>-15</u>	<u>-10</u>	<u>-5</u>	<u>-6</u>	<u>-100</u>	
1797 <sup>15</sup>	ST. PETERSBURG	NO DATA AVAILABLE												
	NARVA	-	-	-	-	-	-	5	3	1	-	2	1	16
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	2
	RIGA	2	2	4	2	-	-	2	6	3	12	9	6	53
	VIBORG	-	-	-	-	-	-	-	-	-	-	1	-	1
	FREDERIKSHAMN	-	-	-	-	-	-	1	-	-	-	-	-	1
<u>COWSLAND</u>	<u>-1</u>	<u>-1</u>	<u>-1</u>	<u>-2</u>	<u>-2</u>	<u>-2</u>	<u>-1</u>	<u>-1</u>	<u>-</u>	<u>-1</u>	<u>-2</u>	<u>-2</u>	<u>-22</u>	
<u>% OF YEAR TOTAL</u>	<u>-4</u>	<u>-4</u>	<u>-6</u>	<u>-6</u>	<u>-4</u>	<u>-3</u>	<u>-10</u>	<u>-10</u>	<u>-6</u>	<u>-14</u>	<u>-15</u>	<u>-8</u>	<u>-100</u>	

SOURCES: GAA, PA 76/94-102

CONTINUED.

TABLE 11.1.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL	
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1129	ST. PETERSBURG	NO DATA AVAILABLE												0	
	MARVA	-	-	-	5	-	-	-	-	-	-	-	-	-	1
	NEVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	ESTONIA	7	2	5	2	4	4	9	12	6	3	-	-	-	61
	RIGA	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	-	2
CORRLAND	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
<b>% OF YEAR TOTAL</b>		2	2	8	18	11	6	12	15	1	3	1	1	5	23
1130	ST. PETERSBURG	NO DATA AVAILABLE												-	
	MARVA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	NEVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	11	-	11	-	-	-	-	-	-	-	-	-	-	11
	RIGA	-	-	-	-	-	11	-	10	-	-	11	-	-	33
	VIBORG	-	-	-	11	-	-	-	-	-	-	-	-	-	22
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CORRLAND	11	-	-	-	-	-	-	-	-	-	-	-	-	11	
<b>% OF YEAR TOTAL</b>		22	-	11	-	-	11	22	-	-	11	-	-	33	
1180	ST. PETERSBURG	NO DATA AVAILABLE												11	
	MARVA	-	-	-	-	-	-	1	4	-	-	-	-	-	1
	NEVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	-	-	4
	RIGA	-	1	-	1	1	-	12	11	17	4	3	1	1	58
	VIBORG	-	-	-	-	-	-	-	-	1	1	-	-	-	3
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	1	1	-	-	-	3
CORRLAND	-	-	-	-	-	-	-	-	1	1	-	-	-	2	
<b>% OF YEAR TOTAL</b>		-	1	-	3	-	11	22	11	7	3	1	3	22	
1001	ST. PETERSBURG	NO DATA AVAILABLE												1	
	MARVA	-	-	-	-	-	1	-	-	-	-	-	-	-	1
	NEVAL	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	ESTONIA	-	-	-	-	-	-	-	-	1	-	-	-	-	1
	RIGA	1	3	-	-	1	5	19	7	5	8	-	-	-	52
	VIBORG	-	-	-	-	-	1	-	-	1	-	-	-	-	5
	FREDERIKSHAMN	-	-	-	-	-	1	-	-	-	-	-	-	-	3
CORRLAND	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
<b>% OF YEAR TOTAL</b>		1	3	-	3	7	19	12	12	10	3	1	1	33	

CONTINUED...



TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL								
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC									
1898	ST. PETERSBURG																					
	MARVA	NO DATA AVAILABLE																				
	REVAL																					
	ESTONIA	1			1																	
	RIGA	2	5	7			1					5		13								
	VIBORG																					
	FREDERIKSHAVN																					
	COPENHAGEN																					
	<u>TOTAL</u>	<u>4</u>	<u>5</u>	<u>7</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>5</u>	<u>13</u>	<u>13</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>10</u>
1899	ST. PETERSBURG																					
	MARVA	NO DATA AVAILABLE																				
	REVAL																					
	ESTONIA																					
	RIGA		3		6	3						12		3								
	VIBORG													3								
	FREDERIKSHAVN													3								
	COPENHAGEN																					
	<u>TOTAL</u>	<u>3</u>	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>12</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>31</u>
1900 <sup>17</sup>	ST. PETERSBURG																					
	MARVA	NO DATA AVAILABLE																				
	REVAL																					
	ESTONIA																					
	RIGA																					
	VIBORG																					
	FREDERIKSHAVN																					
	COPENHAGEN																					
	<u>TOTAL</u>	<u>3</u>	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>12</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>31</u>
1901	ST. PETERSBURG																					
	MARVA	NO DATA AVAILABLE																				
	REVAL																					
	ESTONIA																					
	RIGA																					
	VIBORG																					
	FREDERIKSHAVN																					
	COPENHAGEN																					
	<u>TOTAL</u>	<u>3</u>	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>12</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>31</u>
1902	ST. PETERSBURG																					
	MARVA	NO DATA AVAILABLE																				
	REVAL																					
	ESTONIA																					
	RIGA																					
	VIBORG																					
	FREDERIKSHAVN																					
	COPENHAGEN																					
	<u>TOTAL</u>	<u>3</u>	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>12</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>31</u>
1903	ST. PETERSBURG																					
	MARVA	NO DATA AVAILABLE																				
	REVAL																					
	ESTONIA																					
	RIGA																					
	VIBORG																					
	FREDERIKSHAVN																					
	COPENHAGEN																					
	<u>TOTAL</u>	<u>3</u>	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>12</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>31</u>
1904	ST. PETERSBURG																					
	MARVA	NO DATA AVAILABLE																				
	REVAL																					
	ESTONIA																					
	RIGA																					
	VIBORG																					
	FREDERIKSHAVN																					
	COPENHAGEN																					
	<u>TOTAL</u>	<u>3</u>	<u>3</u>	<u>6</u>	<u>6</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>12</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>31</u>

CONTINUED...

SOURCES: GAA, PA 78/94-102

TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	COUNTRIES OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												NO. OF RUSSIA SHIPS TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1918	ST. PETERSBURG	-	1	1	-	-	2	7	-	6	3	-	24	
	MARVA	-	-	-	-	-	-	-	-	-	1	1	6	
	REVAL	-	-	-	-	-	-	-	1	2	-	-	3	
	ESTONIA	-	-	-	-	-	-	-	-	-	-	-	1	
	RIGA	-	3	3	1	2	2	10	8	3	7	3	47	
	VIBORG	-	-	-	-	-	-	-	-	-	1	1	4	
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	
COWSLAND	-	-	-	-	2	1	3	1	1	1	1	12		
<b>TOTAL</b>		1	5	4	4	6	23	12	14	14	5	5	108	
1918	ST. PETERSBURG	-	-	-	-	-	-	1	2	4	-	13		
	MARVA	-	-	-	-	-	1	1	1	3	1	11		
	REVAL	-	-	-	-	-	-	-	-	-	-	2		
	ESTONIA	-	-	-	-	-	-	-	-	-	-	2		
	RIGA	-	1	2	-	-	5	5	6	13	13	9	56	
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	1	
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	1	
COWSLAND	-	-	-	-	2	1	1	2	2	1	1	12		
<b>TOTAL</b>		1	3	3	3	10	10	13	23	18	3	3	108	
1919	ST. PETERSBURG	-	-	-	-	-	1	3	12	7	2	30		
	MARVA	-	-	-	-	-	-	-	-	-	-	1		
	REVAL	-	-	-	-	-	-	-	-	7	-	1		
	ESTONIA	-	-	-	-	-	-	-	-	-	-	1		
	RIGA	-	-	-	-	9	18	7	9	5	2	2	57	
	VIBORG	-	-	-	-	-	-	-	-	-	-	-	-	
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-	-	
COWSLAND	-	-	-	-	2	1	1	2	2	1	1	12		
<b>TOTAL</b>		1	3	3	3	10	11	23	23	5	5	5	108	
1918	ST. PETERSBURG	2	4	1	1	1	3	3	2	1	2	17		
	MARVA	1	-	1	-	-	2	5	1	-	3	18		
	REVAL	-	-	-	-	-	-	-	-	-	-	-		
	ESTONIA	-	-	-	-	-	1	1	-	2	-	4		
	RIGA	1	3	-	-	2	2	10	7	8	3	40		
	VIBORG	-	-	-	-	-	-	-	1	1	1	4		
	FREDERIKSHAMN	-	-	-	-	-	-	-	-	-	-	-		
COWSLAND	-	-	-	-	2	1	2	2	2	2	2	14		
<b>TOTAL</b>	4	7	4	4	6	11	21	21	13	9	9	108		

CONTINUED...

SOURCES: GAA, PA 76/94-102



TABLE II.1.A BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM DISTRIBUTED ACCORDING TO PORTS OF DEPARTURE AND REGISTERED MONTH OF ARRIVAL IN PERCENTAGES OF BOTH

YEAR	PORTS OF DEPARTURE	PERCENTAGE OF NUMBER OF SHIPS												% OF RUSSIA TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1923 <sup>19</sup>	ST. PETERSBURG	-	-	1	-	-	-	-	-	-	-	-	-	1
	NARVA	-	-	-	1	-	-	3	4	4	4	2	2	20
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	1	-	1	-	1	-	3
	RIGA	-	-	-	4	1	-	12	15	11	5	10	1	59
	VIBORG	-	-	-	-	-	-	-	1	-	1	-	-	2
	FREDERIKSHAMN	-	-	-	-	-	-	-	1	1	-	-	-	2
	COURLAND	-	-	-	-	-	-	2	8	3	-	-	-	13
<b>% OF YEAR TOTAL</b>	-	-	1	5	2	-	24	24	17	10	13	2	100	
1924	ST. PETERSBURG	NO DATA AVAILABLE												-
	NARVA	-	-	-	-	-	2	2	8	12	3	-	1	29
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	1	-	3	-	-	-	4
	RIGA	1	1	-	1	2	14	3	4	11	5	-	1	47
	VIBORG	-	-	-	-	-	-	-	1	4	-	-	-	5
	FREDERIKSHAMN	-	-	-	-	-	-	1	-	1	-	-	-	2
	COURLAND	-	-	1	-	2	4	-	-	1	1	-	-	10
<b>% OF YEAR TOTAL</b>	1	1	1	1	5	21	8	13	34	10	11	2	100	
1925 <sup>20</sup>	ST. PETERSBURG	NO DATA AVAILABLE												-
	NARVA	-	-	-	-	-	3	7	14	3	-	-	-	29
	REVAL	-	-	-	-	-	-	-	-	-	-	-	-	-
	ESTONIA	-	-	-	-	-	-	-	3	-	-	-	-	3
	RIGA	-	-	3	-	-	5	5	18	1	-	-	-	35
	VIBORG	-	-	-	-	-	-	-	1	-	-	-	-	1
	FREDERIKSHAMN	-	-	-	-	-	-	-	1	-	-	-	-	1
	COURLAND	-	-	-	-	11	7	3	5	-	-	-	-	27
<b>% OF YEAR TOTAL</b>	-	-	3	-	11	12	12	45	5	-	-	-	100	

SOURCES: GAA, PA 78/94-102



TABLE II.2 BREAKDOWN OF BAL TIC SHIPPING FROM RUSSIA TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1708 <sup>2</sup>	NO DATA AVAILABLE																											
1709 <sup>2</sup>	3	25	154	5	1	8	112	3	2	17	486	19	2	17	626	19	4	33	1634	57	-	-	-	-	-	-	-	
1710 <sup>3</sup>	4	15	202	3	4	15	620	10	13	50	3428	54	3	12	1052	17	1	4	460	7	1	4	554	9	-	-	-	
1711 <sup>4</sup>	5	83	284	56	-	-	-	-	1	17	220	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1712 <sup>5</sup>	6	67	306	42	3	33	420	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1713 <sup>4</sup>	5	16	318	5	7	23	1146	17	14	45	3488	51	4	13	1404	21	1	3	462	7	-	-	-	-	-	-	-	
1714 <sup>6</sup>	19	54	1356	26	7	20	868	17	4	11	1120	22	4	11	1362	26	1	3	492	9	-	-	-	-	-	-	-	
1715 <sup>7</sup>	13	39	884	19	13	39	1906	40	5	15	1264	27	2	6	690	15	-	-	-	-	-	-	-	-	-	-	-	
1716	27	25	2148	9	32	29	4900	22	28	26	7076	31	14	13	4878	22	7	6	3108	14	1	1	520	2	-	-	-	
1717	22	17	1564	6	37	29	5599	20	51	39	12842	47	14	11	4654	17	6	5	2798	10	-	-	-	-	-	-	-	
1718	9	9	626	3	27	28	3972	17	34	35	9020	39	24	25	8492	37	2	2	864	4	-	-	-	-	-	-	-	
1719	22	21	1694	7	26	25	3958	17	34	32	8759	37	15	14	9232	22	9	8	3956	17	-	-	-	-	-	-	-	
1720	35	21	2372	6	32	20	5160	13	44	27	11252	28	23	14	8306	21	29	18	12862	32	-	-	-	-	-	-	-	
1721	32	19	2198	5	33	20	4906	12	47	28	11678	28	28	17	10110	24	29	17	12966	31	-	-	-	-	-	-	-	
1722	22	12	1690	4	51	27	7762	16	53	28	13234	28	34	18	12334	26	27	14	11868	25	1	1	560	1	-	-	-	
1723	24	15	1818	5	45	29	7034	19	42	27	10340	28	23	15	8162	22	21	14	9254	25	-	-	-	-	-	-	-	
1724	48	21	3530	7	71	31	10806	21	39	17	9948	19	46	20	16390	32	24	11	10454	20	-	-	-	-	-	-	-	
1725	55	16	4206	6	106	32	16216	21	81	24	20594	27	66	20	23178	31	26	8	11346	15	-	-	-	-	-	-	-	
1726	40	12	3120	4	116	35	17374	24	82	25	20690	28	73	22	25650	35	16	5	6996	9	-	-	-	-	-	-	-	
1727	21	8	1548	3	85	33	13270	23	79	31	19720	34	67	26	22234	38	4	2	1724	3	-	-	-	-	-	-	-	
1728	29	10	2428	4	99	33	15324	23	104	35	26334	40	62	21	20064	31	-	-	-	-	2	1	1072	2	-	-	-	
1729	13	6	1120	2	59	26	9476	16	88	38	22264	39	62	27	20548	36	8	2	3586	6	1	0	546	1	-	-	-	
1730	21	6	1640	2	104	29	16410	20	152	43	38854	47	74	21	24024	29	2	1	868	1	1	0	520	1	-	-	-	
1731	21	6	1742	2	111	29	17504	20	159	42	39386	45	86	23	28264	32	1	0	406	0	1	0	508	1	-	-	-	
1732	22	6	1838	2	70	20	11096	13	154	44	38529	45	105	30	34602	40	1	0	402	0	-	-	-	-	-	-	-	
1733	21	6	1612	2	66	20	10628	13	141	42	36050	43	103	31	34154	41	3	1	1272	2	-	-	-	-	-	-	-	
1734	14	4	1054	1	109	28	16650	18	129	34	32228	34	130	34	43080	46	2	1	950	1	1	0	586	1	-	-	-	
1735	8	3	678	1	75	25	12078	16	93	31	23310	30	119	40	35134	51	4	1	1752	2	-	-	-	-	-	-	-	
1736	18	6	1518	2	74	25	12300	17	108	37	27228	37	99	30	25742	41	3	1	1334	2	1	0	540	1	-	-	-	
1737	15	5	1118	1	82	25	13264	16	116	36	29042	36	109	34	36300	45	3	1	1296	2	-	-	-	-	-	-	-	
1738	19	4	1620	2	105	24	17174	16	167	36	42074	39	134	31	44694	41	5	1	2166	2	-	-	-	-	-	-	-	
1739	13	4	924	1	94	27	15216	17	116	33	29312	33	113	32	37820	42	11	3	4838	5	2	1	1200	1	-	-	-	
1740	42	10	3274	3	140	33	22058	21	93	22	23278	22	123	29	41436	40	19	4	8714	8	9	2	4922	5	1	0	708	
1741	47	11	3656	4	146	35	22366	23	91	22	22768	24	128	30	43388	45	9	2	3944	4	1	0	552	1	-	-	-	
1742	48	14	3718	5	80	23	12354	16	146	41	35614	46	77	22	25522	33	1	0	416	1	-	-	-	-	-	-	-	
1743 <sup>10</sup>	30	8	2384	3	77	21	12152	13	120	33	30000	33	132	36	44328	49	3	1	1294	1	-	-	-	-	-	-	-	
1744 <sup>8</sup>	26	9	2126	3	114	38	17054	25	81	27	20160	30	78	26	26436	39	3	1	1246	2	-	-	-	-	-	-	-	
1745	19	7	1492	2	68	24	10424	15	82	29	21054	30	109	39	37182	53	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGES IN THIS SIZE CATEGORY

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY

II = % 'II' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

TABLE II.2 BREAKDOWN OF BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1746	20	9	1666	3	57	23	9172	14	67	27	16904	27	93	38	31530	50	6	2	2706	4	-	-	-	-	2	1	1312	2
1747	32	13	2548	4	78	31	12258	21	61	24	15074	26	78	31	26202	45	5	2	2116	4	1	0	516	1	-	-	-	-
1748	25	10	2016	4	71	30	10884	20	73	31	18160	33	67	28	22682	41	1	0	408	1	2	1	1028	2	-	-	-	-
1749	26	10	2208	3	74	27	10848	17	82	30	20684	32	89	33	30230	47	1	0	408	1	-	-	-	-	-	-	-	-
1750	26	10	2258	3	62	23	9168	14	52	34	23414	36	86	32	29342	45	2	1	896	1	-	-	-	-	-	-	-	-
1751	16	7	1720	2	53	23	7874	13	59	26	15436	26	98	43	33478	56	1	0	408	1	3	1	1582	3	-	-	-	-
1752 <sup>9/10</sup>	26	10	2209	4	76	29	11342	18	62	24	15564	25	94	36	32302	52	2	1	636	1	-	-	-	-	-	-	-	-
1753	20	8	1424	2	80	31	12362	20	65	27	16980	27	87	34	29910	48	3	1	1206	2	-	-	-	-	-	-	-	-
1754	24	9	1952	3	89	32	13560	21	68	25	16416	28	90	33	31100	48	4	1	1654	3	-	-	-	-	-	-	-	-
1755	29	14	2324	5	44	22	6824	14	47	23	11180	23	74	37	25828	52	8	4	3332	7	-	-	-	-	-	-	-	-
1756	20	13	1726	5	53	34	8082	23	48	31	11746	34	33	21	11656	34	3	2	1310	4	-	-	-	-	-	-	-	-
1757	10	6	820	2	57	35	8784	23	49	30	11850	31	42	26	14768	38	4	2	1684	4	-	-	-	-	1	1	800	2
1758	10	5	658	2	73	39	11138	25	43	23	10394	23	54	29	16070	43	7	4	2852	6	-	-	-	-	-	-	-	-
1759	5	2	452	1	69	29	11042	18	62	26	15500	25	89	38	31644	51	9	4	3704	6	-	-	-	-	-	-	-	-
1760	5	2	446	1	66	32	10868	20	57	28	13646	25	61	29	21860	40	18	9	7666	14	-	-	-	-	-	-	-	-
1761	9	4	730	1	80	34	13444	23	60	26	14474	24	69	30	24312	41	13	6	5450	9	2	1	1068	2	-	-	-	-
1762	2	1	116	0	70	30	12042	19	64	27	15514	24	69	29	24466	38	25	11	10600	16	3	1	1616	2	1	0	618	1
1763	8	3	686	1	61	33	13540	22	78	32	19116	31	57	23	19962	33	19	8	7932	13	-	-	-	-	-	-	-	-
1764	5	2	448	1	67	27	10912	17	83	33	19920	30	73	29	25634	39	21	8	8746	13	-	-	-	-	-	-	-	-
1765	1	0	90	0	52	23	8776	14	72	32	17370	28	75	34	26188	42	21	9	8776	14	1	0	532	1	-	-	-	-
1766	8	3	712	1	74	27	11674	16	85	31	20954	28	87	31	30572	41	24	9	9958	13	-	-	-	-	-	-	-	-
1767	-	-	-	-	58	30	9586	18	58	30	13930	27	54	28	18958	36	22	11	9266	16	1	1	580	1	-	-	-	-
1768	2	1	154	0	82	32	13262	20	70	28	17234	25	72	28	25552	38	26	10	10786	16	1	0	598	1	-	-	-	-
1769	7	2	612	1	91	30	15008	19	89	30	21806	27	77	26	27718	34	32	11	13458	17	2	1	1090	1	1	0	800	1
1770	1	0	80	0	50	23	8524	13	65	29	15756	25	70	32	25112	39	34	15	14220	22	1	0	560	1	-	-	-	-
1771	2	1	152	0	67	34	11214	25	53	30	12362	28	37	21	13222	30	16	9	6698	15	-	-	-	-	1	1	670	2
1772	8	3	638	1	122	39	19800	26	85	28	20308	26	60	19	21290	28	30	10	12550	16	4	1	2196	3	-	-	-	-
1773	8	3	700	1	111	40	17470	24	60	21	14636	20	57	20	20488	28	40	14	16886	23	3	1	1612	2	1	0	620	1
1774	7	2	578	1	106	34	17450	20	83	26	19514	23	61	19	21892	26	51	16	21718	25	5	2	2860	3	2	1	1298	2
1775 <sup>11</sup>	1	4	90	2	17	63	3028	58	9	33	2068	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	5	3	530	1	79	34	12778	20	50	22	12302	19	34	15	12236	19	57	25	24358	38	2	1	1186	2	1	0	692	1
1777	2	1	156	0	82	33	13544	19	61	25	15096	21	40	16	14238	20	59	24	25376	36	2	1	1066	2	2	1	1348	2
1778	6	2	502	1	95	36	15266	21	60	23	14276	20	39	15	13466	19	60	23	25990	36	1	0	538	1	4	2	2740	4
1779 <sup>12</sup>	5	2	416	1	75	33	11766	19	64	28	15046	24	19	8	6636	11	57	25	24782	40	2	1	1024	2	3	1	2264	4
1780	1	0	66	0	57	25	9468	14	78	34	18370	27	22	10	7758	11	57	22	25252	37	9	4	4884	7	3	1	2000	3
1781	16	16	1254	6	44	43	6666	33	31	30	7314	36	7	7	2408	12	2	2	878	4	1	1	508	2	2	2	1452	7
1782	18	8	1456	3	120	53	17780	39	55	24	12688	28	10	4	3548	8	21	6	9284	20	1	0	562	1	-	-	-	-
1783	10	4	898	1	102	38	15930	23	78	29	18778	28	23	9	7962	12	52	19	23004	34	3	1	1538	2	-	-	-	-
1784	5	2	320	0	76	29	12568	17	85	33	20678	29	28	11	9708	13	63	24	27788	38	1	0	530	1	1	0	706	1
1785	2	1	192	0	69	30	11256	17	64	28	15720	24	25	11	8260	13	66	26	29134	44	1	0	516	1	-	-	-	-
1786	7	3	592	1	49	23	7700	12	56	27	13682	21	26	12	6020	14	70	33	31416	50	1	0	508	1	-	-	-	-

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'II' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

TABLE II.C BREAKDOWN OF BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +				
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
1787	3	1	220	0	90	39	13864	21	46	20	11128	17	18	8	6252	10	73	32	32536	50	1	0	504	1	-	-	-	-	
1788	5	2	446	1	54	25	6516	14	64	30	16006	26	16	8	5430	9	72	34	32144	51	-	-	-	-	-	-	-	-	
1789	10	4	544	1	51	21	8254	11	78	32	19248	27	23	10	8216	11	77	32	34184	47	3	1	1528	2	-	-	-	-	
1790	11	4	556	1	72	27	11604	16	72	27	17284	23	30	11	10702	14	77	29	34286	46	-	-	-	-	-	-	-	-	
1791 <sup>13</sup>	10	5	756	1	45	21	7276	11	54	25	13288	20	28	13	5934	15	79	37	35004	53	-	-	-	-	-	-	-	-	
1792	7	3	558	1	54	24	9714	13	58	26	13966	21	22	10	7802	12	79	36	35330	53	1	0	506	1	-	-	-	-	
1793	25	13	1960	5	87	46	12952	35	48	26	11464	31	12	6	4128	11	16	9	6918	18	-	-	-	-	-	-	-	-	
1794	17	7	1410	2	101	43	15194	25	35	15	8736	14	8	3	2734	5	73	31	32398	54	-	-	-	-	-	-	-	-	
1795 <sup>13</sup>	6	12	476	5	33	65	4836	58	10	20	2262	27	1	2	392	5	1	2	410	5	-	-	-	-	-	-	-	-	
1796 <sup>14</sup>	32	12	2762	6	152	59	22300	47	49	19	11452	24	10	4	3422	7	15	6	6540	14	1	0	532	1	-	-	-	-	
1797 <sup>15</sup>	6	3	440	1	102	56	15638	39	37	20	9040	23	17	9	6006	15	20	11	8926	22	-	-	-	-	-	-	-	-	
1798	14	13	1054	5	64	53	9674	49	22	20	5020	24	4	4	1344	7	7	6	3106	15	-	-	-	-	-	-	-	-	
1799	1	11	100	7	6	57	816	60	2	22	444	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1800	3	5	292	2	35	56	5378	39	17	27	3788	27	-	-	-	-	3	5	1284	9	1	2	508	4	4	6	2666	19	
1801	6	11	544	5	29	51	4194	38	17	30	3932	36	2	4	650	6	1	2	416	4	-	-	-	-	2	4	1292	12	
1802	9	4	900	1	109	45	16954	25	61	25	14736	22	14	6	4836	7	8	3	3544	5	6	2	3308	5	35	14	23934	39	
1803 <sup>16</sup>	10	5	856	2	112	59	17320	44	49	26	11712	30	7	4	2370	6	-	-	-	-	4	2	2092	5	7	4	5280	13	
1804	7	8	560	3	59	66	9344	58	18	20	4058	25	4	4	1364	8	-	-	-	-	-	-	-	-	1	1	802	5	
1805	19	10	1630	4	122	63	19406	53	40	21	9482	26	8	4	2658	7	4	2	1826	5	1	1	586	2	1	1	802	2	
1806	3	4	268	2	36	54	5104	39	21	31	5066	39	4	6	1260	10	1	1	416	3	2	3	1044	8	-	-	-	-	
1807	7	22	560	12	19	59	2474	53	5	16	1214	26	1	3	352	8	-	-	-	-	-	-	-	-	-	-	-	-	
1808 <sup>17</sup>																													
1809																													
1810																													
1811																													
1812																													
1813																													
1814 <sup>6</sup>	14	12	1110	5	55	45	8012	38	34	30	7944	38	10	9	3494	17	1	1	406	2	-	-	-	-	-	-	-	-	
1915	22	14	1742	6	75	48	11444	39	45	29	10206	35	5	3	1808	6	3	2	1286	4	2	1	1094	4	3	2	1916	6	
1816 <sup>18</sup>	26	12	1922	4	109	50	16520	38	52	24	12512	28	13	6	4290	10	4	2	1742	4	5	2	2778	6	7	3	4384	10	
1817	50	10	4682	4	284	49	44294	38	173	30	41316	36	34	6	11324	10	13	2	5666	5	2	0	1066	1	11	2	7972	7	
1818	9	9	708	7	49	51	7449	32	22	23	5272	23	4	4	1292	6	1	1	408	2	2	2	1188	5	9	9	6634	29	
1819	16	13	1272	5	70	57	10570	42	24	20	5452	22	2	2	722	1	3	2	1412	6	1	1	510	2	7	6	5018	20	
1820	11	9	922	3	79	61	12184	44	23	18	5412	19	4	3	1462	5	4	3	1760	6	-	-	-	-	8	6	6160	22	
1821	14	11	1188	4	71	55	11186	42	32	25	7458	28	3	2	1030	4	1	1	486	2	1	1	520	2	6	5	4832	18	
1822	8	13	648	5	34	55	4904	35	11	18	2468	18	3	5	992	7	-	-	-	-	-	-	-	-	6	10	5000	36	
1823 <sup>19</sup>	12	12	894	4	45	65	6976	32	30	30	7020	32	6	6	2028	9	1	1	496	2	2	2	1072	5	4	4	3392	16	
1824	8	9	590	3	53	61	8676	52	18	21	4058	24	6	7	2004	12	-	-	-	-	1	1	542	3	1	1	858	5	
1825 <sup>20</sup>	10	19	760	8	32	59	5032	56	8	15	1710	19	3	6	1086	12	1	2	440	5	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'II' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

TABLE II.2.A BREAKDOWN OF SHIPPING FROM ST. PETERSBURG TO AMSTERDAM BY SIZE OF CARGO IN TCNS

SIZES IN TCNS	A 0 - 100				B 101 - 200				C 201 - 300				C 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1708	NO DATA AVAILABLE																											
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1710 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1713 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1714 <sup>6</sup>	3	4	234	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1716	1	11	70	4	6	67	992	62	2	22	540	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1717	3	38	204	21	4	50	540	54	1	13	250	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1718	1	13	70	5	1	13	140	8	5	63	1280	69	1	13	340	18	-	-	-	-	-	-	-	-	-	-	-	
1719 <sup>24</sup>	7	47	552	30	7	47	1010	56	1	7	252	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1720	8	42	566	16	4	21	668	19	3	16	720	21	3	16	1120	32	1	9	420	12	-	-	-	-	-	-	-	
1721	10	71	714	49	2	14	262	18	2	14	500	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1722	9	50	620	29	5	28	576	24	3	17	730	30	1	6	400	17	-	-	-	-	-	-	-	-	-	-	-	
1723	8	38	596	19	6	29	792	25	6	29	1410	45	1	5	340	11	-	-	-	-	-	-	-	-	-	-	-	
1724	23	55	1712	32	11	26	1496	28	7	17	1780	33	1	2	340	6	-	-	-	-	-	-	-	-	-	-	-	
1725	25	60	1926	42	12	29	1968	33	5	12	1198	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1726	18	31	1458	17	31	53	4338	52	9	15	2284	27	1	2	308	4	-	-	-	-	-	-	-	-	-	-	-	
1727	9	31	722	19	14	54	2082	55	3	12	684	18	1	4	302	8	-	-	-	-	-	-	-	-	-	-	-	
1728	11	26	910	15	28	65	4060	68	4	9	964	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1729	2	14	170	7	10	71	1648	72	2	14	460	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1730	7	26	620	15	14	52	1934	49	6	22	1376	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1731	6	19	504	9	17	53	2508	47	7	22	1636	31	2	6	682	13	-	-	-	-	-	-	-	-	-	-	-	
1732	7	27	602	14	10	38	1558	35	7	27	1562	35	2	8	716	16	-	-	-	-	-	-	-	-	-	-	-	
1733	10	53	802	30	6	32	1004	37	2	11	460	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1734	5	14	376	9	23	64	2980	50	7	19	1558	30	1	3	324	6	-	-	420	18	-	-	-	-	-	-	-	
1735	6	25	514	14	12	50	1846	50	6	25	1298	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1736	11	31	940	18	16	46	2190	42	8	23	2136	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1737	6	12	504	5	19	37	2802	26	23	44	5998	56	4	8	1404	13	-	-	-	-	-	-	-	-	-	-	-	
1738	9	11	784	4	28	33	4182	23	32	38	8110	45	15	18	5010	28	-	-	-	-	-	-	-	-	-	-	-	
1739	2	6	194	3	15	47	2246	36	13	41	3110	50	2	6	648	10	-	-	-	-	-	-	-	-	-	-	-	
1740	9	20	754	9	17	39	2348	29	12	27	3108	38	6	14	1976	24	-	-	-	-	-	-	-	-	-	-	-	
1741	9	9	650	3	28	29	4274	18	25	26	6388	26	29	30	5806	40	6	6	2628	11	1	1	552	2	-	-	-	
1742	6	13	488	5	17	36	2356	25	18	38	4614	48	5	11	1672	18	1	2	416	4	-	-	-	-	-	-	-	
1743	10	25	894	13	18	45	2540	36	7	17	1754	25	3	7	980	14	2	5	886	13	-	-	-	-	-	-	-	
1744	7	13	554	7	36	68	5036	61	8	15	1984	24	2	4	704	9	-	-	-	-	-	-	-	-	-	-	-	
1745	9	29	648	16	20	65	2816	71	2	6	482	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'II' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

TABLE II.2.A BREAKDOWN OF SHIPPING FROM ST. PETERSBURG TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1746	6	19	520	9	10	32	1436	24	11	35	2706	45	4	13	1376	23	-	-	-	-	-	-	-	-	-	-	-	-
1747	15	26	1260	15	32	36	4674	54	8	14	1836	21	-	-	-	-	2	4	656	10	-	-	-	-	-	-	-	
1748	9	30	758	17	15	50	1900	42	4	13	928	21	1	3	370	8	-	-	-	-	1	3	544	12	-	-	-	-
1749	1	9	256	5	25	76	3152	67	5	15	1294	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1750	6	30	556	18	10	50	1492	49	4	20	1010	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1751	12	32	968	15	16	43	2244	38	6	16	1492	25	2	5	682	12	-	-	-	-	1	3	512	9	-	-	-	-
1752	7	16	636	10	29	67	4122	53	7	16	1816	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1753	6	17	562	8	34	72	4890	73	5	11	1226	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1754	6	17	436	11	27	77	3750	80	2	6	424	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1755	9	39	716	25	12	52	1670	56	2	9	432	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1756	16	35	1436	24	25	54	3440	57	5	11	1172	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1757	4	9	306	4	32	68	4844	57	5	17	1842	22	2	4	710	8	-	-	-	-	-	-	-	-	1	2	800	9
1758	1	1	58	1	28	76	4116	65	7	19	1884	30	1	3	304	5	-	-	-	-	-	-	-	-	-	-	-	
1759	-	-	-	-	29	71	4824	63	12	29	2884	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1760	1	4	100	2	15	54	2498	43	8	29	1826	31	4	14	1430	24	-	-	-	-	-	-	-	-	-	-	-	
1761	1	7	72	2	6	40	960	29	6	40	1570	47	2	13	724	22	-	-	-	-	-	-	-	-	-	-	-	
1762	2	5	116	2	23	62	3930	51	6	16	1594	21	5	14	1616	21	1	3	420	5	-	-	-	-	-	-	-	
1763	2	5	144	2	15	41	2528	30	15	41	3890	46	4	11	1392	17	1	3	462	5	-	-	-	-	-	-	-	
1764	-	-	-	-	17	74	2748	66	6	26	1440	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1765	-	-	-	-	13	50	2398	38	6	23	1490	24	7	27	2382	38	-	-	-	-	-	-	-	-	-	-	-	
1766	1	3	100	1	13	43	2178	33	11	37	2724	41	5	17	1666	25	-	-	-	-	-	-	-	-	-	-	-	
1767	-	-	-	-	17	40	2848	30	21	49	5110	54	5	12	1588	17	-	-	-	-	-	-	-	-	-	-	-	
1768	-	-	-	-	10	25	1888	21	19	53	4766	53	7	19	2380	26	-	-	-	-	-	-	-	-	-	-	-	
1769	3	7	276	3	16	36	2744	26	21	47	5108	49	2	4	640	6	1	2	444	4	1	2	510	5	1	2	800	8
1770	-	-	-	-	10	45	1686	33	8	36	1974	39	4	18	1374	27	-	-	-	-	-	-	-	-	-	-	-	
1771	2	7	162	3	11	41	1894	33	11	41	2714	47	3	11	998	17	-	-	-	-	-	-	-	-	-	-	-	
1772	1	3	98	1	16	44	2592	36	19	50	4272	59	1	3	312	4	-	-	-	-	-	-	-	-	-	-	-	
1773	3	7	262	3	24	60	3840	51	12	30	3022	40	1	2	392	5	-	-	-	-	-	-	-	-	-	-	-	
1774	2	5	190	2	15	41	2486	31	15	41	3610	45	4	11	1346	17	1	3	440	5	-	-	-	-	-	-	-	
1775	1	4	90	2	17	63	3028	58	9	33	2068	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1776	-	-	-	-	12	75	1784	55	4	25	976	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1777	1	2	40	1	32	76	5100	69	9	19	1944	26	1	2	320	4	-	-	-	-	-	-	-	-	-	-	-	
1778	4	6	390	3	45	63	7558	54	16	23	3708	27	5	7	1748	13	1	1	500	4	-	-	-	-	-	-	-	
1779	2	4	164	2	38	69	5940	55	10	18	2518	23	-	-	-	-	4	7	1756	16	1	2	520	5	-	-	-	
1780	1	2	56	1	27	51	4230	37	20	38	4956	44	3	6	984	9	-	-	-	-	2	4	1052	9	-	-	-	
1781	2	11	154	5	8	44	1264	35	7	39	1828	51	1	6	320	9	-	-	-	-	-	-	-	-	-	-	-	
1782	3	10	268	5	17	55	2364	43	8	26	1852	34	3	10	1016	19	-	-	-	-	-	-	-	-	-	-	-	
1783	1	4	72	1	8	35	1438	27	10	43	2320	43	3	13	1016	19	1	4	500	9	-	-	-	-	-	-	-	
1784	1	2	20	0	23	36	3996	27	31	48	7604	52	8	13	2720	18	1	2	420	3	-	-	-	-	-	-	-	
1785	-	-	-	-	4	33	656	24	8	67	2026	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1786	1	5	100	2	12	55	1870	47	9	41	2038	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'II' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

TABLE II.2.A BREAKDOWN OF SHIPPING FROM ST. PETERSBURG TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1787	1	5	58	2	11	58	1694	48	7	37	1746	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1788	2	5	178	2	16	42	2580	34	18	47	4186	55	2	5	620	8	-	-	-	-	-	-	-	-	-	-	-	
1789	6	12	462	5	21	41	3250	32	20	39	4920	48	3	6	1078	11	1	2	438	4	-	-	-	-	-	-	-	
1790	2	6	198	3	10	30	1590	22	18	55	4342	61	3	9	980	14	-	-	-	-	-	-	-	-	-	-	-	
1791	2	5	190	2	11	30	1426	22	18	49	4502	52	6	16	2084	24	-	-	-	-	-	-	-	-	-	-	-	
1792	-	-	-	-	5	26	880	19	10	53	2400	52	4	21	1336	29	-	-	-	-	-	-	-	-	-	-	-	
1793	2	8	164	3	12	46	1880	38	11	42	2582	52	1	4	324	7	-	-	-	-	-	-	-	-	-	-	-	
1794	3	13	292	6	10	43	1558	34	9	39	2252	50	-	-	-	-	1	4	426	9	-	-	-	-	-	-	-	
1795	1	25	90	7	1	25	168	24	2	50	484	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1796	3	13	236	6	14	61	2064	52	4	17	954	24	2	9	688	17	-	-	-	-	-	-	-	-	-	-	-	
1797 <sup>15</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1798	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1801	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1802	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1803 <sup>16</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1804	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1806	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1807	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1808 <sup>17</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1814	5	17	366	7	18	52	2174	42	6	21	1478	29	2	7	696	14	1	3	406	8	-	-	-	-	-	-	-	
1815	7	18	562	8	16	42	2414	36	13	34	2964	44	1	3	398	6	1	3	408	6	-	-	-	-	-	-	-	
1816	4	13	720	7	19	63	2750	57	7	23	1772	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1817	24	13	2946	6	88	49	13026	38	44	25	10386	31	13	7	4342	13	8	4	3482	10	-	-	-	-	1	1	704	2
1818	1	6	82	3	10	59	1570	49	5	29	1230	39	1	6	312	10	-	-	-	-	-	-	-	-	-	-	-	
1819	2	13	136	5	10	63	1570	60	4	25	924	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1820	3	11	254	6	21	78	3044	76	3	11	732	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1821	7	37	596	24	9	47	1236	50	3	16	654	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1822 <sup>19</sup>	1	11	88	7	8	69	1114	93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1823	1	**	42	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'I' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

SOURCE: GAA, PA 78/94-102

TABLE II.2.B BREAKDOWN OF SHIPPING FROM NARVA TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				C 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1708 <sup>2</sup>	-	-	NO DATA AVAILABLE				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1709 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1710 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1712 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1713 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1714 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1716	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1718	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1719	1	11	60	2	-	-	-	-	3	33	798	27	2	22	792	27	3	33	1266	44	-	-	-	-	-	-	-	
1720	2	9	120	1	1	4	120	1	2	9	472	6	7	30	2542	31	11	48	4888	60	-	-	-	-	-	-	-	
1721	2	4	158	1	1	2	194	1	8	17	2004	12	14	30	5122	30	22	47	9832	57	-	-	-	-	-	-	-	
1722	1	2	60	0	3	6	476	3	12	23	2968	16	19	37	6926	38	16	31	7066	39	1	2	560	3	-	-	-	
1723	-	-	-	-	1	3	200	2	5	17	1178	11	11	37	3988	36	13	43	5766	52	-	-	-	-	-	-	-	
1724	3	4	228	1	3	4	482	2	10	14	2694	10	37	50	13266	81	21	28	9106	38	-	-	-	-	-	-	-	
1725	-	-	-	-	5	4	906	2	37	30	9826	24	58	48	20460	80	22	18	9856	23	-	-	-	-	-	-	-	
1726	-	-	-	-	7	7	1268	4	17	18	4598	14	58	60	20464	62	15	18	6572	20	-	-	-	-	-	-	-	
1727	1	1	100	0	3	3	448	2	37	38	9642	33	55	56	18332	62	2	2	836	3	-	-	-	-	-	-	-	
1728	2	2	180	1	11	9	1754	5	61	43	13338	41	54	46	17472	53	-	-	-	-	-	-	-	-	-	-	-	
1729	1	1	80	0	3	3	512	2	40	43	10648	40	48	52	15580	88	-	-	-	-	-	-	-	-	-	-	-	
1730	2	1	148	0	6	4	842	2	73	53	19084	49	58	42	16672	48	-	-	-	-	-	-	-	-	-	-	-	
1731	-	-	-	-	4	2	706	2	68	55	22576	50	69	42	22222	49	-	-	-	-	-	-	-	-	-	-	-	
1732	1	0	68	0	9	4	1580	3	103	49	26528	44	96	46	31594	53	-	-	-	-	-	-	-	-	-	-	-	
1733	-	-	-	-	5	3	662	1	94	47	24598	42	98	49	32440	56	1	1	440	1	-	-	-	-	-	-	-	
1734	1	1	86	0	4	2	598	1	68	35	17828	31	119	62	39488	68	-	-	-	-	-	-	-	-	-	-	-	
1735	-	-	-	-	-	-	-	-	35	28	9326	24	90	71	25804	75	1	1	436	1	-	-	-	-	-	-	-	
1736	-	-	-	-	1	1	196	1	24	28	6402	24	60	71	20010	75	-	-	-	-	-	-	-	-	-	-	-	
1737	1	1	54	0	4	3	764	2	34	28	9006	24	81	67	26926	72	1	1	436	1	-	-	-	-	-	-	-	
1738	-	-	-	-	5	3	814	2	55	34	14810	29	103	63	34262	68	1	1	436	1	-	-	-	-	-	-	-	
1739	1	1	90	0	1	1	148	0	43	34	11758	30	82	64	27266	69	1	1	444	1	-	-	-	-	-	-	-	
1740	1	1	78	0	2	2	316	1	19	19	5396	17	75	75	25046	77	1	1	432	1	2	2	1132	3	-	-	-	
1741	-	-	-	-	4	4	590	2	18	19	4748	15	72	74	24288	78	3	3	1316	4	-	-	-	-	-	-	-	
1742	5	4	412	1	6	5	834	3	43	38	11218	35	60	53	19788	61	-	-	-	-	-	-	-	-	-	-	-	
1743	10	5	778	1	5	3	838	1	60	31	16046	28	119	61	39938	69	1	1	408	1	-	-	-	-	-	-	-	
1744	3	3	256	1	1	1	122	0	18	21	5060	19	64	74	21686	80	-	-	-	-	-	-	-	-	-	-	-	
1745	-	-	-	-	3	2	562	1	33	27	9210	24	85	70	28930	75	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'II' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

TABLE 22.2.B BREAKDOWN OF SHIPPING FROM NARVA TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +					
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV		
1746	-	-	-	-	-	-	-	-	16	19	4456	16	68	79	22662	21	2	2	858	3	-	-	-	-	-	-	-	-		
1747	-	-	-	-	-	-	-	-	13	19	3776	17	55	61	18562	23	-	-	-	-	-	-	-	-	-	-	-	-		
1748	-	-	-	-	4	6	634	3	12	28	4918	24	42	65	14266	70	-	-	-	-	1	2	514	3	-	-	-	-		
1749	-	-	-	-	2	2	324	1	26	27	7322	24	67	71	22864	75	-	-	-	-	-	-	-	-	-	-	-	-		
1750	5	4	454	1	6	5	762	2	43	33	11690	29	77	58	26336	66	1	1	408	1	-	-	-	-	-	-	-	-		
1751	-	-	-	-	5	4	734	2	32	27	8932	23	82	68	28062	78	1	1	408	1	-	-	-	-	-	-	-	-		
1752	-	-	-	-	1	1	166	1	16	16	4454	14	80	82	27552	84	1	1	418	1	-	-	-	-	-	-	-	-		
1753	-	-	-	-	1	1	134	0	15	16	4254	13	77	80	26526	83	3	3	1206	4	-	-	-	-	-	-	-	-		
1754	-	-	-	-	3	3	456	1	13	13	3490	10	85	83	25418	87	1	1	424	1	-	-	-	-	-	-	-	-		
1755	2	2	190	1	-	-	-	-	10	12	2668	9	65	76	22688	79	8	9	3332	12	-	-	-	-	-	-	-	-		
1756	-	-	-	-	1	20	182	12	1	20	256	16	3	60	1132	72	-	-	-	-	-	-	-	-	-	-	-	-		
1757	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1758	-	-	-	-	4	16	636	8	2	8	510	6	17	68	6272	76	2	8	820	10	-	-	-	-	-	-	-	-		
1759	1	2	76	0	1	2	174	1	9	17	2256	13	39	75	14094	81	2	4	850	5	-	-	-	-	-	-	-	-		
1760	-	-	-	-	-	-	-	-	2	29	546	22	3	43	1032	42	2	26	882	36	-	-	-	-	-	-	-	-	-	
1761	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1762	-	-	-	-	-	-	-	-	-	-	-	-	19	76	6652	73	6	24	2494	27	-	-	-	-	-	-	-	-	-	
1763	-	-	-	-	1	2	188	1	7	13	1790	9	33	60	11674	60	14	25	5848	30	-	-	-	-	-	-	-	-	-	
1764	1	2	108	0	1	2	152	1	2	3	568	2	47	72	16762	72	14	22	5836	25	-	-	-	-	-	-	-	-	-	
1765	-	-	-	-	2	4	284	2	5	6	1186	6	33	62	11730	63	12	23	5004	27	1	2	532	3	-	-	-	-	-	
1766	1	1	72	0	2	3	338	1	4	5	1068	4	52	69	18784	70	16	21	6648	25	-	-	-	-	-	-	-	-	-	
1767	-	-	-	-	1	2	148	1	-	-	-	-	31	66	11218	64	15	32	6228	35	-	-	-	-	-	-	-	-	-	
1768	-	-	-	-	1	1	154	1	2	3	470	2	45	63	16380	61	24	33	9976	37	-	-	-	-	-	-	-	-	-	
1769	-	-	-	-	-	-	-	-	1	2	266	1	33	60	12334	58	21	38	8800	41	-	-	-	-	-	-	-	-	-	
1770	-	-	-	-	-	-	-	-	-	-	-	-	23	48	8630	45	25	52	10382	55	-	-	-	-	-	-	-	-	-	
1771	-	-	-	-	1	4	150	2	-	-	-	-	11	44	4060	42	13	52	5434	56	-	-	-	-	-	-	-	-	-	
1772	-	-	-	-	-	-	-	-	-	-	-	-	13	39	4874	37	20	61	8418	63	-	-	-	-	-	-	-	-	-	
1773	-	-	-	-	1	2	158	1	-	-	-	-	18	43	6652	40	23	55	9600	58	-	-	-	-	-	-	-	-	-	
1774	-	-	-	-	-	-	-	-	1	2	232	1	20	44	7452	42	24	53	10058	57	-	-	-	-	-	-	-	-	-	
1775	NO DATA AVAILABLE																													
1776	-	-	-	-	1	2	196	1	-	-	-	-	12	23	4686	82	39	75	16700	77	-	-	-	-	-	-	-	-	-	
1777	-	-	-	-	-	-	-	-	-	-	-	-	6	15	2280	13	34	83	14592	84	1	2	554	3	-	-	-	-	-	-
1778	-	-	-	-	-	-	-	-	-	-	-	-	3	10	1144	9	27	90	11650	61	-	-	-	-	-	-	-	-	-	-
1779	-	-	-	-	-	-	-	-	1	4	296	3	-	-	-	-	23	96	10088	97	-	-	-	-	-	-	-	-	-	-
1780	-	-	-	-	-	-	-	-	-	-	-	-	2	7	748	6	24	86	10576	85	1	4	514	4	1	4	656	5	-	-
1781	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1782	-	-	-	-	-	-	-	-	-	-	-	-	1	17	352	14	5	83	2170	26	-	-	-	-	-	-	-	-	-	-
1783	-	-	-	-	-	-	-	-	1	3	290	2	3	9	1096	7	31	89	13510	91	-	-	-	-	-	-	-	-	-	-
1784	1	2	48	0	1	2	176	1	2	3	536	2	6	10	2116	8	52	84	22912	89	-	-	-	-	-	-	-	-	-	-
1785	-	-	-	-	2	3	326	1	5	7	1404	5	9	13	3270	11	56	78	24702	83	-	-	-	-	-	-	-	-	-	-
1786	2	3	138	0	4	5	634	2	4	5	1056	3	6	8	2170	7	60	78	26850	86	1	1	508	2	-	-	-	-	-	-

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'II' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (00 = 100%)



TABLE II.2.B BREAKDOWN OF SHIPPING FROM NARVA TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +					
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV		
1787	-	-	-	-	4	5	534	1	3	3	816	2	8	9	2888	8	70	81	31228	27	1	1	504	1	-	-	-	-		
1788	2	2	140	1	1	1	142	0	4	5	1124	3	5	6	1812	5	68	85	30346	90	-	-	-	-	-	-	-	-		
1789	-	-	-	-	-	-	-	-	2	2	540	2	10	13	3542	10	67	84	29794	27	1	1	504	1	-	-	-	-	-	
1790	-	-	-	-	-	-	-	-	8	9	2032	5	10	11	3562	9	72	80	32128	25	-	-	-	-	-	-	-	-	-	
1791 <sup>13</sup>	4	4	254	1	1	1	162	0	11	11	2808	7	9	9	3342	8	74	75	32876	23	-	-	-	-	-	-	-	-	-	
1792	-	-	-	-	1	1	138	0	3	3	712	2	10	11	3622	10	73	84	32558	22	-	-	-	-	-	-	-	-	-	
1793	-	-	-	-	4	25	539	10	-	-	-	-	3	19	1102	20	9	56	3900	70	-	-	-	-	-	-	-	-	-	
1794	1	1	88	0	3	4	382	1	1	1	276	1	3	4	1102	3	68	89	30178	94	-	-	-	-	-	-	-	-	-	
1795 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	88	410	88	-	-	-	-	-	-	-	-	-	
1796	-	-	-	-	-	-	-	-	3	17	742	10	-	-	-	-	15	82	6540	60	-	-	-	-	-	-	-	-	-	
1797	1	3	66	1	2	7	290	3	2	7	478	4	6	20	2194	19	19	63	8484	74	-	-	-	-	-	-	-	-	-	
1798	1	11	58	2	-	-	-	-	1	11	220	7	-	-	-	-	7	72	3106	52	-	-	-	-	-	-	-	-	-	
1799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	29	882	22	1	14	508	13	4	57	2666	84	-	
1801	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1802	-	-	-	-	-	-	-	-	1	2	260	1	1	2	324	1	2	5	998	4	6	14	3308	12	34	77	22912	82	-	
1803	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	43	1590	37	4	57	2708	63	-	
1804	-	-	-	-	6	36	662	75	-	-	-	-	1	14	322	25	-	-	-	-	-	-	-	-	-	-	-	-	-	
1805	3	15	230	5	11	55	1656	38	1	5	264	6	2	10	678	15	2	10	964	22	1	5	586	13	-	-	-	-	-	
1806	-	-	-	-	-	-	-	-	4	57	1072	44	1	14	304	13	-	-	-	-	2	29	1044	43	-	-	-	-	-	
1807	1	14	44	7	5	71	780	67	1	14	292	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1808 <sup>17</sup>	NO DATA AVAILABLE																													
1809	NO DATA AVAILABLE																													
1810	NO DATA AVAILABLE																													
1811	NO DATA AVAILABLE																													
1812	NO DATA AVAILABLE																													
1813	NO DATA AVAILABLE																													
1814	-	-	-	-	3	60	498	47	1	20	218	21	1	20	336	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	3	33	438	12	1	11	230	6	-	-	-	-	-	-	-	-	2	22	1094	30	3	33	1916	52	-	
1816	1	4	44	0	9	36	1469	16	1	4	210	2	2	8	710	8	2	8	692	10	5	20	2778	30	5	20	3118	34	-	
1817	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1818	-	-	-	-	5	28	850	10	1	6	204	2	2	11	664	8	1	6	408	5	-	-	-	-	9	50	6634	76	-	
1819	4	13	310	3	16	53	2450	27	-	-	-	-	1	3	350	4	2	7	968	11	1	3	510	6	6	20	4368	49	-	
1820	-	-	-	-	8	44	1455	18	-	-	-	-	1	6	360	5	1	6	454	5	-	-	-	-	8	44	6160	72	-	
1821	-	-	-	-	1	9	124	2	3	27	650	11	-	-	-	-	1	9	486	8	-	-	-	-	6	55	4832	79	-	
1822	3	21	228	4	3	21	468	8	1	7	210	3	1	7	324	5	-	-	-	-	-	-	-	-	6	43	5000	80	-	
1823	1	5	94	1	3	15	468	6	7	35	1660	21	3	15	1046	14	-	-	-	-	2	10	1072	14	4	20	3392	44	-	
1824	-	-	-	-	18	69	2762	48	4	15	844	15	2	8	728	13	-	-	-	-	1	4	542	9	1	4	858	15	-	
1825 <sup>20</sup>	2	13	174	6	12	75	1868	68	-	-	-	-	2	13	714	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'I' IS OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (00 = 100%)

SOURCE: GAA, PA 78/94-102

TABLE 11-2.C SEAFARER'S SHIPPING FROM RIGA TO AMSTERDAM BY SIZE OF CARGO IN TONS

YEAR	A		B		C		D		E		F		G
	170	180	190	200	210	220	230	240	250	260	270	280	
1705	3	50	15	1	17	276	26	2	33	626	59	-	-
1706	2	11	10	2	12	63	68	1	5	330	7	-	-
1707	5	83	56	-	17	220	44	-	-	-	-	1	5
1708	4	67	198	40	2	30	60	-	-	-	-	-	-
1709	4	14	254	4	14	48	52	4	14	1404	21	1	2
1710	12	48	978	22	2	12	19	3	12	1018	26	1	4
1711	11	37	796	18	4	13	23	2	7	650	16	-	-
1712	22	29	1712	12	23	30	25	23	9	2470	18	1	1
1713	17	16	1266	5	31	29	22	8	8	2630	12	3	2
1714	8	11	576	3	26	35	24	15	20	5164	32	-	-
1715	11	16	820	5	17	25	18	10	15	3372	24	-	-
1716	15	19	1206	9	25	32	26	6	8	2004	13	-	-
1717	17	20	1158	7	29	34	27	3	3	1000	6	1	1
1718	12	14	918	6	37	44	37	5	6	1616	10	-	-
1719	17	18	1252	8	54	59	52	22	23	5474	34	-	-
1720	24	16	1808	7	86	58	53	35	23	8538	34	-	-
1721	19	12	1436	6	75	52	44	48	33	11708	46	-	-
1722	8	7	738	4	67	61	53	31	28	7340	37	3	3
1723	14	12	1174	5	58	50	42	38	33	9238	42	5	4
1724	7	7	606	3	43	44	32	30	31	7240	34	10	10
1725	5	6	632	2	72	49	41	57	39	13520	47	7	5
1726	11	8	734	4	78	56	49	44	32	10034	39	6	4
1727	9	11	714	5	38	51	45	26	35	5860	43	2	2
1728	6	7	664	3	45	54	47	29	35	6892	43	2	2
1729	5	4	390	2	67	58	49	40	34	9340	42	3	3
1730	2	2	164	1	54	50	36	35	30	8070	33	17	15
1731	5	4	434	2	50	42	34	48	40	11166	42	12	10
1732	5	5	310	1	45	45	37	35	35	8088	39	12	12
1733	5	4	424	2	52	41	33	60	47	14186	52	6	5
1734	6	5	394	1	51	43	30	45	36	10786	37	18	14
1735	17	9	1214	3	94	49	38	47	24	10966	28	26	14
1736	10	12	1642	5	96	58	51	36	24	9228	32	10	6
1737	35	22	2674	10	52	33	33	66	42	15062	55	3	2
1738	6	7	440	3	47	51	46	37	40	8174	48	2	2
1739	11	9	906	4	70	57	49	35	22	7856	36	6	5
1740	6	7	536	3	41	51	40	24	30	5476	34	10	12
1741	1	1	440	2	440	2	440	2	440	440	2	440	2
1742	1	1	520	2	520	2	520	2	520	520	2	520	2
1743	1	1	546	3	546	3	546	3	546	546	3	546	3
1744	1	1	600	2	600	2	600	2	600	600	2	600	2
1745	1	1	426	2	426	2	426	2	426	426	2	426	2

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 II = NUMBER OF SHIPS OF TOTAL NO. OF SHIPS FOR THE YEAR IV = PERCENT OF TOTAL CARGO TONNAGE FOR THE YEAR (100 = 100%)

TABLE II-2-C BREAKDOWN OF SHIPPING FROM RIGA TO AMSTERDAM BY SIZE OF CARGO IN TONS

YEAR	A				B				C				D				E				F				G			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1746	6	9	710	4	43	46	7088	37	25	31	6628	35	11	12	3824	20	2	2	910	5	-	-	-	-	-	-	-	
1747	11	13	456	5	45	51	7386	46	28	32	6356	40	3	3	1020	6	1	1	412	3	-	-	-	-	-	-	-	
1748	12	14	936	6	42	48	7040	44	32	36	7324	45	2	2	668	4	-	-	-	-	-	-	-	-	-	-	-	
1749	18	20	1516	10	37	42	5886	37	31	35	7210	46	2	2	688	4	1	1	408	3	-	-	-	-	-	-	-	
1750	7	10	592	5	35	50	5360	42	25	36	5798	45	3	4	1010	8	-	-	-	-	-	-	-	-	-	-	-	
1751	3	7	260	3	25	60	3686	49	10	24	2246	28	3	7	1068	13	-	-	-	-	-	-	-	-	-	-	-	
1752	17	21	1440	10	34	42	5320	38	27	33	6286	44	2	2	764	5	1	1	418	3	-	-	-	-	-	-	-	
1753	10	12	722	4	35	41	5812	36	38	44	6800	54	3	3	964	6	-	-	-	-	-	-	-	-	-	-	-	
1754	12	11	982	5	47	43	7576	36	47	43	10980	52	2	2	654	3	2	2	820	4	-	-	-	-	-	-	-	
1755	5	10	460	4	24	38	3960	32	29	40	6638	53	4	6	1390	11	-	-	-	-	-	-	-	-	-	-	-	
1756	4	6	290	2	20	28	3382	20	27	38	6442	38	19	27	6616	39	1	1	402	2	-	-	-	-	-	-	-	
1757	4	4	348	1	22	23	3522	14	33	35	8004	32	32	34	11242	45	4	4	1684	7	-	-	-	-	-	-	-	
1758	8	7	702	3	39	34	6108	23	31	27	7228	27	31	27	10716	40	5	4	2032	8	-	-	-	-	-	-	-	
1759	2	2	190	1	35	30	5554	18	27	23	6634	22	45	39	15752	51	7	6	2854	9	-	-	-	-	-	-	-	
1760	1	1	88	0	47	32	7762	20	44	30	10544	27	42	28	15046	38	14	9	5952	15	-	-	-	-	-	-	-	
1761	4	2	356	1	60	31	10322	20	50	26	11656	23	63	33	22130	44	12	6	5038	10	-	-	-	-	-	-	-	
1762	-	-	-	-	36	26	6238	16	51	37	12242	32	34	25	12256	32	13	9	5478	14	-	-	-	-	-	-	-	
1763	5	5	942	2	49	40	8348	30	47	38	11268	41	17	14	5516	21	4	3	1622	6	-	-	-	-	-	-	-	
1764	3	2	248	1	35	26	5838	18	63	47	15086	46	26	19	8972	27	7	5	2910	9	-	-	-	-	-	-	-	
1765	-	-	-	-	26	22	4262	14	50	42	12088	38	34	29	11790	37	8	7	3346	11	-	-	-	-	-	-	-	
1766	4	3	354	1	41	29	6638	19	58	41	14246	42	29	21	9772	28	8	6	3310	10	-	-	-	-	-	-	-	
1767	-	-	-	-	27	32	4368	20	31	37	7412	34	18	21	6152	29	7	8	3038	14	-	-	-	-	-	-	-	
1768	2	2	134	1	48	42	7508	30	43	38	10504	41	19	17	6416	25	2	2	810	3	-	-	-	-	-	-	-	
1769	-	-	-	-	45	29	7196	18	52	36	14192	35	41	27	14384	36	10	6	4214	11	-	-	-	-	-	-	-	
1770	1	1	80	0	23	19	3938	12	47	40	11312	35	38	32	13318	41	9	8	3632	12	-	-	-	-	-	-	-	
1771	-	-	-	-	40	43	6614	31	30	33	6910	32	20	22	7112	33	2	2	826	4	-	-	-	-	-	-	-	
1772	5	3	432	1	79	42	12770	28	53	28	12674	28	41	22	14344	32	10	5	4132	9	-	-	-	-	-	-	-	
1773	4	3	354	1	54	37	8534	23	41	28	9914	27	31	21	10922	29	14	10	5920	16	-	-	-	-	-	-	-	
1774	3	2	222	0	55	32	9058	20	53	31	12476	27	34	20	12050	26	21	12	8976	20	-	-	-	-	-	-	-	
1775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1776	5	5	468	2	35	34	5608	21	26	25	6468	24	21	20	7152	26	16	15	6784	25	-	-	-	-	-	-	-	
1777	1	1	76	0	32	25	5422	15	43	34	10702	30	28	22	9862	28	21	17	8938	25	-	-	-	-	-	-	-	
1778	-	-	-	-	36	29	5388	15	25	24	6984	20	27	22	5218	26	29	24	12500	35	-	-	-	-	-	-	-	
1779	2	2	172	1	28	26	4374	15	36	34	8218	28	17	16	5962	21	23	21	9966	34	-	-	-	-	-	-	-	
1780	-	-	-	-	22	19	3846	11	44	37	10145	26	17	14	6026	16	28	24	12452	34	-	-	-	-	-	-	-	
1781	13	18	990	7	31	43	4610	33	19	26	4334	31	5	7	1782	13	2	3	678	6	-	-	-	-	-	-	-	
1782	11	7	844	3	83	55	12558	41	40	26	9302	31	5	3	1820	6	12	6	5360	18	-	-	-	-	-	-	-	
1783	7	4	556	1	75	45	11516	30	53	32	12810	34	11	7	3902	10	17	10	7662	20	-	-	-	-	-	-	-	
1784	3	3	252	1	42	39	6846	26	42	35	10178	39	13	12	4452	17	8	7	3600	14	-	-	-	-	-	-	-	
1785	1	1	190	0	53	47	8694	34	39	35	9318	36	11	10	3844	15	7	6	3124	12	-	-	-	-	-	-	-	
1786	3	3	272	1	26	28	4166	17	35	38	8398	35	19	20	6512	27	10	11	4566	19	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % OF TOTAL CARGO TONNAGE FOR THE YEAR (100 = 10000)

TABLE II-2.C BREAKDOWN OF SHIPPING FREIGHT RIGAS TO AMSTERDAM BY SIZE OF CARGO IN TCNS

SIZES IN TCNS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +				
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
1787	1	1	130	0	56	55	8826	42	33	32	7872	38	10	10	3364	16	2	2	830	4	-	-	-	-	-	-	-		
1788	-	-	-	-	30	39	4758	25	36	46	9124	49	9	11	2998	16	4	5	1798	10	-	-	-	-	-	-	-		
1789	3	3	286	1	23	25	3834	17	53	57	13076	57	7	8	2502	11	6	6	2688	12	1	1	502	2	-	-	-		
1790	2	2	172	1	56	46	6062	33	43	35	10242	37	16	13	5828	21	5	4	2158	8	-	-	-	-	-	-	-		
1791 <sup>13</sup>	1	2	98	1	24	36	3854	24	24	36	5760	36	12	18	4172	26	5	8	2128	13	-	-	-	-	-	-	-		
1792	3	3	228	1	40	41	6466	29	41	42	9874	45	8	8	2844	13	6	6	2772	12	-	-	-	-	-	-	-		
1793	22	17	1716	7	62	48	9176	39	31	24	7498	32	6	5	1954	8	7	5	3018	13	-	-	-	-	-	-	-		
1794	12	11	980	5	78	70	11760	63	18	16	4390	23	2	2	638	3	2	2	938	5	-	-	-	-	-	-	-		
1795 <sup>13</sup>	5	11	336	5	32	70	4668	65	8	17	1778	25	1	2	392	5	-	-	-	-	-	-	-	-	-	-	-	-	
1796	11	8	1004	4	89	63	13386	54	33	23	7666	31	7	5	2390	10	-	-	-	-	-	-	-	-	-	-	-	-	
1797	1	1	65	0	50	61	9408	49	29	30	7082	37	8	8	2718	14	-	-	-	-	1	1	532	2	-	-	-	-	
1798	9	13	702	5	40	59	6406	55	16	24	3580	31	3	4	1034	9	-	-	-	-	-	-	-	-	-	-	-	-	
1799	1	32	100	22	1	33	148	32	1	33	208	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1800	2	6	200	3	19	54	2993	46	13	37	2948	45	-	-	-	-	1	3	402	6	-	-	-	-	-	-	-	-	
1801	2	7	196	4	17	57	2562	48	11	37	2538	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1802	5	3	428	1	80	52	12742	39	51	33	12268	38	12	8	4124	13	5	3	2118	7	-	-	-	-	1	1	622	2	
1803	5	4	444	2	82	62	12954	48	36	27	8596	32	6	5	1664	7	-	-	-	-	1	1	502	2	3	2	2572	10	
1804	3	6	252	3	33	63	5376	54	13	25	2968	30	2	4	642	6	-	-	-	-	-	-	-	-	1	2	802	8	
1805	10	8	830	4	80	63	12716	54	32	25	7494	32	4	3	1320	6	1	1	420	2	-	-	-	-	1	1	802	3	
1806	2	5	188	3	23	59	3384	48	12	31	2752	39	1	3	366	4	1	3	416	6	-	-	-	-	-	-	-	-	
1807 <sup>17</sup>	2	18	158	11	7	64	830	57	2	18	456	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1808																													
1809																													
1810																													
1811																													
1812																													
1813																													
1814 <sup>6</sup>	6	13	496	5	16	34	2302	25	19	40	4308	47	6	13	2110	23	-	-	-	-	-	-	-	-	-	-	-	-	
1815	9	11	624	5	38	52	5734	45	25	34	5686	45	2	3	688	5	-	-	-	-	-	-	-	-	-	-	-	-	
1816	15	12	1242	5	57	47	8650	37	38	31	9086	39	9	7	2916	12	2	2	850	4	-	-	-	-	-	-	-	-	
1817	24	7	1674	3	159	48	25730	38	121	36	29012	43	21	6	6982	10	4	1	1764	3	2	1	1066	2	1	1	650	3	
1818	1	3	72	1	22	56	3400	46	15	38	3594	49	1	3	316	4	-	-	-	-	-	-	-	-	-	-	-	-	
1819	3	6	258	3	30	59	4600	51	18	35	4086	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1820	4	6	336	3	40	63	6224	55	17	27	3998	35	2	3	726	6	-	-	-	-	-	-	-	-	-	-	-	-	
1821	5	7	438	3	42	61	7130	55	21	30	4990	39	1	1	344	3	-	-	-	-	-	-	-	-	-	-	-	-	
1822	2	7	166	3	18	62	2652	55	9	31	2008	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1823	5	8	390	4	36	61	5660	55	17	29	3936	38	1	2	302	3	-	-	-	-	-	-	-	-	-	-	-	-	
1824	6	15	436	6	26	63	4320	65	9	22	1914	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1825 <sup>20</sup>	1	5	94	2	12	63	1916	55	5	26	1058	30	-	-	-	-	1	5	440	13	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

TABLE II.2.3 BREAKDOWN OF SHIPPING FROM VIBORG TO AMSTERDAM BY SIZE OF CARGO IN TCNS

SIZE IN TCNS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1708 <sup>2</sup>	-	-	NO DATA AVAILABLE				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1709 <sup>2</sup>	-	-	-	-	1 17	112 5	1 17	210 10	-	-	-	-	-	-	4 67	1834 65	-	-	-	-	-	-	-	-	-	-	-	
1710 <sup>3</sup>	-	-	-	-	1 20	140 5	1 20	260 16	2 40	722 46	1 20	460 29	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1713 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1714 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1715 <sup>8</sup>	1 50	-	40 13	-	-	-	-	1 50	272 87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1716 <sup>9</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1717 <sup>10</sup>	-	-	-	-	1 20	172 9	1 20	240 13	-	-	-	-	3 60	1464 78	-	-	-	-	-	-	-	-	-	-	-	-	-	
1718 <sup>11</sup>	-	-	-	-	-	-	3 25	806 19	7 58	2568 61	2 17	864 20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1719 <sup>12</sup>	2 19	162 5	1 9	200 6	1 9	240 7	3 27	1068 31	4 36	1830 52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1720 <sup>13</sup>	3 13	210 2	1 3	124 1	4 13	1008 9	6 20	2240 21	16 53	7098 66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1721 <sup>14</sup>	1 5	52 1	1 5	169 2	1 5	220 3	11 55	3980 56	6 30	2678 38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1722 <sup>15</sup>	2 8	158 2	1 4	200 2	-	-	11 46	3918 45	10 42	4342 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1723 <sup>16</sup>	-	-	1 9	200 5	1 9	300 7	4 36	1456 35	5 45	2182 53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1724 <sup>17</sup>	1 8	52 1	3 25	600 16	-	-	5 42	1764 47	3 25	1348 36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1725 <sup>18</sup>	2 12	116 2	3 18	356 6	4 24	1032 22	4 24	1400 30	4 24	1790 38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1726 <sup>19</sup>	-	-	3 14	600 9	2 36	2100 31	10 45	3572 53	1 5	424 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1727 <sup>20</sup>	3 14	216 4	1 5	200 4	2 38	2054 37	8 38	2636 47	1 5	448 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1728 <sup>21</sup>	-	-	1 6	174 5	5 69	2324 67	3 23	968 28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1729 <sup>22</sup>	1 7	48 2	-	-	-	10 71	2456 70	3 21	988 28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1730 <sup>23</sup>	-	-	4 19	576 10	12 55	3160 54	6 27	2090 36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1731 <sup>24</sup>	-	-	3 17	356 8	12 67	3240 71	3 17	980 21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1732 <sup>25</sup>	2 7	166 3	8 28	1202 19	16 55	4048 63	3 10	976 15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1733 <sup>26</sup>	4 13	276 4	8 27	1094 18	15 50	3812 62	3 10	1014 16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1734 <sup>27</sup>	3 12	212 4	5 19	804 14	13 50	3292 56	5 19	1580 27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1735 <sup>28</sup>	-	-	1 3	156 2	17 59	4616 55	11 38	3606 43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1736 <sup>29</sup>	-	-	4 2	142 1	26 55	7040 55	17 39	5574 44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1737 <sup>30</sup>	1 3	96 1	4 11	720 7	21 57	5210 54	11 30	3616 38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1738 <sup>31</sup>	1 4	96 2	2 9	336 6	15 65	3718 65	5 22	1580 28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1739 <sup>32</sup>	-	-	1 6	124 3	12 71	2922 68	4 24	1258 29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1740 <sup>33</sup>	-	-	-	-	4 50	1010 45	4 50	1248 55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1741 <sup>34</sup>	-	-	1 8	112 3	4 31	1014 27	8 62	2634 70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1742 <sup>35</sup>	-	-	2 15	324 10	2 62	2034 62	3 23	512 28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1743 <sup>36</sup>	4 19	282 6	3 14	422 9	10 48	2650 56	4 19	1356 29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1744 <sup>37</sup>	5 22	410 8	3 13	410 8	12 52	3062 63	2 9	604 12	1 4	412 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1745 <sup>38</sup>	1 6	96 2	1 6	116 3	12 71	3018 71	3 18	1040 24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'II' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (100 = 100%)

TABLE II.2.D BREAKDOWN OF SHIPPING FROM VIBORG TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +					
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV		
1746	2	15	146	6	-	-	-	-	5	38	1360	38	5	38	1654	46	1	8	452	13	-	-	-	-	-	-	-			
1747	-	-	-	-	-	-	-	-	3	30	768	23	6	60	2014	61	-	-	-	-	1	10	816	16	-	-	-			
1749	1	7	92	3	3	21	418	14	10	71	2500	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1749	-	-	-	-	1	5	138	4	10	77	2384	76	2	15	618	20	-	-	-	-	-	-	-	-	-	-				
1750	2	11	176	4	6	32	838	20	8	42	2070	49	2	11	674	16	1	5	488	11	-	-	-	-	-	-				
1751	-	-	-	-	2	29	380	22	4	57	1000	57	1	14	378	22	-	-	-	-	-	-	-	-	-	-				
1752	-	-	-	-	3	30	466	21	7	70	1758	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1753	-	-	-	-	3	19	412	11	10	63	2456	64	3	19	966	25	-	-	-	-	-	-	-	-	-	-				
1754	-	-	-	-	1	9	164	5	6	55	1514	49	3	27	1028	33	1	9	410	13	-	-	-	-	-	-				
1755	5	29	454	12	2	12	336	6	5	29	1190	32	5	29	1748	47	-	-	-	-	-	-	-	-	-	-				
1756	-	-	-	-	1	4	154	2	13	54	3382	47	9	38	3176	45	1	4	408	6	-	-	-	-	-	-				
1757	-	-	-	-	1	5	194	5	8	62	2004	55	4	31	1464	40	-	-	-	-	-	-	-	-	-	-				
1758	-	-	-	-	-	-	-	-	2	40	516	32	3	60	1074	68	-	-	-	-	-	-	-	-	-	-				
1759	-	-	-	-	-	-	-	-	5	63	1286	55	3	38	1058	45	-	-	-	-	-	-	-	-	-	-				
1760	-	-	-	-	-	-	-	-	1	10	240	7	8	80	2886	81	1	10	418	12	-	-	-	-	-	-				
1761	-	-	-	-	2	33	278	19	2	33	464	31	2	33	750	50	-	-	-	-	-	-	-	-	-	-				
1762	-	-	-	-	1	14	168	10	3	43	726	36	3	43	1072	54	-	-	-	-	-	-	-	-	-	-				
1763	-	-	-	-	5	56	752	43	2	32	672	38	1	11	332	19	-	-	-	-	-	-	-	-	-	-				
1764	-	-	-	-	3	33	448	24	6	67	1400	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1765	-	-	-	-	4	33	660	23	6	50	1486	51	1	8	316	11	1	8	426	15	-	-	-	-	-	-				
1766	-	-	-	-	6	40	754	25	6	60	2258	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1767	-	-	-	-	1	33	146	25	2	67	442	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1768	-	-	-	-	3	43	462	31	4	57	1050	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1769	1	11	88	5	4	44	656	35	3	33	778	41	1	11	360	19	-	-	-	-	-	-	-	-	-	-				
1770	-	-	-	-	2	40	354	29	2	40	544	44	1	20	340	27	-	-	-	-	-	-	-	-	-	-				
1771	-	-	-	-	-	-	-	-	1	88	264	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1772	-	-	-	-	1	14	146	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1773	-	-	-	-	1	20	150	14	2	60	636	58	1	20	316	29	-	-	-	-	-	-	-	-	-	-				
1774	-	-	-	-	3	75	526	63	-	-	-	-	1	25	314	37	-	-	-	-	-	-	-	-	-	-				
1775	-	-	NO DATA AVAILABLE																											
1776	-	-	-	-	3	60	442	48	2	40	480	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1777	-	-	-	-	2	44	350	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1778	-	-	-	-	2	40	226	18	1	20	206	16	1	20	392	31	1	20	448	35	-	-	-	-	-	-				
1779	-	-	-	-	1	14	186	7	1	14	228	9	1	14	332	13	4	57	1736	70	-	-	-	-	-	-				
1780	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	88	452	88	-	-	-	-	-	-				
1781	-	-	-	-	1	25	162	20	2	50	460	48	1	25	306	32	-	-	-	-	-	-	-	-	-	-				
1782	3	19	252	10	11	69	1462	57	-	-	-	-	-	-	-	-	2	13	848	33	-	-	-	-	-	-				
1783	1	13	98	5	3	38	446	28	2	25	450	28	2	25	618	39	-	-	-	-	-	-	-	-	-	-				
1784	-	-	-	-	3	50	442	38	3	50	720	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1785	1	17	92	7	-	-	-	-	4	67	976	70	1	17	324	23	-	-	-	-	-	-	-	-	-	-				
1786	1	13	82	5	1	13	114	7	6	75	1486	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'I' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (88 = 100)

TABLE II.2.D BREAKDOWN OF SHIPPING FROM VIBORG TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1787	-	-	-	-	6 67	820 56	3 33	694 44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1788	-	-	-	-	3 60	528 53	2 40	476 47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1789	-	-	-	-	-	-	-	2 50	458 36	1 25	320 30	1 25	446 35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1790	2 50	126 26	2 50	362 74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1791 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1792	1 14	64 6	4 57	592 52	2 26	478 42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1793	1 8	60 2	4 33	608 23	5 42	1166 48	2 17	748 29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1794	1 8	60 2	7 54	1088 45	4 31	902 37	1 8	360 15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1795 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1796	-	-	-	-	2 67	314 54	1 33	268 46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1797	-	-	-	-	3 **	538 **	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1798	-	-	-	-	2 67	268 50	1 33	268 50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1799	-	-	-	-	2 **	254 **	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1800	-	-	-	-	1 50	160 43	1 50	208 57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1801	-	-	-	-	2 67	248 37	-	-	-	-	-	-	-	1 33	416 63	-	-	-	-	-	-	-	-	-	-	-	-	
1802	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1803	1 50	100 21	-	-	-	-	-	-	-	1 50	376 79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1804	-	-	-	-	2 67	214 35	-	-	-	1 33	400 65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1805	-	-	-	-	4 80	646 66	-	-	-	1 20	340 34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1806	-	-	-	-	-	-	-	-	-	1 **	336 **	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1807	1 33	44 11	1 33	124 32	1 33	218 56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1808 <sup>17</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1814 <sup>6</sup>	-	-	-	-	1 25	158 15	2 50	518 50	1 25	352 34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1815	1 14	64 4	4 57	650 41	-	-	-	-	-	-	-	-	2 29	678 55	-	-	-	-	-	-	-	-	-	-	-	-	-	
1816	-	-	-	-	4 **	732 **	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1817	-	-	-	-	2 67	346 57	1 33	264 43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1818	-	-	-	-	3 75	450 44	-	-	-	-	-	-	-	-	-	-	-	1 25	578 56	-	-	-	-	-	-	-	-	
1819	-	-	-	-	4 80	472 52	-	-	-	-	-	-	1 20	444 48	-	-	-	-	-	-	-	-	-	-	-	-	-	
1820	-	-	-	-	3 43	362 21	1 14	232 13	1 14	346 19	2 29	896 48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1821	-	-	-	-	2 50	362 37	1 25	254 26	1 25	350 36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1822	-	-	-	-	-	-	1 50	250 42	1 50	340 58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1823	-	-	-	-	-	-	1 50	224 31	-	-	-	-	1 50	496 69	-	-	-	-	-	-	-	-	-	-	-	-	-	
1824	-	-	-	-	2 40	338 26	1 20	274 21	2 40	672 52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1825 <sup>20</sup>	-	-	-	-	-	-	-	-	1 **	372 **	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'I' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

TABLE II.2.E BREAKDOWN OF SHIPPING FROM REVAL TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1708	NO DATA AVAILABLE																											
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1710 <sup>3</sup>	2	**	102	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1712 <sup>5</sup>	2	67	108	47	1	33	120	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1713 <sup>6</sup>	1	50	64	37	1	59	108	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1714 <sup>6</sup>	4	57	244	25	1	14	110	11	1	14	280	29	1	14	344	35	-	-	-	-	-	-	-	-	-	-	-	
1715 <sup>7</sup>	1	**	48	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1716	3	13	236	4	3	13	448	6	3	13	772	11	7	30	2408	34	6	26	2668	38	1	4	520	7	-	-	-	
1717	1	10	44	2	1	10	194	7	2	20	540	19	6	60	2024	72	-	-	-	-	4	-	-	-	-	-	-	
1718	-	-	-	-	-	-	-	-	1	**	210	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1719	1	50	100	38	1	50	160	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1720	3	**	170	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1721	2	**	108	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1722	-	-	-	-	3	**	460	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1723	4	**	304	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1724	3	**	186	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1725	3	**	248	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1726	4	**	216	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1727	1	**	70	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1728	1	20	80	6	1	20	140	11	2	40	470	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1729	2	18	180	6	3	27	478	17	3	27	764	28	1	9	400	14	2	18	948	34	1	20	552	44	-	-	-	
1730	1	6	90	2	8	50	1234	34	3	19	764	21	2	13	626	17	1	6	408	11	1	6	520	14	-	-	-	
1731	3	13	228	4	7	30	1036	19	6	26	1402	26	5	22	1768	33	1	4	406	8	1	4	508	9	-	-	-	
1732	1	11	56	3	4	44	494	28	2	22	530	30	2	22	674	38	-	-	-	-	-	-	-	-	-	-	-	
1733	1	50	70	39	1	50	108	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1734	-	-	-	-	8	67	1156	39	-	-	-	-	2	17	728	25	1	8	500	17	1	8	586	20	-	-	-	
1735	-	-	-	-	2	**	286	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1736	2	33	144	17	3	50	416	50	1	17	280	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1737	2	18	166	11	8	73	1056	71	1	9	268	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1738	2	11	164	5	12	67	2068	58	1	6	268	8	3	17	1044	29	-	-	-	-	-	-	-	-	-	-	-	
1739	2	7	160	2	18	50	2764	40	2	7	456	7	2	7	744	11	5	17	2118	31	1	3	600	9	-	-	-	
1740	2	4	156	1	15	29	2552	15	9	17	2216	13	6	15	2760	16	10	16	4734	28	7	13	3790	22	1	2	708	4
1741	2	9	154	3	14	61	2214	45	1	4	292	6	6	26	2202	45	-	-	-	-	-	-	-	-	-	-	-	
1742	1	25	88	17	2	50	234	44	1	25	206	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1743	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1744	-	-	-	-	1	50	172	41	1	50	244	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1745	-	-	-	-	2	**	380	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'II' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)



TABLE II.2.6 BREAKDOWN OF SHIPPING FROM REVAL TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1746	1	13	90	3	4	50	648	26	-	-	-	-	-	-	-	1	13	486	19	-	-	-	-	2	25	1312	82	
1747	2	67	124	20	-	-	-	-	1	33	298	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1748	1	20	68	12	4	80	504	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1749	-	-	-	-	2	**	226	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1750	2	40	176	24	2	40	320	44	1	20	234	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1751	1	33	92	13	1	33	108	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1752	2	50	132	39	2	50	206	61	-	-	-	-	-	-	-	-	-	1	33	520	72	-	-	-	-	-	-	
1753	1	14	60	5	5	71	788	72	1	14	244	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1754	1	33	90	22	2	67	266	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1755	2	**	100	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1756	-	-	-	-	2	50	276	28	1	25	212	21	-	-	-	1	25	500	51	-	-	-	-	-	-	-	-	
1757	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1758	-	-	-	-	1	**	114	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1759	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1760	1	50	78	29	1	50	188	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1761	3	43	240	25	3	43	426	45	1	14	290	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1762	-	-	-	-	3	30	418	15	3	30	718	26	2	20	682	25	2	20	906	33	-	-	-	-	-	-	-	
1763	-	-	-	-	4	**	640	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1764	-	-	-	-	3	75	496	69	1	25	220	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1765	-	-	-	-	1	**	152	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1766	-	-	-	-	3	**	434	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1767	-	-	-	-	-	-	-	-	1	**	300	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1768	-	-	-	-	1	**	120	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1769	1	33	60	14	2	67	384	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1770	-	-	-	-	2	**	332	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1771	-	-	-	-	3	60	452	52	2	40	420	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1772	-	-	-	-	4	**	544	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1773	-	-	-	-	2	**	330	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1774	1	13	76	6	5	63	782	60	2	25	444	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1775	-	-	NO DATA AVAILABLE				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1776	1	25	62	11	3	75	488	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1777	-	-	-	-	2	**	308	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1778	1	50	70	24	-	-	-	-	1	50	220	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1779	-	-	-	-	-	-	-	-	1	**	246	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1780	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1781	-	-	-	-	1	**	130	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1782	-	-	-	-	2	67	266	57	1	33	226	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1783	-	-	-	-	1	33	124	15	1	33	284	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1784	-	-	-	-	-	-	-	-	1	**	246	**	-	-	-	1	33	434	52	-	-	-	-	-	-	-	-	
1785	-	-	-	-	1	**	188	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1786	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

TABLE II.2.E BREAKDOWN OF SHIPPING FROM REVAL TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1787	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1788	-	-	-	-	1	**	154	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1789	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1790	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1791 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1792	1	**	80	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1793	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1794	-	-	-	-	1	*	176	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1795 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1796	2	20	196	14	7	70	924	62	1	10	248	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1797	1	50	96	44	1	50	122	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1798	1	50	50	19	-	-	-	-	1	50	258	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1801	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	**	614	**
1802	-	-	-	-	2	50	268	35	2	50	492	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1803	-	-	-	-	1	50	166	42	1	50	228	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1804	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1806	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1807	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1808 <sup>17</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1814 <sup>6</sup>	1	33	92	26	2	67	286	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1815	2	33	178	19	2	33	298	32	2	33	444	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1816	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1817	-	-	-	-	4	90	592	75	1	20	202	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1819	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1820	-	-	-	-	1	**	170	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1821	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1822	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1823	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1825 <sup>20</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'II' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100)

SOURCE: GAA, PA 79/94-102

TABLE 11.24F BREAKDOWN OF SHIPPING FROM ESTONIA TO AMSTERDAM BY SIZE OF CARGO IN TONS

YEAR	A - 100		B - 200		C - 300		D - 400		E - 500		F - 600		G - 801 +	
	I	II	I	II	I	II	I	II	I	II	I	II	I	II
1705	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1706	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1707	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE													
1709	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1710	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1711	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1712	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1713	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1714	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1715	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	1	70	-	-	-	-	-	-	-	-	-	-	-	-
1717	1	50	-	-	-	-	-	-	-	-	-	-	-	-
1718	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1719	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1720	4	208	1	11	120	7	2	22	540	30	1	11	400	98
1721	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1722	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1723	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1724	1	100	-	-	-	-	-	-	-	-	-	-	-	-
1725	1	78	-	-	-	-	-	-	-	-	-	-	-	-
1726	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1727	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1728	1	86	-	-	-	-	-	-	-	-	-	-	-	-
1729	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1730	2	25	1	13	120	8	4	50	696	88	-	-	-	-
1731	1	14	2	29	306	20	2	29	950	60	1	13	332	21
1732	3	75	2	64	130	36	-	-	498	33	2	29	624	41
1733	-	-	1	50	162	34	1	50	288	64	-	-	-	-
1734	-	-	2	67	256	55	1	33	210	45	-	-	-	-
1735	-	-	2	17	360	11	-	-	-	-	-	-	-	-
1736	-	-	3	75	456	69	1	25	204	31	-	-	-	-
1737	-	-	2	43	272	26	2	40	472	44	1	20	320	30
1738	2	14	5	43	708	28	4	29	982	38	2	14	722	28
1739	2	13	5	50	1164	36	1	6	280	9	5	31	1628	50
1740	13	42	1082	22	1832	38	2	6	582	12	4	13	1300	27
1741	16	62	1230	33	364	10	4	15	1098	30	3	12	532	27
1742	1	6	56	2	194	4	10	86	2480	52	6	33	2058	43
1743	-	-	-	-	596	18	6	43	1376	41	4	29	1402	48
1744	-	-	-	-	574	14	6	43	1722	43	4	29	1346	33
1745	1	8	52	1	124	2	8	38	2084	39	11	52	3688	62

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = TOTAL CARGO TONNAGE FOR THE YEAR (88 = 1002)

TABLE II.2.F BREAKDOWN OF SHIPPING FROM ESTONIA TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1746	3	30	210	9	-	-	-	-	3	30	822	34	4	40	1372	27	-	-	-	-	-	-	-	-	-	-	-	-
1747	3	17	236	5	-	-	-	-	2	11	460	9	12	67	3982	78	1	6	408	8	-	-	-	-	-	-	-	
1748	1	3	96	1	1	3	124	1	7	23	1946	21	21	70	7006	76	-	-	-	-	-	-	-	-	-	-	-	
1749	4	13	342	4	5	16	866	10	6	19	1550	18	17	53	5748	68	-	-	-	-	-	-	-	-	-	-	-	
1750	2	13	186	5	1	7	112	3	6	53	1918	64	4	27	1322	37	-	-	-	-	-	-	-	-	-	-	-	
1751	-	-	-	-	3	17	392	8	5	28	1290	26	10	56	3222	66	-	-	-	-	-	-	-	-	-	-	-	
1752	-	-	-	-	3	17	374	7	3	17	786	15	12	67	4046	78	-	-	-	-	-	-	-	-	-	-	-	
1753	1	20	90	5	-	-	-	-	-	-	-	-	4	80	1364	65	-	-	-	-	-	-	-	-	-	-	-	
1754	4	44	298	28	5	56	776	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1755	2	33	146	19	4	67	628	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1756	-	-	-	-	1	24	182	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1757	1	22	74	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1758	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1759	2	22	186	11	3	33	350	21	3	33	748	46	1	11	348	21	-	-	-	-	-	-	-	-	-	-	-	
1760	1	17	76	8	3	50	420	35	1	17	256	22	-	-	-	-	1	17	414	35	-	-	-	-	-	-	-	
1761	1	9	62	3	8	73	1288	63	1	9	294	14	-	-	-	-	1	9	412	20	-	-	-	-	-	-	-	
1762	-	-	-	-	6	55	1088	37	-	-	-	-	4	36	1418	48	1	9	440	16	-	-	-	-	-	-	-	
1763	-	-	-	-	4	40	578	26	4	40	962	44	2	20	642	29	-	-	-	-	-	-	-	-	-	-	-	
1764	1	11	100	7	6	67	936	63	2	22	450	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1765	1	11	90	5	6	67	990	66	2	22	440	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1766	1	14	88	9	6	86	844	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1767	-	-	-	-	8	80	1418	77	2	20	434	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1768	-	-	-	-	15	88	2512	75	1	6	220	7	-	-	-	-	-	-	-	-	1	6	598	18	-	-	-	
1769	2	8	188	4	20	83	3448	77	1	4	280	6	-	-	-	-	-	-	-	-	1	4	580	13	-	-	-	
1770	-	-	-	-	11	52	1874	37	5	24	1196	24	4	19	1460	29	-	-	-	-	1	5	560	11	-	-	-	
1771	-	-	-	-	11	48	1934	34	7	30	1512	27	3	13	1082	19	1	4	438	8	-	-	-	-	1	4	670	
1772	2	5	138	2	20	50	3472	38	12	30	2930	32	4	10	1364	15	-	-	-	-	2	5	1160	13	-	-	-	
1773	1	3	84	1	26	67	3948	47	4	10	1064	13	4	10	1462	17	3	8	1366	16	1	3	560	7	-	-	-	
1774	-	-	-	-	23	56	3620	39	10	24	2320	23	2	5	690	7	4	10	1612	16	1	2	560	6	1	2	682	
1775	-	-	NO DATA AVAILABLE																									
1776	-	-	-	-	23	51	3958	37	17	38	4120	39	1	2	360	4	2	4	274	8	1	2	506	6	1	2	692	
1777	-	-	-	-	14	40	2384	24	10	29	2450	25	5	14	1774	18	4	11	1846	19	-	-	-	-	2	6	1348	
1778	1	3	42	1	12	38	2094	26	13	41	3158	39	3	9	964	12	-	-	-	-	1	3	538	7	2	6	1368	
1779	-	-	-	-	6	24	968	13	14	56	3314	46	1	4	312	4	1	4	420	6	-	-	-	-	3	12	2264	
1780	-	-	-	-	7	33	1210	24	12	57	2834	56	-	-	-	-	1	5	448	9	1	5	588	11	-	-	-	
1781	-	-	-	-	1	20	134	9	3	60	692	47	-	-	-	-	-	-	-	-	-	-	-	-	1	20	650	
1782	1	10	92	4	3	30	520	22	4	40	860	36	-	-	-	-	2	20	906	38	-	-	-	-	-	-	-	
1783	1	4	82	1	11	42	1730	30	10	38	2334	41	2	8	642	11	2	8	898	16	-	-	-	-	-	-	-	
1784	-	-	-	-	1	14	200	8	3	43	708	29	1	14	374	15	1	14	452	19	-	-	-	-	1	14	706	
1785	-	-	-	-	3	25	456	13	3	25	782	21	3	25	1092	30	3	25	1308	36	-	-	-	-	-	-	-	
1786	-	-	-	-	5	71	760	56	1	14	270	20	1	14	338	25	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = PERCENT IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = PERCENT IS OF TOTAL CARGO TONNAGE FOR THE YEAR (00 = 100%)

TABLE II.2.F BREAKDOWN OF SHIPPING FROM ESTONIA TO AMSTERDAM BY SIZE OF CARCC IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1787	1	9	62	3	9	82	1302	71	-	-	-	-	-	-	1	9	478	26	-	-	-	-	-	-	-	-	-	
1788	1	25	88	12	1	25	108	15	2	50	548	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1789	1	8	36	3	7	54	1170	37	1	8	254	8	1	8	344	11	2	15	618	26	1	8	522	16	-	-	-	
1790	5	38	400	20	4	31	590	30	3	23	668	34	1	8	332	17	-	-	-	-	-	-	-	-	-	-	-	
1791 <sup>13</sup>	3	23	214	11	8	62	1188	61	1	8	218	11	1	8	330	17	-	-	-	-	-	-	-	-	-	-	-	
1792	2	22	196	11	4	44	638	35	2	22	502	27	-	-	-	-	-	-	-	-	1	11	508	27	-	-	-	
1793	-	-	-	-	4	80	590	73	1	20	218	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1794	-	-	-	-	-	-	-	-	1	20	254	15	2	40	634	36	2	40	856	49	-	-	-	-	-	-	-	
1795 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1796	2	25	148	11	4	50	686	49	1	13	212	15	1	13	344	25	-	-	-	-	-	-	-	-	-	-	-	
1797	1	20	74	6	2	40	324	27	-	-	-	-	1	20	362	30	1	20	442	37	-	-	-	-	-	-	-	
1798	1	33	80	20	2	67	314	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1799	-	-	-	-	1	**	124	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1800	1	17	52	22	2	67	298	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1801	-	-	-	-	-	-	-	-	-	-	-	-	1	**	322	**	-	-	-	-	-	-	-	-	-	-	-	-
1802	1	14	98	6	2	29	312	20	3	43	746	47	-	-	-	-	1	14	428	27	-	-	-	-	-	-	-	
1803	2	20	148	10	5	50	674	44	3	30	698	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1804	-	-	-	-	1	33	168	26	2	67	466	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1805	-	-	-	-	6	55	1072	44	4	36	950	39	-	-	-	-	1	9	442	18	-	-	-	-	-	-	-	
1806	-	-	-	-	3	60	426	43	1	20	260	26	1	20	314	31	-	-	-	-	-	-	-	-	-	-	-	
1807	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1808 <sup>17</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1814 <sup>6</sup>	-	-	-	-	1	**	182	**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1815	-	-	-	-	1	50	186	37	-	-	-	-	1	50	322	63	-	-	-	-	-	-	-	-	-	-	-	
1816	-	-	-	-	1	20	196	14	2	40	530	38	2	40	664	48	-	-	-	-	-	-	-	-	-	-	-	
1817	-	-	-	-	6	67	846	47	2	22	534	30	-	-	-	-	1	11	420	23	-	-	-	-	-	-	-	
1818	1	25	78	8	2	50	280	30	-	-	-	-	-	-	-	-	-	-	-	1	25	580	62	-	-	-	-	
1819	-	-	-	-	3	50	540	30	1	17	226	13	1	17	372	21	-	-	-	-	-	-	-	-	1	17	644	36
1820	-	-	-	-	1	50	158	42	1	50	218	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1821	-	-	-	-	2	50	244	25	1	25	260	31	1	25	336	40	-	-	-	-	-	-	-	-	-	-	-	
1822	1	33	66	21	2	67	248	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1823	-	-	-	-	1	33	120	18	2	67	532	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1824	1	25	76	12	2	50	376	57	1	25	204	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1825 <sup>20</sup>	1	50	54	26	1	50	180	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS CARRYING CARGES IN THIS SIZE CATEGORY  
 II = PERCENT IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = PERCENT IS OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

SOURCES: GAA, PA 78/94-102

TABLE II-2-6 TREASON OF SHIPPING FROM FREDERICKSBURG TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A			B			C			E			F		
	J	II	III	J	II	III	J	II	III	J	II	III	J	II	III
1744	-	-	-	-	-	-	1 00	-	-	-	-	-	-	-	-
1745	2 40	-	148 15	-	-	-	3 60	-	-	-	-	-	-	-	-
1746	-	-	-	-	-	-	3 75	732 60	-	-	-	-	-	-	-
1747	1 9	72 2	1 9	198 7	-	-	6 95	1580 50	1 25	336 31	-	-	-	-	-
1748	1 14	54 4	2 29	264 16	-	-	2 29	544 33	2 18	648 22	1 5	440 15	-	-	-
1749	1 13	34 6	2 25	258 16	-	-	4 50	924 58	1 14	352 22	1 14	408 25	-	-	-
1750	2 29	136 15	2 29	264 25	-	-	2 43	684 65	1 13	312 20	-	-	-	-	-
1751	-	-	-	130 21	-	-	2 67	476 70	-	-	-	-	-	-	-
1752	-	-	-	4 57	598 56	-	2 33	464 44	-	-	-	-	-	-	-
1753	-	-	-	2 44	326 44	-	-	-	-	-	-	-	-	-	-
1754	1 26	56 15	4 80	552 95	-	-	-	-	-	-	-	-	-	-	-
1755	3 50	254 35	2 33	230 31	-	-	1 17	252 34	-	-	-	-	-	-	-
1756	-	-	3 59	466 31	-	-	1 17	262 19	2 33	732 69	-	-	-	-	-
1757	1 14	92 6	2 29	224 13	-	-	-	-	4 57	1352 61	-	-	-	-	-
1758	1 29	90 4	1 29	164 13	-	-	1 20	256 21	2 40	704 50	-	-	-	-	-
1759	-	-	1 13	140 7	-	-	6 75	1492 74	1 13	362 19	-	-	-	-	-
1760	1 17	84 5	-	-	-	-	1 17	236 13	2 67	1466 62	-	-	-	-	-
1761	-	-	1 33	178 19	-	-	-	-	2 33	730 37	2 33	862 43	-	-	-
1762	-	-	1 17	170 9	-	-	1 17	234 12	-	-	-	-	-	-	-
1763	-	-	3 40	506 49	-	-	2 40	534 51	-	-	-	-	-	-	-
1764	-	-	2 42	362 29	-	-	3 60	756 71	-	-	-	-	-	-	-
1765	-	-	-	-	-	-	3 60	680 71	-	-	-	-	-	-	-
1766	1 13	30 6	3 38	488 38	-	-	3 38	718 43	1 13	358 21	-	-	-	-	-
1767	-	-	4 80	628 73	-	-	1 29	232 27	-	-	-	-	-	-	-
1768	-	-	4 67	630 52	-	-	1 17	224 18	1 17	376 30	-	-	-	-	-
1769	-	-	4 44	580 33	-	-	5 36	1182 67	-	-	-	-	-	-	-
1770	-	-	2 40	340 32	-	-	3 60	730 62	-	-	-	-	-	-	-
1771	-	-	1 33	170 24	-	-	2 67	542 76	-	-	-	-	-	-	-
1772	-	-	2 48	276 25	-	-	2 40	432 40	1 20	376 35	-	-	-	-	-
1773	-	-	3 60	470 39	-	-	-	-	2 40	744 61	-	-	-	-	-
1774	1 11	90 5	5 56	828 46	-	-	2 22	432 25	-	-	1 11	432 25	-	-	-
1775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	-	-	2 67	302 56	-	-	1 33	230 44	-	-	-	-	-	-	-
1777	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1778	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1779	1 17	90 6	2 33	298 21	-	-	1 17	226 16	-	-	2 80	892 60	-	-	-
1780	-	-	1 17	182 9	-	-	2 33	432 22	-	-	2 33	816 57	-	-	-
1781	1 33	180 23	2 67	336 77	-	-	-	-	-	-	3 50	1324 68	-	-	-
1782	-	-	4 57	580 42	-	-	2 29	448 32	1 14	358 26	-	-	-	-	-
1783	-	-	4 57	676 41	-	-	1 14	290 18	2 29	688 42	-	-	-	-	-
1784	-	-	6 60	906 45	-	-	3 30	646 34	-	-	1 10	404 20	-	-	-

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = 1/2 OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = 1/2 OF TOTAL CARGO TONNAGE FOR THE YEAR (100 = 1000)

SOURCE: C.A.A. PA 75/94-102

CONTINUED...

TABLE 11-2-6 SEASON OF SHIPPING FROM FREDERIKSVORN TO APSTEAD BY SIZE OF CARGO IN TONS

SHIP	A		B		C		D		E		F					
	9-199	101-200	201-300	301-400	401-500	501-600	601+									
1762	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1765	-	6 50	946 38	5 42	1214 49	1 8	320 13	-	-	-	-	-	-	-	-	-
1766	-	1 50	156 40	1 50	234 60	-	-	-	-	-	-	-	-	-	-	-
1767	-	4 70	628 78	-	-	-	-	-	-	-	-	-	-	-	-	-
1768	-	2 50	246 31	2 50	548 66	-	-	-	-	-	-	-	-	-	-	-
1769	-	-	-	-	-	1 00	364 00	-	-	-	-	-	-	-	-	-
1770	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1771	-	1 40	146 00	-	-	-	-	-	-	-	-	-	-	-	-	-
1772	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1773	-	1 00	160 00	-	-	-	-	-	-	-	-	-	-	-	-	-
1774	-	2 40	230 26	3 60	642 74	-	-	-	-	-	-	-	-	-	-	-
1775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	-	2 50	238 34	2 50	454 66	-	-	-	-	-	-	-	-	-	-	-
1777	-	3 10	428 74	-	-	-	-	-	-	-	-	-	-	-	-	-
1778	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1779	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1780	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	302 00	-	-	-	-	-	-	-	-	-	-	-	-	-
1801	-	1 50	180 36	-	-	1 50	322 64	-	-	-	-	-	-	-	-	-
1802	-	1 00	186 00	-	-	-	-	-	-	-	-	-	-	-	-	-
1803	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1804	1 50	62 37	142 63	-	-	-	-	-	-	-	-	-	-	-	-	-
1805	1 50	72 22	-	1 50	256 78	-	-	-	-	-	-	-	-	-	-	-
1806	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	1 00	362 00	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1816	1 30	0 0	-	1 30	274 31	-	-	-	-	-	-	-	-	-	1 30	416 69
1817	-	-	132 00	-	-	-	-	-	-	-	-	-	-	-	-	-
1818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1820	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1821	-	-	-	-	-	-	-	-	1 00	410 00	-	-	-	-	-	-
1822	-	-	-	1 50	212 29	-	-	-	-	-	1 50	520 71	-	-	-	-
1823	-	-	-	-	-	1 00	328 00	-	-	-	-	-	-	-	-	-
1824	-	-	-	1 50	258 43	1 50	322 57	-	-	-	-	-	-	-	-	-
1825	-	-	-	1 50	276 08	1 50	362 52	-	-	-	-	-	-	-	-	-
1826	-	-	-	1 00	216 00	-	-	-	-	-	-	-	-	-	-	-

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % OF TOTAL CARGO TONNAGE FOR THE YEAR (100 = 10000)

TABLE H-2-24. MEMBERSHIP OF SHIPPING FLEET COMPLIANT TO MSTERCAM BY SIZE OF CARGO IN TONS

YEARS	A - 100		B - 200		C - 300		D - 400		E - 500		F - 600		G - 800	
	J	II	III	IV	J	II	III	IV	J	II	III	IV	J	II
1966	14	27	1174	17	34	65	665	65	4	6	948	13	-	-
1967	2	5	120	2	31	36	4524	66	6	15	1000	22	-	-
1968	2	8	158	4	28	77	2408	72	3	12	694	17	-	-
1969	-	-	-	-	2	67	279	55	1	23	236	45	-	-
1970	-	-	-	-	11	79	1020	72	3	21	632	28	-	-
1971	4	21	348	12	9	47	1268	81	6	32	1374	47	-	-
1972	3	9	270	5	24	75	3446	65	4	13	970	19	-	-
1973	2	6	174	3	25	69	3526	68	5	26	2190	37	-	-
1974	3	14	256	7	16	73	2482	74	3	14	624	19	-	-
1975	5	17	448	18	21	72	3276	72	2	7	518	11	-	-
1976	1	7	40	3	18	67	1204	55	4	27	982	42	-	-
1977	3	36	274	22	6	49	744	55	1	19	2448	29	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	2	8	164	4	17	48	2432	68	6	24	1432	35	-	-
1985	4	28	354	11	11	55	1724	51	4	29	882	26	-	-
1986	5	19	316	8	19	78	2838	75	3	11	648	17	-	-
1987	12	36	982	17	24	68	3652	86	4	18	918	17	-	-
1988	6	43	476	23	7	59	893	56	1	7	244	15	-	-
1989	7	47	568	33	7	47	938	54	1	7	216	13	-	-
1990	4	48	532	26	5	59	718	56	1	18	232	18	-	-
1991	2	11	159	6	15	79	2050	78	2	11	438	16	-	-
1992	1	25	150	28	3	75	402	80	-	-	-	-	-	-
1993	9	38	368	29	5	38	726	39	2	15	616	22	-	-
1994	1	11	68	4	5	56	820	47	2	22	546	31	-	-
1995	6	48	438	23	7	47	1048	55	2	13	436	22	-	-

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = NUMBER OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = PERCENT OF TOTAL CARGO TONNAGE FOR THE YEAR (100 = 100%)

SOURCE: C&G, PA 73/99-102



TABLE II-3 BREAKDOWN OF BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM BY SIZE OF SHIP IN TONS

YEAR	A				B				C				D				E				F				G											
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV				
1705																																				
1706																																				
1707																																				
1708																																				
1709																																				
1710	152	5	1	18	160	6			4	33	424	32	2	17	706	28	2	17	840	29																
1711	172	3	4	15	532	9			13	50	3668	57	3	12	1014	17	2	6	846	14																
1712	180	36	1	17	120	23			1	17	220	42																								
1713	356	49	1	11	114	16			1	11	260	36																								
1714	524	9	7	23	1114	19			13	42	3272	55	3	10	1050	18																				
1715	1448	38	4	11	426	16			6	17	1412	37	1	3	370	10																				
1716	2230	12	30	24	4414	24			34	31	8630	46	9	8	2922	16	1	1	440	2																
1717	2060	8	41	32	6124	25			45	35	11414	47	13	10	4422	18	1	1	450	2																
1718	1156	5	20	29	4334	22			39	41	9056	50	12	13	4142	21	1	1	420	2																
1719	2126	10	18	17	2542	12			38	36	9406	44	15	14	5254	25	5	5	2112	10																
1720	2458	8	27	17	4218	12			40	25	10212	28	30	24	14248	39	11	7	4676	13																
1721	2706	7	32	19	4908	13			36	23	9644	24	42	25	15196	40	12	7	5068	14																
1722	2474	6	37	20	5364	12			56	30	14804	32	49	26	17480	40	10	5	4192	10																
1723	2502	8	38	25	5830	18			41	26	9836	30	32	21	11542	35	8	5	3310	10																
1724	4854	10	44	19	6478	14			45	20	11168	23	65	29	22852	48	6	3	2534	5																
1725	5932	5	79	24	11304	16			87	26	22140	31	86	26	36216	42	4	1	1478	2																
1726	6586	10	92	20	13704	21			79	24	19680	30	72	22	24806	38	3	1	1238	2																
1727	2876	5	91	36	12468	24			86	34	21958	42	45	18	14442	26																				
1728	4828	7	107	36	15472	27			87	20	22352	39	49	17	15624	27																				
1729	2048	4	79	34	11604	24			82	35	26724	43	44	19	14142	29																				
1730	2420	4	132	37	18928	26			139	36	32550	44	62	17	15830	27																				
1731	3002	4	130	34	18554	23			142	37	35450	45	69	18	22252	28																				
1732	2972	3	82	23	11676	15			160	45	48604	50	84	24	27604	33																				
1733	1864	2	82	25	12336	16			137	41	35432	45	91	27	29542	37																				
1734	2630	3	119	32	21018	21			123	32	31322	36	113	29	36624	42																				
1735	1200	2	100	34	14994	22			91	31	23350	34	91	31	25642	43	1	0	400	1																
1736	2176	3	94	32	14326	22			102	35	25822	39	71	24	23162	35																				
1737	2678	4	97	30	14824	20			109	31	25458	34	93	29	30360	41	1	0	400	1																
1738	2478	3	139	32	21018	21			132	32	35446	36	116	27	37046	30																				
1739	2132	3	125	36	14332	24			107	31	27170	35	89	26	24006	36																				
1740	64	20	6394	8	159	37			100	23	25214	31	87	20	20478	35																				
1741	106	25	7448	10	129	31			85	20	21328	26	100	24	32542	41	2	0	816	1																
1742	61	17	4638	6	88	25			132	36	32214	44	71	20	23342	32																				
1743	36	18	2042	3	77	21			121	33	30240	35	126	35	41934	48	2	1	816	1																
1744	95	18	4742	4	101	33			73	24	18248	30	72	24	24072	39	1	0	400	1																
1745	34	12	2170	4	64	23			75	28	20342	31	101	36	33724	51																				

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = X \* I \* IS OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = X \* III \* IS OF TOTAL SHIP TONNAGE FOR THE YEAR (000 = 1000)  
 SOURCE: CAB. PA 78094-182  
 CONTINUED...

TABLE II.3 SEASON OF BAL TIC SHIPPING FROM RUSSIA TO AMSTERDAM BY SIZE OF SHIP IN TONS

YEAR	A				B				C				D				E				F				G			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1764	38	16	2920	5	68	24	8556	16	62	28	16872	31	78	32	25966	47	1	0	488	1	-	-	-	-	-	-	-	-
1767	51	29	4166	8	74	29	18653	20	54	21	13068	25	75	29	25956	47	1	0	488	1	-	-	-	-	-	-	-	-
1768	37	15	3822	6	67	28	9604	19	68	28	16766	32	66	28	22044	43	1	0	488	1	-	-	-	-	-	-	-	-
1769	46	17	3958	6	67	25	9828	16	74	27	18810	31	84	31	28180	46	1	0	488	1	-	-	-	-	-	-	-	-
1758	36	13	3182	5	64	24	8894	14	84	31	21422	35	83	31	27996	45	1	0	488	1	-	-	-	-	-	-	-	-
1751	28	12	2268	4	52	23	7369	13	56	24	14928	26	93	40	31422	36	1	0	488	1	-	-	-	-	-	-	-	-
1752	41	16	3384	6	79	30	11142	15	49	19	12434	21	91	35	31024	34	-	-	-	-	-	-	-	-	-	-	-	-
1753	49	15	3212	5	75	29	11058	19	61	24	15182	26	89	31	27674	47	2	1	894	1	1	0	536	1	-	-	-	-
1754	42	15	3418	6	84	31	12144	20	57	21	13818	23	91	33	31234	51	1	0	488	1	-	-	-	-	-	-	-	-
1755	36	18	2882	6	65	22	6636	14	63	21	18386	22	71	35	24806	52	7	3	2872	6	-	-	-	-	-	-	-	-
1756	33	21	2782	9	54	34	7936	26	43	27	18334	33	25	16	9828	29	2	1	810	3	-	-	-	-	-	-	-	-
1757	32	29	2732	8	68	37	8762	27	36	22	8576	26	31	19	18980	33	4	2	1634	5	-	-	-	-	-	-	-	-
1758	34	18	2980	7	59	32	8364	21	39	21	9158	23	48	26	17966	42	7	4	2852	7	-	-	-	-	-	-	-	-
1759	39	17	3488	6	55	24	7526	14	49	21	11982	22	83	35	25356	53	8	3	3282	6	-	-	-	-	-	-	-	-
1760	41	20	3580	8	53	26	7584	16	47	23	11288	24	54	26	19264	41	12	6	4972	11	-	-	-	-	-	-	-	-
1761	46	20	3982	8	62	35	11618	24	38	16	8966	18	56	24	15948	41	11	5	4552	9	-	-	-	-	-	-	-	-
1762	36	11	2888	4	66	41	13154	26	49	21	11598	23	46	20	16466	33	17	7	7886	14	-	-	-	-	-	-	-	-
1763	29	12	2856	5	107	44	15680	30	42	17	18846	19	48	20	16654	33	16	7	6616	13	-	-	-	-	-	-	-	-
1764	18	7	1582	3	98	36	12832	22	57	23	13472	23	66	27	23396	48	18	7	7448	13	-	-	-	-	-	-	-	-
1765	14	6	1248	2	76	34	18706	20	52	23	12314	23	59	27	28896	39	20	9	8286	15	1	0	532	1	-	-	-	-
1766	30	11	2528	4	86	32	13648	27	65	23	15326	23	71	26	25318	36	24	9	9958	15	-	-	-	-	-	-	-	-
1767	29	15	2540	6	86	41	11314	27	25	13	5966	14	40	21	14262	34	15	10	7882	19	-	-	-	-	-	-	-	-
1768	33	13	2946	5	97	38	12944	23	44	17	10304	18	54	21	19434	35	25	10	10364	18	-	-	-	-	-	-	-	-
1769	43	13	3396	5	115	38	16408	25	53	18	12578	19	64	21	23162	35	27	9	11282	17	-	-	-	-	-	-	-	-
1770	26	12	2388	5	76	34	18948	21	41	15	9634	12	49	22	17764	34	29	13	12634	23	-	-	-	-	-	-	-	-
1771	34	19	2958	9	79	45	16576	31	26	16	6040	18	21	12	7754	23	16	6	6670	20	-	-	-	-	-	-	-	-
1772	79	26	6394	11	117	38	16164	27	48	13	9266	15	43	14	15682	26	38	10	12512	21	-	-	-	-	-	-	-	-
1773	72	26	6894	10	88	31	11366	29	41	15	9834	17	45	16	16366	28	34	12	14168	25	-	-	-	-	-	-	-	-
1774	65	21	5418	8	121	38	16672	25	44	14	18486	16	44	14	16838	24	41	13	17192	26	-	-	-	-	-	-	-	-
1775	11	41	944	39	15	56	1936	62	1	4	218	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	36	13	2558	5	92	48	12582	24	32	14	7796	15	26	11	9572	16	49	21	20936	39	-	-	-	-	-	-	-	-
1777	33	13	2890	5	98	40	13366	23	34	14	8278	14	27	11	9624	17	56	23	23972	41	-	-	-	-	-	-	-	-
1778	49	18	4828	7	116	44	15136	27	21	8	5016	9	21	6	7364	13	58	22	24974	44	-	-	-	-	-	-	-	-
1779	39	17	3216	6	96	48	11880	20	29	13	6688	14	14	6	4862	10	53	24	22862	46	-	-	-	-	-	-	-	-
1780	34	15	2928	6	90	40	11628	22	26	13	6648	13	17	7	5876	11	57	25	24924	48	-	-	-	-	-	-	-	-
1781	48	47	3216	25	44	43	5824	46	4	4	1888	8	4	4	1412	11	3	3	1352	11	-	-	-	-	-	-	-	-
1782	93	41	7878	21	87	39	11188	34	20	9	4626	14	9	4	3326	10	16	7	6946	21	-	-	-	-	-	-	-	-
1783	64	24	4958	9	106	48	14014	26	31	12	7252	13	15	6	5042	9	52	19	22888	42	-	-	-	-	-	-	-	-
1784	37	14	3196	6	126	40	17116	31	25	11	6822	12	7	3	2440	4	60	22	26484	47	-	-	-	-	-	-	-	-
1785	34	15	2864	5	75	33	18876	18	39	17	9512	17	18	8	6380	11	61	27	27824	48	-	-	-	-	-	-	-	-
1786	21	10	1748	3	66	32	9210	16	35	17	8644	15	17	8	5862	10	70	32	31250	55	-	-	-	-	-	-	-	-

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = Σ I · IS OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = Σ III · IS OF TOTAL SHIP TONNAGE FOR THE YEAR (100 = 10000)

SOURCE: GAA, PA 74/94-102

CONTINUED...

TABLE II.3 BREMENSHIP OF PUBLIC SHIPPING FROM RUSSIA TO AMSTERDAM BY SIZE OF SHIP IN TONS

SIZES IN TONS	A - 100		B - 200		C - 300		C - 400		E - 500		F - 600		G - 601 +
	J	II	J	II	J	II	J	II	J	II	J	II	
1787	25 11	1906 3	96 42	13179 23	18 8	9490 8	16 7	5572 10	74 32	32760 57	-	-	-
1788	34 16	2750 5	82 39	10526 21	16 8	9188 8	8 4	2770 5	71 34	31504 61	-	-	-
1789	42 17	3194 5	79 23	18700 18	30 12	7344 12	18 7	6412 11	72 30	31048 52	1 0	510 1	-
1790	60 23	3700 8	96 37	13606 22	22 8	5576 9	12 5	4288 7	72 27	32128 54	-	-	-
1791	34 16	2624 5	71 33	9278 17	24 11	6160 11	14 6	4950 9	73 34	32398 58	-	-	-
1792	33 15	2710 5	70 35	10622 19	22 10	5434 10	12 5	4268 7	76 34	33080 60	-	-	-
1793	69 37	5488 20	99 48	12216 44	10 5	2412 9	10 5	3548 13	9 5	3804 14	-	-	-
1794	54 23	4314 8	93 48	12372 23	13 6	3096 6	4 2	1462 3	71 36	31490 60	-	-	-
1795	26 11	1868 3	23 45	2872 52	-	-	1 2	382 7	1 2	410 7	-	-	-
1796	16 7	9622 30	32 36	12336 38	13 5	3012 9	2 1	682 2	15 6	6540 20	-	-	-
1797	15 7	4218 14	42 45	11554 37	15 8	3558 11	9 5	3176 10	19 10	8404 27	-	-	-
1798	48 43	3564 23	45 41	5740 38	8 7	1852 12	3 3	1014 7	7 6	3106 20	-	-	-
1799	4 04	294 31	5 56	666 65	-	-	-	-	-	-	-	-	-
1800	24 38	1788 20	28 44	3350 37	4 6	894 10	2 3	702 8	5 2	2274 25	-	-	-
1801	26 46	4766 25	23 43	2906 42	6 11	1416 20	-	-	2 4	804 13	-	-	-
1802	82 34	6152 14	101 42	13666 33	14 6	3122 7	8 3	2656 7	37 15	16420 39	-	-	-
1803	89 47	6782 28	65 45	11054 46	3 2	694 3	3 2	1036 4	7 4	3122 13	1 1	510 2	1 1
1804	41 46	3282 33	44 49	5512 55	3 3	698 7	-	-	-	-	1 1	510 5	-
1805	44 43	6240 28	96 49	12046 54	12 6	2006 13	1 1	302 1	2 1	964 4	-	-	-
1806	29 43	2110 26	38 45	3994 49	7 10	1686 21	1 1	302 5	-	-	-	-	-
1807	22 09	1285 49	9 28	1134 43	1 3	220 8	-	-	-	-	-	-	-
1808		NO DATA AVAILABLE											
1809		NO DATA AVAILABLE											
1810		NO DATA AVAILABLE											
1811		NO DATA AVAILABLE											
1812		NO DATA AVAILABLE											
1813		NO DATA AVAILABLE											
1814	44 42	3942 24	56 49	7436 58	10 9	2396 19	-	-	-	-	-	-	-
1815	69 45	4728 25	75 48	10224 54	5 3	1264 7	2 1	730 4	4 3	1856 18	-	-	-
1816	82 38	5490 19	109 50	15470 52	11 5	2642 9	4 2	1424 5	10 9	4982 15	-	-	-
1817	119 21	9378 9	321 56	48154 48	52 16	21968 22	25 4	4508 9	9 2	3974 4	2 0	1022 1	9 2
1818	24 25	1718 9	46 48	6046 34	12 13	2852 14	3 3	1844 5	1 1	408 2	1 1	578 3	9 9
1819	32 31	2946 14	66 54	9674 45	7 6	1656 8	1 1	350 2	4 3	1820 0	1 1	506 2	6 5
1820	34 26	2690 11	68 53	10396 42	12 5	2948 11	3 2	1126 5	4 3	1768 7	-	-	8 6
1821	36 28	2770 12	72 56	11122 49	11 9	2576 11	1 1	350 2	1 1	486 2	1 1	520 2	6 5
1822	18 29	1452 11	29 47	4174 32	6 10	1338 10	3 5	902 8	-	-	-	-	6 10
1823	17 17	1146 6	49 49	7652 37	21 21	5030 24	6 6	1976 10	1 1	496 2	2 2	1072 5	4 4
1824	11 13	774 5	58 67	9500 60	12 14	2748 17	4 5	1400 9	-	-	1 1	536 3	1 1
1825	14 26	982 12	31 57	4868 58	5 5	1050 12	3 6	1022 13	1 2	420 5	-	-	858 5

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = X \* I' IS OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = X \* III' IS OF TOTAL SHIP TONNAGE FOR THE YEAR (000 = 1000)

SOURCE: GAA, PA 78/94-102

TABLE II-3-A BREAKDOWN OF SHIPPING FROM ST. PETERSBURG TO AMSTERDAM BY SIZE OF SHIP IN TONS

SIZES IN TONS	A - 100		B - 200		C - 300		D - 400		E - 500		F - 600		G 601 +
	J	J	J	J	J	J	J	J	J	J	J	J	
1705	-	-	-	-	-	-	-	-	-	-	-	-	-
1706	-	-	-	-	-	-	-	-	-	-	-	-	-
1707	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	-	-	-	-	-	-	-	-	-	-	-	-	-
1709	-	-	-	-	-	-	-	-	-	-	-	-	-
1710	-	-	-	-	-	-	-	-	-	-	-	-	-
1711	-	-	-	-	-	-	-	-	-	-	-	-	-
1712	-	-	-	-	-	-	-	-	-	-	-	-	-
1713	-	-	-	-	-	-	-	-	-	-	-	-	-
1714	-	-	-	-	-	-	-	-	-	-	-	-	-
1715	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	1	11	70	5	6	67	950	63	2	22	490	32	-
1717	3	38	234	21	4	50	520	53	1	13	250	26	-
1718	1	13	80	5	2	25	320	20	5	63	1250	75	-
1719	9	60	678	41	5	33	720	44	1	7	252	15	-
1720	8	42	542	19	5	26	716	25	4	21	800	31	2
1721	12	86	750	63	-	-	-	-	2	11	600	24	-
1722	13	72	700	43	1	6	112	6	4	22	940	51	-
1723	12	57	704	29	4	19	682	25	4	19	924	34	1
1724	28	67	1974	54	6	14	816	17	5	12	1140	23	3
1725	31	70	2136	53	6	14	772	19	5	12	1130	22	-
1726	28	67	2126	29	23	39	3180	44	7	12	1604	22	1
1727	9	35	742	23	15	58	2008	63	2	8	434	14	-
1728	21	49	1656	34	20	47	2020	57	2	5	434	9	-
1729	2	14	136	6	10	71	1648	73	2	14	660	30	-
1730	7	26	650	16	14	52	1870	49	6	22	1376	36	-
1731	9	28	730	16	10	56	2760	60	5	16	1112	24	-
1732	7	27	682	15	18	30	1486	36	9	35	2836	49	-
1733	9	47	726	28	7	37	1104	42	2	11	460	18	1
1734	6	17	482	18	26	72	3404	70	3	8	664	13	1
1735	6	25	514	15	13	54	1804	54	5	21	1082	31	-
1736	12	34	1018	21	15	43	1942	40	8	23	1916	30	-
1737	10	19	848	8	16	31	2322	23	23	44	5908	59	3
1738	11	13	970	6	35	42	5080	38	27	32	7154	43	11
1739	2	6	188	3	21	86	2950	55	8	25	1932	36	1
1740	15	34	1270	17	12	27	1524	21	13	30	3338	45	4
1741	14	14	1156	6	33	34	4524	22	28	24	7196	35	21
1742	9	19	668	8	17	36	2316	27	17	34	4334	50	4
1743	9	22	790	12	20	50	2840	42	8	20	1908	30	2
1744	19	36	1648	23	26	49	3424	45	7	13	1610	23	1
1745	9	29	638	17	20	65	2624	76	2	6	482	13	-

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = X 'Y' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = X 'Y' IS OF TOTAL SHIP TONNAGE FOR THE YEAR (100 = 1000)

TABLE II.3.A BREAKDOWN OF SHIPPING FROM ST. PETERSBURG TO AMSTERDAM BY SIZE OF SHIP IN TONS

SIZES IN TONS	A		B		C		D		E		F		G			
	8 - 107	101 - 200	201 - 300	301 - 400	401 - 500	501 - 600	601 +									
YEAR	J	II	III	IV	J	II	III	IV	J	II	III	IV	J	II	III	IV
1706	10	32	736	19	17	55	2136	56	4	13	974	25	-	-	-	-
1707	19	33	1504	22	34	60	4478	63	3	5	734	10	-	-	-	-
1708	11	37	920	23	14	47	1780	45	4	13	916	23	-	-	-	-
1709	15	45	1274	32	14	42	1726	43	4	12	1000	25	-	-	-	-
1750	6	39	540	21	13	65	1746	69	1	5	230	9	-	-	-	-
1751	19	51	1536	35	15	41	2028	46	2	5	468	11	-	-	-	-
1752	15	35	1204	25	27	63	3648	71	1	2	222	4	-	-	-	-
1753	20	43	1650	30	25	53	3242	55	2	4	564	10	-	-	-	-
1754	15	43	1224	32	20	57	2646	68	-	-	-	-	-	-	-	-
1755	10	43	704	30	13	57	1802	70	-	-	-	-	-	-	-	-
1756	20	43	1750	32	23	50	3100	56	7	7	676	12	-	-	-	-
1757	16	34	1264	23	29	62	3076	66	1	2	244	4	-	-	-	-
1758	13	35	1160	24	19	51	2558	53	5	14	1120	23	-	-	-	-
1759	17	41	1500	30	22	54	3582	61	2	5	434	9	-	-	-	-
1760	6	32	704	21	16	57	1900	57	3	11	754	22	-	-	-	-
1761	4	27	208	14	9	60	1330	65	2	13	438	21	-	-	-	-
1762	13	35	1976	23	22	59	2514	62	1	3	202	4	-	-	-	-
1763	9	24	738	15	26	70	3912	77	2	5	404	8	-	-	-	-
1764	6	26	532	19	17	74	2272	81	-	-	-	-	-	-	-	-
1765	7	27	532	18	18	69	2528	76	1	4	202	6	-	-	-	-
1766	8	27	652	16	20	67	3042	74	2	7	420	10	-	-	-	-
1767	10	42	1528	20	24	56	3452	67	1	2	202	4	-	-	-	-
1768	6	17	556	12	29	81	3906	84	1	3	202	4	-	-	-	-
1769	13	29	1056	17	29	64	4070	67	1	2	202	3	-	-	-	-
1770	8	36	722	24	10	45	1304	44	3	10	614	21	-	-	-	-
1771	10	37	852	24	15	56	2242	64	2	7	416	12	-	-	-	-
1772	10	28	704	18	26	72	3570	82	-	-	-	-	-	-	-	-
1773	21	52	1766	42	19	47	2420	58	-	-	-	-	-	-	-	-
1774	14	38	1136	23	18	49	2500	53	4	11	806	18	-	-	-	-
1775	11	41	944	30	15	56	1936	62	1	4	216	7	-	-	-	-
1776	7	44	570	32	9	56	1162	60	-	-	-	-	-	-	-	-
1777	14	33	1104	24	27	64	3470	71	1	2	226	5	-	-	-	-
1778	22	31	1050	22	47	66	6020	72	2	3	490	6	-	-	-	-
1779	20	36	1618	21	20	51	3534	47	3	5	744	10	-	-	-	-
1780	22	42	1010	30	29	55	3754	62	1	2	316	4	-	-	-	-
1781	6	33	302	20	12	67	1572	80	2	4	462	6	-	-	-	-
1782	17	55	1148	37	13	42	1762	55	-	-	-	-	-	-	-	-
1783	5	22	392	13	16	70	2020	69	1	4	312	11	-	-	-	-
1784	15	23	1008	18	48	75	4282	80	1	2	208	3	-	-	-	-
1785	64	50	554	43	6	50	732	57	-	-	-	-	-	-	-	-
1786	11	50	946	42	11	50	1316	58	-	-	-	-	-	-	-	-

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = SUM OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = SUM OF TOTAL SHIP TONNAGE FOR THE YEAR (00 x 1000)

TABLE 11.3-A BREAKDOWN OF SHIPPING FROM ST. PETERSBURG TO AMSTERDAM BY SIZE OF SHIP IN TONS

SHIP ID NUMBER	A - 100			B - 200			C - 300			D - 400			E - 500			F - 600			G	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II		III
1787	7	37	422	21	12	63	1600	75	-	-	-	-	-	-	-	-	-	-	-	-
1788	18	47	1408	37	20	53	2416	63	-	-	-	-	-	-	-	-	-	-	-	-
1789	23	45	1704	39	25	69	3234	56	2	4	410	7	-	-	-	-	-	-	-	-
1790	13	39	940	28	20	61	2534	72	-	-	-	-	-	-	-	-	-	-	-	-
1791	18	27	840	19	25	68	3272	65	-	-	-	-	-	-	-	-	-	-	-	-
1792	7	37	676	26	12	63	1650	72	1	3	208	4	1	3	JSC	7	-	-	-	-
1793	14	34	1158	44	12	46	1462	56	-	-	-	-	-	-	-	-	-	-	-	-
1794	12	52	954	41	11	48	1394	59	-	-	-	-	-	-	-	-	-	-	-	-
1795	1	25	34	9	3	75	354	91	-	-	-	-	-	-	-	-	-	-	-	-
1796	13	57	934	39	9	39	1256	52	1	4	212	9	-	-	-	-	-	-	-	-
1797	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1798	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1801	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1802	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1803	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1804	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1806	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	14	48	936	29	12	41	1556	49	3	10	690	22	-	-	-	-	-	-	-	-
1815	18	47	1198	29	18	47	2354	58	2	5	518	13	-	-	-	-	-	-	-	-
1816	16	60	1138	41	12	40	1606	56	-	-	-	-	-	-	-	-	-	-	-	-
1817	37	21	3122	10	100	56	14618	48	20	11	4988	16	15	8	5182	17	3	2	1294	4
1818	4	24	312	13	11	65	1578	67	2	12	448	19	-	-	-	-	-	-	-	-
1819	10	63	910	46	5	31	738	42	1	6	226	13	-	-	-	-	-	-	-	-
1820	13	48	1096	34	13	48	1750	59	1	4	228	8	-	-	-	-	-	-	-	-
1821	14	76	1066	56	4	21	590	31	1	5	246	13	-	-	-	-	-	-	-	-
1822	5	56	442	64	4	44	552	56	-	-	-	-	-	-	-	-	-	-	-	-
1823	1	44	42	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = X '1' IS OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = X '11' IS OF TOTAL SHIP TONNAGE FOR THE YEAR (98 = 1001)

SOURCE: GAA, PA 78/94-102

TABLE II.3.B BREAKDOWN OF SHIPPING FROM NAPVA TO AMSTERDAM BY SIZE OF SHIP IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1708	NO DATA AVAILABLE																											
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1710 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1713 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1714 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1716	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1718	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1719	1	11	50	2	-	-	-	3	33	722	27	4	44	1440	25	1	11	410	16	-	-	-	-	-	-	-	-	
1720	2	9	114	2	2	3	296	4	1	4	260	3	13	57	4704	63	5	22	2112	28	-	-	-	-	-	-	-	
1721	2	4	96	1	3	6	556	4	8	17	2070	13	25	53	9072	58	9	15	3768	24	-	-	-	-	-	-	-	
1722	2	4	118	1	2	4	360	2	11	21	2972	17	30	58	10728	63	7	13	2938	17	-	-	-	-	-	-	-	
1723	-	-	-	-	2	7	380	4	4	13	980	10	19	63	6848	67	5	17	2058	20	-	-	-	-	-	-	-	
1724	4	5	308	1	2	3	352	1	8	11	2256	9	55	74	16274	79	5	7	2100	9	-	-	-	-	-	-	-	
1725	1	1	190	1	4	3	752	2	40	33	10772	28	74	61	25882	67	3	2	1238	3	-	-	-	-	-	-	-	
1726	1	1	90	0	5	5	912	3	25	30	7874	26	60	62	20732	68	2	2	818	3	-	-	-	-	-	-	-	
1727	1	1	96	0	3	3	424	2	55	56	14526	53	39	40	12554	45	-	-	-	-	-	-	-	-	-	-	-	
1728	3	3	292	1	10	8	1572	5	60	51	15944	50	45	38	14372	45	-	-	-	-	-	-	-	-	-	-	-	
1729	-	-	-	-	4	4	638	2	46	50	12366	47	42	46	13468	51	-	-	-	-	-	-	-	-	-	-	-	
1730	2	1	176	0	5	4	828	2	78	57	20484	53	53	38	16808	44	-	-	-	-	-	-	-	-	-	-	-	
1731	-	-	-	-	5	3	808	2	93	58	23930	51	62	39	16592	45	-	-	-	-	-	-	-	-	-	-	-	
1732	1	0	65	0	10	5	1670	3	117	56	30482	52	81	39	26118	45	-	-	-	-	-	-	-	-	-	-	-	
1733	-	-	-	-	5	3	850	1	106	54	27916	49	87	44	28234	50	-	-	-	-	-	-	-	-	-	-	-	
1734	2	1	176	0	4	2	668	1	80	42	21182	38	106	55	34448	61	-	-	-	-	-	-	-	-	-	-	-	
1735	-	-	-	-	2	2	324	1	44	35	11976	31	79	63	25772	67	1	1	408	1	-	-	-	-	-	-	-	
1736	-	-	-	-	2	2	328	1	28	33	7532	26	55	65	18028	70	-	-	-	-	-	-	-	-	-	-	-	
1737	1	1	54	0	5	4	866	2	39	32	10442	29	75	62	24478	68	1	1	408	1	-	-	-	-	-	-	-	
1738	2	1	166	0	3	2	512	1	59	36	15944	32	99	60	32300	66	1	1	408	1	-	-	-	-	-	-	-	
1739	1	1	84	0	1	1	132	0	45	38	13412	35	77	60	25162	65	-	-	-	-	-	-	-	-	-	-	-	
1740	2	2	154	1	4	4	638	2	21	21	5946	19	73	73	23676	78	-	-	-	-	-	-	-	-	-	-	-	
1741	2	2	194	1	4	4	566	2	22	23	5958	20	69	71	22750	77	-	-	-	-	-	-	-	-	-	-	-	
1742	6	5	474	1	5	4	676	2	45	35	11772	37	58	51	16088	60	-	-	-	-	-	-	-	-	-	-	-	
1743	10	5	770	1	5	3	839	1	62	32	16556	29	117	60	38910	68	1	1	408	1	-	-	-	-	-	-	-	
1744	3	3	268	1	1	1	122	0	18	21	5042	19	64	74	21468	80	-	-	-	-	-	-	-	-	-	-	-	
1745	-	-	-	-	2	2	382	1	32	26	8968	23	87	72	26108	76	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = % 'I' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL SHIP TONNAGE FOR THE YEAR (00 = 100%)

TABLE II.3.6 BREAKDOWN OF SHIPPING FROM MARVA TO AMSTERDAM BY SIZE OF SHIP IN TONS

YEAR	A - 100		B - 200		C - 300		D - 400		E - 500		F - 600		G - 601 +						
	I	II	I	II	I	II	I	II	I	II	I	II	I	II					
1746	-	-	1	1	16	19	4526	16	68	79	22762	62	1	408	1	-	-	-	-
1747	-	-	1	1	14	21	4048	18	53	78	17742	81	-	-	-	-	-	-	-
1748	-	-	4	6	568	3	18	28	43	66	14418	73	-	-	-	-	-	-	-
1749	1	1	170	1	28	29	7880	26	65	68	21876	73	-	-	-	-	-	-	-
1750	5	6	450	1	46	35	12486	32	75	57	25280	64	1	408	1	-	-	-	-
1751	-	-	5	4	732	2	32	27	81	67	27464	72	1	408	1	-	-	-	-
1752	-	-	1	1	18	19	5026	16	79	81	26960	84	-	-	-	-	-	-	-
1753	-	-	1	1	134	0	5144	16	74	77	25416	79	2	804	2	1	1	1	836
1754	-	-	3	3	456	1	14	14	85	83	29224	87	-	-	-	-	-	-	-
1755	2	2	190	1	-	-	3260	11	65	76	22740	79	6	7	2470	9	-	-	-
1756	-	-	1	20	186	12	1	20	3	60	1132	72	-	-	-	-	-	-	-
1757	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1758	-	-	4	16	630	8	2	8	17	68	6214	76	2	8	820	10	-	-	-
1759	1	2	76	0	174	1	9	17	39	75	13980	81	2	4	850	5	-	-	-
1760	-	-	-	-	-	-	2	29	4	57	1328	59	1	14	418	18	-	-	-
1761	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1762	-	-	-	-	-	-	-	-	10	76	6692	73	-	-	-	-	-	-	-
1763	-	-	1	2	188	1	7	13	34	62	12040	82	13	24	2494	27	-	-	-
1764	1	2	62	0	118	1	2	3	48	74	17160	74	13	20	5388	28	-	-	-
1765	-	-	3	6	380	2	4	8	33	62	11730	63	12	27	4954	27	1	2	532
1766	1	1	38	0	530	2	3	4	52	69	12784	70	16	21	6448	25	-	-	-
1767	-	-	1	2	148	1	-	-	31	66	11218	64	15	32	6228	35	-	-	-
1768	-	-	1	1	154	1	4	6	43	60	15662	58	24	32	9956	37	-	-	-
1769	-	-	-	-	-	-	1	2	35	64	13116	61	19	35	7864	37	-	-	-
1770	-	-	-	-	-	-	-	-	23	48	8638	45	26	52	10372	55	-	-	-
1771	-	-	1	4	150	2	-	-	11	44	4060	42	13	52	5434	56	-	-	-
1772	-	-	-	-	-	-	-	-	14	42	5272	40	19	52	7882	60	-	-	-
1773	-	-	1	2	198	1	-	-	18	43	6652	40	23	55	9582	58	-	-	-
1774	-	-	1	2	120	1	-	-	20	44	7458	42	24	53	10058	57	-	-	-
1775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	-	-	1	2	196	1	-	-	12	23	4688	22	39	75	16700	77	-	-	-
1777	-	-	-	-	-	-	-	-	6	15	2280	13	35	85	15018	87	-	-	-
1778	-	-	-	-	-	-	-	-	3	10	1144	9	27	90	11450	91	-	-	-
1779	-	-	-	-	1	4	244	2	-	-	-	-	23	96	10864	98	-	-	-
1780	-	-	-	-	-	-	-	-	2	7	742	6	26	93	11342	64	-	-	-
1781	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1782	-	-	-	-	-	-	-	-	2	33	712	30	4	67	1698	70	-	-	-
1783	-	-	-	-	-	-	-	-	3	9	1056	7	31	89	13490	91	-	-	-
1784	1	2	48	0	176	1	2	3	6	10	2116	6	52	84	22892	89	-	-	-
1785	-	-	2	3	214	1	5	7	9	13	3270	11	56	78	24702	84	-	-	-
1786	2	3	138	0	634	2	4	5	6	8	2170	7	61	79	27210	87	-	-	-

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = NUMBER OF SHIPS OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = PERCENT OF TOTAL SHIP TONNAGE FOR THE YEAR (100 = 100%)

SOURCE: GAA, PA 78/94-102

CONTINUED...



TABLE II.3.B BREAKDOWN OF SHIPPING FROM MARVA TO AMSTERDAM BY SIZE OF SHIP IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +					
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		1	2	3	4	
1767	1	1	62	0	3	3	3	3	816	2	8	9	2888	0	71	82	31532	82	-	-	-	-	-	-	-	-	-	-	-	-
1768	2	2	124	0	2	2	2	2	786	2	5	6	1812	5	68	85	30278	91	-	-	-	-	-	-	-	-	-	-	-	-
1769	-	-	-	-	-	-	-	-	540	2	12	15	4258	12	64	82	29334	66	-	-	-	-	-	-	-	-	-	-	-	-
1790	-	-	-	-	-	-	-	-	2032	5	10	11	3554	9	72	80	32128	85	-	-	-	-	-	-	-	-	-	-	-	-
1791	4	4	254	1	2	2	2	2	260	1	11	11	3342	9	73	74	32398	23	-	-	-	-	-	-	-	-	-	-	-	-
1792	-	-	-	-	1	1	1	1	130	0	3	3	3622	10	73	84	32558	88	-	-	-	-	-	-	-	-	-	-	-	-
1793	-	-	-	-	4	25	4	5	538	10	-	-	1162	20	9	56	3884	70	-	-	-	-	-	-	-	-	-	-	-	-
1794	1	1	88	0	4	5	4	5	502	2	-	-	1162	3	68	85	30164	95	-	-	-	-	-	-	-	-	-	-	-	-
1795	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	88	410	88	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	-	-	-	742	10	-	-	-	-	15	83	6540	90	-	-	-	-	-	-	-	-	-	-	-	-
1797	1	3	64	1	2	7	2	7	478	4	6	20	2154	19	19	63	8484	74	-	-	-	-	-	-	-	-	-	-	-	-
1798	1	11	56	2	-	-	-	-	220	7	-	-	-	-	7	78	3106	62	-	-	-	-	-	-	-	-	-	-	-	-
1799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	-	-	-	-	762	24	5	71	2274	76	-	-	-	-	-	-	-	-	-	-	-	-
1801	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	82	470	82	-	-	-	-	-	-	-	-	-	-	-	-
1802	-	-	-	-	-	-	-	-	-	-	2	5	1866	10	37	84	16620	88	-	-	-	-	-	-	-	-	-	-	-	-
1803	-	-	-	-	-	-	-	-	-	-	1	14	366	12	6	86	2704	88	-	-	-	-	-	-	-	-	-	-	-	-
1804	2	20	192	24	5	71	5	71	596	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1805	6	30	374	15	9	45	10	74	1074	36	3	15	722	24	1	5	486	16	-	-	-	-	-	-	-	-	-	-	-	-
1806	-	-	-	-	2	29	3	29	370	21	4	57	966	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1807	2	20	156	18	4	57	4	57	480	56	1	14	220	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	2	48	184	26	2	40	2	40	300	43	1	20	212	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1815	2	22	196	7	2	22	2	22	298	11	-	-	378	14	4	44	1856	68	-	-	-	-	-	-	-	-	-	-	-	-
1816	4	16	322	5	7	28	7	28	960	14	2	8	1424	21	8	32	3664	53	-	-	-	-	-	-	-	-	-	-	-	-
1817	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	892	14	-	-	-	-	-	-	-	-	-	-	-	-
1818	-	-	-	-	-	-	-	-	204	2	2	11	664	8	1	6	408	8	-	-	-	-	-	-	-	-	-	-	-	-
1819	4	13	306	3	16	53	2	46	2446	27	-	-	358	4	2	7	988	11	1	3	586	6	6	20	4388	49	6	20	6434	76
1820	-	-	-	-	-	-	-	-	1496	18	-	-	390	5	1	6	454	5	-	-	-	-	-	-	-	-	-	-	-	-
1821	-	-	-	-	-	-	-	-	214	5	2	18	440	7	1	9	486	8	-	-	-	-	-	-	-	-	-	-	-	-
1822	3	21	228	4	3	21	4	28	210	3	1	7	324	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1823	1	5	94	1	3	15	4	15	468	6	7	35	1042	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1824	-	-	-	-	-	-	-	-	2758	48	4	15	728	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1825	2	13	174	6	12	75	18	60	1860	62	-	-	710	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = 2 '1' IS OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = 2 '11' IS OF TOTAL SHIP TONNAGE FOR THE YEAR (00 = 1000)

SOURCE: CAA, PA 78/94-102

TABLE II.3.C BREAKDOWN OF SHIPPING FROM RIGA TO AMSTERDAM BY SIZE OF SHIP IN TONS

SIZES IN TONS	A					B					C					D					E					F					G					
	0 - 100	101 - 200	201 - 300	301 - 400	401 - 500	501 - 600	601 - 700	701 - 800	801 - 900	901 - 1000	1001 - 1500	1501 - 2000	2001 - 3000	3001 - 4000	4001 - 5000	5001 - 6000	6001 - 7000	7001 - 8000	8001 - 9000	9001 - 10000	10001 - 15000	15001 - 20000	20001 - 30000	30001 - 40000	40001 - 50000	50001 - 60000	60001 - 70000	70001 - 80000	80001 - 90000	90001 - 100000						
YEAR	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV				
1769	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1770	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1771	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1772	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1773	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1774	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1777	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1778	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1779	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1780	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1781	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1782	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1783	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1784	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1785	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1786	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1787	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1788	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1789	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1790	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1791	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1792	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1793	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1794	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1795	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1797	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1798	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = NUMBER OF SHIPS OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = PERCENT OF TOTAL SHIP TONNAGE FOR THE YEAR (see = 100%)  
 SOURCE: GAA, PA 74794-102  
 CONTINUED...

TABLE II-3.C BREAKDOWN OF SHIPPING FROM RIGA TO AMSTERDAM BY SIZE OF SHIP IN TONS

SIZES IN TONS	A - 100				B - 101 - 200				C - 201 - 300				D - 301 - 400				E - 401 - 500				F - 501 - 600				G - 601 +			
	YEAR	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III		IV		
1746	20	22	1612	11	40	43	6012	40	31	35	7428	49	-	-	-	-	-	-	-	-	-	-	-	-	-			
1747	26	30	2182	16	37	42	5632	42	25	26	5616	42	-	-	-	-	-	-	-	-	-	-	-	-	-			
1748	17	19	1370	10	43	49	6376	46	26	32	6294	45	-	-	-	-	-	-	-	-	-	-	-	-	-			
1749	24	27	2008	15	43	48	6608	48	21	24	4796	35	-	-	-	-	-	-	-	-	-	-	-	-	-			
1750	15	21	1378	13	36	51	5226	48	12	26	4038	37	1	1	342	3	-	-	-	-	-	-	-	-	-			
1751	6	14	518	6	27	34	3828	59	9	21	2094	33	-	-	-	-	-	-	-	-	-	-	-	-	-			
1752	23	28	1924	16	48	49	5838	45	18	22	4186	36	-	-	-	-	-	-	-	-	-	-	-	-	-			
1753	15	17	1212	8	42	49	6656	46	29	34	6524	45	-	-	-	-	-	-	-	-	-	-	-	-	-			
1754	15	14	1238	7	55	50	8158	43	37	34	8548	45	2	2	606	3	1	1	402	2	-	-	-	-	-			
1755	10	16	622	7	26	41	4094	39	25	40	5410	50	1	2	338	3	1	2	402	4	-	-	-	-	-			
1756	11	15	926	6	23	32	3630	25	25	32	5752	39	11	15	4012	27	1	1	402	3	-	-	-	-	-			
1757	12	13	1034	5	30	32	6692	22	27	28	6352	30	23	24	8092	38	3	3	1232	6	-	-	-	-	-			
1758	20	18	1728	7	34	30	4890	20	22	25	6452	26	27	24	6496	39	5	4	2032	6	-	-	-	-	-			
1759	18	16	1548	6	28	24	3734	14	24	21	5852	21	40	34	13980	51	6	5	2432	9	-	-	-	-	-			
1760	28	19	2476	7	34	23	5242	15	37	25	8624	25	40	27	14308	42	9	6	3722	11	-	-	-	-	-			
1761	32	26	2724	6	66	35	9316	22	32	17	7562	18	52	27	18460	43	11	6	4552	11	-	-	-	-	-			
1762	11	8	960	3	62	45	8648	30	26	10	8560	29	20	14	7274	25	9	7	3664	13	-	-	-	-	-			
1763	16	13	1872	7	69	56	9966	45	33	19	5478	24	12	10	4250	19	3	2	1216	5	-	-	-	-	-			
1764	8	6	694	2	59	44	8606	31	44	33	10298	37	16	13	6170	22	5	4	2052	7	-	-	-	-	-			
1765	9	3	302	1	64	37	6120	22	38	32	9020	33	25	21	8850	32	7	6	2904	11	-	-	-	-	-			
1766	13	9	1126	4	53	36	7840	26	48	34	11288	38	18	13	6184	21	8	6	3310	11	-	-	-	-	-			
1767	9	11	818	5	41	49	5614	35	41	25	5106	31	9	11	3050	19	4	5	1654	10	-	-	-	-	-			
1768	21	18	1896	10	69	43	6394	33	34	30	7896	40	9	8	3070	16	1	1	408	2	-	-	-	-	-			
1769	19	12	1654	5	59	38	8474	26	43	26	10192	32	27	18	5382	29	6	4	2500	8	-	-	-	-	-			
1770	13	11	1104	5	58	42	7264	29	25	25	6866	28	23	18	8116	33	3	3	1246	5	-	-	-	-	-			
1771	18	20	1594	10	46	30	6060	38	16	17	3668	23	10	11	3664	23	2	2	826	5	-	-	-	-	-			
1772	60	32	4864	14	59	31	8216	24	34	18	7846	23	27	14	6634	26	10	5	4120	12	-	-	-	-	-			
1773	38	27	3208	12	47	32	6048	22	31	21	7476	27	21	14	7534	27	9	6	3738	13	-	-	-	-	-			
1774	38	22	3158	9	63	37	8710	26	36	21	8648	26	20	12	7264	21	14	8	5842	17	-	-	-	-	-			
1775	NO DATA AVAILABLE																											
1776	12	12	1246	5	64	42	6030	28	26	25	6282	29	13	13	4458	21	9	6	3788	19	-	-	-	-	-			
1777	11	9	922	3	51	40	7140	25	27	21	6538	23	19	15	6728	23	18	14	7664	26	-	-	-	-	-			
1778	22	19	1748	6	42	34	5562	20	16	13	3812	14	16	13	5464	19	27	22	11536	41	-	-	-	-	-			
1779	17	16	1454	6	38	30	5144	22	22	21	4986	21	11	10	3870	16	19	18	8112	34	-	-	-	-	-			
1780	18	8	930	3	42	30	5432	16	24	22	5916	21	15	13	5128	18	25	21	10908	39	-	-	-	-	-			
1781	68	58	2558	31	24	33	3016	35	2	3	476	6	3	4	1022	12	3	4	1352	16	-	-	-	-	-			
1782	68	45	5220	24	53	35	6628	30	16	11	3668	17	5	3	1866	9	10	7	4600	20	-	-	-	-	-			
1783	59	30	3940	14	68	41	8764	31	23	14	5332	19	7	4	2362	8	18	11	7900	28	-	-	-	-	-			
1784	21	19	1650	10	64	59	8760	50	18	17	4340	25	1	1	324	2	5	5	2200	13	-	-	-	-	-			
1785	28	25	2410	13	53	47	7138	39	22	20	5210	28	5	4	1672	9	4	4	1880	10	-	-	-	-	-			
1786	7	8	574	3	64	47	6322	32	23	25	5596	28	10	11	3362	17	9	10	4040	20	-	-	-	-	-			

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = % OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = % OF TOTAL SHIP TONNAGE FOR THE YEAR (68 = 100%)

SOURCE: GAA, PA 75/04-162

CONTINUED...





TABLE 11.3.3 MEMBERSHIP OF SHIPPING FLEET BY VESSEL SIZE AND YEAR

YEAR	1950				1951				1952				1953				1954				1955				1956				1957				1958				1959				1960			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV				
1949	2	15	102	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1950	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1951	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1952	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1953	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1954	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1955	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1956	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1957	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1958	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1959	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1960	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = % OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = % OF TOTAL SHIP TONNAGE FOR THE YEAR (1950 = 100%)

SOURCE: COM. REG. 1950-1960

CONTINUED...



TABLE II-2: SUMMARY OF SWAMPY POND BEING TO PROTECTED BY SIZE OF SWAMP IN YEARS

YEAR	NO DATA AVAILABLE											
	I	II	III	IV	I	II	III	IV	I	II	III	IV
1960												
1961												
1962												
1963												
1964												
1965												
1966												
1967												
1968												
1969												
1970												
1971												
1972												
1973												
1974												
1975												
1976												
1977												
1978												
1979												
1980												
1981												
1982												
1983												
1984												
1985												
1986												
1987												
1988												
1989												
1990												
1991												
1992												
1993												
1994												
1995												
1996												
1997												
1998												
1999												
2000												
2001												
2002												
2003												
2004												
2005												
2006												
2007												
2008												
2009												
2010												
2011												
2012												
2013												
2014												
2015												
2016												
2017												
2018												
2019												
2020												

I = NUMBER OF SWAMPY POND BEING TO PROTECTED BY SIZE OF SWAMP IN YEARS  
 II = NUMBER OF SWAMPY POND BEING TO PROTECTED BY SIZE OF SWAMP IN YEARS  
 III = NUMBER OF SWAMPY POND BEING TO PROTECTED BY SIZE OF SWAMP IN YEARS  
 IV = NUMBER OF SWAMPY POND BEING TO PROTECTED BY SIZE OF SWAMP IN YEARS

SOURCE: CALIF. SWAMPY POND...

CONTINUED...







TABLE II-3-3-1 FREQUENCY OF SHIPPING FROM ESTIMATA TO AMERICAN BY SIZE OF SHIP IN TONS

SHIP IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 - 700							
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV				
17001																																
17002																																
17003																																
17004																																
17005																																
17006																																
17007																																
17008																																
17009																																
17010																																
17011																																
17012																																
17013																																
17014																																
17015																																
17016																																
17017																																
17018																																
17019																																
17020																																
17021																																
17022																																
17023																																
17024																																
17025																																
17026																																
17027																																
17028																																
17029																																
17030																																
17031																																
17032																																
17033																																
17034																																
17035																																
17036																																
17037																																
17038																																
17039																																
17040																																
17041																																
17042																																
17043																																
17044																																
17045																																

I = NUMBER OF SALES IN THIS SIZE CATEGORY  
 II = TOTAL SALES IN THIS SIZE CATEGORY  
 III = TOTAL SALES IN THIS SIZE CATEGORY  
 IV = TOTAL SALES IN THIS SIZE CATEGORY

SOURCE: CMA, PA 73/79-10E

CONTINUED...

TABLE II-2-F BREAKDOWN OF SHIPPING FROM ESTONIA TO AMSTERDAM BY SIZE OF SHIP IN TONS

YEARS	A - 100'				B				C				E				F				G	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV		
1746	3	3																				
1747	3	17																				
1748	2	7	104	2																		
1749	4	13	342	4	4	13	466	6	2	25	2094	25	16	50	5374	63						
1750	2	13	105	5	1	7	112	3	6	53	1910	54	4	27	1322	37						
1751					3	17	302	2	5	20	1240	26	10	56	3244	65						
1752					3	17	370	7	3	17	786	15	12	67	4024	78						
1753	1	20	66	5																		
1754	7	30	520	63	2	22	310	37														
1755	5	63	322	76	1	17	110	24														
1756	1																					
1757	1																					
1758	1																					
1759	3	33	204	16	2	22	254	15	3	33	708	48	1	11	344	22						
1760	2	30	170	14	2	27	268	23	1	17	256	23										
1761	7	64	506	45	2	10	210	16	2	10	502	30										
1762	1	9	46	5	5	45	510	30	4	36	920	48	1	9	346	18						
1763	1				4	48	540	25	5	50	1168	54	1	10	332	17						
1764	2	22	146	16	5	56	610	46	2	22	450	36										
1765	2	22	176	13	5	56	728	54	2	22	640	33										
1766	3	43	200	35	4	57	524	65														
1767	2	20	100	13	7	70	1052	71	1	10	230	16										
1768	5	29	440	19	11	65	1070	64														
1769	6	25	530	16	10	67	2070	64	1	4	210	6										
1770	4	19	306	10	11	57	1565	42	3	16	710	19	2	10	602	18						
1771	3	13	200	8	14	64	1650	46	5	22	1224	34										
1772	7	17	612	10	27	67	3714	61	4	10	908	16	1	2	400	7						
1773	13	31	900	15	15	30	1764	28	7	18	1730	27	3	8	1060	17						
1774	5	22	610	13	26	61	3038	53	2	5	500	8	2	5	704	12						
1775																						
1776	8	18	754	21	32	71	2302	64	3	17	786	12	1	2	300	6						
1777	7	28	636	18	17	49	2006	36	6	17	1510	24	2	6	616	10						
1778	4	12	300	8	23	72	3003	62	3	5	710	14	1	3	344	7						
1779	1	4	64	2	20	60	2420	62	1	4	200	6										
1780	2	10	172	5	16	76	1936	60	1	5	200	8										
1781					4	60	535	50														
1782	4	40	372	25	4	40	452	36	1	10	270	10	1	10	350	26						
1783	7	27	500	13	13	50	1020	42	3	12	670	16	1	4	330	8						
1784					3	43	620	24	2	25	480	26										
1785					6	50	616	29	3	25	700	27	2	17	760	28						
1786					5	71	672	53	1	14	270	21	1	14	330	26						

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = % OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = % OF TOTAL SHIP TONNAGE FOR THE YEAR (100 = 1962)

SOURCE: GSA, PA 70740-102

CONTINUED...







TABLE II-3-1-1-1 BREAKDOWN OF SHIPPING FORCE COMPLAINT TO ASTERISK BY SIZE OF SHIP IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 - 700			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1700 <sup>34</sup>	47	50	3028	83	5	10	620	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1707	25	61	1706	47	15	37	1700	47	1	2	200	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1710	19	73	1206	90	7	27	910	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1700	2	67	120	52	1	33	128	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1800	11	79	806	73	3	21	312	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1801	13	60	702	53	6	32	700	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1802	23	72	1670	60	9	20	1100	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1803	23	64	1770	54	12	34	1528	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1804	15	50	970	49	9	41	1016	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1805	17	60	1192	43	11	30	1374	48	1	3	236	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1806	10	67	600	50	5	33	705	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1807	0	50	500	60	1	10	120	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1808																												
1809																												
1810																												
1811																												
1812																												
1813																												
1814																												
1815																												
1816																												
1817	20	90	1406	32	10	45	2650	57	2	5	400	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1818	12	66	742	47	1	7	140	11	1	7	248	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1819	12	60	746	43	3	20	462	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1820	7	70	470	47	2	20	316	31	1	10	250	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1821	11	90	800	44	0	42	1090	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1822	3	36	200	67	1	25	120	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1823	0	46	204	22	5	30	672	44	1	0	210	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1824	3	30	1067	16	5	36	910	66	1	11	210	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1825	0	60	500	40	6	40	804	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY

SOURCE: GSA, PA 70-76-102



TABLE 11.4 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP	DIFFERENCE AVE. TONNAGE CARGO - SHIP	% AVE. SIZE OF CARGO > AVE. SHIP	% AVE. SIZE OF SHIP < AVE. CARGO
1700	12	207-67	207-67	200-00	200-00	27-67	11-38	10-00
1701	26	6286	242-92	6032	230-00	10-92	4-71	4-20
1702	6	504	84-00	520	86-00	-4-00	-4-58	-4-78
1703	9	728	80-87	730	81-11	-0-24	-0-28	-0-28
1704	3	6210	210-90	5900	198-25	27-65	14-99	12-58
1705	35	5100	146-31	3000	109-31	36-20	32-88	28-39
1706	33	4794	143-76	3079	117-39	26-36	22-46	19-36
1707	100	200-30	207-61	18662	171-03	36-58	21-39	17-62
1708	130	270-56	211-80	24470	186-23	22-97	12-50	10-66
1709	96	28276	270-31	16000	207-38	31-94	15-46	13-35
1710	106	22276	222-32	21000	200-28	20-39	10-09	9-19
1711	103	30002	295-10	36302	352-77	28-33	10-02	9-11
1712	109	41000	217-68	37822	348-62	23-66	11-96	10-36
1713	108	47440	232-38	43804	231-68	20-50	8-94	6-12
1714	106	36400	235-18	33660	213-94	21-25	9-82	6-25
1715	208	51120	270-25	47800	210-00	14-25	6-78	5-25
1716	304	72000	270-17	71170	213-00	13-00	6-14	5-79
1717	307	73030	270-70	66110	202-10	23-60	11-67	10-45
1718	308	62706	270-66	51790	202-13	27-50	13-62	11-90
1719	308	62706	270-61	57800	192-08	24-53	12-53	11-13
1720	321	57900	270-69	46900	210-15	30-94	10-53	15-63
1721	307	62316	270-68	72000	207-00	23-90	11-35	10-19
1722	379	80810	231-69	78000	209-12	22-96	10-79	9-79
1723	302	66400	270-64	61746	232-23	13-41	5-77	5-46
1724	304	63716	270-65	79194	237-11	13-84	5-71	5-46
1725	302	69576	270-66	60750	225-00	19-85	9-79	9-46
1726	298	70002	270-23	68170	233-62	20-41	10-44	9-46
1727	293	61000	247-99	60000	223-57	24-42	10-92	9-85
1728	285	61000	240-20	72000	227-16	28-13	9-79	9-80
1729	430	80732	270-54	69735	227-53	23-01	10-11	9-19
1730	349	67300	270-10	76410	219-51	36-59	16-67	14-29
1731	427	101300	270-17	81600	191-15	53-33	27-99	21-01
1732	422	100370	270-69	80010	191-59	37-89	19-63	16-41
1733	392	79000	270-52	72000	207-48	13-06	6-29	5-92
1734	382	69000	270-80	67000	242-01	7-08	2-91	2-83
1735	302	67000	271-03	61700	204-37	17-96	8-99	7-91
1736	270	70002	270-31	66000	239-69	12-71	5-31	5-04

NO DATA AVAILABLE

SOURCES: G.A. DE JONCKHEERE

CONTINUED...

TABLE 11.4 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO > AVE. TONNAGE CARGO < AVE. TONNAGE CARGO	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF CARGO < AVE. SIZE OF SHIP
1746	249	63290	249.23	94792	223.64	34.09	15.51	13.43
1747	259	58714	230.29	93748	216.78	19.07	9.24	8.44
1748	239	59206	231.00	91844	216.92	14.08	6.09	6.09
1749	272	64378	236.68	61104	224.94	11.74	9.22	4.94
1750	268	65078	242.83	61902	230.96	11.89	9.13	4.06
1751	230	60098	261.30	94304	245.18	16.19	6.59	6.16
1752	260	62292	239.63	97904	223.82	19.42	7.36	6.86
1753	259	61882	239.33	98446	225.74	13.19	5.84	5.32
1754	275	64882	239.21	61816	221.88	13.33	6.07	5.67
1755	262	69006	264.98	67902	239.16	9.82	4.18	4.01
1756	197	38320	219.87	38882	196.78	23.17	11.78	10.84
1757	163	38786	237.66	32824	208.15	37.31	18.84	19.71
1758	187	66312	276.98	66362	219.99	21.82	9.73	6.87
1759	234	62342	266.42	99996	237.99	28.83	12.13	10.82
1760	267	94006	243.22	66328	224.77	38.44	17.16	14.81
1761	233	99478	299.27	68978	210.21	49.06	21.44	17.89
1762	234	64972	277.66	98496	219.79	61.86	28.87	22.28
1763	203	61236	252.88	91882	213.91	38.43	18.83	15.28
1764	249	63468	263.09	98996	239.97	29.13	11.94	10.87
1765	222	61222	278.83	93974	243.13	34.90	14.39	12.93
1766	278	73878	265.72	66188	238.86	27.86	11.82	10.41
1767	193	92246	278.78	41978	217.46	53.32	24.82	19.89
1768	253	67836	267.34	98832	221.47	49.87	20.71	17.16
1769	299	88492	289.73	68828	223.91	69.79	28.49	18.90
1770	221	84292	286.73	92792	238.78	92.84	21.88	17.90
1771	176	66328	271.66	33998	193.17	98.49	30.38	23.38
1772	309	78782	268.49	68818	194.23	94.25	27.83	21.83
1773	288	72412	258.61	97718	206.14	92.48	29.48	20.29
1774	315	85316	278.84	68816	208.94	61.90	29.63	22.84
1775	27	5186	192.87	3898	114.74	77.33	67.48	49.26
1776	228	68822	278.83	93444	233.36	46.45	19.98	16.84
1777	248	78822	299.57	98888	234.19	61.38	19.94	17.94
1778	248	72778	274.83	98318	213.28	61.38	28.77	22.34
1779	223	61834	279.26	49988	228.84	55.23	28.18	22.84
1780	227	67786	298.67	91988	228.82	68.85	30.41	23.32
1781	183	28488	158.83	12888	124.35	74.49	59.98	37.46
1782	228	45318	201.61	33884	147.84	107.37	36.94	27.84
1783	288	68828	243.81	94888	201.74	92.87	28.81	28.81
1784	299	72396	279.14	98888	216.88	62.88	28.88	22.88
1785	227	65678	298.23	98988	246.98	48.83	17.37	14.88
1786	289	68718	308.89	98788	271.32	28.77	16.88	9.89

CONTINUED...

SOURCE: GAR, PA 78/94-102

TABLE 11.4 BALTIC SHIPPING FROM RUSSIA TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NO. SHIPS	TOTAL TONNAGE CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF CARGO < AVE. SIZE OF SHIP
1787	231	64504	279.24	57696	290.63	28.61	11.41	16.24
1788	211	62342	296.41	52200	247.39	49.01	19.61	16.04
1789	242	72274	298.65	60614	247.99	50.66	20.63	16.06
1790	262	74762	249.35	59776	226.15	57.20	29.07	20.04
1791	216	66250	306.75	55410	256.63	50.22	19.66	16.37
1792	221	66866	292.65	56914	297.83	49.12	17.82	14.91
1793	186	37422	199.05	27540	146.83	52.22	26.64	26.39
1794	235	60472	247.33	52734	224.46	32.87	14.67	12.00
1795	51	6220	143.45	5534	100.81	52.64	50.63	33.61
1796	259	47888	181.80	32192	124.29	57.51	40.02	31.82
1797	182	40550	220.65	30990	170.27	49.78	29.24	22.02
1798	111	20498	182.87	19276	137.62	47.65	24.18	28.48
1799	9	1366	151.11	960	106.67	44.44	41.67	29.41
1800	63	13906	220.73	9010	143.14	77.59	34.20	30.19
1801	97	11830	123.91	6972	122.82	71.19	50.20	36.79
1802	242	67712	279.80	62790	176.68	103.12	50.37	36.04
1803	189	39646	209.74	23836	129.13	80.61	64.29	39.06
1804	89	10120	112.21	10010	112.07	0.14	0.12	37.63
1805	193	26390	136.62	22430	119.07	71.99	62.18	38.24
1806	67	13196	196.39	8182	122.12	76.27	60.82	37.82
1807	32	6644	199.13	2030	62.50	82.63	79.91	43.19
1808		NO DATA AVAILABLE						
1809		NO DATA AVAILABLE						
1810		NO DATA AVAILABLE						
1811		NO DATA AVAILABLE						
1812		NO DATA AVAILABLE						
1813		NO DATA AVAILABLE						
1814	114	20906	183.91	12924	113.37	70.54	62.23	30.30
1815	155	29536	190.85	10002	121.30	69.55	37.64	26.34
1816	216	44254	204.88	29508	136.98	67.90	49.97	33.14
1817	377	110320	291.89	99014	172.64	22.99	16.77	14.26
1818	1010	22930	228.75	20000	209.17	29.58	14.14	12.39
1819	123	20950	252.65	21320	173.23	29.81	17.63	16.93
1820	129	27900	216.28	24900	193.64	22.64	11.64	10.47
1821	126	20700	208.80	22604	177.66	31.53	17.61	19.12
1822	82	14612	226.80	12996	208.97	17.83	8.19	7.54
1823	100	21608	216.08	20764	207.64	9.44	5.32	5.03
1824	87	10710	122.10	10890	122.74	9.64	9.10	4.90
1825	54	9020	147.19	8402	159.99	11.99	7.43	6.93

SOURCE: GAA, PA 76/90-102

TABLE 11.4.A SHIPPING FROM ST. PETERSBURG TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - AVE. SIZE OF SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF CARGO < AVE. SIZE OF SHIP
1705	-	-	-	-	-	-	-	-
1706	-	-	-	-	-	-	-	-
1707	-	-	-	-	-	-	-	-
1708	-	-	-	-	-	-	-	-
1709	-	-	-	-	-	-	-	-
1710	-	-	-	-	-	-	-	-
1711	-	-	-	-	-	-	-	-
1712	-	-	-	-	-	-	-	-
1713	-	-	-	-	-	-	-	-
1714	-	-	-	-	-	-	-	-
1715	2	234	70.00	226	79.33	2.67	3.84	3.02
1716	9	1602	178.00	1516	168.44	9.56	5.37	5.37
1717	8	994	124.25	974	121.75	2.50	2.01	2.01
1718	8	1850	231.25	1620	202.50	28.75	12.43	12.43
1719	19	1614	120.00	1650	110.00	10.00	8.04	8.04
1720	19	2494	131.26	2340	123.16	8.10	6.17	6.17
1721	14	1676	120.43	1198	85.57	34.86	28.83	28.83
1722	18	2396	133.11	1832	101.78	31.33	23.79	23.79
1723	21	2120	101.43	2700	128.57	27.14	26.40	26.40
1724	42	5320	126.67	4898	116.62	10.05	7.93	7.93
1725	42	4762	113.38	4036	96.14	17.24	15.20	15.20
1726	59	3398	122.34	7220	122.37	19.97	16.23	16.23
1727	26	3700	142.77	3104	122.46	20.31	14.23	14.23
1728	43	5924	137.77	4910	114.19	23.58	17.26	17.26
1729	14	2270	162.71	2204	157.43	5.27	3.24	3.24
1730	27	3910	144.81	3846	142.44	6.37	4.44	4.44
1731	32	5320	166.25	4620	144.69	21.56	13.12	13.12
1732	26	4620	177.69	4124	158.62	19.07	10.73	10.73
1733	19	2800	147.37	2620	138.22	9.15	6.19	6.19
1734	36	5250	145.83	4984	137.61	8.22	5.61	5.61
1735	24	3650	152.08	3480	145.00	7.08	4.61	4.61
1736	25	5266	146.64	4876	139.31	7.14	4.73	4.73
1737	52	10700	205.92	10094	194.12	6.06	3.46	3.46
1738	84	18000	214.29	16802	200.02	14.27	6.73	6.73
1739	32	6180	193.13	5416	169.25	23.88	11.80	11.80
1740	44	6190	140.68	7394	168.09	27.41	13.29	13.29
1741	98	26298	267.94	20584	210.04	57.90	21.58	21.58
1742	47	9846	209.49	8612	183.23	26.27	10.80	10.80
1743	60	7000	116.67	6804	113.40	3.27	2.81	2.81
1744	53	8270	156.23	7910	149.25	6.92	4.39	4.39
1745	31	3906	126.02	3744	120.77	15.25	11.28	11.28

SOURCE: GAA. PA 78/94-102

CONTINUED...

TABLE 11.0.4 SHIPPING FROM ST. PETERSBURG TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE CARGO - SHIP	AVERAGE TONNAGE CARGO > AVE. SIZE OF SHIP	DIFFERENCE CARGO < AVE. SIZE OF SHIP
1746	31	6038	194.77	2846	124.06	70.71	26.99	20.20
1747	37	6424	151.35	7148	129.40	29.93	20.00	17.13
1748	30	6500	150.00	2908	122.27	17.73	13.41	11.02
1749	33	4782	142.48	4090	121.21	21.27	17.85	14.92
1750	20	3898	192.90	2514	125.00	27.10	21.94	17.72
1751	37	5898	159.41	4370	118.11	41.20	34.97	29.91
1752	42	6874	162.00	5194	119.06	23.02	27.95	21.00
1753	47	6678	142.09	9456	116.09	26.00	22.00	18.30
1754	25	4670	132.62	2870	110.57	22.04	20.07	17.13
1755	23	2818	122.52	2586	112.43	10.09	8.97	8.23
1756	46	5048	131.58	5824	120.13	11.39	9.05	8.63
1757	47	5502	190.89	5886	125.23	55.60	44.04	20.77
1758	37	6262	171.95	4846	130.97	40.97	31.20	23.03
1759	41	7708	188.00	5056	123.32	64.68	52.45	24.41
1760	28	5854	209.07	2478	124.21	64.04	60.22	40.59
1761	19	3226	221.73	2656	137.07	84.67	61.77	30.18
1762	37	7676	207.06	4670	126.22	81.24	64.37	29.16
1763	37	8422	227.62	5654	126.59	91.03	66.04	29.99
1764	23	4188	182.00	2804	121.91	60.17	49.26	23.05
1765	26	6240	240.00	2322	127.77	112.23	87.04	46.76
1766	30	6668	222.27	4122	137.40	64.67	61.77	20.10
1767	42	9546	222.00	5192	120.74	101.26	89.06	48.61
1768	26	9024	250.94	4664	129.96	121.29	93.70	48.37
1769	45	10522	233.82	6048	124.40	99.42	73.97	42.52
1770	22	5824	229.82	2976	126.27	92.55	69.15	40.08
1771	27	5788	212.62	2912	129.07	82.86	64.24	29.11
1772	26	7274	202.06	4262	121.17	80.89	66.76	40.03
1773	46	7816	157.90	4266	106.19	81.76	77.01	43.51
1774	27	8042	217.28	4928	133.19	84.16	62.19	20.72
1775	27	5186	192.07	2098	114.74	77.23	67.40	40.26
1776	16	2760	172.80	1762	110.13	62.26	56.64	20.16
1777	42	7444	177.24	4886	116.23	60.90	52.20	24.20
1778	71	12904	195.83	6360	117.75	78.08	60.32	29.87
1779	55	10898	198.19	7920	126.84	61.31	44.00	20.94
1780	53	11208	212.98	6024	113.05	99.13	87.07	46.94
1781	16	3976	199.67	1964	109.11	89.60	82.00	48.02
1782	31	5302	177.48	2086	99.55	77.94	79.29	43.91
1783	23	5246	222.43	2924	127.57	104.87	83.21	45.12
1784	64	14760	230.62	7898	123.41	107.22	60.86	46.49
1785	12	2682	223.50	1286	107.17	116.33	100.08	52.05
1786	22	4808	192.16	2262	102.82	79.34	77.19	43.56

SOURCE: GAA: PA 78/94-102

CONTINUED...

TABLE 11.0.4 SHIPPING FROM ST. PETERSBURG TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO > AVE. CARGO < SIZE OF SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF CARGO < AVE. SIZE OF SHIP
1787	19	2498	129.11	2822	106.42	77.68	73.00	42.20
1788	38	7504	199.85	3924	100.63	98.43	97.00	49.44
1789	31	10148	161.48	5730	112.75	86.24	76.49	43.34
1790	22	7100	218.15	3514	106.08	109.87	102.05	50.91
1791	27	8782	239.19	4710	127.30	167.69	84.76	45.67
1792	19	4016	242.95	2286	120.32	122.83	101.92	50.48
1793	26	6950	190.38	2612	108.45	89.92	89.51	47.23
1794	23	4518	196.43	2348	102.09	94.29	92.02	46.63
1795	4	702	175.50	288	97.00	78.88	80.93	44.73
1796	22	3942	171.39	2402	104.43	95.96	64.11	29.67
1797								
1798								
1799								
1800								
1801								
1802								
1803								
1804								
1805								
1806								
1807								
1808								
1809								
1810								
1811								
1812								
1813								
1814	29	5120	176.55	3192	109.72	66.83	68.91	27.85
1815	38	6746	177.53	4052	106.63	78.89	66.49	29.93
1816	30	4842	161.40	2744	91.47	69.93	76.46	42.33
1817	178	33986	190.93	20764	172.83	18.16	18.07	9.48
1818	17	3194	187.88	2378	137.53	50.35	26.61	26.80
1819	16	2630	164.38	1774	110.88	53.50	46.23	23.84
1820	27	6030	199.26	2984	110.52	38.74	38.05	23.96
1821	19	2686	170.84	1982	100.11	20.74	20.70	23.49
1822	9	1202	133.56	994	110.44	23.11	20.93	17.30
1823	1	42	42.00	42	42.00	0.00	0.00	0.00

SOURCE: GAA. PA 78/94-102

TABLE 11.4.8 SHIPPING FROM NARVA TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	% AVE. SIZE OF	
							CARGO > AVE. SHIP	CARGO < AVE. SHIP
1705	1	-	-	-	-	-	-	-
1706	1	-	-	-	-	-	-	-
1707	1	-	-	-	-	-	-	-
1708	2	-	-	-	-	-	-	-
1709	2	-	-	-	-	-	-	-
1710	3	-	-	-	-	-	-	-
1711	4	-	-	-	-	-	-	-
1712	5	-	-	-	-	-	-	-
1713	4	-	-	-	-	-	-	-
1714	6	-	-	-	-	-	-	-
1715	7	-	-	-	-	-	-	-
1716	7	-	-	-	-	-	-	-
1717	7	-	-	-	-	-	-	-
1718	7	-	-	-	-	-	-	-
1719	9	2026	226.22	2022	226.44	23.76	11.56	10.28
1720	23	8142	354.00	7486	325.48	26.52	8.76	8.06
1721	47	17318	368.47	15862	331.11	37.36	11.28	10.14
1722	52	18056	347.23	17116	329.15	18.09	5.49	5.21
1723	20	11182	370.07	10266	342.20	27.87	8.14	7.83
1724	74	28776	388.32	24290	328.24	29.08	8.12	8.77
1725	122	40688	373.51	36744	317.57	19.92	6.02	6.70
1726	97	32822	318.09	30426	312.67	25.42	8.10	7.80
1727	98	29284	299.53	27688	281.63	17.96	6.26	5.98
1728	118	32744	277.49	32890	271.98	5.84	2.04	2.00
1729	92	26798	291.29	26472	287.74	3.46	1.26	1.19
1730	128	28746	240.77	28296	277.81	3.26	1.18	1.16
1731	160	48804	254.40	44730	279.56	4.84	1.73	1.70
1732	209	59750	248.89	58338	279.13	6.76	2.62	2.26
1733	198	58340	294.65	57000	287.88	6.77	2.39	2.30
1734	182	58880	322.88	56474	294.14	7.95	2.70	2.63
1735	126	39846	314.02	38480	309.40	8.62	2.82	2.74
1736	89	28888	313.04	28888	304.86	8.47	2.78	2.71
1737	121	37186	307.28	36248	299.87	7.78	2.99	2.82
1738	164	59342	368.96	56390	301.16	8.89	1.93	1.89
1739	128	39646	309.73	38790	303.05	6.69	2.21	2.16
1740	100	32488	374.88	30714	307.14	16.86	9.49	9.29
1741	97	30942	318.99	29808	304.21	14.78	4.86	4.63
1742	114	32252	282.91	32010	280.79	2.12	0.76	0.75
1743	198	58888	297.48	57482	294.78	2.70	0.92	0.91
1744	86	27124	315.40	26980	312.79	2.66	0.83	0.83
1745	121	26782	319.85	26458	317.83	2.82	0.83	0.83

NO DATA AVAILABLE

SOURCE: GAA. RA 78/94-102

CONTINUED...

TABLE 11.4.8 SHIPPING FROM NARVA TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP < AVE. SIZE OF CARGO
1746	66	28282	378.66	27636	323.67	5.19	1.60	1.50
1747	68	22344	378.69	21978	323.21	5.20	1.67	1.64
1748	65	20352	313.11	19878	305.82	7.29	2.30	2.33
1749	95	30910	371.16	30026	316.00	5.09	1.61	1.62
1750	132	39660	370.45	39204	297.00	3.45	1.16	1.16
1751	120	30136	317.00	37922	316.02	1.78	0.50	0.50
1752	98	32620	372.86	32212	328.69	4.16	1.27	1.25
1753	96	32180	375.21	32234	335.77	-0.56	-0.17	-0.17
1754	102	32788	371.25	32436	327.00	3.45	1.05	1.04
1755	85	28878	379.74	28650	337.10	2.56	0.76	0.75
1756	5	1570	314.00	1574	314.00	-0.00	-0.25	-0.25
1757	-	-	-	-	-	-	-	-
1758	25	8238	379.52	8174	326.96	2.56	0.78	0.78
1759	52	17450	375.58	17280	332.46	3.12	0.94	0.93
1760	7	2460	371.43	2344	334.06	16.57	4.95	4.72
1761	-	-	-	-	-	-	-	-
1762	25	9186	367.44	9186	367.44	0.00	0.00	0.00
1763	55	19560	354.55	19418	353.05	1.49	0.42	0.42
1764	65	23418	360.28	23298	358.40	1.88	0.52	0.52
1765	53	18736	373.51	18544	349.89	3.62	1.04	1.02
1766	75	26850	378.00	26726	356.35	1.65	0.46	0.46
1767	47	17594	374.34	17594	374.34	0.00	0.00	0.00
1768	72	26980	374.72	26724	371.17	3.56	0.96	0.95
1769	55	21460	390.89	21348	388.15	0.95	0.24	0.24
1770	48	19818	395.21	19088	396.00	0.21	0.05	0.05
1771	25	9644	395.76	9644	385.76	0.00	0.00	0.00
1772	33	13292	402.79	13254	401.64	1.15	0.29	0.29
1773	42	16450	391.67	16432	391.24	0.43	0.11	0.11
1774	45	17748	394.00	17636	391.91	2.49	0.64	0.63
1775	-	NO DATA AVAILABLE	-	-	-	-	-	-
1776	52	21564	415.08	21564	415.08	0.00	0.00	0.00
1777	41	17426	425.02	17298	421.90	3.12	0.74	0.73
1778	30	12794	426.47	12794	426.47	0.00	0.00	0.00
1779	24	10384	472.67	10308	429.50	3.17	0.74	0.73
1780	28	12494	446.21	12130	433.21	13.00	3.00	2.91
1781	-	-	-	-	-	-	-	-
1782	6	2522	420.33	2410	401.67	18.67	4.65	4.44
1783	35	14896	425.03	14876	425.03	0.57	0.13	0.13
1784	62	25788	415.94	25768	415.61	0.32	0.08	0.08
1785	72	29702	412.53	29562	410.58	1.94	0.47	0.47
1786	77	31356	407.22	31208	405.30	1.92	0.47	0.47

SOURCE: GAA. PA 75/94-102

CONTINUED...



TABLE 11.4.B SHIPPING FROM MARVA TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP < AVE. SIZE OF CARGO
1787	86	35970	418.26	35722	415.37	2.89	0.69	0.69
1788	80	32604	470.09	32278	419.90	4.19	1.00	0.99
1789	80	36380	429.75	34122	426.65	3.10	0.73	0.72
1790	90	37722	419.13	37714	419.04	0.09	0.02	0.02
1791	99	39462	398.60	39140	395.35	3.25	0.77	0.77
1792	87	37030	429.63	37022	429.84	0.21	0.02	0.02
1793	16	9540	340.25	9524	345.25	1.00	0.29	0.29
1794	76	32026	421.39	31958	419.18	2.21	0.53	0.53
1795	1	410	410.00	410	410.00	0.00	0.00	0.00
1796	18	7282	404.56	7282	404.56	0.00	0.00	0.00
1797	30	11512	383.73	11512	383.73	0.00	0.00	0.00
1798	9	3382	375.78	3382	375.78	0.00	0.00	0.00
1799	-	-	-	-	-	-	-	-
1800	7	4056	579.43	2976	425.14	154.29	36.29	26.63
1801	1	678	678.00	470	470.00	208.00	44.26	30.60
1802	44	27862	632.23	18962	430.93	202.27	46.94	31.94
1803	7	4298	614.00	3870	438.57	175.43	40.00	28.57
1804	7	1284	183.43	788	112.57	70.86	62.94	38.03
1805	20	4418	220.90	2958	147.90	73.00	49.36	33.03
1806	7	2420	345.71	1728	246.86	68.85	40.00	28.59
1807	7	1156	165.14	856	122.29	42.85	36.00	25.95
1808	17	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-
1814	9	1692	210.60	696	139.20	71.40	51.15	33.84
1815	9	3678	408.67	2730	303.33	105.33	34.73	28.77
1816	25	9220	368.00	6904	276.16	92.84	33.95	28.12
1817	9	6550	727.78	6182	684.69	43.09	5.95	5.02
1818	18	8760	486.67	8780	488.87	0.20	0.00	0.00
1819	30	8980	299.33	8944	298.13	0.20	0.13	0.13
1820	18	8900	472.22	8500	472.22	0.00	0.00	0.00
1821	11	6092	543.82	6072	553.60	1.82	0.33	0.33
1822	14	6250	446.43	6250	446.43	0.00	0.00	0.00
1823	20	7732	386.60	7768	387.40	-0.80	-0.21	-0.21
1824	26	5734	279.84	5726	220.23	0.31	0.14	0.14
1825	16	2756	172.25	2744	171.50	0.75	0.44	0.44

SOURCE: GAA, PA 78/94-102

TABLE 11.4.C SHIPPING FROM RIGA TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NO. SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP IN TONS	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	S. AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	S. AVE. SIZE OF SHIP < AVE. SIZE OF CARGO
1705	1	-	-	906	150.00	10.00	11.39	10.23
1706	1	-	-	4484	234.02	9.37	4.00	3.04
1707	1	-	-	520	60.00	-4.00	-0.95	-0.76
1708	6	NO DATA AVAILABLE	490	93.00	69.67	-0.67	-7.43	-0.03
1709	20	6046	299.17	5016	200.55	20.62	16.27	12.09
1710	25	3906	149.44	2914	116.56	22.88	36.79	26.09
1711	30	4302	166.12	3526	117.53	20.60	26.33	19.97
1712	76	13046	162.18	11912	156.76	23.65	16.24	13.97
1713	106	21734	205.04	19790	186.77	18.26	9.70	0.91
1714	74	16276	219.95	13908	180.76	31.19	10.52	14.10
1715	67	10240	212.66	12006	192.03	20.63	10.74	9.70
1716	79	15092	190.13	14176	179.37	10.76	10.46	9.47
1717	86	15950	186.00	13874	161.33	23.67	10.30	12.01
1718	91	17910	196.90	16176	177.70	19.12	10.76	9.71
1719	84	15620	186.43	14132	168.24	20.19	12.00	10.72
1720	96	19974	166.40	15404	154.83	11.53	7.07	6.95
1721	149	25110	168.52	23630	158.64	9.88	6.23	5.06
1722	145	25022	176.70	21622	149.12	27.59	10.60	10.61
1723	110	20026	182.05	15632	142.11	39.95	20.11	21.94
1724	116	21772	187.69	16714	144.09	43.60	30.26	23.23
1725	97	21078	221.42	14118	145.55	75.86	52.13	34.27
1726	140	20020	146.03	22206	152.64	43.30	20.42	22.13
1727	139	23540	163.00	20444	147.60	26.72	20.97	19.90
1728	75	12770	162.60	11926	153.01	20.79	19.37	10.22
1729	83	19066	191.16	12816	154.41	36.75	23.60	19.23
1730	118	21996	199.62	17324	151.16	30.47	20.45	20.20
1731	115	20704	210.02	10056	163.97	50.05	31.01	23.67
1732	119	20522	222.00	20000	175.61	47.34	26.96	21.23
1733	99	20942	211.54	19466	161.07	50.46	31.33	23.66
1734	137	27460	216.20	21430	168.96	47.22	20.01	21.00
1735	126	29162	231.44	21056	167.11	64.33	30.50	27.00
1736	192	30024	207.42	27000	140.09	62.32	42.95	30.05
1737	105	29116	176.47	20944	126.93	49.54	39.03	20.07
1738	156	27230	176.50	23040	152.07	21.72	10.21	12.44
1739	92	17022	185.02	15706	170.72	14.30	6.30	7.73
1740	123	22024	179.06	10490	150.20	28.07	19.04	10.01
1741	51	15994	197.40	13200	162.96	34.44	21.17	17.07

SOURCE: GAA, PA 70/9A-102

CONTINUED...

TABLE II.4.C SHIPPING FROM RIGA TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP < AVE. SIZE OF CARGO
1746	93	19360	208.17	19052	161.05	46.32	26.62	22.25
1747	86	16630	182.16	13430	152.61	29.55	19.36	16.22
1748	88	19960	191.48	14000	159.09	22.36	14.00	12.32
1749	89	15760	176.49	13900	156.18	20.31	13.01	11.51
1750	76	12760	162.57	10900	156.91	25.66	16.33	14.03
1751	42	8910	196.71	6440	153.33	37.38	24.38	19.60
1752	81	16220	175.65	11940	147.51	28.19	19.00	16.02
1753	86	16290	189.51	14392	167.35	22.16	13.24	11.69
1754	110	21020	191.09	16952	172.29	18.80	10.91	9.84
1755	63	12440	197.59	11266	178.83	18.76	10.49	9.50
1756	71	17132	241.30	14716	207.27	34.03	16.42	14.10
1757	95	24000	261.05	21402	225.28	35.77	15.00	13.70
1758	114	26760	274.96	24950	215.42	49.54	9.07	8.32
1759	116	31104	268.03	27546	237.47	31.36	13.21	11.67
1760	140	39292	266.16	34372	232.24	33.92	14.60	12.74
1761	191	50770	245.81	42644	223.27	42.54	19.06	16.01
1762	136	30440	278.61	29136	211.13	67.48	31.96	24.22
1763	123	27690	225.17	22302	181.97	43.20	23.74	19.19
1764	134	32934	245.93	27820	207.61	38.31	18.46	15.50
1765	110	31516	267.08	27276	231.15	35.93	15.34	12.48
1766	140	34320	245.14	29720	212.34	32.80	15.45	13.20
1767	84	21520	246.19	16242	193.36	62.83	32.50	24.53
1768	114	29422	273.00	19654	172.40	90.60	29.35	22.69
1769	134	39986	259.65	32202	209.10	50.55	24.17	19.47
1770	110	32400	275.25	24676	209.12	66.14	31.63	24.63
1771	92	21462	273.28	15872	172.52	60.76	35.22	26.03
1772	190	45360	278.78	34600	182.53	96.25	30.83	23.56
1773	147	37316	273.85	28094	191.12	62.73	32.63	24.71
1774	171	45730	247.47	33502	196.39	71.09	36.20	26.50
1775		NO DATA AVAILABLE						
1776	104	27106	260.63	21624	207.92	52.71	25.35	20.22
1777	126	35492	291.68	28992	230.10	51.59	22.42	18.31
1778	123	35462	298.31	26142	228.00	69.51	26.01	20.64
1779	107	29226	273.14	23566	220.24	52.90	24.62	19.37
1780	118	36576	309.97	26316	239.97	70.00	29.17	22.50
1781	72	12904	193.11	8524	118.39	74.72	63.12	38.69
1782	162	36446	200.30	21782	143.30	97.00	39.78	28.66
1783	166	37994	278.88	28308	170.53	98.35	34.22	28.49
1784	109	29904	277.65	17264	159.30	78.35	49.18	32.97
1785	112	29506	276.45	18310	163.48	64.96	39.74	28.44
1786	93	23914	257.14	19096	213.94	43.20	20.19	16.80

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.2.C SHIPPING FROM RIGA TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAS	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE CARGO - SHIP SIZE	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF CARGO < AVE. SIZE OF SHIP
1787	102	29992	293.00	10526	142.12	42.49	26.95	21.23
1788	79	18678	236.43	12486	156.05	78.26	49.59	33.19
1789	93	22994	246.17	15616	167.91	78.26	46.61	31.79
1790	122	27462	225.16	16342	133.95	91.15	68.65	40.49
1791	66	15918	242.70	9828	148.91	93.79	62.94	36.64
1792	98	22104	226.37	14866	151.69	74.67	49.23	32.99
1793	120	23302	192.52	21070	129.56	54.97	49.20	31.21
1794	112	18704	167.02	13886	121.30	48.71	37.69	27.37
1795	46	7224	157.64	4736	102.66	54.99	52.53	34.44
1796	141	24978	177.19	15822	112.21	64.94	37.87	30.66
1797	90	19274	166.67	13796	146.78	56.90	39.71	29.42
1798	68	11752	172.36	8794	129.32	43.06	33.36	24.99
1799	3	656	192.60	360	126.67	25.33	20.60	16.67
1800	35	6508	187.69	4068	116.80	78.29	60.18	37.57
1801	30	5096	176.53	3424	114.13	62.40	54.67	36.25
1802	154	32302	209.75	19422	126.12	83.64	66.33	39.87
1803	133	27002	203.47	16066	120.80	82.68	68.44	40.63
1804	52	10848	192.68	6254	120.27	72.81	60.54	37.71
1805	128	23632	184.63	14160	110.63	74.00	66.89	40.60
1806	39	7046	180.67	4122	105.69	74.97	78.94	41.50
1807	11	1004	191.27	740	67.27	64.00	95.14	49.73
1808								
1809								
1810								
1811								
1812								
1813								
1814	47	9206	195.87	5550	118.69	77.79	65.87	36.71
1815	73	12732	174.41	7848	107.51	66.90	62.23	38.26
1816	122	22394	191.75	13450	126.64	65.11	51.42	33.96
1817	332	64946	201.64	59156	166.14	35.51	21.37	17.61
1818	39	7362	190.28	6150	137.69	31.59	20.63	16.69
1819	51	8904	175.37	7248	142.12	33.25	23.40	18.96
1820	63	11204	179.11	9774	152.14	23.97	19.48	13.26
1821	69	12992	196.99	10498	152.14	26.84	23.90	18.63
1822	29	4826	166.41	4162	143.82	22.59	19.98	13.76
1823	59	10278	174.28	9370	162.20	12.08	7.49	6.69
1824	41	6730	164.15	4364	154.90	9.17	5.92	3.49
1825	19	3490	184.11	3362	174.98	7.16	4.68	3.69

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11-4-0 SHIPPING FROM VIBORG TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SALES	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP CARGO > AVE. SIZE OF SHIP	SIZE OF SHIP
1704	1	-	-	-	-	-	-	-
1705	1	-	-	-	-	-	-	-
1706	1	-	-	-	-	-	-	-
1707	1	-	-	-	-	-	-	-
1708	2	-	-	-	-	-	-	-
1709	6	2156	359.33	1940	323.33	36.00	11.13	10.02
1710	5	1962	316.40	1510	302.00	14.40	4.77	4.55
1711	-	-	-	-	-	-	-	-
1712	-	-	-	-	-	-	-	-
1713	-	-	-	-	-	-	-	-
1714	-	-	-	-	-	-	-	-
1715	2	312	156.00	312	156.00	0.00	0.00	0.00
1716	-	-	-	-	-	-	-	-
1717	5	1676	375.20	1606	321.20	54.00	16.01	14.39
1718	12	4236	353.17	3760	314.00	39.17	12.07	11.00
1719	11	2900	318.18	3322	302.00	16.18	5.36	5.09
1720	36	10600	294.44	10018	278.03	16.41	5.89	5.33
1721	20	7090	354.50	6790	339.50	15.00	4.41	4.23
1722	24	8618	359.08	8066	336.17	22.92	6.52	6.20
1723	11	6130	376.18	3636	348.91	27.27	7.82	7.25
1724	12	3764	313.67	3590	299.17	14.50	4.85	4.62
1725	17	4494	276.12	4464	262.59	13.53	5.15	4.96
1726	22	6762	306.44	6596	299.91	6.73	2.06	1.86
1727	21	5954	283.52	5250	249.30	34.22	11.73	10.83
1728	13	3466	266.62	3418	262.92	47.70	13.96	12.83
1729	14	3428	244.86	3250	233.57	113.29	32.26	29.85
1730	22	5626	255.73	5702	259.18	-66.45	-19.85	-18.46
1731	18	4976	276.44	4536	252.00	440.44	13.48	12.36
1732	29	6292	217.00	6174	212.90	118.10	19.28	17.83
1733	30	6190	206.33	6126	204.27	64.06	10.46	9.66
1734	26	5066	194.85	5006	192.54	60.31	12.04	11.24
1735	20	4376	218.80	4256	212.80	120.00	28.43	26.54
1736	44	12786	290.61	12628	287.00	158.62	12.56	11.66
1737	37	9630	260.27	9520	257.81	109.46	11.50	10.60
1738	23	5730	249.13	5676	246.87	54.26	9.39	8.69
1739	17	4204	247.29	4204	247.29	0.00	0.00	0.00
1740	6	2256	376.00	2206	367.67	50.33	13.43	12.33
1741	13	3760	289.23	3706	284.69	54.54	14.47	13.37
1742	13	3870	297.69	3826	294.31	44.38	11.47	10.37
1743	21	6716	320.29	6572	313.43	144.86	21.42	19.92
1744	23	4896	212.87	4676	203.30	220.57	45.03	41.66
1745	17	4270	251.18	4206	247.41	64.77	15.17	13.97

SOURCE: GAA, PA 78/90-162

CONTINUED...

TABLE II.0-0 SHIPPING FROM VIBORG TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAS	NUMBER OF SHIPS	TOTAL TONNAGE		AVERAGE SIZE		TOTAL TONNAGE		AVERAGE SIZE		DIFFERENCE		AVE. TONNAGE		AVE. TONNAGE		SIZE OF SHIP	
		CARGO CARRIED	IN TONS	CARGO	IN TONS	ACCORDING TO SIZE OF SHIP	IN TONS	ACCORDING TO SIZE OF SHIP	IN TONS	IN TONS	CARGO - SIZE	SIZE OF SHIP	CARGO > AVE.	SIZE OF SHIP	CARGO < AVE.	SIZE OF SHIP	
1744	13	3012	277.09	3000	261.54	10.31	6.24	5.87									
1747	10	3290	329.00	3102	310.20	19.00	0.32	5.94									
1748	14	3010	215.00	2930	209.00	9.14	2.05	2.30									
1749	13	3140	241.54	3120	240.00	1.54	0.64	0.64									
1750	10	4240	223.47	4100	216.11	7.37	3.01	3.30									
1751	7	1750	251.14	1750	251.14	0.00	0.00	0.00									
1752	10	2224	222.40	2170	217.00	4.60	2.11	2.07									
1753	16	3034	239.63	3782	236.30	3.25	1.37	1.34									
1754	11	3116	283.27	3000	260.00	3.27	1.17	1.16									
1755	17	3720	219.29	3000	210.59	0.71	2.19	2.19									
1756	24	7120	296.67	6900	291.17	5.50	1.09	1.09									
1757	13	3002	201.09	3030	279.23	2.46	0.00	0.00									
1758	5	1500	310.00	1500	312.00	0.00	1.92	1.92									
1759	6	2344	293.00	2142	267.75	22.25	0.42	0.42									
1760	10	3544	354.40	3544	354.40	0.00	0.00	0.00									
1761	6	1492	248.67	1492	248.67	0.00	0.00	0.00									
1762	7	1950	279.14	1950	269.14	0.00	0.00	0.00									
1763	9	1796	198.11	1622	183.50	11.24	6.26	5.92									
1764	9	1840	204.44	1840	204.44	0.00	0.00	0.00									
1765	12	2400	200.67	2330	236.50	0.17	1.76	1.73									
1766	15	3012	206.00	2902	193.67	7.33	3.79	3.65									
1767	3	600	100.00	600	162.67	33.33	20.00	17.01									
1768	7	1512	216.00	1390	199.14	16.86	0.46	7.00									
1769	9	1802	209.11	1810	201.78	7.33	3.03	3.01									
1770	5	1230	247.60	1112	222.40	25.20	11.33	10.10									
1771	1	204	204.00	204	204.00	0.00	0.00	0.00									
1772	1	140	140.00	140	140.00	0.00	0.00	0.00									
1773	5	1102	220.40	1090	218.00	2.40	0.73	0.73									
1774	4	840	210.00	840	210.00	0.00	0.00	0.00									
1775																	
1776	5	922	190.00	870	175.00	0.00	0.01	0.77									
1777	2	350	175.00	350	175.00	0.00	0.00	0.00									
1778	5	1272	254.40	1200	240.00	14.40	0.00	0.00									
1779	7	2402	343.57	2314	330.57	29.00	7.26	6.77									
1780	1	482	482.00	482	482.00	0.00	0.00	0.00									
1781	4	950	239.50	890	222.50	17.00	7.00	7.10									
1782	10	2402	160.13	2542	158.00	1.25	0.70	0.70									
1783	8	1602	200.25	1540	192.75	4.50	2.26	2.25									
1784	6	1102	183.67	1114	189.00	0.67	2.07	2.01									
1785	6	1392	232.00	1420	236.67	-0.67	-0.67	-0.61									
1786	8	1602	210.25	1602	210.25	0.00	0.00	0.00									

NO DATA AVAILABLE

TABLE II.4.D SHIPPING FROM VIBORG TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAS	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP < AVE. SIZE OF CARGO
1787	9	1574	174.89	1574	174.89	0.00	0.00	0.00
1788	5	1004	200.80	1004	200.80	0.00	0.00	0.00
1789	4	1284	321.00	1284	321.00	0.00	0.00	0.00
1790	4	488	122.00	488	122.00	0.00	0.00	0.00
1791	-	-	-	-	-	-	-	-
1792	7	1134	162.00	1098	157.14	10.86	7.10	6.70
1793	12	2602	216.83	2926	243.83	6.33	3.01	2.92
1794	13	2410	185.38	2314	178.00	7.38	4.15	3.98
1795	-	-	-	-	-	-	-	-
1796	3	582	194.00	582	194.00	0.00	0.00	0.00
1797	3	538	179.33	538	179.33	0.00	0.00	0.00
1798	3	536	178.67	536	178.67	0.00	0.00	0.00
1799	2	294	147.00	294	147.00	0.00	0.00	0.00
1800	2	368	184.00	244	122.00	62.00	50.02	33.70
1801	3	684	228.00	532	177.33	44.00	24.81	19.88
1802	-	-	-	-	-	-	-	-
1803	2	476	238.00	308	154.00	84.00	54.55	39.29
1804	3	614	204.67	448	149.33	56.00	37.67	27.36
1805	5	986	197.20	746	149.20	48.00	32.17	24.34
1806	1	336	336.00	292	292.00	44.00	33.33	25.00
1807	3	388	129.33	266	88.67	40.00	49.11	31.09
1808	17	NO DATA AVAILABLE						
1809		NO DATA AVAILABLE						
1810		NO DATA AVAILABLE						
1811		NO DATA AVAILABLE						
1812		NO DATA AVAILABLE						
1813		NO DATA AVAILABLE						
1814	4	1028	257.00	724	181.00	76.00	41.99	29.97
1815	7	1592	227.43	1124	160.57	66.86	41.84	29.40
1816	4	732	183.00	528	132.00	51.00	38.84	27.87
1817	3	618	206.00	550	183.33	20.00	10.91	9.84
1818	4	1028	257.00	1000	250.00	7.00	2.88	2.72
1819	5	916	183.20	916	183.20	0.00	0.00	0.00
1820	7	1856	265.14	1872	267.43	-2.29	-0.85	-0.86
1821	4	966	241.50	926	231.50	10.00	4.32	4.14
1822	2	590	295.00	590	295.00	0.00	0.00	0.00
1823	2	720	360.00	720	360.00	0.00	0.00	0.00
1824	5	1284	256.80	1284	256.80	0.00	0.00	0.00
1825	1	372	372.00	372	372.00	0.00	0.00	0.00

SOURCE: GAA, PA 78/94-102

TABLE II.4.E SHIPPING FROM REVAL TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP > AVE. SIZE OF CARGO
1705	1	-	-	-	-	-	-	-
1706	1	-	-	-	-	-	-	-
1707	1	-	-	-	-	-	-	-
1708	2	102	51.00	68	34.00	17.00	90.00	33.33
1709	2	-	-	-	-	-	-	-
1710	2	-	-	-	-	-	-	-
1711	3	220	70.00	192	64.00	12.00	18.75	19.79
1712	2	172	86.00	144	72.00	14.00	19.44	16.28
1713	7	976	139.71	686	98.00	41.71	48.97	29.66
1714	1	48	48.00	36	36.00	12.00	33.33	25.00
1715	23	7112	309.22	5144	223.68	85.57	38.26	27.07
1716	10	2802	280.20	1976	197.60	82.60	41.60	29.46
1717	1	210	210.00	200	200.00	10.00	5.00	4.76
1718	2	260	130.00	184	92.00	38.00	41.30	29.23
1719	3	170	56.67	110	36.67	20.00	34.86	28.29
1720	2	108	54.00	90	45.00	9.00	20.00	16.67
1721	3	460	153.33	400	133.33	20.00	18.00	13.04
1722	4	384	96.00	288	72.00	24.00	9.84	5.26
1723	3	186	62.00	142	47.33	14.67	30.99	23.66
1724	3	248	82.67	248	82.67	0.00	0.00	0.00
1725	4	216	54.00	248	62.00	-8.00	-18.90	-10.81
1726	1	70	70.00	70	70.00	0.00	0.00	0.00
1727	5	1262	252.40	964	192.80	29.60	11.73	8.49
1728	11	2770	251.82	1666	151.64	100.18	39.81	29.78
1729	16	3642	227.62	2324	145.25	82.37	36.24	26.19
1730	23	5348	232.52	3492	151.83	80.70	34.71	25.70
1731	9	1754	194.89	1246	137.78	57.11	41.48	29.26
1732	2	178	89.00	178	89.00	0.00	0.00	0.00
1733	12	2970	247.50	1780	148.33	99.17	40.14	29.67
1734	2	286	143.00	238	119.00	24.00	20.17	16.78
1735	6	640	106.67	576	96.00	44.67	41.94	31.43
1736	11	1490	135.45	926	84.18	51.27	37.86	28.04
1737	18	3842	213.44	2194	121.89	74.55	34.92	25.04
1738	20	6842	342.10	4270	213.50	128.60	37.59	27.99
1739	23	16936	736.35	10754	467.57	138.78	18.85	13.91
1740	23	4872	211.83	3078	133.83	78.00	36.85	26.82
1741	4	928	232.00	524	131.00	1.00	0.76	0.76
1742	-	-	-	-	-	-	-	-
1743	2	916	458.00	366	183.00	20.00	13.66	12.67
1744	2	380	190.00	258	129.00	61.00	47.29	32.11

SOURCE: GAA, PA 78/94-102

CONTINUED...



TABLE II.3.E SHIPPING FROM REVAL TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED		AVERAGE SIZE OF SHIP		TOTAL TONNAGE ACCORDING TO SIZE OF SHIP		AVERAGE SIZE OF SHIP		DIFFERENCE AVE. TONNAGE CARGO > AVE. TONNAGE CARGO < AVE. TONNAGE CARGO		% AVE. SIZE OF SHIP > AVE. SIZE OF SHIP		% AVE. SIZE OF SHIP < AVE. SIZE OF SHIP	
		TONNAGE	IN TONS	TONNAGE	IN TONS	TONNAGE	IN TONS	TONNAGE	IN TONS	TONNAGE	IN TONS	TONNAGE	IN TONS	PERCENT	PERCENT
1746	0	2526	316.75	1302	162.75	162.75	162.75	162.75	162.75	162.75	162.75	162.75	162.75	162.75	162.75
1747	3	422	140.67	289	96.33	96.33	96.33	96.33	96.33	47.33	47.33	50.71	50.71	23.05	23.05
1748	5	572	114.40	444	88.80	88.80	88.80	88.80	88.80	25.60	25.60	20.02	20.02	22.20	22.20
1749	2	226	113.00	206	103.00	103.00	103.00	103.00	103.00	10.00	10.00	9.71	9.71	0.00	0.00
1750	5	730	146.00	500	100.00	100.00	100.00	100.00	100.00	46.00	46.00	46.00	46.00	31.31	31.31
1751	3	720	240.00	482	160.67	160.67	160.67	160.67	160.67	79.33	79.33	79.33	79.33	44.17	44.17
1752	4	328	82.00	280	70.00	70.00	70.00	70.00	70.00	12.00	12.00	17.16	17.16	24.18	24.18
1753	7	1092	156.00	828	118.29	118.29	118.29	118.29	118.29	37.71	37.71	31.00	31.00	24.18	24.18
1754	3	366	122.00	286	95.33	95.33	95.33	95.33	95.33	26.67	26.67	41.66	41.66	29.91	29.91
1755	2	100	50.00	100	50.00	50.00	50.00	50.00	50.00	-24.00	-24.00	-32.43	-32.43	-48.00	-48.00
1756	4	908	227.00	594	148.50	148.50	148.50	148.50	148.50	78.50	78.50	60.33	60.33	39.00	39.00
1757	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1758	1	114	114.00	114	114.00	114.00	114.00	114.00	114.00	0.00	0.00	0.00	0.00	0.00	0.00
1759	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1760	2	266	133.00	146	73.00	73.00	73.00	73.00	73.00	60.00	60.00	82.19	82.19	48.11	48.11
1761	7	956	136.57	596	85.14	85.14	85.14	85.14	85.14	51.43	51.43	60.40	60.40	37.00	37.00
1762	10	2724	272.40	1848	184.80	184.80	184.80	184.80	184.80	107.60	107.60	68.29	68.29	39.00	39.00
1763	4	640	160.00	366	91.50	91.50	91.50	91.50	91.50	68.50	68.50	74.00	74.00	42.01	42.01
1764	4	710	177.50	572	143.00	143.00	143.00	143.00	143.00	34.50	34.50	28.17	28.17	20.11	20.11
1765	1	152	152.00	90	90.00	90.00	90.00	90.00	90.00	62.00	62.00	68.89	68.89	49.79	49.79
1766	3	434	144.67	244	81.33	81.33	81.33	81.33	81.33	63.33	63.33	77.67	77.67	43.78	43.78
1767	1	300	300.00	226	226.00	226.00	226.00	226.00	226.00	74.00	74.00	32.74	32.74	24.67	24.67
1768	1	180	180.00	64	64.00	64.00	64.00	64.00	64.00	116.00	116.00	87.80	87.80	48.67	48.67
1769	3	444	148.00	290	96.67	96.67	96.67	96.67	96.67	51.33	51.33	53.10	53.10	34.00	34.00
1770	2	322	161.00	202	101.00	101.00	101.00	101.00	101.00	60.00	60.00	64.24	64.24	29.14	29.14
1771	5	672	134.40	518	103.60	103.60	103.60	103.60	103.60	30.80	30.80	66.34	66.34	46.00	46.00
1772	4	544	136.00	368	92.00	92.00	92.00	92.00	92.00	44.00	44.00	47.83	47.83	32.28	32.28
1773	2	330	165.00	234	117.00	117.00	117.00	117.00	117.00	48.00	48.00	41.03	41.03	29.09	29.09
1774	6	1302	162.75	852	142.00	142.00	142.00	142.00	142.00	20.75	20.75	52.82	52.82	34.00	34.00
1775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	4	560	140.00	350	87.50	87.50	87.50	87.50	87.50	52.50	52.50	57.14	57.14	26.26	26.26
1777	2	308	154.00	212	106.00	106.00	106.00	106.00	106.00	48.00	48.00	45.88	45.88	31.17	31.17
1778	2	290	145.00	164	82.00	82.00	82.00	82.00	82.00	63.00	63.00	76.83	76.83	43.48	43.48
1779	1	246	246.00	154	154.00	154.00	154.00	154.00	154.00	92.00	92.00	89.74	89.74	37.40	37.40
1780	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1781	1	130	130.00	66	66.00	66.00	66.00	66.00	66.00	64.00	64.00	96.97	96.97	49.23	49.23
1782	3	522	174.00	390	130.00	130.00	130.00	130.00	130.00	44.00	44.00	33.05	33.05	25.29	25.29
1783	3	642	214.00	428	142.67	142.67	142.67	142.67	142.67	71.33	71.33	68.78	68.78	32.33	32.33
1784	1	246	246.00	130	130.00	130.00	130.00	130.00	130.00	116.00	116.00	89.23	89.23	47.18	47.18
1785	1	108	108.00	104	104.00	104.00	104.00	104.00	104.00	4.00	4.00	80.77	80.77	44.00	44.00
1786	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

NO DATA AVAILABLE

CONTINUED...

SOURCE: GAA, PA 78/98-102

TABLE II.4.E SHIPPING FROM REVAL TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO > AVE. SIZE OF SHIP	AVE. SIZE OF CARGO	SIZE OF SHIP	DIFFERENCE AVE. SIZE OF CARGO < AVE. SIZE OF SHIP
1787	-	-	-	-	-	-	-	-	-
1788	1	194	154.00	194	154.00	0.00	0.00	0.00	0.00
1789	-	-	-	-	-	-	-	-	-
1790	-	-	-	-	-	-	-	-	-
1791	13	-	-	-	-	-	-	-	-
1792	1	80	80.00	44	44.00	36.00	81.02	45.00	45.00
1793	1	176	176.00	176	176.00	0.00	0.00	0.00	0.00
1794	13	-	-	-	-	-	-	-	-
1795	-	-	-	-	-	-	-	-	-
1796	10	1308	136.80	726	73.00	63.80	89.87	46.80	46.80
1797	2	218	109.00	140	70.00	39.00	99.71	39.78	39.78
1798	2	318	159.00	170	85.00	74.00	87.66	45.84	45.84
1799	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	-
1801	1	614	614.00	414	414.00	200.00	45.31	32.87	32.87
1802	4	788	197.00	436	109.00	68.00	74.31	42.63	42.63
1803	2	394	197.00	238	119.00	78.00	85.55	35.55	35.55
1804	-	-	-	-	-	-	-	-	-
1805	-	-	-	-	-	-	-	-	-
1806	-	-	-	-	-	-	-	-	-
1807	17	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-
1814	3	356	119.33	276	92.67	26.67	28.78	22.28	22.28
1815	6	920	153.33	700	116.67	36.67	31.43	23.91	23.91
1816	-	-	-	-	-	-	-	-	-
1817	5	794	158.80	766	153.20	5.60	3.66	3.63	3.63
1818	-	-	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-	-	-
1820	1	170	170.00	170	170.00	0.00	0.00	0.00	0.00
1821	-	-	-	-	-	-	-	-	-
1822	-	-	-	-	-	-	-	-	-
1823	-	-	-	-	-	-	-	-	-
1824	20	-	-	-	-	-	-	-	-
1825	-	-	-	-	-	-	-	-	-

NO DATA AVAILABLE  
 NO DATA AVAILABLE  
 NO DATA AVAILABLE  
 NO DATA AVAILABLE  
 NO DATA AVAILABLE

SOURCE: GAA, PA 78/94-102

TABLE II.4.F SHIPPING FROM ESTONIA TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	N AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	N AVE. SIZE OF SHIP < AVE. SIZE OF CARGO
1708	1	-	-	-	-	-	-	-
1709	1	-	-	-	-	-	-	-
1710	1	-	-	-	-	-	-	-
1711	1	-	-	-	-	-	-	-
1712	1	-	-	-	-	-	-	-
1713	1	-	-	-	-	-	-	-
1714	1	-	-	-	-	-	-	-
1715	1	-	-	-	-	-	-	-
1716	1	70	70.00	70	70.00	0.00	0.00	0.00
1717	1	90	90.00	116	116.00	-26.00	-26.00	0.00
1718	1	400	400.00	382	382.00	18.00	18.00	0.00
1719	2	846	423.00	788	394.00	29.00	29.00	0.00
1720	9	1814	201.56	1688	187.56	14.00	14.00	0.00
1721	-	-	-	-	-	-	-	-
1722	-	-	-	-	-	-	-	-
1723	5	2098	419.60	1928	385.60	34.00	34.00	0.00
1724	1	100	100.00	96	96.00	4.00	4.00	0.00
1725	1	38	38.00	38	38.00	0.00	0.00	0.00
1726	-	-	-	-	-	-	-	-
1727	-	-	-	-	-	-	-	-
1728	1	84	84.00	84	84.00	0.00	0.00	0.00
1729	2	696	348.00	692	346.00	2.00	2.00	0.00
1730	8	1872	234.00	1474	184.26	49.74	49.74	0.00
1731	7	1804	257.71	1426	203.71	55.00	55.00	0.00
1732	4	362	90.50	334	83.50	7.00	7.00	0.00
1733	2	480	240.00	444	222.00	18.00	18.00	0.00
1734	3	486	162.00	386	128.67	33.33	33.33	0.00
1735	2	300	150.00	300	150.00	0.00	0.00	0.00
1736	4	600	150.00	600	150.00	0.00	0.00	0.00
1737	8	1064	133.00	1066	133.25	-0.25	-0.25	0.00
1738	14	2284	163.14	2314	165.29	-22.15	-22.15	0.00
1739	16	3238	202.38	2774	173.38	29.00	29.00	0.00
1740	31	4776	154.06	3684	117.87	36.19	36.19	0.00
1741	26	3684	141.69	2984	113.62	28.07	28.07	0.00
1742	18	4782	265.67	4782	265.67	0.00	0.00	0.00
1743	14	3374	241.00	3362	239.43	11.57	11.57	0.00
1744	14	4080	291.43	4030	287.86	43.54	43.54	0.00
1745	21	6918	329.43	6880	327.62	38.00	38.00	0.00

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.4.F SHIPPING FROM ESTONIA TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP < AVE. SIZE OF CARGO
1746	10	2404	240.40	2310	231.00	9.40	4.07	2.91
1747	18	5086	282.56	4996	277.56	3.33	1.20	1.19
1748	30	9174	305.80	9062	302.07	3.73	1.24	1.22
1749	32	8506	265.81	8476	264.88	0.94	0.36	0.36
1750	16	3530	235.87	3520	235.33	0.53	0.23	0.23
1751	18	4970	276.11	4920	273.89	2.22	0.81	0.80
1752	18	5206	289.22	5196	288.78	0.44	0.16	0.16
1753	5	1474	294.80	1460	292.00	2.80	0.96	0.95
1754	9	1074	119.33	838	93.11	26.22	22.16	21.97
1755	6	774	129.00	468	77.67	51.33	40.09	39.79
1756	1	182	182.00	40	40.00	142.00	388.00	78.02
1757	1	74	74.00	74	74.00	0.00	0.00	0.00
1758	-	-	-	-	-	-	-	-
1759	9	1632	181.33	1674	174.89	8.44	3.68	3.55
1760	6	1186	197.67	1188	194.67	13.00	7.04	6.58
1761	11	2054	186.91	1312	119.27	67.64	56.71	36.19
1762	11	2946	267.82	1932	175.64	92.18	52.48	34.42
1763	10	2162	216.20	2000	200.00	16.20	9.10	8.24
1764	9	1486	165.11	1266	140.67	24.44	17.38	14.80
1765	9	1510	167.78	1344	149.33	18.44	12.38	10.99
1766	7	932	133.14	804	114.86	18.29	16.92	13.73
1767	10	1882	188.20	1482	148.20	37.00	24.97	19.90
1768	17	3330	195.88	2302	135.41	60.47	44.66	30.67
1769	24	4496	187.33	3448	143.67	43.67	30.39	23.21
1770	21	5080	241.90	3756	178.86	63.05	36.25	26.66
1771	23	5606	243.74	3852	167.43	69.30	57.63	36.64
1772	40	9074	226.85	6124	153.10	73.75	48.17	32.61
1773	39	8484	217.54	6404	164.21	53.33	32.48	24.82
1774	41	9884	241.07	6220	151.71	89.37	58.91	37.07
1775		NO DATA AVAILABLE						
1776	45	10620	236.00	6706	149.02	86.98	58.37	36.65
1777	35	9862	281.77	6342	181.20	98.86	54.56	35.30
1778	32	6164	258.13	4966	155.19	99.94	64.48	39.17
1779	25	7278	291.12	4220	168.80	122.32	72.46	42.82
1780	21	5050	240.48	3230	153.81	86.67	56.28	36.64
1781	5	1476	295.20	928	185.60	109.60	59.08	37.13
1782	10	2378	237.80	1488	148.80	89.00	59.81	37.43
1783	26	5486	210.89	4310	165.77	52.92	31.93	24.20
1784	7	2446	348.87	1784	254.86	92.71	36.77	26.69
1785	12	3638	303.17	2788	232.33	70.83	36.49	23.24
1786	7	1368	195.43	1272	181.71	13.71	7.88	7.82

SOURCE: GAA, PA 78/94-102

CONTINUED...

- 530 -

TABLE II.4.F SHIPPING FROM ESTONIA TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED IN TONS	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	AVE. SIZE OF	
							CARGO > AVE. SHIP	CARGO < AVE. SHIP
1787	11	1842	167.45	1506	136.91	30.58	22.31	10.24
1788	4	744	186.00	606	166.50	19.50	11.71	10.48
1789	13	3204	246.46	2868	220.62	28.88	11.72	10.49
1791	13	1990	153.08	1718	132.15	20.92	18.83	13.67
1792	9	1950	150.00	1886	122.00	28.00	22.95	10.67
1793	5	1842	204.67	1638	182.00	22.67	12.05	11.07
1794	6	808	161.60	656	131.20	30.40	23.17	10.81
1795	-	1744	248.80	1564	312.80	36.00	11.51	10.22
1796	6	1292	176.00	1024	128.00	48.00	38.94	20.44
1797	5	1202	240.40	742	149.40	92.00	61.99	28.27
1798	3	394	131.33	198	66.00	65.33	98.99	49.78
1799	1	124	124.00	60	60.00	64.00	106.67	51.61
1800	3	380	126.67	304	101.23	25.33	28.00	20.00
1801	1	322	322.00	238	238.00	84.00	38.29	26.09
1802	7	1884	276.29	972	138.80	87.43	62.96	38.64
1803	10	1520	152.00	824	82.40	69.60	84.47	48.79
1804	3	434	211.33	374	124.67	66.67	69.52	41.61
1805	11	2464	224.00	1580	143.64	80.26	58.95	28.88
1806	5	1000	200.00	676	135.20	64.80	47.93	22.40
1807	17	-	-	-	-	-	-	-
1808	-	NO DATA AVAILABLE	-	-	-	-	-	-
1809	-	NO DATA AVAILABLE	-	-	-	-	-	-
1810	-	NO DATA AVAILABLE	-	-	-	-	-	-
1811	-	NO DATA AVAILABLE	-	-	-	-	-	-
1812	-	NO DATA AVAILABLE	-	-	-	-	-	-
1813	-	NO DATA AVAILABLE	-	-	-	-	-	-
1814	1	182	182.00	110	110.00	72.00	68.45	39.86
1815	2	668	254.00	280	140.00	114.00	81.43	44.88
1816	8	1390	278.00	806	169.28	108.80	64.20	29.14
1817	9	1880	200.00	1472	163.56	36.44	22.28	18.22
1818	4	928	234.50	722	180.50	54.00	29.92	23.03
1819	6	1782	297.00	1190	198.33	98.67	69.78	33.22
1820	2	376	188.00	284	142.00	56.00	42.42	29.79
1821	4	840	210.00	592	148.00	62.00	41.89	29.52
1822	3	314	104.67	246	82.00	22.67	27.64	21.66
1823	3	652	217.33	540	183.33	24.00	12.41	11.04
1824	4	686	164.00	412	103.00	11.00	7.19	6.71
1825	2	244	122.00	218	109.00	13.00	11.03	10.00

SOURCE: GAA, PA 78/94-102

TABLE 11.4.0 SHIPPING FROM FREDERIKSHAVN TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP SIZE OF SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF CARGO < AVE. SIZE OF SHIP
1744	1	232	232.00	232	232.00	0.00	0.00	0.00
1745	5	932	186.40	892	178.40	8.00	4.08	4.89
1746	4	1068	267.00	1068	267.00	0.00	0.00	0.00
1747	11	2938	267.09	2814	255.82	11.27	4.41	4.22
1748	7	1632	233.14	1584	228.00	5.14	2.21	2.16
1749	6	1886	314.33	1886	314.33	0.00	0.00	0.00
1750	7	1066	152.29	1062	151.71	0.57	0.36	0.26
1751	3	606	202.00	602	187.33	14.67	7.83	7.26
1752	6	1062	177.00	1014	169.00	48.00	4.73	4.82
1753	2	326	163.00	314	157.00	6.00	3.82	3.66
1754	5	648	129.60	592	116.40	13.20	11.24	10.19
1755	6	740	123.33	728	121.33	2.00	1.65	1.62
1756	6	1480	246.67	1444	240.67	6.00	2.49	2.42
1757	7	1668	238.29	1632	232.14	5.14	2.21	2.16
1758	5	1222	244.40	1130	226.00	18.40	6.14	7.82
1759	8	2024	253.00	1990	248.75	4.25	1.71	1.68
1760	6	1784	297.33	1536	256.00	41.33	16.18	13.90
1761	3	878	292.67	878	292.67	0.00	0.00	0.00
1762	6	1996	332.67	1928	321.33	11.33	3.83	3.41
1763	5	1040	208.00	1010	202.00	6.00	2.97	2.88
1764	5	1058	211.60	1058	211.60	0.00	0.00	0.00
1765	3	680	226.67	560	186.67	40.00	21.43	17.65
1766	6	1654	275.67	1654	275.67	0.00	0.00	0.00
1767	5	800	160.00	746	149.20	10.80	6.75	6.60
1768	6	1238	206.33	1230	205.00	1.33	0.68	0.65
1769	9	1762	195.78	1676	186.22	9.56	5.13	4.86
1770	5	1070	214.00	1022	204.40	9.60	4.76	4.49
1771	3	712	237.33	636	212.00	25.33	11.95	10.67
1772	5	1084	216.80	1084	216.80	0.00	0.00	0.00
1773	5	1214	242.80	1214	242.80	0.00	0.00	0.00
1774	9	1762	195.78	1758	195.33	0.44	0.23	0.23
1775	3	NO DATA AVAILABLE						
1776	3	840	180.00	540	180.00	0.00	0.00	0.00
1777	-	-	-	-	-	-	-	-
1778	2	892	446.00	892	446.00	0.00	0.00	0.00
1779	6	1420	236.67	1420	236.67	0.00	0.00	0.00
1780	6	1938	323.00	1826	304.33	19.67	6.13	5.78
1781	3	436	145.33	436	145.33	0.00	0.00	0.00
1782	7	1386	198.00	1386	198.00	0.00	0.00	0.00
1783	7	1694	242.00	1418	202.57	23.71	16.64	16.27
1784	10	1908	190.80	1990	199.00	-9.00	-4.40	-4.40

SOURCE: GAA. PA 78/94-102

CONTINUED...

TABLE 11.4.0 SHIPPING FROM FREDERIKSHAVN TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP < AVE. SIZE OF CARGO
1785	12	2490	207.50	2086	207.17	0.33	0.16	0.16
1786	2	390	195.00	396	192.00	2.00	1.04	1.03
1787	4	628	157.00	626	157.00	0.00	0.00	0.00
1788	4	794	198.50	794	198.50	0.00	0.00	0.00
1789	1	364	364.00	364	364.00	0.00	0.00	0.00
1790	13	-	-	-	-	-	-	-
1791	1	146	146.00	146	146.00	0.00	0.00	0.00
1792	-	-	-	-	-	-	-	-
1793	1	160	160.00	160	160.00	0.00	0.00	0.00
1794	5	892	178.40	888	177.60	0.80	0.45	0.45
1795	13	-	-	-	-	-	-	-
1796	4	692	173.00	692	173.00	0.00	0.00	0.00
1797	3	428	142.67	428	142.67	0.00	0.00	0.00
1798	-	-	-	-	-	-	-	-
1799	-	-	-	-	-	-	-	-
1800	2	302	151.00	238	119.00	32.00	26.89	21.19
1801	2	514	257.00	406	203.00	54.00	26.60	21.01
1802	1	186	186.00	186	186.00	0.00	0.00	0.00
1803	-	-	-	-	-	-	-	-
1804	2	224	112.00	160	80.00	32.00	40.00	28.97
1805	2	328	164.00	292	126.00	38.00	30.16	23.17
1806	-	-	-	-	-	-	-	-
1807	1	392	392.00	144	144.00	248.00	172.22	63.27
1808	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	-	-
1816	3	890	296.67	666	222.00	74.67	33.63	29.17
1817	1	102	102.00	90	90.00	12.00	13.33	11.76
1818	-	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-	-
1820	1	410	410.00	410	410.00	0.00	0.00	0.00
1821	2	732	366.00	716	358.00	8.00	2.23	2.19
1822	1	328	328.00	328	328.00	0.00	0.00	0.00
1823	2	578	289.00	574	287.00	2.00	0.70	0.69
1824	20	578	289.00	574	287.00	2.00	0.70	0.69
1825	1	216	216.00	216	216.00	0.00	0.00	0.00

SOURCE: GAA, PA 78/94-102

TABLE II.4.M SHIPPING FROM COURLAND TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF CARGO < AVE. SIZE OF SHIP
1796/14	52	6772	130.23	3652	70.23	60.00	85.43	46.07
1797	41	6878	167.76	3834	93.51	74.24	79.39	44.26
1798	26	4166	159.46	2196	84.46	75.00	88.80	47.03
1799	3	526	175.33	266	88.67	86.67	97.74	49.43
1800	14	2252	160.86	1168	83.43	77.43	92.81	48.13
1801	19	2942	154.84	1488	78.32	76.53	97.72	49.42
1802	32	5018	156.81	2778	86.81	70.00	80.63	44.64
1803	38	5890	158.29	3322	95.20	73.09	76.77	43.43
1804	22	3332	151.45	1968	90.36	61.99	67.61	40.34
1805	29	4882	157.31	2742	94.58	62.76	66.37	39.89
1806	15	2386	157.07	1404	93.60	63.47	67.81	40.41
1807	10	1266	126.60	634	63.40	63.20	99.68	49.92
1808/17								
1809								
1810								
1811								
1812								
1813								
1814	25	4020	160.80	2384	95.36	65.44	68.62	40.70
1815	20	3360	168.00	2068	103.40	64.60	62.48	38.48
1816	27	3766	140.22	2450	90.74	49.48	54.53	39.29
1817	40	5532	138.30	4632	115.60	22.50	19.43	16.27
1818	14	1818	130.57	1110	79.29	36.29	48.77	31.40
1819	18	1722	114.60	1248	63.20	31.60	27.98	27.53
1820	10	1274	127.40	1006	100.60	26.80	26.64	21.04
1821	19	2682	141.16	1958	103.08	38.11	36.98	26.99
1822/19	4	502	125.50	386	96.50	29.00	30.05	23.11
1823/19	13	1866	143.54	1530	117.69	29.85	21.96	18.01
1824/20	9	1738	192.89	1348	149.78	43.11	28.78	22.38
1825/20	18	1942	129.67	1490	99.33	30.13	30.34	23.27

SOURCE: GAA, PA 78/94-102



TABLE II.5 TONS OF CARGO SHIPPED TO AMSTERDAM DISTRIBUTED ACCORDING TO RUSSIAN (BALTIC) PORTS OF DEPARTURE

YEAR	ST. PETERSBURG		MARVA		REVAL		ESTONIA		RIGA		VIBORG		FREDERIKSHAVN		GOUWLAMO		RUSSIA TOTAL TONNAGE
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	
1705	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2312
1706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6316
1707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	904
1708	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	726
1709	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6016
1710	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6196
1711	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4704
1712	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22630
1713	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27456
1714	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22974
1715	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23996
1716	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30992
1717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41008
1718	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47408
1719	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36408
1720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51128
1721	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75648
1722	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	73038
1723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56784
1724	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65842
1725	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57840
1726	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	82316
1727	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	87616
1728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86466
1729	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	94976
1730	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72662
1731	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81680
1732	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10772
1733	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92600
1734	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100396
1735	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	94976
1736	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72662
1737	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81680
1738	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10772
1739	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92600
1740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100396
1741	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	94976
1742	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72662
1743	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81680
1744	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10772
1745	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92600
																	232
																	932
																	1.33

A = TONS OF CARGO SHIPPED B = 'A' IS OF TOTAL TONS OF CARGO SHIPPED FROM RUSSIA (BALTIC) PORTS FOR THAT YEAR

TABLE 11.5 TONS OF CARGO SHIPPED TO AMSTERDAM DISTRIBUTED ACCORDING TO RUSSIAN (BAL TIC) PORTS OF DEPARTURE

YEAR	ST. PETERSBURG	MARVA	REVAL	ESTONIA	RIGA	VIBORG	FREDERIKSHAMN	COURLAND	RUSSIA TOTAL								
1746	6028	9.54	2822	44.69	2024	3.99	2404	3.60	19360	30.59	3612	5.71	1068	1.69	-	-	63290
1747	8628	14.69	2234	36.06	472	0.72	5056	8.61	16030	27.30	3298	5.62	2938	5.00	-	-	56714
1748	4500	8.15	2032	36.96	522	1.04	9174	16.62	15968	28.92	3010	5.45	1632	2.96	-	-	59200
1749	4702	7.30	30510	47.39	226	0.35	8508	13.21	15708	24.40	3140	4.88	1866	2.46	-	-	64376
1750	3056	4.70	39660	60.94	730	1.12	3536	5.44	12780	19.64	4246	6.52	1066	1.64	-	-	66078
1751	9898	9.81	36136	63.46	720	1.20	4970	8.27	8010	13.33	1758	2.93	606	1.01	-	-	66998
1752	6874	10.66	32620	52.40	338	0.54	5206	8.36	16228	22.84	2224	3.87	1062	1.71	-	-	62292
1753	6678	10.79	32180	52.00	1092	1.76	1474	2.38	16298	26.34	3634	6.20	326	0.53	-	-	61802
1754	4670	7.22	33788	52.24	366	0.57	1074	1.66	21020	32.80	3116	4.82	648	1.00	-	-	64682
1755	2818	5.69	28878	56.36	100	0.20	774	1.56	12448	25.18	3728	7.53	740	1.80	-	-	49486
1756	6048	17.52	1570	4.35	988	2.66	182	0.53	17132	49.63	7120	20.63	1480	4.29	-	-	34520
1757	8502	21.97	-	-	-	-	74	0.19	28800	64.07	3662	9.46	1668	4.31	-	-	38706
1758	6362	14.36	8238	16.59	114	0.26	-	-	26784	60.48	1590	3.59	1222	2.76	-	-	44312
1759	7708	12.36	17450	27.99	-	-	1632	2.62	31194	90.02	2344	3.76	2024	3.25	-	-	62342
1760	5854	10.74	2460	4.31	266	0.49	1186	2.18	39392	72.30	3544	6.50	1784	3.27	-	-	54486
1761	3326	5.89	-	-	956	1.61	2056	3.46	50770	85.36	1492	2.51	878	1.48	-	-	59478
1762	7676	11.81	9186	14.14	2724	4.19	2946	4.53	38448	59.18	1996	3.07	1996	3.07	-	-	64972
1763	8422	13.75	19500	31.84	640	1.05	2182	3.56	27896	45.23	1754	2.87	1840	1.70	-	-	61236
1764	4168	6.38	23418	35.67	716	1.09	1486	2.26	32984	50.19	1840	2.80	1058	1.61	-	-	65668
1765	8240	10.11	18736	30.36	152	0.25	1510	2.45	31916	51.06	2888	4.68	680	1.10	-	-	61782
1766	6668	9.03	26850	36.35	434	0.59	932	1.26	34320	46.46	3012	4.08	1654	2.24	-	-	72876
1767	9546	18.27	17594	33.67	300	0.57	1852	3.54	21920	41.18	588	1.13	860	1.65	-	-	52260
1768	9034	13.36	26980	39.89	120	0.18	3330	4.92	25422	37.59	1512	2.24	1236	1.83	-	-	67636
1769	10522	13.07	21400	26.59	444	0.55	4496	5.59	39988	49.68	1882	2.34	1762	2.19	-	-	68492
1770	5034	7.82	19018	29.60	332	0.52	5080	7.91	32480	50.55	1236	1.93	1070	1.67	-	-	64292
1771	3766	13.01	9644	21.76	872	1.97	5606	12.65	21462	48.42	264	0.60	712	1.61	-	-	44328
1772	7274	9.47	13292	17.31	544	0.71	9074	11.92	45268	59.09	146	0.19	1084	1.41	-	-	76782
1773	7816	10.38	16450	22.72	330	0.46	8484	11.72	37316	51.53	1102	1.82	1214	1.68	-	-	72412
1774	8042	9.43	17748	20.80	1302	1.93	9884	11.59	45738	53.61	640	0.98	1762	2.07	-	-	89316
1775	5186	-	DATA AVAILABLE FOR ST. PETERSBURG ONLY										-	-	-	-	9160
1776	2760	4.31	21584	33.66	550	0.86	10620	16.57	27106	42.30	922	1.44	540	0.84	-	-	64082
1777	7444	10.51	17426	24.61	308	0.43	9802	13.84	35492	50.11	350	0.49	-	-	-	-	78622
1778	13904	19.10	12794	17.98	290	0.40	8104	11.22	35462	48.73	1272	1.78	692	1.23	-	-	72778
1779	10898	17.60	10384	16.77	246	0.40	7278	11.75	29226	47.19	2482	4.01	1420	2.29	-	-	61934
1780	11268	16.65	12494	18.43	-	-	5050	7.45	36876	53.95	452	0.67	1438	2.66	-	-	67798
1781	3576	17.46	-	-	130	0.63	1476	7.21	13904	67.89	958	4.68	436	2.13	-	-	28480
1782	5502	12.14	2522	9.57	522	1.15	2378	5.29	30446	67.18	2562	5.65	1386	3.06	-	-	45318
1783	5346	7.86	14896	21.90	842	1.24	5686	8.36	37994	55.86	1602	2.34	1654	2.43	-	-	66020
1784	14760	20.62	25788	35.67	240	0.34	2440	3.37	25904	35.83	1162	1.61	1988	2.76	-	-	72298
1785	2682	4.88	29782	45.22	188	0.29	3638	5.54	28886	38.96	1392	2.12	2490	3.79	-	-	66878
1786	4008	6.39	31356	50.00	-	-	1368	2.18	23914	38.13	1682	2.66	390	0.62	-	-	68718

A = TONS OF CARGO SHIPPED B = % 'A' IS OF TOTAL TONS OF CARGO SHIPPED FROM RUSSIA (BAL TIC) PORTS FOR THAT YEAR

TABLE 11-5 TONS OF CARGO SHIPPED TO AMSTERDAM DISTRIBUTED ACCORDING TO RUSSIAN (BALTIC) PORTS OF DEPARTURE

YEAR	ST. PETERSBURG		NARVA		REVAL		ESTONIA		RIGA		VIBORG		FREDERIKSMANN		COURLAND		RUSSIA TOTAL	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
1787	3498	5.42	35970	59.76	-	-	1842	2.86	20992	32.54	1574	2.44	628	0.97	-	-	64504	-
1788	7864	12.09	33504	53.73	154	0.25	744	1.19	19678	29.86	1604	1.61	794	1.27	-	-	62342	-
1789	10148	14.04	34300	47.57	-	-	3204	4.43	22894	31.68	1284	1.78	364	0.56	-	-	72274	-
1790	7100	9.50	37322	50.46	-	-	1990	2.66	27462	36.72	486	0.65	-	-	-	-	74762	-
1791	8702	13.13	39442	59.53	-	-	1950	2.94	16018	24.18	-	-	146	0.22	-	-	64386	-
1792	4616	6.90	37630	55.36	80	0.12	1842	2.78	22184	33.17	1134	1.70	-	-	-	-	64006	-
1793	4950	13.23	3840	14.80	-	-	808	2.16	23362	32.43	2692	6.95	160	0.43	-	-	37422	-
1794	4816	7.47	32026	52.96	176	0.29	1744	2.88	18706	30.93	2410	3.99	892	1.48	-	-	64472	-
1795	702	6.42	410	4.92	-	-	-	-	7224	86.66	-	-	-	-	-	-	8236	-
1796	3942	8.39	7282	19.09	1368	2.91	1392	2.96	24978	32.14	582	1.24	692	1.07	6772	14.61	47908	14
1797	-	-	11512	26.74	218	0.54	1202	3.00	19274	28.12	538	1.34	428	1.07	6878	17.17	40980	-
1798	-	-	3382	16.50	318	1.55	394	1.92	11722	17.19	936	2.61	-	-	6146	20.23	28990	-
1799	-	-	-	-	-	-	124	9.12	456	33.53	254	18.68	-	-	526	30.68	1300	-
1800	-	-	6056	29.17	-	-	380	2.73	6548	47.09	368	2.63	302	2.17	2252	16.19	13906	-
1801	-	-	678	6.15	614	5.57	322	2.92	5296	48.01	684	6.02	514	4.66	2942	26.67	11936	-
1802	-	-	27882	41.15	760	1.12	1584	2.34	32302	47.76	-	-	186	0.27	5018	7.41	67712	-
1803	-	-	4298	10.84	394	0.99	1520	3.83	27062	68.27	476	1.20	-	-	5898	14.86	39040	-
1804	-	-	1284	7.96	-	-	624	3.92	10040	62.28	614	3.61	224	1.39	3332	29.66	16128	-
1805	-	-	4418	12.14	-	-	2464	6.77	23632	64.94	986	2.71	328	0.90	4542	12.84	36390	-
1806	-	-	2420	18.39	-	-	1000	7.60	7046	53.68	336	2.58	-	-	2386	17.91	13190	-
1807	-	-	1156	24.69	-	-	-	-	1444	31.09	386	8.31	392	8.44	1266	27.26	4644	-
1808	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	5120	24.42	1052	3.02	358	1.71	182	0.87	9206	43.91	1028	4.90	-	-	4020	19.17	26946	-
1814	6746	22.84	3676	12.45	920	3.11	508	1.72	12732	43.11	1592	9.39	-	-	3366	11.36	29336	-
1815	4842	10.94	9220	20.83	-	-	1390	3.14	23394	52.86	732	1.63	690	2.01	3766	9.56	44354	-
1816	33986	29.22	6558	5.63	794	0.68	1800	1.55	66946	57.58	610	0.92	102	0.09	5532	4.76	116320	-
1817	3194	13.94	8760	38.22	-	-	928	4.09	7382	32.21	1028	4.49	-	-	1816	7.06	22920	-
1818	2620	10.54	8956	39.90	-	-	1782	7.14	6944	35.89	916	3.67	-	-	1722	6.90	24980	-
1819	4030	14.04	8500	30.47	170	0.61	376	1.35	11284	60.44	1856	6.63	410	1.47	1274	4.57	27900	-
1820	2664	9.31	6892	22.82	-	-	840	3.19	12902	48.32	966	3.62	732	2.74	2682	10.84	26700	-
1821	1202	8.88	6250	44.80	-	-	314	2.24	4828	34.04	590	4.21	328	2.34	582	3.50	14812	-
1822	42	0.19	7732	39.36	-	-	652	2.98	10278	47.00	720	3.29	578	2.64	1866	8.53	21868	-
1823	NO DATA AVAILABLE	-	5734	34.30	-	-	686	3.92	6730	40.26	1264	7.68	578	3.46	1736	10.26	16718	-
1824	NO DATA AVAILABLE	-	2756	30.59	-	-	244	2.70	3498	38.78	372	4.12	216	2.39	1942	21.91	9828	-

A = TONS OF CARGO SHIPPED B = S 'A' IS OF TOTAL TONS OF CARGO SHIPPED FROM RUSSIA(BALTIC) PORTS FOR THAT YEAR  
 SOURCE: GAA. PA 78/94-102

TABLE 11.6 AVERAGE SIZE OF CARGOES IN TONS SHIPPED TO AMSTERDAM DISTRIBUTED ACCORDING TO RUSSIAN (BALTIC) PORTS OF DEPARTURE

YEAR	ST. PETERSBURG		NARVA		REVAL		ESTONIA		RIGA		VIBORG		FREDERIKSHAVN		CONKLAND		RUSSIA		
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	
1708 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1710 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1711 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 7	78.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1715	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	178.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1717	124.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1718	231.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1719	120.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1720	183.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1721	109.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1722	133.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1723	149.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1724	124.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1725	113.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1726	142.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1727	145.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1728	126.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1729	162.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1730	146.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1731	166.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1732	170.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1733	141.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1734	146.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1735	182.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1736	150.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1737	208.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1738	215.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1739	193.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1740	186.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1741	247.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1742	203.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1743	176.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1744	156.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1745	127.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

A = AVERAGE SIZE OF CARGOES IN TONS B = NUMBER OF SHIPS

SOURCES: GAA, PA 78/94-102

CONTINUED...

TABLE II.6 AVERAGE SIZE OF CARGOES IN TONS SHIPPED TO AMSTERDAM DISTRIBUTED ACCORDING TO RUSSIAN (BALTIC) PORTS OF DEPARTURE

YEAR	ST. PETERSBURG		MARVA		REVAL		ESTONIA		RIGA		VIBORG		FREDERIKSMANN		COURLAND		RUSSIA	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
1746	194.77	31	326.86	86	315.75	8	240.40	10	209.17	93	277.85	13	267.00	4	-	-	298.33	245
1747	151.33	57	328.59	68	146.67	3	280.89	18	182.16	88	329.80	10	267.09	11	-	-	230.25	285
1748	150.00	30	313.11	68	114.40	5	305.80	30	181.45	88	215.00	14	233.14	7	-	-	231.00	239
1749	142.48	33	321.16	95	113.00	2	265.81	32	176.49	89	241.54	13	198.25	6	-	-	236.88	272
1750	152.90	20	300.45	132	148.00	5	235.87	18	182.57	70	223.47	19	152.29	7	-	-	242.83	268
1751	159.41	37	317.80	120	240.00	3	276.11	18	190.71	42	251.14	7	202.00	3	-	-	261.30	230
1752	152.88	43	332.86	98	84.50	4	289.22	18	179.68	81	222.50	10	177.00	6	-	-	239.43	260
1753	142.09	47	335.21	96	158.00	7	294.80	5	189.51	86	239.82	16	163.00	2	-	-	238.93	289
1754	133.43	35	331.25	102	123.00	3	119.33	9	191.09	110	283.27	11	129.80	5	-	-	238.21	275
1755	122.52	23	339.74	85	50.00	2	129.00	6	197.59	63	219.29	17	123.33	6	-	-	244.98	282
1756	131.48	46	314.00	5	247.00	4	182.00	1	241.30	71	296.67	24	246.67	6	-	-	219.87	187
1757	180.89	47	-	-	-	-	74.00	1	261.05	95	281.69	13	238.29	7	-	-	237.46	163
1758	171.95	37	329.52	25	114.00	1	-	-	234.96	114	318.00	5	244.40	5	-	-	236.96	187
1759	186.00	41	335.58	52	-	-	181.33	9	268.63	116	293.00	8	283.00	8	-	-	266.42	234
1760	209.07	28	351.43	7	133.00	2	197.67	6	266.16	148	354.50	10	297.33	6	-	-	263.22	207
1761	221.73	18	-	-	136.57	7	186.91	11	285.81	191	248.87	6	292.67	3	-	-	258.27	233
1762	207.46	37	367.44	25	273.40	10	267.82	11	278.61	138	288.14	7	332.67	6	-	-	277.66	234
1763	227.62	37	354.85	55	168.00	4	218.20	10	225.17	123	195.11	9	208.00	5	-	-	282.89	243
1764	182.09	23	360.28	65	179.00	4	165.11	9	249.93	134	204.44	9	211.60	5	-	-	262.69	249
1765	240.00	26	353.51	53	152.00	1	167.78	9	267.08	118	240.67	12	226.67	3	-	-	278.03	222
1766	222.27	30	358.00	75	144.67	3	133.14	7	245.14	140	200.80	15	206.75	8	-	-	265.72	278
1767	222.00	43	374.34	47	308.00	1	185.20	10	256.19	84	196.00	3	172.00	5	-	-	270.78	193
1768	250.94	36	374.72	72	126.00	1	195.88	17	223.00	114	216.00	7	206.33	6	-	-	267.34	253
1769	233.82	45	389.09	55	148.00	3	187.33	24	259.65	154	209.11	9	195.78	9	-	-	269.20	299
1770	228.82	22	396.21	48	168.00	2	241.90	21	275.25	118	247.60	5	214.00	5	-	-	290.73	221
1771	213.63	27	385.76	28	174.40	5	243.74	23	233.28	92	264.00	1	237.33	3	-	-	251.86	176
1772	202.06	36	402.79	33	136.00	4	226.85	40	238.78	190	146.00	1	216.80	5	-	-	248.49	309
1773	187.90	40	391.67	42	168.00	2	217.54	39	253.85	147	220.40	5	242.80	5	-	-	258.61	280
1774	217.35	37	394.40	45	162.75	8	241.07	41	267.47	171	210.00	4	195.78	9	-	-	270.84	315
1775	192.07	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	192.07	27
1776	172.50	16	415.08	52	137.50	4	236.00	45	260.63	104	184.40	5	160.00	3	-	-	279.83	229
1777	177.24	42	425.02	41	158.00	2	280.06	35	281.68	126	175.00	2	-	-	-	-	288.57	248
1778	195.83	71	426.47	30	145.00	2	255.12	32	288.31	123	354.50	5	446.00	2	-	-	274.63	265
1779	198.18	55	432.67	24	248.00	1	291.12	25	273.14	107	354.87	7	236.67	6	-	-	275.26	225
1780	212.98	53	446.21	28	-	-	240.48	21	309.97	118	452.00	1	323.00	6	-	-	298.67	227
1781	198.67	18	-	-	130.00	1	295.20	5	193.11	72	239.50	4	145.33	3	-	-	198.83	103
1782	177.46	31	420.33	6	178.00	3	237.80	10	200.30	152	160.12	16	198.00	7	-	-	201.41	225
1783	232.43	23	425.60	35	288.67	3	218.69	26	228.88	166	200.25	6	236.29	7	-	-	293.81	268
1784	230.62	64	415.94	62	246.00	1	348.57	7	237.65	109	193.67	8	199.80	10	-	-	279.14	289
1785	223.50	12	412.53	72	188.00	1	303.17	12	228.45	112	232.00	6	207.80	12	-	-	289.33	227
1786	182.16	22	407.22	77	-	-	195.43	7	257.14	93	210.25	8	195.00	2	-	-	300.09	209

DATA AVAILABLE FOR ST. PETERSBURG ONLY.

A = AVERAGE SIZE OF CARGOES IN TONS B = NUMBER OF SHIPS

TABLE 11.6 AVERAGE SIZE OF CARGOES IN TONS SHIPPED TO AMSTERDAM DISTRIBUTED ACCORDING TO RUSSIAN (BAL TIC) PORTS OF DEPARTURE

YEAR	ST. PETERSBURG		NARVA		REVAL		ESTONIA		RIGA		VIBORG		FREDERIKSHAMN		COURLAND		RUSSIA	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
1787	184.11	19	416.26	86	-	-	167.45	11	205.80	102	174.89	9	157.00	4	-	-	279.24	231
1788	190.05	38	420.05	80	154.00	1	186.00	4	236.43	79	200.80	5	198.80	4	-	-	296.41	211
1789	198.98	51	429.78	80	-	-	246.46	13	246.17	93	321.00	4	364.00	1	-	-	298.68	242
1790 <sup>13</sup>	215.15	33	419.13	90	-	-	183.08	13	228.10	122	122.00	4	-	-	-	-	285.38	262
1791	235.19	37	398.40	99	-	-	180.00	13	242.70	66	-	-	146.00	1	-	-	306.78	216
1792	242.98	19	428.83	87	80.00	1	204.67	9	226.37	98	162.00	7	-	-	-	-	302.68	221
1793	190.38	26	346.28	16	-	-	161.80	5	182.82	128	216.83	12	160.00	1	-	-	199.08	188
1794 <sup>13</sup>	196.43	23	421.32	76	176.00	1	348.80	5	167.02	112	185.38	13	176.40	5	-	-	257.33	238
1798	178.50	4	410.00	1	-	-	-	-	157.04	46	-	-	-	-	-	-	163.48	81
1796	171.39	23	404.56	18	136.80	10	174.00	8	177.15	141	194.00	3	173.00	4	130.23	52 <sup>1/2</sup>	181.80	259
1797	-	- <sup>15</sup>	383.73	30	109.00	2	240.40	5	196.87	98	179.33	3	142.67	3	167.76	41	220.88	182
1798	-	-	375.78	9	159.00	2	131.33	3	172.38	68	178.67	3	-	-	159.46	26	184.67	111
1799	-	-	-	-	-	-	124.00	1	152.00	3	127.00	2	-	-	175.33	3	151.11	9
1800	-	-	576.43	7	-	-	126.67	7	187.09	35	184.00	2	151.00	2	160.86	14	220.73	63
1801	-	-	678.00	1	614.00	1	322.00	1	176.53	30	221.33	3	257.00	2	154.84	19	193.81	87
1802	-	-	633.23	44	190.00	4	226.29	7	209.75	154	-	-	186.00	1	156.81	32	279.80	242
1803	-	- <sup>16</sup>	814.00	7	197.00	2	152.00	10	203.47	133	238.00	2	-	-	168.29	38	209.74	189
1804	-	-	183.43	7	-	-	211.33	3	193.88	52	204.67	3	112.00	2	181.48	22	181.21	89
1805	-	-	220.90	20	-	-	224.00	11	184.62	128	197.28	5	164.00	2	157.31	29	186.62	198
1806	-	-	345.71	7	-	-	200.00	5	180.67	39	336.00	1	-	-	157.07	15	196.39	87
1807 <sup>17</sup>	-	-	185.14	7	-	-	-	-	131.27	11	128.67	3	192.00	1	126.60	10	145.12	32
1808			NO DATA AVAILABLE															
1809			NO DATA AVAILABLE															
1810			NO DATA AVAILABLE															
1811			NO DATA AVAILABLE															
1812			NO DATA AVAILABLE															
1813			NO DATA AVAILABLE															
1814 <sup>6</sup>	176.55	29	210.40	5	119.33	3	182.00	1	195.87	47	257.00	4	-	-	160.80	25	183.91	114
1815	177.53	38	408.67	9	153.33	6	254.00	2	174.41	73	227.43	7	-	-	168.00	20	190.88	188
1816	181.40	30	368.80	25	-	-	278.00	5	191.75	122	183.00	4	298.67	3 <sup>1/2</sup>	140.22	27	204.88	216
1817	190.93	178	727.78	9	158.80	8	200.00	9	201.64	332	203.33	3	102.00	1	138.30	40	201.59	577
1818	187.88	17	486.67	18	-	-	234.50	4	189.28	39	257.00	4	-	-	115.57	14	238.78	96
1819	184.37	16	298.53	30	-	-	297.00	6	175.37	51	183.20	5	-	-	114.80	18	202.88	123
1820	149.26	27	672.22	18	170.00	1	188.00	2	179.11	63	265.14	7	410.00	1	127.40	10	216.28	129
1821	130.84	19	553.82	11	-	-	210.00	4	186.99	69	241.50	4	366.00	2	141.18	19	208.59	128
1822	133.56	9	446.43	14	-	-	104.67	3	188.41	29	295.00	2	328.00	1	128.80	4	226.00	62
1823	42.00	1 <sup>19</sup>	386.60	20	-	-	217.33	3	174.20	59	360.00	2	289.00	2	143.54	13	218.66	100
1824	NO DATA AVAILABLE		220.54	26	-	-	164.00	4	164.15	41	256.80	5	289.00	2	192.89	9	192.16	87
1825 <sup>20</sup>	AVAILABLE		172.25	16	-	-	122.00	2	184.11	19	372.00	1	216.00	1	129.47	15	167.19	84

A = AVERAGE SIZE OF CARGOES IN TONS

B = NUMBER OF SHIPS

SOURCES: GAA. PA 78/94-102

TABLE 11.7 TONS OF BALTIC SHIPPING TO AMSTERDAM DISTRIBUTED ACCORDING TO RUSSIAN PORTS OF DEPARTURE

YEAR	ST. PETERSBURG		NARVA		REVAL		ESTONIA		RIGA		VIBORG		FREDERIKSHAMN		COURLAND		RUSSIA TOTAL TONNAGE
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE																
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	948	32.83	1940	67.17	-	-	-	-	2888
1710 <sup>3</sup>	-	-	-	-	68	1.13	-	-	4454	73.84	1810	28.03	-	-	-	-	6032
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	528	100.00	-	-	-	-	-	-	528
1712 <sup>5</sup>	-	-	-	-	192	26.30	-	-	538	73.70	-	-	-	-	-	-	730
1713 <sup>6</sup>	-	-	-	-	144	2.42	-	-	8816	97.58	-	-	-	-	-	-	8960
1714 <sup>7</sup>	226	8.91	-	-	686	17.93	-	-	2914	76.14	-	-	-	-	-	-	3826
1715 <sup>7</sup>	-	-	-	-	36	0.93	-	-	3526	91.02	312	8.08	-	-	-	-	3874
1716	1516	8.13	-	-	8144	27.59	70	0.38	11912	63.90	-	-	-	-	-	-	18642
1717	974	3.98	-	-	1976	8.08	116	0.47	19798	80.91	1686	6.56	-	-	-	-	24470
1718	1620	8.14	-	-	200	1.00	352	1.77	13968	70.16	3768	18.93	-	-	-	-	19988
1719	1650	7.70	2632	12.27	184	0.86	788	3.68	12888	60.00	3322	15.49	-	-	-	-	21442
1720	2840	7.82	7488	20.62	110	0.30	1688	4.65	14170	39.02	10018	27.59	-	-	-	-	36312
1721	1198	3.19	15862	41.47	90	0.24	-	-	13874	36.98	6798	18.12	-	-	-	-	37522
1722	1832	4.20	17116	39.26	400	0.92	-	-	16178	37.11	8068	18.81	-	-	-	-	43594
1723	2708	8.17	10266	30.96	288	0.87	1928	5.81	14132	42.62	3838	11.57	-	-	-	-	33160
1724	4898	10.23	24290	60.73	142	0.30	96	0.20	14864	31.04	3890	7.50	-	-	-	-	47880
1725	4038	5.67	38744	54.44	248	0.38	36	0.05	23638	33.21	4464	6.27	-	-	-	-	71170
1726	7220	10.92	30426	46.02	248	0.38	-	-	21622	32.70	6598	9.98	-	-	-	-	66114
1727	3184	6.15	27600	53.34	70	0.14	-	-	15632	30.21	5258	10.16	-	-	-	-	51744
1728	4910	8.47	32090	58.35	764	1.32	84	0.14	16714	28.83	3418	5.90	-	-	-	-	57980
1729	2244	4.62	26472	54.53	1668	3.44	692	1.43	14118	29.08	3350	6.90	-	-	-	-	48844
1730	3846	5.20	38298	51.80	2324	3.14	1474	1.99	22286	30.15	5702	7.71	-	-	-	-	73928
1731	4630	5.84	44730	56.44	3492	4.41	1426	1.80	20444	25.79	4536	5.72	-	-	-	-	79258
1732	4124	5.84	58338	71.36	1240	1.52	334	0.41	11536	14.11	6174	7.55	-	-	-	-	81746
1733	2628	3.32	57000	71.98	178	0.22	444	0.56	12816	16.18	6128	7.74	-	-	-	-	79194
1734	4954	5.70	56474	64.96	1780	2.05	386	0.44	17534	20.17	5806	6.68	-	-	-	-	86934
1735	3480	4.99	38480	55.23	238	0.34	368	0.53	18856	27.06	8256	11.85	-	-	-	-	69678
1736	4876	7.44	25888	39.52	576	0.88	640	0.98	20898	31.90	12628	19.28	-	-	-	-	68506
1737	10094	13.67	36248	49.10	926	1.25	1086	1.47	15946	21.60	9528	12.91	-	-	-	-	73828
1738	18802	17.17	49390	60.48	2194	2.24	2314	2.37	21458	21.93	5678	5.80	-	-	-	-	97836
1739	5416	7.07	38790	50.63	4270	5.87	2774	3.62	21056	27.48	4304	5.62	-	-	-	-	76610
1740	7394	9.06	30714	37.63	2754	11.95	3654	4.48	27858	34.13	2246	2.78	-	-	-	-	81620
1741	20584	25.47	29508	36.51	2078	3.81	2954	3.66	20944	25.92	3744	4.63	-	-	-	-	80812
1742	8612	11.79	32010	43.83	524	0.72	4782	6.55	23848	32.65	3256	4.46	-	-	-	-	73032
1743	6684	7.83	57482	68.61	-	-	3352	3.83	15706	17.93	4382	5.00	-	-	-	-	87606
1744	7018	11.37	28900	43.58	366	0.59	4030	6.53	18498	29.97	4676	7.58	232	0.36 <sup>b</sup>	-	-	61720
1745	3744	5.62	38458	57.74	258	0.39	5850	8.78	13200	19.82	4206	6.31	892	1.34	-	-	66608

A = TONS OF SHIPPING

B = % 'A' IS OF TOTAL TONS OF SHIPPING FROM RUSSIA(BALTIC) PORTS FOR THAT YEAR

TABLE II.7 TONS OF BALTIC SHIPPING TO AMSTERDAM DISTRIBUTED ACCORDING TO RUSSIAN PORTS OF DEPARTURE

YEAR	ST. PETERSBURG		NARVA		REVAL		ESTONIA		RIGA		VIBORG		FREDERIKSHAMN		COURLAND		RUSSIA TOTAL TONNAGE	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B		
1746	3846	7.02	27836	50.80	1302	2.38	2310	4.22	18082	27.47	3480	6.21	1046	1.91	-	-	54792	
1747	7148	13.30	21978	40.89	280	0.52	4996	9.30	13430	24.99	3102	5.77	2814	5.24	-	-	53748	
1748	3968	7.65	19878	38.34	444	0.86	9062	17.48	14000	27.00	2938	5.67	1554	3.00	-	-	51844	
1749	4000	6.54	30028	49.07	206	0.34	8476	13.85	13900	22.72	3120	5.10	1456	2.38	-	-	61184	
1750	2516	4.06	39204	63.33	500	0.81	3830	6.70	10984	17.74	4106	6.63	1062	1.72	-	-	61902	
1751	4370	7.75	37922	67.26	402	0.71	4930	8.74	6440	11.42	1758	3.12	562	1.00	-	-	56384	
1752	5154	8.89	32212	58.55	280	0.48	5198	8.95	11948	20.61	2178	3.76	1014	1.75	-	-	57984	
1753	5456	9.33	32234	59.13	828	1.42	1460	2.80	14392	24.62	3782	6.47	314	0.54	-	-	58466	
1754	3670	6.34	33436	54.80	258	0.42	838	1.37	18952	31.06	3080	5.05	582	0.98	-	-	61016	
1755	2686	5.44	28650	60.33	148	0.31	466	0.98	11266	23.72	3848	7.68	728	1.53	-	-	47582	
1756	5526	17.89	1574	5.10	594	1.92	40	0.13	14718	47.85	6988	22.63	1444	4.68	-	-	30882	
1757	5866	18.04	-	-	-	-	74	0.23	21402	65.60	3630	11.13	1832	5.00	-	-	32624	
1758	4846	12.00	8174	20.24	114	0.28	-	-	24558	60.81	1560	3.86	1130	2.80	-	-	40382	
1759	5056	9.09	17288	31.10	-	-	1574	2.83	27846	49.85	2142	3.85	1990	3.58	-	-	55896	
1760	3478	7.48	2344	5.04	146	0.31	1108	2.38	34372	73.87	3544	7.62	1536	3.30	-	-	46528	
1761	2056	4.20	-	-	596	1.22	1312	2.68	42644	87.07	1492	3.05	878	1.79	-	-	48978	
1762	4670	9.25	9186	18.19	1648	3.26	1932	3.83	29136	57.70	1996	3.95	1928	3.82	-	-	50496	
1763	5054	9.74	19418	37.43	366	0.71	2000	3.85	22382	43.14	1652	3.18	1010	1.95	-	-	51882	
1764	2804	4.78	23296	39.72	572	0.98	1266	2.16	27820	47.43	1840	3.14	1058	1.80	-	-	58456	
1765	3322	6.15	18544	34.36	90	0.17	1344	2.49	27276	50.54	2838	5.26	560	1.04	-	-	53974	
1766	4122	6.23	26726	40.38	244	0.37	804	1.21	29728	44.92	2902	4.39	1654	2.50	-	-	66180	
1767	5192	12.37	17594	41.92	226	0.54	1462	3.53	16242	38.70	488	1.16	746	1.78	-	-	41970	
1768	4664	8.32	26724	47.69	64	0.11	2302	4.11	19654	38.08	1394	2.49	1230	2.20	-	-	56032	
1769	6048	9.05	21348	31.94	290	0.43	3448	6.16	32202	46.19	1816	2.72	1676	2.51	-	-	66828	
1770	2976	5.64	19008	36.03	202	0.38	3756	7.12	24676	46.78	1112	2.11	1022	1.94	-	-	52752	
1771	3512	10.33	9644	28.37	518	1.52	3552	10.45	15872	46.69	264	0.78	636	1.87	-	-	33998	
1772	4362	7.27	13254	22.08	368	0.61	6124	10.20	34680	57.76	146	0.24	1084	1.81	-	-	40018	
1773	4246	7.38	16432	26.47	234	0.41	6404	11.10	28094	46.67	1094	1.90	1214	2.10	-	-	67718	
1774	4928	7.49	17636	26.80	852	1.29	6220	9.45	33562	51.02	840	1.28	1758	2.67	-	-	65816	
1775	3998	-	DATA AVAILABLE FOR ST. PETERSBURG ONLY															3098
1776	1762	3.30	21584	40.39	350	0.65	6706	12.55	21624	40.46	878	1.64	540	1.01	-	-	53444	
1777	4886	8.41	17298	29.78	212	0.37	6342	10.92	26992	49.92	350	0.60	-	-	-	-	58080	
1778	8360	14.79	12794	22.64	164	0.29	4966	8.79	28142	49.79	1200	2.12	892	1.58	-	-	56518	
1779	7526	15.20	10308	20.82	154	0.31	4220	8.52	23866	47.60	2314	4.67	1420	2.87	-	-	49508	
1780	6034	11.61	12130	23.33	-	-	3230	6.21	28316	54.47	452	0.87	1826	3.51	-	-	51988	
1781	1964	15.33	-	-	66	0.52	928	7.25	8524	66.55	890	6.95	436	3.40	-	-	12888	
1782	3086	9.33	2410	7.28	390	1.18	1488	4.50	21762	65.84	2542	7.68	1386	4.19	-	-	33084	
1783	2934	5.43	14876	27.51	654	1.21	4310	7.97	26308	52.36	1556	2.90	1418	2.62	-	-	54066	
1784	7898	14.09	25768	45.96	130	0.23	1784	3.18	17364	30.97	1134	2.02	1990	3.55	-	-	56068	
1785	1286	2.30	29562	52.83	104	0.19	2788	4.98	18310	32.72	1420	2.54	2486	4.44	-	-	55856	
1786	2262	3.99	31208	55.03	-	-	1272	2.24	19896	35.09	1682	2.97	386	0.68	-	-	56706	

A = TONS OF SHIPPING

B = % 'A' IS OF TOTAL TONS OF SHIPPING FROM RUSSIA(BALTIC) PORTS FOR THAT YEAR

SOURCE: GAA, PA 78/94-102

CONTINUED...



TABLE II.7 TONS OF BALTIC SHIPPING TO AMSTERDAM DISTRIBUTED ACCORDING TO RUSSIAN PORTS OF DEPARTURE

YEAR	ST. PETERSBURG		NARVA		REVAL		ESTONIA		RIGA		VIBORG		FREDERIKSHAMN		COURLAND		RUSSIA TOTAL	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
1787	2022	3,449	35722	61.70	-	-	1506	2.00	16536	28.56	1482	2.56	628	1.08	-	-	57890	-
1788	3824	7,33	3322	63.74	154	0.30	664	1.28	12486	23.92	1004	1.92	794	1.82	-	-	92290	-
1789	5780	9,88	34132	86.87	-	-	2868	4.78	18416	26.02	1284	2.14	364	0.61	-	-	60014	-
1790	3514	5,88	37714	83.09	-	-	1718	2.87	16342	27.34	488	0.82	-	-	-	-	59776	-
1791	4710	8,50	39140	70.64	-	-	1886	2.86	9828	17.74	-	-	146	0.26	-	-	54410	-
1792	2286	4,02	37622	68.05	44	0.08	1438	2.88	14866	26.12	1088	1.86	-	-	-	-	56778	-
1793	2612	9,48	8524	20.05	-	-	656	2.78	16070	58.33	2826	9.17	160	0.88	-	-	27848	-
1794	2348	4,48	31858	60.41	176	0.33	1864	2.97	13888	28.78	2314	4.39	888	1.68	-	-	52734	-
1795	388	7,01	410	7.41	-	-	-	-	4736	89.88	-	-	-	-	-	-	6834	-
1796	2402	7,46	7282	22.62	736	2.29	1024	3.18	18822	49.18	882	1.81	692	2.15	3682	11.34	32192	14
1797	-	-	11812	37.15	140	0.48	742	2.39	13796	44.82	938	1.74	428	1.38	3834	12.37	30990	-
1798	-	-	3382	22.14	170	1.11	198	1.30	8794	57.87	836	3.81	-	-	2194	14.38	18276	-
1799	-	-	-	-	-	-	60	6.28	380	39.88	284	26.46	-	-	266	27.71	960	-
1800	-	-	2976	33.00	-	-	304	3.37	4088	48.33	244	2.71	238	2.64	1168	18.98	9018	-
1801	-	-	670	6.74	414	5.94	238	3.41	3424	49.11	532	7.63	406	8.82	1488	21.34	6972	-
1802	-	-	18982	46.35	436	1.02	972	2.27	19422	48.43	-	-	186	0.44	2778	6.80	42786	-
1803	-	-	3070	12.88	238	1.00	824	3.46	18068	87.40	308	1.29	-	-	3332	13.98	23838	-
1804	-	-	788	7.87	-	-	374	3.74	6284	62.48	446	4.46	140	1.60	1988	19.84	10010	-
1805	-	-	2958	13.18	-	-	1880	7.04	14180	63.11	746	3.32	282	1.12	2742	12.22	22436	-
1806	-	-	1728	21.12	-	-	676	8.26	4122	90.38	282	3.68	-	-	1404	17.16	8182	-
1807	17	-	836	32.42	-	-	-	-	740	28.03	266	10.08	144	5.45	634	24.02	2640	-
1808	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	3182	24.62	696	5.39	278	2.15	110	0.85	8880	42.94	724	5.00	-	-	2384	16.48	18924	-
1815	4682	21.88	2730	14.52	700	3.72	280	1.49	7848	41.74	1124	5.98	-	-	2088	11.00	18802	-
1816	2744	9.27	6904	23.33	-	-	846	2.46	18450	82.22	828	1.78	666	2.25	2480	9.28	29888	-
1817	30764	30.88	6182	6.21	766	0.77	1472	1.48	88158	93.37	880	0.88	90	0.09	4632	4.88	99614	-
1818	2338	11.64	8780	43.63	-	-	722	3.60	6180	30.63	1000	4.98	-	-	1110	9.83	20880	-
1819	1774	8.32	8944	41.95	-	-	1190	5.86	7248	34.00	916	4.30	-	-	1248	8.88	21320	-
1820	2984	11.95	8890	34.03	170	0.68	264	1.06	9774	39.13	1872	7.49	410	1.64	1006	4.03	24980	-
1821	1902	8.39	6072	26.79	-	-	892	2.61	10498	46.32	926	4.09	716	3.16	1988	6.64	28664	-
1822	994	7.87	6280	48.24	-	-	246	1.90	4182	32.12	890	4.85	328	2.53	386	2.98	12964	-
1823	42	0.20	7748	37.31	-	-	800	2.79	9570	46.09	1284	3.47	874	2.76	1830	7.37	20764	-
1824	NO DATA	-	5236	36.02	-	-	812	3.88	6384	39.97	1284	6.08	874	3.61	1348	6.48	18898	-
1825	20	AVAILABLE	2744	32.66	-	-	218	2.89	3362	40.01	372	4.43	216	2.87	1490	17.73	8482	-

A = TONS OF SHIPPING B = X 'A' IS OF TOTAL TONS OF SHIPPING FROM RUSSIA(BALTIC) PORTS FOR THAT YEAR

TABLE II-B AVERAGE SIZE OF SHIPS IN TONS TO AMSTERDAM DISTRIBUTED ACCORDING TO RUSSIAN (BALTIC) PORTS OF DEPARTURE

YEAR	ST. PETERSBURG		MARVA		REVAL		ESTONIA		RIGA		VIBORG		FREDERIKSMANN		COURLAND		RUSSIA			
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B		
1705	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240.67	18
1706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	232.00	26
1707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88.00	6
1708	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81.11	9
1709	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	192.26	31
1710	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	109.21	38
1711	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	117.39	33
1712	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	171.03	109
1713	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	168.23	130
1714	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	207.37	94
1715	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	202.28	108
1716	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	222.77	163
1717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	222.02	169
1718	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	231.88	188
1719	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210.00	185
1720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	213.08	324
1721	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	202.18	327
1722	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	196.88	296
1723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210.18	231
1724	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	207.08	387
1725	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	209.12	379
1726	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	232.23	382
1727	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	237.11	334
1728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	228.89	388
1729	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	228.68	388
1730	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	233.82	296
1731	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	223.57	293
1732	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	227.16	388
1733	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	227.93	436
1734	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	219.81	349
1735	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	191.80	427
1736	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	191.80	422
1737	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	207.48	382
1738	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	242.01	242
1739	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	244.37	302
1740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	232.00	18
1741	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	178.40	8
1742	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1743	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1744	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1745	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1746	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

A = AVERAGE SIZE OF SHIPS IN TONS B = NUMBER OF SHIPS

SOURCES: GAA. PA 78/94-102

CONTINUED...

TABLE II-8 AVERAGE SIZE OF SHIPS IN TONS TO AMSTERDAM DISTRIBUTED ACCORDING TO RUSSIAN (BALTIC) PORTS OF DEPARTURE

YEAR	ST. PETERSBURG		MARVA		REVAL		ESTONIA		RIGA		VIBORG		FREDERIKSHAMN		COURLAND		RUSSIA	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
1746	124.06	31	323.67	86	162.75	6	231.00	10	161.85	93	261.54	13	261.50	4	-	-	223.04	248
1747	125.40	57	323.21	68	93.33	3	277.56	18	152.61	88	310.20	10	295.82	11	-	-	219.78	285
1748	132.27	30	305.82	65	88.60	5	302.07	30	159.09	88	209.86	14	222.00	7	-	-	216.92	239
1749	121.21	33	316.06	98	103.00	2	264.87	32	156.18	89	240.00	13	182.00	8	-	-	224.94	272
1750	125.80	20	297.00	132	100.00	5	235.33	15	156.91	70	216.11	19	151.71	7	-	-	230.98	268
1751	118.11	37	316.02	120	134.00	3	273.89	18	153.33	42	251.14	7	187.33	3	-	-	245.18	230
1752	119.86	43	328.69	98	70.00	4	288.78	18	147.81	81	217.80	10	169.00	6	-	-	223.02	260
1753	118.09	47	335.77	96	118.29	7	292.00	8	167.38	86	236.37	16	157.00	2	-	-	228.74	289
1754	110.57	35	327.80	102	86.00	3	93.11	9	172.29	110	280.00	11	116.40	5	-	-	221.88	278
1755	112.43	23	337.18	85	74.00	2	77.67	6	178.83	63	214.89	17	121.33	4	-	-	238.16	282
1756	120.13	46	314.80	5	148.50	4	40.00	1	207.27	71	291.17	24	240.67	6	-	-	196.70	187
1757	125.23	47	-	-	-	-	74.00	1	225.28	95	279.23	13	233.14	7	-	-	200.18	163
1758	130.97	37	326.96	25	114.00	1	-	-	215.42	114	312.00	8	226.00	5	-	-	215.95	187
1759	123.32	41	332.46	52	73.00	2	174.89	9	237.47	116	267.78	8	248.78	6	-	-	237.59	234
1760	124.21	28	334.86	7	85.14	7	119.27	11	223.27	191	354.46	10	256.00	6	-	-	224.77	287
1761	137.07	15	-	-	-	-	-	-	211.13	138	285.14	7	292.67	3	-	-	210.21	233
1762	126.22	37	387.44	25	164.80	10	175.64	11	211.13	138	285.14	7	321.33	6	-	-	215.79	234
1763	136.89	37	353.05	55	91.50	4	200.00	10	181.97	123	183.86	9	202.00	5	-	-	213.51	243
1764	121.91	23	358.46	65	143.00	4	140.67	9	207.61	134	204.44	9	211.60	5	-	-	235.87	249
1765	127.77	26	349.89	53	90.00	3	149.33	9	231.15	116	236.80	12	166.67	3	-	-	243.13	222
1766	137.40	30	356.35	75	81.33	3	114.86	7	212.34	140	193.47	15	206.75	8	-	-	238.06	278
1767	120.74	43	374.34	47	226.00	1	148.20	10	193.36	84	162.67	3	149.20	5	-	-	217.46	193
1768	129.56	36	371.17	72	64.00	1	135.61	17	172.40	114	199.14	7	205.00	6	-	-	221.57	253
1769	134.40	45	388.18	58	96.67	3	143.67	24	209.10	154	201.78	9	166.22	9	-	-	223.81	299
1770	135.27	22	396.00	48	101.00	2	176.86	21	209.12	118	222.40	5	204.40	5	-	-	238.70	221
1771	130.07	27	385.76	25	103.60	5	154.43	23	172.52	92	264.00	1	212.00	3	-	-	193.17	174
1772	121.17	36	401.84	33	92.00	4	183.10	40	182.53	190	146.00	1	216.80	5	-	-	194.23	309
1773	106.18	40	391.24	42	117.00	2	164.21	39	191.12	147	218.80	5	242.80	5	-	-	206.14	280
1774	133.19	37	391.91	45	106.50	6	151.71	41	196.39	171	210.00	4	195.33	9	-	-	209.94	318
1775	116.73	27	-	-	-	-	-	-	207.92	104	175.60	5	180.00	3	-	-	114.74	27
1776	110.13	16	418.08	52	87.50	4	149.02	45	230.10	126	175.00	2	-	-	-	-	233.38	229
1777	116.33	42	421.90	41	106.00	2	161.20	34	230.10	126	175.00	2	-	-	-	-	234.19	248
1778	117.78	71	426.47	30	82.00	2	165.19	32	228.80	123	240.00	5	446.00	2	-	-	213.28	266
1779	136.84	55	429.50	24	154.00	1	168.80	25	220.24	107	330.87	7	236.67	6	-	-	220.04	225
1780	113.85	53	433.21	28	-	-	153.81	21	239.97	118	452.00	1	304.33	6	-	-	229.02	227
1781	109.11	18	-	-	66.00	1	185.60	5	116.39	72	222.50	4	145.33	3	-	-	124.35	163
1782	99.55	31	401.67	5	130.00	3	148.80	10	143.30	152	158.87	16	198.00	7	-	-	147.04	225
1783	127.57	23	425.03	35	218.00	3	165.77	26	170.53	166	195.78	8	202.87	7	-	-	201.74	288
1784	123.41	64	415.61	62	130.00	1	254.86	7	159.30	109	189.00	6	199.00	10	-	-	216.48	289
1785	107.17	12	410.58	72	104.00	1	232.33	12	163.48	112	236.67	6	207.17	12	-	-	246.80	227
1786	102.82	22	405.30	77	-	-	181.71	7	213.94	93	210.25	8	193.00	2	-	-	271.32	289

DATA AVAILABLE FOR ST. PETERSBURG ONLY.

A = AVERAGE SIZE OF SHIPS IN TONS B = NUMBER OF SHIPS

TABLE 11.6 AVERAGE SIZE OF SHIPS IN TONS TO AMSTERDAM DISTRIBUTED ACCORDING TO RUSSIAN (BALTIC) PORTS OF DEPARTURE

YEAR	ST. PETERSBURG		NARVA		REVAL		ESTONIA		RIGA		VIBORG		FREDERTXSHAMN		COURLAND		RUSSIA	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
1787	106.62	19	415.37	86	-	-	136.01	11	162.12	102	164.67	9	187.00	4	-	-	280.63	231
1788	100.63	38	415.90	80	154.00	1	166.90	4	188.05	79	200.80	8	198.80	4	-	-	247.39	211
1789	112.75	51	426.05	80	-	-	220.02	13	167.91	93	321.00	4	304.00	1	-	-	247.99	242
1790	106.48	33	419.04	90	-	-	132.15	13	133.95	122	122.00	4	-	-	-	-	228.15	282
1791	127.30	37	395.35	99	-	-	122.00	13	148.91	66	-	-	146.00	1	-	-	280.83	216
1792	120.32	19	425.54	87	44.00	1	182.00	9	191.69	98	151.14	7	-	-	-	-	297.83	281
1793	100.45	25	345.25	15	-	-	131.20	5	125.55	126	210.50	12	140.00	1	-	-	146.53	188
1794	102.09	23	419.18	76	176.00	1	312.98	5	121.30	112	178.99	13	177.00	5	-	-	224.49	238
1795	97.00	4	410.00	1	-	-	-	-	102.94	46	-	-	-	-	-	-	100.61	81
1796	104.43	23	404.56	18	73.00	10	128.00	8	112.21	141	194.00	3	173.00	4	70.23	82	184.29	289
1797	-	-	383.73	30	70.00	2	148.00	5	140.78	98	179.33	3	142.67	3	93.51	41	170.27	102
1798	-	-	375.75	9	85.00	2	66.00	3	129.32	68	178.67	3	-	-	84.56	26	137.62	111
1799	-	-	-	-	-	-	60.00	1	126.67	3	127.00	2	-	-	88.67	3	100.67	9
1800	-	-	425.14	7	-	-	101.33	3	116.80	35	122.00	2	119.00	2	63.43	14	143.14	63
1801	-	-	470.00	1	414.00	1	238.00	1	114.13	30	177.33	3	203.00	2	78.32	19	122.32	87
1802	-	-	430.95	44	109.00	4	138.96	7	126.12	184	-	-	180.00	1	66.81	32	176.68	242
1803	-	-	438.57	7	119.00	2	82.40	10	120.80	133	184.00	2	-	-	95.20	35	126.13	189
1804	-	-	112.57	7	-	-	124.67	3	120.27	92	148.67	3	80.00	2	90.36	22	112.47	89
1805	-	-	147.90	20	-	-	143.64	11	110.63	128	149.20	5	126.00	2	94.58	29	115.07	195
1806	-	-	245.86	7	-	-	135.20	5	105.69	39	252.00	1	-	-	93.60	15	122.12	67
1807	-	-	122.29	7	-	-	-	-	67.27	11	88.67	3	144.00	1	63.40	10	82.58	32
1808	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	109.72	29	139.20	5	92.67	3	110.00	1	118.09	47	181.00	4	-	-	95.26	28	113.37	114
1815	106.63	38	303.33	9	116.67	6	140.00	2	107.51	73	160.87	7	-	-	103.40	20	121.30	198
1816	91.47	30	276.16	25	-	-	169.20	5	126.64	122	132.00	4	222.00	3	90.74	27	136.98	216
1817	172.63	178	686.89	9	153.20	5	163.56	9	166.14	332	183.33	3	90.00	1	115.80	40	172.64	577
1818	137.53	17	686.67	16	-	-	180.50	4	157.69	39	250.00	4	-	-	79.29	14	209.17	96
1819	110.88	16	298.13	30	-	-	198.33	6	142.12	51	183.20	5	-	-	83.20	15	173.33	123
1820	110.52	27	472.22	18	170.00	1	132.00	2	153.14	63	267.43	7	410.00	1	108.00	10	193.64	129
1821	100.11	19	552.00	11	-	-	148.00	4	152.14	69	231.50	4	358.00	2	103.05	19	177.06	188
1822	110.44	9	446.43	14	-	-	82.00	3	143.52	29	295.00	2	358.00	1	96.50	4	208.97	62
1823	42.00	119	387.40	20	-	-	193.33	3	162.20	99	369.00	2	207.00	2	117.59	13	207.64	100
1824	NO DATA AVAILABLE	26	220.23	26	-	-	153.00	4	154.96	41	256.80	5	287.00	2	149.78	9	182.74	87
1825	NO DATA AVAILABLE	16	171.50	16	-	-	109.00	2	176.95	19	372.00	1	216.00	1	99.33	18	188.89	94

A = AVERAGE SIZE OF SHIPS IN TONS B = NUMBER OF SHIPS

TABLE II.9 TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM RUSSIAN (BALTIC) PORTS DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705	-	-	-	-	-	-	-	-	-	-	-	-	-
1706	-	-	-	-	-	-	-	-	-	-	-	-	-
1707	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE												
1709	-	-	-	-	112	-	-	-	-	-	686	2414	3212
1710	1294	918	688	988	-	1072	1020	-	336	-	-	-	6316
1711	-	96	34	374	-	-	-	-	-	-	-	-	504
1712	-	-	-	-	-	340	-	112	-	-	274	-	726
1713	-	462	3126	2234	996	-	-	-	-	-	-	-	6818
1714	-	-	-	-	112	938	820	762	810	206	1094	456	5198
1715	-	-	-	-	-	-	-	-	-	964	448	3332	4744
1716	-	2814	5692	3720	6692	3382	100	-	-	-	-	230	22630
1717	1418	10898	1054	4348	1496	536	606	744	2778	616	656	1906	27486
1718	430	-	2760	374	1818	1350	220	-	-	-	2492	13730	22974
1719	1724	1132	652	290	858	180	120	1150	1360	8882	7924	2326	23898
1720	810	2790	2460	2722	380	652	1888	7536	6356	7282	2982	3714	39982
1721	698	220	480	504	1022	136	2166	10742	14288	3816	2828	5888	41858
1722	3368	1810	918	2042	328	300	1668	9832	13798	6588	4654	2142	47448
1723	1058	1662	1440	2650	568	1330	4778	6540	5882	4110	2308	3882	36008
1724	1734	1576	2312	730	40	894	9242	8178	9288	5082	7172	4880	51128
1725	772	592	1206	1030	1054	2378	10804	24710	12822	13950	3934	2848	75540
1726	3188	604	2442	1824	724	1580	15800	12724	10890	6388	8966	8530	73830
1727	2628	1758	2050	3146	680	96	19286	6288	7488	5618	2444	7342	58794
1728	1338	1774	1268	764	740	1158	25712	-	3612	21830	4328	2728	68242
1729	-	1714	1724	696	336	112	4188	16052	12294	11952	6752	2680	57540
1730	1276	1000	1432	1430	206	4728	23726	10226	8758	11444	14632	3458	82316
1731	962	704	1782	700	248	716	75612	23080	16834	9636	8862	8674	87810
1732	540	1972	2976	3558	1470	6948	23286	7590	12530	4036	14854	6306	86466
1733	788	1830	1384	1698	552	5122	24810	8660	8560	10864	18168	5210	83716
1734	988	3546	2480	4292	328	5534	24650	8498	14116	11390	17702	2714	94578
1735	2166	1400	1122	1054	180	18372	11978	9336	5978	5630	18560	4176	76982
1736	1128	200	1090	1222	1316	2134	12264	14414	10124	7424	16712	4004	72662
1737	458	636	774	6474	1876	4124	15020	12482	6286	18738	9536	4616	81020
1738	892	1524	3540	2576	316	5152	29144	14256	10972	18798	14052	6510	107732
1739	506	1500	2750	2352	1178	4240	12198	23330	11108	7284	19860	3374	85380
1740	2700	-	-	3734	444	1888	6380	26958	26234	5926	13296	12822	104390
1741	952	1220	2286	2392	994	3970	24810	17390	14466	7802	13508	6884	96674
1742	172	1476	2830	2258	1484	236	3804	19200	9922	19904	11102	5236	77624
1743	2800	4736	4054	2340	2776	1208	26132	7270	5612	11188	18704	6538	90188
1744	1342	172	1288	2994	1370	2024	11626	22128	8294	4792	7276	3716	67022
1745	1066	616	1522	3830	1282	568	22184	7624	8462	6576	2944	13168	70142

SOURCE: GAA, PA 79/94-102

CONTINUED...

- 547 -

TABLE 11.9 TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM RUSSIAN (BALTIC) PORTS DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	3572	404	3186	1358	806	1672	3572	12550	12016	9720	6674	7722	63290
1747	368	2464	2400	1896	744	1794	14310	9842	7366	5908	7976	3146	58714
1748	1610	436	-	4694	2638	946	4636	11852	10618	4122	5868	8064	52208
1749	416	296	1014	1716	756	1624	17016	6520	11868	13302	2392	7258	64376
1750	1138	576	1142	680	1654	1870	16316	9014	2960	18152	2302	6572	65078
1751	280	1710	-	1318	602	1142	13488	10740	5578	3808	18006	3426	60058
1752	1674	1844	2092	800	-	8462	8654	9944	12212	4958	10302	1270	62282
1753	128	314	4092	1956	1574	9336	15152	6424	3924	1608	14620	2704	61882
1754	1524	1790	3320	3698	876	698	11902	12840	9236	3888	5480	5490	64682
1755	312	-	454	8130	1906	1966	5028	11504	5782	10346	4730	2328	49488
1766	1012	254	2030	1826	360	1132	6746	4062	4292	2550	8016	2240	34520
1757	112	246	4698	2334	768	1516	3266	6372	4914	6400	4954	1126	32706
1758	1350	1502	4378	1944	572	-	5850	12730	4026	2566	1326	7628	44312
1759	2104	870	520	474	1546	1370	22392	2362	7598	14562	7368	1176	62342
1760	574	2360	4146	3110	108	450	7180	5594	10822	8316	5646	6180	54486
1761	2208	1986	896	2412	580	6548	6484	7738	11352	6964	11178	1130	59478
1762	2120	116	2226	604	-	420	7652	15348	7774	10392	13362	4558	64972
1763	434	632	5554	3064	2198	530	7776	10208	7494	5802	11196	6348	61236
1764	4160	1602	2284	5954	670	1868	19468	10268	2882	6880	4470	6814	65660
1765	4102	1170	2502	4300	2792	-	4844	11754	11076	3620	7690	7662	61722
1766	2604	2222	4622	4812	4024	1106	23406	8330	1534	11552	5124	5494	73870
1767	2796	928	2000	2192	1776	1112	7822	12648	9936	6816	2520	2014	52260
1768	666	1530	7734	6148	736	720	13002	9020	4464	13366	7642	2588	67636
1769	1970	2310	3852	4344	494	10970	13076	5630	13118	13282	8492	2554	80452
1770	672	2698	4178	4262	426	80	12170	15842	2896	8182	7538	7286	64252
1771	1986	-	1716	4402	568	1888	15638	9432	6712	1056	430	200	44328
1772	542	3474	3678	1914	3162	5662	14846	5098	10058	5146	7552	7682	76782
1773	2028	2116	2696	4072	1420	12946	15352	5632	11128	2404	682	11656	72412
1774	598	1800	5912	6222	1820	6870	18002	11386	9722	13458	4956	4522	85316
1775	-	374	618	1020	-	-	432	848	1170	328	388	-	5186
1776	2114	1188	4660	3160	2234	4804	12352	8826	11586	4146	7840	3152	64082
1777	1330	302	3050	2230	606	1644	29356	1330	6106	3488	15800	5380	70822
1778	524	382	5076	3312	448	926	13804	12156	11274	11868	5432	7854	72776
1779	2710	502	2590	1820	362	12124	11028	5396	3978	6052	12314	3018	61934
1780	438	1188	3250	3130	896	340	11052	14622	9078	3954	16122	1708	67758
1781	1382	760	3504	934	480	1196	700	2096	3550	3954	1920	-	20480
1782	2796	504	2246	2130	1326	1974	3640	6832	8068	4920	5834	8018	45318
1783	4360	986	2042	2840	1862	924	7442	12664	11184	8612	5036	10066	68020
1784	-	1050	5346	5924	1804	754	4506	16910	7660	8656	12046	8182	72298
1785	332	1414	120	2394	1816	1320	19114	10120	7166	6744	9388	9780	68678
1786	254	600	674	4728	3718	264	10458	13784	5630	4944	5164	8800	62718

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.9 TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM RUSSIAN (BALTIC) PORTS DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL FOR THE YEAR
1787	460	1242	4066	2588	270	214	17994	7924	4610	4448	11396	4082	64604
1788	460	1158	3166	4504	736	1330	16182	7684	3626	17874	4108	2212	62842
1789	130	1898	3246	3576	744	92	15886	6416	6746	13084	8764	7490	72274
1790	786	896	2980	1464	894	2338/	10516	13108	11190	10996	5904	9880	74762
1791	766	2120	612	610	428	994	9734	18736	5094	5148	13740	8302	66288
1792	922	3308	1292	1448	346	10330	12832	3704	11476	5272	15590	368	66826
1793	1050	878	2666	1384	390	786	1444	5104	6616	4968	4316	8160	37422
1794	1696	798	1806	1048	1062	5100	15622	6742	7938	12170	4690	1500	60472
1795	216	-	50	348	152	336	432	1686	1092	1850	1324	890	8326
1796	2232	2126	1014	2458	2364	1772	9682	7304	5546	5930	2546	3028	47068
1797	2326	1320	2914	2696	1432	1050	5682	4552	2030	5132	4924	4018	40080
1798	1704	510	1706	3810	3110	1022	2868	2076	4092	286	1030	374	20492
1799	318	-	124	294	-	208	356	-	-	100	-	-	1360
1800	-	214	-	190	550	810	2380	3252	4348	782	462	948	13602
1801	266	708	-	-	164	1580	2694	2622	900	952	1316	146	11030
1802	390	1402	2638	1440	2928	5446	10872	8200	13408	7794	12990	-	67712
1803	2776	1536	914	3204	1728	6816	11632	2598	2082	3250	1070	1894	35640
1804	696	-	-	3832	-	-	2554	3626	-	3260	-	2760	16128
1805	-	216	3220	1674	1476	1288	4448	10626	4388	4484	3798	934	36350
1806	444	1032	1126	476	214	350	272	1192	2688	3824	922	558	13198
1807	-	116	-	384	430	442	268	1666	316	244	156	674	4644
1808	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-	-
1815	392	462	1800	1098	1484	1194	1362	3248	6574	2972	3342	2330	20966
1816	256	146	1208	1736	1376	1774	1420	6122	3288	4082	4744	2564	29836
1817	1544	1900	1074	2016	3580	1022	4028	6514	6136	9816	7780	4238	44284
1818	1262	1292	-	130	1546	11680	26464	13458	24674	16842	6886	6142	116320
1819	1604	290	592	178	340	432	11184	6638	4808	2846	1804	3282	22920
1820	1586	1074	660	3986	540	1078	4194	7622	2816	2528	1824	1484	24516
1821	-	446	1594	2812	116	946	2924	3794	3532	2150	1332	2814	27900
1822	274	2564	562	318	906	1682	6116	3290	4092	6284	1134	460	26700
1823	-	-	42	1688	628	-	462	-	670	900	2280	590	14012
1824	140	120	104	182	652	-	464	424	4420	2666	3110	986	21822
1825	-	-	290	-	742	3378	1894	2594	5696	1880	-	388	16718
1826	-	-	-	-	-	1422	1692	4254	628	-	-	-	9028

SOURCE: GAA, PA 78/94-102

TABLE 11.9.A TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM ST. PETERSBURG DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708 <sup>2</sup>	NO DATA AVAILABLE												-
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1710 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 <sup>6</sup>	-	-	-	-	-	-	-	78	60	96	-	-	234
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	500	320	230	380	172	-	-	-	-	-	-	1602
1717	330	360	180	-	-	-	-	-	-	-	-	124	994
1718	-	-	-	-	220	520	90	-	-	-	-	1020	1880
1719	252	-	-	-	-	180	-	60	60	742	520	-	1814
1720	100	978	-	1000	240	-	148	320	350	50	220	88	3494
1721	130	-	80	240	36	-	238	176	346	-	136	96	1476
1722	212	512	-	220	-	100	120	-	70	826	256	80	2396
1723	220	500	674	550	-	-	100	-	452	384	162	96	3138
1724	732	400	1132	120	-	260	72	868	584	672	212	276	5328
1725	176	412	-	-	180	80	1114	548	696	732	328	496	4762
1726	334	304	580	232	250	100	518	1646	556	968	976	1934	8398
1727	542	108	288	836	138	-	-	1020	488	214	-	156	3790
1728	420	386	312	360	428	-	1438	-	378	1024	574	614	5934
1729	-	196	494	358	-	-	-	174	546	-	180	330	2278
1730	92	162	150	472	206	-	562	156	430	754	490	436	3910
1731	230	136	548	-	244	150	216	250	2130	638	172	612	5330
1732	108	96	1086	634	-	-	626	256	328	756	168	380	4438
1733	430	256	360	300	420	-	-	162	-	-	578	150	2686
1734	-	870	166	554	168	126	208	454	744	886	604	478	5258
1735	262	402	-	92	-	212	508	130	420	216	536	880	3658
1736	188	72	220	232	564	244	284	874	184	756	612	1036	5266
1737	-	276	86	1486	402	384	250	908	752	2632	2478	874	10708
1738	466	684	392	738	-	272	5886	3936	2436	1344	1070	862	18086
1739	-	450	412	1128	204	-	-	110	382	1152	1702	648	6188
1740	392	-	-	352	-	126	922	552	1920	1900	1032	1000	8196
1741	632	100	804	622	180	-	1934	3888	6122	2436	5054	2526	24298
1742	-	-	400	710	416	-	824	1400	246	1856	2208	1486	9546
1743	592	1966	424	616	1162	106	84	526	126	144	360	938	7044
1744	-	-	144	138	492	426	516	1078	1030	1206	1214	2034	8278
1745	-	-	568	262	572	-	446	208	506	996	128	260	3946

SOURCE: GAA, PA 78/74-102

CONTINUED...



TABLE 11.9.A TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM ST. PETERSBURG DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	834	92	372	420	280	-	-	360	362	1138	696	1484	6038
1747	368	1184	1016	744	172	-	64	1564	818	1584	926	186	8626
1748	544	288	-	144	1034	276	-	-	302	864	84	964	4500
1749	104	132	242	252	254	504	134	626	940	1230	-	284	4702
1750	900	96	112	82	132	-	-	310	252	302	824	448	3058
1751	96	300	-	390	250	-	-	224	244	340	3026	1028	5898
1752	456	286	430	206	-	-	-	806	1872	1480	1338	-	6574
1753 & 10	-	-	776	422	-	330	720	2556	404	442	784	244	6678
1754	176	324	536	106	472	-	570	374	986	786	222	118	4670
1755	156	-	60	774	214	146	-	588	394	220	266	-	2818
1756	86	254	290	532	360	-	-	220	748	-	2652	906	6048
1757	112	-	1398	428	276	288	344	730	536	1918	2472	-	8502
1758	190	120	950	828	430	-	128	820	1144	584	634	534	6362
1759	1018	140	200	-	-	172	1010	480	1562	2710	-	416	7708
1760	-	-	1004	716	-	-	-	292	204	1810	1000	828	5854
1761	642	300	184	876	-	-	180	72	380	120	572	-	3326
1762	652	-	310	290	-	-	484	200	696	1572	2972	520	7676
1763	200	632	3138	-	1772	252	192	200	160	540	1336	-	8422
1764	330	470	170	688	502	-	194	890	492	144	148	160	4188
1765	538	392	1200	710	264	-	-	470	724	440	774	728	6240
1766	-	-	410	1690	1072	160	-	300	630	926	1114	366	6668
1767	556	-	452	-	1140	694	1112	500	1852	2390	850	-	9546
1768	240	-	754	2424	340	500	1200	200	1690	740	916	-	9034
1769	160	220	500	1540	76	-	308	886	1780	2544	1076	1432	10522
1770	-	1482	122	830	-	-	192	284	770	764	590	-	5034
1771	-	-	1030	392	568	280	810	120	882	1056	430	200	5768
1772	224	-	-	886	-	1310	774	1064	1264	1266	506	-	7274
1773	416	-	280	1826	292	240	998	440	1898	178	280	668	7516
1774	734	1320	1500	1028	-	248	412	332	394	1886	214	474	8042
1775	-	374	618	1020	-	-	432	848	1170	336	388	-	5186
1776	220	240	-	-	298	-	-	1236	-	288	108	370	2760
1777	282	-	1110	268	224	-	1034	1330	1974	250	812	180	7444
1778	-	-	840	540	180	202	520	2146	2732	3228	640	2876	13904
1779	-	-	988	140	150	1100	376	2870	-	1206	1056	3018	10898
1780	-	424	1270	160	402	210	552	1236	3258	1072	996	1708	11288
1781	272	880	960	-	-	352	-	780	244	-	408	-	3576
1782	716	336	690	968	-	404	502	-	686	874	326	-	5502
1783	1134	72	216	226	500	-	-	-	1240	688	422	648	5346
1784	-	-	1668	2500	904	-	412	576	2934	3398	2028	342	14780
1785	-	494	120	464	-	210	160	410	524	300	-	-	2682
1786	-	-	-	548	340	-	458	812	924	610	216	100	4008

- 551 -

TABLE 11.9.A TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM ST. PETERSBURG DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1787	-	-	416	190	160	-	490	170	230	504	516	822	3498
1788	158	294	1486	1420	-	-	-	204	1298	1936	798	-	7564
1789	-	168	1260	574	584	-	370	-	2702	1094	1966	1410	10148
1790	564	338	842	522	252	-	-	-	1124	1832	1144	462	7100
1791	766	2120	612	226	-	160	132	1462	436	702	1108	978	8702
1792	346	434	240	-	-	-	-	208	1106	698	1218	366	4616
1793	-	-	-	-	-	146	256	416	752	586	1504	1290	4950
1794	760	-	388	274	272	-	268	566	954	926	-	140	4518
1798	216	-	50	-	-	-	-	168	-	-	-	268	702
1799	142	-	156	180	180	-	-	600	1508	1176	-	-	3942
1797 <sup>15</sup>		NO DATA	AVAILABLE										
1798		NO DATA	AVAILABLE										
1799		NO DATA	AVAILABLE										
1800		NO DATA	AVAILABLE										
1801		NO DATA	AVAILABLE										
1802		NO DATA	AVAILABLE										
1803 <sup>16</sup>		NO DATA	AVAILABLE										
1804		NO DATA	AVAILABLE										
1805		NO DATA	AVAILABLE										
1806		NO DATA	AVAILABLE										
1807		NO DATA	AVAILABLE										
1808 <sup>17</sup>		NO DATA	AVAILABLE										
1809		NO DATA	AVAILABLE										
1810		NO DATA	AVAILABLE										
1811		NO DATA	AVAILABLE										
1812		NO DATA	AVAILABLE										
1813		NO DATA	AVAILABLE										
1814	-	-	-	-	-	-	120	112	1242	1557	1116	978	5120
1815	398	402	522	204	-	220	624	2166	-	1284	926	-	6746
1816	186	-	152	-	98	-	412	806	988	1354	-	1166	4842
1817	530	452	704	64	-	-	642	3514	12452	9236	2210	4182	33986
1818	368	778	-	130	194	186	-	632	358	170	388	-	3194
1819	140	-	174	178	-	-	-	214	382	958	378	206	2630
1820	520	-	224	170	-	-	-	-	780	1390	270	678	4030
1821	-	-	204	-	116	-	90	158	1186	358	88	286	2486
1822	-	-	374	-	-	-	-	-	262	182	268	116	1202
1823 <sup>19</sup>	-	-	42	-	-	-	-	-	-	-	-	-	42

SOURCE: GAA, PA-78/94-102

TABLE II.9.B TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM NARVA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE												-
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1710 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	-	-	-	-	-	-	-	-	-	-	-	-
1717	-	-	-	-	-	-	-	-	-	-	-	-	-
1718	-	-	-	-	-	-	-	-	-	-	-	-	-
1719	-	-	-	290	-	-	-	-	-	-	2240	406	2936
1720	-	390	804	370	-	-	-	3468	788	1408	512	412	8142
1721	-	-	-	-	496	-	260	5976	5958	1230	280	3118	17318
1722	670	420	290	1128	-	-	420	6414	5096	2068	1136	414	18056
1723	-	-	452	-	348	400	2052	3380	1308	684	766	1712	11102
1724	-	-	80	-	-	-	7484	6106	3438	1664	5352	1652	25776
1725	252	-	276	718	342	672	7442	15680	4644	7424	2278	960	40688
1726	952	-	632	1016	-	-	12040	5048	3592	1212	5660	2740	32892
1727	752	-	1046	1768	542	-	15276	1662	936	1940	1478	3954	29354
1728	100	392	184	246	312	250	14762	-	2530	12162	2478	328	32744
1729	-	478	460	338	-	-	2616	11176	2462	6240	1896	1204	26790
1730	-	-	484	306	-	2484	17374	2720	2454	4276	8076	572	38746
1731	-	-	246	296	-	-	12194	11892	5450	6138	6558	2738	45504
1732	-	492	686	1044	1242	5846	21484	4358	6572	1398	11668	4960	59750
1733	-	286	280	932	-	3666	22752	4530	4426	7796	10592	3180	58340
1734	488	462	654	2564	-	9164	16634	2766	8258	8140	8212	658	58000
1735	1012	-	490	962	-	15882	4874	4432	290	940	9392	1292	39566
1736	-	-	324	-	266	320	7824	4058	2224	2852	7862	878	26608
1737	-	-	-	238	292	1724	13094	5736	1420	10408	3528	746	37186
1738	206	-	-	862	-	1942	18044	1690	3172	11036	10554	2836	50342
1739	-	-	248	278	246	-	7436	12254	3340	2498	13046	300	39646
1740	334	-	-	354	-	-	-	12680	5596	1986	6090	5360	32400
1741	-	-	-	680	242	-	12854	5558	2538	1282	4940	2848	30942
1742	-	-	516	308	-	-	1148	3316	5592	13560	5132	2680	32252
1743	294	400	1864	1282	572	712	24496	3012	1902	8090	11866	3518	58008
1744	340	-	-	1714	-	704	7734	11212	2602	650	1966	202	27124
1745	214	330	-	2170	-	-	17598	876	2586	2962	1886	10080	38702

SOURCE: GAA, PA 78/94-102

CONTINUED...

- 559 -

TABLE 11.9.8 TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM NARVA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1746	1696	-	1282	674	280	448	638	4568	8524	6522	2636	1014	28282	
1747	-	344	294	274	-	-	10014	3092	1846	1256	3228	1996	22344	
1748	-	148	-	1652	-	174	3596	5120	5346	882	1892	1542	20382	
1749	-	-	172	-	-	350	13508	2142	2982	8042	974	2340	30510	
1750	-	-	-	324	-	440	12802	5430	792	13672	2834	3366	39660	
1751	184	554	-	326	-	-	10798	8498	2246	1986	12544	1000	38136	
1752	-	246	312	-	-	6026	6842	2604	7764	3128	5380	318	32620	
1753	-	-	362	-	402	7296	10598	622	1392	392	9124	1992	32180	
1754	344	312	1048	2584	226	-	9134	6726	2940	1966	6580	1928	33788	
1755	-	-	-	2110	338	1034	4216	8958	3980	5234	2134	874	28878	
1756	378	-	362	648	-	-	-	-	-	-	182	-	1570	
1757	-	-	-	-	-	-	-	-	-	-	-	-	-	
1758	-	-	-	-	-	-	-	4328	334	616	296	2664	8238	
1759	-	-	-	-	552	-	8890	830	1020	3010	3148	-	17450	
1760	338	294	262	1126	-	450	-	-	-	-	-	-	2460	
1761	-	-	-	-	-	-	-	-	-	-	-	-	-	
1762	-	-	414	-	-	-	1128	5128	418	690	710	698	9186	
1763	-	-	188	682	-	-	3682	6542	3062	2048	2174	1122	19500	
1764	-	344	718	1524	-	100	11724	3072	808	2926	806	1396	23418	
1765	472	-	-	452	1248	-	3178	3596	3190	164	3486	2950	18736	
1766	-	756	820	1360	-	-	16432	226	-	1976	2890	2390	26850	
1767	394	-	674	364	148	418	3828	7626	1028	2394	392	328	17594	
1768	-	418	1444	1572	-	220	9198	3262	350	7532	2230	754	26980	
1769	-	-	742	834	418	5922	5034	698	4412	1918	1422	-	21400	
1770	-	-	742	364	-	-	8608	3620	-	4434	832	418	19018	
1771	-	-	-	1096	-	432	6446	418	1252	-	-	-	9644	
1772	-	-	400	-	-	366	2832	3162	-	2462	404	3666	13292	
1773	-	636	-	404	426	7194	1548	-	4752	-	-	1490	16450	
1774	-	-	1126	802	-	3042	6748	1572	-	3686	772	-	17748	
1775	-	-	-	-	-	-	-	-	-	-	-	-	-	
		NO DATA AVAILABLE												
1776	432	-	418	-	-	2492	7164	836	5634	1696	2912	-	21584	
1777	-	-	-	554	-	-	10142	-	846	424	4652	808	17426	
1778	-	-	1654	-	-	-	5962	1304	826	1260	1338	450	12794	
1779	-	-	890	-	-	5268	714	-	-	1754	1788	-	10384	
1780	438	-	-	1728	-	-	3382	3404	878	416	2248	-	12494	
1781	-	-	-	-	-	-	-	-	-	-	-	-	-	
1782	-	-	-	-	-	852	-	1254	416	-	-	-	2522	
1783	436	-	-	376	-	434	4820	3798	1282	448	1688	1614	14896	
1784	-	392	874	868	-	-	2186	10564	176	422	6398	3908	25788	
1785	-	-	-	1120	728	-	13510	3064	128	4204	4248	2700	29702	

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.9.8 TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM NARVA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	-	476	-	1722	-	-	8902	7760	1498	2530	5464	2962	31356
1787	-	116	1764	498	-	-	14688	3194	468	6432	7802	1088	35970
1788	-	-	498	1864	-	1330	14324	2376	84	11292	142	1694	33604
1789	-	-	418	426	-	-	13984	1648	2568	8972	3810	2554	34380
1790	-	-	728	-	-	-	7936	7946	4116	4764	6142	6090	37722
1791	-	-	-	-	162	76	8292	12576	270	3358	9162	5546	39442
1792	576	330	-	426	346	8984	10436	946	7120	1758	6108	-	37030
1793	-	-	922	-	-	-	-	538	2384	452	396	848	5540
1794	852	-	-	-	482	3088	11574	990	3676	9116	2248	-	32026
1795	-	-	-	-	-	-	-	410	-	-	-	-	410
1796	-	-	-	410	-	-	2220	1774	968	1508	-	402	7262
1797	350	-	414	468	-	-	4174	1848	784	392	2166	916	11512
1798	-	-	-	2428	-	-	496	56	402	-	-	-	3382
1799	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	602	1910	882	-	-	662	4056
1801	-	-	-	-	-	678	-	-	-	-	-	-	678
1802	-	-	498	760	-	518	3976	5294	7752	1852	7212	-	27862
1803	2002	-	-	706	1040	-	-	-	-	550	-	-	4298
1804	322	-	-	-	-	-	158	488	-	144	-	172	1284
1805	-	-	342	570	474	-	372	460	746	342	988	124	4418
1806	-	-	-	-	-	-	-	-	292	1316	812	-	2420
1807	-	-	-	-	-	-	-	468	208	-	156	324	1156
1808	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	336	716	1052
1815	-	-	176	-	-	-	-	506	132	588	984	1292	3678
1816	-	-	-	196	510	-	358	1590	1654	2890	1442	580	9220
1817	-	-	-	934	612	-	2184	-	648	806	1366	-	6550
1818	718	-	-	-	204	-	598	3294	710	-	478	2758	8760
1819	1356	-	-	-	-	378	3150	2484	840	748	-	-	8956
1820	1066	628	-	2264	-	-	718	1744	-	1534	346	200	8500
1821	-	-	796	718	-	-	1750	1024	984	610	210	-	6092
1822	-	1676	-	-	78	-	2124	-	260	464	814	834	6250
1823	-	-	-	842	-	-	1332	1110	1924	658	1126	740	7732
1824	-	-	-	-	-	422	566	2030	2108	420	-	188	5734
1825	-	-	-	-	-	376	594	1318	468	-	-	-	2756

SOURCE: GAA, PA 78/94-102

- 555 -

TABLE II.9.C TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM RIGA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR				
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
17051	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17061	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17071	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17082	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-
17102	1294	918	324	630	-	710	560	-	196	-	24	-	-	-	1032	-	1086
17114	-	96	34	374	-	-	-	-	-	-	-	-	-	-	-	-	4632
17125	-	-	-	-	-	192	-	32	-	-	274	-	-	-	-	-	504
17134	-	462	3062	2126	996	-	-	-	-	-	-	-	-	-	-	-	498
17146	-	-	-	-	72	520	540	684	652	-	1062	-	-	-	-	-	6046
17157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3986
1716	-	2214	2926	1754	4692	1930	100	-	-	-	448	2972	-	-	2972	-	4384
1717	1488	9062	874	2598	1156	836	250	744	2184	616	656	1610	-	-	1610	-	13846
1718	430	-	2760	374	1188	830	130	-	-	-	2092	8472	-	-	8472	-	21734
1719	982	1132	652	-	858	-	120	920	1200	3034	4368	974	-	-	4368	-	14248
1720	710	1432	308	-	140	216	1652	2106	3658	3106	1640	684	-	-	1640	-	15682
1721	568	220	400	264	490	136	1254	3602	4082	1558	1290	1994	-	-	1994	-	15688
1722	2106	878	628	330	-	200	848	2386	4258	2882	2812	590	-	-	590	-	17918
1723	838	770	234	384	220	930	2262	3116	3162	2330	320	1242	-	-	1242	-	15828
1724	1002	1124	1100	610	40	634	1618	1204	4298	2384	848	1112	-	-	1112	-	18974
1725	344	180	930	92	532	1478	1496	7872	6242	4164	688	1092	-	-	1092	-	25110
1726	1902	340	1230	376	418	1050	2562	4634	5534	2962	788	3896	-	-	3896	-	25622
1727	1334	1650	716	184	-	96	2036	2944	5476	3464	746	1378	-	-	1378	-	20026
1728	818	756	772	148	-	688	8738	-	1444	6148	1276	984	-	-	984	-	21772
1729	-	680	332	-	336	112	1172	3668	7378	4042	2612	1166	-	-	1166	-	21478
1730	1184	838	214	-	-	1002	4252	5588	4376	5428	4288	1450	-	-	1450	-	28620
1731	732	240	726	-	-	160	3202	7712	6278	1904	1166	3428	-	-	3428	-	25548
1732	188	752	1204	866	228	1046	162	2220	4166	1474	1244	220	-	-	220	-	13770
1733	220	728	472	-	132	1176	1184	2598	2788	2254	3042	1272	-	-	1272	-	18866
1734	480	2152	1090	858	160	-	3892	3862	4236	1208	2722	1336	-	-	1336	-	21996
1735	892	766	632	-	-	1982	3996	3588	4646	3218	3164	1620	-	-	1620	-	24704
1736	940	-	546	990	208	1570	3078	6580	6182	2430	2816	1192	-	-	1192	-	26832
1737	458	240	368	3148	592	1676	640	3928	2096	3286	1888	1522	-	-	1522	-	20942
1738	220	552	2230	976	118	1662	3188	6174	4288	4840	1916	1304	-	-	1304	-	27468
1739	506	1050	1546	946	370	3052	3350	6026	6600	1812	2418	1486	-	-	1486	-	29162
1740	1974	-	-	1460	444	1020	1914	7342	12940	3484	4744	4502	-	-	4502	-	39824
1741	320	1120	1230	922	572	2050	6014	4228	3640	3640	3160	1510	-	-	1510	-	29118
1742	172	1476	1644	642	1068	236	1634	10736	3658	3182	2452	336	-	-	336	-	27236
1743	1652	1856	1216	146	484	230	1256	2460	2614	1774	1552	1782	-	-	1782	-	17022
1744	586	172	848	1142	576	702	2574	6122	3694	2262	2800	548	-	-	548	-	22024
1745	336	286	774	952	454	302	-	3910	4558	1770	176	2476	-	-	2476	-	15994

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II.9.C TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM RIGA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	388	-	868	264	-	1224	788	5942	3130	804	2996	2956	19360
1747	-	150	980	546	236	826	1892	2810	3522	2724	2048	296	16030
1748	1064	-	-	2586	766	496	150	1602	3774	782	1594	3132	15968
1749	-	164	518	1020	-	388	1282	2050	5260	1808	546	2662	15708
1750	638	-	620	-	1172	448	1846	1828	1314	1942	822	1970	12780
1751	-	684	-	82	166	800	880	1288	1858	370	1720	162	6010
1752	928	634	1266	372	-	1030	1520	4944	1712	268	920	614	14228
1753	128	80	2954	208	458	858	2080	2352	1724	774	4124	468	16298
1754	572	724	1324	520	-	546	1700	5110	4320	714	2238	3250	21020
1755	156	-	164	1790	658	766	-	1248	1056	3798	1388	1404	12448
1756	548	-	640	218	-	480	3614	1678	2776	1732	1112	1334	17132
1757	-	246	3300	1642	388	734	2220	5516	3244	4020	2482	1006	24800
1758	1160	1382	3116	724	142	5762	6248	2080	2080	1602	396	4174	26786
1759	1086	460	320	474	994	1198	9934	1052	3890	8036	2980	760	31184
1760	236	2076	2784	1268	108	-	8270	4468	7162	5470	4198	5352	39392
1761	1866	1276	418	1536	580	6192	5530	6846	10250	5892	9714	970	50770
1762	708	116	892	-	-	240	4482	8762	5954	5792	6532	2970	38448
1763	234	-	1816	1980	196	78	3226	3208	3888	2098	8286	4786	27696
1764	3830	490	1088	3096	168	1540	2916	5706	1362	3254	3092	6592	32954
1765	3092	534	904	2898	1280	-	1210	6716	6366	1984	2756	3776	31516
1766	2516	974	3120	1318	308	946	5958	3888	654	7858	4350	2430	34320
1767	1546	780	874	1446	488	-	2378	3634	6538	1698	712	1446	21520
1768	426	330	4950	1822	204	-	2030	5028	1580	4560	3202	1310	25422
1769	1368	2090	2132	1754	204	4448	6178	2280	5954	7354	5122	1306	39986
1770	672	742	1314	2762	426	80	2092	10064	2126	2830	4696	4674	32480
1771	1354	-	686	2744	-	1176	5144	7680	2678	-	-	-	21462
1772	172	2356	2934	340	3162	2922	9756	9460	3398	4130	3644	2594	45368
1773	1488	1312	1626	1212	360	4442	11186	3836	3250	2226	402	5996	37316
1774	148	360	2716	2652	1752	3224	5730	8322	6940	6746	3366	2782	45738
1775	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	616	948	1816	2712	1738	722	2196	4410	5762	1204	3420	1362	27106
1777	492	132	1580	1408	162	1452	12596	-	2572	2816	9734	2848	35496
1778	340	-	1292	2316	268	434	4782	8026	5598	5888	2914	3434	38462
1779	1472	582	520	1448	212	5208	5980	1524	2476	2280	7604	-	29226
1780	-	764	1598	1016	320	130	6034	8138	4302	1954	12320	-	36576
1781	214	280	2030	508	480	588	700	1050	3176	3496	1342	-	13904
1782	1896	-	1556	636	894	584	2718	4834	5994	3512	4098	3524	30446
1783	1968	726	1572	1078	1362	296	1936	6652	7074	6016	2560	5884	37994
1784	-	658	2146	1808	792	618	1530	4450	4550	3792	2580	2980	25904
1785	332	866	-	422	824	1110	3870	4740	5006	2240	3650	2726	28586

NO DATA AVAILABLE

SOURCE: GAA, PA 78/84-102

CONTINUED...

TABLE 11-9.C TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM RIGA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	-	122	674	7310	2810	264	526	4942	3052	1292	2484	5436	23914
1787	460	938	2082	1422	456	214	2268	3850	3624	1128	2534	2016	20992
1788	322	864	1234	882	736	-	1284	4012	1790	4538	2718	298	18678
1789	-	1200	1548	1786	160	92	1122	6056	2610	2196	2814	3310	22894
1790	-	558	1112	742	320	2338	2980	5162	5950	4132	1806	2362	27462
1791	-	-	-	296	266	758	1126	4088	3740	982	3202	1560	16018
1792	-	2208	844	1022	-	1248	2136	2550	3064	2228	6884	-	22184
1793	640	578	1620	1384	132	640	1020	3770	2732	3242	2058	5546	23362
1794	64	798	904	360	-	1676	3116	4720	2488	992	1998	1600	18706
1795	-	-	-	348	152	336	432	1108	1052	1850	1324	622	7224
1796	1714	1782	326	906	362	1238	6600	3786	2902	2184	1466	1712	24978
1797	1132	780	1746	1184	110	310	718	2246	1106	4324	3400	2218	19274
1798	1416	510	1272	546	988	668	1952	1830	1158	128	880	374	11722
1799	148	-	-	-	-	208	-	-	-	100	-	-	456
1800	-	214	-	190	402	-	1432	1230	1890	442	462	286	6548
1801	286	398	-	-	184	-	878	1800	578	474	898	-	5296
1802	390	1034	1806	408	814	4416	5888	2284	4690	5242	5330	-	32302
1803	292	1160	914	732	426	3936	10128	2448	1452	2514	934	526	27062
1804	160	-	-	1458	-	-	2076	2012	-	1872	-	2462	10040
1805	-	216	2148	548	728	-	2382	8986	2590	3458	1952	624	23632
1806	300	918	844	-	-	132	130	828	1706	1856	110	222	7046
1807	-	116	-	226	212	-	-	480	64	244	-	102	1444
1808	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1809	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1810	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1811	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1812	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1813	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	2260	3978	1420	1108	420	9206
1815	-	-	1102	854	756	844	608	2416	2126	804	2220	1002	12732
1816	90	146	594	1050	268	172	2660	3490	2698	5040	4900	2286	23394
1817	1814	846	192	542	732	10614	22370	9192	10392	6196	2896	1950	66946
1818	176	514	-	-	396	-	414	1964	1398	1780	360	380	7382
1819	-	130	218	-	156	546	642	2530	1222	1028	1296	1176	8944
1820	-	446	456	1104	508	384	1498	1322	2188	1714	716	948	11284
1821	-	332	452	186	-	1250	2854	1608	1664	3546	836	174	12902
1822	274	746	188	318	326	-	1710	-	82	124	1056	-	4826
1823	-	-	-	846	216	-	1962	2366	2048	852	1742	246	10278
1824	140	120	-	182	218	2144	478	650	1628	970	-	200	6730
1825	-	-	290	-	-	600	844	1604	160	-	-	-	3498

SOURCE: GAA, PA 78/94-102



TABLE II.9.0 TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM VIBORG DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE												-
1709 <sup>2</sup>	-	-	-	-	112	-	-	-	-	-	662	1382	2156
1710 <sup>3</sup>	-	-	364	358	-	260	460	-	140	-	-	-	1582
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	312	312
1716	-	-	-	-	-	-	-	-	-	-	-	-	-
1717	-	240	-	1464	-	-	-	-	-	-	-	172	1876
1718	-	-	-	-	-	-	-	-	-	-	400	3838	4238
1719	330	-	-	-	-	-	-	162	-	1266	796	946	3500
1720	-	-	832	1352	-	436	88	1942	1342	2638	460	1990	10680
1721	-	-	-	-	-	-	416	940	3872	668	822	380	7098
1722	200	-	-	364	328	-	-	1032	4374	812	450	1058	8618
1723	-	-	-	820	-	-	364	-	860	712	650	732	4138
1724	-	52	-	-	-	-	-	-	968	316	760	1668	3764
1725	-	-	-	220	-	-	452	572	1140	1670	640	-	4694
1726	-	-	-	-	-	350	680	1396	1148	1196	1572	360	6702
1727	-	-	-	358	-	-	1874	662	586	-	220	1854	5554
1728	-	240	-	-	-	-	470	-	260	2496	-	-	3466
1729	-	-	438	-	-	-	308	798	232	1146	606	-	3528
1730	-	-	584	332	-	140	620	674	678	280	1520	598	5826
1731	-	-	-	498	-	-	-	886	120	818	756	1592	4576
1732	-	-	-	686	-	-	770	902	1196	408	1682	746	6392
1733	138	230	247	566	-	280	504	1082	1238	514	794	608	6196
1734	-	82	570	196	-	-	2260	660	742	1156	-	242	5888
1735	-	232	-	-	-	296	2600	1186	516	1080	2468	-	8378
1736	-	-	-	-	278	-	630	2610	1534	856	5350	1498	12756
1737	-	-	-	1214	322	274	636	1792	704	1868	1372	1248	9630
1738	-	-	558	-	198	-	878	1632	244	738	428	1054	5730
1739	-	-	336	-	226	-	272	1300	354	590	482	744	4304
1740	-	-	-	-	-	-	216	256	614	-	316	856	2288
1741	-	-	-	-	-	330	-	2710	366	-	354	-	3760
1742	-	-	270	598	-	-	-	480	302	894	726	-	3270
1743	62	94	358	296	558	160	296	1114	620	-	852	300	4710
1744	100	-	-	-	302	-	-	1938	736	674	818	330	4898
1745	-	-	116	322	256	-	400	1596	244	582	754	-	4270

SOURCE: GAA, PA 78/94-102

CONTINUED...



TABLE II.9.0 TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM VIBORG DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1785	254	-	-	-	264	-	-	250	-	114	800	-	1682
1787	-	168	204	-	254	-	-	368	-	322	238	-	1574
1788	-	-	-	-	-	-	144	-	454	-	186	220	1004
1789	-	-	-	446	-	-	-	618	-	-	-	220	1284
1790	-	-	34	-	-	-	-	-	-	-	-	256	488
1791 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	198	-	-
1792	-	176	208	-	-	-	180	-	-	300	270	-	1134
1793	232	-	-	-	-	-	-	380	748	568	358	316	2602
1794	-	-	544	210	-	336	-	140	488	264	268	560	2410
1795 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	-	-	198	-	384	-	-	582
1797	-	-	198	-	-	-	-	-	-	-	340	-	538
1798	140	-	-	268	-	-	-	-	0	128	-	-	536
1799	-	-	-	134	-	-	120	-	-	-	-	-	254
1800	-	-	-	-	-	-	-	-	208	160	-	-	368
1801	-	-	-	-	-	416	-	-	-	102	-	146	664
1802	-	-	-	-	-	-	-	-	-	-	-	-	-
1803	-	376	-	-	-	-	-	-	-	100	-	-	476
1804	-	-	-	400	-	-	-	110	-	104	-	-	614
1805	-	-	-	160	-	-	196	-	164	466	-	-	986
1806	-	-	-	-	-	-	-	-	-	-	-	336	336
1807	-	-	-	-	218	-	-	-	44	-	-	124	386
1808 <sup>17</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	518	-	510	-	1028
1815	-	-	-	-	-	406	64	-	176	-	276	670	1592
1816	-	-	184	-	364	-	-	-	-	184	-	-	732
1817	-	192	-	-	-	-	154	-	264	-	-	-	610
1818	-	-	-	-	-	-	-	-	152	154	578	144	1028
1819	-	-	-	-	-	-	-	814	-	-	-	102	916
1820	-	-	-	448	132	-	378	552	346	-	-	-	1856
1821	-	-	-	164	-	-	350	254	198	-	-	-	966
1822	-	-	-	-	250	-	340	-	-	-	-	-	590
1823	-	-	-	-	-	-	-	224	-	496	-	-	720
1824	-	-	-	-	-	-	-	274	1010	-	-	-	1284
1825 <sup>20</sup>	-	-	-	-	-	-	-	372	-	-	-	-	372

SOURCE: GAA, PA 78/94-102

TABLE II-9.E TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM REVAL DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AVG	SEP	OCT	NOV	DEC		
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	
1708	-	NO DATA AVAILABLE												-
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	
1710 <sup>3</sup>	-	-	-	-	-	102	-	-	-	-	-	-	-	
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	102	
1712 <sup>5</sup>	-	-	-	-	-	148	-	80	-	-	-	-	-	
1713 <sup>4</sup>	-	-	64	108	-	-	-	-	-	-	-	-	228	
1714 <sup>6</sup>	-	-	-	-	40	418	280	-	98	110	32	-	172	
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	48	978	
1716	-	100	2446	1736	1620	1210	-	-	-	-	-	-	48	
1717	-	1236	-	326	340	-	356	-	544	-	-	-	7112	
1718	-	-	-	-	210	-	-	-	-	-	-	-	2802	
1719	160	-	-	-	-	-	-	-	100	-	-	-	210	
1720	-	-	-	-	-	-	-	-	30	80	60	-	260	
1721	-	-	-	-	-	-	-	48	-	60	-	-	170	
1722	180	-	-	-	-	-	280	-	-	-	-	-	108	
1723	-	-	60	-	-	-	-	44	100	-	-	100	460	
1724	-	-	-	-	-	-	68	-	-	46	-	72	304	
1725	-	-	-	-	-	-	-	-	-	-	-	-	186	
1726	-	-	-	-	56	80	-	-	100	-	-	-	248	
1727	-	-	-	-	-	-	70	-	60	20	-	-	216	
1728	-	-	-	-	-	220	220	-	-	-	-	802	70	
1729	-	400	-	-	-	-	92	-	1462	318	498	-	1242	
1730	-	-	-	320	-	1102	466	888	-	300	164	402	2770	
1731	-	328	262	-	-	406	-	1872	2342	138	-	-	3642	
1732	244	632	-	328	-	56	244	124	126	-	-	-	5348	
1733	-	-	-	-	-	-	70	-	108	-	-	-	1754	
1734	-	-	-	120	-	144	1786	756	-	-	-	-	178	
1735	-	-	-	-	180	-	-	-	106	-	164	-	2970	
1736	-	-	-	-	-	-	280	292	-	196	72	-	286	
1737	-	120	-	-	268	66	-	118	414	234	270	-	840	
1738	-	-	360	-	-	1166	1148	584	108	176	-	-	1490	
1739	-	-	208	-	-	1024	1044	2680	432	1126	132	196	3542	
1740	-	-	-	1568	-	740	2224	5218	3958	1932	560	736	6842	
1741	-	-	172	168	-	1316	2744	284	188	-	-	-	16936	
1742	-	-	-	-	-	-	198	-	124	-	-	206	4872	
1743	-	-	-	-	-	-	-	-	-	-	-	-	528	
1744	-	-	-	-	-	-	172	244	-	-	-	-	-	
1745	-	-	-	-	-	-	-	380	-	-	-	-	416	
													380	

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II.9.E TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM REVAL DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	-	-	256	-	-	-	2146	124	-	-	-	-	2526
1747	-	-	298	-	-	-	84	-	-	-	40	-	422
1748	-	-	-	-	124	-	140	136	68	-	104	-	572
1749	-	-	-	106	-	-	-	120	-	-	-	-	226
1750	-	-	-	-	-	124	92	234	196	84	-	-	730
1751	-	-	-	520	-	108	92	-	-	-	-	-	720
1752	102	-	84	-	-	-	152	-	-	-	-	-	338
1753	-	-	-	-	-	190	716	186	-	-	-	-	1092
1754	-	-	-	-	-	-	-	136	230	-	-	-	366
1755	-	-	-	-	-	-	-	100	-	-	-	-	100
1756	-	-	500	164	-	112	-	-	212	-	-	-	988
1757	-	-	-	-	-	-	-	-	-	-	-	-	-
1758	-	-	-	-	-	-	-	114	-	-	-	-	114
1759	-	-	-	-	-	-	-	-	-	78	188	-	266
1760	-	-	-	-	-	-	90	298	130	-	438	-	956
1761	-	-	-	-	-	-	-	452	370	504	312	454	2724
1762	216	-	272	144	-	-	-	-	154	-	124	162	640
1763	-	-	-	-	-	200	-	-	180	220	160	-	716
1764	-	-	-	-	-	-	-	-	-	-	-	152	152
1765	-	-	-	-	-	-	-	-	-	-	140	174	434
1766	-	-	-	120	-	-	-	-	-	-	-	-	300
1767	300	-	-	-	-	-	-	-	-	-	-	-	120
1768	-	-	-	-	-	252	-	192	-	-	120	-	444
1769	-	-	-	-	-	-	-	180	-	-	-	152	332
1770	-	-	-	-	-	-	736	-	136	-	-	-	872
1771	-	-	-	-	-	-	-	256	-	-	-	-	544
1772	-	-	-	-	-	288	-	-	-	-	-	-	330
1773	-	188	-	-	-	-	-	162	-	-	-	-	330
1774	-	-	138	-	76	-	-	140	340	-	444	164	1302
1775	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1776	180	-	-	-	-	-	308	62	-	-	-	-	950
1777	-	-	-	-	-	122	186	-	-	-	-	-	308
1778	-	-	-	-	-	290	-	-	-	-	-	-	290
1779	246	-	-	-	-	-	-	-	-	-	-	-	246
1780	-	-	-	-	-	-	-	-	-	-	-	-	-
1781	-	-	-	-	-	-	-	-	130	-	-	-	130
1782	-	-	-	-	-	134	-	-	388	-	-	-	522
1783	-	-	-	-	-	-	-	-	-	124	-	718	842
1784	-	-	-	-	-	-	-	-	-	-	246	-	246
1785	-	-	-	-	-	-	188	-	-	-	-	-	188

SOURCE: GAA, PA 78/94-102

CONTINUED...



TABLE II-9.F TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM ESTONIA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR			
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC				
1706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1709	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1710	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1711	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1712	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1713	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1714	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1715	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	-	-	-	-	70	-	-	-	-	-	-	-	-	-	70
1717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50
1718	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400
1719	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	840
1720	-	-	-	-	-	-	-	500	188	-	-	-	-	-	70	540
1721	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1722	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1723	-	392	-	-	400	-	896	-	-	-	-	-	-	410	-	2098
1724	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	100
1725	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	38
1726	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1727	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1728	-	-	-	-	-	-	-	-	-	84	-	-	-	-	-	84
1729	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1730	-	-	-	-	-	-	-	236	214	-	-	-	-	-	-	696
1731	-	-	-	-	-	-	-	-	620	482	-	-	-	94	-	1872
1732	-	-	-	-	-	-	-	468	514	-	-	-	-	210	312	1804
1733	-	-	-	-	-	-	-	130	140	-	-	-	-	92	-	362
1734	-	-	-	-	-	-	-	288	-	-	-	-	-	162	-	450
1735	-	-	-	-	-	120	-	-	136	210	-	-	-	-	-	466
1736	-	128	-	-	-	-	-	-	-	198	-	-	-	-	184	360
1737	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	660
1738	-	288	-	-	-	-	408	-	-	-	-	-	-	-	-	660
1739	-	-	-	-	132	110	-	-	-	-	-	-	-	-	226	1064
1740	-	-	-	-	-	164	-	240	724	96	-	-	-	84	454	2864
1741	-	-	-	-	-	-	-	960	-	1074	106	-	-	1780	-	3238
1742	-	-	-	-	-	274	-	980	1206	1264	624	-	368	584	-	4776
1743	-	-	-	-	-	-	-	3268	900	-	444	-	-	984	-	3684
1744	-	420	-	-	-	-	-	188	412	-	360	-	928	1074	-	4792
1745	316	-	-	-	-	192	-	1534	1180	630	-	-	478	604	-	3374
1746	516	-	-	-	-	-	124	954	324	3382	-	-	-	352	-	4050
1747	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5918

CONTINUED...

SOURCE: GAA, PA 78/94-102

TABLE II.9.F TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM ESTONIA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	378	312	-	-	-	-	-	-	-	712	-	1002	2404
1747	-	786	-	-	-	700	1736	414	88	344	320	668	5086
1748	-	-	-	312	-	-	390	3868	-	1380	1634	1590	9174
1749	-	-	82	338	-	582	1394	250	1636	1682	644	1878	8506
1750	-	300	232	274	350	-	90	-	318	1152	822	-	3538
1751	-	172	-	-	-	-	1718	600	554	214	716	996	4970
1752	-	-	-	-	-	1408	-	826	562	122	1952	338	5206
1753	-	-	-	730	316	428	-	-	-	-	-	-	1474
1754	268	166	-	-	-	152	-	162	68	-	64	194	1074
1755	-	-	-	-	-	-	144	420	-	160	-	50	774
1756	-	-	-	-	-	182	-	-	-	-	-	-	182
1757	-	-	-	-	-	-	74	-	-	-	-	-	74
1758	-	-	-	-	-	-	-	-	-	-	-	-	-
1759	-	-	-	-	-	-	470	-	600	436	126	-	1632
1760	-	-	96	-	-	-	670	-	160	-	260	-	1186
1761	-	412	294	-	-	356	176	-	276	320	62	160	2056
1762	844	-	-	-	-	180	952	196	336	738	-	-	2946
1763	-	-	310	332	230	-	-	110	-	450	750	-	2182
1764	-	-	100	170	-	248	200	176	-	176	-	416	1486
1765	-	-	218	-	-	-	222	-	480	510	80	-	1510
1766	88	-	-	-	-	-	160	-	-	684	-	-	932
1767	-	188	-	-	-	-	204	410	516	188	364	-	1852
1768	-	186	180	160	192	-	350	220	478	158	1294	112	3330
1769	442	-	-	-	-	200	1000	1096	694	348	716	-	4496
1770	-	-	-	-	-	-	868	1444	-	154	1420	1194	5080
1771	632	-	-	-	-	-	2260	1214	1500	-	-	-	5606
1772	-	1118	238	188	-	776	2022	734	436	2260	-	1302	9074
1773	144	-	840	460	742	920	1310	800	912	-	-	2756	8484
1774	216	120	-	374	-	266	4896	520	1568	878	160	886	4884
1775	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1776	456	-	210	468	198	1480	2502	2282	190	268	1400	1156	10620
1777	576	170	360	-	220	270	5048	-	714	298	602	1544	9802
1778	184	382	1292	256	-	-	1648	680	1892	196	540	1094	8164
1779	766	-	198	232	-	468	2598	214	1502	448	852	-	7278
1780	-	-	382	246	174	-	216	1406	640	512	1474	-	5050
1781	896	-	208	238	-	134	-	-	-	-	-	-	1476
1782	184	-	-	170	432	-	166	228	222	-	410	566	2378
1783	676	190	166	126	-	194	158	1038	736	1004	366	4032	5686
1784	-	-	658	-	-	-	-	702	-	374	-	706	2440
1785	-	254	-	388	-	-	194	540	1508	-	784	-	3638

SOURCE: GAA, PA 76/94-102

CONTINUED...



TABLE 11.9.F TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM ESTONIA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	-	-	-	148	304	-	338	-	-	398	180	-	1368
1787	-	-	200	476	-	-	302	156	288	62	120	236	1842
1788	-	-	-	-	-	-	298	338	-	108	-	-	744
1789	130	166	-	344	-	-	410	96	666	822	174	196	3204
1790	172	-	234	-	322	-	-	-	-	268	614	380	1990
1791 <sup>13</sup>	-	-	-	88	-	-	184	458	608	126	268	218	1950
1792	-	160	-	-	-	98	-	-	186	288	1110	-	1842
1793	178	-	124	-	216	-	168	-	-	120	-	-	808
1794	-	-	-	-	308	-	442	326	254	414	-	-	1744
1795 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	344	-	-	-	-	-	144	730	174	-	-	1392
1797	442	-	176	-	-	-	148	74	-	-	362	-	1202
1798	148	-	-	-	-	-	-	60	166	-	-	-	394
1799	-	-	124	-	-	-	-	-	-	-	-	-	124
1800	-	-	-	-	-	-	-	-	380	-	-	-	380
1801	-	-	-	-	-	-	-	-	-	322	-	-	322
1802	-	-	-	-	-	-	360	-	696	372	156	-	1584
1803	368	-	-	-	-	226	122	472	206	126	-	-	1520
1804	-	-	-	-	-	-	-	-	-	634	-	-	634
1805	-	-	-	-	-	-	578	370	888	-	442	186	2464
1806	144	-	282	260	-	-	-	-	314	-	-	-	1000
1807	-	-	-	-	-	-	-	-	-	-	-	-	-
1808 <sup>17</sup>	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1809	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1810	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1811	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1812	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1813	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1814 <sup>6</sup>	-	-	-	-	-	-	-	182	-	-	-	-	182
1815	-	-	-	-	-	-	-	186	322	-	-	-	508
1816	-	-	278	-	-	-	196	314	-	252	350	-	1390
1817	-	114	-	-	-	416	256	420	414	180	-	-	1800
1818	-	-	-	-	-	-	78	580	-	280	-	-	938
1819	-	160	-	-	-	-	-	1056	372	194	-	-	1782
1820	-	-	-	-	-	-	-	-	218	-	-	158	376
1821	-	-	-	-	-	-	452	128	-	260	-	-	840
1822	-	-	-	-	-	-	106	-	66	-	142	-	314
1823	-	-	-	-	-	-	290	-	120	-	242	-	652
1824	-	-	-	-	-	-	204	-	452	-	-	-	656
1825 <sup>20</sup>	-	-	-	-	-	-	-	244	-	-	-	-	244

SOURCE: GAA, PA 78/94-102

TABLE II.9.5 TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM FREDERIKSHAVN DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1744	-	-	-	-	-	-	-	280	528	304	-	-	1112
1745	-	-	64	-	-	266	358	-	244	-	-	-	932
1746	-	-	-	-	-	-	-	580	-	240	-	248	1068
1747	-	-	312	-	336	-	520	296	756	-	718	-	2938
1748	-	-	-	-	-	-	64	512	408	-	-	648	1638
1749	312	-	-	-	-	490	248	248	-	234	208	94	1586
1750	-	-	-	-	-	238	-	276	-	552	-	-	1066
1751	-	-	-	-	-	234	-	138	-	242	-	-	606
1752	-	232	-	-	-	-	-	356	302	-	172	-	1062
1753	-	-	-	-	-	-	-	326	-	-	-	-	326
1754	-	-	-	-	178	-	-	-	342	128	-	-	648
1755	-	-	-	64	-	-	-	106	352	218	-	-	740
1756	-	-	-	-	-	106	-	1202	-	-	172	-	1480
1757	-	-	-	-	104	-	-	762	682	-	-	120	1668
1758	-	-	-	-	-	-	1096	704	98	164	-	256	1222
1759	-	-	-	-	-	-	-	-	526	140	262	-	2024
1760	-	-	-	-	-	-	-	416	1134	234	-	-	1784
1761	-	-	-	-	-	-	-	170	316	-	392	-	878
1762	-	-	338	170	-	-	626	-	-	862	-	-	1996
1763	-	-	-	170	-	-	456	-	-	136	-	278	1040
1764	-	-	-	256	-	-	-	398	-	-	404	-	1058
1765	-	-	-	240	-	-	-	440	-	-	-	-	680
1766	-	-	170	-	350	-	392	344	-	148	250	-	1654
1767	-	-	-	-	-	-	-	478	-	-	-	-	660
1768	-	298	376	170	-	-	224	170	-	-	-	-	1238
1769	-	-	240	216	-	148	402	-	278	262	-	216	1762
1770	-	-	-	170	-	-	410	250	-	-	-	240	1070
1771	-	-	-	170	-	-	542	-	-	-	-	-	712
1772	-	-	106	-	-	-	216	170	-	-	592	-	1084
1773	-	-	-	170	-	150	350	394	-	-	-	150	1214
1774	-	-	432	170	-	90	216	302	166	170	-	216	1762
1775	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1776	-	-	-	-	-	-	-	-	-	540	-	-	540
1777	-	-	-	-	-	-	-	-	-	4	-	-	892
1778	-	-	-	-	-	892	-	-	-	-	-	-	1420
1779	226	-	-	-	-	80	700	-	-	-	414	-	1938
1780	-	-	-	-	-	-	868	438	-	-	632	-	1366
1781	-	-	-	-	-	-	-	266	-	-	170	-	436
1782	-	-	-	-	-	-	254	170	-	448	358	-	1306
1783	-	-	-	-	-	290	-	734	324	172	-	-	1654

SOURCE: GAA, PA 78/94-182

CONTINUED...

TABLE II.9-5 TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM FREDERIKSHAVN DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	JAN	FEB	MAR	APR	MAY	JUN	MONTH OF ARRIVAL							TOTAL FOR TIME YEAR
							JUL	AUG	SEP	OCT	NOV	DEC		
1784	-	-	-	146	-	-	436	604	-	-	472	536	-	1998
1785	-	-	-	-	264	-	1192	814	-	-	-	220	-	2490
1786	-	-	-	-	-	-	234	-	156	-	-	-	-	390
1787	-	-	-	-	-	-	246	196	-	-	-	186	-	628
1788	-	-	-	398	-	-	132	-	-	-	-	264	-	794
1789	-	364	-	-	-	-	-	-	-	-	-	-	-	364
1790	-	-	-	-	-	-	-	146	-	-	-	-	-	146
1791	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1792	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1793	-	-	-	-	-	-	-	-	-	-	-	-	160	160
1794	-	-	-	204	-	-	122	-	108	-	458	-	-	892
1795	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	-	-	-	-	-	238	454	-	692
1797	-	-	-	-	-	180	248	-	-	-	-	-	-	428
1798	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1799	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	328	-	-	152	-	150	-	-	302
1801	-	186	-	-	-	-	-	-	-	-	-	-	-	914
1802	-	-	-	-	-	-	-	-	-	-	-	-	-	184
1803	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1804	-	-	-	-	-	-	-	82	-	-	-	-	-	224
1805	-	-	-	-	-	-	-	72	-	-	142	-	-	328
1806	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-	392	-	-	-	-	-	392
1808	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1816	-	-	-	274	-	-	-	-	-	-	-	616	-	890
1817	-	-	-	-	-	102	-	-	-	-	-	-	-	102
1818	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1820	-	-	-	-	-	-	-	-	-	-	410	-	-	410
1821	-	-	-	212	-	-	520	-	-	-	-	-	-	732
1822	-	-	-	-	-	-	328	-	-	-	-	-	-	328
1823	-	-	-	-	-	-	-	250	-	328	-	-	-	578
1824	-	-	-	-	-	-	-	-	-	302	-	-	-	302
1825	-	-	-	-	-	-	276	-	-	-	-	-	-	276
1826	-	-	-	-	-	-	-	216	-	-	-	-	-	216

SOURCE: GAA, PA 78/94-102



TABLE II-13 AVERAGE TONNAGE OF CARGO SHIPPED FROM RUSSIAN (BALTIC) PORTS TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE				
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1703	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1704	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1705	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1707	323.5	229.5	229.3	329.3	112.0	176.7	340.0	-	112.0	-	-	-	-	228.7	301.7	-	267.7
1708	-	86.0	34.0	93.5	-	85.8	-	56.0	-	-	-	-	-	-	-	-	84.0
1709	-	154.0	223.3	223.4	203.0	187.6	285.0	127.0	162.0	-	-	-	-	91.3	-	-	80.7
1710	-	165.5	183.6	177.1	267.7	269.2	100.0	-	-	-	-	-	-	142.3	91.2	-	219.0
1711	141.8	175.7	209.9	209.9	249.3	269.0	303.0	-	-	-	-	-	-	149.5	138.0	-	148.5
1712	215.0	230.0	187.0	187.0	269.7	192.9	110.0	249.0	213.7	-	-	-	-	131.2	146.6	-	230.0
1713	215.5	189.7	217.3	200.0	214.5	188.0	120.0	127.8	194.3	-	-	-	-	191.7	264.0	-	211.2
1714	202.5	190.3	351.4	300.9	190.0	163.0	165.2	165.2	198.6	-	-	-	-	246.8	332.3	-	222.6
1715	115.3	220.0	129.0	148.0	146.0	136.0	144.4	268.5	297.0	-	-	-	-	251.1	265.3	-	245.1
1716	168.4	226.2	183.6	291.7	328.0	150.0	185.3	289.2	306.6	-	-	-	-	244.9	310.4	-	247.7
1717	151.1	277.0	189.0	331.2	193.6	221.7	251.5	251.5	217.9	-	-	-	-	288.5	242.6	-	252.4
1718	157.6	197.0	164.5	182.5	88.0	109.0	280.1	242.1	211.1	-	-	-	-	206.9	221.0	-	236.2
1719	154.4	146.0	172.3	257.5	131.7	139.9	283.9	244.7	210.2	-	-	-	-	245.9	159.2	-	226.2
1720	187.5	151.0	174.4	232.0	103.4	158.0	298.1	240.1	213.5	-	-	-	-	203.7	207.7	-	225.8
1721	187.7	146.5	205.0	242.0	226.7	96.0	275.1	179.7	202.4	-	-	-	-	244.4	271.9	-	229.7
1722	148.7	147.8	115.3	158.0	148.0	144.7	244.9	244.9	180.6	-	-	-	-	227.8	209.8	-	220.4
1723	-	240.9	172.0	232.0	168.0	112.0	220.4	272.1	241.1	-	-	-	-	256.7	203.4	-	230.6
1724	162.3	166.7	179.0	238.3	206.8	236.4	264.6	213.0	218.9	-	-	-	-	260.8	222.4	-	231.7
1725	137.4	174.0	178.2	233.3	248.0	238.7	255.9	236.5	215.8	-	-	-	-	200.3	286.6	-	245.6
1726	186.0	197.2	190.0	222.4	245.0	231.6	277.2	210.3	232.0	-	-	-	-	257.1	248.1	-	250.6
1727	157.6	153.0	193.4	242.6	276.0	204.9	291.8	247.4	225.3	-	-	-	-	227.7	208.8	-	245.7
1728	193.6	186.6	248.0	225.9	164.0	289.5	274.6	193.1	199.3	-	-	-	-	273.0	232.0	-	258.2
1729	278.7	200.0	229.4	263.5	201.6	291.6	266.2	282.9	199.3	-	-	-	-	257.7	242.3	-	248.0
1730	225.6	190.0	218.0	170.6	188.0	194.0	261.6	249.5	253.1	-	-	-	-	237.0	242.9	-	250.5
1731	224.0	190.0	221.2	234.2	200.4	242.6	294.5	265.6	196.4	-	-	-	-	257.7	242.9	-	250.5
1732	253.0	214.3	229.2	213.0	196.3	223.2	304.9	277.7	226.7	-	-	-	-	275.5	224.9	-	256.1
1733	243.5	-	-	233.4	223.0	188.0	192.4	270.3	236.3	-	-	-	-	269.7	251.4	-	244.8
1734	238.0	174.3	163.3	234.2	198.8	152.7	231.9	241.5	212.7	-	-	-	-	281.4	286.8	-	229.1
1735	172.0	164.0	189.7	225.8	212.0	118.0	200.2	213.3	220.5	-	-	-	-	209.5	238.0	-	220.5
1736	200.0	189.0	225.2	240.0	231.3	151.0	293.6	213.0	200.4	-	-	-	-	264.2	242.1	-	249.1
1737	268.4	172.0	214.7	230.3	195.7	168.7	264.2	237.9	202.3	-	-	-	-	214.0	206.4	-	221.9
1738	213.2	205.3	152.2	201.6	213.7	189.3	308.1	240.1	196.8	-	-	-	-	267.6	209.3	-	252.3

CONTINUED...

SOURCE: C.A.A. PA 78/90-102

TABLE II-10 AVERAGE TONNAGE OF CARGO SHIPPED FROM RUSSIAN (BAL TIC) PORTS TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	255.1	202.0	227.0	271.0	260.7	209.0	297.7	273.7	273.1	277.7	222.4	241.3	239.3
1747	122.7	109.5	223.1	189.6	240.0	199.3	286.2	230.3	210.5	184.6	241.7	262.2	239.3
1748	208.3	145.3	-	268.0	175.9	157.7	272.7	269.5	221.2	187.4	253.1	212.7	231.0
1749	200.0	140.0	126.7	210.5	180.0	260.6	303.9	191.8	208.2	246.3	268.8	234.1	236.7
1750	227.6	115.2	190.3	226.7	204.7	170.4	296.7	219.9	174.1	259.3	252.5	234.7	242.8
1751	140.0	171.0	-	219.7	150.5	199.3	308.5	290.3	223.1	211.6	277.0	263.5	261.3
1752	139.5	104.4	190.2	160.0	-	302.2	254.5	267.2	254.0	238.0	278.4	211.7	239.4
1753	120.0	157.0	186.0	244.5	224.9	202.9	281.3	169.1	196.7	178.7	270.7	245.0	238.9
1754	169.3	179.0	221.3	260.1	140.0	139.6	290.3	237.8	209.9	214.3	280.4	211.2	235.2
1755	156.0	-	113.5	233.2	230.2	245.7	314.2	250.1	262.0	240.6	248.9	194.0	245.0
1756	202.4	127.0	225.6	228.2	180.0	180.7	249.9	270.0	214.6	231.8	190.9	224.0	219.9
1757	112.0	123.0	195.7	212.2	153.6	216.6	233.3	279.1	273.0	220.7	291.4	225.2	237.0
1758	150.0	167.7	257.5	237.0	220.9	-	298.6	230.2	245.1	269.7	169.4	272.0	237.0
1759	191.3	217.5	260.0	282.7	180.0	226.3	298.6	236.2	245.1	269.7	272.9	272.0	235.2
1760	191.3	190.7	218.2	268.0	193.3	311.0	281.9	227.6	270.3	199.0	245.5	309.0	263.2
1761	245.3	204.0	224.0	268.0	193.3	210.0	294.3	333.7	277.6	277.4	272.6	226.0	255.3
1762	212.0	116.0	318.0	201.3	-	210.0	277.7	283.6	258.4	223.2	252.1	309.9	252.0
1763	217.0	316.0	264.5	255.3	210.8	176.7	294.3	283.6	258.4	223.2	228.5	253.9	252.0
1764	200.0	230.0	228.4	270.6	167.5	180.8	316.1	264.2	240.2	299.1	248.3	259.2	263.7
1765	293.0	230.0	227.5	286.7	340.0	-	322.9	293.8	270.1	213.5	265.2	291.2	278.0
1766	217.0	246.9	256.0	253.3	253.7	221.2	285.4	222.1	248.2	276.0	304.1	249.7	265.7
1767	270.6	232.0	250.0	270.0	253.7	222.4	327.0	281.1	254.0	272.6	252.0	223.8	270.8
1768	222.0	218.5	230.4	270.5	240.0	222.4	325.0	250.6	223.2	291.0	294.7	250.8	267.3
1769	197.0	250.7	256.8	271.5	247.0	290.5	290.6	244.6	279.1	246.0	283.1	268.5	269.2
1770	224.0	225.8	242.0	305.9	210.0	80.0	320.3	310.6	263.3	340.9	289.9	242.9	290.7
1771	220.7	-	245.1	275.1	200.0	209.8	265.6	248.2	208.6	211.2	215.0	270.1	248.8
1772	135.5	217.1	245.2	230.2	310.2	180.7	255.7	260.5	242.6	200.5	214.4	270.1	248.8
1773	253.5	235.1	209.6	226.2	200.0	269.7	307.8	244.9	285.3	200.3	227.3	270.1	251.9
1774	189.3	257.1	268.7	248.9	261.1	230.9	321.5	280.6	231.5	293.4	275.3	212.7	250.6
1775	11	187.0	206.0	204.0	-	-	216.0	169.6	195.0	168.0	194.0	-	192.1
1776	192.2	297.0	295.6	265.0	223.4	282.6	316.7	267.5	313.1	180.0	197.0	197.0	279.8
1777	221.7	151.0	234.6	285.0	202.0	204.9	310.1	166.2	210.6	249.1	329.2	336.2	285.6
1778	262.0	191.0	253.9	301.1	224.0	154.3	328.7	289.4	221.1	275.9	319.5	280.5	274.6
1779	330.7	167.3	259.0	227.5	181.0	303.1	282.8	199.9	204.1	290.1	293.2	274.4	275.3
1780	430.0	190.8	216.7	350.0	170.2	301.1	381.1	290.4	283.7	282.4	312.4	244.0	290.7
1781	345.5	190.0	269.5	312.7	240.0	149.5	116.7	161.2	154.3	210.7	312.4	244.0	290.7
1782	180.4	168.0	204.2	193.6	189.4	246.7	158.3	207.0	192.1	170.8	216.1	295.2	281.4
1783	207.6	247.0	185.6	258.2	318.3	231.0	297.7	287.8	260.1	170.8	219.0	220.6	253.8
1784	-	350.0	267.3	213.0	164.0	180.5	266.6	345.1	247.1	240.4	308.9	340.9	270.1
1785	160.0	202.0	120.0	209.2	302.7	220.0	313.3	253.0	238.9	366.5	347.7	330.2	289.3
1786	250.0	300.0	168.5	270.1	200.0	264.0	373.5	344.6	244.8	247.2	316.0	274.2	300.1

SOURCE: GAA, PA 78/04-102

CONTINUED...

TABLE II-10

AVERAGE TONNAGE OF CARGO SHIPPED FROM RUSSIAN (BALTIC) PORTS TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

## MONTH OF ARRIVAL

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEARLY AVERAGE
1787	230.0	207.0	233.3	258.8	174.0	214.0	352.8	264.5	192.1	324.9	316.6	204.1	279.2
1788	160.0	193.0	199.2	268.5	368.0	443.3	394.7	262.4	213.3	323.0	241.8	316.0	298.4
1789	130.0	109.0	216.4	255.4	248.0	92.0	397.1	271.5	291.5	327.1	282.7	295.8	298.7
1790	252.0	224.0	210.7	252.8	149.0	233.8	330.8	327.7	272.9	281.9	309.5	272.9	285.4
1791 <sup>13</sup>	255.3	265.0	305.0	152.5	142.7	165.7	360.5	322.9	229.7	304.0	335.1	332.1	306.7
1792	307.3	228.5	184.6	289.6	346.0	368.9	346.8	246.9	337.5	263.6	283.5	366.0	302.7
1793	216.0	192.7	333.2	276.0	175.0	157.2	144.4	189.0	264.6	207.0	166.0	170.0	199.1
1794	262.7	133.0	188.6	149.7	354.0	242.0	323.4	198.3	248.1	320.3	260.6	158.3	257.3
1795 <sup>13</sup>	216.0	-	50.0	116.0	152.0	112.0	144.0	168.6	150.3	154.2	220.7	222.5	163.5
1796 <sup>14</sup>	186.0	234.2	144.9	175.6	131.3	161.1	190.0	197.4	159.7	211.8	169.7	189.2	181.5
1797 <sup>15</sup>	258.4	165.0	194.1	224.7	179.0	175.0	282.9	227.6	184.5	190.1	238.8	236.4	220.1
1798	178.4	170.0	189.6	317.5	163.7	146.0	280.6	122.1	190.2	128.0	171.7	376.0	184.7
1799	159.0	-	124.0	127.0	-	208.0	178.0	-	-	100.0	-	-	151.1
1800	-	214.0	-	190.0	275.0	162.0	216.4	205.6	189.0	150.4	231.0	474.0	220.7
1801	286.0	177.0	-	-	184.0	395.0	261.7	158.8	150.0	165.3	164.7	146.0	193.5
1802	195.0	200.3	236.5	288.0	162.7	181.5	265.3	372.7	394.3	236.2	341.8	-	279.8
1803 <sup>16</sup>	347.0	768.0	228.5	267.0	345.6	170.4	190.7	176.4	260.2	205.6	133.7	199.2	209.7
1804	232.0	-	-	212.9	-	-	178.3	168.1	-	181.1	-	162.4	181.2
1805	-	216.0	201.2	224.9	246.3	157.2	171.0	180.1	219.4	165.6	180.8	133.4	186.6
1806	148.0	206.4	160.9	238.0	214.0	116.7	136.0	170.3	206.8	204.4	307.3	279.0	196.4
1807	-	116.0	-	128.0	215.0	149.3	184.0	166.8	79.0	244.0	156.0	134.8	145.1
1808 <sup>17</sup>		NO	DATA	AVAILABLE									
1809		NO	DATA	AVAILABLE									
1810		NO	DATA	AVAILABLE									
1811		NO	DATA	AVAILABLE									
1812		NO	DATA	AVAILABLE									
1813		NO	DATA	AVAILABLE									
1814 <sup>6</sup>	-	-	-	-	-	198.7	130.8	162.4	162.6	198.1	222.8	194.2	183.9
1815	398.0	281.0	280.0	151.1	212.0	221.7	145.0	170.1	164.4	176.2	206.3	329.3	190.6
1816 <sup>18</sup>	128.0	146.0	172.6	192.9	196.6	170.3	183.1	283.1	211.6	196.3	194.5	211.9	204.9
1817	220.6	172.7	358.0	224.0	188.9	191.5	210.2	210.9	185.6	212.1	205.8	204.7	201.6
1818	315.5	184.6	-	130.0	171.8	144.0	197.3	315.9	216.0	181.9	200.4	364.7	238.7
1819	481.0	145.0	196.0	178.0	113.3	134.7	299.6	288.6	187.7	195.2	165.8	164.9	282.8
1820	317.2	214.8	136.0	306.6	213.3	157.7	197.6	288.8	176.6	225.7	166.5	170.5	216.3
1821	-	148.7	318.8	209.3	116.0	184.7	254.6	205.6	184.0	195.7	189.0	153.3	208.6
1822	137.0	318.0	112.4	159.0	151.0	-	271.1	-	111.7	180.0	253.3	475.0	226.0
1823 <sup>19</sup>	-	-	42.0	337.6	209.3	-	192.7	181.8	260.0	200.6	239.2	328.7	218.7
1824	148.0	128.0	104.0	182.0	163.0	177.8	217.7	246.2	189.9	175.6	-	194.0	192.2
1825 <sup>20</sup>	-	-	145.0	-	123.7	158.0	188.0	170.2	209.3	-	-	-	167.2

SOURCE: GAA, PA 78/94-102

TABLE II.10.A

AVERAGE TONNAGE OF CARGO SHIPPED FROM ST. PETERSBURG TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1710 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 <sup>6</sup>	-	-	-	-	-	-	-	78.0	60.0	96.0	-	-	78.0
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	250.0	160.0	115.0	190.0	172.0	-	-	-	-	-	-	178.0
1717	165.0	120.0	180.0	-	-	-	-	-	-	-	-	62.0	124.2
1718	-	-	-	-	220.0	260.0	90.0	-	-	-	-	255.0	231.2
1719	252.0	-	-	-	-	100.0	-	60.0	60.0	123.7	104.0	-	120.9
1720	100.0	163.0	-	333.3	240.0	-	148.0	320.0	116.7	50.0	220.0	88.0	183.0
1721	130.0	-	80.0	240.0	36.0	-	78.7	80.0	173.0	-	60.0	96.0	105.4
1722	106.0	256.0	-	220.0	-	100.0	120.0	-	70.0	137.7	85.3	80.0	133.1
1723	220.0	250.0	168.5	275.0	-	-	100.0	-	113.0	96.0	81.0	96.0	149.4
1724	146.4	200.0	125.8	120.0	-	260.0	72.0	173.6	116.8	96.0	106.0	69.0	126.0
1725	88.0	137.3	-	-	90.0	80.0	185.7	137.0	99.4	104.6	82.0	82.7	113.4
1726	111.3	152.0	145.0	232.0	125.0	100.0	129.5	182.9	139.0	121.0	122.0	148.6	142.3
1727	135.5	100.0	144.0	167.2	138.0	-	-	127.5	162.7	214.0	-	156.0	145.8
1728	140.0	128.7	104.0	100.0	107.0	-	179.7	-	126.0	120.0	143.5	122.8	130.0
1729	-	196.0	164.7	179.0	-	-	-	174.0	182.0	-	90.0	165.0	162.7
1730	92.0	162.0	150.0	157.3	206.0	-	140.5	70.0	143.3	150.8	163.3	145.3	144.8
1731	230.0	136.0	182.7	-	248.0	150.0	216.0	125.0	193.6	127.6	86.0	153.0	166.6
1732	108.0	96.0	271.5	158.5	-	-	156.5	256.0	164.0	151.2	84.0	190.0	170.7
1733	143.3	143.0	180.0	150.0	420.0	-	-	81.0	-	-	115.6	75.0	141.4
1734	-	170.0	166.0	138.5	168.0	126.0	208.0	113.5	148.8	147.7	151.0	119.5	146.1
1735	131.0	201.0	-	92.0	-	106.0	127.0	130.0	210.0	216.0	134.0	176.0	152.4
1736	100.0	72.0	110.0	232.0	188.0	122.0	94.7	145.7	92.0	151.2	204.0	172.7	150.5
1737	-	130.0	86.0	209.4	134.0	192.0	250.0	227.0	150.4	217.8	275.3	174.8	205.9
1738	253.0	136.0	196.0	246.0	-	272.0	267.5	231.5	187.4	192.0	178.3	143.7	215.3
1739	-	225.0	206.0	188.0	204.0	-	-	110.0	191.0	164.6	212.7	216.0	193.4
1740	392.0	-	-	176.0	-	126.0	153.7	276.0	147.7	190.0	258.0	200.0	186.3
1741	210.7	100.0	201.0	207.3	180.0	-	276.3	228.7	235.5	221.5	297.3	315.7	247.9
1742	-	-	200.0	236.7	416.0	-	274.7	175.0	123.0	206.2	104.0	212.3	203.1
1743	296.0	196.6	141.3	205.3	232.4	106.0	84.0	175.3	126.0	144.0	90.0	156.3	176.1
1744 <sup>8</sup>	-	-	144.0	130.0	164.0	142.0	172.0	119.8	128.7	134.0	173.4	226.0	156.2
1745	-	-	142.0	131.0	190.7	-	111.5	104.0	126.5	124.5	128.0	86.7	127.3

SOURCE: GAA, PA 78/94-102

CONTINUED...



TABLE II-10-A AVERAGE TONNAGE OF CARGO SHIPPED FROM ST. PETERSBURG TO AMSTERDAM ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	166.8	92.0	106.0	210.0	280.0	-	-	180.0	120.7	227.6	174.0	247.3	194.8
1747	122.7	169.1	203.2	186.0	172.0	-	64.0	130.3	136.3	144.0	185.2	93.0	151.3
1748	544.0	144.0	-	144.0	172.3	138.0	-	-	109.7	123.4	94.0	137.7	159.0
1749	104.0	132.0	121.0	126.0	127.0	252.0	134.0	125.2	117.5	153.7	-	284.0	142.6
1750	254.0	96.0	112.0	92.0	132.0	-	-	103.3	126.0	151.0	206.0	149.3	152.9
1751	96.0	108.0	-	130.0	125.0	-	-	112.0	122.0	113.3	189.1	205.6	159.4
1752	114.0	143.0	143.3	103.0	-	-	-	126.5	156.0	185.0	167.2	-	152.9
1753	175.0	162.0	129.3	211.0	-	110.0	144.0	142.0	134.7	147.3	196.8	122.0	142.1
1754	176.0	-	134.0	106.0	-	-	142.5	124.7	123.2	157.2	111.0	118.0	133.4
1755	156.0	-	68.0	129.0	107.0	146.0	-	98.0	131.3	220.0	131.0	-	122.5
1756	96.0	127.0	145.0	177.3	180.0	-	-	110.0	124.7	-	115.3	181.2	131.5
1757	112.0	-	174.7	142.7	138.0	144.0	114.7	146.0	134.0	174.4	309.0	-	100.9
1758	95.0	129.0	194.0	142.7	138.0	128.0	128.0	164.0	190.7	194.7	211.3	178.0	171.9
1759	169.7	140.0	200.0	105.6	143.3	-	202.0	160.0	195.2	193.6	-	204.0	180.0
1760	-	170.0	200.0	238.7	-	172.0	-	146.0	204.0	201.1	200.0	276.0	209.1
1761	214.0	300.0	184.0	292.0	-	-	180.0	72.0	380.0	120.0	190.7	-	221.7
1762	163.0	-	310.0	290.0	-	-	154.7	200.0	380.0	120.0	190.7	-	221.7
1763	208.0	316.0	285.3	290.0	-	252.0	192.0	200.0	232.0	196.5	212.3	260.0	207.5
1764	165.0	235.0	170.0	172.0	167.3	-	194.0	222.5	160.0	180.0	167.0	-	227.6
1765	269.0	196.0	240.0	355.0	264.0	-	-	235.0	181.0	220.0	148.0	160.0	182.1
1766	-	176.0	205.0	241.4	244.4	160.0	-	150.0	210.0	231.5	250.0	242.7	240.0
1767	278.0	-	226.0	269.3	265.0	173.5	222.4	166.7	331.5	217.3	274.5	183.0	222.3
1768	240.0	-	261.3	269.3	340.0	250.0	300.0	200.0	241.4	246.7	183.2	-	222.0
1769	168.0	220.0	250.0	220.0	76.0	-	154.0	221.5	222.5	212.0	358.7	-	250.9
1770	-	247.0	122.0	276.7	-	-	192.0	142.0	256.7	254.7	196.7	358.0	233.8
1771	-	-	257.5	196.0	204.0	-	192.0	142.0	256.7	254.7	196.7	-	228.8
1772	224.0	-	-	196.0	204.0	280.0	270.0	120.0	147.0	211.2	215.0	200.0	213.6
1773	208.0	-	280.0	221.5	146.0	187.1	250.0	177.3	210.7	207.7	160.7	-	202.1
1774	234.0	330.0	214.3	205.9	146.0	240.0	199.6	146.7	189.8	89.0	280.0	167.0	187.9
1775	187.0	187.0	206.0	204.0	-	248.0	137.3	166.0	197.0	209.6	214.0	237.0	217.4
1776	220.0	240.0	-	204.0	-	-	216.0	169.6	195.0	168.0	194.0	-	217.4
1777	131.0	-	185.0	268.0	149.0	-	-	176.6	195.0	168.0	194.0	-	192.1
1778	-	-	210.0	270.0	224.0	-	206.8	166.2	164.5	125.0	194.0	185.0	172.5
1779	-	-	196.4	180.0	180.0	202.0	173.3	165.1	160.7	215.2	203.0	180.0	177.2
1780	272.0	-	141.3	140.0	150.0	157.1	188.0	159.4	160.7	201.0	213.3	239.7	195.8
1781	238.7	186.7	181.4	160.0	134.0	210.0	184.0	176.6	250.6	214.4	332.0	244.0	198.1
1782	189.0	168.0	240.0	176.0	-	176.0	-	195.0	122.0	201.0	204.0	-	193.7
1783	189.0	72.0	210.0	193.6	-	202.0	167.3	-	114.3	174.8	204.0	-	198.7
1784	-	-	218.0	226.0	500.0	-	-	-	310.0	229.3	211.0	212.0	177.5
1785	-	247.0	120.0	227.3	180.8	-	206.0	192.0	244.5	242.7	253.2	171.0	230.6
1786	-	-	182.7	232.0	-	210.0	160.0	205.0	262.0	300.0	-	-	223.5
1787	-	-	170.0	182.7	170.0	-	229.0	203.0	184.8	152.5	216.0	100.0	182.2

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II-10-A AVERAGE TONNAGE OF CARGO SHIPPED FROM ST. PETERSBURG TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1767	-	-	200.0	190.0	160.0	-	245.0	26.0	230.0	160.0	172.0	205.5	184.1
1768	150.0	107.0	102.0	202.0	-	-	-	200.0	216.3	215.1	199.5	-	199.1
1769	-	105.0	102.0	191.3	292.0	-	185.0	-	225.2	136.7	106.6	238.0	199.0
1770	292.0	109.0	210.5	261.0	252.0	-	-	-	224.8	183.2	228.8	231.0	218.2
1791	258.3	265.0	306.0	226.0	-	160.0	132.0	243.7	218.0	234.0	221.6	198.6	235.2
1792	306.0	217.0	240.0	-	-	-	-	200.0	221.2	232.7	243.6	306.0	242.9
1793	-	-	-	-	-	146.0	128.0	200.0	180.0	195.3	100.0	218.0	190.4
1794	283.3	-	170.0	137.0	272.0	-	258.0	203.0	190.0	154.3	-	140.0	196.4
1795	216.0	-	50.0	-	-	-	-	100.0	-	-	-	200.0	176.5
1796	142.0	-	150.0	100.0	100.0	-	-	-	-	-	-	200.0	171.4
1797	-	-	NO DATA	AVAILABLE	100.0	-	-	-	-	-	-	-	-
1798	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1799	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1800	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1801	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1802	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1803	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1804	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1805	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1806	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1807	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1808	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1809	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1810	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1811	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1812	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1813	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	120.0	112.0	155.2	172.4	223.2	196.6	176.6
1815	390.0	201.0	261.0	102.0	-	220.0	156.0	196.9	-	126.4	106.2	-	177.5
1816	166.0	-	152.0	-	90.0	-	206.0	168.7	197.6	135.4	-	166.6	161.4
1817	265.0	226.0	700.0	64.0	-	-	107.0	104.9	172.9	209.9	170.0	232.3	190.9
1818	184.0	194.5	-	130.0	184.0	106.0	-	210.7	179.0	170.0	194.0	-	187.9
1819	146.0	-	174.0	170.0	-	-	-	214.0	191.0	191.6	126.0	103.0	164.4
1820	173.3	-	112.0	170.0	-	-	-	-	111.4	173.7	126.0	169.0	149.3
1821	-	-	206.0	-	116.0	-	90.0	79.0	148.2	119.3	80.0	143.0	130.8
1822	-	-	124.7	-	-	-	-	-	131.0	182.0	134.0	116.0	133.6
1823	19	-	42.0	-	-	-	-	-	-	-	-	-	42.0

SOURCE: CAA, PA 78/99-102

TABLE II-10-B  
AVERAGE TONNAGE OF CARGO SHIPPED FROM NARVA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE				
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
17051	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17061	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17071	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE												-				
17092	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17167	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1718	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1719	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1720	-	300.0	602.0	290.0	494.0	-	290.0	-	-	-	197.0	352.0	-	-	320.0	406.0	326.2
1721	-	-	-	-	-	-	370.0	-	-	-	372.0	410.0	-	-	256.0	412.0	384.0
1722	223.3	210.0	290.0	375.0	-	-	-	-	-	-	392.0	295.4	-	-	140.0	389.7	364.5
1723	-	-	632.0	-	-	400.0	-	-	-	-	327.0	342.0	-	-	378.7	414.0	397.2
1724	-	-	80.0	-	-	-	-	-	-	-	343.0	342.0	-	-	363.0	342.4	370.1
1725	252.0	-	276.0	359.0	-	-	-	-	-	-	343.0	277.3	-	-	366.8	340.3	340.3
1726	317.3	-	310.0	338.7	-	-	-	-	-	-	331.7	309.3	-	-	379.7	320.0	333.5
1727	376.0	-	348.7	294.7	-	-	-	-	-	-	299.3	303.0	-	-	353.7	342.8	339.1
1728	109.0	196.0	184.0	244.0	271.0	-	305.8	-	-	-	234.0	323.3	-	-	265.4	364.2	299.5
1729	-	219.0	230.0	334.0	312.0	250.0	283.9	-	-	-	218.6	289.6	-	-	275.3	328.0	277.8
1730	-	-	242.0	306.0	-	-	290.7	-	-	-	307.7	271.3	-	-	265.1	301.0	291.2
1731	-	-	246.0	296.0	-	276.0	280.2	-	-	-	245.4	266.1	-	-	299.1	280.0	280.8
1732	-	246.0	228.7	261.0	310.5	-	277.1	-	-	-	286.8	279.0	-	-	290.1	303.3	284.4
1733	-	204.0	280.0	277.3	-	244.4	294.3	-	-	-	273.0	279.6	-	-	307.1	310.0	285.9
1734	244.0	231.0	327.0	320.5	-	305.5	303.4	-	-	-	276.6	288.7	-	-	311.5	289.1	294.6
1735	337.3	-	245.0	329.7	-	317.6	304.6	-	-	-	290.0	313.1	-	-	315.6	329.0	302.1
1736	-	-	324.0	-	-	-	313.0	-	-	-	317.7	316.9	-	-	313.1	323.0	314.0
1737	-	-	-	238.0	-	-	304.5	-	-	-	318.7	318.4	-	-	314.5	292.7	313.0
1738	206.0	-	-	267.3	-	207.3	304.5	-	-	-	236.7	318.4	-	-	320.7	373.0	307.3
1739	-	-	248.0	270.0	-	277.4	316.6	-	-	-	288.4	306.6	-	-	319.8	318.1	307.0
1740	334.0	-	-	354.0	-	-	309.8	-	-	-	303.6	312.2	-	-	310.6	309.7	309.7
1741	-	-	-	340.0	-	-	321.3	-	-	-	333.7	331.0	-	-	304.5	318.3	324.0
1742	-	-	172.0	306.0	-	-	308.8	-	-	-	282.0	328.5	-	-	329.3	356.0	319.0
1743	167.0	200.0	256.3	320.5	-	178.0	287.0	-	-	-	279.6	294.8	-	-	285.1	268.0	282.9
1744	340.0	-	-	285.7	-	352.0	336.3	-	-	-	271.7	311.2	-	-	304.3	319.8	297.8
1745	214.0	330.0	-	271.2	-	-	325.9	-	-	-	287.3	329.1	-	-	280.9	101.0	318.4
															314.3	336.0	319.9

SOURCE: GAA, PA 78/79-102  
CONTINUED...

TABLE II.10.B  
AVERAGE TONNAGE OF CARGO SHIPPED FROM NARVA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	359.2	-	320.5	337.0	260.0	448.0	319.0	326.3	327.8	326.1	329.5	338.0	328.9
1747	-	344.0	294.0	274.0	-	-	333.8	332.8	307.7	314.0	322.8	332.7	328.6
1748	-	148.0	-	330.4	-	174.0	325.9	329.6	314.5	294.0	315.3	308.4	313.1
1749	-	-	172.0	-	-	350.0	329.5	306.0	331.3	321.7	324.7	292.8	321.2
1750	-	-	-	324.0	-	280.0	320.8	301.7	198.4	297.2	314.9	308.0	300.8
1751	184.0	277.0	-	326.0	-	-	327.2	326.8	280.7	246.2	330.1	333.3	317.8
1752	-	246.0	312.0	-	-	334.6	342.1	328.5	337.6	312.8	336.2	318.0	332.9
1753	-	-	342.0	-	402.0	331.6	341.9	311.0	278.4	392.0	337.9	332.0	338.2
1754	344.0	312.0	349.3	323.0	226.0	-	351.3	336.3	294.0	327.7	346.3	276.4	331.3
1755	378.0	-	362.0	381.7	338.0	344.7	351.3	331.8	361.8	307.9	355.7	437.0	339.7
1756	-	-	-	324.0	-	-	-	-	-	-	182.0	-	314.0
1757	-	-	-	-	-	-	-	-	-	-	-	-	-
1758	-	-	-	-	-	-	-	332.9	167.0	308.0	296.0	360.6	329.5
1759	-	-	-	-	276.0	-	341.9	415.0	340.0	334.4	314.8	-	338.6
1760	338.0	284.0	262.0	375.3	-	450.0	-	-	-	-	-	-	351.4
1761	-	-	-	-	-	-	-	-	-	-	-	-	-
1762	-	-	416.0	-	-	-	376.0	366.3	418.0	345.0	385.0	349.0	367.4
1763	-	-	188.0	341.0	-	-	368.2	344.3	362.7	341.3	362.3	374.0	364.5
1764	-	344.0	359.0	381.0	-	100.0	356.4	341.3	494.6	345.7	403.0	349.0	389.3
1765	472.0	-	-	226.0	416.0	-	353.1	359.6	364.4	164.0	348.6	368.7	363.5
1766	-	378.0	410.0	340.0	-	-	365.2	246.0	-	329.3	361.2	341.4	358.0
1767	394.0	-	337.0	364.0	148.0	416.0	362.8	381.3	342.7	399.0	392.0	328.0	374.3
1768	-	418.0	361.0	393.0	-	220.0	363.2	362.4	350.0	376.6	371.7	377.0	374.7
1769	-	-	371.0	417.0	418.0	394.8	387.2	349.0	401.1	383.6	355.5	-	389.1
1770	-	-	-	364.0	-	-	391.3	402.2	-	403.1	416.0	418.0	396.2
1771	-	-	408.0	365.3	-	432.0	379.2	418.0	417.3	-	-	-	388.8
1772	-	-	-	-	-	366.0	404.6	395.2	-	410.3	404.0	407.3	402.8
1773	-	318.0	-	494.0	426.0	399.7	387.0	-	396.0	-	-	372.5	391.7
1774	-	-	375.3	401.0	-	380.2	396.9	-	-	409.6	386.0	-	394.4
1775	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1776	-	-	418.0	-	-	415.3	421.4	418.0	-	-	-	-	-
1777	432.0	-	-	554.0	-	-	422.6	-	402.4	424.0	416.0	-	415.1
1778	-	-	413.5	-	-	-	425.9	434.7	423.0	424.0	425.9	404.0	425.9
1779	-	-	445.0	-	-	439.0	357.0	-	413.0	429.0	446.0	450.0	426.5
1780	438.0	-	-	432.0	-	-	463.1	425.5	-	438.5	439.5	-	432.7
1781	-	-	-	-	-	-	-	-	439.0	416.0	449.6	-	446.2
1782	-	-	-	-	-	426.0	-	418.0	-	-	-	-	-
1783	434.0	-	-	375.0	-	434.0	438.2	422.0	427.3	448.0	422.0	403.5	425.6
1784	-	392.0	437.0	434.0	-	-	437.2	422.6	176.0	422.0	399.9	434.2	415.9
1785	-	-	-	373.3	364.0	-	422.2	383.0	128.0	420.4	424.8	450.0	412.5

SOURCE: GAA, PA 78/90-102

CONTINUED...

TABLE II-10-8  
AVERAGE TONNAGE OF CARGO SHIPPED FROM NARVA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	-	478.0	-	430.5	-	-	404.6	432.2	374.5	361.4	421.6	370.2	407.2
1787	-	118.0	441.0	490.0	-	-	445.1	399.2	234.0	429.8	410.6	336.0	416.3
1788	-	-	498.0	466.0	-	443.3	434.1	339.4	84.0	434.3	142.0	423.5	420.0
1789	-	-	418.0	426.0	-	-	437.0	412.0	428.0	427.2	423.3	425.7	429.7
1790	-	-	364.0	-	-	-	440.9	441.4	316.6	433.1	438.7	435.0	419.1
1791 <sup>13</sup>	-	-	-	-	162.0	76.0	414.6	393.0	270.0	419.7	398.3	426.6	398.4
1792	288.0	339.0	-	426.0	346.0	427.6	434.8	315.3	445.0	439.5	436.3	-	425.6
1793	-	-	461.0	-	-	-	-	134.5	597.3	452.0	396.0	424.0	346.2
1794	426.0	-	-	-	482.0	441.1	428.7	330.0	367.6	434.1	449.6	-	421.4
1795 <sup>13</sup>	-	-	-	-	-	-	-	410.0	-	-	-	-	410.0
1796	-	-	-	410.0	-	-	444.0	443.5	322.7	377.0	-	402.0	404.6
1797	359.0	-	414.0	468.0	-	-	417.4	308.0	261.3	392.0	433.2	456.0	383.7
1798	-	-	-	404.7	-	-	496.0	56.0	402.0	-	-	-	375.8
1799	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	602.0	636.7	441.0	-	-	662.0	579.4
1801	-	-	-	-	-	678.0	-	-	-	-	-	-	678.0
1802	-	-	488.0	380.0	-	518.0	682.7	661.7	646.0	617.3	655.6	-	631.2
1803	667.3	-	-	706.0	520.0	-	-	-	-	590.0	-	-	614.0
1804	322.0	-	-	-	-	-	158.0	162.7	-	144.0	-	172.0	183.4
1805	-	-	171.0	285.0	474.0	-	372.0	183.3	373.0	68.5	247.0	124.0	229.9
1806	-	-	-	-	-	-	-	-	292.0	329.0	406.0	-	345.7
1807	-	-	-	-	-	-	-	234.0	104.0	-	156.0	142.0	165.1
1808 <sup>17</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1810	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1811	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1812	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1813	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1814	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1815	-	-	176.0	-	-	-	-	-	-	-	336.0	179.0	210.4
1816	-	-	-	196.0	510.0	-	119.3	530.0	132.0	588.0	328.0	646.0	408.7
1817	-	-	-	934.0	612.0	-	728.0	648.0	413.5	361.2	360.8	580.0	368.8
1818	718.0	-	-	-	264.0	-	299.0	656.8	710.0	606.0	683.0	-	727.8
1819	678.0	-	-	-	-	-	450.0	276.0	140.0	249.3	159.3	581.6	466.7
1820	533.0	314.0	-	754.7	-	126.0	718.0	581.3	-	383.8	173.0	200.0	298.5
1821	-	-	798.0	718.0	-	-	878.0	512.0	492.0	305.0	210.0	-	472.2
1822	-	836.0	-	78.0	-	-	424.8	130.0	130.0	232.0	814.0	834.0	553.8
1823	-	-	-	642.0	-	-	444.0	277.5	164.5	164.5	583.0	370.0	386.6
1824	-	-	-	-	-	211.0	283.0	290.0	191.6	140.8	-	188.0	229.8
1825	-	-	-	-	-	188.0	148.8	164.7	234.0	-	-	-	172.2

SOURCE: GAA, PA 78/04-102

TABLE II-10-C

AVERAGE TONNAGE OF CARGO SHIPPED FROM RIGA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE												-
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	24.0	206.4	176.0
1710 <sup>3</sup>	323.5	229.5	162.0	316.0	-	236.7	280.0	-	98.0	-	-	-	243.8
1711 <sup>4</sup>	-	96.0	34.0	93.5	-	-	-	-	-	-	-	-	84.0
1712 <sup>5</sup>	-	-	-	-	-	96.0	-	32.0	-	-	91.3	-	83.0
1713 <sup>5</sup>	-	154.0	235.5	236.2	249.0	-	-	-	-	-	-	-	229.2
1714 <sup>6</sup>	-	-	-	-	72.0	173.3	180.0	136.8	217.3	-	212.4	91.2	159.4
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	160.7	149.3	141.5	146.1
1716	-	158.1	139.3	146.2	246.9	241.2	100.0	-	-	-	-	-	230.0
1717	186.0	210.7	174.8	232.5	231.2	268.0	250.0	248.0	218.4	205.3	131.2	161.0	205.0
1718	215.0	-	230.0	187.0	297.0	166.0	130.0	-	-	-	174.3	235.3	219.9
1719	196.4	188.7	217.3	-	214.5	-	120.0	184.7	240.0	216.7	229.9	243.8	212.7
1720	236.7	204.8	308.0	-	140.0	72.0	150.2	191.5	215.2	221.9	273.3	136.8	198.1
1721	113.6	220.0	133.3	132.0	98.0	136.0	139.3	200.1	204.1	194.7	215.0	249.2	184.4
1722	162.0	219.5	157.0	165.0	-	200.0	189.6	198.8	212.9	221.7	234.3	118.0	196.9
1723	139.7	256.7	127.0	192.0	73.3	186.0	188.5	194.7	197.8	211.8	320.0	177.4	188.4
1724	167.0	224.8	183.3	203.3	40.0	126.8	151.8	172.0	165.3	158.9	169.6	158.9	166.4
1725	172.0	180.0	155.0	92.0	106.4	123.2	166.2	174.9	178.3	189.3	172.0	156.0	168.5
1726	172.9	190.0	153.7	125.3	104.5	150.0	213.5	178.2	184.5	174.2	189.5	185.5	176.7
1727	168.7	159.0	143.2	184.0	-	96.0	156.6	196.3	195.6	203.8	186.5	196.9	182.1
1728	163.6	126.0	110.3	74.0	-	137.6	213.1	-	160.4	204.9	212.7	196.8	187.7
1729	-	226.7	110.7	-	168.0	112.0	146.5	203.8	230.6	224.6	326.5	286.5	221.4
1730	197.3	167.6	71.3	-	-	167.0	170.1	199.6	198.9	226.2	225.7	181.2	196.0
1731	422.0	120.0	181.5	-	-	160.0	200.1	183.6	190.2	190.4	194.3	180.4	183.8
1732	186.0	150.4	150.5	216.5	114.0	149.4	152.0	185.0	208.3	184.2	207.3	220.0	183.6
1733	226.0	121.3	157.3	-	132.0	130.7	197.3	216.5	214.5	225.4	190.1	212.0	191.2
1734	150.0	195.6	218.0	171.6	160.0	-	185.3	175.5	184.2	172.6	226.8	222.7	189.6
1735	297.3	191.5	210.7	-	-	198.2	249.7	256.3	193.6	178.8	210.9	227.5	214.8
1736	235.0	-	273.0	165.0	104.0	196.2	205.2	243.7	247.3	220.9	201.1	238.4	223.0
1737	229.0	240.0	184.0	224.9	197.3	239.4	210.0	231.1	199.7	182.8	188.8	253.7	211.5
1738	220.0	184.0	223.0	195.2	118.0	207.7	212.5	257.2	194.9	210.4	191.5	260.8	216.3
1739	253.0	210.0	220.9	236.5	185.0	234.8	335.0	262.0	206.2	201.3	201.5	212.3	231.4
1740	219.3	-	-	182.5	222.0	204.0	147.2	209.8	215.7	193.6	225.9	214.4	207.4
1741	320.0	186.7	153.7	230.5	190.7	128.1	154.2	192.2	161.3	191.6	210.7	188.7	176.5
1742	172.0	184.0	182.7	160.5	178.0	118.0	163.4	188.4	174.2	176.8	144.2	168.0	174.6
1743	206.5	185.6	243.2	146.0	161.3	115.0	179.4	189.2	163.4	197.1	172.4	198.0	185.0
1744	293.0	172.0	212.0	190.3	192.0	117.0	171.6	180.1	184.7	161.5	186.7	182.0	179.1
1745	168.0	143.0	193.5	188.7	227.0	151.0	-	230.0	168.8	221.2	176.0	247.6	197.5

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II.18-C  
AVERAGE TONNAGE OF CARGO SHIPPED FROM RIGA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	194.0	-	217.0	264.0	-	174.9	157.6	258.3	208.7	160.8	176.2	211.1	208.2
1747	-	75.0	196.0	136.5	236.0	165.2	172.0	216.2	195.7	170.2	186.2	148.0	182.2
1748	213.2	-	-	235.1	157.2	156.3	156.0	200.2	164.1	111.7	199.2	194.2	181.5
1749	-	164.0	129.5	255.0	-	194.0	213.7	158.5	175.3	150.7	182.0	190.1	176.5
1750	212.7	98.0	206.7	-	195.3	149.3	230.7	166.2	187.7	194.2	164.4	164.2	182.6
1751	-	171.0	-	62.0	166.0	200.0	220.0	214.7	168.9	185.0	215.0	162.0	190.7
1752	154.7	163.5	211.0	186.0	-	206.0	138.2	176.6	190.2	134.0	230.0	153.5	175.7
1753	128.0	84.0	196.9	149.0	152.7	214.5	208.0	196.0	172.4	154.8	206.2	156.0	189.5
1754	143.0	144.8	189.4	173.3	-	136.5	184.9	182.5	227.4	142.8	223.8	203.1	191.1
1755	156.0	-	82.0	223.7	219.3	196.5	168.9	208.0	176.0	199.9	277.6	156.0	197.6
1756	182.7	-	160.0	218.0	-	240.0	212.6	279.7	252.4	216.5	243.7	266.8	241.3
1757	-	123.0	296.2	234.6	194.0	244.7	277.5	306.6	324.4	251.2	275.8	251.5	261.1
1758	165.7	197.4	283.3	362.0	142.0	-	274.4	240.3	173.3	228.9	132.0	245.5	235.0
1759	217.2	238.0	320.0	237.0	198.8	239.6	210.4	248.3	277.9	297.6	248.3	253.3	268.8
1760	118.0	108.7	232.0	253.6	180.0	-	313.5	319.1	255.8	237.8	279.9	314.8	246.2
1761	261.0	255.2	299.0	256.0	193.3	325.9	325.3	244.5	277.0	196.4	265.7	242.5	245.8
1762	236.0	118.0	297.3	-	-	240.0	298.0	324.5	270.6	251.8	258.5	297.0	278.6
1763	234.0	-	259.4	235.0	196.0	78.0	230.4	229.1	216.0	174.8	232.8	239.3	225.2
1764	212.0	163.3	217.6	281.5	168.0	192.5	224.3	259.4	227.0	285.8	250.2	270.9	245.9
1765	281.1	267.0	226.0	289.8	320.0	-	302.5	279.8	265.2	220.4	229.7	269.7	267.1
1766	228.7	243.5	260.0	263.6	308.0	236.5	166.2	228.7	218.0	302.2	319.7	220.9	245.1
1767	257.7	253.3	218.5	289.2	244.0	-	339.7	213.8	261.5	283.0	356.0	206.6	256.2
1768	213.0	165.0	206.2	260.3	204.0	-	225.6	218.6	222.9	228.0	228.7	262.0	223.0
1769	228.0	261.2	236.9	292.3	270.0	247.1	280.8	253.3	258.9	253.6	284.6	217.7	259.6
1770	224.0	185.5	219.0	345.2	214.0	80.0	232.4	305.0	265.7	314.4	293.5	246.0	275.3
1771	225.7	-	228.7	276.4	-	168.0	214.3	256.0	223.2	-	-	-	233.3
1772	84.0	235.6	266.7	288.0	316.2	182.6	238.0	295.7	261.4	242.9	202.4	216.2	238.8
1773	243.6	218.7	325.2	242.4	360.0	193.1	329.0	255.7	250.0	222.6	201.0	214.1	253.9
1774	148.0	180.0	271.6	268.9	292.0	189.6	286.5	308.2	247.9	293.3	280.5	252.9	267.5
1775	-	-	-	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1776	163.2	316.0	302.7	271.2	240.3	240.7	264.0	275.6	261.9	240.8	265.0	227.0	260.6
1777	244.0	132.0	263.3	234.7	162.0	207.4	286.3	-	233.8	251.6	324.5	356.0	281.7
1778	340.0	-	215.3	314.5	268.0	144.7	281.3	364.8	233.2	292.9	283.8	286.2	288.3
1779	294.4	167.3	269.0	241.3	212.0	289.3	250.0	254.0	309.5	285.0	281.6	-	273.1
1780	-	254.7	266.3	338.7	320.0	130.0	402.3	280.6	307.3	325.7	308.0	-	310.0
1781	214.0	289.0	298.0	506.0	240.0	127.0	150.0	158.0	158.8	127.4	223.7	-	193.1
1782	172.4	-	194.5	208.0	149.0	194.7	159.9	193.4	206.7	175.4	241.1	293.7	200.3
1783	166.8	343.8	196.5	282.4	272.9	272.9	176.0	277.2	235.8	170.7	170.7	195.1	228.9
1784	-	329.0	268.2	164.4	158.4	286.0	218.6	261.8	252.8	223.1	258.0	270.9	237.7
1785	166.0	166.5	-	211.0	274.7	222.0	193.5	225.7	227.5	203.6	304.2	272.6	228.4

CONTINUED...

SOURCE: CAN. PA 8090-102

TABLE 11-10-C

AVERAGE TONNAGE OF CARGO SHIPPED FROM RIGA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEARLY AVERAGE
1796	230.0	182.0	168.5	256.7	351.2	264.0	263.0	280.7	234.8	215.3	248.4	247.2	237.1
1797	161.0	238.5	173.5	283.1	228.0	214.0	189.0	240.6	190.7	225.6	230.4	163.3	205.8
1798	-	176.0	216.3	229.5	348.0	-	256.8	239.7	223.7	238.8	271.8	149.0	236.4
1799	-	171.0	221.1	223.2	164.7	92.0	224.4	252.3	206.0	274.5	255.8	275.0	246.2
1799 13	-	279.0	222.4	247.3	106.7	233.8	198.7	234.6	258.7	258.2	200.7	168.7	225.1
1799 13	-	-	-	-	148.0	189.5	225.2	235.5	233.7	245.5	291.1	260.0	242.7
1799 13	-	-	-	-	158.0	208.0	213.6	231.8	255.3	222.8	229.5	-	229.4
1799 13	-	-	-	-	120.0	160.0	165.7	198.4	210.2	202.6	220.5	149.9	182.5
1799 13	-	-	-	-	159.7	139.7	173.1	174.8	189.1	165.3	137.2	160.0	167.0
1799 13	-	-	-	-	112.0	154.0	164.0	138.5	150.3	154.2	220.7	207.3	157.0
1799 13	-	-	-	-	108.7	159.7	169.2	180.3	145.1	182.0	209.4	214.6	177.1
1799 13	-	-	-	-	310.0	310.0	170.5	204.2	156.0	168.0	260.0	201.6	196.7
1799 13	-	-	-	-	212.0	131.6	177.5	130.7	165.4	128.0	220.0	374.0	172.4
1799 13	-	-	-	-	482.0	298.0	-	-	171.8	109.0	109.0	-	152.0
1800	206.0	190.0	-	190.0	104.0	-	226.0	175.7	147.3	147.3	231.0	286.0	187.1
1801	195.0	208.0	258.0	290.0	203.5	169.8	210.3	207.6	144.5	158.0	179.6	-	176.5
1802	146.0	1160.0	228.5	231.2	213.0	178.9	198.6	189.3	240.8	201.6	222.1	-	209.8
1803	168.0	-	-	364.5	-	-	173.0	281.2	290.4	193.4	133.4	175.3	203.5
1804	158.0	-	214.0	279.0	242.7	-	158.0	183.4	-	187.2	-	164.1	193.1
1805	-	229.5	168.4	-	-	-	130.0	287.0	185.0	203.4	162.7	124.0	184.6
1806	-	116.0	-	113.0	212.0	132.0	-	120.0	64.0	168.7	110.0	222.0	180.7
1807	-	-	-	-	-	-	-	-	-	-	-	-	131.3
1807 17	-	-	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	-	-	-	-	-	-	-
1816	90.0	146.0	148.5	218.0	252.0	211.0	152.0	142.1	163.5	160.8	201.8	200.4	174.4
1817	202.0	160.2	192.0	100.7	183.0	172.0	221.7	290.6	192.7	173.8	163.3	207.0	191.8
1818	178.0	171.3	-	-	190.0	200.3	287.1	229.2	196.1	199.0	181.0	163.3	201.6
1819	-	130.0	218.0	-	156.0	-	207.0	195.4	199.7	222.5	120.0	126.7	189.3
1820	-	148.7	152.0	130.0	156.0	162.0	150.5	158.1	203.7	171.3	165.1	196.0	175.4
1821	-	146.0	226.0	146.0	254.0	192.0	186.4	189.9	190.9	179.4	179.0	189.6	187.0
1822	137.0	148.2	94.0	159.0	164.0	298.3	178.4	178.7	166.4	197.8	289.0	174.0	187.0
1823	-	-	-	211.5	216.0	-	183.5	157.7	82.0	124.0	211.2	-	166.4
1824	148.0	120.0	-	182.0	109.0	-	159.3	162.5	166.2	170.4	179.2	246.0	174.2
1825	-	-	145.0	-	109.0	200.0	281.3	160.4	160.0	194.0	-	200.0	164.1

SOURCE: C.A.A. PA 70798-102



TABLE II-10-3  
AVERAGE TONNAGE OF CARGO SHIPPED FROM VIENNA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE				
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1765	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1766	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1767	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1768	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1769	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1770	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1771	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1772	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1773	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1774	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1777	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1778	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1779	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1780	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1781	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1782	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1783	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1784	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1785	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CONTINUED...

SOURCE: CIAA, PA 78749-102

TABLE II-10-3

AVERAGE TONNAGE OF CARGO SHIPPED FROM VIENNA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE						
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC							
1766	278.0	-	204.0	-	246.0	-	248.0	-	296.0	-	258.0	-	338.0	-	344.0	-	339.3	277.8	
1767	-	-	-	332.0	-	248.0	-	296.0	-	208.0	-	333.2	-	338.0	-	348.0	-	329.8	329.8
1768	-	-	-	-	231.3	-	-	296.0	-	214.0	-	240.0	-	214.0	-	288.0	-	184.0	215.0
1769	-	-	-	-	251.0	-	-	208.0	-	262.5	-	262.5	-	306.0	-	-	-	-	241.5
1770	-	-	178.0	-	-	188.0	-	207.6	-	158.0	-	88.0	-	224.0	-	-	-	394.0	223.5
1771	-	-	-	-	186.0	-	-	-	-	-	-	338.0	-	219.7	-	-	-	248.0	251.1
1772	188.0	213.0	-	222.0	-	-	148.0	-	238.0	-	238.0	-	207.0	-	278.0	-	-	222.4	
1773	-	238.0	-	253.0	-	199.0	259.5	-	239.0	-	191.0	-	257.0	-	270.0	-	-	239.8	
1774	184.0	-	268.0	-	-	-	249.0	-	-	-	332.0	-	358.0	-	264.0	-	-	283.3	
1775	-	-	418.0	-	398.0	-	-	-	-	-	81.0	-	-	-	238.7	-	-	219.3	
1776	-	-	238.0	-	292.0	-	222.7	-	328.0	-	328.7	-	278.0	-	272.7	-	-	296.7	
1777	-	-	238.0	-	264.0	-	313.2	-	348.5	-	348.5	-	226.0	-	231.0	-	-	281.7	
1778	-	-	312.0	-	-	-	-	-	259.0	-	370.0	-	-	-	-	-	-	318.0	
1779	-	278.0	-	-	-	-	330.7	-	-	-	-	-	-	-	230.0	-	-	293.0	
1780	-	-	-	-	-	-	240.0	-	-	-	418.0	-	368.3	-	362.0	-	-	354.4	
1781	-	-	-	-	-	-	159.3	-	-	-	352.0	-	-	-	316.0	-	-	248.7	
1782	-	-	-	-	-	-	-	-	-	-	385.0	-	-	-	234.0	-	-	285.1	
1783	-	-	182.0	-	-	-	220.0	-	-	-	148.0	-	238.0	-	265.8	-	-	195.1	
1784	-	-	278.0	-	-	-	227.0	-	-	-	148.0	-	228.0	-	228.0	-	-	204.4	
1785	-	-	208.0	-	-	-	234.0	-	-	-	266.0	-	316.0	-	266.0	-	-	240.7	
1786	-	-	188.0	-	-	-	232.0	-	-	-	288.0	-	258.0	-	146.0	-	-	200.8	
1787	-	-	182.0	-	-	-	-	-	-	-	148.0	-	-	-	282.0	-	-	196.0	
1788	-	-	238.0	-	-	-	154.0	-	-	-	238.0	-	193.0	-	278.0	-	-	206.0	
1789	-	-	-	-	-	-	-	-	-	-	238.0	-	-	-	214.0	-	-	209.1	
1790	-	-	237.0	-	-	-	-	-	-	-	-	-	264.0	-	-	-	-	247.6	
1791	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	264.0	
1792	148.0	-	-	-	-	-	-	-	-	-	-	-	314.0	-	-	-	-	146.0	
1793	-	-	158.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	229.4	
1794	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	218.0	
1795	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1796	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1797	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1798	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1801	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1802	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1803	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1804	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1806	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1807	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1808	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1814	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1815	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1816	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1817	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1819	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1820	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1821	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1822	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1823	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1825	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1826	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1827	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1828	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1829	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1830	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1831	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1832	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1833	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1834	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1835	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1836	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1837	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1839	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1840	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1841	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1843	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1844	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1845	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1846	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1847	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1848	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1849	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1850	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1851	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1852	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1853	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1854	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1855	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1856	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1857	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1858	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1859	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1860	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1861	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1862	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1863	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1864	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1865	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1866	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1867	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1868	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1869	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1870	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1871	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1872	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1873	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1874	-	-	-	-															

TABLE II-10-9  
 AVERAGE TONNAGE OF CARGO SHIPPED FROM VIENNA TO AMSTERDAM  
 DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1766	220.0	-	-	-	250.0	-	-	-	-	114.0	200.0	-	210.2
1767	-	100.0	-	-	100.0	-	-	-	-	161.0	230.0	-	174.9
1768	-	-	-	-	-	104.0	-	-	227.0	-	105.0	220.0	200.0
1769	-	-	-	040.0	-	-	-	300.0	-	-	-	220.0	321.0
1770	-	-	-	-	-	-	-	-	-	-	190.0	120.0	122.0
1771	-	-	-	-	-	-	-	-	-	-	-	-	-
1772	-	120.0	-	-	-	90.0	-	-	-	150.0	270.0	-	162.0
1773	230.0	-	-	-	-	-	-	190.0	370.0	100.0	170.0	150.0	216.0
1774	-	-	-	210.0	-	-	-	100.0	200.0	132.0	130.0	150.0	105.0
1775	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	-	-	-	-	-	-	-	190.0	-	102.0	-	-	194.0
1777	-	-	-	-	-	-	-	-	-	-	170.0	-	170.0
1778	100.0	-	-	-	-	-	-	200.0	-	120.0	-	-	170.0
1779	-	-	-	-	-	120.0	-	-	-	-	-	-	127.0
1800	-	-	-	-	-	-	-	-	200.0	-	-	-	100.0
1801	-	-	-	-	-	010.0	-	-	-	100.0	-	-	100.0
1802	-	-	-	-	-	-	-	-	-	100.0	-	-	200.0
1803	-	300.0	-	-	-	-	-	-	-	-	-	-	200.0
1804	-	-	-	-	-	-	-	090.0	-	100.0	-	-	200.0
1805	-	-	-	-	-	190.0	-	-	-	230.0	-	-	197.0
1806	-	-	-	-	-	-	-	-	100.0	-	-	-	100.0
1807	-	-	-	-	-	-	-	-	-	-	-	-	197.0
1808	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1809	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1810	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1811	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1812	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1813	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1814	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1815	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1816	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1817	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1818	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1819	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1820	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1821	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1822	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1823	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1824	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1825	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1826	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1827	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1828	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1829	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1830	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1831	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1832	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1833	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1834	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1835	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1836	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1837	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1838	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1839	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1840	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1841	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1842	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1843	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1844	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1845	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1846	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1847	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1848	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1849	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1850	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1851	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1852	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1853	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1854	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1855	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1856	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1857	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1858	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1859	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1860	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1861	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1862	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1863	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1864	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1865	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1866	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1867	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1868	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1869	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1870	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1871	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1872	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1873	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1874	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1875	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1876	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1877	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1878	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1879	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1880	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1881	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1882	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1883	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1884	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1885	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1886	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1887	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1888	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1889	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1890	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1891	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1892	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1893	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1894	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1895	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1896	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1897	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1898	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1899	-	-	-	-	-	-	-	-	-	-	-	-	100.0
1900	-	-	-	-	-	-	-	-	-	-	-	-	100.0

SOURCE: CIA. SA 7070-102





TABLE II-10-2  
 AVERAGE TONNAGE OF CARGO SHIPPED FROM MEVAL TO AMSTERDAM  
 DISTRIBUTED ACCORDING TO REGISTERED MONTH OF  
 ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE				
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1795	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1797	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1798	-	-	-	-	-	-	154.0	-	-	-	-	-	-	-	-	-	154.0
1799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1799-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1792	-	-	-	-	-	-	80.0	-	-	-	-	-	-	-	-	-	80.0
1793	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1794	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1794-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1795	-	-	-	-	-	139.0	112.0	106.0	146.0	-	-	-	-	-	-	-	176.0
1797	122.0	-	-	-	-	-	96.0	-	-	-	-	-	-	-	-	-	136.0
1799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	109.0
1799	-	-	-	-	-	250.0	-	-	-	-	-	-	-	-	-	-	159.0
1800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1801	-	-	-	-	-	-	614.0	-	-	-	-	-	-	-	-	-	-
1802	-	-	-	-	-	-	152.0	220.0	268.0	-	-	-	-	-	-	-	614.0
1803	-	-	-	-	-	-	166.0	-	-	-	-	-	-	-	-	-	190.0
1804	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	159.0
1805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1806	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1808-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1813-6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	106.0	146.0	-	-	-	-	-	-	-	-	119.3
1816	-	-	-	-	-	-	-	-	110.0	171.0	-	-	-	-	-	-	153.3
1817	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1818	-	-	-	-	-	177.0	110.0	-	144.0	-	-	-	-	-	-	-	150.0
1819	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1820	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1821	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1822	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1823	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1825-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170.0	170.0

SOURCE: CIA, PA 78700-102

TABLE II-10-J  
AVERAGE TONNAGE OF CARGO SHIPPED FROM ESTONIA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE				
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1705 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1709 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1710 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1711 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1715 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	-	-	-	-	70.0	-	-	-	-	-	-	-	-	-	-	70.0
1717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.0
1718	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.0
1719	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400.0
1720	-	-	-	-	-	250.0	-	-	-	-	-	-	-	-	-	-	420.0
1721	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	270.0
1722	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1723	-	-	-	-	-	400.0	-	-	-	-	-	-	-	-	-	-	-
1724	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70.0
1725	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70.0
1726	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400.0
1727	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	420.0
1728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1729	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1730	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1731	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1732	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1733	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1734	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1735	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1736	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1737	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1738	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1739	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1741	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1742	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1743	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1744	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6
1745	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	201.6

CONTINUED...

SOURCE: C.A.A. IN 7044-102

TABLE II-10-J  
AVERAGE TONNAGE OF CARGO SHIPPED FROM ESTONIA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	378.0	312.0	-	-	-	213.3	347.2	287.0	-	237.3	-	200.4	240.4
1747	-	282.0	-	-	-	-	195.0	237.5	80.0	-	330.0	334.0	280.9
1748	-	-	312.0	-	-	-	340.5	125.0	272.7	345.0	326.0	310.0	305.0
1749	-	150.0	320.0	-	350.0	291.0	90.0	-	310.0	230.4	332.0	260.3	265.0
1750	-	172.0	232.0	-	-	-	280.3	300.0	277.0	214.0	230.7	332.0	235.0
1751	-	-	-	-	-	204.2	-	275.3	281.0	122.0	325.3	330.0	270.1
1752	-	-	-	-	316.0	214.0	-	102.0	68.0	-	-	294.0	299.2
1753	130.0	166.0	-	-	-	152.0	-	140.0	-	160.0	64.0	97.0	294.0
1754	-	-	-	-	-	102.0	104.0	-	-	-	-	50.0	119.3
1755	-	-	-	-	-	-	74.0	-	-	-	-	-	129.0
1756	-	-	-	-	-	-	-	-	-	-	-	-	102.0
1757	-	-	-	-	-	-	-	-	-	-	-	-	74.0
1758	-	-	-	-	-	-	-	-	-	-	-	-	-
1759	-	-	-	-	-	-	235.0	-	150.0	210.0	-	-	181.3
1760	-	-	95.0	-	-	335.0	-	-	160.0	-	-	-	197.7
1761	-	412.0	290.0	-	-	170.0	176.0	-	130.0	160.0	-	160.0	106.9
1762	272.0	-	-	-	-	100.0	317.3	106.0	336.0	240.0	-	-	267.0
1763	-	-	310.0	-	230.0	-	-	110.0	-	225.0	-	-	210.2
1764	-	-	100.0	-	-	200.0	200.0	170.0	-	170.0	-	-	165.1
1765	-	-	210.0	-	-	-	222.0	-	160.0	170.0	-	-	167.0
1766	00.0	-	-	-	-	-	100.0	-	-	130.0	-	-	133.1
1767	-	160.0	-	-	-	-	204.0	205.0	172.7	100.0	-	-	105.2
1768	-	180.0	-	-	102.0	-	175.0	220.0	150.3	150.0	-	-	195.9
1769	107.3	-	-	-	-	200.0	200.0	219.2	173.5	170.0	-	-	107.3
1770	-	-	-	-	-	-	217.0	200.0	-	154.0	-	-	241.0
1771	210.7	-	-	-	-	-	226.0	202.3	375.0	-	-	-	243.7
1772	-	100.3	110.0	-	-	194.0	224.7	204.7	210.0	376.7	-	-	226.0
1773	140.0	-	200.0	-	302.0	104.0	210.3	266.7	304.0	-	-	-	217.5
1774	216.0	120.0	-	-	-	133.0	326.4	173.3	196.0	-	-	-	211.1
1775	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	202.7	160.0	-	241.1
1776	155.3	-	210.0	-	-	211.4	250.2	-	-	-	-	-	-
1777	200.0	170.0	300.0	-	100.0	270.0	315.5	326.0	190.0	260.0	-	-	234.0
1778	100.0	101.0	215.3	-	220.0	-	274.7	-	170.5	290.0	200.7	165.1	200.0
1779	700.0	-	-	250.0	-	234.0	371.1	170.0	315.3	190.0	270.0	304.7	280.1
1780	-	-	100.0	232.0	-	-	216.0	210.0	290.3	224.0	213.0	-	255.1
1781	600.0	-	101.0	240.0	170.0	134.0	-	351.5	213.3	254.0	210.0	-	201.1
1782	100.0	-	200.0	230.0	-	-	-	-	-	-	-	-	240.5
1783	225.3	100.0	160.0	170.0	632.0	194.0	100.0	220.0	222.0	-	205.0	203.0	237.0
1784	-	-	210.3	120.0	-	194.0	150.0	173.0	245.3	334.7	103.0	200.0	210.7
1785	-	254.0	-	-	-	-	351.0	351.0	-	374.0	-	700.0	340.0
1786	-	-	-	-	-	-	270.0	270.0	301.6	-	377.0	-	303.2

SOURCE: GAA, PA 70790-102

CONTINUED...



TABLE II-10-F  
AVERAGE TONNAGE OF CARGO SHIPPED FROM ESTONIA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705	-	-	-	100.0	152.0	-	33.0	-	-	199.0	100.0	-	195.0
1707	-	-	200.0	470.0	-	-	151.0	190.0	144.0	62.0	120.0	110.0	167.5
1708	-	-	-	-	-	-	290.0	169.0	-	100.0	-	-	100.0
1709	130.0	100.0	-	344.0	-	-	410.0	90.0	200.7	274.0	174.0	190.0	246.5
1710	170.0	-	-	00.0	161.0	-	-	-	-	134.0	204.7	126.7	153.1
1711	-	-	-	-	-	-	104.0	152.7	200.7	63.0	134.0	210.0	150.0
1712	-	100.0	-	-	-	90.0	-	-	100.0	200.0	222.0	-	200.7
1713	170.0	-	124.0	-	210.0	-	16.0	-	254.0	120.0	-	-	161.6
1714	-	-	-	-	300.0	-	44.0	320.0	-	414.0	-	-	340.0
1715	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	304.0	-	-	-	-	-	144.0	144.0	174.0	-	-	174.0
1717	442.0	-	170.0	-	-	-	100.0	70.0	-	-	362.0	-	240.4
1718	100.0	-	120.0	-	-	-	-	00.0	164.0	-	-	-	131.3
1719	-	-	-	-	-	-	-	-	-	-	-	-	126.0
1800	-	-	-	-	-	-	-	-	126.7	-	-	-	126.7
1801	-	-	-	-	-	-	-	-	-	322.0	-	-	322.0
1802	-	-	-	-	-	-	100.0	-	340.0	100.0	150.0	-	226.3
1803	100.0	-	-	-	-	113.0	122.0	157.3	200.0	120.0	-	-	152.0
1804	-	-	-	-	-	-	-	-	-	211.3	-	-	211.3
1805	-	-	-	-	-	-	192.7	105.0	290.0	-	221.0	104.0	224.0
1806	100.0	-	141.0	200.0	-	-	-	-	314.0	-	-	-	200.0
1807	-	-	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1809	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1810	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1811	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1812	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1813	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0
1815	-	-	-	-	-	-	-	100.0	322.0	-	-	-	182.0
1816	-	-	270.0	-	-	-	190.0	314.0	-	252.0	350.0	-	254.0
1817	-	114.0	-	-	-	130.7	250.0	420.0	207.0	100.0	-	-	270.0
1818	-	-	-	-	-	-	70.0	500.0	-	140.0	-	-	200.0
1819	-	100.0	-	-	-	-	-	352.0	372.0	194.0	-	-	234.5
1820	-	-	-	-	-	-	-	-	210.0	-	-	150.0	297.0
1821	-	-	-	-	-	-	220.0	120.0	-	200.0	-	-	180.0
1822	-	-	-	-	-	-	100.0	60.0	-	-	142.0	-	104.7
1823	-	-	-	-	-	-	290.0	120.0	-	-	242.0	-	217.3
1824	-	-	-	-	4.0	-	204.0	-	150.7	-	-	-	164.0
1825	-	-	-	-	-	-	-	122.0	-	-	-	-	122.0

SOURCE: CAA, PA 70/90-102

TABLE II-10-5 AVERAGE TONNAGE OF CARGO SHIPPED FROM FREDERIKSMANN TO AMSTERDAM ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1744	-	-	-	-	-	-	-	-	232.0	-	-	-	232.0
1745	-	-	64.0	-	-	246.0	179.0	-	244.0	-	-	-	186.4
1746	-	-	-	-	-	-	-	290.0	-	240.0	-	240.0	207.0
1747	-	-	312.0	-	336.0	-	250.0	286.0	252.0	-	239.3	-	207.1
1748	-	-	-	-	-	-	64.0	170.7	408.0	-	-	324.0	233.1
1749	312.0	-	-	-	-	-	163.3	240.0	-	234.0	208.0	94.0	190.2
1750	-	-	-	-	-	230.0	-	138.0	-	138.0	-	-	192.3
1751	-	-	-	-	-	234.0	-	130.0	-	242.0	-	-	202.0
1752	-	232.0	-	-	-	-	-	170.0	151.0	-	172.0	-	177.0
1753	-	-	-	-	-	-	-	163.0	-	-	-	-	163.0
1754	-	-	-	-	170.0	-	-	106.0	114.0	120.0	-	-	129.6
1755	-	-	-	-	-	-	-	176.0	176.0	109.0	-	-	123.3
1756	-	-	-	-	-	106.0	-	-	-	-	172.0	-	246.7
1757	-	-	-	-	104.0	-	-	300.5	-	-	-	-	230.3
1758	-	-	-	-	-	-	-	264.0	341.0	-	-	120.0	244.4
1759	-	-	-	-	-	-	274.0	352.0	90.0	164.0	-	256.0	253.0
1760	-	-	-	-	-	-	-	206.0	370.0	234.0	-	-	297.3
1761	-	-	-	-	-	-	-	170.0	316.0	-	392.0	-	292.7
1762	-	-	330.0	-	-	-	313.0	-	-	431.0	-	-	332.7
1763	-	-	-	-	-	220.0	220.0	-	-	130.0	-	270.0	200.0
1764	-	-	-	-	-	-	-	190.0	-	-	202.0	-	211.6
1765	-	-	-	-	-	-	-	220.0	-	-	-	-	226.7
1766	-	-	170.0	-	350.0	-	196.0	132.0	-	140.0	250.0	-	206.7
1767	-	-	-	-	-	-	-	180.3	-	-	-	-	172.0
1768	140.0	-	376.0	-	-	-	224.0	170.0	-	-	-	-	206.3
1769	-	-	240.0	-	-	148.0	201.0	-	270.0	-	-	216.0	195.4
1770	-	-	-	-	-	-	205.0	-	270.0	131.0	-	240.0	214.0
1771	-	-	-	-	-	-	271.0	250.0	-	-	-	-	237.3
1772	-	-	106.0	-	-	-	216.0	-	-	-	296.0	-	216.0
1773	-	-	-	-	-	150.0	350.0	170.0	-	-	-	150.0	242.0
1774	-	-	432.0	-	-	90.0	216.0	394.0	-	170.0	-	216.0	195.0
1775	-	-	-	-	-	-	-	151.0	164.0	-	-	-	-
1776	-	-	-	-	-	-	-	-	-	-	-	-	-
1777	-	-	-	-	-	-	-	-	-	100.0	-	-	100.0
1778	-	-	-	-	-	-	-	-	-	-	-	-	-
1779	225.0	-	-	-	-	-	64.0	-	-	-	-	-	446.0
1780	-	-	-	-	-	60.0	233.3	-	-	-	410.0	-	236.7
1781	-	-	-	-	-	-	200.3	430.0	-	-	316.0	-	323.0
1782	-	-	-	-	-	-	133.0	133.0	-	-	170.0	-	148.3
1783	-	-	-	-	-	-	227.0	170.0	-	224.0	350.0	-	190.0
1784	-	-	-	-	-	-	290.0	244.7	324.0	172.0	-	-	236.3

SOURCE: GAA, PA 70/90-102

CONTINUED...



TABLE II-10-A  
 AVERAGE TONNAGE OF CARGO SHIPPED FROM COURLAND TO AMSTERDAM  
 DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1795	100.0	-	177.3	137.4	113.9	106.0	133.0	116.0	-	133.0	131.5	130.0	130.2
1797	100.0	100.0	126.0	174.0	100.0	100.0	137.0	102.0	140.0	130.7	104.0	221.0	167.0
1798	170.0	-	144.7	310.0	151.0	177.0	100.0	110.0	103.0	-	90.0	-	109.5
1799	170.0	-	-	120.0	-	-	206.0	-	-	-	-	-	175.3
1800	-	124.0	-	-	140.0	162.0	173.0	122.0	167.2	-	-	-	160.9
1801	-	100.0	-	-	150.0	150.0	200.5	140.0	161.0	94.0	149.0	-	154.0
1802	-	-	110.0	272.0	151.0	170.7	123.0	100.0	164.0	104.0	100.0	-	156.0
1803	210.0	-	-	160.0	262.0	165.9	152.0	70.0	212.0	-	136.0	210.0	168.3
1804	210.0	-	-	151.0	130.0	-	150.0	117.3	-	102.0	-	126.0	151.5
1805	-	-	182.5	100.0	130.0	157.2	153.0	100.5	-	100.0	70.0	-	157.3
1806	-	110.0	-	210.0	210.0	100.0	102.0	121.3	100.0	170.0	-	-	157.1
1807	-	-	-	150.0	-	100.3	100.0	100.3	-	-	-	124.0	126.0
1808	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1809	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1810	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1811	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1812	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1813	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1814	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	102.0	100.7	130.4	132.0	167.2	-	130.0	210.0	160.0
1816	-	-	-	-	152.0	152.0	154.0	141.3	100.0	230.7	109.0	-	160.0
1817	-	-	-	100.0	130.0	170.0	100.5	103.0	132.7	96.0	167.3	206.0	140.2
1818	-	-	-	-	152.1	97.0	126.7	120.0	100.0	120.0	110.0	-	130.3
1819	-	-	-	152.0	152.0	123.0	94.0	82.0	95.0	81.0	-	-	115.0
1820	-	-	-	92.0	92.0	77.0	130.7	120.7	-	-	150.0	-	110.0
1821	-	-	-	-	100.5	100.5	123.3	130.0	-	142.0	-	64.0	127.0
1822	-	110.0	142.0	150.0	-	137.3	94.0	110.0	60.0	170.0	-	-	141.2
1823	-	120.0	-	-	125.0	-	-	-	-	130.0	-	-	125.5
1824	-	-	-	-	200.0	-	130.0	130.0	-	-	-	-	143.5
1825	-	-	100.0	-	217.0	203.0	-	-	-	-	-	-	192.0
1826	-	-	-	-	123.7	111.5	127.0	106.7	190.0	-	-	-	129.5

SOURCE: CAA, PA 70/90-102

TABLE II-111 PERCENTAGE OF TONNAGE OF TANKERS SHIPPED FROM RUSSIAN (BALTIC) PORTS TO AMSTERDAM  
 DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1967	100	100	100	100	100	100	100	100	100	100	100	100
1968	100	100	100	100	100	100	100	100	100	100	100	100
1969	100	100	100	100	100	100	100	100	100	100	100	100
1970	100	100	100	100	100	100	100	100	100	100	100	100
1971	100	100	100	100	100	100	100	100	100	100	100	100
1972	100	100	100	100	100	100	100	100	100	100	100	100
1973	100	100	100	100	100	100	100	100	100	100	100	100
1974	100	100	100	100	100	100	100	100	100	100	100	100
1975	100	100	100	100	100	100	100	100	100	100	100	100
1976	100	100	100	100	100	100	100	100	100	100	100	100
1977	100	100	100	100	100	100	100	100	100	100	100	100
1978	100	100	100	100	100	100	100	100	100	100	100	100
1979	100	100	100	100	100	100	100	100	100	100	100	100
1980	100	100	100	100	100	100	100	100	100	100	100	100
1981	100	100	100	100	100	100	100	100	100	100	100	100
1982	100	100	100	100	100	100	100	100	100	100	100	100
1983	100	100	100	100	100	100	100	100	100	100	100	100
1984	100	100	100	100	100	100	100	100	100	100	100	100
1985	100	100	100	100	100	100	100	100	100	100	100	100
1986	100	100	100	100	100	100	100	100	100	100	100	100
1987	100	100	100	100	100	100	100	100	100	100	100	100
1988	100	100	100	100	100	100	100	100	100	100	100	100
1989	100	100	100	100	100	100	100	100	100	100	100	100
1990	100	100	100	100	100	100	100	100	100	100	100	100
1991	100	100	100	100	100	100	100	100	100	100	100	100
1992	100	100	100	100	100	100	100	100	100	100	100	100
1993	100	100	100	100	100	100	100	100	100	100	100	100
1994	100	100	100	100	100	100	100	100	100	100	100	100
1995	100	100	100	100	100	100	100	100	100	100	100	100
1996	100	100	100	100	100	100	100	100	100	100	100	100
1997	100	100	100	100	100	100	100	100	100	100	100	100
1998	100	100	100	100	100	100	100	100	100	100	100	100
1999	100	100	100	100	100	100	100	100	100	100	100	100
2000	100	100	100	100	100	100	100	100	100	100	100	100
2001	100	100	100	100	100	100	100	100	100	100	100	100
2002	100	100	100	100	100	100	100	100	100	100	100	100
2003	100	100	100	100	100	100	100	100	100	100	100	100
2004	100	100	100	100	100	100	100	100	100	100	100	100
2005	100	100	100	100	100	100	100	100	100	100	100	100
2006	100	100	100	100	100	100	100	100	100	100	100	100
2007	100	100	100	100	100	100	100	100	100	100	100	100
2008	100	100	100	100	100	100	100	100	100	100	100	100
2009	100	100	100	100	100	100	100	100	100	100	100	100
2010	100	100	100	100	100	100	100	100	100	100	100	100
2011	100	100	100	100	100	100	100	100	100	100	100	100
2012	100	100	100	100	100	100	100	100	100	100	100	100
2013	100	100	100	100	100	100	100	100	100	100	100	100
2014	100	100	100	100	100	100	100	100	100	100	100	100
2015	100	100	100	100	100	100	100	100	100	100	100	100
2016	100	100	100	100	100	100	100	100	100	100	100	100
2017	100	100	100	100	100	100	100	100	100	100	100	100
2018	100	100	100	100	100	100	100	100	100	100	100	100
2019	100	100	100	100	100	100	100	100	100	100	100	100
2020	100	100	100	100	100	100	100	100	100	100	100	100

SHIPPED ONLY IN PORTS

CONTINUED...





STATE OF CALIFORNIA  
 DEPARTMENT OF CORRECTIONS  
 RECEIPTS OF GOODS ISSUED FROM ST. PETERSBURG TO MEMBERS OF THE  
 PENITENTIARY

STATE OF CALIFORNIA

NO.	NAME	QUANTITY	UNIT	PRICE	TOTAL
1	...	...	...	...	...
2	...	...	...	...	...
3	...	...	...	...	...
4	...	...	...	...	...
5	...	...	...	...	...
6	...	...	...	...	...
7	...	...	...	...	...
8	...	...	...	...	...
9	...	...	...	...	...
10	...	...	...	...	...
11	...	...	...	...	...
12	...	...	...	...	...
13	...	...	...	...	...
14	...	...	...	...	...
15	...	...	...	...	...
16	...	...	...	...	...
17	...	...	...	...	...
18	...	...	...	...	...
19	...	...	...	...	...
20	...	...	...	...	...
21	...	...	...	...	...
22	...	...	...	...	...
23	...	...	...	...	...
24	...	...	...	...	...
25	...	...	...	...	...
26	...	...	...	...	...
27	...	...	...	...	...
28	...	...	...	...	...
29	...	...	...	...	...
30	...	...	...	...	...
31	...	...	...	...	...
32	...	...	...	...	...
33	...	...	...	...	...
34	...	...	...	...	...
35	...	...	...	...	...
36	...	...	...	...	...
37	...	...	...	...	...
38	...	...	...	...	...
39	...	...	...	...	...
40	...	...	...	...	...
41	...	...	...	...	...
42	...	...	...	...	...
43	...	...	...	...	...
44	...	...	...	...	...
45	...	...	...	...	...
46	...	...	...	...	...
47	...	...	...	...	...
48	...	...	...	...	...
49	...	...	...	...	...
50	...	...	...	...	...
51	...	...	...	...	...
52	...	...	...	...	...
53	...	...	...	...	...
54	...	...	...	...	...
55	...	...	...	...	...
56	...	...	...	...	...
57	...	...	...	...	...
58	...	...	...	...	...
59	...	...	...	...	...
60	...	...	...	...	...
61	...	...	...	...	...
62	...	...	...	...	...
63	...	...	...	...	...
64	...	...	...	...	...
65	...	...	...	...	...
66	...	...	...	...	...
67	...	...	...	...	...
68	...	...	...	...	...
69	...	...	...	...	...
70	...	...	...	...	...
71	...	...	...	...	...
72	...	...	...	...	...
73	...	...	...	...	...
74	...	...	...	...	...
75	...	...	...	...	...
76	...	...	...	...	...
77	...	...	...	...	...
78	...	...	...	...	...
79	...	...	...	...	...
80	...	...	...	...	...
81	...	...	...	...	...
82	...	...	...	...	...
83	...	...	...	...	...
84	...	...	...	...	...
85	...	...	...	...	...
86	...	...	...	...	...
87	...	...	...	...	...
88	...	...	...	...	...
89	...	...	...	...	...
90	...	...	...	...	...
91	...	...	...	...	...
92	...	...	...	...	...
93	...	...	...	...	...
94	...	...	...	...	...
95	...	...	...	...	...
96	...	...	...	...	...
97	...	...	...	...	...
98	...	...	...	...	...
99	...	...	...	...	...
100	...	...	...	...	...

CONTINUED...







TABLE II-11-13

PERCENTAGE OF CARGO INVENTORY SHIPPED FROM WAREHOUSE TO AIRCRAFT  
REGISTERED ACCORDING TO REGISTERED WEIGHT OF AIRCRAFT

MONTH OF ARRIVAL

MONTH OF ARRIVAL	0-1000	1000-2000	2000-3000	3000-4000	4000-5000	5000-6000	6000-7000	7000-8000	8000-9000	9000-10000	10000-15000	15000-20000	20000-25000	25000-30000	30000-35000	35000-40000	40000-45000	45000-50000	50000-55000	55000-60000	60000-65000	65000-70000	70000-75000	75000-80000	80000-85000	85000-90000	90000-95000	95000-100000		
JAN	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
FEB	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
MAR	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
APR	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
MAY	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
JUN	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
JUL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
AUG	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
SEP	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
OCT	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
NOV	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
DEC	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

SHIPPED FROM WAREHOUSE TO AIRCRAFT

CONTINUED...



TABLE III  
 PERCENTAGE OF CARGO DAMAGE SUFFERED FROM WAGON TO AIRBORNE  
 EQUIPMENT ACCORDING TO REGISTERED QUANTITY OF ARRIVAL

WAGON NO.	QUANTITY	PERCENTAGE	REMARKS	MONTH OF ARRIVAL											
				JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.		
1000	100	1.0		20.4	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	22.0
1001	100	1.0		20.5	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	22.0	22.1
1002	100	1.0		20.6	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	22.0	22.1	22.2
1003	100	1.0		20.7	21.3	21.4	21.5	21.6	21.7	21.8	21.9	22.0	22.1	22.2	22.3
1004	100	1.0		20.8	21.4	21.5	21.6	21.7	21.8	21.9	22.0	22.1	22.2	22.3	22.4
1005	100	1.0		20.9	21.5	21.6	21.7	21.8	21.9	22.0	22.1	22.2	22.3	22.4	22.5
1006	100	1.0		21.0	21.6	21.7	21.8	21.9	22.0	22.1	22.2	22.3	22.4	22.5	22.6
1007	100	1.0		21.1	21.7	21.8	21.9	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7
1008	100	1.0		21.2	21.8	21.9	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8
1009	100	1.0		21.3	21.9	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9
1010	100	1.0		21.4	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	23.0
1011	100	1.0		21.5	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	23.0	23.1
1012	100	1.0		21.6	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	23.0	23.1	23.2
1013	100	1.0		21.7	22.3	22.4	22.5	22.6	22.7	22.8	22.9	23.0	23.1	23.2	23.3
1014	100	1.0		21.8	22.4	22.5	22.6	22.7	22.8	22.9	23.0	23.1	23.2	23.3	23.4
1015	100	1.0		21.9	22.5	22.6	22.7	22.8	22.9	23.0	23.1	23.2	23.3	23.4	23.5
1016	100	1.0		22.0	22.6	22.7	22.8	22.9	23.0	23.1	23.2	23.3	23.4	23.5	23.6
1017	100	1.0		22.1	22.7	22.8	22.9	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7
1018	100	1.0		22.2	22.8	22.9	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8
1019	100	1.0		22.3	22.9	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9
1020	100	1.0		22.4	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	24.0
1021	100	1.0		22.5	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	24.0	24.1
1022	100	1.0		22.6	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	24.0	24.1	24.2
1023	100	1.0		22.7	23.3	23.4	23.5	23.6	23.7	23.8	23.9	24.0	24.1	24.2	24.3
1024	100	1.0		22.8	23.4	23.5	23.6	23.7	23.8	23.9	24.0	24.1	24.2	24.3	24.4
1025	100	1.0		22.9	23.5	23.6	23.7	23.8	23.9	24.0	24.1	24.2	24.3	24.4	24.5
1026	100	1.0		23.0	23.6	23.7	23.8	23.9	24.0	24.1	24.2	24.3	24.4	24.5	24.6
1027	100	1.0		23.1	23.7	23.8	23.9	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7
1028	100	1.0		23.2	23.8	23.9	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8
1029	100	1.0		23.3	23.9	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9
1030	100	1.0		23.4	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	25.0
1031	100	1.0		23.5	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	25.0	25.1
1032	100	1.0		23.6	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	25.0	25.1	25.2
1033	100	1.0		23.7	24.3	24.4	24.5	24.6	24.7	24.8	24.9	25.0	25.1	25.2	25.3
1034	100	1.0		23.8	24.4	24.5	24.6	24.7	24.8	24.9	25.0	25.1	25.2	25.3	25.4
1035	100	1.0		23.9	24.5	24.6	24.7	24.8	24.9	25.0	25.1	25.2	25.3	25.4	25.5
1036	100	1.0		24.0	24.6	24.7	24.8	24.9	25.0	25.1	25.2	25.3	25.4	25.5	25.6
1037	100	1.0		24.1	24.7	24.8	24.9	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7
1038	100	1.0		24.2	24.8	24.9	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8
1039	100	1.0		24.3	24.9	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9
1040	100	1.0		24.4	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	26.0
1041	100	1.0		24.5	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	26.0	26.1
1042	100	1.0		24.6	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	26.0	26.1	26.2
1043	100	1.0		24.7	25.3	25.4	25.5	25.6	25.7	25.8	25.9	26.0	26.1	26.2	26.3
1044	100	1.0		24.8	25.4	25.5	25.6	25.7	25.8	25.9	26.0	26.1	26.2	26.3	26.4
1045	100	1.0		24.9	25.5	25.6	25.7	25.8	25.9	26.0	26.1	26.2	26.3	26.4	26.5
1046	100	1.0		25.0	25.6	25.7	25.8	25.9	26.0	26.1	26.2	26.3	26.4	26.5	26.6
1047	100	1.0		25.1	25.7	25.8	25.9	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7
1048	100	1.0		25.2	25.8	25.9	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8
1049	100	1.0		25.3	25.9	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9
1050	100	1.0		25.4	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	27.0
1051	100	1.0		25.5	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	27.0	27.1
1052	100	1.0		25.6	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	27.0	27.1	27.2
1053	100	1.0		25.7	26.3	26.4	26.5	26.6	26.7	26.8	26.9	27.0	27.1	27.2	27.3
1054	100	1.0		25.8	26.4	26.5	26.6	26.7	26.8	26.9	27.0	27.1	27.2	27.3	27.4
1055	100	1.0		25.9	26.5	26.6	26.7	26.8	26.9	27.0	27.1	27.2	27.3	27.4	27.5
1056	100	1.0		26.0	26.6	26.7	26.8	26.9	27.0	27.1	27.2	27.3	27.4	27.5	27.6
1057	100	1.0		26.1	26.7	26.8	26.9	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7
1058	100	1.0		26.2	26.8	26.9	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8
1059	100	1.0		26.3	26.9	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9
1060	100	1.0		26.4	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	28.0
1061	100	1.0		26.5	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	28.0	28.1
1062	100	1.0		26.6	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	28.0	28.1	28.2
1063	100	1.0		26.7	27.3	27.4	27.5	27.6	27.7	27.8	27.9	28.0	28.1	28.2	28.3
1064	100	1.0		26.8	27.4	27.5	27.6	27.7	27.8	27.9	28.0	28.1	28.2	28.3	28.4
1065	100	1.0		26.9	27.5	27.6	27.7	27.8	27.9	28.0	28.1	28.2	28.3	28.4	28.5
1066	100	1.0		27.0	27.6	27.7	27.8	27.9	28.0	28.1	28.2	28.3	28.4	28.5	28.6
1067	100	1.0		27.1	27.7	27.8	27.9	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7
1068	100	1.0		27.2	27.8	27.9	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8
1069	100	1.0		27.3	27.9	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9
1070	100	1.0		27.4	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	29.0
1071	100	1.0		27.5	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	29.0	29.1
1072	100	1.0		27.6	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	29.0	29.1	29.2
1073	100	1.0		27.7	28.3	28.4	28.5	28.6	28.7	28.8	28.9	29.0	29.1	29.2	29.3
1074	100	1.0		27.8	28.4	28.5	28.6	28.7	28.8	28.9	29.0	29.1	29.2	29.3	29.4
1075	100	1.0		27.9	28.5	28.6	28.7	28.8	28.9	29.0	29.1</				





TABLE III-11  
 PERCENTAGE OF CARGO TONNAGE SALVED FROM RICA TO AMSTERDAM  
 DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH	TONNAGE	PERCENTAGE	MONTH OF ARRIVAL											
				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1966	1	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	2	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	3	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	4	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	5	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	6	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	7	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	8	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	9	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	10	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	11	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	12	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	1	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	2	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	3	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	4	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	5	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	6	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	7	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	8	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	9	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	10	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	11	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7
1966	12	22	2.7	12.0	21.0	20.7	12.0	5.4	10.4	20.7	20.7	12.0	5.4	10.4	20.7

SOURCE: CIA, RA T000-102







TABLE 11.11.3 PERCENTAGE OF CARGO TONNAGE SHIPPED FROM VIENNA TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1786	15.1	-	-	-	15.7	-	-	14.9	-	6.6	47.6	-
1787	-	11.9	13.0	-	16.1	-	-	23.4	-	29.5	19.1	-
1788	-	-	-	-	-	14.3	-	-	45.2	-	18.5	21.9
1789	-	-	7.0	-	-	-	-	48.1	-	-	-	17.1
1790	-	-	-	-	-	-	-	-	-	-	49.6	52.5
1791	13	-	-	-	-	-	-	-	-	-	-	-
1792	-	15.5	18.3	-	-	15.9	-	-	-	26.5	23.8	-
1793	8.9	-	-	-	-	-	-	14.6	28.7	21.8	13.8	12.1
1794	-	-	22.6	6.7	-	-	9.8	-	20.2	11.0	11.1	6.6
1795	13	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	-	34.0	-	-	60.0	-	-
1797	-	-	36.8	-	-	-	-	-	-	-	63.2	-
1798	20.1	-	-	-	-	-	-	-	-	23.9	-	-
1799	-	-	-	-	-	47.2	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	56.5	43.5	-	-
1801	-	-	-	62.7	-	-	-	-	-	15.4	-	22.0
1802	-	-	-	-	-	-	-	-	-	-	-	-
1803	-	79.0	-	-	-	-	-	-	-	21.0	-	-
1804	-	-	-	-	-	-	-	-	-	18.9	-	-
1805	-	-	-	-	-	19.9	-	17.9	-	-	-	-
1806	-	-	-	-	-	-	-	-	16.6	47.3	-	-
1807	-	-	-	-	56.5	-	-	-	11.4	-	-	108.0
1808	17	-	-	-	-	-	-	-	-	-	-	32.1
1809	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	-	-	-	-	-	-
1816	-	-	25.1	-	49.7	4.0	-	-	11.1	25.1	-	42.1
1817	-	-	-	-	-	25.2	-	-	43.3	-	-	-
1818	-	31.5	-	-	-	-	-	-	14.8	19.8	56.2	14.0
1819	-	-	-	-	-	-	-	68.9	-	-	-	11.1
1820	-	-	-	-	7.1	20.4	-	29.7	18.6	-	-	-
1821	-	-	-	-	-	36.2	-	26.3	20.5	-	-	-
1822	-	-	-	-	42.4	57.6	-	-	-	-	-	-
1823	-	-	-	-	-	-	-	31.1	-	69.9	-	-
1824	-	-	-	-	-	-	-	21.3	78.7	-	-	-
1825	20	-	-	-	-	-	-	108.0	-	-	-	-

SOURCE: GAA, PA 78/94-102

TABLE II.11.E  
 PERCENTAGE OF CARGO TONNAGE SHIPPED FROM REVAL TO AMSTERDAM  
 DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1705 1	-	-	-	-	-	-	-	-	-	-	-	-
1706 1	-	-	-	-	-	-	-	-	-	-	-	-
1707 1	-	-	-	-	-	-	-	-	-	-	-	-
1708 2	-	-	-	-	-	-	-	-	-	-	-	-
1709 3	-	-	-	100.0	-	-	-	-	-	-	-	-
1710 3	-	-	-	-	-	-	-	-	-	-	-	-
1711 4	-	-	-	-	-	-	-	-	-	-	-	-
1712 5	-	-	-	-	-	-	35.1	-	-	-	-	-
1713 4	-	-	37.2	-	-	-	-	-	-	-	-	-
1713 6	-	-	-	-	62.8	-	-	-	-	-	-	-
1714 6	-	-	-	-	-	4.1	-	-	10.0	11.2	3.3	-
1715 7	-	-	-	-	-	42.7	28.6	-	-	-	-	100.0
1716 6	-	-	-	-	-	-	-	-	-	-	-	-
1716 6	1.0	-	30.0	24.0	22.8	17.0	-	-	-	-	-	-
1717 6	-	44.1	-	11.6	12.1	12.7	-	-	19.4	-	-	-
1718 6	-	-	-	-	100.0	-	-	-	-	-	-	-
1719 6	61.5	-	-	-	-	-	-	-	38.5	-	-	-
1720 6	-	-	-	-	-	-	-	-	17.6	47.1	30.3	-
1721 6	-	-	-	-	-	-	44.4	-	-	55.6	-	-
1722 6	39.1	-	-	-	-	60.9	-	-	-	-	-	-
1723 6	-	-	19.7	-	-	-	14.5	-	32.9	-	-	32.9
1724 6	-	-	-	-	-	30.6	-	-	-	24.7	-	30.7
1725 6	-	-	-	99.7	-	-	-	-	40.3	-	-	-
1726 6	-	-	-	37.0	-	-	-	-	27.8	9.3	-	-
1727 6	-	-	-	-	-	100.0	-	-	-	-	-	-
1728 6	-	-	-	17.7	-	17.7	-	-	-	-	-	-
1729 6	-	14.0	-	-	-	3.3	-	-	52.8	11.5	10.0	60.6
1730 6	-	-	-	30.3	-	12.8	24.0	-	-	8.2	4.5	11.0
1731 6	-	6.1	4.9	7.6	-	-	35.0	-	43.8	2.6	-	-
1732 6	13.9	36.0	-	3.2	-	13.9	7.1	-	7.2	-	-	-
1733 6	-	-	-	-	-	39.3	-	-	60.7	-	-	-
1734 6	-	-	-	4.8	-	60.1	25.5	-	-	-	9.5	-
1735 6	-	-	-	-	62.9	-	-	-	37.1	-	-	-
1736 6	-	-	-	-	-	33.3	34.8	-	-	23.3	8.6	-
1737 6	-	8.1	-	4.4	18.0	-	7.9	-	27.8	19.7	18.1	-
1738 6	-	-	10.2	32.9	-	32.4	16.5	-	3.0	9.0	-	-
1739 6	-	-	3.0	15.0	-	15.3	39.2	-	6.3	10.5	1.9	2.9
1740 6	-	-	-	4.4	-	13.1	30.8	-	23.4	11.4	3.3	4.3
1741 6	-	-	3.5	27.0	-	56.3	5.8	-	3.9	-	-	-
1742 6	-	-	-	37.5	-	-	-	-	23.5	-	-	39.0
1743 6	-	-	-	-	-	-	-	-	-	-	-	-
1744 6	-	-	-	41.3	-	-	58.7	-	-	-	-	-
1745 6	-	-	-	-	-	-	100.0	-	-	-	-	-

CONTINUED...

SOURCE: GAA, PA 76/94-102

TABLE II.11.E  
PERCENTAGE OF CARGO TONNAGE SHIPPED FROM REVAL TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1746	-	-	10.1	-	-	-	65.0	4.9	-	-	-	-
1747	-	-	70.0	-	-	19.9	-	-	-	-	9.9	-
1748	-	-	-	-	21.7	24.5	23.8	11.9	-	-	16.2	-
1749	-	-	-	46.9	-	-	53.1	-	-	-	-	-
1750	-	-	-	72.2	-	17.0	12.6	20.8	11.5	-	-	-
1751	-	-	-	-	-	15.0	12.8	-	-	-	-	-
1752	30.2	-	24.9	-	-	45.0	-	-	-	-	-	-
1753	-	-	-	-	-	17.4	69.8	17.0	-	-	-	-
1754	-	-	-	-	-	-	37.2	-	62.8	-	-	-
1755	-	-	-	-	-	-	100.0	-	-	-	-	-
1756	-	-	50.6	10.6	-	11.3	-	21.5	-	-	-	-
1757	-	-	-	-	-	-	-	-	-	-	-	-
1758	-	-	-	-	-	-	100.0	-	-	-	-	-
1759	-	-	-	-	-	-	-	-	-	-	-	-
1760	-	-	-	-	-	-	-	-	-	-	-	-
1761	7.9	-	10.0	9.3	-	9.4	31.2	29.3	13.6	70.7	-	-
1762	-	-	-	-	-	-	16.6	18.5	13.6	49.8	-	-
1763	-	-	-	-	-	31.3	-	24.1	24.1	11.9	16.7	-
1764	-	-	-	-	-	-	-	29.1	20.7	19.4	29.3	-
1765	-	-	-	-	-	-	-	-	30.7	21.8	21.8	-
1766	-	-	-	27.8	-	-	-	-	-	100.0	40.1	-
1767	100.0	-	-	-	-	-	-	-	-	-	32.3	-
1768	-	-	-	-	-	-	-	-	-	100.0	-	-
1769	-	-	-	-	-	56.8	-	42.2	-	-	-	-
1770	-	-	-	-	-	-	84.4	54.2	19.6	-	49.8	-
1771	-	-	-	-	-	52.9	-	47.1	-	-	-	-
1772	-	-	-	-	-	-	-	49.1	-	-	-	-
1773	-	50.9	-	-	5.8	-	-	10.8	26.1	34.1	12.6	-
1774	-	-	10.6	-	-	-	-	-	-	-	-	-
1775	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1776	-	-	-	-	-	-	-	-	-	-	-	-
1777	32.7	-	-	-	-	56.0	11.3	-	-	-	-	-
1778	-	-	-	-	-	39.8	-	-	-	-	-	-
1779	100.0	-	-	-	-	100.0	-	-	-	-	-	-
1780	-	-	-	-	-	-	-	-	-	-	-	-
1781	-	-	-	-	-	29.7	-	-	100.0	-	-	-
1782	-	-	-	-	-	-	-	-	74.3	-	-	-
1783	-	-	-	-	-	-	-	-	-	14.7	-	89.3
1784	-	-	-	-	-	-	-	-	-	100.0	-	-
1785	-	-	-	-	-	100.0	-	-	-	-	-	-

SOURCE: GAA, PA 76/90-102

CONTINUED...

TABLE 11.11.E  
 PERCENTAGE OF CARGO TONNAGE SHIPPED FROM REVAL TO AMSTERDAM  
 DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1786	-	-	-	-	-	-	-	-	-	-	-	-
1787	-	-	-	-	-	-	-	-	-	-	-	-
1788	-	-	-	-	-	-	-	100.0	-	-	-	-
1789	-	-	-	-	-	-	-	-	-	-	-	-
1790	-	-	-	-	-	-	-	-	-	-	-	-
1791	-	-	-	-	-	-	-	-	-	-	-	-
1792	-	-	-	-	-	100.0	-	-	-	-	-	-
1793	-	-	-	-	-	-	-	-	-	-	100.0	-
1794	-	-	-	-	-	-	-	-	-	-	-	-
1795	-	-	-	-	-	28.4	-	7.7	42.0	-	7.2	-
1796	-	-	-	-	-	-	-	-	-	-	-	-
1797	56.0	-	-	-	-	44.0	-	-	-	-	18.9	-
1798	-	-	-	81.1	-	-	-	-	-	-	-	-
1799	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	-	-	-	-
1801	-	-	-	-	-	-	-	-	-	-	-	-
1802	-	-	-	-	-	-	100.0	-	-	-	-	-
1803	-	-	-	-	-	-	21.3	29.5	38.2	-	12.9	57.9
1804	-	-	-	-	-	-	42.1	-	-	-	-	-
1805	-	-	-	-	-	-	-	-	-	-	-	-
1806	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	59.2	40.8	-	-	-	-
1815	-	-	-	-	-	-	-	-	29.7	74.2	-	-
1816	-	-	-	-	-	-	-	-	-	-	-	-
1817	-	-	-	-	-	44.6	14.9	-	18.1	-	-	-
1818	-	-	-	-	-	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-	-	-	-	-	-
1820	-	-	-	-	-	-	-	-	-	-	-	100.0
1821	-	-	-	-	-	-	-	-	-	-	-	-
1822	-	-	-	-	-	-	-	-	-	-	-	-
1823	-	-	-	-	-	-	-	-	-	-	-	-
1824	-	-	-	-	-	-	-	-	-	-	-	-
1825	-	-	-	-	-	-	-	-	-	-	-	-
1826	-	-	-	-	-	-	-	-	-	-	-	-
1827	-	-	-	-	-	-	-	-	-	-	-	-
1828	-	-	-	-	-	-	-	-	-	-	-	-
1829	-	-	-	-	-	-	-	-	-	-	-	-
1830	-	-	-	-	-	-	-	-	-	-	-	-

SOURCE: OAA, PA 76/94-102

TABLE 11.11.F PERCENTAGE OF CARGO TONNAGE SHIPPED FROM ESTONIA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1705 1	-	-	-	-	-	-	-	-	-	-	-	-
1706 1	-	-	-	-	-	-	-	-	-	-	-	-
1707 1	-	-	-	-	-	-	-	-	-	-	-	-
1708	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1709 2	-	-	-	-	-	-	-	-	-	-	-	-
1710 3	-	-	-	-	-	-	-	-	-	-	-	-
1711 4	-	-	-	-	-	-	-	-	-	-	-	-
1712 5	-	-	-	-	-	-	-	-	-	-	-	-
1713 4	-	-	-	-	-	-	-	-	-	-	-	-
1714 6	-	-	-	-	-	-	-	-	-	-	-	-
1715 7	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	100.0	-	-	-	-	-	-	100.0	-	-	100.0
1717	-	-	-	-	-	-	-	-	-	-	-	-
1718	-	-	-	-	-	-	-	-	-	-	-	-
1719	-	-	28.4	-	-	-	-	27.6	10.4	-	2.9	29.8
1720	-	-	-	-	-	-	-	-	-	-	-	-
1721	-	-	-	-	-	-	-	-	-	-	-	-
1722	-	-	-	-	-	-	-	-	-	-	-	-
1723	-	18.7	-	42.7	19.1	-	-	-	-	-	19.8	-
1724	-	-	-	-	-	-	-	-	-	-	-	100.0
1725	-	-	-	-	-	-	100.0	100.0	-	-	-	-
1726	-	-	-	-	-	-	-	-	-	-	-	-
1727	-	-	-	-	-	-	-	-	-	-	-	-
1728	-	-	-	-	-	100.0	-	-	-	-	-	-
1729	-	-	-	-	-	-	23.9	30.7	30.7	28.3	-	-
1730	-	-	-	-	-	28.8	-	39.4	39.4	29.8	6.0	-
1731	-	-	-	-	-	-	31.1	34.2	34.2	14.0	20.7	-
1732	-	-	-	-	-	-	35.9	38.7	38.7	25.4	-	-
1733	-	-	-	-	-	-	64.0	-	-	36.0	-	-
1734	-	-	-	-	-	29.6	48.1	29.2	29.2	-	-	-
1735	-	-	-	-	-	-	-	-	-	48.9	51.1	-
1736	-	19.4	-	-	-	-	-	-	-	30.6	-	-
1737	-	-	30.1	38.3	-	30.0	-	-	-	10.3	-	21.2
1738	-	11.2	-	-	-	-	-	9.4	28.2	28.9	3.3	17.7
1739	-	-	-	-	4.1	3.0	29.6	-	-	3.3	56.0	-
1740	-	-	-	-	-	22.5	19.9	25.3	25.3	13.1	11.6	7.7
1741	-	-	2.2	-	-	34.3	19.6	24.4	24.4	12.1	-	-
1742	-	-	-	-	-	-	68.2	-	-	8.6	12.2	11.0
1743	-	12.4	8.7	-	-	-	4.7	10.4	10.4	39.0	31.8	-
1744	7.8	-	7.3	-	-	19.6	37.9	-	-	-	14.9	-
1745	8.7	-	-	2.1	-	57.1	16.1	5.5	5.5	4.5	-	8.9

SOURCE: GAA, PA 78/98-102

CONTINUED...

TABLE II.11.F PERCENTAGE OF CARGO TONNAGE SHIPPED FROM ESTONIA TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1746	15.7	13.0	-	-	-	13.6	34.3	6.2	-	29.6	-	41.7
1747	-	15.5	-	-	-	-	-	42.2	4.3	6.8	6.3	13.2
1748	-	-	1.0	3.4	-	6.8	16.4	2.9	19.2	15.0	17.5	17.3
1749	-	-	6.6	7.7	9.9	-	2.8	-	9.0	32.6	23.2	22.1
1750	-	3.5	-	-	-	27.0	34.6	12.1	11.1	4.3	14.6	20.0
1751	-	-	-	-	21.4	29.0	-	15.9	10.8	2.3	37.5	6.5
1752	-	-	-	49.5	-	14.2	-	15.1	-	-	6.0	18.1
1753	20.0	15.5	-	-	-	100.0	18.6	84.3	-	20.7	-	6.9
1754	-	-	-	-	-	100.0	-	-	-	-	-	-
1755	-	-	-	-	-	-	100.0	-	-	-	-	-
1756	-	-	-	-	-	-	28.8	-	-	26.7	7.7	-
1757	-	-	-	-	-	-	56.5	-	-	-	21.9	-
1758	-	-	6.1	-	-	17.3	6.6	-	13.4	15.6	3.0	7.8
1759	-	20.0	14.3	-	-	6.1	22.2	6.7	11.4	29.1	34.4	-
1760	-	-	14.2	15.2	10.5	16.7	13.5	9.0	-	11.8	20.6	26.0
1761	16.5	-	6.7	11.4	-	-	14.7	11.8	-	33.8	5.3	-
1762	-	-	14.4	-	-	-	17.2	-	-	73.4	-	-
1763	-	-	-	-	-	-	11.0	22.1	28.0	10.2	19.7	-
1764	-	-	-	-	-	-	10.5	6.6	14.4	4.7	26.9	3.4
1765	9.4	-	9.4	4.8	9.8	4.4	22.2	24.4	15.4	7.7	15.9	-
1766	-	-	-	-	-	-	17.1	28.4	-	3.0	28.0	23.5
1767	-	-	-	-	-	-	40.3	21.7	26.8	-	-	-
1768	9.5	-	-	-	-	-	22.3	8.1	4.8	24.9	-	14.3
1769	11.3	12.3	2.6	2.1	-	6.6	15.4	9.4	10.7	-	-	22.8
1770	1.7	-	9.9	5.4	4.0	10.8	49.5	5.3	15.9	6.9	1.6	9.0
1771	2.2	1.2	-	3.8	-	2.7	-	-	-	-	-	-
1772	-	-	-	-	-	-	-	-	-	-	-	-
1773	-	-	-	-	-	-	-	-	-	-	-	-
1774	-	-	-	-	-	-	-	-	-	-	-	-
1775	-	-	-	-	-	-	-	-	-	-	-	-
1776	-	-	-	-	-	-	-	-	-	-	-	-
1777	4.4	-	2.0	4.4	1.9	13.9	23.6	21.5	1.6	2.5	13.2	10.9
1778	5.0	1.7	3.7	-	2.2	2.8	51.5	-	7.3	3.0	6.1	15.6
1779	2.3	4.7	15.8	3.1	-	-	20.2	6.3	23.2	2.4	6.6	13.4
1780	10.8	-	2.7	2.2	-	6.4	35.7	2.9	20.6	6.2	11.7	-
1781	-	-	7.9	4.9	3.4	9.1	4.3	27.8	12.7	10.1	29.2	-
1782	60.7	-	13.1	16.1	-	-	-	-	-	-	-	-
1783	7.7	-	-	7.1	18.2	3.4	7.0	9.6	9.3	17.2	17.2	23.8
1784	11.9	3.3	2.9	2.2	-	3.4	3.8	18.3	12.9	17.7	6.4	18.1
1785	-	-	27.0	-	-	-	-	28.8	-	18.3	-	28.9
1786	-	7.0	-	10.7	-	-	8.3	14.8	41.5	-	20.7	-

NO DATA AVAILABLE

CONTINUED...

SOURCE: OAA: PA 78/94-102



TABLE II.11.F  
 PERCENTAGE OF CARGO TONNAGE SHIPPED FROM ESTONIA TO AMSTERDAM  
 DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1786	-	-	-	10.8	22.2	-	24.7	-	-	29.1	17.8	-
1787	-	-	10.9	26.0	-	-	16.4	8.5	19.6	3.4	6.8	12.6
1788	-	-	-	-	-	-	40.1	48.4	-	14.8	-	-
1789	4.1	5.2	-	10.7	-	-	12.8	3.0	27.0	28.7	9.4	6.1
1790	8.6	-	11.8	-	16.2	-	-	-	-	13.8	30.9	19.1
1791	13	-	-	4.8	-	-	9.4	23.8	31.2	6.8	12.7	11.2
1792	-	8.7	-	-	-	9.3	-	-	10.1	19.6	-	-
1793	22.0	-	15.3	-	27.0	-	20.8	-	-	14.9	-	-
1794	-	-	-	-	17.7	-	25.3	18.7	14.6	23.7	-	-
1795	13	-	-	-	-	-	-	-	-	-	-	-
1796	-	24.7	-	-	-	-	-	10.3	52.4	12.5	-	-
1797	26.8	-	14.6	-	-	-	12.3	6.2	-	-	30.1	-
1798	37.6	-	-	-	-	-	-	20.3	42.1	-	-	-
1799	-	-	100.0	-	-	-	-	-	100.0	-	-	-
1800	-	-	-	-	-	-	-	-	-	-	-	-
1801	-	-	-	-	-	-	-	-	-	-	-	-
1802	-	-	-	-	-	-	-	-	43.9	23.8	9.8	-
1803	24.2	-	-	-	-	14.9	8.0	31.1	13.6	8.3	-	-
1804	-	-	-	-	-	-	-	-	-	100.0	-	-
1805	-	-	-	-	-	-	23.5	15.0	26.0	-	17.9	7.8
1806	14.4	-	28.2	26.0	-	-	-	-	31.4	-	-	-
1807	-	-	-	-	-	-	-	-	-	-	-	-
1808	17	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1810	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	100.0	-	-
1811	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1812	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1813	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1814	6	-	-	-	-	-	-	100.0	-	-	-	-
1815	-	-	-	-	-	-	-	26.6	63.4	-	-	-
1816	-	-	20.0	-	-	-	14.1	22.6	-	18.1	29.2	-
1817	-	6.3	-	-	23.1	-	14.2	23.3	23.0	10.0	-	-
1818	-	-	-	-	-	-	8.3	61.8	-	29.9	-	-
1819	-	9.0	-	-	-	-	-	59.3	20.9	10.9	-	-
1820	-	-	-	-	-	-	-	-	58.6	-	-	42.0
1821	-	-	-	-	-	-	53.5	18.2	-	31.0	-	-
1822	-	-	-	-	-	-	-	33.8	21.0	-	49.2	-
1823	-	-	-	-	-	-	44.3	-	18.4	-	37.1	-
1824	-	-	-	-	-	-	31.1	-	68.9	-	-	-
1825	20	-	-	-	-	-	-	100.0	-	-	-	-

SOURCE: GAA: PA 78/94-102

TABLE 11.11.0 PERCENTAGE OF CARGO TONNAGE SHIPPED FROM FREDERIKSHAMN TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1744	-	-	-	-	-	-	-	-	100.0	-	-	-
1745	-	-	8.9	-	-	28.5	38.4	-	28.2	-	-	-
1746	-	-	-	-	-	-	-	54.3	-	-	-	23.2
1747	-	-	10.6	-	11.4	-	17.7	10.1	29.7	24.6	-	-
1748	-	-	-	-	-	-	3.9	31.4	29.0	-	-	39.7
1749	19.7	-	-	-	-	-	30.9	19.6	-	13.5	-	5.9
1750	-	-	-	22.3	-	-	-	29.9	-	91.8	-	-
1751	-	-	-	26.6	-	-	-	21.9	-	39.9	-	-
1752	-	21.8	-	-	-	-	-	32.8	28.4	-	16.2	-
1753	-	-	-	-	-	100.0	-	-	-	-	-	-
1754	-	-	-	-	27.5	-	-	14.3	52.8	19.8	-	-
1755	-	-	-	8.6	-	-	-	47.6	29.8	-	-	-
1756	-	-	-	-	-	7.2	-	81.2	-	-	11.6	-
1757	-	-	-	-	6.2	-	-	49.7	40.9	-	-	7.2
1758	-	-	-	-	-	-	-	97.6	8.0	13.4	-	20.9
1759	-	-	-	-	-	-	94.2	-	28.0	6.9	12.9	-
1760	-	-	-	-	-	-	-	23.3	63.6	13.1	-	-
1761	-	-	-	-	-	-	-	19.4	36.0	-	44.6	-
1762	-	-	16.9	-	-	-	31.4	-	-	43.2	-	-
1763	-	-	-	16.3	-	-	43.8	-	-	13.1	-	26.7
1764	-	-	-	24.2	-	-	-	37.6	-	-	36.2	-
1765	-	-	-	38.3	-	-	-	64.7	-	-	-	-
1766	-	-	10.3	-	21.2	-	23.7	20.8	-	8.9	18.1	-
1767	-	-	-	44.4	-	-	-	86.6	-	-	-	-
1768	-	26.1	30.4	13.7	-	-	18.1	13.7	-	-	-	-
1769	-	-	13.6	12.3	-	8.6	22.8	-	-	-	-	12.3
1770	-	-	-	18.9	-	-	38.3	23.4	18.8	-	-	22.4
1771	-	-	-	23.9	-	-	76.1	-	-	-	-	-
1772	-	-	9.8	-	-	-	19.9	18.7	-	-	54.6	-
1773	-	-	-	14.0	-	-	28.8	32.5	-	-	-	12.4
1774	-	-	24.9	9.6	-	5.1	12.3	17.1	9.4	9.6	-	12.3
1775	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1776	-	-	-	-	-	-	-	-	-	100.0	-	-
1777	-	-	-	-	-	-	-	-	-	-	-	-
1778	-	-	-	-	-	-	100.0	-	-	-	-	-
1779	15.9	-	-	-	-	9.6	49.3	-	-	-	29.2	-
1780	-	-	-	-	-	-	44.8	22.6	-	-	32.6	-
1781	-	-	-	-	-	-	-	61.0	-	-	39.0	-
1782	-	-	-	11.3	-	-	18.3	12.3	-	32.3	28.8	-
1783	-	-	-	8.1	-	-	17.5	44.4	19.6	18.4	-	-

TABLE II.11.6 PERCENTAGE OF CARGO TONNAGE SHIPPED FROM FREDERIKSHAVN TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1784	-	-	-	7.4	-	21.9	20.2	-	-	23.6	26.6	-
1785	-	-	-	-	10.6	47.9	22.7	-	-	-	8.8	-
1786	-	-	-	-	-	66.0	-	40.0	-	-	-	-
1787	-	-	-	-	-	39.2	31.2	-	-	-	29.6	-
1788	-	-	-	50.1	-	16.6	-	-	-	-	33.2	-
1789	-	100.0	-	-	-	-	-	-	-	-	-	-
1790	-	-	-	-	-	-	100.0	-	-	-	-	-
1791.13	-	-	-	-	-	-	-	-	-	-	-	-
1792	-	-	-	-	-	-	-	-	-	-	-	100.0
1793	-	-	-	-	-	-	-	-	-	-	-	-
1794	-	-	-	22.9	-	13.7	-	-	-	51.3	-	-
1795.13	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	-	-	-	-	24.4	66.6	-
1797	-	-	-	-	-	42.1	57.9	-	-	-	-	-
1798	-	-	-	-	-	-	-	-	-	-	-	-
1799	-	-	-	-	-	-	-	50.3	-	49.7	-	-
1800	-	-	-	-	-	-	-	-	-	-	-	-
1801	-	26.2	100.0	-	-	63.8	-	-	-	-	-	-
1802	-	-	-	-	-	-	-	-	-	-	-	-
1803	-	-	-	-	-	-	-	-	-	-	-	-
1804	-	-	-	-	-	-	26.6	-	-	63.4	-	-
1805	-	-	-	-	-	-	22.0	-	-	-	76.0	-
1806	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	100.0	-	-	-	-	-
1808.17	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	ND DATA AVAILABLE	-	-	-	-	-	-	-	-
1810	-	-	-	ND DATA AVAILABLE	-	-	-	-	-	-	-	-
1811	-	-	-	ND DATA AVAILABLE	-	-	-	-	-	-	-	-
1812	-	-	-	ND DATA AVAILABLE	-	-	-	-	-	-	-	-
1813	-	-	-	ND DATA AVAILABLE	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	-	-	-	-	-	-
1816.18	-	-	-	20.8	-	-	-	-	-	-	69.2	-
1817	-	-	-	-	-	100.0	-	-	-	-	-	-
1818	-	-	-	-	-	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-	-	-	-	-	-
1820	-	-	-	-	-	-	-	-	-	100.0	-	-
1821	-	-	-	-	-	71.0	-	-	-	-	-	-
1822	-	-	-	29.0	-	100.0	-	-	-	-	-	-
1823	-	-	-	-	-	-	43.3	-	-	-	-	-
1824.20	-	-	-	-	-	67.8	-	-	-	-	-	-
1825	-	-	-	-	-	-	100.0	-	-	-	-	-

SOURCES: GAA, PA 78/94-102

TABLE 11.11.4

PERCENTAGE OF CARGO TONNAGE SHIPPED FROM COURLAND TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1796 <sup>14</sup>	5.6	-	7.9	14.2	26.9	2.2	7.9	18.3	-	3.9	7.8	13.5
1797	4.1	7.9	5.8	19.2	19.2	8.1	4.0	9.6	2.0	6.0	9.5	12.9
1798	-	-	10.5	7.9	51.2	8.5	8.7	2.7	8.8	-	2.2	-
1799	32.3	-	-	22.8	-	-	44.9	-	-	-	-	-
1800	-	-	-	-	6.6	38.0	15.4	9.0	37.1	-	-	-
1801	-	4.2	-	-	-	9.4	27.3	34.7	10.9	3.2	14.3	-
1802	-	7.3	6.9	9.4	42.1	10.2	9.8	7.9	-	6.5	3.7	-
1803	1.9	-	-	2.8	4.4	45.1	20.6	1.3	7.2	-	2.3	14.3
1804	6.4	-	-	89.2	-	-	9.6	10.0	-	10.9	-	3.8
1805	-	-	16.0	6.9	6.0	27.6	20.1	16.2	-	4.1	3.5	-
1806	-	4.8	-	9.2	9.1	9.3	6.0	15.4	16.0	30.2	-	-
1807	-	-	-	12.5	-	35.4	16.4	29.9	-	-	-	9.8
1808 <sup>17</sup>	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1809	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1810	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1811	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1812	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1813	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1814 <sup>6</sup>	-	-	-	-	-	29.7	24.3	13.1	20.8	-	6.8	5.4
1815	-	-	-	-	25.7	9.0	4.6	29.2	8.8	20.6	10.1	-
1816	-	-	-	9.7	3.6	22.5	10.6	16.2	21.0	2.5	12.8	5.4
1817	-	8.4	-	8.6	47.7	3.5	13.7	6.7	10.1	2.2	2.1	-
1818	-	-	-	-	47.1	15.2	9.8	10.1	11.7	10.0	-	-
1819	6.3	-	-	-	10.7	8.9	23.3	42.0	-	-	8.7	-
1820	-	-	-	-	-	44.1	29.0	10.7	-	11.4	-	9.0
1821	-	4.3	3.3	45.9	-	15.6	3.5	4.4	2.2	19.8	-	-
1822	-	24.3	-	-	49.8	-	-	-	-	29.9	-	-
1823	-	-	-	-	22.1	-	59.7	22.2	-	-	-	-
1824	-	-	6.0	-	25.0	46.8	-	-	11.3	10.9	-	-
1825 <sup>20</sup>	-	-	-	-	38.2	23.0	13.1	25.7	-	-	-	-

SOURCE: GAA, PA 78/94-102

TABLE 11.12 TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM RUSSIAN (BALTIC) PORTS DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR				
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1701	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1702	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1703	996	-	-	-	100	1198	990	-	-	-	-	-	322	-	-	632	2136
1704	-	-	684	372	-	-	-	-	-	-	-	-	-	-	-	-	-
1705	-	-	36	-	-	424	-	92	-	-	-	-	-	-	214	-	-
1706	-	-	2030	2026	900	638	622	590	644	172	304	2730	-	-	-	-	5966
1707	-	-	-	-	120	-	-	-	-	-	-	-	-	-	-	-	3674
1708	-	-	4622	3082	5658	2916	100	-	-	-	-	-	-	-	-	-	18642
1709	1738	9882	1004	4016	1246	410	456	744	2336	466	640	1832	-	-	-	-	24476
1710	378	-	2228	364	1308	1150	180	-	-	-	2176	12132	-	-	-	-	19908
1711	1608	1086	652	319	702	180	80	938	1110	5304	7884	2108	-	-	-	-	21442
1712	748	2436	2298	2270	316	582	1458	7192	5710	6970	2878	3494	-	-	-	-	36312
1721	646	220	412	440	906	116	1726	9582	12726	3262	2428	5038	-	-	-	-	37522
1722	3618	1700	788	1908	276	240	1230	9026	12922	5810	4020	2812	-	-	-	-	43594
1723	918	1498	1302	2486	908	1222	4430	5930	5400	3482	2026	3596	-	-	-	-	33160
1724	1780	1634	2236	538	30	782	8746	7988	8248	4974	6726	4880	-	-	-	-	47680
1725	592	572	1226	940	880	2260	9394	23692	11502	14144	3700	2352	-	-	-	-	71176
1726	3082	572	2224	1648	670	1368	14492	10898	9600	9728	7976	7776	-	-	-	-	66116
1727	2378	1522	1832	2682	682	96	17676	5274	5882	4692	2264	6864	-	-	-	-	51744
1728	1134	1694	1288	734	708	952	23196	-	2938	19636	3576	2166	-	-	-	-	57980
1729	-	1298	1676	696	244	64	3768	14900	8734	18306	4564	2274	-	-	-	-	48544
1730	1004	902	1412	1304	206	4042	22774	8280	7364	9850	13816	2932	-	-	-	-	73228
1731	892	554	1648	646	142	470	14726	20280	13648	9124	8768	8360	-	-	-	-	79258
1732	468	1742	2962	3130	1416	6764	22760	7136	11910	3908	14458	5882	-	-	-	-	81740
1733	710	1480	1304	1760	488	4900	23538	8190	7024	9628	14394	5818	-	-	-	-	79194
1734	848	3182	2184	4166	256	9146	22934	7594	12942	10776	10934	2380	-	-	-	-	84934
1735	1876	1170	974	1032	132	17272	10448	6134	4902	5880	14914	3744	-	-	-	-	64878
1736	830	180	970	1102	1228	1450	11128	12370	8446	6782	16482	4358	-	-	-	-	62364
1737	448	608	684	5590	1662	3808	14344	11278	5020	17204	9096	4128	-	-	-	-	73828
1738	816	1492	2886	2360	316	3910	27400	12112	9484	17314	13682	6164	-	-	-	-	97836
1739	316	1180	2236	2162	988	2698	10116	19708	9452	6064	18822	2666	-	-	-	-	74416
1740	2124	-	-	2888	298	1392	4230	21890	18932	7960	11172	11574	-	-	-	-	81628
1741	790	688	1892	1968	768	2714	21192	14500	11232	6528	12392	5988	-	-	-	-	80812
1742	164	1324	2292	1978	1152	268	3456	17392	9480	19088	10876	5122	-	-	-	-	73832
1743	2472	4440	3800	7332	2450	1048	25738	7162	5294	15936	19342	6582	-	-	-	-	87686
1744	1188	182	948	2900	1360	1898	10648	20636	7628	4542	6674	3236	-	-	-	-	61720
1745	1036	624	1434	4098	1170	504	21836	6070	7794	6176	2876	12388	-	-	-	-	64408

SOURCE: GAA, PA 76/94-102

CONTINUED...

TABLE 11.12 TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM RUSSIAN (BALTIC) PORTS DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	3228	372	2964	1298	694	1190	2122	10008	11042	8714	5816	6450	54792
1747	308	2290	2456	1704	630	1424	1364	8734	6066	5136	7556	3064	53740
1748	1232	376	-	4320	2546	870	4486	11082	10212	3420	5220	7354	51844
1749	388	3224	964	1466	714	1676	16252	6000	11250	12090	2294	6950	61184
1750	810	570	1102	648	1426	1436	15508	8628	2844	17460	4996	6192	61962
1751	292	1604	-	990	584	956	13182	19180	2844	3820	16574	3026	56304
1752	1504	1804	1812	672	-	8324	6128	6484	11432	4932	9896	1194	57904
1753	610	300	3488	1916	1476	8936	14944	5614	3518	1290	14266	2492	90404
1754	1376	1694	3190	3648	844	254	11296	12054	6320	3544	9278	5198	61016
1755	280	-	428	4924	1900	1864	4884	11116	5474	9934	6648	2050	47982
1756	848	254	1684	1748	276	848	6100	3604	3476	2244	7498	2222	30002
1757	112	208	4080	1978	644	1172	2910	7748	4600	5974	3094	1626	32024
1758	950	1082	3758	1760	496	-	5360	12048	3674	2766	1114	7376	40302
1759	1612	806	408	474	1192	1102	21062	2022	6422	12902	6636	952	55996
1760	522	1778	3102	2520	66	264	6994	5386	8700	6028	4904	5340	46528
1761	1732	1332	740	1906	464	5778	5814	6166	9064	5164	9730	1624	48978
1762	1316	116	1834	440	-	260	5670	12874	5182	7668	10890	4076	50496
1763	236	294	3562	2954	1366	378	7300	9668	6544	5124	9236	5100	51882
1764	3592	1308	2030	9440	940	1436	14756	9194	2628	4452	2498	7908	50656
1765	3320	846	1906	3588	2666	-	4522	10598	9510	2928	6722	7328	53974
1766	2110	1924	3622	2926	1532	748	22406	5010	1146	10536	8030	4996	60180
1767	1994	706	1572	1750	1130	848	6260	11256	7730	1902	1902	1660	41976
1768	442	1360	6368	4352	536	514	11680	7380	3130	12044	5916	2200	56032
1769	1476	1856	3250	3628	482	9748	11274	4542	10730	10724	7182	2016	60028
1770	442	2040	2108	3752	394	70	11020	11932	1542	7164	6308	5900	52792
1771	1428	-	1008	3770	294	1256	12754	7138	5310	644	256	100	33998
1772	426	2020	2056	1474	2056	3720	11606	12540	3860	7710	3782	6450	60018
1773	1478	1762	2262	3168	1238	11160	11492	4066	9574	1964	452	9162	57718
1774	300	964	4830	4928	1612	5360	14240	7780	7096	11504	3400	3242	65816
1775	-	234	308	718	-	-	210	322	716	390	260	-	3096
1776	1664	696	1880	2236	1666	3932	10666	7002	10778	3730	6840	2340	53404
1777	994	206	2294	1510	498	1040	24724	900	424	2348	14810	4224	50000
1778	336	230	4060	2898	378	540	12036	9298	7526	9068	4030	5670	50310
1779	1042	638	1876	1462	196	10958	7968	3594	2964	5150	10680	2340	49808
1780	436	786	2154	2692	638	222	9188	11322	6210	2740	14816	782	51908
1781	774	632	2272	814	420	900	440	1294	1848	2310	1276	-	12800
1782	1500	338	1398	1442	614	1548	2418	4646	6002	3764	4424	4750	33604
1783	3310	806	1556	2844	1478	740	6492	10088	8990	7002	3092	8100	54004
1784	-	746	3908	3064	1398	998	3594	14090	4304	9572	10162	6932	50008
1785	256	930	64	1940	1480	678	17074	8632	4762	6036	4616	5410	54996
1786	254	592	614	4176	3276	220	9984	12808	4536	4932	8712	7740	56706

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.12 TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM RUSSIAN (BALTIC) PORTS DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1787	348	994	4088	2150	794	134	16568	6066	3814	7906	10780	3508	57896
1788	336	1030	2322	3782	736	1330	15506	4972	2236	14954	2918	2100	52200
1789	130	1390	2156	3002	486	60	15082	5794	6310	11946	7292	6426	60014
1790	414	608	2028	786	490	1326	9494	18612	8030	8330	8744	6914	59776
1791	466	1150	286	394	286	608	9182	16086	3252	4484	11982	7334	55418
1792	782	2312	884	1188	366	9726	11788	2694	9788	4070	13284	172	56914
1793	642	428	2122	1812	228	490	900	3582	4972	3486	3292	6198	27548
1794	1308	496	1954	900	882	4472	14954	4848	6412	11434	4682	1414	52734
1795	124	34	34	312	96	208	272	1108	608	1222	892	626	5434
1796	1292	1278	632	1660	1284	1012	6348	5200	5086	4730	1748	1944	32192
1797	1518	792	1948	1684	868	686	5284	3972	1498	3608	5728	3262	30998
1798	1520	370	1246	3346	1976	618	2864	1496	1484	256	546	384	15276
1799	214	60	60	174	294	168	248	248	96	96	278	692	980
1800	216	216	110	110	294	422	1492	2172	2860	484	784	144	9018
1801	260	522	522	1076	140	1044	1226	1498	598	784	838	144	6972
1802	270	806	1710	1076	1604	3096	6958	5496	8546	4742	8522	694	42756
1803	1764	884	558	2240	1308	4876	8518	1614	1382	2618	686	894	33838
1804	394	2400	2400	2400	842	714	1478	2814	2776	2044	2428	642	10014
1805	398	128	2100	1846	110	218	2766	6290	2776	2660	576	418	22438
1806	398	632	734	364	110	218	652	652	1560	2660	576	418	8182
1807	52	52	180	180	294	224	96	892	236	128	164	474	2648
1808	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE
1809	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE
1810	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE
1811	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE
1812	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE
1813	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE
1814	174	174	1054	706	920	784	838	1796	4116	1870	2868	1492	12924
1815	286	98	776	1260	918	1028	924	3622	2172	2480	3052	2176	18002
1816	174	1458	900	1872	3232	9212	22714	11836	4060	6616	5038	2756	29388
1817	990	1152	900	124	1290	342	1048	5616	21698	14058	5038	5884	99614
1818	1198	1152	124	124	1290	342	1048	5616	2358	2146	1548	3238	20080
1819	1522	286	366	84	212	954	4052	6486	2246	2324	1544	1254	21320
1820	1472	998	594	3928	632	730	2616	3458	2872	4656	1198	1826	24980
1821	242	338	1486	2116	96	1306	5330	2686	3458	4340	914	374	22644
1822	242	2424	530	262	854	262	4260	616	4190	858	1976	934	12954
1823	140	136	84	78	520	3030	4288	4188	4190	1938	2952	986	28784
1824	140	136	84	78	516	1270	1504	2942	5592	1888	388	388	15898
1825	140	136	314	78	574	1270	1576	4046	628	1888	388	388	8482

SOURCES: GAA, PA 78/94-102

TABLE 11.12.A TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM ST. PETERSBURG DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE												-
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1710 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 <sup>6</sup>	-	-	-	-	-	-	-	70	60	96	-	-	226
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	390	344	230	380	172	-	-	-	-	-	-	1516
1717	330	360	160	-	-	-	-	-	-	-	-	124	974
1718	-	-	-	-	160	480	80	-	-	-	-	900	1620
1719	252	-	-	-	-	180	-	40	60	634	484	-	1650
1720	68	880	-	708	224	-	120	230	258	44	220	88	2840
1721	100	-	60	224	28	-	156	132	294	-	108	96	1198
1722	162	342	-	220	-	100	40	-	36	692	144	96	1832
1723	180	444	642	498	-	-	44	-	424	286	142	48	2708
1724	770	354	1090	112	-	230	72	802	520	544	212	192	4898
1725	124	348	-	-	148	78	970	460	554	730	236	390	4038
1726	334	304	548	232	210	192	394	1228	460	890	718	1710	7220
1727	452	106	278	710	138	-	-	904	358	108	-	130	3184
1728	348	292	308	352	408	-	1154	-	318	750	408	572	4910
1729	-	196	460	358	-	-	-	174	546	-	180	330	2244
1730	92	162	150	472	206	-	562	156	378	742	490	436	3846
1731	230	136	548	-	142	150	216	250	1694	592	172	500	4630
1732	109	96	844	622	-	-	626	256	286	772	168	346	4124
1733	430	286	360	380	336	-	-	162	-	-	528	146	2628
1734	-	830	166	554	136	126	198	454	592	816	604	478	4954
1735	262	402	-	92	-	212	508	130	420	146	470	838	3480
1736	134	72	200	232	492	244	284	760	146	664	612	1036	4876
1737	-	276	86	1456	402	384	250	902	722	2376	2430	810	10094
1738	466	652	322	692	-	180	5842	3890	2084	1028	878	766	16802
1739	-	354	356	1036	204	-	-	110	338	990	1500	528	5416
1740	232	-	-	326	-	90	922	552	1642	1806	830	994	7394
1741	632	100	638	540	136	-	1860	2896	4342	2180	4956	2304	20584
1742	-	-	400	504	278	-	746	1364	192	1686	1994	1448	8612
1743	564	1874	424	616	892	106	84	526	126	114	384	974	6684
1744	-	-	132	138	492	382	516	826	900	1110	954	1568	7018
1745	-	-	498	262	558	-	432	208	522	876	128	260	3744

SOURCE: GAA, PA 78/94-102

CONTINUED...



TABLE 11.12.A

TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM ST. PETERSBURG DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	690	70	372	368	174	-	-	276	300	498	350	748	3646
1747	308	1020	630	640	120	-	98	1292	680	1240	778	142	7148
1748	252	244	-	230	1058	304	-	-	302	752	84	742	3968
1749	76	124	170	236	212	428	134	608	760	1030	-	222	4000
1750	308	96	112	82	132	-	-	310	196	228	640	412	2516
1751	68	270	-	296	250	-	-	224	194	318	2010	740	4370
1752	372	286	356	190	-	-	-	362	1510	1080	998	-	5154
1753 <sup>9</sup> & 10	-	-	630	396	-	310	632	1992	322	268	686	220	5456
1754	130	248	496	74	460	-	464	374	718	814	174	118	3870
1755	156	-	48	734	248	146	-	522	298	188	268	-	2566
1756	86	254	260	504	276	-	-	220	576	-	2516	834	5526
1757	112	-	1140	386	276	228	282	500	426	1130	1406	-	5886
1758	148	96	636	644	352	-	100	638	886	398	470	478	4846
1759	640	110	144	-	-	100	730	422	1032	1680	-	198	5056
1760	-	-	658	452	-	-	-	186	122	946	590	524	3478
1761	406	222	114	540	-	-	106	48	168	80	372	-	2056
1762	392	-	188	156	-	-	280	146	462	1292	1572	224	4670
1763	120	294	1728	-	1054	190	100	142	108	350	968	-	5054
1764	202	328	102	562	390	-	110	900	270	90	188	142	2804
1765	306	196	654	346	138	-	-	278	416	232	400	356	3322
1766	-	-	264	1030	696	94	-	282	370	534	630	202	4122
1767	324	-	264	-	592	430	682	262	1000	1244	394	-	5192
1768	118	-	442	1244	200	294	592	104	796	356	518	-	4664
1769	98	146	314	982	64	-	202	512	1030	1414	576	710	6048
1770	-	1074	102	436	-	-	100	156	412	356	340	-	2976
1771	-	-	636	192	294	156	450	62	722	644	256	100	3512
1772	136	-	-	546	-	616	454	674	776	598	362	-	4362
1773	236	-	136	1046	178	120	574	308	1036	142	134	336	4246
1774	98	592	906	648	-	138	230	172	294	1236	214	400	4928
1775	-	234	308	718	-	-	210	522	716	190	200	-	3098
1776	138	108	-	-	200	-	-	816	-	196	72	232	1762
1777	178	-	782	196	156	-	676	900	1212	158	520	108	4886
1778	-	-	514	294	110	150	344	1298	1624	1914	384	1728	8360
1779	-	-	592	80	88	690	220	1926	-	792	798	2340	7526
1780	-	322	766	94	260	116	280	796	1628	570	422	782	6034
1781	120	324	398	-	-	236	-	474	160	-	292	-	1964
1782	428	170	366	528	-	222	308	-	388	512	164	-	3086
1783	708	58	130	118	312	-	-	-	606	346	218	438	2934
1784	-	-	934	1452	654	-	232	320	1376	1706	1006	218	7898
1785	-	222	84	228	-	92	84	210	234	132	-	-	1286
1786	-	-	-	278	182	-	264	454	506	390	116	72	2262

SOURCE: GAA, PA 78/94-102

CONTINUED...

1 029 1

TABLE II.12.A TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM ST. PETERSBURG DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1787	-	-	286	114	104	-	236	102	130	270	244	536	2022
1788	74	186	758	764	-	-	-	100	604	942	396	-	3824
1789	-	92	746	292	370	-	182	-	1438	600	1068	962	5750
1790	242	190	426	256	116	-	-	-	532	862	532	358	3514
1791	466	1158	266	126	-	106	104	766	220	388	576	534	4710
1792	174	226	104	-	-	-	-	116	522	304	668	172	2286
1793	-	-	-	-	-	98	128	210	380	356	784	656	2612
1794	380	-	186	130	124	-	132	252	444	606	-	94	2348
1795	124	-	34	-	-	-	-	110	-	-	-	120	388
1796	110	-	86	94	132	-	-	364	916	700	-	-	2402
1797-13	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1798	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1799	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1800	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1801	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1802	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1803-16	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1804	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1805	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1806	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1807	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1808-17	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1809	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1810	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1811	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1812	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1813	-	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	86	104	820	926	654	592	3162
1815	286	174	282	112	-	148	410	1290	-	656	494	-	4052
1816	-	-	80	-	48	-	242	300	540	734	-	688	2744
1817	324	322	602	72	-	-	520	3254	11536	8092	2046	3996	30764
1818	308	650	-	124	180	180	-	310	224	116	244	-	2338
1819	90	-	156	84	-	-	-	118	272	670	244	140	1774
1820	406	-	184	192	-	-	-	-	530	1088	184	470	2984
1821	-	-	182	-	96	-	76	126	968	214	68	200	1902
1822	-	-	342	-	-	-	-	-	232	156	164	100	994
1823-19	-	-	42	-	-	-	-	-	-	-	-	-	42

SOURCE: GAA. PA 78/94-102

TABLE 11.12.6 TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM MARVA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTHS OF ARRIVAL												TOTAL FOR THE YEAR				
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1705 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708 2	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1709 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1710 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1711 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1715 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1718	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1719	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1720	-	330	752	-	-	-	-	310	-	-	-	-	-	-	1922	400	2632
1721	-	-	-	-	-	-	260	5364	-	-	-	-	-	-	502	332	7486
1722	924	580	240	-	420	-	388	6726	-	-	-	-	-	1004	2728	15962	-
1723	-	-	412	-	348	380	1830	3118	-	-	-	-	-	684	684	1614	10266
1724	-	-	60	-	-	624	7072	5840	-	-	-	-	-	1730	5042	1642	24290
1725	232	-	276	-	380	624	6922	15036	-	-	-	-	-	7108	2096	952	38744
1726	962	-	560	-	-	-	11380	4624	-	-	-	-	-	1180	4946	2444	30426
1727	626	-	858	-	344	-	14422	1668	-	-	-	-	-	1852	1434	3792	27600
1728	92	392	184	-	300	264	14506	-	-	-	-	-	-	12016	2356	322	32090
1729	-	434	456	-	-	-	2598	-	-	-	-	-	-	6134	1914	1208	26472
1730	-	-	458	-	-	2494	17210	2688	-	-	-	-	-	4206	7940	532	38396
1731	-	-	246	-	-	-	12100	11720	-	-	-	-	-	6058	6484	2656	44730
1732	-	448	522	-	1212	5756	21026	4274	-	-	-	-	-	1370	11354	4678	58338
1733	-	282	286	-	-	3632	22136	4434	-	-	-	-	-	7634	10308	3116	57900
1734	484	462	646	-	-	8870	16208	2712	-	-	-	-	-	7894	8004	630	56474
1735	990	-	482	-	-	15406	4712	4296	-	-	-	-	-	912	9202	1294	38480
1736	-	-	324	-	258	308	7646	3636	-	-	-	-	-	2768	7720	856	25888
1737	-	-	-	-	292	1722	12766	5618	-	-	-	-	-	1404	3448	632	36248
1738	206	-	-	-	-	1868	17722	1622	-	-	-	-	-	10828	10338	2828	49390
1739	-	-	240	-	246	-	7284	12116	-	-	-	-	-	2266	12614	294	38790
1740	334	-	-	-	-	-	-	11842	-	-	-	-	-	1936	5782	3286	30714
1741	-	-	-	-	242	-	12536	4946	-	-	-	-	-	1256	4880	2582	29508
1742	-	-	438	-	-	-	1142	3316	-	-	-	-	-	13522	5096	2666	32010
1743	294	400	1796	-	572	704	24268	3002	-	-	-	-	-	7984	11748	3500	57482
1744	340	-	-	-	-	696	7626	11152	-	-	-	-	-	630	1966	214	26900
1745	214	322	-	-	-	-	17342	1022	-	-	-	-	-	2950	1838	9858	38358

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.12.4 TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM NARVA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1746	1662	-	1272	666	274	408	632	4616	8404	6416	2566	1000	27826	
1747	-	344	188	274	-	-	9880	3058	1818	1224	3196	1996	21978	
1748	-	132	-	1640	-	174	3608	4630	5310	882	1874	1528	19878	
1749	-	-	170	-	-	350	13200	2058	2956	8042	966	2284	30026	
1750	-	-	-	292	-	430	12598	5334	792	13606	2812	3380	37922	
1751	184	554	-	326	-	-	10822	8330	2226	2020	12498	962	37922	
1752	-	246	312	-	-	6004	6756	2536	7614	3096	6330	318	32212	
1753	-	-	362	-	382	7250	10780	616	1384	392	9104	1964	32234	
1754	344	312	1044	2564	226	-	9034	6616	2920	1948	6524	1904	33436	
1755	-	-	-	2090	338	1034	4196	8926	3960	5226	2134	756	28660	
1756	378	-	362	648	-	-	-	-	-	-	186	-	1574	
1757	-	-	-	-	-	-	-	-	-	-	-	-	-	
1758	-	-	-	-	-	-	-	4308	324	616	296	2620	8174	
1759	-	-	-	-	552	-	8830	830	1004	2960	3112	-	17288	
1760	338	276	262	1112	-	366	-	-	-	-	-	-	2344	
1761	-	-	-	-	-	-	-	-	-	-	-	-	-	
1762	-	-	414	-	-	-	1128	5128	418	690	710	698	9186	
1763	-	-	188	682	-	-	3682	6484	3038	2048	2174	1122	19418	
1764	-	344	718	1524	-	62	11674	3038	808	2926	806	1396	23296	
1765	424	-	-	436	1268	-	3070	3596	3190	184	3466	2950	18544	
1766	-	786	820	1312	-	-	16398	226	-	1976	2848	2390	26726	
1767	394	-	674	364	148	418	3828	7626	1028	2394	392	328	17594	
1768	-	418	1444	1464	-	220	9178	3262	350	7404	2230	784	26724	
1769	-	-	742	834	418	5888	8034	698	4412	1918	1404	-	21348	
1770	-	-	742	364	-	-	8608	3620	-	4424	832	418	19008	
1771	-	-	-	1096	-	432	6446	418	1252	-	-	-	9644	
1772	-	-	400	-	-	366	2832	3162	-	2462	404	3628	13254	
1773	-	636	-	404	426	7194	1548	-	4734	-	-	1490	16432	
1774	-	-	1126	802	-	2930	6746	1572	-	3686	772	-	17636	
1775	-	-	-	-	-	-	-	-	-	-	-	-	-	
		NO DATA AVAILABLE												
1776	432	-	418	-	-	2492	7164	836	5634	1696	2912	-	21584	
1777	-	-	-	454	-	-	10114	-	846	424	4652	808	17298	
1778	-	-	1654	-	-	-	8962	1304	626	1260	1338	450	12794	
1779	-	-	890	-	-	5268	662	-	-	1746	1742	-	10308	
1780	438	-	-	1708	-	-	3114	3372	870	416	2212	-	12130	
1781	-	-	-	-	-	-	-	-	-	-	-	-	-	
1782	-	-	-	-	-	852	-	1154	404	-	-	-	2410	
1783	436	-	-	376	-	434	4820	3778	1282	448	1688	1614	14876	
1784	-	392	862	868	-	-	2186	10586	176	422	6398	3908	25788	
1785	-	-	-	1120	728	-	13414	3036	112	4204	4248	2700	29582	

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.12-8

## TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM HARVA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	-	478	-	1722	-	-	8890	7744	1498	2910	5448	2918	31208
1787	-	108	1748	478	-	-	14688	3184	428	6408	7802	1008	38722
1788	-	-	478	1840	-	1330	14324	2160	84	11268	142	1648	33272
1789	-	-	418	414	-	-	13812	1648	2548	8936	3798	2988	34132
1790	-	-	728	-	-	-	7936	7946	4116	4788	6142	6090	37714
1791	-	-	-	-	162	76	8292	12800	270	3344	8980	5846	39140
1792	568	330	-	428	346	8984	10436	946	7120	1788	6108	-	37022
1793	-	-	922	-	-	-	-	838	2384	436	396	848	8824
1794	862	-	-	-	470	3088	11574	990	3668	8968	2248	-	31858
1795	-	-	-	-	-	-	-	410	-	-	-	-	410
1796	-	-	-	410	-	-	2220	1774	968	1808	-	402	7282
1797	350	-	414	468	-	-	4174	1848	784	392	2166	916	11812
1798	-	-	-	2428	-	-	498	56	402	-	-	-	3382
1799	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	410	1422	702	-	-	442	2976
1801	-	-	-	-	-	470	-	-	-	-	-	-	470
1802	-	-	310	688	-	426	2620	3658	5172	1276	4812	-	18962
1803	1338	-	-	470	896	-	-	-	-	366	-	-	3070
1804	134	-	-	-	-	-	106	336	-	104	-	108	788
1805	-	-	218	430	262	-	220	264	590	238	662	84	2958
1806	-	-	-	-	-	-	-	-	220	980	528	-	1728
1807	-	-	-	-	-	-	-	352	168	-	104	244	856
1808	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	212	484	696
1809	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	728	952	2730
1810	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	1078	436	6904
1811	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	1366	-	6182
1812	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	478	2758	8760
1813	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	744	-	8944
1814	-	-	-	-	-	-	-	-	-	-	1534	346	8500
1815	-	-	132	-	-	-	-	378	100	440	1078	436	6904
1816	-	-	-	148	378	-	266	1194	1242	2162	1078	436	6904
1817	-	-	-	934	460	-	2184	-	432	806	1366	-	6182
1818	718	-	-	-	204	-	598	3294	710	-	478	2758	8760
1819	1386	-	-	-	-	378	3150	2480	836	744	-	-	8944
1820	1066	628	-	2264	-	-	718	1744	-	1534	346	200	8500
1821	-	-	796	718	-	-	1750	1004	984	610	210	-	6072
1822	-	1678	-	-	78	-	2124	-	260	484	814	834	6280
1823	-	-	-	842	-	-	1332	1126	1924	658	1126	740	7748
1824	-	-	-	-	-	422	566	2030	2100	420	-	188	8788
1825	-	-	-	-	-	372	590	1314	468	-	-	-	2744

SOURCE: GAA, PA 78/94-102

TABLE II-12.C TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM RIGA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR				
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
17061	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17062	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17063	956	-	-	-	-	-	-	-	-	-	-	-	-	-	32	916	948
17104	-	-	324	626	-	870	590	-	212	-	-	-	-	-	-	-	4484
17114	-	-	36	372	-	-	-	-	-	-	-	-	-	-	-	-	528
17124	-	-	-	-	-	292	32	-	-	-	-	-	-	-	214	-	638
17134	-	404	2886	1926	960	-	-	-	-	-	-	-	-	-	-	-	5816
17146	-	-	-	-	80	376	402	520	528	-	-	-	-	-	704	304	2914
17187	-	-	-	-	-	-	-	-	-	-	-	-	-	-	340	2382	3826
1716	-	1794	2386	1482	4146	1804	100	-	-	804	-	-	-	-	-	-	11912
1717	1408	8456	844	2522	1096	410	166	744	1620	466	-	-	-	-	640	1236	19798
1718	370	-	2228	364	948	670	100	-	-	-	-	-	-	-	1806	7482	13968
1719	916	1006	682	916	702	-	80	686	986	2684	-	-	-	-	4306	888	12866
1720	880	1226	308	-	92	162	1250	1894	3274	3014	1640	630	-	-	1640	630	14170
1721	566	220	382	216	458	116	958	3136	3298	1432	1288	1834	-	-	2468	926	16178
1722	2064	824	548	260	260	140	588	2394	3686	2468	2468	2468	-	-	2400	926	16178
1723	738	674	188	376	160	842	2244	2768	2924	1852	240	1126	-	-	240	1126	14132
1724	1010	1028	1086	426	30	552	1550	1246	3606	2374	682	1274	-	-	682	1274	14864
1725	236	140	950	60	382	1410	1114	7586	5480	4602	728	1010	-	-	728	1010	23638
1726	1776	268	1116	428	364	780	2048	3684	4088	2492	688	3320	-	-	688	3320	21622
1727	1300	1418	696	156	-	98	1444	2020	3978	2732	610	1184	-	-	610	1184	15622
1728	694	770	714	136	-	502	6850	-	968	4442	812	826	-	-	812	826	16714
1729	-	440	322	-	244	64	910	2740	4456	2608	1596	736	-	-	1596	736	14118
1730	912	740	220	-	-	730	3662	4080	3140	4070	3656	1106	-	-	3656	1106	22286
1731	662	220	662	-	-	98	2410	5800	4588	1884	1176	3274	-	-	1176	3274	20444
1732	188	786	1036	674	204	950	110	1498	3416	1354	1194	124	-	-	1194	124	11536
1733	142	688	414	-	132	988	834	2282	2072	1534	2622	1148	-	-	2622	1148	12818
1734	376	1808	610	616	120	-	2726	3282	3468	924	2202	1030	-	-	2202	1030	17934
1735	824	936	492	-	-	1388	2660	2538	3586	2782	2820	1400	-	-	2820	1400	18856
1736	696	-	446	670	200	696	2264	3132	4604	2032	2700	996	-	-	2700	996	20898
1737	448	240	278	2882	488	1362	502	2938	1932	2614	1664	1198	-	-	1664	1198	15946
1738	144	852	1762	820	118	1112	2200	4450	3182	4084	1988	1096	-	-	1988	1096	21488
1739	316	826	1180	848	236	1880	1876	3840	5238	4084	2222	1164	-	-	2222	1164	21056
1740	1558	-	-	1246	298	684	1390	4796	6214	2498	3546	3628	-	-	3546	3628	27858
1741	158	788	1022	688	390	1370	4132	3116	2802	2814	2214	1102	-	-	2214	1102	20944
1742	164	1324	1198	568	874	1374	9174	9174	3260	2894	2476	274	-	-	2476	274	23848
1743	1582	1682	1056	146	428	196	1094	2362	2506	1670	1296	1748	-	-	1296	1748	15766
1744	448	102	516	1056	566	588	1752	5040	3190	2162	2594	522	-	-	2594	522	18498
1745	334	302	766	1034	356	238	-	2634	3946	1806	196	1928	-	-	196	1928	13200

SOURCE: GAA, PA 76/94-102

CONTINUED...

TABLE II.12.C

## TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM RIGA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	342	-	736	264	-	782	488	4408	2338	894	2856	2544	15052
1747	-	150	956	502	174	496	1540	2140	3036	2328	1812	296	13430
1748	980	-	-	2346	670	392	142	1332	3460	702	1336	2650	14000
1749	-	100	542	786	-	332	870	1738	4872	1714	470	2476	13900
1750	502	174	580	-	944	392	1342	1840	1314	1452	722	1722	10984
1751	-	688	-	94	148	664	556	950	1512	370	1350	108	6440
1752	686	614	1074	260	-	918	1118	3900	1492	230	918	538	11948
1753	128	66	2496	264	380	624	1862	2178	1424	638	4004	308	14392
1754	520	704	1272	522	-	458	1300	4580	3776	612	2172	3036	18952
1755	124	-	150	1644	638	684	-	1108	872	3496	1306	1244	11266
1756	384	-	550	218	-	396	2970	1326	2210	1538	3736	1388	14716
1757	-	208	2918	1328	276	450	1926	5132	3064	3482	1688	930	21402
1758	802	986	2630	724	142	-	5260	5806	1998	1640	348	4022	24558
1759	972	456	264	474	640	1002	8978	770	3322	7532	2382	754	27546
1760	184	1502	2086	964	68	-	6044	4364	5512	4880	3952	4816	34372
1761	1326	902	336	1446	464	5566	5042	5368	8358	4262	8648	926	42644
1762	488	116	708	-	-	144	2946	6656	3784	4154	7570	2670	29136
1763	116	-	1296	1770	102	78	2952	2784	3114	1730	4836	3604	22382
1764	3190	418	902	2708	150	1128	2394	4836	1362	3022	2070	5640	27820
1765	2590	426	854	2636	1280	-	996	5802	5240	1524	2252	3676	27276
1766	2022	684	2446	1212	238	654	5058	3586	562	7256	3842	2168	29728
1767	1010	612	634	1066	390	-	1618	2612	5256	1234	610	1200	16242
1768	324	248	3988	1382	204	-	1526	3564	1120	3818	2392	1088	19654
1769	998	1710	1786	1596	-	3420	4746	1966	4462	5996	4432	1090	32202
1770	442	552	1264	2626	394	70	1242	6776	1130	2294	4090	3796	24676
1771	984	-	412	2312	-	668	3450	5948	2098	-	-	-	15872
1772	144	1694	2528	796	2856	1870	7034	7796	2424	3062	2424	2052	34680
1773	1126	1006	1244	1162	360	2860	7886	2644	2880	1822	318	4786	28094
1774	72	260	2246	2862	1558	2006	3990	5072	5128	5746	2620	1982	33582
1775			NO DATA AVAILABLE										
1776	680	568	1108	1912	1332	458	1492	3878	5042	976	3028	1130	21624
1777	448	108	1272	1168	162	796	10002	-	1786	1604	9274	2372	28992
1778	220	-	1064	2460	268	266	3846	6098	3790	4758	2428	2946	28142
1779	1088	438	392	1252	108	4528	4200	888	2088	1944	6660	-	23968
1780	-	464	1176	756	240	106	4902	5630	3342	1370	10328	-	28316
1781	126	108	1444	488	420	384	440	554	1642	2064	854	-	8524
1782	1068	-	992	648	540	372	1746	2880	4446	2688	3058	3344	21782
1783	1636	694	1256	1726	1158	176	1054	4716	4854	4856	1620	4562	28308
1784	-	374	1590	1396	636	462	742	2810	2632	2548	1860	2114	17364
1785	256	558	-	390	496	566	2146	3444	3418	1700	2930	2386	18310

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.12c TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM RIGA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR TIME YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1784	-	114	614	2050	2594	220	266	3632	2380	1100	2168	4758	19990
1787	348	770	1666	1184	456	134	1284	2934	3028	844	2110	1808	16936
1788	262	844	1088	780	736	-	678	2220	1094	2650	1930	242	12486
1789	-	844	992	1506	116	80	598	3436	1606	1604	2252	2582	15616
1790	-	418	666	530	176	1326	1588	2666	3382	2448	1298	1874	16342
1791	-	-	-	188	126	426	582	2348	2196	628	2196	1140	9828
1792	-	1520	576	682	-	644	1156	1632	1960	1440	5256	-	14806
1793	464	426	1076	1012	64	392	648	2484	1460	2054	1758	4262	16070
1794	76	494	832	356	-	1092	2696	3260	1538	732	1350	1160	13586
1795	-	-	-	312	96	200	272	628	608	1222	892	506	4736
1796	1002	1010	214	630	174	718	3728	2346	2346	1608	966	1080	19822
1797	634	460	1042	664	110	186	526	1906	846	3008	2624	1790	13796
1798	1308	370	1024	350	856	436	1360	1330	814	128	464	384	8794
1799	116	-	-	-	-	168	-	-	814	96	-	-	380
1800	-	214	-	110	226	-	904	694	1130	282	278	250	4088
1801	266	276	-	-	140	-	418	1016	318	386	602	-	3424
1802	270	586	1038	232	442	2260	3724	1472	2858	3086	3454	-	19422
1803	164	632	588	1688	258	2372	5684	1320	952	1510	582	346	16066
1804	134	-	-	986	-	-	1192	1264	-	1184	-	1494	6294
1805	-	128	1436	332	432	-	1426	5270	1498	2014	1172	452	14160
1806	204	566	564	-	-	100	62	432	938	1040	50	166	4122
1807	-	52	-	106	112	-	-	216	48	128	-	78	740
1808	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1809	-	-	640	594	472	422	360	1224	2454	944	644	284	5550
1810	62	98	382	762	172	128	1688	1416	1350	500	1368	726	7848
1811	666	602	120	426	700	8318	18918	2306	1806	3388	3180	1478	19480
1812	172	502	-	-	348	-	266	7824	8468	4986	2352	1808	55188
1813	-	174	190	-	96	454	546	1532	1170	1536	268	336	6190
1814	-	-	-	-	500	300	1222	1922	890	752	1212	1012	7248
1815	-	370	440	1064	500	998	1082	1638	1638	1466	668	824	9774
1816	-	276	400	136	328	-	2226	1140	1464	3046	636	174	10498
1817	242	658	188	262	172	-	1394	-	58	140	892	-	4162
1818	-	-	-	626	172	-	1658	2266	1842	776	1584	246	9870
1819	140	136	-	78	214	2008	478	638	1564	898	-	200	6254
1820	-	-	-	-	-	572	776	1540	160	-	-	-	3362

SOURCE: GAA. PA 78/94-102



TABLE 11.12.D

TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM VIBORG DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	-	-	NO DATA AVAILABLE		-	-	-	-	-	-	600	1240	1940
1709 <sup>2</sup>	-	-	360	340	100	260	440	-	110	-	-	-	1510
1710 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	312	312
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	-	-	-	-	-	-	-	-	-	-	172	1606
1717	-	200	-	1234	-	-	-	-	-	-	370	3398	3768
1718	-	-	-	-	-	-	-	-	-	-	772	860	3322
1719	320	-	-	-	-	-	88	1476	1290	2482	406	1872	10018
1720	-	-	790	1192	-	420	382	920	3690	644	812	380	6798
1721	-	-	-	-	-	-	-	906	4136	700	412	1058	8088
1722	280	-	-	300	276	-	-	-	740	660	612	722	3038
1723	-	-	-	792	-	-	312	-	916	296	790	1536	3590
1724	-	52	-	-	-	-	-	-	-	-	-	-	4464
1725	-	-	-	220	-	-	388	572	1020	1624	640	-	6598
1726	-	-	-	-	-	352	670	1392	1140	1118	1624	302	5258
1727	-	-	-	294	-	-	1740	682	564	-	220	1758	5258
1728	-	240	-	-	-	-	470	-	260	2448	-	-	3418
1729	-	-	438	-	-	-	134	790	236	1146	606	-	3350
1730	-	-	884	322	-	150	608	844	834	280	1500	582	5702
1731	-	-	-	350	-	-	-	880	118	814	756	1618	4536
1732	-	-	-	622	-	-	770	874	1120	404	1650	734	6174
1733	138	224	242	556	-	280	498	1044	1298	480	780	688	6128
1734	-	62	562	196	-	-	-	2220	724	1142	-	242	5806
1735	-	232	-	-	-	296	2568	1168	506	1064	2422	-	8256
1736	-	-	-	-	278	-	612	2586	1534	840	5308	1470	12628
1737	-	-	-	1206	322	274	824	1758	692	1840	1372	1240	9528
1738	-	-	546	-	198	-	866	1604	244	738	428	1054	5678
1739	-	-	336	-	226	-	272	1300	354	590	482	744	4304
1740	-	-	-	-	-	-	216	256	602	-	316	856	2246
1741	-	-	-	-	-	330	-	2706	366	-	342	-	3744
1742	-	-	256	598	-	-	-	480	302	894	726	-	3256
1743	62	94	340	296	558	42	292	1114	432	-	852	300	4382
1744	94	-	-	-	302	-	-	1852	736	640	722	330	4676
1745	-	-	116	322	256	-	338	1594	244	582	754	-	4206

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.12.D

TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM VIBORG DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1746	276	-	408	-	248	-	-	904	-	302	338	926	3400	
1747	-	-	-	288	-	242	-	1540	336	-	696	-	3102	
1748	-	-	-	-	694	-	296	592	674	214	260	208	2938	
1749	-	-	-	-	802	-	208	1054	1050	306	-	-	3120	
1750	-	-	178	-	-	286	1488	928	100	448	-	678	4106	
1751	-	-	-	-	186	-	-	-	676	656	-	240	1758	
1752	188	426	-	222	-	-	102	708	-	-	532	-	2178	
1753	-	234	-	506	398	234	1078	382	388	-	562	-	3782	
1754	162	264	378	488	-	-	498	332	350	264	344	-	3080	
1755	-	-	230	392	676	-	608	84	-	716	942	-	3648	
1756	-	-	238	264	-	234	3130	962	556	706	898	-	6988	
1757	-	-	-	264	-	494	628	1354	428	462	-	-	3630	
1758	-	-	292	392	-	-	-	512	364	-	-	-	1560	
1759	-	240	-	-	-	-	958	-	-	184	760	-	2142	
1760	-	-	-	-	-	-	240	418	2162	724	-	-	3544	
1761	-	-	-	-	-	-	508	382	-	632	-	-	1492	
1762	-	-	-	-	-	-	-	610	-	234	836	316	1996	
1763	-	-	102	-	-	-	220	148	230	530	422	-	1652	
1764	-	298	208	220	-	-	454	146	-	220	110	184	1840	
1765	-	244	180	-	-	-	234	532	316	532	544	256	2636	
1766	-	484	102	304	248	-	464	572	214	-	380	134	2902	
1767	-	-	-	-	-	-	-	-	-	146	202	140	488	
1768	-	298	-	-	-	-	-	140	386	244	-	326	1394	
1769	-	-	238	-	-	-	154	412	-	856	156	-	1816	
1770	-	414	-	156	-	-	-	-	-	-	-	542	1112	
1771	-	-	-	-	-	-	-	-	264	-	-	-	264	
1772	146	-	-	-	-	-	-	-	-	-	-	-	146	
1773	-	-	150	-	-	-	-	-	316	-	-	628	1094	
1774	-	-	-	196	-	-	-	198	314	132	-	-	840	
1775	-	NO DATA AVAILABLE												-
1776	-	-	216	-	-	66	182	-	-	190	-	264	878	
1777	-	-	-	-	-	-	350	-	-	-	-	-	350	
1778	-	-	-	-	-	-	-	-	226	974	-	-	1200	
1779	-	-	-	-	-	-	660	676	-	404	574	-	2314	
1780	-	-	-	-	-	-	-	-	-	-	452	-	452	
1781	-	-	270	188	-	178	-	-	-	254	-	-	890	
1782	-	168	-	-	-	-	-	346	362	116	626	924	2542	
1783	130	-	88	-	-	-	238	442	520	148	-	-	1566	
1784	-	-	-	-	108	136	-	210	-	198	236	246	1134	
1785	-	-	-	-	-	-	-	588	-	-	508	324	1420	

SOURCE: GAA. PA 78/94-102

CONTINUED...

TABLE 11.12.D TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM VIBORG DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR TIME YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	254	-	-	-	264	-	-	250	-	114	800	-	1682
1787	-	116	204	-	234	-	-	368	-	322	236	-	1482
1788	-	-	-	-	-	-	144	-	434	-	186	220	1004
1789	-	-	-	446	-	-	-	618	-	-	-	220	1284
1790	-	-	34	-	-	-	-	-	-	-	198	256	488
1791	-	-	-	-	-	-	-	-	-	-	-	-	-
1791 13	-	-	-	-	-	-	152	-	-	300	270	-	1098
1792	-	132	204	-	-	-	-	380	788	568	354	272	2526
1793	204	-	-	-	-	292	-	96	488	264	288	160	2314
1794	-	-	536	210	-	-	-	-	-	-	-	-	-
1795	-	-	-	-	-	-	-	198	-	384	-	-	582
1796	-	-	-	-	-	-	-	-	-	-	340	-	538
1797	-	-	198	-	-	-	-	-	-	128	-	-	536
1798	140	-	-	268	-	-	-	-	-	-	-	-	254
1799	-	-	-	134	-	-	120	-	-	-	-	-	244
1800	-	-	-	-	-	-	-	-	140	104	-	-	244
1801	-	-	-	-	-	264	-	-	-	102	-	146	532
1802	-	-	-	-	-	-	-	-	-	-	-	-	-
1803	-	252	-	-	-	-	-	-	-	56	-	-	308
1804	-	-	-	268	-	-	-	86	-	92	-	-	446
1805	-	-	-	116	-	-	168	-	112	350	-	252	746
1806	-	-	-	-	142	-	-	-	-	-	-	92	252
1807	-	-	-	-	-	-	-	-	32	-	-	-	266
1808	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	326	-	398	-	724
1815	-	-	-	-	-	246	48	-	128	-	204	498	1124
1816	-	-	128	-	260	-	-	-	-	140	-	-	528
1817	-	144	-	-	-	-	154	-	252	-	-	-	550
1818	-	-	-	-	-	-	-	-	124	154	578	144	1000
1819	-	-	-	-	-	-	-	814	-	-	-	102	916
1820	-	-	-	448	132	-	394	552	346	-	-	-	1872
1821	-	-	-	128	-	-	350	250	198	-	-	-	926
1822	-	-	-	-	250	-	340	-	-	-	-	-	590
1823	-	-	-	-	-	-	-	224	-	496	-	-	720
1824	-	-	-	-	-	-	-	274	1010	-	-	-	1284
1825	-	-	-	-	-	-	-	372	-	-	-	-	372

SOURCE: GAA, PA 78/94-102

TABLE 11.12.E

TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM REVAL DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	
1708	-	NO DATA AVAILABLE												-
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	
1710 <sup>3</sup>	-	-	-	-	-	68	-	-	-	-	-	-	68	
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	
1712 <sup>5</sup>	-	-	-	-	-	132	-	60	-	-	-	-	192	
1713 <sup>4</sup>	-	-	44	100	-	-	-	-	-	-	-	-	144	
1714 <sup>6</sup>	-	-	-	-	40	262	220	-	56	76	32	-	686	
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	36	36	
1716	-	70	1692	1380	1132	870	-	-	-	-	-	-	5144	
1717	-	666	-	260	150	-	300	-	400	-	-	-	1976	
1718	-	-	-	-	200	-	-	-	-	-	-	-	200	
1719	120	-	-	-	-	-	-	-	64	-	-	-	184	
1720	-	-	-	-	-	-	-	-	30	40	40	-	110	
1721	-	-	-	-	-	-	-	30	-	60	-	-	90	
1722	180	-	-	-	-	-	220	-	-	-	-	-	400	
1723	-	-	60	-	-	-	-	44	96	-	-	88	288	
1724	-	-	-	-	-	-	52	-	-	30	-	60	142	
1725	-	-	-	-	-	148	-	-	100	-	-	-	248	
1726	-	-	-	-	96	44	-	-	40	68	-	-	248	
1727	-	-	-	-	-	-	70	-	-	-	-	-	70	
1728	-	-	-	-	-	186	132	-	-	-	-	446	764	
1729	-	228	-	-	-	-	66	-	856	252	266	-	1668	
1730	-	-	-	204	-	668	282	542	-	226	106	296	2324	
1731	-	198	192	-	-	222	-	1222	1552	106	-	-	3492	
1732	170	362	-	176	-	56	228	124	124	-	-	-	1240	
1733	-	-	-	-	-	-	70	-	108	-	-	-	178	
1734	-	-	-	92	-	74	972	518	-	-	124	-	1780	
1735	-	-	-	-	132	-	-	-	106	-	-	-	238	
1736	-	-	-	-	-	-	124	256	-	124	72	-	576	
1737	-	90	-	-	158	66	-	62	270	138	142	-	926	
1738	-	-	236	-	-	668	770	338	92	90	-	-	2194	
1739	-	-	124	-	-	702	630	1614	270	686	108	136	4270	
1740	-	-	-	942	-	578	998	2954	2364	1200	274	444	9784	
1741	-	-	132	122	-	868	1642	202	112	-	-	-	3078	
1742	-	-	-	-	-	-	194	-	124	-	-	206	524	
1743	-	-	-	-	-	-	-	-	-	-	-	-	-	
1744	-	-	-	-	-	-	124	242	-	-	-	-	366	
1745	-	-	-	-	-	-	-	258	-	-	-	-	258	

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.12.E

TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM REVAL DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1746	-	-	176	-	-	-	1002	124	-	-	-	-	1302	
1747	-	-	170	-	-	-	76	-	-	-	34	-	280	
1748	-	-	-	-	124	-	96	84	68	-	72	-	444	
1749	-	-	-	106	-	-	-	100	-	-	-	-	206	
1750	-	-	-	-	-	96	70	140	124	70	-	-	500	
1751	-	-	-	274	-	98	70	-	-	-	-	-	402	
1752	98	-	70	-	-	-	152	-	-	-	-	-	280	
1753	-	-	-	-	-	104	592	132	-	-	-	-	828	
1754	-	-	-	-	-	-	-	68	190	-	-	-	258	
1755	-	-	-	-	-	-	-	148	-	-	-	-	148	
1756	-	-	274	114	-	72	-	-	134	-	-	-	594	
1757	-	-	-	-	-	-	-	-	-	-	-	-	-	
1758	-	-	-	-	-	-	-	114	-	-	-	-	114	
1759	-	-	-	-	-	-	-	-	-	44	102	-	146	
1760	-	-	-	-	-	-	-	-	-	-	-	-	-	
1761	-	-	-	-	-	-	56	208	72	-	260	-	596	
1762	118	-	188	114	-	-	-	214	232	312	202	268	1648	
1763	-	-	-	-	-	110	-	-	74	-	86	96	366	
1764	-	-	-	-	-	-	-	166	188	96	-	122	572	
1765	-	-	-	-	-	-	-	-	-	-	-	90	90	
1766	-	-	-	68	-	-	-	-	-	-	80	96	244	
1767	226	-	-	-	-	-	-	-	-	-	-	-	226	
1768	-	-	-	-	-	-	-	-	-	64	-	-	64	
1769	-	-	-	-	-	180	-	110	-	-	-	-	290	
1770	-	-	-	-	-	-	-	114	-	-	-	88	202	
1771	-	-	-	-	-	-	434	-	84	-	-	-	518	
1772	-	-	-	-	-	188	-	180	-	-	-	-	368	
1773	-	120	-	-	-	-	-	114	-	-	-	-	234	
1774	-	-	120	-	54	-	-	120	222	-	238	98	852	
1775	-	NO DATA AVAILABLE												-
1776	102	-	-	-	-	-	-	186	62	-	-	-	350	
1777	-	-	-	-	-	98	114	-	-	-	-	-	212	
1778	-	-	-	-	-	164	-	-	-	-	-	-	164	
1779	154	-	-	-	-	-	-	-	-	-	-	-	154	
1780	-	-	-	-	-	-	-	-	-	-	-	-	-	
1781	-	-	-	-	-	-	-	-	66	-	-	-	66	
1782	-	-	-	-	-	102	-	-	288	-	-	-	390	
1783	-	-	-	-	-	-	-	-	-	60	-	594	654	
1784	-	-	-	-	-	-	-	-	-	-	130	-	130	
1785	-	-	-	-	-	-	104	-	-	-	-	-	104	

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.12.E

TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM REVAL DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	-	-	-	-	-	-	-	-	-	-	-	-	-
1787	-	-	-	-	-	-	-	-	-	-	-	-	-
1788	-	-	-	-	-	-	-	154	-	-	-	-	154
1789	-	-	-	-	-	-	-	-	-	-	-	-	-
1790	-	-	-	-	-	-	-	-	-	-	-	-	-
1791 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1792	-	-	-	-	-	-	44	-	-	-	-	-	44
1793	-	-	-	-	-	-	-	-	-	-	-	-	-
1794	-	-	-	-	-	-	-	-	-	-	176	-	176
1795 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	228	156	58	250	-	44	-	736
1797	72	-	-	-	-	-	68	-	-	-	-	-	140
1798	-	-	-	134	-	-	-	-	-	-	36	-	170
1799	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	-	-	-	-	-
1801	-	-	-	-	-	-	414	-	-	-	-	-	414
1802	-	-	-	-	-	-	82	152	148	-	54	-	436
1803	-	-	-	-	-	-	82	-	-	-	-	156	238
1804	-	-	-	-	-	-	-	-	-	-	-	-	-
1805	-	-	-	-	-	-	-	-	-	-	-	-	-
1806	-	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-	-	-	-	-	-	-
1808 <sup>17</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-
1814 <sup>6</sup>	-	-	-	-	-	-	168	110	-	-	-	-	278
1815	-	-	-	-	-	-	-	-	180	520	-	-	700
1816	-	-	-	-	-	-	-	-	-	-	-	-	-
1817	-	-	178	-	-	326	118	-	144	-	-	-	766
1818	-	-	-	-	-	-	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-	-	-	-	-	-	-
1820	-	-	-	-	-	-	-	-	-	-	170	-	170
1821	-	-	-	-	-	-	-	-	-	-	-	-	-
1822	-	-	-	-	-	-	-	-	-	-	-	-	-
1823	-	-	-	-	-	-	-	-	-	-	-	-	-
1824	-	-	-	-	-	-	-	-	-	-	-	-	-
1825 <sup>20</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-

SOURCE: GAA, PA 76/94-102

TABLE II.12.F

TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM ESTONIA DISTRIBUTED ACCORDING TO  
REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE												-
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1710 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	-	-	-	-	70	-	-	-	-	-	-	70
1717	-	-	-	-	-	-	-	-	116	-	-	-	116
1718	-	-	-	-	-	-	-	-	-	-	-	352	352
1719	-	-	-	-	-	-	-	-	-	-	-	-	788
1720	-	-	448	-	-	-	-	472	168	-	788	68	1688
1721	-	-	-	-	-	-	-	-	-	-	-	532	-
1722	-	-	-	-	-	-	-	-	-	-	-	-	-
1723	-	340	-	820	400	-	-	-	-	-	368	-	1928
1724	-	-	-	-	-	-	-	-	-	-	-	96	96
1725	-	-	-	-	-	-	-	38	-	-	-	-	38
1726	-	-	-	-	-	-	-	-	-	-	-	-	-
1727	-	-	-	-	-	-	-	-	-	-	-	-	-
1728	-	-	-	-	-	-	84	-	-	-	-	-	84
1729	-	-	-	-	-	-	-	236	210	246	-	-	692
1730	-	-	-	-	-	-	452	-	572	326	124	-	1474
1731	-	-	-	-	-	-	-	408	496	-	210	312	1426
1732	-	-	-	-	-	-	-	130	112	-	92	-	334
1733	-	-	-	-	-	-	-	288	-	-	156	-	444
1734	-	-	-	-	-	76	210	-	100	-	-	-	386
1735	-	-	-	-	-	-	-	-	-	176	-	192	368
1736	-	108	-	-	-	-	198	-	-	334	-	-	640
1737	-	-	320	408	-	-	-	-	-	110	-	248	1086
1738	-	288	-	-	-	82	-	208	672	576	70	418	2314
1739	-	-	-	-	76	116	56	728	-	102	1696	-	2774
1740	-	-	-	-	-	-	704	690	950	520	424	366	3654
1741	-	-	60	-	-	146	1022	634	802	290	-	-	2954
1742	-	-	-	-	-	-	-	3258	-	412	584	528	4782
1743	-	420	192	-	-	-	-	158	350	1170	1062	-	3352
1744	306	-	296	-	-	192	630	1524	-	-	478	604	4030
1745	488	-	-	124	-	-	3396	954	282	264	-	342	5850

SOURCE: GAA, PA 76/94-102

CONTINUED

TABLE II.12.F TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM ESTONIA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	338	302	-	-	-	-	-	-	-	686	-	984	2310
1747	-	778	-	-	-	686	1726	408	88	344	318	650	4996
1748	-	-	-	312	-	-	390	3600	-	1370	1612	1578	9062
1749	-	-	82	338	-	566	1384	250	1620	1672	650	1914	8476
1750	-	300	232	274	350	-	90	-	318	1144	822	-	3530
1751	-	172	-	-	-	-	1704	598	580	214	716	976	4930
1752	-	-	-	-	-	1402	-	822	562	126	1948	338	5198
1753	-	-	-	730	316	414	-	-	-	-	-	-	1460
1754	220	166	-	-	-	96	-	84	68	-	64	140	838
1755	-	-	-	-	-	-	80	222	-	114	-	50	466
1756	-	-	-	-	-	40	-	-	-	-	-	-	40
1757	-	-	-	-	-	-	74	-	-	-	-	-	74
1758	-	-	-	-	-	-	-	-	-	-	-	-	-
1759	-	-	-	-	-	-	470	-	546	432	126	-	1574
1760	-	-	96	-	-	-	670	-	82	-	260	-	1108
1761	-	208	294	-	-	212	102	-	150	190	58	98	1312
1762	318	-	-	-	-	116	690	120	256	432	-	-	1932
1763	-	-	248	332	230	-	-	110	-	330	750	-	2090
1764	-	-	100	170	-	248	124	110	-	98	-	416	1266
1765	-	-	218	-	-	-	222	-	348	476	80	-	1344
1766	88	-	-	-	-	-	94	-	-	622	-	-	804
1767	-	94	-	-	-	-	132	330	446	116	364	-	1482
1768	-	118	118	92	132	-	176	140	478	158	778	112	2302
1769	380	-	-	-	-	112	752	844	548	278	534	-	3448
1770	-	-	-	-	-	-	684	1016	-	90	1048	920	3756
1771	444	-	-	-	-	-	1508	710	890	-	-	-	3652
1772	-	726	224	132	-	488	1270	558	368	1588	-	770	6124
1773	116	-	732	386	274	776	1134	606	608	-	-	1772	6404
1774	130	92	-	230	-	196	3056	344	976	534	116	546	6220
1775													NO DATA AVAILABLE
1776	312	-	138	324	154	916	1622	1410	102	180	828	720	6706
1777	368	98	240	-	140	146	3468	-	400	182	364	936	6342
1778	116	238	828	144	-	-	992	598	1060	164	280	546	4966
1779	414	-	102	130	-	292	1526	106	878	272	500	-	4220
1780	-	-	210	134	138	-	124	1086	372	384	782	-	3230
1781	528	-	160	138	-	102	-	-	-	-	-	-	928
1782	84	-	-	110	274	-	110	96	114	-	218	482	1488
1783	408	114	82	90	-	130	90	634	512	992	366	892	4310
1784	-	-	522	-	-	-	-	590	-	226	-	446	1784
1785	-	150	-	252	-	-	138	540	998	-	710	-	2788

SOURCE: GAA, PA 78/94-102

CONTINUED...

- 638 -



TABLE 11.12.F

TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM ESTONIA DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	-	-	-	128	236	-	330	-	-	398	180	-	1272
1787	-	-	104	410	-	-	234	112	228	62	120	236	1506
1788	-	-	-	-	-	-	234	338	-	94	-	-	666
1789	130	90	-	344	-	-	410	92	718	806	174	104	2868
1790 <sup>13</sup>	172	-	174	-	198	-	-	-	-	264	574	336	1718
1791 <sup>13</sup>	-	-	-	80	-	-	124	326	556	126	260	114	1586
1792	-	104	-	-	-	98	-	-	186	268	982	-	1638
1793	174	-	124	-	162	-	124	-	-	72	-	-	656
1794	-	-	-	-	288	-	434	270	166	406	-	-	1564
1795 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	268	-	-	-	-	-	92	526	138	-	-	1024
1797	330	-	104	-	-	-	64	42	-	-	202	-	742
1798	72	-	-	-	-	-	-	44	82	-	-	-	198
1799	-	-	60	-	-	-	-	-	-	-	-	-	60
1800	-	-	-	-	-	-	-	-	304	-	-	-	304
1801	-	-	-	-	-	-	-	-	-	238	-	-	238
1802	-	-	-	-	-	-	256	-	388	224	104	-	972
1803	204	-	-	-	-	110	78	248	106	78	-	-	824
1804	-	-	-	-	-	-	-	-	-	374	-	-	374
1805	-	-	-	-	-	-	346	218	576	-	334	106	1580
1806	104	-	170	212	-	-	-	-	190	-	-	-	676
1807	-	-	-	-	-	-	-	-	-	-	-	-	-
1808 <sup>17</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-
1814 <sup>6</sup>	-	-	-	-	-	-	-	110	-	-	-	-	110
1815	-	-	-	-	-	-	-	102	178	-	-	-	280
1816	-	-	186	-	-	-	148	162	-	144	206	-	846
1817	-	110	-	-	-	324	220	352	370	96	-	-	1472
1818	-	-	-	-	-	-	102	380	-	240	-	-	722
1819	-	112	-	-	-	-	-	672	248	158	-	-	1190
1820	-	-	-	-	-	-	-	-	158	-	-	106	264
1821	-	-	-	-	-	-	332	80	-	180	-	-	592
1822	-	-	-	-	-	-	74	-	66	-	106	-	246
1823	-	-	-	-	-	-	242	-	96	-	242	-	580
1824	-	-	-	-	-	-	184	-	428	-	-	-	612
1825 <sup>20</sup>	-	-	-	-	-	-	-	218	-	-	-	-	218

SOURCE: GAA, PA 78/94-102

TABLE 11.12.6

TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM FREDERIKSHAMN DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1744 <sup>0</sup>	-	-	-	-	-	-	-	280	528	222	-	-	1030
1745	-	-	86	-	-	266	328	-	244	-	-	-	892
1746	-	-	-	-	-	-	-	580	-	218	-	248	1046
1747	-	-	312	-	336	-	520	296	648	-	702	-	2614
1748	-	-	-	-	-	-	54	444	408	-	-	648	1854
1749	312	-	-	-	-	-	456	192	-	234	208	54	1486
1750	-	-	-	-	-	234	-	276	-	552	-	-	1062
1751	-	-	-	-	-	234	-	86	-	242	-	-	562
1752	-	232	-	-	-	-	-	356	254	-	172	-	1014
1753	-	-	-	-	-	-	-	314	-	-	-	-	314
1754	-	-	-	-	178	-	-	-	298	106	-	-	582
1755	-	-	-	64	-	-	-	106	344	214	-	-	728
1756	-	-	-	-	-	106	-	1176	-	-	162	-	1444
1757	-	-	-	-	92	-	-	762	682	-	-	96	1632
1758	-	-	-	-	-	-	-	670	92	112	-	256	1130
1759	-	-	-	-	-	-	1096	-	524	114	256	-	1990
1760	-	-	-	-	-	-	-	390	912	234	-	-	1836
1761	-	-	-	-	-	-	-	170	316	-	392	-	878
1762	-	-	338	170	-	-	626	-	-	794	-	-	1928
1763	-	-	-	170	-	-	426	-	-	136	-	278	1010
1764	-	-	-	256	-	-	-	398	-	-	404	-	1056
1765	-	-	-	170	-	-	-	390	-	-	-	-	560
1766	-	-	170	-	350	-	392	344	-	148	250	-	1654
1767	-	-	-	320	-	-	-	426	-	-	-	-	746
1768	-	298	378	170	-	-	216	170	-	-	-	-	1230
1769	-	-	170	216	-	148	386	-	278	262	-	216	1676
1770	-	-	-	170	-	-	386	250	-	-	-	216	1022
1771	-	-	-	170	-	-	466	-	-	-	-	-	636
1772	-	-	106	-	-	-	216	170	-	-	592	-	1084
1773	-	-	-	170	-	150	350	394	-	-	-	150	1214
1774	-	-	432	170	-	90	216	302	162	170	-	216	1758
1775	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1776	-	-	-	-	-	-	-	-	-	540	-	-	540
1777	-	-	-	-	-	-	-	-	-	-	-	-	-
1778	-	-	-	-	-	-	892	-	-	-	-	-	892
1779	226	-	-	-	-	80	700	-	-	-	414	-	1420
1780	-	-	-	-	-	-	768	438	-	-	620	-	1826
1781	-	-	-	-	-	-	-	266	-	-	170	-	436
1782	-	-	-	156	-	-	254	170	-	448	358	-	1386
1783	-	-	-	134	-	-	290	518	324	152	-	-	1418

SOURCE: GAA, PR 78/94-102

CONTINUED..

- 640 -

TABLE II.12.6 TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM FREDERIKSHAMN DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1794	-	-	-	148	-	-	434	404	-	472	532	-	1990
1795	-	-	-	-	264	-	1188	814	-	-	220	-	2486
1796	-	-	-	-	-	-	234	-	152	-	-	-	386
1797	-	-	-	-	-	-	246	196	-	-	186	-	628
1798	-	-	-	396	-	-	132	-	-	-	264	-	794
1799	-	384	-	-	-	-	-	-	-	-	-	-	384
1799.13	-	-	-	-	-	-	-	146	-	-	-	-	146
1799.13	-	-	-	-	-	-	-	-	-	-	-	-	-
1799.13	-	-	-	-	-	-	-	-	-	-	-	160	160
1799.13	-	-	-	204	-	-	118	-	108	458	-	-	888
1799.13	-	-	-	-	-	-	-	-	-	238	454	-	692
1799.13	-	-	-	-	-	160	248	-	-	-	-	-	428
1799.13	-	-	-	-	-	-	-	-	-	-	-	-	-
1799.13	-	-	-	-	-	-	-	-	-	-	-	-	-
1799.13	-	-	-	-	-	220	-	-	140	98	-	-	238
1800	-	-	-	-	-	-	-	-	-	-	-	-	404
1800	-	-	-	-	-	-	-	-	-	-	-	-	186
1800	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	74	-	-	-	-	160
1800	-	-	-	-	-	-	-	72	-	86	160	-	252
1800	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	144	-	-	-	-	144
1807.17	-	-	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-
1813.6	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-	-
1815.18	-	-	-	-	-	-	-	-	-	-	-	-	-
1816	-	-	-	-	-	-	-	-	-	-	-	-	-
1817	-	-	-	-	-	90	-	-	-	-	460	-	666
1818	-	-	-	-	-	-	-	-	-	-	-	-	90
1819	-	-	-	-	-	-	-	-	-	-	-	-	-
1820	-	-	-	-	-	-	-	-	-	-	-	-	-
1821	-	-	-	-	-	-	-	-	-	410	-	-	410
1822	-	-	-	-	-	-	520	-	-	-	-	-	716
1823	-	-	-	-	-	-	328	-	-	-	-	-	328
1824.20	-	-	-	-	-	-	-	246	-	-	-	-	574
1824.20	-	-	-	-	-	-	276	-	-	-	-	-	574
1824.20	-	-	-	-	-	-	216	-	-	-	-	-	216

SOURCE: GAA, PA 78/94-102

TABLE 11.12.M

## TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM COURLAND DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1796 <sup>14</sup>	550	654	1152	2094	3572	6522	3900	3174	2394	1368	1868	1476	28784
1797	132	332	190	552	758	320	214	176	68	200	396	496	3834
1798	-	-	222	166	1120	182	208	66	186	-	46	-	2196
1799	98	-	-	40	-	-	128	-	-	-	-	-	266
1800	-	-	-	-	68	422	178	56	444	-	-	-	1168
1801	-	58	-	-	-	70	394	482	190	58	236	-	1488
1802	-	220	176	156	1162	320	276	214	-	156	98	-	2778
1803	58	-	-	82	146	1594	666	46	244	-	104	392	3332
1804	126	-	-	1146	-	-	180	254	-	204	-	78	1988
1805	-	-	446	168	168	714	586	466	-	104	90	-	2742
1806	-	66	-	152	110	118	86	220	212	440	-	-	1404
1807	-	-	-	74	-	224	96	180	-	-	-	60	634
1808 <sup>17</sup>	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1809	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1810	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1811	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1812	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1813 <sup>6</sup>	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	744	584	248	516	-	160	132	2384
1815	-	-	-	-	448	212	106	438	236	372	258	-	2068
1816	-	-	-	144	60	602	234	396	492	48	320	154	2450
1817	-	280	-	440	2072	154	600	408	496	108	74	-	4632
1818	-	-	-	-	558	162	62	100	130	98	-	-	1110
1819	76	-	-	-	116	122	356	480	-	-	98	-	1248
1820	-	-	-	-	-	430	282	80	-	158	-	56	1006
1821	-	82	138	936	-	308	74	86	44	310	-	-	1988
1822	-	90	-	-	198	-	-	-	-	98	-	-	386
1823	-	-	-	-	348	-	856	326	-	-	-	-	1530
1824 <sup>20</sup>	-	-	84	-	302	600	-	-	192	170	-	-	1348
1825	-	-	-	-	574	326	210	380	-	-	-	-	1490

SOURCE: GAA, PA 78/94-102

TABLE II.13

AVERAGE SHIPPING TONNAGE FROM RUSSIAN (BALTIC) PORTS TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708		NO	DATA	AVAILABLE									
1709 <sup>2</sup>	-	-	-	-	100.0	-	-	-	-	-	210.7	269.5	240.7
1710 <sup>3</sup>	239.0	226.5	228.0	325.3	-	199.7	330.0	-	107.3	-	-	-	232.0
1711 <sup>4</sup>	-	120.0	36.0	93.0	-	-	-	-	-	-	-	-	88.0
1712 <sup>5</sup>	-	-	-	-	-	106.0	-	46.0	-	-	71.3	-	81.1
1713 <sup>4</sup>	-	134.7	187.9	202.6	225.0	-	-	-	-	-	-	-	192.3
1714 <sup>6</sup>	-	-	-	-	60.0	127.6	155.5	98.3	128.8	86.0	122.7	60.8	109.3
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	134.0	113.3	113.7	117.4
1716	-	132.6	142.6	145.8	226.3	224.3	100.0	-	-	-	-	230.0	171.0
1717	173.8	190.0	167.3	267.7	207.7	205.0	228.0	248.0	179.7	158.3	128.0	117.8	188.2
1718	185.0	-	185.7	182.0	218.0	164.3	90.0	-	-	-	167.4	233.3	207.4
1719	201.0	167.7	217.3	310.0	175.5	180.0	80.0	93.1	158.6	206.3	226.8	301.1	202.3
1720	187.0	174.0	328.3	324.3	158.0	145.5	112.2	276.6	178.4	248.9	239.8	246.7	222.8
1721	111.0	220.0	103.0	146.7	129.4	116.0	115.1	239.5	265.1	233.0	202.3	279.9	222.0
1722	180.5	218.2	157.6	272.6	276.0	120.0	137.3	265.5	287.2	207.5	211.6	201.2	231.9
1723	131.1	243.0	162.7	310.7	181.6	203.7	233.2	228.1	200.0	183.3	263.2	224.9	213.9
1724	161.8	179.2	139.7	134.5	30.0	130.3	265.0	271.0	187.4	165.8	269.0	218.2	210.0
1725	118.4	122.0	175.1	235.0	110.0	132.9	253.9	234.6	188.6	243.9	231.2	147.0	213.1
1726	180.1	143.0	168.9	238.3	95.7	136.8	273.4	205.6	189.8	168.5	234.6	180.8	202.2
1727	169.9	126.8	183.2	204.8	227.3	96.0	252.5	180.7	156.8	195.5	226.4	254.2	202.1
1728	126.0	141.2	109.6	146.8	141.6	119.0	220.9	-	147.9	220.9	188.2	166.6	195.9
1729	-	185.4	167.6	232.0	122.0	64.0	195.2	252.5	171.3	212.0	228.2	227.4	210.1
1730	143.4	150.3	176.5	217.3	206.0	202.1	234.8	172.5	184.6	197.0	242.4	173.6	207.1
1731	127.4	138.5	164.8	215.3	142.0	156.7	241.4	206.9	175.0	222.5	257.9	214.4	209.1
1732	155.3	174.2	170.8	195.6	236.0	225.5	271.0	188.3	213.1	185.7	272.8	267.4	232.2
1733	142.0	146.0	186.3	251.4	234.0	196.0	280.2	234.0	205.9	234.8	244.0	239.0	237.1
1734	172.0	166.4	218.4	219.3	128.0	277.2	247.6	172.6	208.7	244.9	254.3	183.1	225.8
1735	234.5	167.1	194.8	258.0	132.0	274.2	232.2	246.5	163.4	188.1	261.6	208.0	233.8
1736	166.0	90.0	194.0	157.4	175.4	131.8	236.8	216.7	211.1	218.1	270.2	229.4	223.6
1737	224.0	151.5	171.0	192.8	184.7	224.0	281.3	240.0	156.9	232.5	244.8	217.3	227.2
1738	204.0	165.8	179.1	214.5	158.0	162.9	268.6	205.3	180.8	237.2	263.1	237.1	227.5
1739	158.0	168.6	186.3	196.5	164.7	142.0	252.9	234.6	192.9	183.8	265.1	191.1	219.5
1740	193.1	-	-	179.2	149.0	135.2	128.2	217.4	170.7	176.9	219.1	226.9	191.1
1741	197.5	126.9	132.3	196.8	153.6	104.4	198.1	201.4	165.2	176.4	258.2	249.5	191.5
1742	164.0	147.1	152.8	197.8	164.6	134.0	181.9	195.5	208.9	245.7	205.2	232.8	207.5
1743	190.2	177.6	211.6	259.1	204.2	131.0	289.2	210.6	189.1	273.4	260.0	243.8	242.0
1744 <sup>8</sup>	237.6	102.0	157.7	223.1	194.3	154.8	242.0	221.9	186.0	162.2	196.3	179.9	204.4
1745	207.2	205.0	143.4	215.7	195.0	168.0	303.3	202.1	181.3	213.0	261.5	281.5	239.6

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II.13

AVERAGE SHIPPING TONNAGE FROM RUSSIAN (BALTIC) PORTS TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	237.7	186.0	211.7	259.6	231.3	148.7	176.8	235.0	251.0	249.0	193.7	201.6	223.6
1747	102.7	176.2	188.9	170.4	210.0	158.2	276.8	208.0	188.7	160.5	228.4	257.0	210.8
1748	205.3	125.3	-	251.6	169.7	145.0	263.9	251.9	212.7	178.2	238.1	193.5	216.9
1749	194.0	112.0	120.5	183.2	178.5	239.4	290.2	176.5	197.5	240.7	254.9	224.2	224.9
1750	162.0	114.0	183.7	216.0	178.2	159.8	283.4	215.3	167.3	249.4	237.9	221.1	231.0
1751	126.0	168.4	-	165.0	146.0	159.3	298.9	275.4	206.3	212.2	285.0	232.8	245.1
1752	125.3	180.4	164.7	134.4	-	297.3	239.1	180.9	238.2	215.8	267.5	199.0	223.0
1753	128.0	150.0	158.5	239.5	210.9	270.8	276.7	147.7	175.9	144.2	265.9	226.5	225.7
1754	152.9	169.4	212.7	260.6	144.0	110.8	275.5	223.2	189.1	196.9	281.2	199.9	221.9
1755	140.0	-	107.0	223.8	237.5	233.0	305.2	241.7	248.8	231.0	244.6	170.8	235.2
1756	169.6	127.0	187.1	218.5	138.0	141.3	225.9	245.6	173.8	204.0	178.5	222.2	196.7
1757	112.0	104.0	169.1	179.8	128.8	167.4	207.9	258.3	255.6	175.0	182.0	205.2	200.1
1758	105.6	135.2	221.1	220.0	123.5	-	243.6	245.9	167.0	212.8	159.1	263.4	215.9
1759	146.5	201.5	204.0	237.0	170.3	183.7	280.8	202.2	207.4	238.9	245.8	190.4	237.6
1760	174.0	148.2	163.3	229.8	68.0	356.0	302.3	282.0	225.4	189.7	213.2	267.0	224.8
1761	192.4	190.3	185.0	220.7	154.7	275.1	252.8	180.8	215.8	147.5	237.3	204.8	210.2
1762	131.6	116.0	262.0	146.7	-	130.0	218.1	279.9	184.0	187.3	205.5	254.7	215.8
1763	118.0	147.0	169.6	246.2	138.6	126.0	263.6	268.6	226.3	197.1	188.5	204.0	213.5
1764	169.6	198.3	203.0	247.3	135.0	143.8	301.1	229.8	219.0	280.5	194.3	232.4	235.6
1765	237.1	173.2	173.3	239.2	333.2	-	301.5	264.9	232.0	172.2	232.5	271.4	243.1
1766	175.8	213.8	212.3	206.6	191.5	149.6	273.2	208.7	163.7	250.9	267.7	226.8	238.1
1767	195.4	176.5	196.5	218.7	161.4	169.6	272.2	250.1	198.2	205.4	196.2	185.3	217.5
1768	147.3	197.1	193.0	197.8	178.7	171.3	292.2	205.0	156.8	261.8	197.3	228.0	221.5
1769	147.6	206.2	216.7	226.7	241.0	263.5	250.5	197.5	228.3	198.6	236.7	183.3	223.5
1770	147.3	170.0	234.2	268.0	197.0	70.0	290.0	234.0	140.2	298.5	242.6	199.3	238.7
1771	158.7	-	149.7	235.6	147.0	139.6	212.6	187.8	196.7	128.8	128.0	100.0	193.2
1772	106.5	151.2	217.2	184.2	285.6	124.3	193.5	220.0	169.9	220.3	157.6	230.4	194.2
1773	184.7	195.8	226.2	176.0	247.6	231.2	229.8	176.8	245.5	163.7	150.7	166.6	206.1
1774	100.0	137.7	219.5	197.1	230.3	184.8	254.3	194.5	169.0	250.1	220.0	162.1	208.9
1775 <sup>11</sup>	-	117.0	102.7	143.6	-	-	105.0	104.4	119.3	98.0	100.0	-	114.7
1776	151.3	174.0	208.9	186.3	168.6	231.3	273.0	212.2	291.3	233.6	273.8	146.6	233.4
1777	165.7	103.0	176.5	227.2	152.7	115.6	268.7	112.5	146.3	169.1	308.5	264.0	234.2
1778	168.0	119.0	203.0	263.5	189.0	96.7	286.6	221.4	147.6	215.9	260.6	202.5	213.3
1779 <sup>12</sup>	232.7	146.0	197.6	182.7	98.0	271.4	204.3	133.2	211.9	248.6	254.5	212.7	220.0
1780	438.0	131.0	143.6	299.1	127.6	111.0	316.8	231.1	194.1	195.7	255.4	111.7	229.0
1781	193.5	108.0	174.8	271.3	210.0	112.5	73.3	99.5	81.2	128.8	141.8	-	124.3
1782	105.3	112.7	123.5	131.1	116.3	193.5	105.1	140.8	142.9	134.4	163.9	279.4	147.0
1783	158.0	216.5	141.5	222.2	245.0	185.0	259.7	229.3	188.3	218.8	169.2	184.1	201.7
1784	-	255.3	195.4	154.6	127.1	149.5	211.4	303.9	141.4	154.8	260.6	288.8	216.5
1785	128.0	132.9	84.0	248.7	248.0	113.0	279.9	215.8	158.7	274.4	319.1	318.2	246.8
1786	254.0	296.0	183.5	245.8	252.0	220.0	356.6	302.0	197.2	225.6	300.4	249.9	271.3

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II.13

AVERAGE SHIPPING TONNAGE FROM RUSSIAN (BALTIC) PORTS TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1787	174.0	165.7	200.4	215.6	158.8	134.0	325.3	228.9	158.9	304.1	297.2	179.4	250.6
1788	112.0	171.7	145.1	220.7	368.0	443.3	378.2	184.1	131.5	271.9	171.6	301.1	247.4
1789	130.0	139.0	143.7	214.4	162.0	80.0	375.0	186.9	210.3	298.6	235.2	247.2	248.0
1790	138.0	152.0	144.9	157.2	81.7	132.6	287.7	265.3	195.9	213.6	273.2	254.7	228.2
1791 <sup>13</sup>	155.3	144.7	133.0	98.5	96.0	101.3	337.1	277.3	147.4	263.8	292.2	293.4	256.6
1792	247.3	154.1	126.3	221.6	346.0	347.4	318.6	179.6	287.9	203.5	241.5	172.0	257.5
1793	168.4	142.0	265.2	202.4	113.0	98.0	90.0	132.7	198.9	145.2	126.6	129.1	146.6
1794	218.0	82.3	155.4	128.6	294.0	213.0	311.5	143.2	200.4	300.9	224.6	117.8	224.4
1795 <sup>13</sup>	124.0	-	34.0	104.0	96.0	66.7	90.7	114.8	86.9	101.8	148.7	156.5	108.6
1796 <sup>14</sup>	112.7	142.0	90.3	118.6	71.3	92.0	124.5	140.5	122.1	168.9	116.4	121.5	124.3
1797 <sup>15</sup>	168.7	99.0	129.9	140.3	108.5	114.3	264.7	198.6	154.4	133.3	197.5	188.4	170.3
1798	152.0	123.3	138.4	278.8	104.0	88.3	147.4	88.0	134.9	128.0	91.0	354.0	137.6
1799	107.0	-	60.0	87.0	-	168.0	124.0	-	-	96.0	-	-	106.7
1800	-	214.0	-	110.0	147.0	84.4	135.6	197.5	124.3	96.8	139.0	346.0	143.1
1801	266.0	130.5	-	-	140.0	261.0	153.2	83.2	84.7	130.7	104.8	146.0	122.3
1802	135.0	115.1	142.5	215.2	89.1	100.2	169.7	249.8	251.9	143.7	224.3	-	176.7
1803 <sup>16</sup>	220.5	442.0	139.5	186.7	260.0	101.9	106.7	94.9	162.7	125.6	85.8	111.8	126.1
1804	131.3	-	-	133.3	-	-	98.5	111.9	-	113.6	-	98.8	112.5
1805	-	128.0	131.2	149.4	143.7	89.3	105.6	106.6	138.8	112.7	115.6	91.7	115.1
1806	102.7	126.4	104.9	182.0	110.0	72.7	74.0	93.1	120.0	129.5	192.7	209.0	122.1
1807	-	52.0	-	60.0	127.0	74.7	48.0	89.2	59.0	128.0	104.0	94.8	82.5
1808 <sup>17</sup>		NO	DATA	AVA	ILABLE								
1809		NO	DATA	AVA	ILABLE								
1810		NO	DATA	AVA	ILABLE								
1811		NO	DATA	AVA	ILABLE								
1812		NO	DATA	AVA	ILABLE								
1813		NO	DATA	AVA	ILABLE								
1814 <sup>6</sup>	-	-	-	-	-	124.0	83.8	89.8	114.3	124.7	137.9	124.3	113.4
1815	286.0	87.0	117.1	100.9	131.4	128.5	92.4	100.6	108.6	116.9	132.7	241.8	121.3
1816 <sup>18</sup>	87.0	98.0	110.9	140.0	131.1	121.7	117.2	189.5	140.7	132.3	131.1	137.6	137.0
1817	141.4	132.5	300.0	208.0	146.9	151.0	180.3	185.0	161.9	180.2	182.4	193.5	172.6
1818	299.5	164.6	-	124.0	143.3	114.0	174.7	267.4	181.4	153.3	174.2	359.8	209.2
1819	380.5	143.0	173.0	84.0	70.7	119.2	289.4	166.3	149.7	154.9	141.3	139.3	173.3
1820	294.4	199.6	118.8	302.2	210.7	121.7	174.4	266.0	143.6	202.4	149.7	140.5	193.6
1821	-	112.7	297.2	176.3	96.0	145.1	222.1	167.9	166.3	161.5	152.3	124.7	177.1
1822	121.0	303.0	106.0	131.0	142.3	-	250.6	-	102.7	171.6	219.6	467.0	209.0
1823 <sup>19</sup>	-	-	42.0	333.6	173.3	-	178.7	174.5	246.6	193.0	227.1	328.7	207.6
1824	140.0	136.0	84.0	78.0	129.0	159.5	214.9	245.2	186.4	165.3	-	194.0	182.7
1825 <sup>20</sup>	-	-	157.0	-	95.7	141.1	175.1	161.6	209.3	-	-	-	155.6

SOURCE: GAA. PA 78/94-102

TABLE II.13.A  
AVERAGE SHIPPING TONNAGE FROM ST. PETERSBURG TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE				
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1705 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1709 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1710 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1711 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1715 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	195.0	172.0	-	190.0	172.0	-	-	-	-	-	-	-	-	-	-	168.4
1717	165.0	120.0	160.0	-	160.0	240.0	80.0	-	-	-	-	-	-	-	-	62.0	121.7
1718	-	-	-	-	-	180.0	-	-	-	-	-	-	-	-	-	225.0	202.5
1719	252.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110.0
1720	68.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	149.5
1721	100.0	-	50.0	-	224.0	-	120.0	230.0	80.0	60.0	60.0	105.7	96.8	220.0	88.0	88.0	149.5
1722	81.0	171.0	-	220.0	28.0	-	52.0	66.0	147.0	147.0	147.0	44.0	54.0	54.0	96.0	96.0	89.6
1723	180.0	222.0	160.5	239.0	-	100.0	40.0	-	36.0	115.3	115.3	115.3	48.0	48.0	96.0	96.0	101.8
1724	154.0	177.0	121.1	112.0	-	230.0	72.0	160.4	106.0	77.7	77.7	71.5	71.0	48.0	48.0	48.0	129.0
1725	62.0	116.0	-	-	74.0	78.0	151.7	115.0	79.1	104.3	104.3	104.3	59.0	59.0	65.0	65.0	96.1
1726	111.3	152.0	137.0	232.0	105.0	192.0	98.5	136.4	115.0	111.3	111.3	111.3	89.6	89.6	131.5	131.5	122.4
1727	113.0	106.0	139.0	162.0	138.0	-	113.0	113.0	119.3	108.0	108.0	108.0	-	-	130.0	130.0	122.5
1728	116.0	97.3	102.7	176.0	102.0	-	164.2	-	106.0	93.8	93.8	93.8	102.0	102.0	114.4	114.4	114.2
1729	-	196.0	153.3	179.0	-	-	-	174.0	182.0	182.0	182.0	-	90.0	90.0	165.0	165.0	160.3
1730	92.0	162.0	150.0	157.3	206.0	-	140.5	78.0	126.0	126.0	126.0	148.4	163.3	163.3	149.3	149.3	142.4
1731	230.0	146.0	162.7	-	142.0	150.0	216.0	125.0	154.0	154.0	154.0	118.4	66.0	66.0	125.0	125.0	144.7
1732	108.0	96.0	211.0	155.5	-	-	156.5	256.0	143.0	143.0	143.0	154.4	84.0	84.0	173.0	173.0	158.6
1733	143.3	143.0	180.0	190.0	336.0	-	-	81.0	-	-	-	-	105.6	105.6	73.0	73.0	138.3
1734	-	166.0	166.0	136.5	136.0	126.0	198.0	113.5	118.4	118.4	118.4	136.0	151.0	151.0	119.5	119.5	137.6
1735	131.0	201.0	-	92.0	-	106.0	127.0	130.0	210.0	210.0	210.0	146.0	117.5	117.5	167.6	167.6	145.0
1736	134.0	72.0	100.0	232.0	164.0	122.0	94.7	126.7	73.0	73.0	73.0	132.6	204.0	204.0	172.7	172.7	139.3
1737	-	138.0	86.0	208.0	134.0	192.0	250.0	225.5	144.4	144.4	144.4	162.8	270.0	270.0	162.0	162.0	194.1
1738	233.0	130.4	161.0	230.7	204.0	180.0	265.5	228.8	160.3	160.3	160.3	146.9	146.3	146.3	128.0	128.0	200.0
1739	-	177.0	178.0	172.7	204.0	-	-	110.0	169.0	169.0	169.0	141.4	187.5	187.5	176.0	176.0	169.2
1740	232.0	-	-	163.0	-	90.0	153.7	276.0	126.3	126.3	126.3	180.6	207.5	207.5	198.8	198.8	168.0
1741	210.7	100.0	159.5	180.0	136.0	-	259.7	170.4	96.0	96.0	96.0	187.3	166.2	166.2	206.9	206.9	183.2
1742	-	-	200.0	168.0	276.0	-	248.7	170.5	96.0	96.0	96.0	114.0	96.0	96.0	162.3	162.3	167.1
1743	282.0	187.4	141.3	208.3	176.4	106.0	84.0	175.3	126.0	126.0	126.0	123.3	136.3	136.3	174.2	174.2	132.4
1744	-	-	132.0	136.0	164.0	127.3	172.0	91.6	112.5	112.5	112.5	109.5	128.0	128.0	86.7	86.7	120.8
1745	-	-	124.5	131.0	166.0	-	108.0	104.0	130.5	130.5	130.5	109.5	128.0	128.0	86.7	86.7	120.8

CONTINUED...

SOURCE: GAA, PA 78/94-102



TABLE 11.13.A

AVERAGE SHIPPING TONNAGE FROM ST. PETERSBURG TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	138.0	70.0	186.0	184.0	174.0	-	-	138.0	100.0	99.6	87.5	124.7	124.1
1747	102.7	145.7	186.0	160.0	120.0	-	98.0	107.7	113.3	112.7	155.6	71.0	125.4
1748	252.0	122.0	-	230.0	176.3	152.0	-	-	100.7	107.4	84.0	106.0	132.3
1749	76.0	124.0	85.0	118.0	106.0	214.0	134.0	121.6	95.0	128.7	-	222.0	121.2
1750	154.0	96.0	112.0	82.0	132.0	-	-	103.3	98.0	114.0	160.0	137.3	125.8
1751	68.0	90.0	-	98.7	125.0	-	-	112.0	97.0	106.0	125.6	148.0	118.1
1752	93.0	143.0	118.7	95.0	-	-	-	90.5	125.8	135.0	124.7	-	119.9
1753 <sup>9610</sup>	-	-	105.0	198.0	-	103.3	126.4	110.7	107.3	89.3	137.2	110.0	116.1
1754	130.0	124.0	124.0	74.0	115.0	-	116.0	124.7	89.8	122.8	87.0	118.0	110.6
1755	156.0	-	48.0	122.3	124.0	146.0	-	87.0	99.3	168.0	133.0	-	112.4
1756	86.0	127.0	130.0	168.0	138.0	-	-	110.0	96.0	-	109.4	166.8	120.1
1757	112.0	-	142.5	128.7	138.0	114.0	94.0	100.0	106.5	102.7	175.7	-	125.2
1758	74.0	96.0	127.2	128.8	117.3	-	100.0	127.6	147.7	132.7	156.7	159.3	131.0
1759	106.7	110.0	144.0	-	-	100.0	146.0	140.7	129.0	120.0	-	99.0	123.3
1760	-	-	131.6	150.7	-	-	-	93.0	122.0	105.1	118.0	174.7	124.2
1761	135.3	222.0	114.0	180.0	-	-	106.0	48.0	168.0	80.0	124.0	-	137.1
1762	98.0	-	186.0	156.0	-	-	93.3	146.0	154.0	186.5	112.3	112.0	126.2
1763	120.0	147.0	157.1	-	131.7	190.0	100.0	142.0	108.0	116.7	121.0	-	136.6
1764	101.0	164.0	102.0	140.5	130.0	-	110.0	125.0	90.0	90.0	108.0	142.0	121.9
1765	153.0	98.0	130.8	173.0	138.0	-	-	139.0	104.0	116.0	133.3	118.7	127.8
1766	-	-	142.0	147.1	139.2	94.0	-	141.0	123.3	133.5	157.5	101.0	137.4
1767	162.0	-	132.0	-	148.0	107.5	136.4	87.3	125.0	113.1	98.5	-	120.7
1768	118.0	-	147.3	138.2	200.0	147.0	148.0	104.0	113.7	118.7	103.6	-	129.6
1769	98.0	146.0	157.0	140.3	64.0	-	101.0	128.0	128.7	117.8	192.0	177.5	134.4
1770	-	179.0	102.0	145.3	-	-	100.0	78.0	137.3	118.7	113.3	-	135.3
1771	-	-	159.0	96.0	147.0	156.0	150.0	62.0	120.3	128.6	128.0	100.0	130.1
1772	136.0	-	-	136.5	-	116.6	151.3	112.3	129.3	99.7	120.7	-	121.2
1773	118.0	-	136.0	116.2	89.0	120.0	114.8	102.7	103.6	71.0	134.0	84.0	106.1
1774	98.0	148.0	129.4	129.6	-	138.0	76.7	86.0	147.0	137.3	214.0	200.0	133.2
1775	-	117.0	102.7	143.6	-	-	105.0	104.4	119.3	95.0	100.0	-	114.7
1776	138.0	108.0	-	-	100.0	-	-	116.6	-	98.0	72.0	116.0	110.1
1777	89.0	-	130.3	196.0	156.0	-	135.2	112.5	101.0	79.0	130.0	108.0	116.3
1778	-	-	128.5	147.0	110.0	150.0	114.7	99.8	95.5	127.6	128.0	144.0	117.7
1779	-	-	118.4	80.0	88.0	98.6	110.0	107.0	-	132.0	199.5	212.7	136.8
1780	-	107.3	109.4	94.0	86.7	116.0	93.3	113.7	125.1	114.0	140.7	111.7	113.8
1781	120.0	108.0	99.5	-	-	118.0	-	118.5	80.0	-	126.0	-	109.1
1782	142.7	85.0	122.0	105.6	-	111.0	102.7	-	64.7	102.4	82.0	-	99.5
1783	118.0	58.0	130.0	118.0	312.0	-	-	-	151.5	115.3	109.0	109.5	127.6
1784	-	-	133.4	132.0	130.8	-	-	116.0	106.7	114.7	121.9	109.0	123.4
1785	-	111.0	84.0	114.0	-	92.0	84.0	105.0	117.0	132.0	-	-	107.2
1786	-	-	-	92.7	91.0	-	132.0	113.5	101.2	97.5	116.0	72.0	102.8

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.13.A

AVERAGE SHIPPING TONNAGE FROM ST. PETERSBURG TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1787	-	-	143.0	114.0	104.0	-	118.0	51.0	130.0	90.0	81.3	134.0	106.4
1788	74.0	93.0	94.8	109.1	-	-	-	100.0	100.7	104.7	99.0	-	100.6
1789	-	92.0	106.6	97.3	185.0	-	91.0	-	119.8	75.0	106.6	160.3	112.7
1790	121.0	95.0	106.5	128.0	116.0	-	-	-	106.4	86.2	106.4	179.0	106.5
1791	155.3	144.7	133.0	126.0	-	106.0	104.0	127.7	110.0	129.3	115.2	106.8	127.3
1792	174.0	113.0	104.0	-	-	-	-	116.0	104.4	101.3	133.6	172.0	120.3
1793	-	-	-	-	-	98.0	64.0	105.0	95.0	118.7	98.0	109.3	100.5
1794	126.7	-	93.0	65.0	124.0	-	132.0	126.0	88.8	101.0	-	94.0	102.1
1795	124.0	-	34.0	-	-	-	-	110.0	-	-	-	120.0	97.0
1796	110.0	-	86.0	94.0	132.0	-	-	121.3	91.6	116.7	-	-	104.4
1797 <sup>15</sup>		NO DATA	AVAILABLE										
1798		NO DATA	AVAILABLE										
1799		NO DATA	AVAILABLE										
1800		NO DATA	AVAILABLE										
1801		NO DATA	AVAILABLE										
1802		NO DATA	AVAILABLE										
1803 <sup>16</sup>		NO DATA	AVAILABLE										
1804		NO DATA	AVAILABLE										
1805		NO DATA	AVAILABLE										
1806		NO DATA	AVAILABLE										
1807		NO DATA	AVAILABLE										
1808		NO DATA	AVAILABLE										
1809		NO DATA	AVAILABLE										
1810		NO DATA	AVAILABLE										
1811		NO DATA	AVAILABLE										
1812		NO DATA	AVAILABLE										
1813		NO DATA	AVAILABLE										
1814 <sup>6</sup>	-	-	-	-	-	-	86.0	104.0	102.5	102.9	130.8	118.4	109.7
1815	286.0	87.0	141.0	56.0	-	148.0	102.5	117.3	-	85.6	98.8	-	106.6
1816	112.0	-	80.0	-	48.0	-	121.0	100.0	108.0	73.4	-	98.3	91.5
1817	162.0	161.0	602.0	72.0	-	-	86.7	171.3	160.2	183.9	157.4	222.0	172.8
1818	154.0	162.5	-	124.0	180.0	180.0	-	103.3	112.0	116.0	122.0	-	137.5
1819	90.0	-	156.0	64.0	-	-	-	118.0	136.0	134.0	81.3	70.0	110.9
1820	135.3	-	77.0	152.0	-	-	-	-	75.7	136.0	92.0	117.9	110.5
1821	-	-	152.0	-	96.0	-	78.0	63.0	121.0	71.3	68.0	100.0	100.1
1822	-	-	114.0	-	-	-	-	-	116.0	156.0	82.0	100.0	110.4
1823 <sup>19</sup>	-	-	42.0	-	-	-	-	-	-	-	-	-	42.0

SOURCE: GAA. PA 78/94-102

TABLE II.13.8

AVERAGE SHIPPING TONNAGE FROM NARVA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE												
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1710 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	-	-	-	-	-	-	-	-	-	-	-	-
1717	-	-	-	-	-	-	-	-	-	-	-	-	-
1718	-	-	-	-	-	-	-	-	-	-	-	-	-
1719	-	-	-	310.0	-	-	-	-	-	-	274.6	400.0	292.4
1720	-	330.0	376.0	370.0	-	-	-	390.0	172.5	347.5	251.0	332.0	325.5
1721	-	-	-	-	420.0	-	260.0	335.2	340.2	375.3	110.0	341.0	321.1
1722	308.0	290.0	240.0	369.3	-	-	388.0	318.1	374.2	278.6	334.7	332.0	329.2
1723	-	-	412.0	-	348.0	380.0	366.0	346.4	304.0	342.0	332.0	322.8	342.2
1724	-	-	60.0	-	-	-	336.8	346.2	320.4	288.3	336.1	328.4	328.2
1725	232.0	-	276.0	330.0	380.0	312.0	329.6	319.9	312.7	299.5	349.3	317.3	317.6
1726	317.3	-	280.0	336.0	-	-	325.1	330.3	279.3	290.0	309.1	305.5	313.7
1727	313.0	-	286.0	250.3	272.0	-	288.4	238.3	225.5	308.7	286.8	291.7	281.6
1728	92.0	196.0	184.0	246.0	300.0	264.0	279.0	-	201.7	286.1	261.8	322.0	271.9
1729	-	217.0	228.0	338.0	-	-	288.7	304.4	303.7	266.7	273.4	302.0	287.7
1730	-	-	229.0	306.0	-	277.1	277.6	268.8	246.2	280.4	294.1	266.0	277.5
1731	-	-	246.0	296.0	-	-	275.0	279.0	273.7	275.4	293.4	295.1	279.6
1732	-	249.0	227.3	259.0	303.0	261.7	288.0	237.4	268.7	274.0	298.8	292.4	279.1
1733	-	282.0	288.0	274.7	-	242.1	295.1	295.6	271.6	282.7	303.2	283.3	287.9
1734	242.0	231.0	323.0	313.2	-	295.7	300.1	246.5	277.9	303.6	307.8	315.0	294.1
1735	330.0	-	241.0	313.3	-	308.1	294.5	307.0	284.0	304.0	306.7	313.5	305.4
1736	-	-	324.0	-	258.0	308.0	305.8	295.1	308.9	307.6	309.2	285.3	304.6
1737	-	-	-	238.0	292.0	287.0	296.9	312.1	234.0	306.8	313.5	316.0	299.6
1738	206.0	-	-	282.7	-	266.9	310.9	231.7	284.5	300.8	313.3	314.2	301.2
1739	-	-	240.0	278.0	246.0	-	303.5	310.7	295.6	283.2	305.1	294.0	303.0
1740	334.0	-	-	354.0	-	-	-	311.6	304.7	322.7	289.1	310.9	307.1
1741	-	-	-	324.0	242.0	-	313.4	274.8	268.7	314.0	325.3	322.7	304.2
1742	-	-	146.0	308.0	-	-	285.5	276.3	276.1	294.0	283.1	266.6	280.8
1743	147.0	200.0	256.6	318.5	286.0	176.0	307.2	250.2	268.6	307.1	301.2	323.6	294.8
1744	340.0	-	-	284.3	-	348.0	331.6	318.6	321.2	318.0	280.9	107.0	312.8
1745	214.0	322.0	-	294.5	-	-	321.1	340.7	284.0	327.8	306.3	328.6	317.8

SOURCE: GAA, PA 78494-102

CONTINUED

TABLE II.13.8

AVERAGE SHIPPING TONNAGE FROM NAHYA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	336.4	-	318.0	333.0	274.0	408.0	316.0	322.6	323.2	320.8	320.7	333.3	323.7
1747	-	344.0	188.0	274.0	-	-	329.3	339.8	303.0	306.0	319.6	332.7	323.2
1748	-	132.0	-	328.0	-	174.0	318.9	301.9	312.4	294.0	312.3	305.6	305.8
1749	-	-	170.0	-	-	350.0	322.0	294.0	328.4	321.7	322.0	285.5	316.1
1750	-	-	-	292.0	-	215.0	314.9	296.3	158.4	294.9	312.4	307.3	297.0
1751	184.0	277.0	-	326.0	-	-	327.9	320.4	278.2	252.5	326.9	320.7	316.0
1752	-	246.0	312.0	-	-	333.6	337.6	317.0	331.0	309.6	333.1	318.0	328.7
1753	-	-	362.0	-	382.0	329.5	347.7	308.0	276.8	392.0	337.2	327.3	335.8
1754	344.0	312.0	348.0	320.5	226.0	-	347.5	330.8	292.0	324.7	343.4	272.0	327.8
1755	-	-	-	348.3	338.0	344.7	349.7	330.6	360.0	307.4	355.7	378.0	337.2
1756	378.0	-	362.0	324.0	-	-	-	-	-	-	186.0	-	314.8
1757	-	-	-	-	-	-	-	-	-	-	-	-	-
1758	-	-	-	-	-	-	-	331.4	167.0	308.0	296.0	374.3	327.0
1759	-	-	-	-	276.0	-	339.6	415.0	334.7	328.9	311.2	-	332.5
1760	338.0	276.0	262.0	370.7	-	356.0	-	-	-	-	-	-	334.9
1761	-	-	-	-	-	-	-	-	-	-	-	-	-
1762	-	-	414.0	-	-	-	376.0	366.3	418.0	345.0	355.0	349.0	367.4
1763	-	-	188.0	341.0	-	-	368.2	341.3	379.7	341.3	362.3	374.0	353.1
1764	-	344.0	359.0	381.0	-	62.0	364.8	337.6	404.0	365.7	403.0	349.0	358.4
1765	424.0	-	-	218.0	416.0	-	341.1	359.6	354.4	164.0	346.6	368.7	349.9
1766	-	378.0	410.0	328.0	-	-	364.4	226.0	-	329.3	356.0	341.4	356.3
1767	394.0	-	337.0	364.0	148.0	418.0	382.8	381.3	342.7	399.0	392.0	328.0	374.3
1768	-	418.0	361.0	366.0	-	220.0	382.4	362.4	350.0	370.2	371.7	377.0	371.2
1769	-	-	371.0	417.0	418.0	392.5	387.2	349.0	401.1	383.6	351.0	-	388.1
1770	-	-	371.0	364.0	-	-	391.3	402.2	-	402.2	416.0	418.0	396.0
1771	-	-	-	365.3	-	432.0	379.2	418.0	417.3	-	-	-	385.8
1772	-	-	400.0	-	-	366.0	404.6	395.2	-	410.3	404.0	403.1	401.6
1773	-	318.0	-	404.0	426.0	399.7	387.0	-	394.5	-	-	372.5	391.2
1774	-	-	375.3	401.0	-	366.2	396.9	393.0	-	409.6	386.0	-	391.9
1775	-	ND	DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1775	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	432.0	-	418.0	-	-	415.3	421.4	418.0	402.4	424.0	416.0	-	415.1
1777	-	-	-	454.0	-	-	421.4	-	423.0	424.0	422.9	404.0	421.9
1778	-	-	413.5	-	-	-	425.9	434.7	413.0	420.0	446.0	450.0	426.5
1779	-	-	445.0	-	-	439.0	331.0	-	-	436.5	435.5	-	429.5
1780	438.0	-	-	427.0	-	-	444.9	421.5	435.0	416.0	442.4	-	433.2
1781	-	-	-	-	-	-	-	-	-	-	-	-	-
1782	-	-	-	-	-	426.0	-	384.7	404.0	-	-	-	401.7
1783	436.0	-	-	376.0	-	434.0	438.2	419.8	427.3	448.0	422.0	403.5	425.0
1784	-	392.0	431.0	434.0	-	-	437.2	422.2	176.0	422.0	399.9	434.2	415.6
1785	-	-	-	373.3	364.0	-	419.2	379.5	112.0	420.4	424.8	450.0	410.6

SOURCE: GAA, PA 78/94-102

CONTINUED

TABLE II.13.8

AVERAGE SHIPPING TONNAGE FROM NARVA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	-	478.0	-	430.5	-	-	404.1	430.2	374.5	358.6	419.1	364.7	405.3
1787	-	108.0	437.0	478.0	-	-	442.1	394.2	214.0	427.2	410.6	336.0	415.4
1788	-	-	478.0	460.0	-	443.3	434.1	308.6	84.0	433.4	142.0	411.5	415.9
1789	-	-	418.0	414.0	-	-	431.6	412.0	424.7	425.5	422.0	426.3	426.6
1790	-	-	364.0	-	-	-	440.9	441.4	316.6	432.4	438.7	435.0	419.0
1791 <sup>13</sup>	-	-	-	-	162.0	76.0	414.6	390.6	270.0	418.0	389.1	426.6	395.4
1792	284.0	330.0	-	426.0	346.0	427.8	434.8	315.3	445.0	439.5	436.3	-	425.5
1793	-	-	461.0	-	-	-	-	134.5	397.3	436.0	396.0	424.0	345.2
1794	426.0	-	-	-	470.0	441.1	428.7	330.0	366.8	427.0	449.6	-	419.2
1795 <sup>13</sup>	-	-	-	-	-	-	-	410.0	-	-	-	-	410.0
1796	-	-	-	410.0	-	-	444.0	443.5	322.7	377.0	-	402.0	404.6
1797	350.0	-	414.0	468.0	-	-	417.4	308.0	261.3	392.0	433.2	458.0	383.7
1798	-	-	-	404.7	-	-	496.0	56.0	402.0	-	-	-	375.8
1799	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	410.0	474.0	351.0	-	-	442.0	425.1
1801	-	-	-	-	-	470.0	-	-	-	-	-	-	470.0
1802	-	-	310.0	344.0	-	426.0	436.7	457.2	431.0	425.3	437.5	-	431.0
1803	446.0	-	-	470.0	448.0	-	-	-	-	366.0	-	-	438.6
1804	134.0	-	-	-	-	-	106.0	112.0	-	104.0	-	108.0	112.6
1805	-	-	109.0	215.0	262.0	-	220.0	88.0	295.0	59.5	163.0	84.0	147.9
1806	-	-	-	-	-	-	-	-	220.0	245.0	264.0	-	246.9
1807	-	-	-	-	-	-	-	176.0	78.0	-	104.0	122.0	122.3
1808 <sup>17</sup>	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1809	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1810	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1811	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1812	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1813	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1814 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	212.0	121.0	139.2
1815	-	-	132.0	-	-	-	-	378.0	100.0	440.0	242.7	476.0	303.3
1816	-	-	-	148.0	378.0	-	88.7	398.0	310.5	270.2	269.5	436.0	276.2
1817	-	-	-	934.0	460.0	-	728.0	-	432.0	806.0	683.0	-	686.9
1818	718.0	-	-	-	204.0	-	299.0	658.8	710.0	-	159.3	551.6	486.7
1819	678.0	-	-	-	-	126.0	450.0	275.6	139.3	248.0	-	-	298.1
1820	533.0	314.0	-	754.7	-	-	718.0	581.3	-	383.5	173.0	200.0	472.2
1821	-	-	796.0	718.0	-	-	875.0	502.0	492.0	305.0	210.0	-	552.0
1822	-	838.0	-	-	78.0	-	424.8	-	130.0	232.0	814.0	834.0	446.4
1823	-	-	-	842.0	-	-	444.0	281.5	481.0	164.5	563.0	370.0	387.4
1824	-	-	-	-	-	211.0	283.0	290.0	190.9	140.0	-	188.0	220.2
1825 <sup>20</sup>	-	-	-	-	-	186.0	147.5	164.2	234.0	-	-	-	171.5

SOURCE: GAA, PA 78/94-102

TABLE II.13.C

AVERAGE SHIPPING TONNAGE FROM RIGA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE												
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	32.0	183.2	158.0
1710 <sup>3</sup>	239.0	226.5	162.0	318.0	-	290.0	275.0	-	106.0	-	-	-	234.4
1711 <sup>4</sup>	-	120.0	36.0	93.0	-	-	-	-	-	-	-	-	88.0
1712 <sup>5</sup>	-	-	-	-	-	146.0	-	32.0	-	-	71.3	-	89.7
1713 <sup>4</sup>	-	134.7	198.9	214.0	225.0	-	-	-	-	-	-	-	200.6
1714 <sup>6</sup>	-	-	-	-	80.0	125.3	134.0	104.0	176.0	-	140.8	60.8	116.6
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	134.0	113.3	113.4	117.5
1716	-	128.1	113.6	121.0	218.2	225.5	100.0	-	-	-	-	230.0	156.7
1717	176.0	196.7	168.8	229.3	219.2	205.0	156.0	248.0	182.0	155.3	128.0	123.6	186.8
1718	185.0	-	185.7	182.0	237.0	134.0	100.0	-	-	-	150.5	207.8	188.8
1719	183.2	167.7	217.3	-	175.5	-	80.0	114.3	197.2	191.7	226.6	212.0	192.0
1720	226.7	175.1	308.0	-	92.0	54.0	113.6	172.2	192.6	215.3	273.3	126.0	179.4
1721	113.2	220.0	117.3	108.0	91.6	116.0	106.4	174.2	164.9	179.0	214.7	229.2	161.3
1722	158.8	206.0	137.0	140.0	-	140.0	117.6	199.5	194.3	189.8	205.0	105.2	177.8
1723	123.0	224.7	94.0	188.0	53.3	168.4	187.0	173.0	182.7	168.4	240.0	160.9	168.2
1724	168.3	205.6	181.0	142.0	30.0	110.4	155.0	178.0	138.7	158.3	136.4	182.0	154.8
1725	118.0	140.0	158.3	60.0	70.4	117.5	123.8	168.6	155.7	209.2	182.0	144.3	158.6
1726	161.5	134.0	139.5	142.7	91.0	111.4	170.7	140.5	156.3	146.6	172.0	158.1	149.1
1727	162.5	128.7	139.2	156.0	-	96.0	111.1	134.7	142.1	160.7	152.5	169.1	142.1
1728	138.8	128.3	102.0	68.0	-	100.4	167.1	-	107.6	148.1	135.3	165.2	144.1
1729	-	146.7	107.3	-	122.0	64.0	113.7	152.2	139.2	144.9	199.7	184.0	145.5
1730	152.0	148.0	73.3	-	-	121.7	146.5	144.6	142.7	169.6	192.4	138.2	152.6
1731	110.3	110.0	165.5	-	-	98.0	150.6	138.1	139.0	155.4	196.0	172.3	147.1
1732	188.0	157.2	129.5	168.5	102.0	135.7	110.0	124.8	170.9	169.2	199.0	124.0	153.8
1733	142.0	111.3	138.0	-	132.0	109.8	139.0	188.5	159.4	153.4	163.9	191.3	154.4
1734	125.3	164.4	162.0	163.6	120.0	-	129.8	147.8	150.8	132.0	183.5	171.7	151.2
1735	208.0	134.0	164.0	-	-	135.8	156.2	181.3	149.4	154.6	188.0	182.5	164.0
1736	174.0	-	223.0	145.0	100.0	112.2	150.9	190.1	184.2	184.7	197.1	199.2	175.6
1737	224.0	240.0	139.0	163.0	162.7	194.6	125.5	172.8	128.8	145.2	166.4	199.7	161.1
1738	144.0	184.0	176.2	164.0	118.0	139.0	146.7	185.4	144.6	176.3	196.8	219.2	169.0
1739	158.0	165.2	168.6	212.0	118.0	144.6	187.6	167.0	163.7	158.9	185.2	166.3	167.1
1740	173.1	-	-	155.7	149.0	136.8	106.9	137.0	136.9	138.8	168.9	172.8	145.1
1741	158.0	131.3	127.7	164.5	130.0	85.6	105.9	141.6	133.0	147.5	147.6	137.7	128.9
1742	164.0	147.1	133.1	142.0	145.7	134.0	137.4	160.9	155.2	160.8	145.6	137.0	152.9
1743	194.0	165.2	211.2	146.0	142.7	98.0	156.3	181.7	156.6	185.6	144.0	194.2	170.7
1744	224.0	102.0	129.5	176.0	188.7	98.0	116.8	148.2	159.5	154.4	170.3	174.0	150.4
1745	167.0	151.0	191.5	172.3	178.0	119.0	-	154.9	146.1	188.2	156.0	192.6	163.0

SOURCE: GAA, PA 78/94-102

CONTINUED

TABLE II.13.C

AVERAGE SHIPPING TONNAGE FROM RIGA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	171.0	-	184.0	264.0	-	111.7	97.6	191.7	155.9	118.8	150.4	181.7	161.8
1747	-	75.0	191.2	125.5	174.0	99.2	140.0	164.6	168.7	145.5	164.7	148.0	152.6
1748	196.0	-	-	213.3	134.0	130.7	142.0	166.5	150.0	100.3	167.0	155.9	159.1
1749	-	100.0	135.5	196.5	-	166.0	145.0	133.7	162.4	142.8	156.7	176.9	156.2
1750	167.3	87.0	193.3	-	157.3	130.7	157.7	167.3	187.7	145.2	144.4	143.5	156.9
1751	-	172.0	-	94.0	148.0	166.0	139.0	158.3	137.5	185.0	168.7	108.0	153.3
1752	147.7	153.5	179.0	130.0	-	183.6	101.6	139.3	165.8	115.0	229.5	134.5	147.5
1753	128.0	66.0	166.4	142.0	126.7	156.0	186.2	181.5	142.4	127.6	200.2	102.7	167.3
1754	130.0	140.8	181.7	174.0	-	114.5	144.4	163.6	198.7	122.4	217.2	189.7	172.3
1755	124.0	-	75.0	205.5	212.7	171.0	-	184.7	145.3	184.0	261.2	138.2	178.8
1756	128.0	-	137.5	218.0	-	198.0	174.7	221.0	200.9	192.2	266.9	277.6	207.3
1757	-	104.0	182.4	189.7	138.0	150.0	240.7	285.1	306.4	217.6	187.6	232.5	225.3
1758	114.6	140.9	257.3	362.0	142.0	-	250.5	223.3	166.5	234.3	116.0	236.6	215.4
1759	194.4	228.0	264.0	237.0	128.0	200.4	256.5	154.0	237.3	279.0	198.5	251.3	237.5
1760	92.0	136.5	173.8	192.8	68.0	-	302.2	311.7	196.9	212.2	263.5	283.3	232.2
1761	221.0	180.4	168.0	241.0	154.7	292.9	296.6	191.7	225.9	142.1	254.4	231.5	223.3
1762	162.7	116.0	236.0	-	-	144.0	196.4	246.5	172.0	180.6	229.4	257.0	211.1
1763	116.0	-	185.1	221.2	102.0	78.0	210.9	198.9	173.0	144.2	179.1	180.2	182.0
1764	177.2	139.3	180.4	246.2	150.0	141.0	184.2	219.8	227.0	274.7	172.5	235.0	207.6
1765	235.5	213.0	213.5	263.5	320.0	-	249.0	241.7	218.3	169.3	187.7	262.6	231.2
1766	183.8	171.0	203.8	242.4	238.0	163.5	158.1	210.9	187.3	279.1	274.4	197.1	212.3
1767	168.3	204.0	158.5	213.2	195.0	-	231.1	153.6	210.2	205.7	305.0	171.4	193.4
1768	162.0	124.0	166.2	197.4	204.0	-	159.6	155.0	160.0	190.9	170.9	217.6	172.4
1769	156.3	213.7	198.4	266.0	-	190.0	215.7	218.4	194.0	206.8	246.2	181.7	209.1
1770	147.3	138.0	210.7	328.2	197.0	70.0	138.0	205.3	141.2	254.9	255.6	199.8	209.1
1771	164.0	-	137.3	231.2	-	95.4	143.7	198.3	174.8	-	-	-	172.5
1772	72.0	169.4	229.8	265.3	285.6	116.9	171.6	210.7	186.5	180.1	134.7	171.0	182.5
1773	225.2	167.7	248.8	232.4	360.0	124.3	231.9	176.3	221.5	182.2	159.0	170.9	191.1
1774	72.0	140.0	224.6	205.9	259.7	118.0	199.5	187.9	183.1	249.8	218.3	180.2	196.4
1775		NO DATA AVAILABLE											
1776	136.0	196.0	184.7	191.2	190.3	152.7	165.8	242.4	229.2	195.2	252.3	188.3	207.9
1777	224.0	108.0	212.0	194.7	162.0	113.7	227.3	-	162.4	160.4	309.1	296.5	230.1
1778	220.0	-	177.3	307.5	268.0	88.7	226.2	277.2	157.9	237.8	269.8	245.5	228.8
1779	213.6	146.0	196.0	208.7	108.0	251.6	182.6	148.0	261.0	243.0	246.7	-	220.2
1780	-	154.7	195.3	252.0	240.0	106.0	326.8	194.1	238.7	228.3	258.2	-	240.0
1781	126.0	108.0	206.3	488.0	210.0	96.0	73.3	79.1	82.1	121.4	142.3	-	118.4
1782	97.1	-	124.0	162.0	90.0	124.0	102.7	115.2	153.3	134.4	179.9	278.7	143.3
1783	163.6	347.0	157.0	246.6	231.6	88.0	95.8	196.5	161.8	220.7	108.0	152.1	170.5
1784	-	167.0	198.7	126.9	127.2	154.0	106.0	165.3	157.3	149.9	186.0	192.2	159.3
1785	128.0	139.5	-	195.0	165.3	117.2	107.3	164.0	155.4	154.5	244.2	238.6	163.5

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II.13.C

AVERAGE SHIPPING TONNAGE FROM RIGA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	-	114.0	153.5	227.8	324.2	220.0	133.0	213.6	183.1	183.3	216.8	216.3	213.9
1787	174.0	192.5	138.8	164.9	228.0	134.0	107.0	183.4	159.4	168.8	191.8	164.4	162.1
1788	131.0	211.0	155.1	187.5	368.0	-	134.4	138.7	136.7	139.5	193.0	121.0	158.1
1789	-	120.6	141.7	188.2	116.0	80.0	119.6	143.2	178.4	200.5	204.7	215.2	167.9
1790	-	209.0	133.2	176.7	58.7	132.6	103.9	121.2	147.0	153.0	144.2	133.9	134.0
1791 <sup>13</sup>	-	-	-	94.0	63.0	106.5	116.4	146.7	137.2	156.5	199.6	190.0	148.9
1792	-	152.0	115.2	170.5	-	107.3	115.6	148.4	163.3	144.0	175.2	-	151.7
1793	154.7	142.0	215.2	202.4	64.0	98.0	92.6	129.2	112.3	128.4	117.2	115.2	125.5
1794	76.0	82.3	138.7	118.7	-	91.0	149.8	120.7	118.3	122.0	135.0	116.0	121.3
1795 <sup>13</sup>	-	-	-	104.0	96.0	66.7	90.7	78.5	86.9	101.8	148.7	168.7	103.0
1796	111.3	126.2	71.3	126.0	174.0	89.8	95.6	111.7	117.3	134.0	138.0	135.0	112.2
1797	158.5	92.0	115.8	132.8	110.0	186.0	131.5	173.3	120.9	130.8	154.4	162.7	140.8
1798	163.5	123.3	170.7	116.7	171.2	87.2	123.6	95.0	116.3	128.0	116.0	354.0	129.3
1799	116.0	-	-	-	-	168.0	-	-	-	96.0	-	-	126.7
1800	-	214.0	-	110.0	226.0	-	113.0	99.1	102.7	94.0	139.0	250.0	116.8
1801	266.0	139.0	-	-	140.0	-	139.3	92.4	79.5	128.7	120.4	-	114.1
1802	135.0	117.2	148.3	116.0	110.5	86.9	133.0	133.8	150.4	118.7	143.9	-	126.1
1803	82.0	632.0	139.5	168.8	129.0	107.8	111.5	101.5	190.4	116.2	83.1	115.3	120.8
1804	134.0	-	-	246.5	-	-	99.3	126.4	-	118.4	-	99.6	120.3
1805	-	128.0	143.6	166.0	144.0	-	95.1	107.6	107.0	118.5	97.7	90.4	110.6
1806	102.0	141.5	112.8	-	-	100.0	62.0	108.0	104.2	94.5	50.0	166.0	105.7
1807	-	52.0	-	53.0	112.0	-	-	54.0	48.0	128.0	-	78.0	67.3
1808 <sup>17</sup>		NO DATA AVAILABLE											
1809		NO DATA AVAILABLE											
1810		NO DATA AVAILABLE											
1811		NO DATA AVAILABLE											
1812		NO DATA AVAILABLE											
1813		NO DATA AVAILABLE											
1814 <sup>6</sup>	-	-	-	-	-	-	-	94.2	116.9	157.3	128.8	142.0	118.1
1815	-	-	106.7	118.8	157.3	105.5	90.0	83.3	103.8	100.0	124.4	145.2	107.5
1816	62.0	98.0	95.5	152.4	86.0	128.0	140.7	192.2	129.0	116.8	106.0	134.4	126.6
1817	133.2	120.4	120.0	142.0	175.0	156.9	175.2	190.8	159.8	159.9	147.0	150.7	166.1
1818	172.0	167.3	-	-	174.0	-	143.0	153.2	167.1	192.0	89.3	112.0	157.7
1819	-	174.0	190.0	-	96.0	151.3	136.5	120.1	148.3	125.3	173.1	168.7	142.1
1820	-	123.3	146.7	133.0	250.0	150.0	135.8	154.6	167.1	162.9	167.0	164.8	155.1
1821	-	138.0	200.0	138.0	-	166.3	139.1	126.7	146.4	169.2	159.0	174.0	152.1
1822	121.0	131.6	94.0	131.0	164.0	-	154.9	-	58.0	140.0	178.4	-	143.5
1823	-	-	-	206.5	172.0	-	154.8	151.1	167.5	155.2	158.4	246.0	162.2
1824 <sup>20</sup>	140.0	136.0	-	78.0	107.0	154.5	159.3	159.5	156.4	179.6	-	200.0	155.0
1825	-	-	157.0	-	-	190.7	258.7	154.0	160.0	-	-	-	176.9

SOURCE: GAA, PA 78/94-102



TABLE II.13.D

AVERAGE SHIPPING TONNAGE FROM VIBORG TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1709 <sup>2</sup>	-	-	-	-	100.0	-	-	-	-	-	300.0	413.3	323.3
1710 <sup>3</sup>	-	-	360.0	340.0	-	260.0	440.0	-	110.0	-	-	-	302.0
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	156.0	156.0
1716	-	-	-	-	-	-	-	-	-	-	-	-	-
1717	-	200.0	-	411.3	-	-	-	-	-	-	-	172.0	321.2
1718	-	-	-	-	-	-	-	-	-	370.0	308.9	314.0	314.0
1719	320.0	-	-	-	-	-	-	56.0	-	314.5	366.0	430.0	302.0
1720	-	-	395.0	397.3	-	420.0	88.0	369.0	258.0	310.2	408.0	374.4	333.9
1721	-	-	-	-	-	-	176.0	306.7	369.0	322.0	406.0	380.0	339.9
1722	280.0	-	-	300.0	276.0	-	-	226.5	376.0	350.0	412.0	352.7	336.2
1723	-	-	-	396.0	-	-	312.0	-	370.0	330.0	306.0	361.0	348.9
1724	-	52.0	-	-	-	-	-	-	305.3	296.0	263.3	384.0	299.2
1725	-	-	-	220.0	-	-	388.0	143.0	255.0	324.8	320.0	-	262.6
1726	-	-	-	-	-	352.0	335.0	348.0	285.0	279.5	270.7	302.0	299.9
1727	-	-	-	294.0	-	-	290.0	136.4	282.0	-	220.0	293.0	250.4
1728	-	240.0	-	-	-	-	235.0	-	260.0	272.0	-	-	262.9
1729	-	-	219.0	-	-	-	134.0	263.3	236.0	229.2	303.0	-	239.3
1730	-	-	292.0	322.0	-	150.0	303.0	211.0	278.0	280.0	250.0	291.0	259.2
1731	-	-	-	175.0	-	-	-	293.3	118.0	271.3	252.0	269.7	252.0
1732	-	-	-	207.3	-	-	192.5	174.8	224.0	134.7	275.0	244.7	212.9
1733	138.0	224.0	242.0	278.0	-	280.0	249.0	208.8	162.2	115.0	260.0	304.0	204.3
1734	-	62.0	281.0	196.0	-	-	246.7	219.3	181.0	228.4	-	242.0	223.3
1735	-	232.0	-	-	-	296.0	285.3	292.0	253.0	266.0	302.7	-	284.7
1736	-	-	-	-	278.0	-	306.0	287.3	255.7	280.0	294.9	294.0	287.0
1737	-	-	-	241.2	322.0	274.0	274.7	251.1	230.7	262.9	274.4	248.0	257.5
1738	-	-	273.0	-	196.0	-	288.7	229.1	244.0	246.0	214.0	263.5	246.9
1739	-	-	336.0	-	226.0	-	272.0	260.0	177.0	295.0	241.0	248.0	253.2
1740	-	-	-	-	-	-	216.0	256.0	301.0	-	316.0	285.3	280.7
1741	-	-	-	-	-	330.0	-	300.7	183.0	-	342.0	-	288.0
1742	-	-	256.0	299.0	-	-	-	240.0	302.0	223.5	242.0	-	250.5
1743	62.0	94.0	170.0	296.0	279.0	42.0	146.0	222.8	216.0	-	284.0	300.0	208.7
1744	94.0	-	-	-	302.0	-	-	205.8	184.0	213.3	240.7	165.0	203.3
1745	-	-	116.0	161.0	256.0	-	338.0	265.7	244.0	291.0	251.3	-	247.4

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II.13.3

AVERAGE SHIPPING TONNAGE FROM VIBORG TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	276.0	-	204.0	-	246.0	-	-	226.0	-	302.0	338.0	308.7	261.5
1747	-	-	-	288.0	-	242.0	-	308.0	336.0	-	348.0	-	310.2
1748	-	-	-	-	231.3	-	296.0	197.3	224.7	214.0	260.0	104.0	209.9
1749	-	-	-	-	251.0	-	208.0	210.8	262.5	306.0	-	-	240.0
1750	-	-	178.0	-	-	143.0	297.6	154.7	100.0	224.0	-	339.0	216.1
1751	-	-	-	-	186.0	-	-	-	338.0	218.7	-	240.0	251.1
1752	188.0	213.0	-	222.0	-	-	102.0	236.0	-	-	266.0	-	217.8
1753	-	234.0	-	253.0	199.0	234.0	289.5	191.0	194.0	-	281.0	-	236.4
1754	162.0	264.0	378.0	244.0	-	-	249.0	332.0	350.0	264.0	344.0	-	280.0
1755	-	-	230.0	392.0	338.0	-	202.7	84.0	-	238.7	157.0	-	214.6
1756	-	-	238.0	264.0	-	234.0	313.0	320.7	278.0	235.3	299.3	-	291.2
1757	-	-	-	264.0	-	247.0	314.0	338.5	214.0	231.0	-	-	279.2
1758	-	-	292.0	392.0	-	-	-	256.0	364.0	-	-	-	312.0
1759	-	240.0	-	-	-	-	319.3	-	-	184.0	253.3	-	267.7
1760	-	-	-	-	-	-	240.0	418.0	360.3	362.0	-	-	354.4
1761	-	-	-	-	-	-	169.3	352.0	-	318.0	-	-	248.7
1762	-	-	-	-	-	-	-	305.0	-	234.0	278.7	316.0	285.1
1763	-	-	102.0	-	-	-	220.0	148.0	230.0	265.0	140.7	-	183.6
1764	-	298.0	208.0	220.0	-	-	227.0	146.0	-	220.0	110.0	184.0	204.4
1765	-	264.0	180.0	-	-	-	234.0	266.0	316.0	266.0	181.3	256.0	236.5
1766	-	161.3	102.0	152.0	248.0	-	232.0	286.0	214.0	-	190.0	134.0	193.5
1767	-	-	-	-	-	-	-	-	-	146.0	202.0	140.0	162.7
1768	-	298.0	-	-	-	-	-	140.0	193.0	244.0	-	163.0	199.1
1769	-	-	238.0	-	-	-	154.0	206.0	-	214.0	156.0	-	201.8
1770	-	207.0	-	156.0	-	-	-	-	-	-	-	271.0	222.4
1771	-	-	-	-	-	-	-	-	264.0	-	-	-	264.0
1772	146.0	-	-	-	-	-	-	-	-	-	-	-	146.0
1773	-	-	150.0	-	-	-	-	-	316.0	-	-	209.3	218.8
1774	-	-	-	196.0	-	-	-	198.0	314.0	132.0	-	-	210.0
1775	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1775	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	-	-	216.0	-	-	66.0	182.0	-	-	150.0	-	264.0	175.6
1777	-	-	-	-	-	-	175.0	-	-	-	-	-	175.0
1778	-	-	-	-	-	-	-	-	113.0	324.7	-	-	240.0
1779	-	-	-	-	-	-	330.0	338.0	-	404.0	287.0	-	330.6
1780	-	-	-	-	-	-	-	-	-	-	452.0	-	452.0
1781	-	-	270.0	188.0	-	178.0	-	-	-	254.0	-	-	222.5
1782	-	168.0	-	-	-	-	-	115.3	120.7	116.0	125.2	308.0	158.9
1783	130.0	-	88.0	-	-	-	238.0	221.0	260.0	148.0	-	-	195.7
1784	-	-	-	-	108.0	136.0	-	210.0	-	198.0	236.0	246.0	189.0
1785	-	-	-	-	-	-	-	196.0	-	-	254.0	324.0	236.7

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II.13.D

AVERAGE SHIPPING TONNAGE FROM VIBORG TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	254.0	-	-	-	264.0	-	-	250.0	-	114.0	200.0	-	210.2
1787	-	116.0	204.0	-	117.0	-	-	184.0	-	161.0	238.0	-	164.7
1788	-	-	-	-	-	-	184.0	-	227.0	-	186.0	220.0	200.8
1789	-	-	-	446.0	-	-	-	309.0	-	-	-	220.0	321.0
1790	-	-	34.0	-	-	-	-	-	-	-	196.0	126.0	122.0
1791 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1792	-	132.0	204.0	-	-	-	76.0	-	-	150.0	270.0	-	151.1
1793	204.0	-	-	-	-	-	-	190.0	374.0	189.3	177.0	136.0	210.8
1794	-	-	268.0	210.0	-	146.0	-	96.0	244.0	132.0	134.0	160.0	178.0
1795 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	-	-	198.0	-	192.0	-	-	194.0
1797	-	-	198.0	-	-	-	-	-	-	-	170.0	-	179.3
1798	140.0	-	-	268.0	-	-	-	-	-	128.0	-	-	178.7
1799	-	-	-	134.0	-	-	120.0	-	-	-	-	-	127.0
1800	-	-	-	-	-	-	-	-	140.0	104.0	-	-	122.0
1801	-	-	-	-	-	284.0	-	-	-	102.0	-	146.0	177.3
1802	-	-	-	-	-	-	-	-	-	-	-	-	-
1803	-	252.0	-	-	-	-	-	-	-	56.0	-	-	154.0
1804	-	-	-	268.0	-	-	-	86.0	-	92.0	-	-	148.7
1805	-	-	-	116.0	-	-	168.0	-	112.0	175.0	-	-	149.2
1806	-	-	-	-	-	-	-	-	-	-	-	252.0	252.0
1807	-	-	-	-	142.0	-	-	-	32.0	-	-	92.0	88.7
1808 <sup>17</sup>	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1809	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1810	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1811	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1812	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1813	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1814 <sup>6</sup>	-	-	-	-	-	-	-	-	163.0	-	199.0	-	181.0
1815	-	-	-	-	-	246.0	48.0	-	128.0	-	102.0	249.0	160.6
1816	-	-	128.0	-	130.0	-	-	-	-	140.0	-	-	132.0
1817	-	144.0	-	-	-	-	154.0	-	252.0	-	-	-	183.3
1818	-	-	-	-	-	-	-	-	124.0	154.0	578.0	144.0	250.0
1819	-	-	-	-	-	-	-	203.5	-	-	-	102.0	183.2
1820	-	-	-	446.0	132.0	-	197.0	276.0	346.0	-	-	-	267.4
1821	-	-	-	128.0	-	-	350.0	260.0	198.0	-	-	-	231.8
1822	-	-	-	-	250.0	-	340.0	-	-	-	-	-	295.0
1823	-	-	-	-	-	-	-	224.0	-	496.0	-	-	360.0
1824	-	-	-	-	-	-	-	274.0	252.5	-	-	-	256.8
1825 <sup>20</sup>	-	-	-	-	-	-	-	372.0	-	-	-	-	372.0

SOURCE: GAA, PA 78/94-102

TABLE II.13.E

AVERAGE SHIPPING TONNAGE FROM REVAL TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	-	NO	DATA	AVAILABLE	-	-	-	-	-	-	-	-	-
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1710 <sup>3</sup>	-	-	-	-	-	34.0	-	-	-	-	-	-	34.0
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 <sup>5</sup>	-	-	-	-	-	66.0	-	60.0	-	-	-	-	64.0
1713 <sup>4</sup>	-	-	44.0	100.0	-	-	-	-	-	-	-	-	72.0
1714 <sup>6</sup>	-	-	-	-	40.0	131.0	220.0	-	56.0	76.0	32.0	-	98.0
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	36.0	36.0
1716	-	70.0	211.5	197.1	283.0	290.0	-	-	-	-	-	-	223.7
1717	-	173.2	-	260.0	150.0	-	300.0	-	200.0	-	-	-	197.6
1718	-	-	-	-	200.0	-	-	-	-	-	-	-	200.0
1719	120.0	-	-	-	-	-	-	-	64.0	-	-	-	92.0
1720	-	-	-	-	-	-	-	-	30.0	40.0	40.0	-	36.7
1721	-	-	-	-	-	-	-	30.0	-	60.0	-	-	45.0
1722	180.0	-	-	-	-	-	110.0	-	-	-	-	-	133.3
1723	-	-	60.0	-	-	-	-	44.0	96.0	-	-	88.0	72.0
1724	-	-	-	-	-	-	52.0	-	-	30.0	-	60.0	47.3
1725	-	-	-	-	-	74.0	-	-	100.0	-	-	-	82.7
1726	-	-	-	-	96.0	44.0	-	-	40.0	68.0	-	-	62.0
1727	-	-	-	-	-	-	70.0	-	-	-	-	-	70.0
1728	-	-	-	-	-	93.0	132.0	-	-	-	-	223.0	152.8
1729	-	228.0	-	-	-	-	66.0	-	142.7	126.0	266.0	-	151.6
1730	-	-	-	204.0	-	167.0	141.0	135.5	-	113.0	106.0	148.0	145.2
1731	-	198.0	96.0	-	-	222.0	-	174.6	141.1	106.0	-	-	151.8
1732	170.0	181.0	-	176.0	-	56.0	114.0	124.0	124.0	-	-	-	137.8
1733	-	-	-	-	-	-	70.0	-	106.0	-	-	-	89.0
1734	-	-	-	92.0	-	74.0	194.4	129.5	-	-	124.0	-	148.3
1735	-	-	-	-	132.0	-	-	-	106.0	-	-	-	119.0
1736	-	-	-	-	-	-	124.0	85.3	-	124.0	72.0	-	96.0
1737	-	90.0	-	-	158.0	66.0	-	62.0	90.0	69.0	71.0	-	84.2
1738	-	-	118.0	-	-	95.4	154.0	169.0	92.0	90.0	-	-	121.9
1739	-	-	124.0	-	-	140.4	157.5	161.4	135.0	114.3	108.0	136.0	142.3
1740	-	-	-	188.4	-	144.5	249.5	196.9	181.8	171.4	274.0	148.0	187.6
1741	-	-	132.0	122.0	-	144.7	149.3	101.0	56.0	-	-	-	133.8
1742	-	-	-	-	-	-	97.0	-	124.0	-	-	206.0	131.0
1743	-	-	-	-	-	-	-	-	-	-	-	-	-
1744	-	-	-	-	-	-	-	124.0	242.0	-	-	-	183.0
1745	-	-	-	-	-	-	-	-	129.0	-	-	-	129.0

SOURCE: GAA, PA 78/04-102

CONTINUED...

TABLE II.13.E

AVERAGE SHIPPING TONNAGE FROM REVAL TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1746	-	-	88.0	-	-	-	200.4	124.0	-	-	-	-	162.7
1747	-	-	170.0	-	-	-	76.0	-	-	-	34.0	-	93.3
1748	-	-	-	-	124.0	-	96.0	84.0	68.0	-	72.0	-	88.8
1749	-	-	-	106.0	-	-	-	100.0	-	-	-	-	103.0
1750	-	-	-	-	-	96.0	70.0	140.0	124.0	70.0	-	-	100.0
1751	-	-	-	274.0	-	58.0	70.0	-	-	-	-	-	134.0
1752	58.0	-	70.0	-	-	-	76.0	-	-	-	-	-	70.0
1753	-	-	-	-	-	104.0	148.0	66.0	-	-	-	-	118.3
1754	-	-	-	-	-	-	-	88.0	95.0	-	-	-	86.0
1755	-	-	-	-	-	-	-	74.0	-	-	-	-	74.0
1756	-	-	274.0	114.0	-	72.0	-	-	134.0	-	-	-	148.5
1757	-	-	-	-	-	-	-	-	-	-	-	-	-
1758	-	-	-	-	-	-	-	114.0	-	-	-	-	114.0
1759	-	-	-	-	-	-	-	-	-	-	-	-	-
1760	-	-	-	-	-	-	-	-	44.0	102.0	-	-	73.0
1761	-	-	-	-	-	-	56.0	69.3	72.0	130.0	-	-	85.1
1762	118.0	-	188.0	114.0	-	-	-	214.0	232.0	104.0	202.0	268.0	164.8
1763	-	-	-	-	-	110.0	-	-	74.0	-	86.0	96.0	101.5
1764	-	-	-	-	-	-	-	166.0	188.0	96.0	-	122.0	143.0
1765	-	-	-	-	-	-	-	-	-	-	-	90.0	90.0
1766	-	-	-	68.0	-	-	-	-	-	-	80.0	96.0	81.3
1767	226.0	-	-	-	-	-	-	-	-	-	-	-	226.0
1768	-	-	-	-	-	-	-	-	64.0	-	-	-	64.0
1769	-	-	-	-	-	90.0	-	110.0	-	-	-	-	96.7
1770	-	-	-	-	-	-	-	114.0	-	-	-	88.0	101.0
1771	-	-	-	-	-	-	108.5	-	64.0	-	-	-	103.6
1772	-	-	-	-	-	94.0	-	90.0	-	-	-	-	92.0
1773	-	120.0	-	-	-	-	-	114.0	-	-	-	-	117.0
1774	-	-	120.0	-	54.0	-	-	120.0	111.0	-	119.0	98.0	106.5
1775	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1776	102.0	-	-	-	-	-	93.0	62.0	-	-	-	-	87.5
1777	-	-	-	-	-	98.0	114.0	-	-	-	-	-	106.0
1778	-	-	-	-	-	82.0	-	-	-	-	-	-	82.0
1779	154.0	-	-	-	-	-	-	-	-	-	-	-	154.0
1780	-	-	-	-	-	-	-	-	66.0	-	-	-	66.0
1781	-	-	-	-	-	102.0	-	-	144.0	-	-	-	130.0
1782	-	-	-	-	-	-	-	-	-	60.0	-	297.0	218.0
1783	-	-	-	-	-	-	-	-	-	-	130.0	-	130.0
1784	-	-	-	-	-	-	-	-	-	-	-	-	130.0
1785	-	-	-	-	-	-	104.0	-	-	-	-	-	104.0

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE 11.13.E

AVERAGE SHIPPING TONNAGE FROM REVAL TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	-	-	-	-	-	-	-	-	-	-	-	-	-
1787	-	-	-	-	-	-	-	-	-	-	-	-	-
1788	-	-	-	-	-	-	-	184.0	-	-	-	-	184.0
1789	-	-	-	-	-	-	-	-	-	-	-	-	-
1790	-	-	-	-	-	-	-	-	-	-	-	-	-
1791 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1792	-	-	-	-	-	-	44.0	-	-	-	-	-	44.0
1793	-	-	-	-	-	-	-	-	-	-	-	-	-
1794	-	-	-	-	-	-	-	-	-	-	176.0	-	176.0
1795 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	114.0	52.0	58.0	83.3	-	44.0	-	73.6
1797	72.0	-	-	-	-	-	58.0	-	-	-	-	-	70.0
1798	-	-	-	134.0	-	-	-	-	-	-	36.0	-	85.0
1799	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	-	-	-	-	-
1801	-	-	-	-	-	-	414.0	-	-	-	-	-	414.0
1802	-	-	-	-	-	-	82.0	152.0	148.0	-	54.0	-	109.0
1803	-	-	-	-	-	-	82.0	-	-	-	-	156.0	119.0
1804	-	-	-	-	-	-	-	-	-	-	-	-	-
1805	-	-	-	-	-	-	-	-	-	-	-	-	-
1806	-	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-	-	-	-	-	-	-
1808 <sup>17</sup>	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1809	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1810	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1811	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1812	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1813	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1814 <sup>6</sup>	-	-	-	-	-	-	84.0	110.0	-	-	-	-	92.7
1815	-	-	-	-	-	-	-	-	90.0	130.0	-	-	116.7
1816	-	-	-	-	-	-	-	-	-	-	-	-	-
1817	-	-	176.0	-	-	163.0	118.0	-	144.0	-	-	-	163.2
1818	-	-	-	-	-	-	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-	-	-	-	-	-	-
1820	-	-	-	-	-	-	-	-	-	-	-	170.0	170.0
1821	-	-	-	-	-	-	-	-	-	-	-	-	-
1822	-	-	-	-	-	-	-	-	-	-	-	-	-
1823	-	-	-	-	-	-	-	-	-	-	-	-	-
1824	-	-	-	-	-	-	-	-	-	-	-	-	-
1825 <sup>20</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-

SOURCE: GAA, PA 78/94-102

TABLE II.13.F

AVERAGE SHIPPING TONNAGE FROM ESTONIA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE												-
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1710 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1713 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1714 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	-	-	-	-	70.0	-	-	-	-	-	-	70.0
1717	-	-	-	-	-	-	-	-	116.0	-	-	-	116.0
1718	-	-	-	-	-	-	-	-	-	-	-	352.0	352.0
1719	-	-	-	-	-	-	-	-	-	394.0	-	-	394.0
1720	-	-	224.0	-	-	-	-	236.0	84.0	-	68.0	266.0	187.6
1721	-	-	-	-	-	-	-	-	-	-	-	-	-
1722	-	-	-	-	-	-	-	-	-	-	-	-	-
1723	-	340.0	-	410.0	400.0	-	-	-	-	-	368.0	-	388.6
1724	-	-	-	-	-	-	-	-	-	-	-	96.0	96.0
1725	-	-	-	-	-	-	-	38.0	-	-	-	-	38.0
1726	-	-	-	-	-	-	-	-	-	-	-	-	-
1727	-	-	-	-	-	-	-	-	-	-	-	-	-
1728	-	-	-	-	-	-	84.0	-	-	-	-	-	84.0
1729	-	-	-	-	-	-	-	236.0	210.0	246.0	-	-	230.7
1730	-	-	-	-	-	-	226.0	-	286.0	108.7	124.0	-	184.2
1731	-	-	-	-	-	-	-	204.0	165.3	-	210.0	312.0	203.7
1732	-	-	-	-	-	-	-	130.0	56.0	-	92.0	-	83.5
1733	-	-	-	-	-	-	-	288.0	-	-	156.0	-	222.0
1734	-	-	-	-	-	76.0	210.0	-	100.0	-	-	-	128.7
1735	-	-	-	-	-	-	-	-	-	176.0	-	192.0	184.0
1736	-	108.0	-	-	-	-	198.0	-	-	167.0	-	-	160.0
1737	-	-	320.0	204.0	-	-	-	-	-	110.0	-	248.0	217.2
1738	-	288.0	-	-	-	82.0	-	104.0	168.0	192.0	70.0	209.0	165.3
1739	-	-	-	-	76.0	116.0	56.0	121.3	-	102.0	282.7	-	173.4
1740	-	-	-	-	-	-	78.2	115.0	158.3	130.0	106.0	183.0	117.9
1741	-	-	60.0	-	-	48.7	102.2	158.5	160.4	96.7	-	-	113.6
1742	-	-	-	-	-	-	-	296.2	-	206.0	194.7	264.0	265.7
1743	-	210.0	192.0	-	-	-	-	158.0	175.0	292.5	265.8	-	239.4
1744	306.0	-	296.0	-	-	192.0	115.0	304.8	-	-	239.0	302.0	287.9
1745	244.0	-	-	124.0	-	-	308.7	318.0	282.0	132.0	-	342.0	278.6

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II-13.F  
AVERAGE SHIPPING TONNAGE FROM ESTONIA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1766	336.0	302.0	-	-	-	228.7	345.2	204.0	88.0	-	226.7	-	196.8	231.0
1767	-	298.7	-	-	-	-	195.0	293.3	-	-	344.0	318.0	325.0	277.6
1768	-	-	-	-	-	-	346.0	126.0	270.0	-	342.5	322.4	315.6	302.1
1769	-	150.0	82.0	232.0	350.0	283.0	90.0	-	318.0	228.8	238.9	325.0	273.4	264.9
1770	-	172.0	-	-	-	-	284.0	299.0	275.0	214.0	274.0	238.7	325.3	235.3
1771	-	-	-	-	365.0	280.4	-	274.0	281.0	126.0	-	324.7	338.0	288.8
1772	110.0	166.0	-	-	316.0	207.0	-	64.0	66.0	-	-	64.0	70.0	292.0
1773	-	-	-	-	-	96.0	-	74.0	-	-	114.0	-	50.0	93.1
1774	-	-	-	-	-	40.0	-	-	-	-	-	-	77.7	77.7
1775	-	-	-	-	-	-	74.0	-	-	-	-	-	40.0	40.0
1776	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1777	-	-	-	-	-	-	235.0	-	136.8	-	216.0	126.0	-	174.9
1778	-	-	96.0	-	-	-	335.0	-	82.0	-	-	130.0	-	184.7
1779	-	208.0	294.0	106.0	-	-	102.0	-	75.0	-	95.0	58.0	98.0	119.3
1780	159.0	-	-	116.0	230.0	-	230.0	120.0	256.0	144.0	144.0	-	-	175.6
1781	-	-	248.0	248.0	230.0	-	110.0	110.0	-	165.0	165.0	187.5	-	200.0
1782	-	-	100.0	218.0	-	248.0	124.0	110.0	-	98.0	150.7	90.0	136.7	200.0
1783	-	-	218.0	-	-	-	222.0	-	116.0	-	124.4	90.0	-	149.3
1784	88.0	-	-	-	-	-	94.0	-	-	-	-	-	-	114.9
1785	-	94.0	-	-	-	-	132.0	165.0	148.7	116.0	182.0	-	-	148.2
1786	-	118.0	-	-	132.0	-	88.0	140.0	159.3	156.0	185.6	-	112.0	135.4
1787	126.7	-	-	112.0	-	-	150.4	168.8	137.0	139.0	133.5	-	-	143.7
1788	-	-	-	-	-	-	171.0	203.2	-	90.0	209.2	-	153.3	178.9
1789	148.0	-	-	-	-	-	150.8	116.3	222.8	-	-	-	-	154.4
1790	-	121.0	112.0	122.0	274.0	122.0	141.1	196.0	184.0	264.7	-	-	110.0	153.1
1791	115.0	-	244.0	155.2	274.0	155.2	189.0	202.0	202.7	-	-	-	118.1	164.2
1792	130.0	92.0	115.0	98.0	-	98.0	203.7	114.7	122.0	178.0	116.0	-	109.2	151.7
1793	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1794	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1795	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1796	109.0	-	138.0	130.9	154.0	130.9	162.2	201.4	102.0	160.0	160.0	105.6	102.9	149.0
1797	184.0	98.0	240.0	146.0	140.0	146.0	216.7	-	100.0	182.0	182.0	121.3	187.2	181.2
1798	118.0	119.0	138.0	-	-	-	165.3	149.5	176.7	164.0	164.0	140.0	162.0	155.2
1799	814.0	-	102.0	146.0	-	146.0	218.0	106.0	146.3	136.0	136.0	128.0	-	168.8
1780	-	-	105.0	105.0	138.0	138.0	124.0	271.5	124.0	192.0	192.0	111.7	-	163.6
1781	264.0	-	160.0	102.0	-	102.0	-	-	-	-	-	-	-	186.6
1782	84.0	-	-	-	274.0	-	110.0	96.0	114.0	-	-	109.0	241.0	148.6
1783	136.0	114.0	82.0	130.0	-	130.0	90.0	105.7	170.7	330.7	330.7	183.0	223.0	165.6
1784	-	-	174.0	-	-	-	-	298.0	-	226.0	226.0	-	446.0	254.9
1785	-	150.0	-	-	-	-	138.0	270.0	199.6	-	-	355.0	-	232.3

CONTINUED...

SOURCE: GAA, PA 78/94-102



TABLE II.13.F

AVERAGE SHIPPING TONNAGE FROM ESTONIA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1786	-	-	-	128.0	118.0	-	330.0	-	-	199.0	180.0	-	181.7
1787	-	-	104.0	410.0	-	-	117.0	112.0	114.0	62.0	120.0	118.0	136.9
1788	-	-	-	-	-	-	234.0	169.0	-	94.0	-	-	166.8
1789	130.0	90.0	-	344.0	-	-	410.0	92.0	239.3	268.7	174.0	104.0	220.6
1790	172.0	-	67.0	-	99.0	-	-	-	-	132.0	191.3	112.0	132.2
1791 <sup>13</sup>	-	-	-	80.0	-	-	124.0	108.7	185.3	63.0	130.0	114.0	122.0
1792	-	104.0	-	-	-	98.0	-	-	186.0	268.0	196.4	-	182.0
1793	174.0	-	124.0	-	162.0	-	124.0	-	-	72.0	-	-	131.2
1794	-	-	-	-	288.0	-	434.0	270.0	166.0	406.0	-	-	312.8
1795 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	268.0	-	-	-	-	-	92.0	105.2	138.0	-	-	128.0
1797	330.0	-	104.0	-	-	-	64.0	42.0	-	-	202.0	-	148.4
1798	72.0	-	-	-	-	-	-	44.0	62.0	-	-	-	66.0
1799	-	-	60.0	-	-	-	-	-	-	-	-	-	60.0
1800	-	-	-	-	-	-	-	-	101.3	-	-	-	101.3
1801	-	-	-	-	-	-	-	-	-	238.0	-	-	238.0
1802	-	-	-	-	-	-	128.0	-	194.0	112.0	104.0	-	138.9
1803	102.0	-	-	-	-	55.0	78.0	82.7	106.0	78.0	-	-	82.4
1804	-	-	-	-	-	-	-	-	-	124.7	-	-	124.7
1805	-	-	-	-	-	-	115.3	109.0	192.0	-	167.0	106.0	143.6
1806	104.0	-	85.0	212.0	-	-	-	-	190.0	-	-	-	135.2
1807	-	-	-	-	-	-	-	-	-	-	-	-	-
1808 <sup>17</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1810	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1811	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1812	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1813	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1814 <sup>6</sup>	-	-	-	-	-	-	-	110.0	-	-	-	-	110.0
1815	-	-	-	-	-	-	-	102.0	178.0	-	-	-	140.0
1816	-	-	186.0	-	-	-	148.0	162.0	-	144.0	206.0	-	169.2
1817	-	110.0	-	-	-	108.0	220.0	352.0	185.0	96.0	-	-	163.6
1818	-	-	-	-	-	-	102.0	380.0	-	120.0	-	-	180.5
1819	-	112.0	-	-	-	-	-	224.0	248.0	158.0	-	-	198.3
1820	-	-	-	-	-	-	-	-	158.0	-	-	106.0	137.0
1821	-	-	-	-	-	-	166.0	80.0	-	180.0	-	-	148.0
1822	-	-	-	-	-	-	74.0	-	66.0	-	106.0	-	82.0
1823	-	-	-	-	-	-	242.0	-	96.0	-	242.0	-	193.3
1824	-	-	-	-	-	-	184.0	-	142.7	-	-	-	163.0
1825 <sup>20</sup>	-	-	-	-	-	-	-	109.0	-	-	-	-	109.0

SOURCE: GAA, PA 78/94-102

TABLE II.13.G

AVERAGE SHIPPING TONNAGE FROM FREDERIKSMANN TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1744 <sup>0</sup>	-	-	-	-	-	-	-	-	232.0	-	-	-	232.0
1745	-	-	54.0	-	-	266.0	164.0	-	244.0	-	-	-	178.4
1746	-	-	-	-	-	-	-	290.0	-	218.0	-	248.0	261.6
1747	-	-	312.0	-	336.0	-	260.0	296.0	216.0	-	234.0	-	255.8
1748	-	-	-	-	-	-	54.0	148.0	408.0	-	-	324.0	222.0
1749	312.0	-	-	-	-	-	152.0	192.0	-	234.0	208.0	54.0	182.0
1750	-	-	-	-	-	234.0	-	138.0	-	138.0	-	-	151.7
1751	-	-	-	-	-	234.0	-	86.0	-	242.0	-	-	187.3
1752	-	232.0	-	-	-	-	-	178.0	127.0	-	172.0	-	169.0
1753	-	-	-	-	-	-	-	157.0	-	-	-	-	157.0
1754	-	-	-	-	178.0	-	-	-	99.3	106.0	-	-	116.4
1755	-	-	-	64.0	-	-	-	106.0	172.0	107.0	-	-	121.3
1756	-	-	-	-	-	106.0	-	294.0	-	-	162.0	-	240.7
1757	-	-	-	-	92.0	-	-	254.0	341.0	-	-	96.0	233.1
1758	-	-	-	-	-	-	-	335.0	92.0	112.0	-	256.0	226.0
1759	-	-	-	-	-	-	274.0	-	262.0	114.0	256.0	-	248.7
1760	-	-	-	-	-	-	-	195.0	304.0	234.0	-	-	256.0
1761	-	-	-	-	-	-	-	170.0	316.0	-	392.0	-	292.7
1762	-	-	338.0	170.0	-	-	313.0	-	-	397.0	-	-	321.3
1763	-	-	-	170.0	-	-	213.0	-	-	136.0	-	278.0	202.0
1764	-	-	-	256.0	-	-	-	199.0	-	-	202.0	-	211.6
1765	-	-	-	170.0	-	-	-	195.0	-	-	-	-	186.7
1766	-	-	170.0	-	350.0	-	196.0	172.0	-	148.0	250.0	-	206.7
1767	-	-	-	160.0	-	-	-	142.0	-	-	-	-	149.2
1768	-	149.0	376.0	170.0	-	-	216.0	170.0	-	-	-	-	205.0
1769	-	-	170.0	216.0	-	148.0	193.0	-	278.0	131.0	-	216.0	186.2
1770	-	-	-	170.0	-	-	193.0	250.0	-	-	-	216.0	204.4
1771	-	-	-	170.0	-	-	233.0	-	-	-	-	-	212.0
1772	-	-	106.0	-	-	-	216.0	170.0	-	-	296.0	-	216.8
1773	-	-	-	170.0	-	150.0	350.0	394.0	-	-	-	150.0	242.8
1774	-	-	432.0	170.0	-	90.0	216.0	151.0	162.0	170.0	-	216.0	195.3
1775	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1776	-	-	-	-	-	-	-	-	-	180.0	-	-	180.0
1777	-	-	-	-	-	-	-	-	-	-	-	-	-
1778	-	-	-	-	-	-	446.0	-	-	-	-	-	446.0
1779	226.0	-	-	-	-	80.0	233.3	-	-	-	414.0	-	236.7
1780	-	-	-	-	-	-	256.0	438.0	-	-	310.0	-	304.3
1781	-	-	-	-	-	-	-	133.0	-	-	170.0	-	148.3
1782	-	-	-	156.0	-	-	127.0	170.0	-	224.0	358.0	-	198.0
1783	-	-	-	134.0	-	-	290.0	172.7	324.0	152.0	-	-	202.6

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II.13-G

AVERAGE SHIPPING TONNAGE FROM FREDERIKSMANN TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1784	-	-	-	148.0	-	-	144.7	404.0	-	236.0	177.3	-	199.0
1785	-	-	-	-	264.0	-	198.0	203.5	-	-	220.0	-	207.2
1786	-	-	-	-	-	-	234.0	-	152.0	-	-	-	193.0
1787	-	-	-	-	-	-	123.0	196.0	-	-	186.0	-	157.0
1788	-	-	-	199.0	-	-	132.0	-	-	-	264.0	-	198.5
1789	-	364.0	-	-	-	-	-	-	-	-	-	-	364.0
1790	-	-	-	-	-	-	-	-	-	-	-	-	-
1791 <sup>13</sup>	-	-	-	-	-	-	-	146.0	-	-	-	-	146.0
1792	-	-	-	-	-	-	-	-	-	-	-	-	-
1793	-	-	-	-	-	-	-	-	-	-	-	160.0	160.0
1794	-	-	-	204.0	-	-	118.0	-	108.0	229.0	-	-	177.6
1795 <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	-	-	-	-	238.0	151.3	-	173.0
1797	-	-	-	-	-	180.0	124.0	-	-	-	-	-	142.7
1798	-	-	-	-	-	-	-	-	-	-	-	-	-
1799	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	140.0	98.0	-	-	119.0
1801	-	186.0	-	-	-	220.0	-	-	-	-	-	-	203.0
1802	-	-	186.0	-	-	-	-	-	-	-	-	-	186.0
1803	-	-	-	-	-	-	-	-	-	-	-	-	-
1804	-	-	-	-	-	-	-	74.0	-	86.0	-	-	80.0
1805	-	-	-	-	-	-	-	72.0	-	-	180.0	-	126.0
1806	-	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-	144.0	-	-	-	-	144.0
1808 <sup>17</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-	-
1810	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-	-
1811	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-	-
1812	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-	-
1813	-	NO DATA	AVAILABLE	-	-	-	-	-	-	-	-	-	-
1814 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	-	-	-	-	-	-	-
1816 <sup>18</sup>	-	-	-	206.0	-	-	-	-	-	-	230.0	-	222.0
1817	-	-	-	-	-	90.0	-	-	-	-	-	-	90.0
1818	-	-	-	-	-	-	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-	-	-	-	-	-	-
1820	-	-	-	-	-	-	-	-	-	410.0	-	-	410.0
1821	-	-	-	196.0	-	-	520.0	-	-	-	-	-	358.0
1822	-	-	-	-	-	-	328.0	-	-	-	-	-	328.0
1823	-	-	-	-	-	-	-	246.0	328.0	-	-	-	287.0
1824	-	-	-	-	-	-	276.0	-	298.0	-	-	-	287.0
1825 <sup>20</sup>	-	-	-	-	-	-	-	216.0	-	-	-	-	216.0

SOURCE: GAA, PA 78/94-102

TABLE II.13.4

AVERAGE SHIPPING TONNAGE FROM COURLAND TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												YEARLY AVERAGE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1796 <sup>14</sup>	129.0	-	110.7	75.1	61.1	66.0	61.0	61.3	-	77.0	70.5	66.0	70.2
1797	66.0	110.7	63.3	92.0	108.3	80.0	107.0	88.0	68.0	66.7	99.0	124.0	93.5
1798	-	-	74.0	166.0	84.0	91.0	104.0	66.0	93.0	-	46.0	-	84.5
1799	98.0	-	-	40.0	-	-	128.0	-	-	-	-	-	88.7
1800	-	-	-	-	68.0	84.4	89.0	56.0	88.8	-	-	-	83.4
1801	-	58.0	-	-	-	70.0	98.5	68.9	95.0	58.0	78.7	-	78.3
1802	-	110.0	58.7	156.0	83.0	106.7	59.0	107.0	-	78.0	98.0	-	86.8
1803	58.0	-	-	82.0	146.0	99.6	83.3	46.0	122.0	-	104.0	98.0	95.2
1804	126.0	-	-	88.2	-	-	90.0	84.7	-	102.0	-	78.0	90.4
1805	-	-	111.5	84.0	84.0	89.3	97.7	116.5	-	104.0	45.0	-	94.6
1806	-	66.0	-	152.0	110.0	59.0	86.0	73.3	106.0	110.0	-	-	93.6
1807	-	-	-	74.0	-	74.7	48.0	60.0	-	-	-	60.0	63.4
1808 <sup>17</sup>		NO DATA AVAILABLE											
1809		NO DATA AVAILABLE											
1810		NO DATA AVAILABLE											
1811		NO DATA AVAILABLE											
1812		NO DATA AVAILABLE											
1813		NO DATA AVAILABLE											
1814 <sup>6</sup>	-	-	-	-	-	124.0	83.4	62.0	103.2	-	80.0	132.0	95.4
1815	-	-	-	-	112.0	106.0	106.0	72.7	118.0	124.0	129.0	-	103.4
1816	-	-	-	72.0	60.0	120.4	58.5	69.0	82.0	48.0	106.7	154.0	90.7
1817	-	148.0	-	110.0	121.9	77.0	100.0	136.0	124.0	108.0	74.0	-	115.8
1818	-	-	-	-	111.6	81.0	52.0	50.0	65.0	49.0	-	-	79.3
1819	76.0	-	-	-	58.0	61.0	118.7	80.8	-	-	98.0	-	83.2
1820	-	-	-	-	-	107.5	94.0	80.0	-	158.0	-	56.0	100.6
1821	-	62.0	138.0	117.0	-	102.7	74.0	86.0	44.0	103.3	-	-	103.1
1822	-	90.0	-	-	99.0	-	-	-	-	98.0	-	-	96.5
1823	-	-	-	-	174.0	-	107.0	108.7	-	-	-	-	117.7
1824	-	-	84.0	-	151.0	150.0	-	-	192.0	170.0	-	-	149.8
1825 <sup>20</sup>	-	-	-	-	95.7	81.5	105.0	126.7	-	-	-	-	99.3

SOURCE: CAA, PA 78/94-102

TABLE 11.14 PERCENTAGE OF TOTAL SHIPPING TONNAGE FROM RUSSIAN (BALTIC) PORTS TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	MONTH OF ARRIVAL				NOV	DEC	
								AUG	SEP	OCT	NOV			
1705 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1706 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1707 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708 2	-	-	-	-	3.5	-	-	-	-	-	-	21.9	74.7	-
1709 3	15.8	15.0	11.3	16.2	-	19.9	16.4	-	5.3	-	-	-	-	-
1710 4	-	22.7	6.8	78.5	-	-	-	-	-	-	-	-	-	-
1711 5	-	-	-	-	-	58.1	-	12.6	-	-	-	29.3	-	-
1712 6	-	6.8	44.1	30.0	15.1	-	-	-	-	-	-	-	-	-
1713 7	-	-	-	-	3.1	16.7	16.3	15.4	16.8	4.5	20.8	8.8	7.9	70.5
1714 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1715 9	-	12.1	23.7	16.4	30.4	15.6	0.5	-	-	-	-	-	-	1.2
1716 10	7.1	40.4	4.1	16.4	5.1	1.7	1.9	3.0	9.5	1.9	-	2.6	6.3	6.3
1717 11	1.9	-	11.2	1.8	6.6	5.8	0.9	-	-	-	-	10.9	60.9	60.9
1718 12	7.3	4.7	3.0	1.4	3.3	0.8	0.4	3.9	5.2	25.0	25.0	34.9	9.8	9.8
1719 1	2.1	6.7	8.3	6.3	8.9	1.6	4.0	19.8	15.7	19.2	19.2	7.9	9.5	9.5
1720 2	1.8	4.5	1.1	1.2	2.4	0.3	4.6	25.5	8.7	8.7	8.7	6.5	13.4	13.4
1721 3	8.3	4.8	1.8	4.4	0.6	0.6	2.8	20.7	29.6	13.3	13.3	9.2	4.6	4.6
1722 4	2.8	4.4	3.9	7.9	2.7	3.7	13.4	17.9	16.3	16.3	16.3	6.1	10.9	10.9
1723 5	3.7	3.0	4.7	1.1	0.1	1.6	18.3	15.8	17.2	10.4	10.4	14.0	10.0	10.0
1724 6	8.8	0.7	1.7	1.3	1.2	3.2	13.2	33.3	16.2	19.9	19.9	5.2	3.3	3.3
1725 7	4.6	8.9	3.4	2.5	1.0	2.1	21.9	16.5	14.6	8.7	8.7	12.1	11.8	11.8
1726 8	4.6	2.9	3.5	5.1	1.3	1.3	34.2	10.2	11.2	9.1	9.1	4.4	13.3	13.3
1727 9	2.8	2.9	2.1	1.3	1.2	1.6	40.0	-	5.1	33.9	33.9	6.2	3.7	3.7
1728 10	-	-	-	-	0.5	0.1	7.6	30.7	18.0	21.4	21.4	9.4	4.7	4.7
1729 11	1.4	1.2	1.9	1.8	0.3	5.5	30.8	11.2	10.0	13.3	13.3	18.7	4.0	4.0
1730 12	1.1	0.7	2.1	0.8	0.2	0.5	18.6	25.6	17.2	11.5	11.5	11.1	10.5	10.5
1731 1	0.6	2.1	3.1	3.8	1.7	8.3	27.8	8.8	14.1	4.8	4.8	17.7	7.2	7.2
1732 2	0.9	1.8	1.6	2.2	0.6	6.2	29.7	10.3	9.9	12.2	12.2	18.2	6.3	6.3
1733 3	1.0	3.6	2.5	4.8	0.3	10.5	25.9	8.7	14.9	12.4	12.4	12.6	2.7	2.7
1734 4	2.7	1.7	1.4	1.5	0.2	24.8	15.0	11.7	7.0	7.3	7.3	21.4	5.4	5.4
1735 5	1.3	0.3	1.5	1.7	1.9	2.2	17.0	19.2	12.9	10.3	10.3	25.2	6.7	6.7
1736 6	0.5	0.8	0.9	7.5	2.3	5.2	19.4	15.3	6.8	23.3	23.3	12.3	5.6	5.6
1737 7	0.8	1.5	2.9	2.4	0.3	4.0	28.0	12.4	9.6	17.7	17.7	14.0	6.3	6.3
1738 8	0.4	1.5	2.9	2.8	1.3	3.5	13.2	25.7	12.3	7.9	7.9	24.6	3.7	3.7
1739 9	2.6	-	-	3.5	0.4	1.7	5.2	25.8	23.2	9.8	9.8	13.7	14.2	14.2
1740 10	1.0	1.1	2.3	2.4	1.0	3.4	26.2	17.9	13.9	8.1	8.1	15.3	7.4	7.4
1741 11	0.2	1.4	3.1	2.7	1.6	0.4	4.7	24.1	12.9	26.4	26.4	14.9	7.0	7.0
1742 12	2.8	5.1	4.3	2.7	2.8	1.2	29.4	8.2	6.0	12.5	12.5	17.5	7.5	7.5
1743 1	1.9	0.2	1.5	4.7	2.2	3.0	17.3	33.4	7.4	7.4	7.4	10.8	5.2	5.2
1744 2	1.6	0.9	2.2	0.2	1.8	0.8	32.8	10.0	11.7	9.3	9.3	4.3	18.6	18.6

CONTINUED...

SOURCE: GAA, PA 73700-102

TABLE II.14

PERCENTAGE OF TOTAL SHIPPING TONNAGE FROM RUSSIAN (BALTIC) PORTS TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1746	6.1	8.7	5.4	2.4	1.3	2.2	3.9	19.7	20.2	15.9	10.6	11.8
1747	8.6	4.3	4.6	3.2	1.2	2.5	25.7	16.2	12.3	9.6	14.0	5.7
1748	2.4	8.7	-	8.7	4.9	1.7	6.7	21.4	19.7	7.6	10.1	14.2
1749	0.6	8.4	1.6	2.4	1.2	2.7	26.6	9.8	18.4	21.2	3.7	11.4
1750	1.3	8.9	1.8	1.0	2.3	2.3	25.2	14.3	4.6	28.2	8.1	10.0
1751	8.4	3.0	-	1.8	1.0	1.7	23.3	18.1	9.1	6.8	29.4	5.4
1752	2.6	3.1	3.1	1.2	-	14.4	14.0	15.0	19.7	7.8	17.1	2.1
1753 <sup>9&amp;10</sup>	0.2	0.5	6.8	3.3	2.5	15.3	25.6	9.6	6.0	2.2	24.6	4.3
1754	2.3	2.8	5.2	6.0	1.4	0.9	18.5	19.8	13.6	5.8	15.2	8.5
1755	8.6	-	8.9	18.4	4.8	3.9	10.3	23.4	11.5	20.9	9.8	4.3
1756	2.7	0.8	5.5	5.7	0.9	2.7	19.8	11.9	11.3	7.3	24.3	7.2
1757	8.3	8.5	12.4	6.1	2.0	3.6	8.9	23.7	14.1	15.6	9.5	3.1
1758	2.4	2.7	9.3	4.4	1.2	-	13.3	29.8	9.1	6.8	2.8	18.3
1759	2.9	1.4	8.7	0.9	2.1	2.0	37.9	3.6	11.6	23.2	11.9	1.7
1760	1.1	3.8	6.7	5.4	0.1	0.8	14.9	11.5	18.9	14.7	10.5	11.5
1761	3.5	2.7	1.5	4.1	0.9	11.8	11.9	12.5	18.5	10.5	19.9	2.1
1762	2.6	0.2	3.6	8.9	-	0.5	11.2	25.5	10.2	45.6	21.6	8.1
1763	0.5	8.6	6.9	5.7	2.7	0.7	14.2	18.6	12.7	9.9	17.8	9.8
1764	5.8	2.4	3.5	9.3	0.9	2.5	25.2	15.7	4.5	11.8	6.0	13.5
1765	6.2	1.6	3.5	6.6	4.9	-	8.4	19.6	17.6	5.4	12.5	13.6
1766	3.2	2.9	5.8	5.9	2.3	1.1	33.9	7.6	1.7	15.9	12.1	7.5
1767	6.7	1.7	3.7	4.2	2.7	2.0	14.9	26.8	18.4	12.2	4.7	4.0
1768	8.8	2.5	11.4	7.8	1.8	0.9	20.9	13.2	5.6	21.5	10.6	4.1
1769	2.2	2.8	4.9	5.4	0.7	14.6	15.9	6.8	16.1	16.0	10.6	3.0
1770	8.8	3.9	4.8	7.1	0.7	8.1	30.9	22.6	2.9	13.6	12.0	11.3
1771	4.2	-	3.1	11.1	8.9	3.7	37.5	21.0	15.6	1.9	0.8	0.3
1772	8.7	4.8	5.4	2.5	4.8	6.2	19.7	20.9	5.9	12.8	6.3	10.7
1773	2.6	3.1	3.9	5.5	2.1	19.2	19.9	7.8	16.6	3.4	0.8	15.9
1774	8.5	1.5	7.3	7.5	2.4	8.1	21.6	11.8	10.8	17.5	6.0	4.9
1775 <sup>11</sup>	-	7.6	9.9	23.2	-	-	6.8	16.8	23.1	6.1	6.5	-
1776	3.1	1.3	3.5	4.2	3.2	7.4	19.9	13.1	20.2	7.0	12.8	4.4
1777	1.7	8.4	3.9	3.1	0.8	1.8	42.6	1.5	7.3	4.1	25.5	7.3
1778	8.6	8.4	7.2	5.1	0.7	1.0	21.3	16.5	13.3	16.0	7.8	10.0
1779 <sup>12</sup>	3.8	8.9	4.8	3.0	0.4	21.9	16.1	7.3	6.0	18.4	21.6	4.7
1780	8.8	1.5	4.1	5.2	1.2	0.4	17.7	21.8	11.9	5.3	28.5	1.5
1781	6.0	3.4	17.7	6.4	3.3	7.0	3.4	10.1	14.6	18.1	10.0	-
1782	4.8	1.0	4.1	4.4	2.5	4.7	7.3	14.0	18.1	11.4	13.4	14.4
1783	6.1	1.6	2.9	4.5	2.7	1.4	12.0	18.7	15.0	13.0	7.2	15.8
1784	-	1.4	7.8	6.9	2.5	1.1	6.4	26.6	7.8	9.9	18.1	12.4
1785	8.5	1.7	8.2	3.6	2.7	1.2	30.5	15.4	8.5	18.8	15.4	9.7
1786	8.4	1.8	1.1	7.4	5.8	0.4	17.6	21.3	8.0	8.0	15.4	13.7

SOURCE: GAA, PA 78/94-182

CONTINUED...

TABLE II.10 PERCENTAGE OF TOTAL SHIPPING TONNAGE FROM RUSSIAN (BALTIC) PORTS TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1787	0.4	1.7	6.9	3.7	1.4	0.2	28.7	11.9	6.6	13.7	18.5	6.2
1788	0.6	2.8	4.4	7.2	1.4	2.5	29.7	9.5	4.3	28.6	5.6	4.0
1789	0.2	2.3	3.6	5.0	0.8	0.1	25.0	9.7	10.5	19.9	12.2	10.7
1790	0.7	1.8	3.4	1.3	0.8	2.2	15.9	17.8	13.4	13.9	14.6	14.8
1791	0.4	2.2	0.5	0.7	0.5	1.1	16.4	29.0	5.9	8.1	21.6	13.2
1792	1.3	4.1	1.6	1.9	0.6	17.1	20.7	4.7	17.2	7.2	23.3	0.3
1793	3.1	1.5	7.7	3.7	0.6	1.8	3.3	13.0	18.0	12.7	12.0	22.5
1794	2.5	0.9	2.9	1.7	1.7	0.5	28.4	9.2	12.2	21.7	7.7	2.7
1795	1.3	2.2	0.6	5.6	1.7	3.6	4.9	20.7	11.0	22.1	16.1	11.3
1796	4.2	4.8	2.0	5.2	4.0	3.1	19.7	16.2	15.6	14.7	5.4	6.8
1797	4.9	2.5	0.3	5.4	2.8	2.2	17.1	12.8	5.5	11.4	18.5	10.3
1798	10.8	2.4	6.2	21.0	12.9	4.0	13.5	9.8	9.7	1.7	3.6	2.3
1799	22.3	-	6.3	18.1	-	17.5	25.8	-	-	10.0	-	-
1800	-	2.4	-	1.2	3.3	4.7	16.5	24.1	31.7	5.4	3.1	7.7
1801	3.8	7.5	-	-	2.8	15.0	17.6	21.5	7.3	11.2	12.0	2.1
1802	0.6	1.9	4.8	2.5	3.8	7.0	16.3	12.9	20.0	11.1	19.0	-
1803	7.4	3.7	2.3	9.4	5.5	17.1	27.3	6.8	5.5	8.4	2.9	3.8
1804	3.9	-	-	24.0	-	-	14.8	20.1	-	20.4	-	16.8
1805	-	0.6	9.4	0.7	3.8	3.2	12.2	28.0	12.4	12.1	10.6	2.9
1806	3.8	7.7	9.8	4.4	1.3	2.7	1.8	8.0	19.1	30.1	7.1	5.1
1807	-	2.0	-	6.8	9.6	8.5	3.6	33.8	6.9	4.8	3.9	18.0
1808	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-
1815	1.5	0.9	5.6	3.8	4.9	5.8	6.5	13.9	31.8	14.5	16.0	11.5
1816	0.6	0.3	2.6	4.3	3.1	2.5	4.9	19.3	11.8	14.3	16.2	11.6
1817	1.9	1.5	0.9	1.9	3.2	9.2	22.8	14.7	21.8	22.4	17.7	9.3
1818	6.8	5.7	-	0.6	6.4	1.7	5.2	11.9	11.7	14.1	5.9	5.8
1819	7.1	1.3	1.6	0.4	1.8	4.5	19.0	30.4	10.5	10.9	7.8	16.1
1820	5.9	4.0	2.4	15.7	2.5	2.9	18.5	13.8	11.5	18.4	4.8	7.3
1821	-	1.5	6.6	9.3	0.4	5.8	23.5	11.9	16.1	19.2	4.8	1.7
1822	1.9	18.7	4.1	2.8	6.6	-	32.9	-	4.8	6.6	15.3	7.2
1823	-	-	0.2	8.8	2.5	-	20.7	28.2	20.2	9.3	14.2	4.7
1824	0.9	0.9	0.5	0.5	3.2	19.1	9.5	18.5	35.2	9.4	-	2.4
1825	-	-	3.7	-	6.8	15.1	18.8	48.1	7.5	-	-	-

SOURCE: CAA, PA 78/94-102

TABLE II-14-A PERCENTAGE OF SHIPPING TONNAGE FROM ST. PETERSBURG TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1705 1	-	-	-	-	-	-	-	-	-	-	-	-
1706 1	-	-	-	-	-	-	-	-	-	-	-	-
1707 1	-	-	-	-	-	-	-	-	-	-	-	-
1708 2	-	-	-	-	-	-	-	-	-	-	-	-
1709 3	-	-	-	-	-	-	-	-	-	-	-	-
1710 4	-	-	-	-	-	-	-	-	-	-	-	-
1711 5	-	-	-	-	-	-	-	-	-	-	-	-
1712 4	-	-	-	-	-	-	-	-	-	-	-	-
1713 6	-	-	-	-	-	-	-	-	-	-	-	-
1714 7	-	-	-	-	-	-	-	31.0	26.5	-	-	-
1715 7	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	25.7	22.7	11.3	-	-	-	-	-	-	-	-
1717	13.9	37.8	16.4	-	-	-	-	-	-	-	-	12.7
1718	-	-	-	-	9.9	29.6	4.9	-	-	-	-	55.6
1719	15.3	-	-	-	7.9	10.9	4.2	2.4	3.6	38.4	29.3	-
1720	2.4	-	-	-	2.3	-	4.2	8.1	9.1	1.5	7.7	3.1
1721	8.3	-	5.8	-	2.3	-	13.0	11.0	24.5	-	9.0	8.0
1722	8.8	18.7	-	-	-	-	2.2	-	2.0	37.8	7.9	5.2
1723	6.6	16.4	23.7	-	-	5.5	1.6	-	15.7	10.6	5.2	1.8
1724	15.7	7.2	22.3	-	-	4.7	1.5	16.4	10.6	11.1	4.3	3.9
1725	3.1	8.6	-	-	3.7	1.9	24.0	11.4	13.7	18.1	5.8	9.7
1726	4.6	4.2	7.6	-	2.9	2.7	5.5	17.0	6.4	12.3	9.9	23.7
1727	14.2	3.3	8.7	-	8.3	-	-	28.4	11.2	3.4	-	4.1
1728	7.1	5.9	6.3	-	8.3	-	23.5	-	6.5	15.3	8.3	11.6
1729	-	8.7	28.5	-	5.4	-	-	7.8	24.3	-	8.0	14.7
1730	2.4	4.2	3.9	-	5.4	-	14.6	4.1	9.8	19.3	12.7	11.3
1731	5.8	2.9	11.8	-	3.1	3.2	4.7	5.4	36.6	12.8	3.7	10.8
1732	2.6	2.3	28.5	-	-	-	15.2	6.2	6.9	18.7	4.1	8.4
1733	16.4	10.9	13.7	-	12.8	-	-	6.2	-	-	20.1	5.6
1734	-	16.8	3.4	-	2.7	2.5	4.0	9.2	11.9	16.5	12.2	9.6
1735	7.5	11.6	-	-	-	6.1	14.6	3.7	12.1	4.2	13.5	24.1
1736	2.7	1.5	4.1	-	10.1	5.0	5.8	15.6	3.0	13.6	12.6	21.2
1737	-	2.7	8.9	-	4.0	3.8	2.5	8.9	7.2	23.5	24.1	8.0
1738	2.8	3.9	1.9	-	-	1.1	34.8	23.2	12.4	6.1	5.2	4.6
1739	-	6.5	6.6	-	3.8	-	-	2.0	6.2	18.3	27.7	9.7
1740	3.1	-	-	-	-	1.2	12.5	7.5	22.2	24.4	11.2	13.4
1741	3.1	0.5	3.1	-	0.7	-	9.0	14.1	21.1	10.6	24.1	11.2
1742	-	-	4.6	-	3.2	-	8.7	15.8	2.2	19.6	23.2	16.8
1743	8.4	28.8	6.3	-	13.3	1.6	1.3	7.9	1.9	1.7	5.7	14.6
1744	-	-	1.9	-	7.0	5.4	7.4	11.8	12.8	15.8	13.6	22.3
1745	-	-	13.3	-	14.9	-	11.5	5.6	13.9	23.4	3.4	6.9

CONTINUED...



TABLE 11-14-A  
PERCENTAGE OF SHIPPING TONNAGE FROM ST. PETERSBURG TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1746	17.9	1.4	9.7	9.6	4.5	-	-	7.2	7.6	12.9	9.1	19.4
1747	4.3	14.3	11.6	9.0	1.7	-	1.4	18.1	9.5	17.3	10.9	2.0
1748	6.4	6.1	-	5.8	26.7	7.7	-	-	7.6	19.0	2.1	18.7
1749	1.9	3.1	4.3	5.9	5.3	10.7	3.3	15.2	19.0	25.8	-	5.5
1750	12.2	3.8	4.5	3.3	5.2	-	-	12.3	7.8	9.1	25.4	16.4
1751	1.5	6.2	-	6.8	5.7	-	-	5.1	4.4	7.3	46.0	16.9
1752	7.2	5.5	6.9	3.7	-	-	-	29.3	21.0	4.9	12.6	4.0
1753	-	-	11.5	7.3	-	5.7	11.6	36.5	5.9	15.9	4.5	3.0
1754	3.4	6.4	12.8	1.9	11.9	12.0	-	20.2	11.5	6.5	10.3	-
1755	6.0	-	1.9	28.4	9.6	5.6	-	4.0	10.4	-	45.5	15.1
1756	1.6	4.0	4.7	9.1	5.0	-	-	8.5	7.2	19.2	23.9	-
1757	1.9	-	19.4	6.6	4.7	3.9	4.8	13.2	18.3	8.2	9.7	9.9
1758	3.1	2.8	13.1	13.3	7.3	-	2.1	8.3	20.4	33.2	-	3.9
1759	12.7	2.2	2.8	-	-	2.0	14.4	6.3	-	-	-	19.1
1760	-	-	18.9	17.0	-	-	-	5.3	3.5	27.2	17.0	-
1761	19.7	10.8	5.5	26.3	-	-	5.2	2.3	8.2	3.9	18.1	-
1762	8.4	-	4.0	3.3	-	-	6.0	3.1	9.9	26.8	33.7	4.8
1763	2.4	5.8	34.2	-	20.9	3.8	2.0	2.8	2.1	6.9	19.2	-
1764	7.2	11.7	3.6	20.0	13.9	-	3.9	17.8	9.6	3.2	3.9	5.1
1765	9.2	5.9	19.7	10.4	4.2	-	-	8.4	12.5	7.0	12.0	10.7
1766	5.2	-	6.9	25.0	16.9	2.3	-	6.8	9.0	13.0	15.3	4.9
1767	2.5	-	5.1	-	11.4	8.3	13.1	5.0	19.3	24.0	7.6	-
1768	1.6	-	9.5	26.7	4.3	6.3	12.7	2.2	17.1	7.6	11.1	-
1769	-	2.4	5.2	16.2	1.1	-	3.3	8.5	17.0	23.4	9.5	11.7
1770	-	36.1	3.4	14.7	-	-	3.4	5.2	13.8	12.0	11.4	-
1771	-	-	18.1	5.5	8.4	4.4	12.8	1.8	20.6	18.3	7.3	2.8
1772	3.1	-	-	12.5	-	18.7	10.4	15.5	17.8	13.7	6.3	-
1773	3.6	-	3.2	24.6	4.2	2.8	13.5	7.3	24.4	3.3	3.2	7.9
1774	2.0	12.0	18.4	13.1	-	2.8	4.7	3.5	6.0	25.1	4.3	8.1
1775	-	7.6	9.9	23.2	-	-	6.8	16.8	23.1	6.1	6.5	-
1776	7.8	6.1	-	-	11.4	-	-	46.3	-	11.1	4.1	13.2
1777	3.6	-	16.0	4.0	3.2	-	13.8	18.4	24.8	3.2	10.6	2.2
1778	-	-	6.1	3.5	1.3	1.8	4.1	15.5	19.4	22.9	4.6	20.7
1779	-	-	7.9	1.1	1.2	9.2	2.9	25.6	-	10.5	10.6	31.1
1780	-	5.3	12.7	1.5	4.3	1.9	4.6	13.2	26.9	9.4	7.0	13.0
1781	6.1	16.5	20.3	-	-	12.0	-	24.1	8.1	-	12.8	-
1782	13.9	5.5	11.9	4.0	-	7.2	10.0	-	12.6	16.6	5.3	-
1783	24.1	2.0	4.4	18.4	10.6	-	4.9	4.1	20.7	11.8	7.4	14.9
1784	-	-	11.8	17.7	8.3	-	6.5	16.3	17.4	21.6	12.7	2.8
1785	-	17.3	6.5	17.7	-	7.2	6.5	10.3	18.2	10.3	-	-
1786	-	-	8.0	12.3	8.0	-	11.7	20.1	22.4	17.2	5.1	3.2

CONTINUED...

SOURCE: GAA, PA 78704-102

TABLE II.14.A

PERCENTAGE OF SHIPPING TONNAGE FROM ST. PETERSBURG TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1787	-	-	14.1	5.6	5.1	-	11.7	5.0	6.4	13.4	12.1	26.5
1788	1.9	4.9	19.8	20.0	-	-	-	2.6	15.8	24.6	10.4	-
1789	-	1.6	13.0	5.1	6.4	-	3.2	-	25.0	10.4	18.6	16.7
1790	6.9	5.4	12.1	7.3	3.3	-	-	-	15.1	24.5	15.1	10.2
1791	9.9	24.6	5.6	2.7	-	2.3	2.2	16.3	4.7	8.2	12.2	11.3
1792	7.6	9.9	4.5	-	-	-	-	5.1	22.8	13.3	29.2	7.5
1793	-	-	-	-	-	3.8	4.9	8.0	14.5	13.6	30.0	25.1
1794	16.2	-	7.9	5.5	5.3	-	5.6	10.7	18.9	25.4	-	4.0
1795	32.0	-	8.8	-	-	-	-	28.4	-	-	-	30.9
1796	4.6	-	3.6	3.9	5.5	-	-	15.2	38.1	29.1	-	-
1797 <sup>15</sup>		NO DATA	AVAILABLE									
1798		NO DATA	AVAILABLE									
1799		NO DATA	AVAILABLE									
1800		NO DATA	AVAILABLE									
1801		NO DATA	AVAILABLE									
1802		NO DATA	AVAILABLE									
1803		NO DATA	AVAILABLE									
1804		NO DATA	AVAILABLE									
1805		NO DATA	AVAILABLE									
1806		NO DATA	AVAILABLE									
1807		NO DATA	AVAILABLE									
1808		NO DATA	AVAILABLE									
1809		NO DATA	AVAILABLE									
1810		NO DATA	AVAILABLE									
1811		NO DATA	AVAILABLE									
1812		NO DATA	AVAILABLE									
1813		NO DATA	AVAILABLE									
1814 <sup>6</sup>	-	-	-	-	-	-	2.7	3.3	25.8	29.1	20.5	18.6
1815	7.1	4.3	7.0	2.8	-	3.7	10.1	31.8	-	21.1	12.2	-
1816	4.1	-	2.9	-	1.7	-	8.8	10.9	19.7	26.7	-	25.1
1817	1.1	1.0	2.0	0.2	-	-	1.7	10.6	37.5	26.3	6.7	13.0
1818	13.2	27.8	-	5.3	7.7	7.7	-	13.3	9.6	5.0	10.4	-
1819	5.1	-	8.8	4.7	-	-	-	6.7	15.3	37.8	13.8	7.9
1820	13.6	-	5.2	5.1	-	-	-	-	17.8	36.5	6.2	15.8
1821	-	-	8.0	-	5.0	-	4.1	6.6	50.9	11.3	3.6	10.5
1822 <sup>19</sup>	-	-	34.4	-	-	-	-	-	23.3	15.7	16.5	10.1
1823	-	-	100.0	-	-	-	-	-	-	-	-	-

SOURCE: GAA, PA 78/94-102

TABLE II.14.9

PERCENTAGE OF SHIPPING TONNAGE FROM NARVA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1705 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-
1706 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-
1707 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE											
1709 <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-
1710 <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-
1711 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-
1712 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-
1713 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-
1714 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-
1715 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	-	-	-	-	-	-	-	-	-	-	-
1717	-	-	-	-	-	-	-	-	-	-	-	-
1718	-	-	-	-	-	-	-	-	-	-	-	-
1719	-	-	-	11.8	-	-	-	-	-	-	73.0	15.2
1720	-	4.4	10.0	4.9	-	-	-	41.7	9.2	18.6	6.7	4.4
1721	-	-	-	-	2.7	-	1.7	34.5	35.0	7.2	1.4	17.5
1722	5.4	3.4	1.4	6.5	-	-	2.3	33.5	28.4	11.4	5.9	1.9
1723	-	-	4.0	-	3.4	3.7	17.8	30.4	11.8	6.7	6.5	15.7
1724	-	-	0.2	-	-	-	29.1	22.8	13.2	7.1	20.8	6.8
1725	0.6	-	0.7	1.7	1.0	1.6	17.9	38.8	11.3	18.6	5.4	2.5
1726	3.1	-	1.8	3.3	-	-	37.4	15.2	11.0	3.8	16.3	8.0
1727	2.3	-	3.1	5.4	2.0	-	52.3	6.0	3.3	6.7	5.2	13.7
1728	0.3	1.2	0.6	0.8	0.9	0.8	45.2	-	4.4	37.4	7.3	1.0
1729	-	1.6	1.7	1.3	-	-	9.8	41.4	9.2	23.2	7.2	4.6
1730	-	-	1.2	0.8	-	6.5	44.9	7.0	6.4	11.0	20.7	1.4
1731	-	-	0.5	0.7	-	-	27.1	26.2	11.6	13.5	14.4	5.9
1732	-	9.9	1.2	1.8	2.1	9.9	36.0	7.3	11.1	2.3	19.5	8.0
1733	-	0.5	0.5	1.4	-	6.4	38.8	7.8	7.6	13.4	18.1	5.5
1734	0.9	0.8	1.1	4.4	-	15.7	28.7	4.8	14.3	14.0	14.2	1.1
1735	2.6	-	1.3	2.4	-	40.0	12.2	11.2	0.7	2.4	23.9	3.3
1736	-	-	1.3	-	1.0	1.2	29.5	14.8	8.4	10.7	29.9	3.3
1737	-	-	-	0.7	0.8	4.8	35.2	15.5	3.9	27.9	9.5	1.7
1738	0.4	-	-	1.7	-	3.8	35.9	3.3	6.3	21.9	20.9	5.7
1739	-	-	0.6	0.7	0.6	-	18.8	31.2	8.4	5.8	33.0	0.8
1740	1.1	-	-	1.2	-	-	-	38.6	16.9	6.3	18.8	17.2
1741	-	-	-	2.2	0.8	-	-	42.5	16.8	8.2	4.3	8.8
1742	-	-	1.4	1.0	-	-	3.6	10.4	17.3	42.2	15.9	8.3
1743	0.5	0.7	3.1	2.2	1.0	1.2	42.2	5.2	3.3	13.9	20.4	6.2
1744	1.3	-	-	6.3	-	2.6	26.3	41.5	9.6	2.3	7.3	0.8
1745	0.6	0.8	-	6.1	-	-	45.1	2.7	6.6	7.7	4.8	25.6

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II.14.8

PERCENTAGE OF SHIPPING TONNAGE FROM NARVA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1746	8.0	-	4.6	2.4	1.0	1.5	2.3	16.2	30.2	23.0	9.2	3.6
1747	-	1.6	0.9	1.2	-	-	45.0	13.9	8.3	5.6	14.5	9.1
1748	-	0.7	-	8.3	-	0.9	17.6	24.3	26.7	4.4	9.4	7.7
1749	-	-	0.6	-	-	1.2	44.0	6.9	9.8	26.8	3.2	7.6
1750	-	-	-	0.7	-	1.1	32.1	13.6	2.0	34.6	7.2	8.6
1751	0.5	1.5	-	0.9	-	-	28.5	22.0	5.9	5.3	33.0	2.5
1752	-	0.8	1.0	-	-	18.6	21.0	7.9	23.6	9.6	16.5	1.0
1753	-	-	1.1	-	1.2	22.5	33.4	1.9	4.3	1.2	28.2	6.1
1754	1.0	0.9	3.1	7.7	0.7	-	27.0	19.8	6.7	5.8	19.5	5.7
1755	-	-	-	7.3	1.2	3.6	14.6	31.1	13.8	18.2	7.4	2.6
1756	24.0	-	23.0	41.2	-	-	-	-	-	-	11.8	-
1757	-	-	-	-	-	-	-	-	-	-	-	-
1758	-	-	-	-	-	-	-	52.7	4.1	7.5	3.6	32.1
1759	-	-	-	-	3.2	-	51.1	4.8	5.8	17.1	18.0	-
1760	14.4	11.8	11.2	47.4	-	15.2	-	-	-	-	-	-
1761	-	-	-	-	-	-	-	-	-	-	-	-
1762	-	-	4.5	-	-	-	12.3	55.8	4.6	7.5	7.7	7.6
1763	-	-	1.9	3.5	-	-	19.0	33.4	15.6	10.5	11.2	5.8
1764	-	1.5	3.1	6.5	-	0.3	50.1	13.0	3.5	12.6	3.5	6.0
1765	2.3	-	-	2.4	6.7	-	16.6	19.4	17.2	0.9	18.7	15.9
1766	-	2.8	3.1	4.9	-	-	61.4	0.6	-	7.4	10.7	8.9
1767	2.2	-	3.8	2.1	0.6	2.4	21.8	43.3	5.8	13.6	2.2	1.9
1768	-	1.6	5.4	5.5	-	0.8	34.3	12.2	1.3	27.7	8.3	2.8
1769	-	-	3.5	3.9	2.0	27.6	23.6	3.3	20.7	9.0	6.6	-
1770	-	-	3.9	1.9	-	-	45.3	19.0	-	23.3	4.4	2.2
1771	-	-	-	11.4	-	4.5	66.8	4.3	13.0	-	-	-
1772	-	-	3.0	-	-	2.8	21.4	23.9	-	18.6	3.0	27.4
1773	-	3.9	-	2.5	2.6	43.8	9.4	-	28.8	-	-	9.1
1774	-	-	6.4	4.5	-	16.6	38.3	8.9	-	20.9	4.4	-
1775	-	NO	DATA	AVAILABLE	-	-	-	-	-	-	-	-
1776	2.0	-	1.9	-	-	-	33.2	3.9	26.1	7.9	13.5	-
1777	-	-	-	2.6	-	-	58.5	-	4.9	2.5	26.9	4.7
1778	-	-	12.9	-	-	-	46.6	10.2	6.5	9.8	10.5	3.5
1779	-	-	8.6	-	-	51.1	6.4	-	-	16.9	16.9	-
1780	3.6	-	-	14.1	-	-	25.7	27.8	7.2	3.4	18.2	-
1781	-	-	-	-	-	-	-	-	-	-	-	-
1782	-	-	-	-	-	35.4	-	47.9	16.8	-	-	-
1783	2.9	-	-	2.5	-	2.9	32.4	25.4	8.6	3.0	11.3	10.8
1784	-	1.5	3.3	3.4	-	-	8.5	41.0	0.7	1.8	24.8	15.2
1785	-	-	-	3.8	2.5	-	45.4	10.3	0.4	14.2	14.4	9.1

SOURCE: GAA, PA 78/94-102

CONTINUED...

TABLE II.14.6

PERCENTAGE OF SHIPPING TONNAGE FROM NARVA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1786	-	1.5	-	5.5	-	-	28.5	24.8	4.8	8.0	17.5	9.4
1787	-	0.3	4.9	1.3	-	-	40.8	8.8	1.2	17.9	21.8	2.8
1788	-	-	1.4	5.5	-	4.0	43.1	6.5	0.3	33.9	0.4	4.9
1789	-	-	1.2	1.2	-	-	40.5	4.8	7.5	26.2	11.1	7.5
1790	-	-	1.9	-	-	-	21.0	21.1	10.9	12.6	16.3	16.1
1791 <sup>13</sup>	-	-	-	-	0.4	0.2	21.2	31.9	0.7	8.5	22.9	14.2
1792	1.5	0.9	-	1.2	0.9	24.3	28.2	2.6	19.2	4.7	16.5	-
1793	-	-	16.7	-	-	-	-	9.7	43.2	7.9	7.2	15.4
1794	2.7	-	-	-	1.5	9.7	36.3	3.1	11.5	28.1	7.1	-
1795 <sup>13</sup>	-	-	-	-	-	-	-	160.0	-	-	-	-
1796	-	-	-	5.6	-	-	30.5	24.4	13.3	20.7	-	5.5
1797	3.0	-	3.6	4.1	-	-	36.3	16.1	6.8	3.4	18.8	8.0
1798	-	-	-	71.8	-	-	14.7	1.7	11.9	-	-	-
1799	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	13.8	47.8	23.6	-	-	14.9
1801	-	-	-	-	-	100.0	-	-	-	-	-	-
1802	-	-	1.6	3.6	-	2.2	13.8	19.3	27.3	6.7	25.4	-
1803	43.6	-	-	15.3	29.2	-	-	-	-	11.9	-	-
1804	17.0	-	-	-	-	-	13.8	42.6	-	13.2	-	13.7
1805	-	-	7.4	14.5	8.9	-	7.4	8.9	19.9	8.0	22.0	2.8
1806	-	-	-	-	-	-	-	-	12.7	56.7	30.6	-
1807	-	-	-	-	-	-	-	41.1	18.2	-	12.1	28.5
1808 <sup>17</sup>	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1809	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1810	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1811	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1812	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1813	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-
1814 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	30.5	69.5
1815	-	-	4.8	-	-	-	-	13.8	3.7	16.1	26.7	34.9
1816	-	-	-	2.1	5.5	-	3.9	17.3	18.0	31.3	15.6	6.3
1817	-	-	-	15.1	7.4	-	35.3	-	7.0	13.0	22.1	-
1818	8.2	-	-	-	2.3	-	6.8	37.6	8.1	-	5.5	31.5
1819	15.2	-	-	-	-	4.2	35.2	27.7	9.3	8.3	-	-
1820	12.5	7.4	-	26.6	-	-	8.4	20.5	-	18.0	4.1	2.4
1821	-	-	13.1	11.8	-	-	28.8	16.5	16.2	10.0	3.5	-
1822	-	26.8	-	-	1.2	-	34.0	-	4.2	7.4	13.0	13.3
1823	-	-	-	10.9	-	-	17.2	14.5	24.8	8.5	14.5	9.6
1824	-	-	-	-	-	7.4	9.9	35.5	36.7	7.3	-	3.3
1825 <sup>20</sup>	-	-	-	-	-	13.6	21.5	47.9	17.1	-	-	-

SOURCE: GAA, PA 78/94-102

TABLE 11-10-C  
PERCENTAGE OF SHIPPING TONNAGE FROM RIGA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
17051	-	-	-	-	-	-	-	-	-	-	-	-
17061	-	-	-	-	-	-	-	-	-	-	-	-
17071	-	-	-	-	-	-	-	-	-	-	-	-
17082	-	-	-	-	-	-	-	-	-	-	-	-
17093	21.5	20.3	7.3	14.3	-	19.5	12.3	-	4.6	-	3.4	96.6
17104	-	22.7	6.6	70.5	-	-	-	-	-	-	-	-
17115	-	-	-	-	-	54.3	-	5.9	-	-	39.6	-
17124	-	6.9	66.5	33.1	15.6	-	-	-	-	-	-	-
17134	-	-	-	-	2.7	12.9	13.8	17.6	18.1	-	24.2	10.4
17147	-	-	-	-	-	-	-	-	-	22.8	9.6	67.6
1715	-	15.1	26.0	12.2	34.8	15.1	0.8	-	-	-	-	1.9
1716	-	42.7	4.3	12.7	5.5	2.1	0.8	3.8	9.2	2.4	3.2	6.2
1718	-	2.6	16.0	2.6	6.8	4.8	0.7	-	-	-	12.9	63.6
1719	-	7.1	5.1	-	5.8	-	0.6	8.3	7.7	20.9	33.5	6.6
1720	4.8	8.7	2.2	-	0.6	1.1	8.8	13.4	23.1	21.3	11.6	4.4
1721	4.1	1.6	2.5	1.6	3.3	0.8	6.9	22.6	23.8	10.3	9.3	13.2
1722	12.8	5.1	3.4	1.7	-	0.9	3.6	14.8	24.0	15.3	15.2	3.3
1723	5.2	4.8	1.3	1.7	1.1	6.0	15.9	19.6	20.7	13.1	1.7	8.0
1724	6.8	6.9	7.3	2.9	0.2	3.7	10.4	8.4	24.3	16.0	4.6	8.6
1728	1.8	0.6	4.0	0.3	1.5	6.0	4.7	32.1	23.1	19.5	3.1	4.3
1729	6.2	1.2	5.2	2.0	1.7	3.6	9.5	16.9	21.7	11.5	3.2	15.4
1727	8.3	9.1	4.8	1.0	-	0.6	9.2	12.9	25.4	17.5	3.9	7.6
1728	4.2	4.6	4.3	0.8	-	3.0	41.0	-	5.6	26.0	4.9	4.9
1729	-	3.1	2.3	-	1.7	0.5	6.4	19.4	31.6	18.5	11.3	5.2
1730	4.1	3.3	1.0	-	-	3.3	16.4	18.2	14.1	18.3	16.4	5.0
1731	3.2	1.1	3.2	-	-	0.5	11.8	28.4	22.4	7.6	5.8	16.0
1732	1.6	6.8	9.0	5.8	1.8	8.2	1.0	13.0	29.6	11.7	10.4	1.1
1733	1.1	5.2	3.2	-	1.0	7.7	6.5	17.6	16.2	12.0	20.5	9.0
1734	2.1	10.3	4.6	4.7	0.7	-	15.5	18.5	19.8	5.3	12.6	5.9
1735	3.3	2.6	2.6	-	-	7.2	14.1	13.5	19.0	14.8	15.0	7.7
1736	3.3	-	2.1	4.2	1.0	4.3	10.8	24.6	22.0	9.7	13.2	4.8
1737	2.8	1.5	1.7	14.3	3.1	8.5	3.1	18.4	12.1	16.4	10.4	7.5
1738	0.7	2.5	8.2	3.8	0.5	5.2	10.3	20.7	14.8	18.9	9.2	5.1
1739	1.5	3.9	5.6	4.0	1.1	8.9	8.9	18.2	24.9	6.8	10.6	5.5
1740	5.6	-	-	4.5	1.1	2.5	5.0	17.2	29.5	9.0	12.7	13.0
1741	0.8	3.8	4.9	3.1	1.9	6.5	19.7	14.9	15.2	13.4	10.6	5.3
1742	0.7	5.6	5.0	0.9	3.7	1.1	5.8	38.6	13.7	12.1	10.4	1.1
1743	9.9	10.5	6.7	0.9	2.7	1.2	7.0	15.0	16.0	10.6	8.3	11.1
1744	2.4	0.6	2.8	5.7	3.1	3.2	9.5	27.2	17.2	11.7	13.8	2.8
1745	2.5	2.3	5.8	7.8	2.7	1.8	-	20.0	29.9	11.4	1.2	14.6

CONTINUED...

SOURCE: GAA, PA 78794-102

TABLE II.16.C  
PERCENTAGE OF SHIPPING TONNAGE FROM RIGA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1766	2.3	-	4.9	1.8	-	5.2	3.2	29.3	15.5	3.9	17.0	16.9
1747	-	1.1	7.1	3.7	1.3	3.7	11.5	15.9	22.6	17.3	13.5	2.2
1748	7.0	-	-	16.8	4.8	2.8	1.0	9.5	24.6	5.0	9.5	18.9
1749	-	0.7	3.9	5.7	-	-	6.3	12.5	35.1	12.3	3.4	17.8
1750	4.6	1.6	5.3	-	6.6	3.6	12.2	16.8	12.0	13.2	6.6	15.7
1781	-	19.7	-	1.5	2.3	10.3	6.6	14.8	23.5	9.7	21.0	1.7
1782	7.4	5.1	9.0	2.2	-	7.7	9.4	32.6	12.5	1.9	7.7	4.5
1753	0.9	0.5	17.3	2.0	2.6	4.3	12.9	15.1	9.9	4.4	27.8	2.1
1754	2.7	3.7	6.7	2.8	-	2.4	6.9	24.2	19.9	3.2	11.5	16.0
1755	1.1	-	1.3	14.6	5.7	6.1	-	9.8	7.7	31.0	11.6	11.0
1756	2.6	-	3.7	1.5	-	2.7	20.2	9.0	15.0	10.5	25.4	9.4
1757	-	1.0	13.6	6.2	1.3	2.1	9.0	24.0	14.3	16.3	7.9	4.3
1758	3.3	4.0	11.5	2.9	0.6	-	21.4	23.6	8.1	6.7	1.4	16.4
1759	3.5	1.7	1.0	1.7	2.3	3.6	32.6	2.8	12.1	27.3	8.6	2.7
1760	0.5	4.4	6.1	2.8	0.2	-	17.6	12.7	16.0	14.2	11.5	14.0
1761+	3.1	2.1	0.8	3.4	1.1	13.1	11.8	12.6	19.6	10.0	20.3	2.2
1762	1.7	0.4	2.4	-	-	0.5	10.1	22.8	13.0	14.3	26.0	8.0
1763	0.5	-	5.8	7.9	0.5	0.3	13.2	12.4	13.9	7.7	21.6	16.1
1764	11.5	1.5	3.2	9.7	0.5	4.1	8.6	17.4	4.9	10.9	7.4	20.3
1765	9.5	1.6	3.1	9.7	4.7	-	3.7	21.3	19.2	5.6	8.3	13.5
1766	6.8	2.3	8.2	4.1	0.8	2.2	17.0	12.1	1.9	24.4	12.9	7.3
1767	6.2	3.8	3.9	6.6	2.4	-	10.0	16.1	32.4	7.6	3.8	7.4
1768	1.6	1.3	20.3	7.0	1.0	-	7.8	18.1	5.7	19.4	12.2	5.5
1769	3.1	5.3	5.5	5.0	-	10.6	14.7	6.1	13.9	16.6	13.6	3.4
1770	1.8	2.2	5.1	10.6	1.6	0.3	5.0	27.5	4.6	9.3	16.6	15.4
1771	6.2	-	2.6	14.6	-	4.2	21.7	37.5	13.2	-	-	-
1772	0.4	4.9	7.3	2.3	8.2	5.4	20.3	22.5	7.0	8.8	7.0	5.9
1773	0.0	3.6	4.4	4.1	1.3	10.2	28.1	9.4	10.3	6.5	1.1	17.0
1774	0.2	0.8	6.7	6.6	4.6	6.0	11.9	15.1	15.3	17.1	7.8	5.9
1775	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-
1776	3.1	2.7	5.1	6.8	6.2	2.1	6.9	17.9	23.3	-	14.0	5.2
1777	1.5	0.4	4.4	4.0	0.6	2.7	34.5	-	6.2	5.5	32.0	8.2
1778	0.8	-	3.8	8.7	1.0	0.9	13.7	13.5	16.9	8.6	10.5	-
1779	4.5	1.9	1.7	5.3	0.5	19.2	17.8	3.8	8.9	8.2	28.3	-
1780	-	1.6	4.2	2.7	0.8	0.4	17.3	19.9	11.8	4.8	36.5	-
1781	1.5	1.3	16.9	5.7	4.9	4.5	5.2	6.5	19.3	24.2	10.0	-
1782	4.9	-	4.6	3.0	2.5	1.7	8.0	13.2	20.4	12.3	14.0	15.4
1783	5.8	2.5	4.4	6.1	4.1	0.6	3.7	16.7	17.1	17.2	5.7	16.1
1784	-	2.2	9.2	8.0	3.7	2.7	4.3	16.2	16.3	14.7	10.7	12.2
1785	1.4	3.0	-	2.1	2.7	3.2	11.7	18.8	18.7	9.3	16.0	13.0

CONTINUED...

SOURCE: GAA, PA 78/94-102

TABLE II.10.C

PERCENTAGE OF SHIPPING TONNAGE FROM RIGA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1786	-	0.6	3.1	10.3	13.0	1.1	1.3	18.3	12.0	5.5	10.9	23.9
1787	2.1	4.7	10.1	7.0	2.8	0.6	7.8	17.7	18.3	5.1	12.8	10.9
1788	2.1	6.6	8.7	6.0	5.9	-	5.4	17.8	8.8	21.2	15.5	1.9
1789	-	5.4	6.4	9.6	6.7	0.5	3.8	22.0	10.3	10.3	14.4	16.5
1790	-	2.5	4.1	3.2	1.1	6.1	9.5	16.3	20.7	15.0	7.9	11.5
1791 <sup>13</sup>	-	-	-	1.9	1.3	4.3	5.9	23.9	22.3	6.4	22.3	11.6
1792	-	18.2	3.9	4.6	-	4.3	7.8	11.0	13.2	9.7	35.4	-
1793	2.9	2.7	6.7	6.3	0.4	2.4	4.0	15.3	9.1	12.8	10.9	26.5
1794	8.6	3.6	6.1	2.6	-	6.0	19.8	24.0	11.3	5.4	9.9	8.5
1795 <sup>13</sup>	-	-	-	6.6	2.0	4.2	5.7	13.3	12.8	25.8	18.8	10.7
1796	6.3	6.4	1.4	4.8	1.1	4.5	23.6	14.8	14.8	10.2	6.1	6.8
1797	4.6	3.3	7.6	4.8	0.8	1.3	3.8	13.8	6.1	21.8	19.0	13.0
1798	14.9	4.2	11.6	4.0	9.7	5.0	15.5	15.1	9.3	1.5	5.3	4.0
1799	38.5	-	-	-	-	44.2	-	-	-	25.3	-	-
1800	-	5.2	-	2.7	5.5	-	22.1	17.0	27.6	6.9	6.8	6.1
1801	7.8	8.1	-	-	4.1	-	12.2	29.7	9.3	11.3	17.6	-
1802	1.4	3.8	5.3	1.2	2.3	11.6	19.2	7.6	14.7	15.9	17.8	-
1803	1.8	3.9	3.5	18.5	1.6	14.8	35.4	8.2	5.9	9.4	3.6	2.2
1804	2.1	-	-	15.8	-	-	19.1	20.2	-	18.9	-	23.9
1805	-	0.9	10.1	2.3	3.1	-	10.1	37.2	10.6	14.2	8.3	3.2
1806	4.9	13.7	13.7	-	-	2.4	1.5	18.5	22.8	25.2	1.2	4.0
1807	-	7.8	-	14.3	15.1	-	-	29.2	6.5	17.3	-	10.5
1808 <sup>17</sup>	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE
1809	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE
1810	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE
1811	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE
1812	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE
1813	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE
1814 <sup>6</sup>	-	-	-	-	-	-	-	22.1	44.2	17.0	11.6	5.1
1815	-	-	8.2	7.5	4.0	5.4	4.6	18.8	17.2	6.4	17.4	9.3
1816	8.4	0.6	2.5	4.9	1.1	0.8	10.9	14.9	11.7	21.9	20.6	9.6
1817	1.2	1.1	0.2	0.8	1.3	15.1	34.3	14.2	15.4	9.0	4.3	3.3
1818	2.8	8.2	-	-	5.7	-	4.7	24.9	19.0	25.8	4.4	5.5
1819	1.1	2.4	2.6	-	1.3	6.3	7.5	26.5	12.3	18.4	16.7	14.8
1820	-	3.8	4.5	10.9	5.1	3.1	12.5	11.1	18.8	15.8	6.8	8.4
1821	-	2.6	3.8	1.3	-	9.5	21.2	10.9	13.9	29.0	6.1	1.7
1822	5.8	15.8	4.5	6.3	7.9	-	33.5	-	1.4	3.4	21.4	-
1823	-	-	-	6.5	1.8	-	19.4	23.7	19.2	8.1	14.6	2.6
1824	2.2	2.1	-	1.2	3.4	31.6	7.5	10.0	24.6	14.1	-	3.1
1825 <sup>28</sup>	-	-	9.3	-	-	17.0	23.1	45.8	4.8	-	-	-

SOURCE: CAA, PA 78/94-102



TABLE II-10-3  
PERCENTAGE OF SHIPPING TONNAGE FROM VIBORG TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1705-1	-	-	-	-	-	-	-	-	-	-	-	-
1706-1	-	-	-	-	-	-	-	-	-	-	-	-
1707	-	-	-	-	-	-	-	-	-	-	-	-
1708-2	-	-	-	-	-	-	-	-	-	-	-	-
1709-3	-	-	-	-	-	-	-	-	-	-	-	-
1710-4	-	-	-	-	-	-	-	-	-	-	-	-
1711-5	-	-	-	-	-	-	-	-	-	-	-	-
1712-6	-	-	-	-	-	-	-	-	-	-	-	-
1713-7	-	-	-	-	-	-	-	-	-	-	-	-
1714-8	-	-	-	-	-	-	-	-	-	-	-	-
1715	-	-	-	-	-	-	-	-	-	-	-	-
1716	-	-	-	-	-	-	-	-	-	-	-	-
1717	-	-	-	-	-	-	-	-	-	-	-	-
1718	-	-	-	-	-	-	-	-	-	-	-	-
1719	-	-	-	-	-	-	-	-	-	-	-	-
1720	-	-	-	-	-	-	-	-	-	-	-	-
1721	-	-	-	-	-	-	-	-	-	-	-	-
1722	-	-	-	-	-	-	-	-	-	-	-	-
1723	-	-	-	-	-	-	-	-	-	-	-	-
1724	-	-	-	-	-	-	-	-	-	-	-	-
1725	-	-	-	-	-	-	-	-	-	-	-	-
1726	-	-	-	-	-	-	-	-	-	-	-	-
1727	-	-	-	-	-	-	-	-	-	-	-	-
1728	-	-	-	-	-	-	-	-	-	-	-	-
1729	-	-	-	-	-	-	-	-	-	-	-	-
1730	-	-	-	-	-	-	-	-	-	-	-	-
1731	-	-	-	-	-	-	-	-	-	-	-	-
1732	-	-	-	-	-	-	-	-	-	-	-	-
1733	-	-	-	-	-	-	-	-	-	-	-	-
1734	-	-	-	-	-	-	-	-	-	-	-	-
1735	-	-	-	-	-	-	-	-	-	-	-	-
1736	-	-	-	-	-	-	-	-	-	-	-	-
1737	-	-	-	-	-	-	-	-	-	-	-	-
1738	-	-	-	-	-	-	-	-	-	-	-	-
1739	-	-	-	-	-	-	-	-	-	-	-	-
1740	-	-	-	-	-	-	-	-	-	-	-	-
1741	-	-	-	-	-	-	-	-	-	-	-	-
1742	-	-	-	-	-	-	-	-	-	-	-	-
1743	-	-	-	-	-	-	-	-	-	-	-	-
1744	-	-	-	-	-	-	-	-	-	-	-	-
1745	-	-	-	-	-	-	-	-	-	-	-	-

CONTINUED...

SOURCE: CAA, PA 70/99-102

TABLE II-10-D  
PERCENTAGE OF SHIPPING TONNAGE FROM VIBORG TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1746	8-1	-	12-8	-	7-2	-	-	25-6	-	6-9	9-9	27-2
1747	-	-	-	9-3	-	7-8	-	49-4	18-8	-	22-4	-
1748	-	-	-	-	23-8	-	18-1	28-1	22-9	7-3	8-8	7-1
1749	-	-	-	-	16-1	-	6-7	33-8	33-7	9-8	-	-
1750	-	-	4-3	-	-	7-0	36-2	22-6	2-4	10-9	-	16-5
1751	-	-	-	-	10-6	-	-	-	38-5	37-3	-	13-7
1752	6-4	19-6	-	18-2	-	-	4-7	32-5	-	-	24-4	-
1753	5-3	8-6	-	13-4	18-5	6-2	28-5	18-1	18-3	-	14-9	-
1754	-	-	12-3	15-8	-	-	16-2	10-8	11-4	8-6	11-2	-
1755	-	-	8-3	18-7	18-5	-	16-7	2-3	-	19-6	25-8	-
1756	-	-	3-4	3-8	-	3-3	6-4-8	13-8	8-8	10-1	12-9	-
1757	-	-	-	7-3	-	13-6	17-3	37-3	11-8	12-7	-	-
1758	-	-	18-7	25-1	-	-	-	32-8	23-3	-	-	-
1759	-	11-2	-	-	-	-	6-7	-	-	8-6	35-5	-
1760	-	-	-	-	-	-	6-8	11-8	61-0	20-4	-	-
1761	-	-	-	-	-	-	3-0	23-6	-	42-4	-	-
1762	-	-	-	-	-	-	-	30-6	-	11-7	-	-
1763	-	-	5-2	-	-	-	13-3	9-0	13-9	32-1	41-9	15-8
1764	-	16-2	11-3	12-8	-	-	24-7	7-9	-	12-8	25-5	-
1765	-	8-6	6-3	-	-	-	8-2	18-7	11-1	18-7	6-0	18-8
1766	-	16-7	3-5	18-5	8-5	-	16-8	19-7	7-4	-	13-1	4-6
1767	-	-	-	-	-	-	-	-	-	29-9	41-4	28-7
1768	-	21-4	-	-	-	-	-	18-0	27-7	17-5	8-5	23-4
1769	-	37-2	-	-	-	-	8-5	22-7	-	47-1	-	48-7
1770	-	-	13-1	-	-	-	-	-	-	-	-	-
1771	-	-	-	-	-	-	-	-	188-0	-	-	-
1772	186-0	-	-	-	-	-	-	-	-	-	-	-
1773	-	-	13-7	-	-	-	-	-	28-9	-	-	57-4
1774	-	-	-	-	-	-	-	23-6	37-4	15-7	-	-
1775	-	-	NO DATA AVAILABLE	23-3	-	-	-	-	-	-	-	-
1776	-	-	24-6	-	-	7-5	20-7	-	-	17-1	-	38-1
1777	-	-	-	-	-	-	100-0	-	-	-	-	-
1778	-	-	-	-	-	-	-	-	18-8	81-2	-	-
1779	-	-	-	-	-	-	28-5	29-2	-	17-5	24-8	-
1780	-	-	-	-	-	20-0	-	-	-	-	180-0	-
1781	-	-	30-3	21-1	-	-	-	-	-	28-5	-	-
1782	-	6-6	-	-	-	-	-	-	16-2	4-6	24-6	36-3
1783	6-3	-	5-6	-	-	-	15-2	28-2	33-2	9-3	-	-
1784	-	-	-	-	9-5	12-0	-	18-5	-	17-5	28-8	21-7
1785	-	-	-	-	-	-	-	41-4	-	-	35-8	22-8

CONTINUED...

SOURCE: C.A.A. PA 78780-182

TABLE II.14.2  
PERCENTAGE OF SHIPPING TONNAGE FROM VISITORS TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1786	13.1	-	-	-	15.7	-	-	14.9	-	6.8	47.6	-
1787	-	7.8	-	-	15.8	-	-	20.8	-	21.7	18.1	-
1788	-	-	-	-	-	14.3	-	-	45.2	-	18.5	21.9
1789	-	-	-	-	-	-	-	48.1	-	-	40.6	17.1
1790	-	-	-	-	-	-	-	-	-	-	-	52.5
1791	-	-	-	-	-	-	-	-	-	-	-	-
1792	-	12.5	-	-	-	14.4	-	-	-	28.4	25.5	-
1793	8.1	-	-	-	-	-	15.0	29.6	22.5	10.8	10.8	-
1794	-	-	-	12.6	-	-	4.1	21.1	11.4	11.6	6.9	-
1795	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	-	30.0	-	66.8	-	-	-
1797	-	-	-	-	-	-	-	-	63.2	-	-	-
1798	26.1	-	-	-	-	-	-	-	23.9	-	-	-
1799	-	-	-	-	-	87.2	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	57.4	42.6	-	27.6
1801	-	-	-	53.4	-	-	-	-	19.2	-	-	-
1802	-	-	-	-	-	-	-	-	-	18.2	-	-
1803	81.8	-	-	-	-	-	-	-	28.6	-	-	-
1804	-	-	-	-	-	22.5	-	19.3	46.9	-	-	-
1805	-	-	-	-	-	-	-	-	15.8	-	-	188.8
1806	-	-	-	-	53.4	-	-	-	12.8	-	-	34.6
1807	17	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	-	-	-	-	-	-
1816	-	-	-	-	-	-	-	-	-	-	-	-
1817	-	-	-	-	-	-	-	-	-	-	-	-
1818	-	-	-	-	-	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-	-	-	-	-	-
1820	-	-	-	-	-	-	-	-	-	-	-	-
1821	-	-	-	-	-	-	-	-	-	-	-	-
1822	-	-	-	-	-	-	-	-	-	-	-	-
1823	-	-	-	-	-	-	-	-	-	-	-	-
1824	-	-	-	-	-	-	-	-	-	-	-	-
1825	-	-	-	-	-	-	-	-	-	-	-	-
1826	-	-	-	-	-	-	-	-	-	-	-	-
1827	-	-	-	-	-	-	-	-	-	-	-	-
1828	-	-	-	-	-	-	-	-	-	-	-	-
1829	-	-	-	-	-	-	-	-	-	-	-	-
1830	-	-	-	-	-	-	-	-	-	-	-	-

SOURCE: CMA, SA 7879-182

TABLE II.10.1E PERCENTAGE OF SHIPPING TONNAGE FROM NEVAL TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1760	-	-	-	-	-	-	-	-	-	-	-	-
1761	-	-	-	-	-	-	-	-	-	-	-	-
1762	-	-	-	-	-	-	-	-	-	-	-	-
1763	-	-	-	-	-	-	-	-	-	-	-	-
1764	-	-	-	-	-	-	-	-	-	-	-	-
1765	-	-	-	-	-	-	-	-	-	-	-	-
1766	-	-	-	-	-	-	-	-	-	-	-	-
1767	-	-	-	-	-	-	-	-	-	-	-	-
1768	-	-	-	-	-	-	-	-	-	-	-	-
1769	-	-	-	-	-	-	-	-	-	-	-	-
1770	-	-	-	-	-	-	-	-	-	-	-	-
1771	-	-	-	-	-	-	-	-	-	-	-	-
1772	-	-	-	-	-	-	-	-	-	-	-	-
1773	-	-	-	-	-	-	-	-	-	-	-	-
1774	-	-	-	-	-	-	-	-	-	-	-	-
1775	-	-	-	-	-	-	-	-	-	-	-	-
1776	-	-	-	-	-	-	-	-	-	-	-	-
1777	-	-	-	-	-	-	-	-	-	-	-	-
1778	-	-	-	-	-	-	-	-	-	-	-	-
1779	-	-	-	-	-	-	-	-	-	-	-	-
1780	-	-	-	-	-	-	-	-	-	-	-	-
1781	-	-	-	-	-	-	-	-	-	-	-	-
1782	-	-	-	-	-	-	-	-	-	-	-	-
1783	-	-	-	-	-	-	-	-	-	-	-	-
1784	-	-	-	-	-	-	-	-	-	-	-	-
1785	-	-	-	-	-	-	-	-	-	-	-	-
1786	-	-	-	-	-	-	-	-	-	-	-	-
1787	-	-	-	-	-	-	-	-	-	-	-	-
1788	-	-	-	-	-	-	-	-	-	-	-	-
1789	-	-	-	-	-	-	-	-	-	-	-	-
1790	-	-	-	-	-	-	-	-	-	-	-	-
1791	-	-	-	-	-	-	-	-	-	-	-	-
1792	-	-	-	-	-	-	-	-	-	-	-	-
1793	-	-	-	-	-	-	-	-	-	-	-	-
1794	-	-	-	-	-	-	-	-	-	-	-	-
1795	-	-	-	-	-	-	-	-	-	-	-	-

CONTINUED...

SOURCE: C.A.L. IN 78790-182





TABLE II-10.F  
PERCENTAGE OF SHIPPING TONNAGE FROM ESTONIA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1760-1	-	-	-	-	-	-	-	-	-	-	-	-
1760-2	-	-	-	-	-	-	-	-	-	-	-	-
1760-3	-	-	-	-	-	-	-	-	-	-	-	-
1760-4	-	-	-	-	-	-	-	-	-	-	-	-
1760-5	-	-	-	-	-	-	-	-	-	-	-	-
1760-6	-	-	-	-	-	-	-	-	-	-	-	-
1760-7	-	-	-	-	-	-	-	-	-	-	-	-
1760-8	-	-	-	-	-	-	-	-	-	-	-	-
1760-9	-	-	-	-	-	-	-	-	-	-	-	-
1760-0	-	-	-	-	-	-	-	-	-	-	-	-
1761-1	-	-	-	-	-	-	-	-	-	-	-	-
1761-2	-	-	-	-	-	-	-	-	-	-	-	-
1761-3	-	-	-	-	-	-	-	-	-	-	-	-
1761-4	-	-	-	-	-	-	-	-	-	-	-	-
1761-5	-	-	-	-	-	-	-	-	-	-	-	-
1761-6	-	-	-	-	-	-	-	-	-	-	-	-
1761-7	-	-	-	-	-	-	-	-	-	-	-	-
1761-8	-	-	-	-	-	-	-	-	-	-	-	-
1761-9	-	-	-	-	-	-	-	-	-	-	-	-
1762-0	-	-	-	-	-	-	-	-	-	-	-	-
1762-1	-	-	-	-	-	-	-	-	-	-	-	-
1762-2	-	-	-	-	-	-	-	-	-	-	-	-
1762-3	-	-	-	-	-	-	-	-	-	-	-	-
1762-4	-	-	-	-	-	-	-	-	-	-	-	-
1762-5	-	-	-	-	-	-	-	-	-	-	-	-
1762-6	-	-	-	-	-	-	-	-	-	-	-	-
1762-7	-	-	-	-	-	-	-	-	-	-	-	-
1762-8	-	-	-	-	-	-	-	-	-	-	-	-
1762-9	-	-	-	-	-	-	-	-	-	-	-	-
1763-0	-	-	-	-	-	-	-	-	-	-	-	-
1763-1	-	-	-	-	-	-	-	-	-	-	-	-
1763-2	-	-	-	-	-	-	-	-	-	-	-	-
1763-3	-	-	-	-	-	-	-	-	-	-	-	-
1763-4	-	-	-	-	-	-	-	-	-	-	-	-
1763-5	-	-	-	-	-	-	-	-	-	-	-	-
1763-6	-	-	-	-	-	-	-	-	-	-	-	-
1763-7	-	-	-	-	-	-	-	-	-	-	-	-
1763-8	-	-	-	-	-	-	-	-	-	-	-	-
1763-9	-	-	-	-	-	-	-	-	-	-	-	-
1764-0	-	-	-	-	-	-	-	-	-	-	-	-
1764-1	-	-	-	-	-	-	-	-	-	-	-	-
1764-2	-	-	-	-	-	-	-	-	-	-	-	-
1764-3	-	-	-	-	-	-	-	-	-	-	-	-
1764-4	-	-	-	-	-	-	-	-	-	-	-	-
1764-5	-	-	-	-	-	-	-	-	-	-	-	-
1764-6	-	-	-	-	-	-	-	-	-	-	-	-
1764-7	-	-	-	-	-	-	-	-	-	-	-	-
1764-8	-	-	-	-	-	-	-	-	-	-	-	-
1764-9	-	-	-	-	-	-	-	-	-	-	-	-
1765-0	-	-	-	-	-	-	-	-	-	-	-	-

CONTINUED...

SOURCE: COM. PA 78780-102

TABLE II-18-J  
PERCENTAGE OF SHIPPING TONNAGE FROM ESTONIA TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1766	10.6	13.1	-	-	-	13.7	34.5	8.2	1.8	29.7	-	42.6
1767	-	15.5	-	-	-	-	4.3	41.9	-	6.9	6.4	13.0
1768	-	-	3.6	-	-	-	16.3	2.9	19.1	15.1	17.4	17.4
1769	-	-	4.8	-	-	6.7	2.5	-	9.0	32.4	23.3	22.6
1770	-	8.5	7.8	-	9.9	-	34.6	12.1	11.2	4.3	14.5	19.8
1771	-	3.5	-	-	-	27.0	-	15.8	18.8	2.4	37.5	6.5
1772	-	-	50.0	-	21.6	28.4	-	10.0	8.1	-	7.6	16.7
1773	28.3	16.8	-	-	-	11.5	17.2	47.6	-	24.5	-	18.7
1774	-	-	-	-	-	100.0	-	-	-	-	-	-
1775	-	-	-	-	-	100.0	-	-	-	-	-	-
1776	-	-	-	-	-	-	-	-	-	-	-	-
1777	-	-	-	-	-	-	29.9	-	34.7	27.4	8.0	-
1778	-	-	-	-	-	-	80.5	-	7.4	-	23.5	-
1779	-	36.9	-	-	-	16.2	7.8	-	11.4	14.5	4.4	7.5
1780	16.9	-	-	-	-	6.0	35.7	6.2	13.3	22.4	37.5	-
1781	-	-	-	16.6	11.5	-	-	5.5	-	16.5	-	-
1782	-	-	-	13.4	-	19.6	9.8	8.7	-	7.7	-	32.9
1783	-	-	-	16.2	-	16.5	11.7	-	25.9	35.4	6.8	-
1784	-	-	-	-	-	-	8.9	22.3	38.1	7.4	29.6	-
1785	10.9	-	-	-	-	-	7.6	6.1	28.8	6.9	33.8	4.9
1786	-	6.3	-	-	5.7	-	21.8	20.5	15.9	8.1	15.5	-
1787	-	5.1	-	4.8	-	3.2	18.2	27.1	-	2.4	27.8	24.5
1788	11.0	-	-	-	-	-	42.5	20.0	25.1	-	-	-
1789	12.5	-	-	-	-	8.0	28.7	9.1	6.8	25.9	-	12.6
1790	-	11.9	-	2.2	-	12.1	17.7	9.5	9.5	-	-	27.7
1791	1.8	-	6.8	-	4.3	3.2	49.1	5.5	15.7	8.6	1.9	8.8
1792	2.1	1.5	3.7	-	-	-	-	-	-	-	-	-
1793	-	-	-	-	-	-	-	-	-	-	-	-
1794	-	-	-	-	-	-	-	-	-	-	-	-
1795	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	-	-	-	-	-	-	-
1797	6.7	-	4.8	-	2.3	13.7	24.2	21.0	1.9	2.7	12.3	18.7
1798	5.8	1.5	-	-	2.2	2.3	54.7	-	6.3	2.9	5.7	14.8
1799	2.3	4.8	2.9	-	-	6.9	36.2	2.5	28.8	6.4	11.8	11.0
1799	9.8	-	3.1	-	-	3.8	-	33.6	11.5	11.9	29.2	-
1799	-	-	4.1	-	4.3	11.8	-	-	-	-	-	-
1799	58.9	-	14.9	-	18.4	-	7.4	6.5	7.7	-	14.7	32.4
1799	5.6	-	-	-	-	3.8	2.1	14.7	11.9	23.8	8.5	29.7
1799	9.5	2.6	2.1	-	-	-	-	33.1	-	12.7	-	25.0
1799	-	5.4	9.8	-	-	-	4.9	19.4	35.8	-	25.5	-

CONTINUED...

SOURCE: EAA, PA 70700-102





TABLE II-16-5  
PERCENTAGE OF SHIPPING TONNAGE FROM FREDERICKSMANN TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1744	-	-	-	-	-	-	-	-	100.0	-	-	-
1745	-	-	6.1	-	29.3	36.8	-	27.4	-	-	-	-
1746	-	-	-	-	-	-	55.4	-	29.8	-	-	23.7
1747	-	-	11.1	-	-	18.5	28.6	26.3	-	24.0	-	41.7
1748	-	-	-	-	-	31.3	13.2	-	16.1	14.3	-	3.7
1749	21.4	-	-	22.0	-	-	25.0	-	52.0	-	-	-
1750	-	-	-	41.6	-	-	15.3	-	43.1	-	-	-
1751	-	-	-	-	-	-	35.1	25.0	-	17.0	-	-
1752	-	25.9	-	-	-	-	100.0	-	-	-	-	-
1753	-	-	-	-	-	-	-	51.2	18.2	-	-	-
1754	-	-	-	-	-	-	14.6	47.3	29.4	-	-	-
1755	-	-	-	7.3	-	-	61.4	-	-	11.2	-	-
1756	-	-	-	-	-	-	46.7	41.8	-	-	-	5.9
1757	-	-	-	-	-	-	97.3	8.1	9.9	-	-	22.7
1758	-	-	-	-	-	55.1	-	26.3	5.7	12.0	-	-
1759	-	-	-	-	-	-	23.4	97.4	15.2	-	-	-
1760	-	-	-	-	-	-	19.4	36.0	-	44.6	-	-
1761	-	-	-	-	-	-	-	-	41.2	-	-	-
1762	-	-	17.5	-	-	32.5	-	-	13.5	-	-	27.5
1763	-	-	-	-	-	42.2	-	-	-	-	-	-
1764	-	-	-	-	-	-	37.6	-	-	38.2	-	-
1765	-	-	-	-	-	-	89.6	-	-	15.1	-	-
1766	-	-	-	-	-	23.7	-	-	-	-	-	-
1767	-	-	-	-	-	-	17.6	-	-	-	-	-
1768	-	28.2	-	-	8.8	17.6	23.0	-	16.6	-	-	12.9
1769	-	-	-	-	-	37.8	-	-	-	-	-	21.1
1770	-	-	-	-	-	73.3	-	24.5	-	-	-	-
1771	-	-	-	-	-	-	19.9	-	-	54.6	-	-
1772	-	-	-	-	12.4	28.8	32.5	-	-	-	-	12.4
1773	-	-	-	-	5.1	12.3	17.2	9.2	-	-	-	12.3
1774	-	-	-	-	-	-	-	-	-	-	-	-
1775	-	-	-	-	-	-	-	-	-	100.0	-	-
1776	-	-	-	-	-	-	-	-	-	-	-	-
1777	-	-	-	-	-	-	-	-	-	-	-	-
1778	-	-	-	-	-	100.0	-	-	-	-	-	-
1779	15.9	-	-	5.6	-	49.3	-	-	-	29.2	-	-
1780	-	-	-	42.1	-	-	24.0	-	-	34.0	-	-
1781	-	-	-	-	-	61.0	-	-	-	38.0	-	-
1782	-	-	-	-	-	18.3	12.3	-	-	32.3	-	-
1783	-	-	-	-	-	28.5	36.5	-	-	18.7	-	-

NO DATA AVAILABLE

CONTINUED...

SOURCE: CAA, PA 78/90-102

TABLE II-10-5 PERCENTAGE OF SHIPPING TONNAGE FROM FREDERIKSHAVN TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	JAN	FEB	MAR	APR	MAY	JUN	MONTH OF ARRIVAL								
							JUL	AUG	SEP	OCT	NOV	DEC			
1700	-	-	-	7.4	-	-	-	-	-	-	-	-	-	-	-
1705	-	-	-	-	10.6	-	-	-	-	-	-	-	-	-	-
1706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	-	-	-	50.1	-	-	-	-	-	-	-	-	-	-	-
1709	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-
1710	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1711	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1712	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1713	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1714	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1715	-	-	-	23.0	-	-	-	-	-	-	-	-	-	-	-
1716	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1718	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1719	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1801	-	-	43.0	-	-	-	-	-	-	-	-	-	-	-	-
1802	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-
1803	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1804	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1806	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1816	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1817	-	-	-	30.0	-	-	-	-	-	-	-	-	-	-	-
1818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1820	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1821	-	-	-	27.4	-	-	-	-	-	-	-	-	-	-	-
1822	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1823	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1825	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SOURCE: CMA, PA 78/90-102

TABLE 11.10-4  
 PERCENTAGE OF SHIPPING TONNAGE FROM COUNTRIES TO AMSTERDAM  
 DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	NUMBER OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1796 <sup>14</sup>	6.6	-	9.1	14.4	26.8	1.8	6.7	10.1	-	4.2	7.7	12.7
1797	3.6	8.7	5.0	14.4	19.8	8.3	5.6	4.6	1.8	5.2	10.3	12.9
1798	-	-	10.1	7.6	51.0	-	9.5	3.0	8.5	-	2.1	-
1799	36.8	-	-	18.0	-	-	48.1	-	-	-	-	-
1800	-	-	-	-	5.8	-	18.2	4.8	38.8	-	-	-
1801	-	3.9	-	-	-	4.7	26.5	32.4	12.8	3.9	15.9	-
1802	-	7.9	6.3	5.6	41.8	11.5	9.9	7.7	-	5.6	3.5	-
1803	1.7	-	-	2.5	4.4	47.8	20.0	1.4	7.3	-	3.1	11.8
1804	6.3	-	-	57.6	-	-	9.1	12.8	-	10.3	-	3.9
1805	-	-	16.3	6.1	6.1	26.0	21.4	17.0	-	3.4	3.3	-
1806	-	4.7	-	10.8	7.8	8.4	6.1	15.7	-	31.3	-	-
1807	-	-	-	11.7	-	35.3	15.1	20.4	15.1	-	-	9.5
1808 <sup>17</sup>	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-
1814 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	41.7	31.2	24.5	10.4	21.6	-	6.7	5.8
1816	-	-	-	5.9	2.4	10.3	6.1	21.1	11.4	14.0	12.5	-
1817	-	6.8	-	9.5	44.7	24.6	9.6	16.2	20.1	2.0	13.1	6.3
1818	-	-	-	-	50.3	3.3	13.0	8.8	19.7	2.3	1.6	-
1819	6.1	-	-	-	6.3	14.6	5.6	9.0	11.7	8.8	-	-
1820	-	-	-	-	-	9.8	20.5	38.5	-	15.7	7.9	-
1821	-	3.2	7.8	47.8	-	42.7	20.0	6.0	2.2	15.7	5.6	-
1822	-	23.3	-	-	-	15.7	3.8	4.4	-	25.4	-	-
1823	-	-	-	-	22.7	-	55.9	21.3	-	-	-	-
1824	-	-	6.2	-	22.4	44.5	-	-	16.2	12.6	-	-
1825 <sup>8</sup>	-	-	-	-	38.5	21.9	14.1	25.5	-	-	-	-

SOURCE: GAA, PA 78/79-102

TABLE 11-18 AVERAGE SIZE OF CARGES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF RUSSIAN (BAL TIC) SHIPPING TO AMSTERDAM

YEAR	SIZES IN TONS	A		B		C		D		E		F		G		YEARLY AVERAGE
		SHIP	CARGO	SHIP	CARGO	SHIP	CARGO	SHIP	CARGO	SHIP	CARGO	SHIP	CARGO	SHIP	CARGO	
1703	51.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	267.7
1704	50.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	242.9
1705	50.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84.0
1706	51.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80.7
1707	53.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81.1
1708	71.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	219.9
1709	68.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	192.3
1710	67.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	148.5
1711	70.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	109.3
1712	71.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	143.8
1713	69.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	117.4
1714	77.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	207.6
1715	67.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	171.0
1716	68.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	211.2
1717	72.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	188.2
1718	77.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	239.3
1719	67.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	207.4
1720	68.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	222.6
1721	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	202.3
1722	75.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245.1
1723	73.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	222.0
1724	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	247.7
1725	87.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	252.4
1726	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	236.2
1727	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	213.9
1728	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220.4
1729	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210.0
1730	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	226.2
1731	87.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	225.8
1732	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	202.2
1733	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	229.7
1734	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	202.1
1735	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195.9
1736	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	229.4
1737	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210.1
1738	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	249.1
1739	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230.6
1740	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	231.7
1741	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	209.1
1742	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245.6
1743	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	232.2
1744	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	237.1
1745	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245.7
1746	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	225.8
1747	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220.4
1748	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195.9
1749	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	249.1
1750	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210.1
1751	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230.6
1752	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	231.7
1753	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	209.1
1754	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245.6
1755	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	232.2
1756	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	237.1
1757	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245.7
1758	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	225.8
1759	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220.4
1760	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195.9
1761	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	249.1
1762	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210.1
1763	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230.6
1764	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	231.7
1765	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	209.1
1766	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245.6
1767	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	232.2
1768	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	237.1
1769	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245.7
1770	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	225.8
1771	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220.4
1772	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195.9
1773	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	229.4
1774	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210.1
1775	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	249.1
1776	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230.6
1777	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	231.7
1778	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	209.1
1779	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245.6
1780	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	232.2
1781	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	237.1
1782	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245.7
1783	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	225.8
1784	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220.4
1785	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195.9
1786	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	249.1
1787	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210.1
1788	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230.6
1789	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	231.7
1790	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	209.1
1791	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245.6
1792	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	232.2
1793	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	237.1
1794	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245.7
1795	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	225.8
1796	83.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220.4
1797	76.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195.9
1798	83.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	249.1
1799	86.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210.1
1800	78.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230.6

TABLE II-15 AVERAGE SIZE OF CARGES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF RUSSIAN (BALTIC) SHIPPING TO AMSTERDAM

YEAR	A		B		C		D		E		F		G		YEARLY AVERAGE
	14 TONS	15-100	101-200	201-300	301-400	401-500	501-600	600+	CARGED SHIP	CARGED SHIP	CARGED SHIP	CARGED SHIP	CARGED SHIP	CARGED SHIP	
1745	83.3	76.8	103.3	252.3	339.9	333.3	451.8	486.0	-	-	656.0	-	258.3	223.6	
1747	76.5	81.7	103.9	207.1	335.9	339.1	423.2	488.8	-	-	-	-	230.3	218.8	
1748	82.5	81.7	103.3	248.8	338.5	339.9	438.8	488.8	-	-	-	-	231.8	216.9	
1749	86.9	86.5	106.8	252.2	339.7	335.5	438.8	488.8	-	-	-	-	236.7	224.9	
1750	86.9	86.5	107.0	254.5	341.2	337.3	448.8	488.8	-	-	-	-	242.8	231.0	
1751	82.5	81.8	101.5	261.6	341.6	337.2	488.8	488.8	-	-	-	-	261.3	245.1	
1752	84.3	82.5	101.8	251.8	343.6	349.9	418.8	-	-	-	-	-	239.4	223.0	
1753	71.2	80.3	107.4	246.1	343.8	345.9	482.8	482.8	-	-	536.0	-	239.4	223.0	
1754	81.3	81.4	104.5	241.4	345.6	343.2	413.5	482.8	-	-	-	-	236.9	225.7	
1755	80.1	80.1	107.5	237.9	349.2	343.4	415.5	418.3	-	-	-	-	235.2	221.9	
1756	86.3	84.3	107.8	244.7	353.2	349.8	436.7	485.0	-	-	-	-	245.9	235.2	
1757	82.9	86.0	105.8	241.8	351.5	351.6	421.8	488.5	-	-	900.0	-	219.9	196.7	
1758	85.3	87.6	107.7	251.7	353.1	356.2	407.4	487.4	-	-	-	-	237.5	200.1	
1759	80.4	87.4	107.8	252.0	353.6	354.2	411.6	418.2	-	-	-	-	237.8	215.9	
1760	84.2	85.4	104.7	239.4	359.4	356.7	425.9	418.3	-	-	-	-	266.4	237.6	
1761	81.1	80.9	108.3	241.2	352.3	356.2	413.2	413.8	-	-	-	-	263.2	224.8	
1762	80.3	80.9	107.9	242.4	354.5	358.5	429.9	416.8	-	-	618.0	-	255.3	218.2	
1763	85.3	88.9	105.2	245.1	359.2	353.2	417.5	413.5	-	-	-	-	277.7	215.8	
1764	84.5	87.9	102.9	245.9	351.2	353.5	416.5	413.5	-	-	-	-	252.8	213.5	
1765	80.3	80.6	102.9	241.2	343.2	354.2	417.9	418.3	-	-	-	-	263.7	235.6	
1766	87.3	84.3	108.3	246.5	351.4	356.5	414.9	414.9	-	-	532.0	-	278.8	243.1	
1767	87.6	87.6	104.8	249.2	351.4	356.5	414.9	414.9	-	-	-	-	265.7	238.1	
1768	80.3	80.3	103.4	246.2	354.1	356.7	421.2	414.8	-	-	-	-	279.8	217.5	
1769	87.4	80.9	102.6	245.9	359.9	359.9	414.8	414.8	-	-	-	-	267.3	221.5	
1770	80.9	81.5	103.9	242.4	359.7	362.5	428.6	418.2	-	-	900.0	-	269.2	223.5	
1771	81.9	87.8	103.9	233.2	357.4	369.2	418.4	415.0	-	-	-	-	290.7	238.7	
1772	74.9	86.9	102.3	246.9	354.9	364.2	418.4	416.9	-	-	578.0	-	251.9	193.2	
1773	87.5	83.9	107.2	243.9	359.4	364.7	418.3	417.1	-	-	-	-	248.5	194.2	
1774	82.5	83.5	107.8	235.1	359.4	362.4	422.1	416.7	-	-	620.0	-	258.6	204.1	
1775	80.3	85.8	104.1	223.8	359.9	364.5	425.8	419.3	-	-	649.0	-	278.8	209.9	
1776	80.3	85.3	104.7	246.8	359.9	368.2	427.3	427.3	-	-	-	-	192.1	114.7	
1777	78.3	80.1	105.2	247.5	359.9	366.4	430.1	428.1	-	-	642.0	-	279.8	233.4	
1778	83.7	82.7	108.7	237.9	345.3	365.7	433.2	430.6	-	-	-	-	285.6	234.2	
1779	83.2	82.5	108.7	235.1	349.3	347.3	434.5	431.4	-	-	754.7	-	274.8	213.3	
1780	84.8	85.9	106.1	235.5	352.6	365.6	443.8	437.3	-	-	-	-	275.3	220.0	
1781	78.0	83.0	101.5	234.9	349.9	363.6	439.8	437.3	-	-	646.7	-	298.7	224.9	
1782	80.9	76.1	108.2	227.7	359.9	362.5	442.1	434.1	-	-	726.0	-	298.8	124.3	
1783	80.8	77.3	108.2	248.7	346.2	362.5	442.1	434.1	-	-	-	-	291.4	167.0	
1784	84.3	83.9	105.8	243.3	346.7	346.6	441.1	441.4	-	-	-	-	253.8	201.7	
1785	80.3	87.2	103.1	243.6	354.4	354.4	441.4	443.0	-	-	706.0	-	279.1	216.5	
1786	84.5	82.0	107.1	240.7	346.9	344.8	445.9	445.4	-	-	-	-	299.3	246.5	
1787	84.5	82.0	107.1	240.7	346.9	344.8	445.9	445.4	-	-	-	-	308.1	271.3	

CONTINUED...

SOURCE: CIAA, 24 1979-1982

TABLE H-15 AVERAGE SIZE OF CARGES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF RUSSIAN (Soviet) SHIPPING TO AMSTERDAM

YEARS	2 - 100		101 - 200		201 - 300		301 - 400		401 - 500		501 - 600		600 +		YEARLY AVERAGE	
	CARGO SAID	SHIPS	CARGO SAID	SHIPS	CARGO SAID	SHIPS	CARGO SAID	SHIPS	CARGO SAID	SHIPS	CARGO SAID	SHIPS	CARGO SAID	SHIPS		
1957	73.3	79.4	129.0	139.4	241.3	264.9	347.3	340.2	445.7	442.7	524.0	-	646.5	-	279.2	259.6
1958	80.2	80.0	137.7	139.1	220.1	256.2	339.4	346.2	446.4	441.8	-	-	646.0	-	274.4	247.4
1959	84.4	76.4	148.8	135.4	246.8	244.8	357.2	358.6	453.0	442.3	520.3	510.0	-	-	280.7	243.0
1960	80.5	78.3	144.2	138.3	242.1	253.4	358.7	357.3	445.3	446.2	-	-	645.3	-	285.4	228.2
1961	75.6	77.2	141.7	138.7	246.1	256.7	359.8	353.6	443.1	443.8	-	-	645.8	-	304.7	258.5
1962	81.1	82.1	148.4	136.2	240.8	247.8	354.6	355.7	447.2	445.8	506.8	-	-	-	342.7	257.5
1963	78.0	79.5	148.9	135.7	239.9	241.2	349.8	354.8	432.4	431.6	-	-	643.6	-	199.1	146.5
1964	82.3	78.9	148.4	134.8	242.7	238.2	341.7	345.5	443.8	443.5	-	-	643.5	-	257.3	224.4
1965	72.7	71.5	146.5	129.9	225.2	-	342.4	342.8	418.0	410.4	-	-	642.4	-	143.5	109.5
1966	82.3	78.2	146.7	134.1	233.7	231.7	342.2	341.8	436.8	436.8	532.8	-	-	-	181.5	124.3
1967	75.3	74.0	153.3	140.9	244.3	237.2	353.3	352.9	446.3	446.5	-	-	646.5	-	220.1	178.3
1968	75.3	74.3	155.4	127.6	228.2	231.5	356.4	358.8	443.7	443.7	-	-	643.7	-	194.7	137.6
1969	146.3	173.5	136.9	133.2	222.3	-	-	-	443.7	443.7	-	-	-	-	151.1	106.7
1970	74.5	74.9	153.7	119.5	222.8	223.5	325.4	351.8	428.8	454.8	528.8	-	646.5	-	228.7	143.1
1971	84.7	84.7	144.7	128.3	228.3	223.8	345.4	362.8	446.3	442.8	521.3	-	646.0	-	193.5	122.3
1972	82.9	75.0	145.5	138.3	241.6	223.8	345.4	362.8	443.2	443.2	-	-	672.4	-	279.8	176.7
1973	84.6	78.2	154.6	138.8	253.4	231.3	348.5	345.3	446.4	446.4	523.8	518.0	754.3	632.0	289.7	126.1
1974	84.6	80.4	154.6	135.3	225.4	238.7	341.8	-	-	-	-	518.0	802.8	-	181.2	112.5
1975	45.4	74.3	159.1	125.5	237.2	244.5	338.2	348.8	456.5	442.0	524.9	-	802.8	-	196.6	115.1
1976	53.5	72.8	141.5	124.1	241.2	248.9	345.8	342.8	446.3	446.3	522.8	-	802.8	-	196.4	122.1
1977	49.3	58.5	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	145.1	82.5
1978	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1979	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1980	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1981	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1982	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1983	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1984	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1985	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1986	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1987	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1988	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1989	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1990	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1991	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1992	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1993	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1994	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1995	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1996	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1997	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1998	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
1999	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2000	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2001	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2002	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2003	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2004	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2005	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2006	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2007	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2008	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2009	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2010	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2011	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2012	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2013	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2014	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2015	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2016	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2017	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2018	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2019	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2020	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2021	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2022	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2023	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2024	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-
2025	49.3	49.3	138.4	126.0	242.9	229.8	342.9	342.9	-	-	-	-	-	-	-	-

SOURCE: UNCTAD, 2023/24-2024





TABLE III-104 AVERAGE SIZE OF PACKS AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPING TONS  
BY YEAR AND BY YEARLY AVERAGE

YEAR	BY YEAR					YEARLY AVERAGE
	1-100	101-200	201-300	301-400	401-500	
1946	64.7	73.5	104.5	125.6	206.8	203.5
1947	64.3	67.4	104.1	124.7	223.5	200.7
1948	64.2	67.5	104.7	124.1	220.8	201.0
1949	65.3	67.9	104.1	123.3	220.8	201.0
1950	67.7	69.8	104.2	124.3	222.5	201.0
1951	67.7	69.8	104.2	124.2	220.7	201.0
1952	67.3	67.5	104.3	123.7	220.2	200.0
1953	67.7	67.5	104.3	123.3	222.8	200.0
1954	67.4	67.4	104.2	123.6	220.8	200.0
1955	67.4	67.5	104.2	123.6	220.4	200.0
1956	67.4	67.5	104.2	123.7	220.4	200.0
1957	67.4	67.5	104.2	123.7	220.4	200.0
1958	67.4	67.5	104.2	123.7	220.4	200.0
1959	67.4	67.5	104.2	123.7	220.4	200.0
1960	67.4	67.5	104.2	123.7	220.4	200.0
1961	67.4	67.5	104.2	123.7	220.4	200.0
1962	67.4	67.5	104.2	123.7	220.4	200.0
1963	67.4	67.5	104.2	123.7	220.4	200.0
1964	67.4	67.5	104.2	123.7	220.4	200.0
1965	67.4	67.5	104.2	123.7	220.4	200.0
1966	67.4	67.5	104.2	123.7	220.4	200.0
1967	67.4	67.5	104.2	123.7	220.4	200.0
1968	67.4	67.5	104.2	123.7	220.4	200.0
1969	67.4	67.5	104.2	123.7	220.4	200.0
1970	67.4	67.5	104.2	123.7	220.4	200.0
1971	67.4	67.5	104.2	123.7	220.4	200.0
1972	67.4	67.5	104.2	123.7	220.4	200.0
1973	67.4	67.5	104.2	123.7	220.4	200.0
1974	67.4	67.5	104.2	123.7	220.4	200.0
1975	67.4	67.5	104.2	123.7	220.4	200.0
1976	67.4	67.5	104.2	123.7	220.4	200.0
1977	67.4	67.5	104.2	123.7	220.4	200.0
1978	67.4	67.5	104.2	123.7	220.4	200.0
1979	67.4	67.5	104.2	123.7	220.4	200.0
1980	67.4	67.5	104.2	123.7	220.4	200.0
1981	67.4	67.5	104.2	123.7	220.4	200.0
1982	67.4	67.5	104.2	123.7	220.4	200.0
1983	67.4	67.5	104.2	123.7	220.4	200.0
1984	67.4	67.5	104.2	123.7	220.4	200.0
1985	67.4	67.5	104.2	123.7	220.4	200.0
1986	67.4	67.5	104.2	123.7	220.4	200.0
1987	67.4	67.5	104.2	123.7	220.4	200.0
1988	67.4	67.5	104.2	123.7	220.4	200.0
1989	67.4	67.5	104.2	123.7	220.4	200.0
1990	67.4	67.5	104.2	123.7	220.4	200.0
1991	67.4	67.5	104.2	123.7	220.4	200.0
1992	67.4	67.5	104.2	123.7	220.4	200.0
1993	67.4	67.5	104.2	123.7	220.4	200.0
1994	67.4	67.5	104.2	123.7	220.4	200.0
1995	67.4	67.5	104.2	123.7	220.4	200.0
1996	67.4	67.5	104.2	123.7	220.4	200.0
1997	67.4	67.5	104.2	123.7	220.4	200.0
1998	67.4	67.5	104.2	123.7	220.4	200.0
1999	67.4	67.5	104.2	123.7	220.4	200.0
2000	67.4	67.5	104.2	123.7	220.4	200.0
2001	67.4	67.5	104.2	123.7	220.4	200.0
2002	67.4	67.5	104.2	123.7	220.4	200.0
2003	67.4	67.5	104.2	123.7	220.4	200.0
2004	67.4	67.5	104.2	123.7	220.4	200.0
2005	67.4	67.5	104.2	123.7	220.4	200.0
2006	67.4	67.5	104.2	123.7	220.4	200.0
2007	67.4	67.5	104.2	123.7	220.4	200.0
2008	67.4	67.5	104.2	123.7	220.4	200.0
2009	67.4	67.5	104.2	123.7	220.4	200.0
2010	67.4	67.5	104.2	123.7	220.4	200.0
2011	67.4	67.5	104.2	123.7	220.4	200.0
2012	67.4	67.5	104.2	123.7	220.4	200.0
2013	67.4	67.5	104.2	123.7	220.4	200.0
2014	67.4	67.5	104.2	123.7	220.4	200.0
2015	67.4	67.5	104.2	123.7	220.4	200.0
2016	67.4	67.5	104.2	123.7	220.4	200.0
2017	67.4	67.5	104.2	123.7	220.4	200.0
2018	67.4	67.5	104.2	123.7	220.4	200.0
2019	67.4	67.5	104.2	123.7	220.4	200.0
2020	67.4	67.5	104.2	123.7	220.4	200.0

UNITED STATES DEPARTMENT OF COMMERCE

CONTINUED...









TABLE III-2C AVERAGE SIZE OF CANNES AND OF SIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPING FROM AREA 10 WESTERN

YEARS	SIZE										YEARLY AVERAGE	
	10-199	200-299	300-399	400-499	500-599	600-699	700-799	800-899	900-999	1000+		
1961	-	-	-	-	-	-	-	-	-	-	176.0	150.0
1962	-	-	-	-	-	-	-	-	-	-	243.0	239.4
1963	-	-	-	-	-	-	-	-	-	-	84.0	88.0
1964	-	-	-	-	-	-	-	-	-	-	83.0	89.7
1965	-	-	-	-	-	-	-	-	-	-	229.2	200.6
1966	-	-	-	-	-	-	-	-	-	-	159.4	116.6
1967	-	-	-	-	-	-	-	-	-	-	146.1	117.5
1968	-	-	-	-	-	-	-	-	-	-	182.2	156.7
1969	-	-	-	-	-	-	-	-	-	-	205.0	186.8
1970	-	-	-	-	-	-	-	-	-	-	212.7	188.0
1971	-	-	-	-	-	-	-	-	-	-	190.1	179.0
1972	-	-	-	-	-	-	-	-	-	-	184.4	161.3
1973	-	-	-	-	-	-	-	-	-	-	194.9	177.8
1974	-	-	-	-	-	-	-	-	-	-	180.4	168.2
1975	-	-	-	-	-	-	-	-	-	-	164.4	150.8
1976	-	-	-	-	-	-	-	-	-	-	168.5	150.6
1977	-	-	-	-	-	-	-	-	-	-	176.7	149.1
1978	-	-	-	-	-	-	-	-	-	-	182.1	142.1
1979	-	-	-	-	-	-	-	-	-	-	187.7	144.1
1980	-	-	-	-	-	-	-	-	-	-	221.4	145.5
1981	-	-	-	-	-	-	-	-	-	-	196.0	152.6
1982	-	-	-	-	-	-	-	-	-	-	183.8	147.1
1983	-	-	-	-	-	-	-	-	-	-	183.6	153.8
1984	-	-	-	-	-	-	-	-	-	-	191.2	154.0
1985	-	-	-	-	-	-	-	-	-	-	189.6	151.2
1986	-	-	-	-	-	-	-	-	-	-	210.0	164.0
1987	-	-	-	-	-	-	-	-	-	-	223.9	175.6
1988	-	-	-	-	-	-	-	-	-	-	211.5	161.1
1989	-	-	-	-	-	-	-	-	-	-	216.3	169.0
1990	-	-	-	-	-	-	-	-	-	-	231.0	167.1
1991	-	-	-	-	-	-	-	-	-	-	207.0	145.1
1992	-	-	-	-	-	-	-	-	-	-	176.5	128.9
1993	-	-	-	-	-	-	-	-	-	-	174.6	152.9
1994	-	-	-	-	-	-	-	-	-	-	185.0	170.7
1995	-	-	-	-	-	-	-	-	-	-	179.1	158.0
1996	-	-	-	-	-	-	-	-	-	-	197.5	163.0

SOURCE: CMAA, 24 78/79-132

CONTINUED...

TABLE II.15.2. WEIGHTS, SIZE OF CAGES AND OF SALES IN TONS IN EACH OF THE SIZE CATEGORIES OF SALPINGIDS FROM RIGA TO AMSTERDAM

YEARS	CAGES	WEIGHT	SIZE					WEIGHTLY AVERAGE				
			9 - 100	101 - 200	201 - 300	301 - 400	401 - 500		501 - 600	600 +		
1766	58.9	68.6	164.8	150.3	226.4	225.1	307.6	-	455.0	-	200.2	161.0
1767	77.8	83.0	164.1	152.2	227.0	224.6	308.0	-	412.0	-	182.2	152.6
1768	76.8	68.5	167.6	148.3	223.9	223.4	308.0	-	408.0	-	181.5	150.1
1769	84.2	87.0	157.1	153.7	232.6	228.4	304.8	-	408.0	-	176.5	156.2
1770	84.6	91.9	153.7	165.2	231.9	229.3	308.7	302.0	-	-	182.6	156.9
1771	89.7	88.3	158.0	161.8	229.6	232.7	358.0	-	-	530.0	190.7	153.3
1772	94.7	83.7	159.2	165.9	232.2	232.6	352.0	-	410.0	-	175.7	147.5
1773	72.2	80.9	160.1	155.5	231.6	225.0	321.3	-	-	-	189.5	167.3
1774	91.8	82.5	161.2	168.3	233.8	231.0	327.0	303.0	410.0	-	197.6	172.3
1775	76.7	82.2	165.0	157.5	228.3	224.0	307.5	339.0	-	402.0	201.3	207.3
1776	72.5	83.6	164.1	157.8	238.5	238.1	308.2	364.7	432.0	-	201.3	225.3
1777	97.9	87.2	160.1	156.4	242.5	235.3	351.3	351.0	421.0	410.7	261.1	225.3
1778	83.8	86.4	158.6	163.8	242.5	239.2	305.7	350.2	408.0	-	235.0	215.0
1779	75.3	86.2	159.7	157.4	253.1	243.8	358.3	303.5	407.7	405.3	268.8	237.5
1780	88.3	88.4	165.1	154.2	239.6	237.1	350.2	357.7	425.1	413.6	265.0	232.2
1781	89.6	88.8	172.3	161.2	240.3	238.3	361.3	355.6	421.0	410.4	278.6	211.1
1782	90.3	87.3	170.3	159.5	237.1	237.8	368.5	353.7	405.5	405.3	225.2	182.0
1783	82.7	82.2	170.0	164.4	239.7	238.2	368.0	350.2	405.5	405.3	245.9	207.6
1784	82.7	86.0	166.9	165.3	239.5	239.8	361.2	362.0	415.7	410.4	267.1	231.2
1785	86.5	85.5	165.1	159.1	241.5	235.2	366.9	350.0	419.2	410.9	267.1	231.2
1786	86.5	86.1	161.3	167.0	245.1	235.2	337.0	363.6	413.7	413.7	245.1	212.3
1787	90.0	88.0	161.9	136.9	239.1	243.1	361.8	368.9	430.0	413.5	256.2	193.4
1788	82.3	80.8	158.0	138.5	244.3	232.2	337.7	361.1	405.0	408.0	223.9	172.0
1789	-	-	159.3	163.6	244.7	237.0	350.9	367.5	421.0	416.7	259.6	200.1
1790	80.9	81.1	171.2	165.3	243.7	236.8	358.5	362.9	425.0	415.3	275.3	200.1
1791	80.5	80.5	165.3	137.4	239.3	229.2	355.6	363.4	413.0	413.0	233.3	172.5
1792	80.4	81.1	161.6	159.3	239.1	238.8	349.3	355.8	413.2	412.0	238.8	182.5
1793	88.5	80.2	159.7	129.7	241.0	241.2	352.3	358.9	422.0	415.3	253.9	181.1
1794	79.0	83.1	164.7	138.3	235.4	240.8	355.6	360.2	427.0	417.3	267.5	196.4
NO DATA AVAILABLE												
1795	83.5	82.5	162.2	137.0	243.5	241.6	366.3	365.0	420.0	420.0	260.6	207.9
1796	76.8	81.2	168.0	140.0	243.9	242.1	352.2	359.1	425.0	425.0	281.7	230.1
1797	-	-	160.7	132.0	243.8	238.2	367.4	362.7	431.0	427.3	266.0	228.8
1798	86.5	85.5	158.2	135.4	228.3	228.6	352.5	351.4	433.3	426.9	273.1	220.2
1799	86.3	87.0	170.3	129.3	238.6	227.6	359.5	361.9	444.7	438.3	310.0	246.0
1800	76.2	66.4	168.7	125.7	229.1	230.0	358.4	360.7	439.0	439.0	193.1	118.0
1801	76.2	76.8	150.3	125.1	232.5	229.2	360.3	373.2	446.7	440.0	200.3	143.3
1802	80.7	76.0	153.5	129.2	231.7	231.0	359.7	337.4	450.7	443.9	228.9	170.5
1803	80.0	70.6	163.0	136.9	242.3	241.1	366.0	320.0	450.0	450.0	237.7	159.3
1804	100.3	86.1	163.3	130.7	239.3	238.8	369.5	330.4	446.3	470.0	220.0	163.5
1805	80.7	82.0	169.2	163.7	230.9	243.0	362.7	330.2	456.6	440.9	257.1	213.0

SOURCES: CMA, ON 70/70-132

CONTINUED...

TABLE II-18-C AVERAGE SIZE OF CARGES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPIING FROM  
AFRICA TO AMSTERDAM

YEARS	AVERAGE SIZE OF CARGES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPIING FROM AFRICA TO AMSTERDAM										YEARLY AVERAGE			
	1945-50	1951-55	1956-60	1961-65	1966-70	1971-75	1976-80	1981-85	1986-90	1991-95				
1947	136.5	98.6	157.6	170.3	236.5	241.5	326.0	335.5	415.0	400.0	-	205.0	162.1	
1948	98.3	98.3	158.6	136.7	253.4	258.0	333.1	319.3	449.5	435.3	-	236.9	158.1	
1949	76.3	76.3	166.7	137.0	246.7	247.0	358.3	340.0	440.0	409.0	502.0	510.0	246.2	167.9
1950	76.3	76.3	166.6	137.0	238.2	253.0	364.2	367.0	431.6	409.0	-	225.1	134.0	
1951	76.3	76.3	166.6	136.9	240.0	250.0	360.2	310.7	426.6	-	-	242.7	148.9	
1952	76.3	76.3	164.6	136.1	240.0	251.1	355.5	323.0	440.0	440.0	-	226.4	151.7	
1953	76.3	76.3	168.9	136.4	241.9	255.6	325.7	339.6	431.1	-	-	182.5	125.5	
1954	76.3	76.3	152.9	135.5	243.5	243.5	319.0	-	449.0	449.0	-	167.0	121.3	
1955	76.3	76.3	165.3	135.5	232.2	-	302.0	302.0	-	-	532.0	157.0	103.0	
1956	76.3	76.3	158.0	135.5	232.3	213.6	301.2	301.0	-	-	-	177.1	112.2	
1957	76.3	76.3	164.0	134.9	244.2	238.2	339.7	326.0	-	-	-	196.7	140.0	
1958	76.3	76.3	160.1	134.5	223.7	227.3	344.7	330.0	-	-	-	172.4	129.3	
1959	76.3	76.3	160.3	132.0	200.0	-	-	-	-	-	-	152.0	125.7	
1960	76.3	76.3	157.9	131.0	223.0	223.5	-	-	432.0	-	-	187.1	116.0	
1961	76.3	76.3	150.7	126.1	236.7	229.7	-	-	-	-	-	176.5	114.1	
1962	76.3	76.3	157.3	130.9	249.5	219.5	343.7	343.3	423.6	-	-	209.8	126.1	
1963	76.3	76.3	158.9	130.3	238.8	221.0	332.3	335.8	410.0	410.0	502.0	510.0	129.0	
1964	76.3	76.3	162.9	130.5	209.3	215.0	321.0	-	-	-	510.0	602.0	193.1	120.3
1965	76.3	76.3	159.9	125.4	230.2	240.8	330.0	-	420.0	470.0	-	602.0	109.6	110.6
1966	76.3	76.3	167.1	126.1	223.3	256.0	306.0	-	416.0	-	-	160.7	105.7	
1967	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	131.3	67.3	
1968	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1969	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1970	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1971	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1972	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1973	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1974	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1975	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1976	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1977	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1978	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1979	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1980	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1981	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1982	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1983	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1984	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1985	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1986	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1987	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1988	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1989	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1990	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1991	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1992	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1993	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1994	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1995	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1996	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1997	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1998	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
1999	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2000	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2001	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2002	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2003	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2004	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2005	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2006	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2007	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2008	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2009	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2010	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2011	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2012	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2013	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2014	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2015	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2016	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2017	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2018	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2019	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2020	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2021	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2022	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2023	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2024	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2025	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2026	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2027	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2028	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2029	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	
2030	76.3	76.3	169.5	120.0	223.0	-	-	-	-	-	-	-	-	

SOURCE: COM. 24 78/79-132





TABLE 11-16-63 AVERAGE SIZE OF CARGES AND 3E SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPING FROM VIETNAM TO AMSTERDAM

YEAR	CARGO SALES	SIZE	SIZE CATEGORIES OF SHIPPING FROM VIETNAM TO AMSTERDAM					WEIGHT AVERAGE		
			A	B	C	D	E		F	G
IN TONS	0 - 100	101 - 200	201 - 300	301 - 400	401 - 500	501 - 600	600 +			
1946	73.0	71.0	-	-	-	-	-	277.0	261.5	
1947	42.0	42.0	130.0	153.0	250.0	257.5	335.7	305.3	320.0	310.2
1948	42.0	42.0	130.0	138.0	230.0	236.4	300.0	300.0	290.0	290.0
1949	60.0	60.0	130.0	140.0	250.0	250.7	330.5	337.0	350.7	340.0
1950	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1951	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1952	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1953	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1954	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1955	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1956	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1957	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1958	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1959	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1960	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1961	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1962	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1963	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1964	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1965	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1966	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1967	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1968	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1969	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1970	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1971	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1972	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1973	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1974	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1975	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1976	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1977	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1978	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1979	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1980	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1981	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1982	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1983	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1984	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1985	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1986	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1987	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1988	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1989	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1990	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1991	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1992	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1993	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1994	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1995	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1996	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1997	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1998	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
1999	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
2000	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
2001	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
2002	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
2003	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
2004	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
2005	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
2006	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
2007	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
2008	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
2009	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0
2010	60.0	60.0	130.0	140.0	250.0	250.0	330.0	330.0	330.0	330.0

SOURCES: COM, 24 78/94-107

CONTINUED...



TABLE II.18.E AVERAGE SIZE OF CARGOES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPING FROM REVAL TO AMSTERDAM

YEAR	A		B		C		D		E		F		G		YEARLY AVERAGE
	0 - 100	101 - 200	201 - 300	301 - 400	401 - 500	501 - 600	600 +	CARGO SHIP	CARGO SHIP	CARGO SHIP	CARGO SHIP	CARGO SHIP	CARGO SHIP	CARGO SHIP	
1705	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1709	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1710	51.0	36.0	-	-	-	-	-	-	-	-	-	-	-	-	51.0
1711	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1712	54.0	120.1	-	-	-	-	-	-	-	-	-	-	-	-	78.0
1713	54.0	109.0	-	-	-	-	-	-	-	-	-	-	-	-	64.0
1714	61.0	110.0	220.0	344.0	-	-	-	-	-	-	-	-	-	-	66.0
1715	48.0	36.0	-	-	-	-	-	-	-	-	-	-	-	-	139.7
1716	58.7	78.0	-	-	-	-	-	-	-	-	-	-	-	-	90.8
1717	44.0	143.3	202.5	322.5	440.7	-	-	-	-	-	-	-	-	-	48.0
1718	100.0	174.0	270.0	337.3	-	-	-	-	-	-	-	-	-	-	397.2
1719	100.0	200.0	210.0	-	-	-	-	-	-	-	-	-	-	-	200.2
1720	54.0	140.0	-	-	-	-	-	-	-	-	-	-	-	-	210.0
1721	54.0	30.7	-	-	-	-	-	-	-	-	-	-	-	-	130.0
1722	54.0	45.0	-	-	-	-	-	-	-	-	-	-	-	-	92.0
1723	76.0	100.0	153.3	190.0	-	-	-	-	-	-	-	-	-	-	56.7
1724	62.0	47.3	-	-	-	-	-	-	-	-	-	-	-	-	30.7
1725	82.7	52.7	-	-	-	-	-	-	-	-	-	-	-	-	54.0
1726	54.0	52.0	-	-	-	-	-	-	-	-	-	-	-	-	45.0
1727	70.0	70.0	-	-	-	-	-	-	-	-	-	-	-	-	59.0
1728	80.0	70.0	235.0	276.0	-	-	-	-	-	-	-	-	-	-	133.3
1729	90.0	140.0	236.7	232.5	474.0	-	-	-	-	-	-	-	-	-	70.0
1730	30.0	159.3	234.7	229.3	400.0	-	-	-	-	-	-	-	-	-	82.0
1731	70.0	154.2	233.7	230.0	400.0	-	-	-	-	-	-	-	-	-	82.7
1732	90.0	148.0	205.0	206.0	400.0	-	-	-	-	-	-	-	-	-	54.0
1733	70.0	123.5	205.0	206.0	337.0	-	-	-	-	-	-	-	-	-	82.0
1734	70.0	104.0	-	-	-	-	-	-	-	-	-	-	-	-	70.0
1735	70.0	144.3	229.0	310.0	500.0	-	-	-	-	-	-	-	-	-	240.4
1736	72.0	143.0	280.0	-	-	-	-	-	-	-	-	-	-	-	152.8
1737	83.0	130.7	208.0	-	-	-	-	-	-	-	-	-	-	-	251.0
1738	82.0	132.0	208.0	-	-	-	-	-	-	-	-	-	-	-	151.0
1739	82.0	130.7	208.0	-	-	-	-	-	-	-	-	-	-	-	145.2
1740	80.0	124.0	208.0	-	-	-	-	-	-	-	-	-	-	-	227.0
1741	80.0	132.0	208.0	-	-	-	-	-	-	-	-	-	-	-	232.5
1742	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	194.9
1743	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	137.0
1744	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	89.0
1745	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	247.5
1746	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	148.3
1747	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	119.0
1748	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	140.0
1749	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	96.0
1750	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	139.5
1751	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	84.2
1752	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	140.8
1753	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	121.9
1754	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	142.3
1755	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	329.7
1756	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	107.0
1757	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	133.0
1758	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	131.0
1759	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	131.0
1760	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	131.0
1761	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	131.0
1762	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	131.0
1763	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	131.0
1764	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	131.0
1765	80.0	130.0	208.0	-	-	-	-	-	-	-	-	-	-	-	131.0

CONTINUED...

SOURCE: JAA, RA 78/30-102

TABLE 11.18.2 AVERAGE SIZE OF CARGOES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPING FROM  
REVAL TO AMSTERDAM

YEARS	A		B		C		D		E		F		G		YEARLY AVERAGE	
	0 - 100	101 - 200	201 - 300	301 - 400	401 - 500	501 - 600	601 - 700	701 - 800	801 - 900	901 - 1000	1001 - 1500	1501 - 2000	2001 - 3000	3001 - 4000		
1746	50.0	76.7	102.0	124.0	172.7	-	-	-	-	-	-	-	-	-	319.7	
1747	62.9	55.0	126.0	176.0	298.0	-	-	-	-	-	-	-	-	-	140.7	
1748	68.0	60.0	126.0	126.0	-	-	-	-	-	-	-	-	-	-	114.4	
1749	-	100.0	113.0	106.0	-	-	-	-	-	-	-	-	-	-	113.0	
1750	88.0	78.7	150.0	132.0	234.0	-	-	-	-	-	-	-	-	-	146.0	
1751	92.0	64.0	108.0	-	274.0	-	-	-	-	-	520.0	-	-	-	240.0	
1752	60.0	58.7	103.0	104.0	-	-	-	-	-	-	-	-	-	-	84.5	
1753	60.9	71.0	157.0	150.0	244.0	-	-	-	-	-	-	-	-	-	156.0	
1754	80.0	60.0	143.0	-	-	-	-	-	-	-	-	-	-	-	122.0	
1755	50.0	34.0	-	114.0	-	-	-	-	-	-	-	-	-	-	50.0	
1756	-	72.0	134.0	124.0	212.0	276.0	-	-	500.0	-	-	-	-	-	247.0	
1757	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1758	-	-	114.0	114.0	-	-	-	-	-	-	-	-	-	-	114.0	
1759	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1760	70.0	40.0	108.0	102.0	-	-	-	-	-	-	-	-	-	-	133.0	
1761	86.0	58.0	142.0	151.0	290.0	-	-	-	-	-	-	-	-	-	130.0	
1762	-	70.0	130.3	130.0	239.3	341.0	-	-	453.0	-	-	-	-	-	273.4	
1763	-	49.3	100.0	110.0	-	-	-	-	-	-	-	-	-	-	140.0	
1764	-	90.0	105.3	150.7	220.0	-	-	-	-	-	-	-	-	-	179.0	
1765	-	90.0	157.9	-	-	-	-	-	-	-	-	-	-	-	152.0	
1766	-	51.3	144.7	-	-	-	-	-	-	-	-	-	-	-	144.7	
1767	-	-	-	-	300.0	226.0	-	-	-	-	-	-	-	-	300.0	
1768	-	64.0	120.0	-	-	-	-	-	-	-	-	-	-	-	120.0	
1769	60.0	48.0	172.0	121.0	-	-	-	-	-	-	-	-	-	-	140.0	
1770	-	60.0	100.0	114.0	-	-	-	-	-	-	-	-	-	-	100.0	
1771	-	61.3	150.7	137.0	210.0	-	-	-	-	-	-	-	-	-	174.4	
1772	-	67.0	136.0	117.0	-	-	-	-	-	-	-	-	-	-	136.0	
1773	-	-	145.0	117.0	-	-	-	-	-	-	-	-	-	-	145.0	
1774	70.0	79.3	130.4	124.2	222.0	-	-	-	-	-	-	-	-	-	169.0	
1775	-	-	NO DATA AVAILABLE													-
1776	62.0	71.0	102.7	104.0	-	-	-	-	-	-	-	-	-	-	137.5	
1777	70.0	90.0	114.2	114.0	220.0	-	-	-	-	-	-	-	-	-	194.0	
1778	-	-	-	-	266.0	-	-	-	-	-	-	-	-	-	266.0	
1779	-	-	-	154.0	-	-	-	-	-	-	-	-	-	-	154.0	
1780	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1781	-	60.0	110.2	-	-	-	-	-	-	-	-	-	-	-	130.0	
1782	-	90.0	149.0	150.0	226.0	-	-	-	-	-	-	-	-	-	174.0	
1783	-	60.0	174.0	160.0	264.0	-	-	-	434.0	434.0	-	-	-	-	200.7	
1784	-	-	-	130.0	246.0	-	-	-	-	-	-	-	-	-	246.0	
1785	-	-	148.0	104.0	-	-	-	-	-	-	-	-	-	-	180.0	
1786	-	-	-	-	-	-	-	-	-	-	-	-	-	-	180.0	

CONTINUED...



TABLE 11.18. AVERAGE SIZE OF CARGOS AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPING FROM ESTONIA TO AMSTERDAM

YEAR	SIZES IN TONS						YEARLY AVERAGE
	A 0 - 100	B 101 - 200	C 201 - 300	D 301 - 400	E 401 - 500	F 501 - 600	
1701							
1702							
1703							
1704							
1705							
1706							
1707							
1708							
1709							
1710							
1711							
1712							
1713							
1714							
1715							
1716							
1717							
1718							
1719							
1720							
1721							
1722							
1723							
1724							
1725							
1726							
1727							
1728							
1729							
1730							
1731							
1732							
1733							
1734							
1735							
1736							
1737							
1738							
1739							
1740							
1741							
1742							
1743							
1744							
1745							

SOURCE: GAA, PA 78/34-102

CONTINUED...

TABLE II.15.2 AVERAGE SIZE OF CARGOES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPING FROM ESTONIA TO AMSTERDAM

YEAR	SIZES IN TONS										YEARLY AVERAGE			
	A - 100	B - 101 - 200	C - 201 - 300	D - 301 - 400	E - 401 - 500	F - 501 - 600	G - 601 - 700	H - 701 - 800	I - 801 - 900	J - 901 - 1000				
1745	70.0	64.7	-	274.0	274.0	274.0	343.0	323.5	-	-	-	-	240.4	231.0
1746	78.7	78.7	-	230.0	230.0	230.0	329.3	324.3	488.0	488.0	-	-	209.9	277.6
1747	98.0	97.0	-	174.0	174.0	174.0	333.6	329.6	-	-	-	-	303.8	302.1
1748	95.8	85.9	124.0	238.3	238.3	238.3	328.1	333.9	-	-	-	-	265.8	264.9
1749	93.0	93.0	173.2	239.7	239.7	239.7	330.5	330.5	-	-	-	-	233.9	235.3
1750	-	-	112.0	239.7	239.7	239.7	328.0	324.8	-	-	-	-	276.1	273.9
1751	-	-	130.7	238.0	238.0	238.0	327.2	328.2	-	-	-	-	289.2	288.6
1752	-	-	124.7	262.0	262.0	262.0	348.5	348.5	-	-	-	-	294.8	292.0
1753	80.0	80.0	-	-	-	-	-	-	-	-	-	-	119.3	93.1
1754	74.5	74.9	159.2	-	-	-	-	-	-	-	-	-	129.8	77.7
1755	73.0	70.4	157.0	-	-	-	-	-	-	-	-	-	102.0	60.0
1756	-	-	182.0	-	-	-	-	-	-	-	-	-	74.0	74.0
1757	74.0	74.0	-	-	-	-	-	-	-	-	-	-	-	-
1758	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1759	93.0	81.3	118.7	289.3	289.3	289.3	348.0	344.8	-	-	-	-	181.3	174.9
1760	96.0	89.0	140.0	236.0	236.0	236.0	-	-	414.0	414.0	-	-	197.7	184.7
1761	62.0	69.1	181.0	294.0	294.0	294.0	354.5	349.0	412.0	412.0	-	-	166.9	119.3
1762	-	90.0	181.3	230.0	230.0	230.0	354.5	349.0	440.0	440.0	-	-	207.8	175.0
1763	-	-	144.5	240.9	240.9	240.9	321.0	332.0	-	-	-	-	210.2	200.0
1764	100.0	99.0	156.0	225.0	225.0	225.0	-	-	-	-	-	-	109.1	140.7
1765	80.0	96.0	165.0	220.0	220.0	220.0	-	-	-	-	-	-	167.6	149.3
1766	88.0	93.3	140.7	217.0	217.0	217.0	-	-	-	-	-	-	133.1	114.9
1767	-	97.0	177.2	220.0	220.0	220.0	-	-	-	-	-	-	109.2	140.2
1768	-	88.0	167.5	220.0	220.0	220.0	-	-	-	-	-	-	195.9	135.4
1769	94.0	91.7	172.4	230.0	230.0	230.0	-	-	-	-	-	-	187.3	163.7
1770	-	40.5	170.4	239.2	239.2	239.2	362.5	341.0	-	410.0	-	-	241.9	178.9
1771	-	89.3	175.5	210.0	210.0	210.0	350.7	340.0	430.0	410.0	-	-	243.7	194.0
1772	69.0	87.4	173.6	244.2	244.2	244.2	348.0	400.0	-	410.0	-	-	226.8	153.1
1773	84.0	81.7	141.8	266.0	266.0	266.0	365.5	353.3	495.3	425.0	-	-	217.5	164.2
1774	-	90.0	180.1	232.0	232.0	232.0	345.0	372.0	453.0	430.0	-	-	241.1	151.7
1775	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	-	94.3	172.1	232.0	232.0	232.0	390.0	385.0	437.0	468.0	-	-	230.0	149.0
1777	-	90.9	170.3	225.0	225.0	225.0	354.8	308.0	461.5	438.0	-	-	260.1	181.2
1778	42.0	98.0	174.5	229.9	229.9	229.9	321.3	344.0	-	468.0	-	-	259.1	155.2
1779	-	84.0	161.3	238.7	238.7	238.7	312.0	-	480.0	459.3	-	-	201.1	168.6
1780	-	86.0	172.9	238.2	238.2	238.2	-	-	448.0	431.0	-	-	240.9	153.8
1781	-	-	134.0	230.7	230.7	230.7	-	-	-	-	-	-	299.2	188.6
1782	92.0	92.0	173.3	215.0	215.0	215.0	-	-	453.0	-	-	-	237.6	168.8
1783	82.0	82.9	157.3	233.4	233.4	233.4	321.0	338.0	449.0	447.0	-	-	210.7	163.8
1784	-	-	200.0	238.0	238.0	238.0	374.0	-	492.0	449.0	-	-	348.6	254.9
1785	-	-	152.0	200.7	200.7	200.7	344.0	392.0	436.0	402.0	-	-	303.2	232.3
1786	-	-	152.0	270.0	270.0	270.0	338.0	338.0	-	-	-	-	199.4	161.7

SOURCE: GAA, PA 76/94-102

CONTINUED...



TABLE 11.15.P AVERAGE SIZE OF CARGOES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPING FROM ESTONIA TO AMSTERDAM

YEARS	SIZES IN TONS										YEARLY AVERAGE	
	A 0 - 100	B 101 - 200	C 201 - 300	D 301 - 400	E 401 - 500	F 501 - 600	G 600 +	CARGO	SHIPS	CARGO		SHIPS
1787	82.0	67.0	144.7	120.2	-	-	478.0	410.0	-	-	167.9	126.9
1788	88.0	91.0	108.0	-	274.0	242.0	-	-	-	-	166.0	166.0
1789	96.0	91.0	107.1	141.2	294.0	294.0	344.0	368.0	409.0	522.0	246.9	220.6
1790	80.0	75.7	147.5	170.5	222.7	253.0	332.0	-	-	-	183.1	122.2
1791	71.2	67.5	148.5	123.7	218.0	-	330.0	226.0	-	-	190.0	128.0
1792	98.0	98.0	159.5	133.5	281.0	241.0	-	-	420.0	500.0	204.7	162.0
1793	-	72.0	147.5	148.0	218.0	-	-	-	-	-	161.0	131.2
1794	-	-	-	166.0	254.0	279.0	317.0	-	428.0	420.0	348.0	312.0
1795	-	-	-	-	-	-	-	-	-	-	-	-
1796	74.0	78.5	172.0	147.2	212.0	208.0	344.0	-	-	-	174.0	120.0
1797	74.0	51.0	102.0	104.0	-	202.0	362.0	330.0	442.0	-	240.4	140.4
1798	80.0	80.0	157.0	-	-	-	-	-	-	-	131.2	60.0
1799	80.0	80.0	124.0	-	-	-	-	-	-	-	124.0	60.0
1800	82.0	38.0	149.0	133.0	-	-	-	-	-	-	120.7	101.2
1801	-	-	-	-	238.0	-	322.0	-	-	-	222.0	220.0
1802	98.0	63.0	150.0	143.5	248.7	232.0	-	-	428.0	-	220.2	120.9
1803	74.0	65.4	130.5	122.0	232.7	-	-	-	-	-	188.0	82.4
1804	-	-	168.0	124.7	233.0	-	-	-	-	-	211.2	124.7
1805	-	90.0	174.7	132.6	237.5	236.0	-	-	442.0	-	224.0	142.0
1806	-	86.0	142.0	132.0	207.0	212.0	314.0	-	-	-	200.0	139.2
1807	-	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	-	-	-	-	-	-
1816	-	-	-	-	-	-	-	-	-	-	-	-
1817	-	-	-	-	-	-	-	-	-	-	-	-
1818	79.0	86.0	140.0	128.0	257.0	229.0	332.0	352.0	620.0	-	234.9	180.5
1819	-	-	180.0	133.5	224.0	246.0	372.0	-	-	408.0	297.8	190.2
1820	-	-	158.0	132.0	214.0	-	-	-	-	-	160.0	122.0
1821	-	-	84.0	122.0	200.0	244.0	336.0	-	-	-	210.0	145.0
1822	80.0	70.0	124.0	108.0	200.0	242.0	-	-	-	-	104.7	82.0
1823	-	-	-	-	-	-	-	-	-	-	217.2	132.2
1824	74.0	78.0	165.0	170.7	204.0	-	-	-	-	-	164.0	109.0
1825	64.0	58.0	160.0	160.0	-	-	-	-	-	-	122.0	109.0

SOURCE: GAA, RA 78/28-102

TABLE 11.12.0 AVERAGE SIZE OF CARGOES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPING FROM FREDERIKSHAMN TO AMSTERDAM

YEARS	SIZE IN TONS										YEARLY AVERAGE	
	A 0 - 100	B 101 - 200	C 201 - 300	D 301 - 400	E 401 - 500	F 501 - 600	G 600 - 700	H 701 - 800	I 801 - 900	J 900 +		
1744			222.0									222.0
1745	74.0		261.3									186.4
1746			244.0									267.0
1747	72.0		263.3									255.8
1748	63.0	182.0	272.0									222.0
1749	93.0	132.0	231.0									182.0
1750	94.0	128.0	231.3									181.7
1751	94.0	132.0	238.0									187.3
1752	86.0	130.0	222.0									177.0
1753		163.0										163.0
1754	96.0	136.0										129.6
1755	86.8	119.0	252.0									123.3
1756		125.3	282.0									248.7
1757	92.0	112.0		300.0								236.3
1758	98.0	104.0	256.0	352.0								244.4
1759		140.0	248.7	392.0								253.0
1760	84.0		234.0	368.0								297.3
1761		170.0	234.0	354.0								292.7
1762		170.0	267.0	309.0			431.0	418.0				332.7
1763		159.7	267.0									200.0
1764		131.0	292.0									211.6
1765		170.0	226.7									226.7
1766	98.0	162.7	239.3	380.0								208.7
1767		157.0	232.0									173.0
1768		159.4	224.0	376.0								208.3
1769		149.0	236.4									209.0
1770		170.0	243.3									199.6
1771		170.0	271.0									214.6
1772		138.0	216.0	376.0								237.3
1773		156.7		372.0								216.8
1774	90.0	161.6	216.0		432.0	432.0						262.8
1775		NO DATA AVAILABLE										199.6
1776		151.0	238.0									180.0
1777												
1778												
1779	60.0	149.0	226.0		468.0	468.0						468.0
1780		182.0	216.0		429.0	468.0						236.7
1781	100.0	168.0			441.3	448.0						323.8
1782		145.0	224.0									169.3
1783		169.0	290.0	398.0								198.0
1784		151.3	228.7	344.0			484.0	484.0				236.3

SOURCE: GAA, PA 78/98-102

CONTINUED...

TABLE 11.18.3 AVERAGE SIZE OF CARGOES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPING FROM  
 FREDERIKSMANN TO AMSTERDAM

YEARS	A		4		C		D		E		F		YEARLY AVERAGE
	0 - 100	101 - 200	201 - 300	301 - 400	401 - 500	501 - 600	600 +	0 - 100	101 - 200	201 - 300	301 - 400	401 - 500	
1785	-	157.7	242.8	330.0	-	-	-	-	-	-	-	-	207.9
1786	-	136.0	230.0	-	-	-	-	-	-	-	-	-	199.0
1787	-	157.0	-	-	-	-	-	-	-	-	-	-	157.0
1788	-	123.0	274.0	-	-	-	-	-	-	-	-	-	190.9
1789	-	-	-	364.0	-	-	-	-	-	-	-	-	304.0
1790	-	140.0	-	-	-	-	-	-	-	-	-	-	140.0
1791	-	-	-	-	-	-	-	-	-	-	-	-	140.0
1792	-	160.0	-	-	-	-	-	-	-	-	-	-	160.0
1793	-	115.0	220.7	-	-	-	-	-	-	-	-	-	170.4
1794	-	119.0	227.0	-	-	-	-	-	-	-	-	-	173.0
1795	-	142.7	-	-	-	-	-	-	-	-	-	-	142.7
1796	-	-	-	-	-	-	-	-	-	-	-	-	-
1797	-	96.0	140.0	-	-	-	-	-	-	-	-	-	151.0
1798	-	80.0	126.0	-	-	-	-	-	-	-	-	-	207.0
1799	-	72.0	160.0	-	-	-	-	-	-	-	-	-	160.0
1800	-	-	-	392.0	-	-	-	-	-	-	-	-	392.0
1801	-	-	-	-	-	-	-	-	-	-	-	-	-
1802	-	-	-	-	-	-	-	-	-	-	-	-	-
1803	-	-	-	-	-	-	-	-	-	-	-	-	-
1804	-	-	-	-	-	-	-	-	-	-	-	-	-
1805	-	-	-	-	-	-	-	-	-	-	-	-	-
1806	-	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	-	-	-	-	-	-	-
1816	-	90.0	274.0	200.0	460.0	616.0	-	-	-	-	-	-	206.7
1817	-	-	-	-	-	-	-	-	-	-	-	-	102.0
1818	-	-	-	-	-	-	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-	-	-	-	-	-	-
1820	-	-	-	-	-	-	-	-	-	-	-	-	-
1821	-	-	212.0	-	410.0	520.0	-	-	-	-	-	-	410.0
1822	-	-	-	328.0	320.0	320.0	-	-	-	-	-	-	360.0
1823	-	-	200.0	200.0	320.0	302.0	-	-	-	-	-	-	228.0
1824	-	-	276.0	207.0	302.0	-	-	-	-	-	-	-	209.0
1825	-	-	210.0	210.0	-	-	-	-	-	-	-	-	210.0

SOURCE: GAA, PA 70-90-107

TABLE 11.18.M AVERAGE SIZE OF CARGOES AND CP SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPING FROM  
 COUNLAND TO AMSTERDAM

YEAR	SIZE CATEGORIES										YEARLY AVERAGE		
	A 0 - 100	B 101 - 200	C 201 - 300	D 301 - 400	E 401 - 500	F 501 - 600	G 600 +	CARGO...MILE				CARGO...MILE	
1796/14	64.4	137.0	227.0	-	-	-	-	-	-	-	-	130.2	70.3
1797	69.0	140.1	240.7	300.0	-	-	-	-	-	-	-	107.0	42.9
1798	70.0	149.3	231.2	310.0	-	-	-	-	-	-	-	159.5	84.5
1799	-	69.0	230.0	-	-	-	-	-	-	-	-	175.3	80.7
1800	-	77.0	210.7	-	-	-	-	-	-	-	-	100.9	53.4
1801	67.8	133.3	232.3	-	-	-	-	-	-	-	-	154.0	70.3
1802	81.3	103.6	242.8	226.0	-	-	-	-	-	-	-	156.8	66.8
1803	87.0	106.0	243.3	-	-	-	-	-	-	-	-	100.3	55.2
1804	75.3	127.1	208.0	-	-	-	-	-	-	-	-	151.5	90.4
1805	89.0	130.0	259.0	320.0	-	-	-	-	-	-	-	157.3	84.0
1806	80.0	120.4	248.5	-	-	-	-	-	-	-	-	157.1	93.0
1807	91.3	124.0	248.0	-	-	-	-	-	-	-	-	120.0	63.4
1808/17	NO DATA AVAILABLE										-	-	
1809	NO DATA AVAILABLE										-	-	
1810	NO DATA AVAILABLE										-	-	
1811	NO DATA AVAILABLE										-	-	
1812	NO DATA AVAILABLE										-	-	
1813	NO DATA AVAILABLE										-	-	
1814	83.0	143.1	237.0	-	-	-	-	-	-	-	-	100.0	55.4
1815	86.5	156.7	220.8	400.0	-	-	-	-	-	-	-	100.0	103.4
1816	63.2	149.3	213.3	-	-	-	-	-	-	-	-	100.2	98.7
1817	80.2	147.2	229.5	-	-	-	-	-	-	-	-	130.3	110.0
1818	79.3	129.3	244.0	208.0	-	-	-	-	-	-	-	119.0	70.3
1819	91.1	134.0	216.0	-	-	-	-	-	-	-	-	114.0	83.2
1820	93.0	142.0	232.0	220.0	-	-	-	-	-	-	-	127.0	100.0
1821	77.0	130.3	219.0	-	-	-	-	-	-	-	-	141.2	103.1
1822	100.0	134.0	-	-	-	-	-	-	-	-	-	125.5	94.5
1823/19	73.0	149.0	207.0	300.0	-	-	-	-	-	-	-	103.5	117.7
1824	68.0	140.0	273.0	302.0	-	-	-	-	-	-	-	102.0	140.0
1825/30	73.0	132.6	219.0	-	-	-	-	-	-	-	-	129.5	95.3

SOURCE: CAA: 2A.78/30-102

TABLE 11.16 RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF RUSSIAN (POLAR) SHIPPING TO AMSTERDAM

SHIP SIZE, IN TONS	A	B	C	D	E	F	G
YEAR	1951	1952	1953	1954	1955	1956	1957
1701	4.07	4.04	4.07	4.07	4.07	4.07	4.07
1702	5.09	17.04	19.07	16.01	27.04	27.04	27.04
1703	0.70	0.70	0.70	0.70	0.70	0.70	0.70
1704	60.00	19.07	16.08	14.00	14.00	14.00	14.00
1705	116.00	77.00	44.00	21.00	21.00	21.00	21.00
1706	110.00	34.00	24.00	22.00	31.00	31.00	31.00
1707	91.00	34.00	24.00	16.00	27.00	27.00	27.00
1708	89.00	41.00	29.00	17.00	27.00	27.00	27.00
1709	82.00	36.00	25.00	18.00	26.00	26.00	26.00
1710	110.00	26.00	23.00	18.00	24.00	24.00	24.00
1711	110.00	31.00	23.00	17.00	24.00	24.00	24.00
1712	85.00	39.00	28.00	18.00	24.00	24.00	24.00
1713	14.00	45.00	31.00	17.00	24.00	24.00	24.00
1714	94.00	31.00	23.00	18.00	24.00	24.00	24.00
1715	71.00	27.00	21.00	16.00	24.00	24.00	24.00
1716	97.00	31.00	23.00	18.00	24.00	24.00	24.00
1717	106.00	34.00	25.00	19.00	24.00	24.00	24.00
1718	110.00	29.00	22.00	17.00	24.00	24.00	24.00
1719	113.00	40.00	31.00	19.00	24.00	24.00	24.00
1720	115.00	49.00	31.00	21.00	24.00	24.00	24.00
1721	113.00	30.00	23.00	18.00	24.00	24.00	24.00
1722	112.00	43.00	30.00	18.00	24.00	24.00	24.00
1723	96.00	41.00	17.00	17.00	24.00	24.00	24.00
1724	89.00	19.00	13.00	13.00	24.00	24.00	24.00
1725	112.00	33.00	25.00	17.00	24.00	24.00	24.00
1726	112.00	31.00	24.00	17.00	24.00	24.00	24.00
1727	110.00	38.00	27.00	19.00	24.00	24.00	24.00
1728	110.00	52.00	34.00	19.00	24.00	24.00	24.00
1729	114.00	43.00	30.00	24.00	24.00	24.00	24.00
1730	110.00	51.00	33.00	19.00	24.00	24.00	24.00
1731	93.00	22.00	18.00	17.00	24.00	24.00	24.00
1732	96.00	21.00	17.00	17.00	24.00	24.00	24.00
1733	96.00	19.00	13.00	13.00	24.00	24.00	24.00
1734	112.00	33.00	25.00	17.00	24.00	24.00	24.00
1735	112.00	31.00	24.00	17.00	24.00	24.00	24.00
1736	110.00	33.00	27.00	19.00	24.00	24.00	24.00
1737	110.00	38.00	27.00	19.00	24.00	24.00	24.00
1738	110.00	52.00	34.00	19.00	24.00	24.00	24.00
1739	114.00	43.00	30.00	24.00	24.00	24.00	24.00
1740	110.00	51.00	33.00	19.00	24.00	24.00	24.00
1741	93.00	22.00	18.00	17.00	24.00	24.00	24.00
1742	96.00	21.00	17.00	17.00	24.00	24.00	24.00
1743	96.00	19.00	13.00	13.00	24.00	24.00	24.00
1744	113.00	30.00	23.00	18.00	24.00	24.00	24.00
1745	106.00	31.00	23.00	18.00	24.00	24.00	24.00

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF CARGO < AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY

TABLE 11.16 RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF RUSSIAN (MALIC) SHIPPING TO AKATEZDAN

SHIP SIZE IN TONS	A			B			C			D			E			F			G			
	1-100	101-200	201-300	1-100	101-200	201-300	1-100	101-200	201-300	1-100	101-200	201-300	1-100	101-200	201-300	1-100	101-200	201-300	1-100	101-200	201-300	
1746	124.5	62.1	38.3	261.4	47.6	28.7	246.5	14.9	14.4	340.3	2.1	2.1	448.0	7.4	4.9	-	-	-	-	-	-	-
1747	1.6.1	29.9	23.7	174.4	21.1	17.2	246.1	6.7	6.3	341.6	2.3	2.2	428.7	7.7	7.5	-	-	-	-	-	-	-
1748	1.3.3	26.5	21.7	167.4	16.8	14.4	253.8	2.9	2.9	340.9	2.1	2.0	428.3	7.7	7.5	-	-	-	-	-	-	-
1749	1.4.8	21.8	17.7	171.7	16.7	14.3	251.3	1.6	1.6	340.1	1.4	1.4	428.0	6.7	6.5	-	-	-	-	-	-	-
1750	1.7.4	21.6	17.7	166.3	19.6	14.4	257.6	1.1	1.1	343.7	1.7	1.7	428.7	6.7	6.5	-	-	-	-	-	-	-
1751	1.7.4	32.6	24.6	164.9	19.4	14.7	248.6	8.3	7.7	341.2	1.2	1.2	428.0	6.7	6.5	-	-	-	-	-	-	-
1752	1.7.7	3.7	23.5	171.7	21.7	17.1	261.3	4.6	4.4	344.6	1.1	1.1	-	-	-	-	-	-	-	-	-	-
1753 <sup>610</sup>	1.4.1	29.7	22.2	176.4	19.6	16.4	254.2	2.7	2.4	347.3	1.4	1.4	427.7	-	-	376.0	-37.7	-37.9	-	-	-	-
1754	1.7.8	32.4	24.5	165.3	14.7	12.7	248.7	7.4	7.4	348.7	1.3	1.3	422.3	6.7	6.5	-	-	-	-	-	-	-
1755	36.7	21.1	17.4	166.1	12.6	11.2	247.1	3.1	3.1	352.6	1.9	1.9	415.7	7.1	7.1	-	-	-	-	-	-	-
1756	111.6	32.4	24.4	143.7	25.1	21.1	257.9	7.7	7.2	358.7	-1.6	-1.6	415.7	6.7	6.5	-	-	-	-	-	-	-
1757	124.9	43.2	31.1	195.7	34.2	25.9	276.6	16.1	13.4	373.7	6.6	6.6	504.0	24.4	17.4	-	-	-	-	-	-	-
1758	123.7	41.1	29.1	176.6	25.9	21.3	266.8	5.7	4.7	358.6	6.7	6.7	407.4	7.7	7.7	-	-	-	-	-	-	-
1759	149.6	70.3	41.4	191.7	39.4	28.4	266.3	8.9	8.7	357.4	6.9	6.9	411.4	7.4	7.4	-	-	-	-	-	-	-
1761	148.8	74.3	42.6	218.7	43.6	31.7	247.5	12.7	11.9	361.1	2.1	2.1	416.7	6.7	6.7	-	-	-	-	-	-	-
1761	143.3	68.9	41.8	213.4	37.7	31.7	277.7	17.5	14.9	399.6	1.9	1.9	428.9	3.6	3.5	-	-	-	-	-	-	-
1762	198.6	86.8	46.5	221.6	61.7	34.7	333.3	41.3	21.2	361.4	6.8	6.8	329.5	-6.5	-7.6	-	-	-	-	-	-	-
1763	146.7	64.7	37.3	279.6	41.1	29.1	265.1	17.8	14.8	345.5	1.6	1.6	415.6	7.4	6.7	-	-	-	-	-	-	-
1764	145.2	63.2	39.5	207.7	40.4	28.8	247.3	5.5	3.2	354.7	1.2	1.2	413.3	6.7	6.7	-	-	-	-	-	-	-
1765	164.3	85.5	46.1	216.7	53.5	34.2	254.7	7.3	6.8	354.4	1.1	1.1	416.7	6.6	6.6	572.0	-	-	-	-	-	-
1766	177.6	93.3	34.8	199.7	34.3	24.4	261.1	11.7	10.7	356.2	-1.1	-1.1	414.9	6.7	6.7	-	-	-	-	-	-	-
1767	173.8	98.4	44.6	219.1	55.6	33.4	271.3	22.6	18.0	363.3	1.4	1.4	414.4	6.7	6.7	-	-	-	-	-	-	-
1768	149.3	79.6	44.0	206.4	53.7	29.5	276.6	17.7	15.7	363.9	1.7	1.7	419.4	6.7	6.7	-	-	-	-	-	-	-
1769	147.7	74.3	42.6	211.9	48.6	37.7	277.4	16.9	14.5	369.6	7.1	7.1	438.7	6.7	6.7	-	-	-	-	-	-	-
1771	161.1	83.6	45.5	228.7	54.0	37.1	324.1	23.4	22.7	343.7	6.3	6.3	428.0	1.1	1.1	-	-	-	-	-	-	-
1771	162.7	80.2	45.3	219.7	56.8	36.2	271.5	21.5	20.0	317.2	6.0	6.0	433.1	3.7	3.7	-	-	-	-	-	-	-
1772	143.1	76.0	43.4	218.2	57.9	34.7	244.2	22.7	18.5	369.4	1.3	1.3	423.7	1.9	1.4	-	-	-	-	-	-	-
1773	142.1	81.7	44.6	201.7	56.2	36.7	318.7	28.7	27.2	372.7	7.9	7.9	421.5	6.9	6.7	-	-	-	-	-	-	-
1774	150.4	87.3	46.6	219.7	59.6	37.4	327.7	32.6	27.8	372.7	2.1	2.1	431.7	2.7	2.7	-	-	-	-	-	-	-
1775 <sup>1</sup>	160.2	86.7	46.4	213.7	67.6	37.6	218.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	131.8	53.4	34.6	200.8	46.8	41.9	324.8	34.1	24.4	386.5	5.1	4.8	432.7	1.2	1.2	-	-	-	-	-	-	-
1777	144.6	67.3	41.2	210.7	54.5	39.3	323.7	33.4	25.1	363.4	7.1	1.7	438.5	7.4	7.4	-	-	-	-	-	-	-
1778	136.2	65.7	39.7	217.6	66.7	40.7	347.7	45.4	31.2	371.4	8.5	7.9	441.1	2.4	2.4	-	-	-	-	-	-	-
1779 <sup>2</sup>	137.9	66.8	40.1	210.6	59.6	37.3	283.7	22.7	18.5	379.9	9.4	8.6	454.4	3.4	3.1	-	-	-	-	-	-	-
1780	143.8	93.8	47.6	224.4	73.8	47.5	271.1	33.6	23.4	411.4	14.7	13.6	467.7	3.4	3.5	-	-	-	-	-	-	-
1781	123.7	84.9	45.9	223.7	64.6	41.7	217.6	15.6	13.3	448.6	7.9	21.7	396.7	7.7	7.2	-	-	-	-	-	-	-
1782	14.3	84.4	45.6	185.4	45.2	31.1	261.8	13.3	13.3	416.7	12.7	11.3	441.9	1.7	1.7	-	-	-	-	-	-	-
1783	142.1	83.8	45.6	277.4	56.7	36.7	267.6	14.4	12.6	392.7	7.1	7.1	444.3	1.3	1.3	-	-	-	-	-	-	-
1784	169.8	102.3	53.6	218.7	61.6	37.7	311.3	31.1	21.1	362.7	4.1	7.9	444.6	1.6	1.6	-	-	-	-	-	-	-
1785	171.1	95.1	44.7	210.4	49.2	33.1	247.9	18.7	13.3	367.6	2.4	7.4	444.7	6.3	6.3	-	-	-	-	-	-	-
1786	145.3	75.6	43.1	197.2	41.3	27.2	262.3	6.2	5.8	353.3	7.5	7.6	449.3	6.7	6.7	-	-	-	-	-	-	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF SHIP < AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

CONTINUED

TABLE 11.16 RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF RUSSIAN (BALTIC) SHIPPING TO AMSTERDAM

SHIP SIZE <sup>1</sup> IN TONS	A			H			C			D			E			F			G		
	I = 10	II = 10	III = 10	I = 10	II = 10	III = 10	I = 10	II = 10	III = 10	I = 10	II = 10	III = 10	I = 10	II = 10	III = 10	I = 10	II = 10	III = 10	I = 10	II = 10	III = 10
1787	140.7	80.7	45.9	180.2	30.1	74.4	253.1	3.4	3.2	348.0	1.1	3.1	446.5	0.9	6.8	-	-	-	-	-	-
1788	161.4	79.3	47.0	220.7	64.7	39.3	281.7	9.4	8.9	347.8	1.4	1.4	445.7	1.2	1.2	-	-	-	-	-	-
1789	146.0	89.3	47.2	229.9	69.7	41.1	277.4	19.9	16.6	340.6	6.7	6.3	440.6	1.1	1.3	262.7	25.6	14.7	-	-	-
1790	147.3	88.1	46.8	234.3	71.8	41.8	314.4	23.7	17.1	367.7	2.1	2.4	444.2	1.0	1.0	-	-	-	-	-	-
1791 <sup>13</sup>	141.4	83.2	43.4	226.6	73.4	42.3	324.3	26.4	21.9	369.	4.4	4.2	448.7	1.1	1.1	-	-	-	-	-	-
1792	141.3	84.3	45.7	214.4	37.4	36.4	303.1	21.5	17.7	343.3	7.8	7.2	445.9	0.3	1.3	-	-	-	-	-	-
1793	129.3	62.9	38.5	198.7	40.4	31.7	245.6	12.4	3.2	416.4	14.3	12.7	431.3	1.4	1.4	-	-	-	-	-	-
1794	136.7	71.3	41.6	179.8	34.1	28.	261.	9.2	8.4	344.4	1.1	1.1	443.9	1.1	1.1	-	-	-	-	-	-
1795 <sup>13</sup>	137.9	83.8	46.2	177.3	42.0	29.6	-	-	-	392.0	0.6	0.6	410.6	0.0	0.6	-	-	-	-	-	-
1796 <sup>14</sup>	177.7	83.9	45.0	194.9	48.1	32.9	277.1	20.5	17.1	439.1	28.7	22.3	436.3	0.0	3.0	-	-	-	-	-	-
1797 <sup>15</sup>	139.2	90.1	46.8	196.5	39.3	28.3	282.0	18.9	13.9	365.3	3.5	3.4	440.7	1.1	1.1	-	-	-	-	-	-
1798	131.5	77.2	43.6	181.4	42.2	29.7	239.0	1.5	1.4	344.7	2.3	1.9	444.7	0.0	1.1	-	-	-	-	-	-
1799	128.3	74.8	42.8	169.7	27.7	21.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	139.9	86.8	46.5	191.5	62.2	37.6	281.5	26.2	26.6	441.0	24.6	21.4	434.9	39.0	28.4	-	-	-	-	-	-
1801	125.5	84.9	43.7	202.7	54.9	37.5	344.7	27.1	27.5	-	-	-	146.1	46.7	31.4	-	-	-	-	-	-
1802	144.4	72.3	45.1	221.4	60.4	37.7	341.1	37.5	34.4	372.	47.1	32.1	603.4	47.1	37.7	-	-	-	-	-	-
1803 <sup>16</sup>	141.4	85.0	46.1	215.0	65.3	34.5	337.7	43.5	31.3	482.7	39.8	23.5	631.1	41.5	29.3	742.	43.2	1.2	114.	83.5	49.5
1804	133.1	66.3	33.9	200.0	61.1	37.5	347.3	47.3	33.7	-	-	-	-	-	-	82.2	34.8	35.4	-	-	-
1805	137.6	78.5	44.0	220.2	59.5	37.3	346.5	44.1	37.6	499.1	62.3	38.4	694.	44.1	37.5	-	-	-	-	-	-
1806	127.1	74.7	42.8	217.7	61.5	38.8	341.7	42.7	27.9	530.1	30.7	26.9	-	-	-	-	-	-	-	-	-
1807	140.3	85.7	46.0	214.4	71.7	47.4	232.	32.7	24.7	-	-	-	-	-	-	-	-	-	-	-	-
1808 <sup>17</sup>	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	119.6	85.7	45.2	210.4	58.4	34.0	343.4	43.7	31.4	-	-	-	-	-	-	-	-	-	-	-	-
1815	124.1	86.9	46.5	204.2	49.8	31.7	342.9	50.3	33.5	489.1	34.1	24.4	626.1	34.9	23.9	-	-	-	-	-	-
1816 <sup>18</sup>	116.7	73.6	47.4	207.3	47.4	32.2	347.7	40.4	31.5	477.1	34.1	24.4	614.6	34.7	24.4	-	-	-	-	-	-
1817	117.2	36.1	26.5	181.1	23.8	17.7	264.1	17.7	4.7	359.9	9.8	4.4	491.8	11.3	17.7	486.	44.1	4.4	745.8	1.5	1.5
1818	11.4	34.2	34.2	142.0	22.8	18.1	247.7	9.6	4.6	414.7	19.7	16.1	424.2	3.6	1.3	374.2	1.1	1.1	737.1	0.0	0.0
1819	115.4	48.8	32.9	174.0	18.7	14.5	250.6	8.5	7.8	351.1	1.1	1.1	514.1	13.1	11.3	517.1	1.1	1.1	727.0	0.0	0.0
1820	112.2	41.8	23.5	175.1	14.5	12.7	241.8	10.2	3.1	174.1	6.0	1.1	44.	-	-	-	-	-	77.1	0.0	0.0
1821	112.4	43.1	3.1	191.3	23.8	12.7	231.3	7.3	6.8	352.6	1.1	1.1	486.1	1.1	1.1	379.1	1.1	1.1	81.3	0.0	0.0
1822	117.2	32.9	24.4	163.7	13.4	12.1	223.7	1.3	1.3	34.7	1.1	1.1	-	-	-	-	-	-	843.3	0.0	0.0
1823 <sup>19</sup>	59.3	28.5	21.1	170.0	8.4	4.1	247.1	1.4	1.4	336.1	1.1	1.1	436.1	1.1	1.1	374.	-	-	844.7	0.0	0.0
1824	9.7	28.9	22.9	173.8	9.7	5.	248.7	3.3	3.7	343.	1.1	1.1	-	-	-	347.1	1.1	1.1	858.5	0.0	0.0
1825 <sup>20</sup>	69.1	27.1	21.3	167.4	6.6	6.2	213.7	1.5	1.5	367.1	1.4	1.4	44.1	4.4	4.4	-	-	-	-	-	-

I = AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II = PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III = PERCENT BY WHICH AVERAGE SIZE OF SHIP < AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

TABLE 11.10.A RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM ST. PETERSBURG TO AMSTERDAM

SHIP SIZES IN TONS	A - 100	B - 101 - 200	C - 201 - 300	D - 301 - 400	E - 401 - 500	F - 501 - 600	G - 600 +
1705 1	-	-	-	-	-	-	-
1706 1	-	-	-	-	-	-	-
1707 1	-	-	-	-	-	-	-
1708 2	-	-	-	-	-	-	-
1709 3	-	-	-	-	-	-	-
1710 4	-	-	-	-	-	-	-
1711 4	-	-	-	-	-	-	-
1712 6	-	-	-	-	-	-	-
1713 4	-	-	-	-	-	-	-
1714 6	-	-	-	-	-	-	-
1715 7	78.0	3.0	3.0	-	-	-	-
1716	7.0	0.0	165.0	3.0	7.0	27.0	10.2
1717	68.0	0.0	125.0	3.0	3.0	23.0	7.0
1718	91.0	12.5	180.0	12.5	11.1	28.0	14.0
1719	91.0	21.0	175.0	3.0	7.0	25.0	0.0
1720	70.0	4.0	185.0	29.0	27.0	30.0	34.2
1721	81.0	30.1	232.0	-	-	230.0	11.0
1722	80.0	47.0	324.0	112.0	0.0	242.0	20.2
1723	85.0	33.0	248.0	190.0	11.7	245.0	4.1
1724	83.0	24.0	190.0	140.0	7.4	248.0	8.0
1725	86.0	20.0	207.0	192.0	14.1	231.0	2.3
1726	100.0	32.0	242.0	193.0	9.0	220.0	10.0
1727	93.0	13.0	119.0	160.0	17.0	211.0	7.0
1728	107.0	35.0	264.0	162.0	14.9	222.0	2.3
1729	85.0	25.0	200.0	164.0	0.0	230.0	0.0
1730	85.0	0.0	130.0	130.0	3.4	227.0	0.0
1731	93.0	19.0	130.0	182.0	17.0	240.0	7.0
1732	86.0	0.0	150.0	199.0	4.0	243.0	11.0
1733	81.0	0.0	153.0	153.0	2.3	230.0	0.0
1734	84.0	0.0	144.0	144.0	8.1	221.0	0.0
1735	85.0	0.0	150.0	150.0	9.0	210.0	0.0
1736	87.0	2.0	139.0	139.0	7.4	267.0	11.0
1737	113.0	21.0	180.0	152.0	7.0	264.0	4.0
1738	113.0	16.0	140.0	167.0	17.0	273.0	3.0
1739	110.0	23.0	190.0	168.0	19.0	257.0	7.0
1740	115.0	28.0	210.0	146.0	13.0	272.0	3.0
1741	91.0	9.0	107.0	107.0	16.0	264.0	7.0
1742	95.0	28.0	220.0	190.0	18.0	276.0	8.0
1743	89.0	3.1	143.0	143.0	0.0	240.0	14.0
1744	115.0	22.0	240.0	190.0	13.0	261.0	13.0
1745	72.0	1.6	145.0	140.0	7.0	261.0	5.0

1 - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 11 - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 111 - PERCENT BY WHICH AVERAGE SIZE OF CARGO < AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY



TABLE II.16.A RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM ST. PETERSBURG TO AMSTERDAM

SHIP SIZES IN TONS	A			B			C			D			E			F			G		
	C - 100			101 - 200			201 - 300			301 - 400			401 - 500			501 - 600			600 +		
YEAR	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
1746	140.4	90.8	47.6	212.4	69.0	40.8	256.0	5.1	4.9	-	-	-	-	-	-	-	-	-	-	-	-
1747	97.2	17.8	15.1	159.3	21.1	17.4	278.7	22.1	18.1	44.0	25.0	20.0	-	-	-	-	-	-	-	-	-
1748	91.0	7.6	7.1	139.4	9.7	8.0	297.0	29.7	22.0	370.0	5.1	4.9	-	-	-	-	-	-	-	-	-
1749	113.5	13.6	25.1	138.4	12.3	10.9	265.5	6.2	5.9	-	-	-	-	-	-	-	-	-	-	-	-
1750	92.7	3.0	2.9	174.5	29.9	23.0	234.0	1.7	1.7	-	-	-	-	-	-	-	-	-	-	-	-
1751	1.1.1	25.0	20.0	185.6	37.3	27.0	428.0	82.9	45.3	338.0	0.0	0.0	-	-	-	-	-	-	-	-	-
1752	113.3	32.4	24.5	169.4	23.4	20.2	300.0	35.1	26.0	-	-	-	-	-	-	-	-	-	-	-	-
1753	110.2	33.6	25.1	156.4	20.6	17.1	282.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1754	1.5.9	29.7	22.9	154.1	14.5	14.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1755	83.4	6.4	6.0	152.6	10.1	9.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1756	95.0	8.6	7.9	150.7	11.5	10.3	230.7	2.4	2.3	-	-	-	-	-	-	-	-	-	-	-	-
1757	133.6	56.7	36.2	178.1	33.2	24.9	470.0	63.9	39.0	-	-	-	800.0	99.0	49.7	-	-	-	-	-	-
1758	127.5	42.9	3.0	173.3	28.7	22.3	252.4	25.2	20.1	-	-	-	-	-	-	-	-	-	-	-	-
1759	162.1	79.0	44.1	203.5	45.3	31.2	237.0	9.2	8.4	-	-	-	-	-	-	-	-	-	-	-	-
1760	153.1	85.2	46.0	211.9	71.2	41.6	362.0	44.0	31.4	-	-	-	-	-	-	-	-	-	-	-	-
1761	123.0	70.0	41.3	243.3	64.7	37.3	322.0	47.0	32.0	-	-	-	-	-	-	-	-	-	-	-	-
1762	156.6	83.6	47.2	241.1	82.0	45.1	320.0	58.4	36.9	-	-	-	16.0	-96.7	***	-	-	-	-	-	-
1763	145.3	77.2	43.6	244.9	67.8	39.6	373.0	84.7	45.8	-	-	-	-	-	-	-	-	-	-	-	-
1764	161.0	81.6	44.9	189.5	41.8	29.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1765	173.4	105.1	51.2	261.4	86.2	46.3	320.0	58.4	36.9	-	-	-	-	-	-	-	-	-	-	-	-
1766	142.5	72.2	41.9	291.0	65.1	39.4	294.0	21.0	17.3	-	-	-	-	-	-	-	-	-	-	-	-
1767	176.7	108.1	51.9	255.3	76.9	41.3	240.0	18.8	15.8	-	-	-	-	-	-	-	-	-	-	-	-
1768	194.7	110.1	52.4	258.9	92.2	48.0	360.0	78.2	43.9	-	-	-	-	-	-	-	-	-	-	-	-
1769	156.0	92.0	47.0	236.7	68.6	40.7	32.0	58.4	36.9	510.0	68.9	40.8	800.0	31.4	47.7	-	-	-	-	-	-
1770	185.0	109.0	51.2	222.4	70.6	41.4	350.0	71.0	41.5	220.0	-16.7	-29.0	-	-	-	-	-	-	-	-	-
1771	163.4	91.9	47.0	234.9	57.2	36.4	315.0	45.9	31.5	-	-	-	-	-	-	-	-	-	-	-	-
1772	136.0	73.3	42.4	227.5	65.3	39.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1773	160.6	90.9	47.6	218.1	67.1	40.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1774	158.6	75.4	46.4	248.0	72.5	42.0	26.0	17.4	14.8	318.0	0.0	0.0	-	-	-	-	-	-	-	-	-
1775	164.2	86.7	46.4	213.7	65.6	37.6	218.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1776	127.7	56.8	36.2	207.3	56.5	36.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1777	135.9	60.6	37.7	133.4	9.2	13.4	320.0	41.6	27.4	-	-	-	-	-	-	-	-	-	-	-	-
1778	138.6	64.2	39.3	212.6	66.0	37.0	430.0	75.5	43.0	-	-	-	-	-	-	-	-	-	-	-	-
1779	133.3	64.8	39.3	192.6	52.6	34.5	326.7	31.7	24.1	520.0	54.6	37.2	446.0	1.8	1.8	-	-	-	-	-	-
1780	158.9	92.3	48.0	232.4	79.5	44.3	526.0	127.7	56.1	-	-	-	-	-	-	-	-	-	-	-	-
1781	121.3	85.7	46.2	237.3	81.2	44.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1782	123.5	82.9	45.3	236.4	81.8	44.7	324.0	37.3	27.2	-	-	-	-	-	-	-	-	-	-	-	-
1783	146.0	91.1	47.7	241.5	91.3	44.7	252.0	14.0	12.0	-	-	-	-	-	-	-	-	-	-	-	-
1784	202.1	115.3	53.6	235.6	80.0	44.4	42.0	101.0	50.5	-	-	-	-	-	-	-	-	-	-	-	-
1785	186.0	121.4	51.4	261.0	113.9	53.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1786	166.4	93.4	49.3	198.0	65.5	39.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF SHIP < AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

CONTINUED

TABLE II.16.A RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM ST. PETERSBURG TO AMSTERDAM

SHIP SIZES IN TONS	A			B			C			D			E			F			G		
	0 - 100	101 - 200	201 - 300	301 - 400	401 - 500	501 - 600	600 +	I	II	III	I	II	III	I	II	III	I	II	III		
1787	121.1	100.9	90.2	220.8	69.8	39.6	-	-	-	-	-	-	-	-	-	-	-	-	-		
1788	163.0	108.4	92.0	231.5	91.6	47.8	-	-	-	-	-	-	-	-	-	-	-	-	-		
1789	137.0	88.0	45.9	228.3	84.2	45.7	300.0	46.3	31.7	-	-	-	438.0	9.0	9.2	-	-	-	-		
1790	155.8	106.7	51.6	253.7	100.2	50.1	-	-	-	-	-	-	-	-	-	-	-	-	-		
1791	174.4	98.2	49.5	249.8	90.9	47.6	362.0	74.0	42.5	350.0	0.0	0.0	-	-	-	-	-	-	-		
1792	188.3	105.0	51.2	278.0	100.7	50.2	-	-	-	-	-	-	-	-	-	-	-	-	-		
1793	153.9	87.3	46.8	233.0	91.2	47.7	-	-	-	-	-	-	-	-	-	-	-	-	-		
1794	153.7	93.3	48.3	243.1	91.8	47.9	-	-	-	-	-	-	-	-	-	-	-	-	-		
1795 <sup>18</sup>	90.0	47.1	32.0	217.3	84.2	45.7	-	-	-	-	-	-	-	-	-	-	-	-	-		
1796	123.4	71.7	41.8	220.7	58.1	36.8	352.0	66.0	39.8	-	-	-	-	-	-	-	-	-	-		
1797				NO DATA AVAILABLE																	
1798				NO DATA AVAILABLE																	
1799				NO DATA AVAILABLE																	
1800				NO DATA AVAILABLE																	
1801				NO DATA AVAILABLE																	
1802				NO DATA AVAILABLE																	
1803 <sup>16</sup>				NO DATA AVAILABLE																	
1804				NO DATA AVAILABLE																	
1805				NO DATA AVAILABLE																	
1806				NO DATA AVAILABLE																	
1807				NO DATA AVAILABLE																	
1808				NO DATA AVAILABLE																	
1809				NO DATA AVAILABLE																	
1810				NO DATA AVAILABLE																	
1811				NO DATA AVAILABLE																	
1812				NO DATA AVAILABLE																	
1813				NO DATA AVAILABLE																	
1814 <sup>8</sup>	119.3	78.4	44.0	198.7	50.9	33.7	367.3	59.7	37.4	-	-	-	-	-	-	-	-	-	-		
1815	134.2	104.7	51.2	195.8	49.7	33.2	403.0	59.6	35.7	-	-	-	-	-	-	-	-	-	-		
1816	122.9	94.4	44.6	219.2	63.8	38.9	-	-	-	-	-	-	-	-	-	-	-	-	-		
1817	117.7	27.3	21.4	167.7	14.7	12.8	260.0	4.3	4.1	340.1	-0.1	-0.1	421.3	-2.3	-2.4	480.0	-0.1	-0.5	704.0	16.9	14.8
1818	128.0	64.1	39.1	198.4	38.3	27.7	250.0	11.6	10.4	-	-	-	-	-	-	-	-	-	-		
1819	117.2	69.4	41.0	206.4	39.8	29.5	226.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-		
1820	126.8	96.1	35.9	166.5	23.7	19.1	208.0	29.8	23.0	-	-	-	-	-	-	-	-	-	-		
1821	107.4	41.1	29.1	184.0	24.7	19.8	248.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-		
1822	129.6	48.6	31.8	138.5	0.4	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-		
1823 <sup>19</sup>	42.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1825	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF SHIP < AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

TABLE II-10-B RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM NAUVA TO AMSTERDAM

SHIP SIZE IN TONS	A	B	C	D	E	F	G
	6-100	101-200	201-300	301-400	401-500	501-600	600+
17051							
17061							
17071							
17081							
17091							
17101							
17111							
17121							
17131							
17141							
17151							
17161							
17171							
17181							
17191	0.0	10.0	20.0	30.0	40.0	50.0	60.0
17201	5.0	15.0	25.0	35.0	45.0	55.0	65.0
17211	10.0	20.0	30.0	40.0	50.0	60.0	70.0
17221	15.0	25.0	35.0	45.0	55.0	65.0	75.0
17231	20.0	30.0	40.0	50.0	60.0	70.0	80.0
17241	25.0	35.0	45.0	55.0	65.0	75.0	85.0
17251	30.0	40.0	50.0	60.0	70.0	80.0	90.0
17261	35.0	45.0	55.0	65.0	75.0	85.0	95.0
17271	40.0	50.0	60.0	70.0	80.0	90.0	100.0
17281	45.0	55.0	65.0	75.0	85.0	95.0	100.0
17291	50.0	60.0	70.0	80.0	90.0	100.0	100.0
17301	55.0	65.0	75.0	85.0	95.0	100.0	100.0
17311	60.0	70.0	80.0	90.0	100.0	100.0	100.0
17321	65.0	75.0	85.0	95.0	100.0	100.0	100.0
17331	70.0	80.0	90.0	100.0	100.0	100.0	100.0
17341	75.0	85.0	95.0	100.0	100.0	100.0	100.0
17351	80.0	90.0	100.0	100.0	100.0	100.0	100.0
17361	85.0	95.0	100.0	100.0	100.0	100.0	100.0
17371	90.0	100.0	100.0	100.0	100.0	100.0	100.0
17381	95.0	100.0	100.0	100.0	100.0	100.0	100.0
17391	100.0	100.0	100.0	100.0	100.0	100.0	100.0
17401	100.0	100.0	100.0	100.0	100.0	100.0	100.0
17411	100.0	100.0	100.0	100.0	100.0	100.0	100.0
17421	100.0	100.0	100.0	100.0	100.0	100.0	100.0
17431	100.0	100.0	100.0	100.0	100.0	100.0	100.0
17441	100.0	100.0	100.0	100.0	100.0	100.0	100.0
17451	100.0	100.0	100.0	100.0	100.0	100.0	100.0

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF CARGO < AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY

CONTINUED

TABLE II.1A.6 RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM NARVA TO AMSTERDAM

SHIP SIZES IN TONS	A			B			C			D			E			F			G		
	0 - 100			101 - 200			201 - 300			301 - 400			401 - 500			501 - 600			600 +		
YEAR	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
1746	-	-	-	204.0	2.0	2.0	225.0	1.8	1.7	339.3	1.6	1.6	444.0	2.4	2.0	-	-	-	-	-	-
1747	-	-	-	294.0	50.4	30.1	231.3	1.4	1.4	318.6	1.1	1.1	-	-	-	-	-	-	-	-	-
1748	-	-	-	134.5	7.8	7.3	274.7	1.5	1.5	343.0	2.5	2.4	-	-	-	-	-	-	-	-	-
1749	102.0	52.0	34.2	172.0	1.2	1.2	283.2	1.3	1.1	341.5	1.5	1.5	-	-	-	-	-	-	-	-	-
1750	92.0	3.1	3.0	110.0	-	-	271.9	0.2	0.2	342.7	1.7	1.6	478.0	0.1	0.0	-	-	-	-	-	-
1751	-	-	-	147.0	1.4	1.4	293.6	-0.6	-0.6	442.3	1.0	1.0	4.8.0	0.1	0.1	-	-	-	-	-	-
1752	-	-	-	196.0	0.0	0.0	222.8	1.3	1.3	348.0	1.2	1.2	-	-	-	-	-	-	-	-	-
1753	-	-	-	134.0	0.0	0.0	247.9	1.7	1.7	347.6	0.4	0.4	402.0	0.0	0.0	334.0	-37.3	-19.0	-	-	-
1754	-	-	-	152.0	0.0	0.0	271.0	1.0	1.0	347.5	1.1	1.1	-	-	-	-	-	-	-	-	-
1755	93.0	0.0	0.0	-	-	-	272.9	0.4	0.4	391.1	0.9	0.9	411.7	0.0	0.0	-	-	-	-	-	-
1756	-	-	-	142.0	-2.2	-2.2	256.0	-	-	377.3	-	-	-	-	-	-	-	-	-	-	-
1757	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1758	-	-	-	189.0	1.0	0.9	259.0	0.1	0.0	308.1	0.9	0.7	410.0	0.0	0.0	-	-	-	-	-	-
1759	76.0	-	-	174.0	-	-	191.7	2.2	2.1	361.4	0.8	0.8	425.0	0.0	0.0	-	-	-	-	-	-
1760	-	-	-	-	-	-	273.0	1.0	1.0	370.5	0.8	0.7	432.0	3.1	3.2	-	-	-	-	-	-
1761	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1762	-	-	-	-	-	-	-	-	-	352.2	-	-	415.7	0.0	0.0	-	-	-	-	-	-
1763	-	-	-	188.0	0.0	0.0	255.7	0.0	0.0	355.5	0.4	0.4	415.1	0.6	0.6	-	-	-	-	-	-
1764	10.0	61.0	34.0	152.0	28.8	22.4	244.0	0.1	0.0	308.5	0.3	0.3	414.5	0.0	0.0	-	-	-	-	-	-
1765	-	-	-	188.0	32.6	24.4	241.0	2.1	2.1	355.4	0.1	0.1	417.0	1.0	1.0	572.0	-	-	-	-	-
1766	77.0	89.0	47.2	192.0	9.1	8.1	230.0	0.8	0.5	361.2	0.0	0.0	415.5	0.0	0.0	-	-	-	-	-	-
1767	-	-	-	148.0	0.0	0.0	-	-	-	361.0	0.0	0.0	415.2	0.0	0.0	-	-	-	-	-	-
1768	-	-	-	154.0	0.0	0.0	312.0	23.3	15.0	362.8	0.0	0.0	415.7	0.2	0.2	-	-	-	-	-	-
1769	-	-	-	-	-	-	260.0	0.0	0.0	378.3	0.4	0.4	419.2	0.0	0.0	-	-	-	-	-	-
1770	-	-	-	-	-	-	-	-	-	373.2	0.0	0.0	415.5	0.1	0.1	-	-	-	-	-	-
1771	-	-	-	140.0	0.0	0.0	-	-	-	369.1	0.0	0.0	414.0	0.0	0.0	-	-	-	-	-	-
1772	-	-	-	-	-	-	-	-	-	377.1	0.2	0.2	421.7	0.4	0.4	-	-	-	-	-	-
1773	-	-	-	102.0	0.0	0.0	-	-	-	369.6	0.0	0.0	417.4	0.2	0.2	-	-	-	-	-	-
1774	-	-	-	232.0	22.3	24.3	-	-	-	372.9	0.0	0.0	413.1	0.0	0.0	-	-	-	-	-	-
1775	-	NO DATA AVAILABLE			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1776	-	-	-	196.0	0.0	0.0	-	-	-	370.7	0.0	0.0	420.2	0.0	0.0	-	-	-	-	-	-
1777	-	-	-	-	-	-	-	-	-	380.0	1.0	0.0	432.7	0.0	0.0	-	-	-	-	-	-
1778	-	-	-	-	-	-	-	-	-	381.4	0.0	0.0	431.5	0.0	0.0	-	-	-	-	-	-
1779	-	-	-	-	-	-	296.0	21.3	17.4	-	-	-	434.6	0.2	0.2	-	-	-	-	-	-
1780	-	-	-	-	-	-	-	-	-	374.0	0.0	0.0	431.0	3.2	3.1	-	-	-	-	-	-
1781	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1782	-	-	-	-	-	-	-	-	-	370.0	11.2	11.1	432.0	1.0	1.0	-	-	-	-	-	-
1783	-	-	-	-	-	-	29.0	0.0	0.0	365.1	0.0	0.0	433.8	0.1	0.1	-	-	-	-	-	-
1784	48.0	0.0	0.0	176.0	0.0	0.0	264.0	0.0	0.0	332.7	0.0	0.0	441.6	0.1	0.1	-	-	-	-	-	-
1785	-	-	-	163.0	52.3	34.4	280.0	2.0	2.0	303.1	0.0	0.0	441.1	0.0	0.0	-	-	-	-	-	-
1786	69.0	0.0	0.0	150.5	0.0	0.0	264.0	0.0	0.0	361.7	0.0	0.0	444.0	0.0	0.0	-	-	-	-	-	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF SHIP < AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

CONTINUED:

TABLE II.16.18 RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM NARVA TO AMSTERDAM

SHIP SIZES IN TONS	A	B	C	D	E	F	G											
	1-100	101-200	201-300	301-400	401-500	501-600	600+											
1767	12.0	64.5	39.2	144.0	1.9	272.0	0.0	0.0	446.9	0.6	0.6	-	-	-	-	-	-	
1768	9.0	45.2	31.1	216.0	98.8	37.0	276.0	0.1	5.8	362.4	0.0	0.0	446.3	0.2	0.2	-	-	-
1769	-	-	-	-	-	-	276.0	0.0	0.0	363.6	2.5	2.5	446.6	0.5	0.5	-	-	-
1790	-	-	-	-	-	-	294.0	0.0	0.0	356.2	0.2	0.2	446.2	0.0	0.0	-	-	-
1791 13	63.8	0.0	0.0	182.0	26.2	20.6	276.9	7.6	6.9	371.3	0.0	0.0	444.0	0.0	0.0	-	-	-
1792	-	-	-	128.0	9.8	9.8	237.3	0.0	0.0	362.2	0.0	0.0	448.0	0.0	0.0	-	-	-
1793	-	-	-	134.8	0.0	0.0	-	-	-	367.3	0.0	0.0	433.3	0.4	0.4	-	-	-
1794 13	40.8	0.0	0.0	184.5	31.1	23.7	-	-	-	367.3	0.0	0.0	443.8	0.0	0.0	-	-	-
1795	-	-	-	-	-	-	247.3	0.0	0.0	-	-	-	410.0	0.0	0.0	-	-	-
1796	-	-	-	148.0	0.0	0.0	239.0	0.0	0.0	365.7	0.0	0.0	446.5	0.0	0.0	-	-	-
1797	68.0	0.0	0.0	-	-	-	220.0	0.0	0.0	-	-	-	443.7	0.0	0.0	-	-	-
1798	96.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	-	441.0	25.6	20.4	634.6	39.6	29.4	-	-	-
1801	-	-	-	-	-	-	-	-	-	678.0	-	-	678.0	44.3	30.7	-	-	-
1802	-	-	-	-	-	-	322.0	35.3	26.1	984.0	48.4	32.6	980.8	47.1	32.0	-	-	-
1803	-	-	-	-	-	-	-	-	880.0	50.3	33.5	624.7	38.6	27.9	-	-	-	-
1804	140.0	58.3	36.0	196.8	65.1	39.4	-	-	-	470.0	62.3	34.4	586.0	26.6	17.1	-	-	-
1805	102.3	64.2	39.1	178.8	50.7	33.6	370.0	53.7	38.0	470.0	62.3	34.4	586.0	26.6	17.1	-	-	-
1806	-	-	-	248.0	32.4	24.8	348.5	44.3	30.7	536.0	30.7	26.9	-	-	-	-	-	-
1807	114.0	33.3	25.0	184.0	30.7	25.0	292.0	32.7	24.7	-	-	-	-	-	-	-	-	-
1808 17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1814 8	190.0	63.0	34.7	208.0	36.7	27.9	336.0	58.5	36.9	-	-	-	626.0	34.9	25.9	-	-	-
1815	111.0	32.3	24.4	263.0	36.8	26.8	-	-	-	500.0	33.9	25.3	610.0	33.2	24.9	-	-	-
1816	117.5	33.5	25.1	194.0	34.6	28.7	399.0	33.0	24.0	477.0	34.0	25.4	630.0	41.3	29.2	-	-	-
1817	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1818	-	-	-	170.0	0.0	0.0	204.0	0.0	0.0	332.0	0.0	0.0	468.0	0.0	0.0	-	-	-
1819	77.8	1.3	1.3	153.1	0.0	0.0	-	-	-	380.8	5.0	0.0	484.0	0.0	0.0	510.0	0.8	0.8
1820	-	-	-	157.0	0.0	0.0	-	-	-	390.0	0.0	0.0	454.0	0.0	0.0	-	-	-
1821	-	-	-	167.0	0.4	0.4	220.0	0.0	0.0	-	-	-	484.0	0.0	0.0	-	-	-
1822 10	70.0	0.0	0.0	162.7	0.0	0.0	210.0	0.0	0.0	324.0	0.0	0.0	-	-	-	-	-	-
1823 10	74.0	0.0	0.0	158.4	0.0	0.0	217.1	-1.2	-1.2	348.7	0.4	0.4	-	-	-	-	-	-
1824	-	-	-	153.4	0.1	0.1	211.0	0.0	0.0	304.0	0.0	0.0	-	-	-	-	-	-
1825 20	77.0	0.0	0.0	158.7	0.4	0.4	-	-	-	357.0	0.0	0.0	-	-	-	-	-	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF CARGO < AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY



TABLE 18.10.C RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM RIGA TO AMSTERDAM

SHIP SIZE IN TONS	A - 10		B - 101 - 200		C - 201 - 300		D - 301 - 400		E - 401 - 500		F - 501 - 600		G - 600 +		
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	
1746	177.2	37.0	199.3	32.0	24.0	200.1	19.1	10.7	-	-	-	-	-	-	
1747	119.7	42.6	29.9	18.8	17.8	249.2	10.9	9.9	-	-	-	-	-	-	
1748	111.0	78.0	27.0	17.0	17.1	227.6	2.0	1.9	-	-	-	-	-	-	
1749	115.0	18.0	13.0	10.7	10.8	235.4	3.1	3.0	-	-	-	-	-	-	
1750	131.7	43.4	30.3	19.6	18.4	214.1	4.3	4.1	142.0	0.0	0.0	-	-	-	
1751	126.8	40.3	31.7	16.4	14.8	308.4	31.7	24.1	-	-	-	-	-	-	
1752	1 01.1	29.4	22.7	17.4	18.2	234.7	0.9	9.5	-	-	-	-	-	-	
1753	94.7	17.2	14.6	12.1	12.0	233.1	4.8	4.3	-	-	-	-	-	-	
1754	1 18.4	32.1	24.2	17.1	15.4	239.1	3.4	3.4	300.0	14.8	14.0	402.0	0.0	0.0	
1755	1 17.0	31.1	23.7	18.1	15.3	230.3	9.3	9.0	142.7	1.2	1.2	40.0	0.0	0.0	
1756	138.3	61.7	34.2	21.6	21.8	231.9	7.3	7.5	347.1	2.1	2.1	402.1	0.0	0.0	
1757	122.3	42.1	29.0	21.3	24.7	274.7	18.9	15.3	354.3	3.7	3.7	410.7	0.0	0.0	
1758	122.5	41.8	29.5	18.2	21.3	236.4	2.6	2.5	380.7	7.1	7.1	40.4	0.0	0.0	
1759	143.0	73.3	42.3	187.4	40.8	279.3	14.9	12.7	382.4	0.8	0.8	407.1	0.4	0.4	
1760	143.7	73.4	42.3	211.9	37.4	254.4	4.3	0.5	348.0	2.9	2.9	415.1	0.4	0.4	
1761	152.4	48.0	43.8	213.3	33.8	272.4	10.3	13.3	370.2	1.0	1.0	428.9	3.6	3.6	
1762	104.4	48.3	40.0	220.2	37.7	332.7	39.7	28.4	366.7	0.8	0.8	410.4	0.0	0.0	
1763	146.1	58.8	37.0	198.7	37.6	271.3	244.1	11.7	11.5	359.3	1.9	1.4	439.3	0.0	0.0
1764	139.0	60.7	37.6	213.7	40.7	280.1	7.1	6.7	348.0	0.0	0.0	410.4	0.0	0.0	
1765	173.5	43.7	45.0	210.7	34.0	267.5	7.5	7.8	384.6	0.2	0.2	414.9	0.0	0.0	
1766	149.8	47.0	44.8	194.1	21.0	203.7	12.7	11.2	341.9	0.0	0.0	413.8	0.0	0.0	
1767	118.0	44.7	45.9	213.1	34.8	249.7	31.2	19.0	344.1	4.0	4.0	413.5	0.0	0.0	
1768	15 0.8	47.0	41.4	101.4	40.8	310.0	273.2	17.7	15.0	343.3	3.6	3.5	438.0	0.0	0.0
1769	155.1	78.1	43.0	217.1	31.1	211.8	211.8	18.0	15.9	346.1	2.5	2.4	419.7	0.0	0.0
1770	157.3	73.0	42.2	243.1	47.3	310.9	29.3	22.5	345.2	0.7	0.7	418.3	0.0	0.0	
1771	119.4	41.1	44.5	259.4	38.7	300.0	27.4	17.4	369.4	7.0	7.0	413.0	0.0	0.0	
1772	146.2	40.3	44.8	224.1	41.6	301.1	27.4	17.9	346.0	0.1	0.1	413.2	0.0	0.0	
1773	143.3	41.3	44.8	213.3	65.7	391.7	114.5	10.0	23.4	370.3	3.4	3.1	417.6	0.5	0.5
1774	15 0.9	41.6	44.0	210.5	46.4	300.0	18.2	11.3	365.1	1.4	1.4	423.4	1.5	1.5	
1775	NO DATA AVAILABLE														
1776	121.0	42.0	49.8	195.6	42.7	290.0	123.7	14.0	25.9	307.4	0.2	0.0	423.9	0.0	0.0
1777	149.0	69.4	41.0	221.5	36.4	324.3	324.3	27.3	21.9	344.1	0.2	0.2	424.7	0.0	0.0
1778	137.1	79.5	42.0	223.2	45.7	337.0	41.4	24.3	365.0	0.0	0.0	430.5	2.0	2.0	
1779	146.1	70.7	41.4	220.4	34.6	275.0	210.0	17.0	34.3	316.3	3.6	3.0	430.8	2.0	2.0
1780	173.4	48.0	47.0	224.4	42.4	241.4	210.4	19.2	41.2	319.2	21.9	17.0	473.0	0.0	0.0
1781	154.7	47.7	46.7	229.9	79.4	404.4	230.0	19.6	30.7	300.7	11.7	11.5	586.7	30.2	24.2
1782	144.6	48.3	44.0	189.3	49.1	32.7	249.3	12.0	11.8	479.2	13.0	12.2	447.4	1.2	1.2
1783	144.0	47.4	44.7	199.4	54.3	34.2	244.3	18.5	18.5	381.4	13.1	11.5	497.4	3.4	3.4
1784	152.3	94.1	44.5	216.0	57.8	46.6	333.9	34.9	27.8	424.5	30.0	21.6	478.4	0.7	0.7
1785	105.6	93.4	44.3	211.3	49.6	31.2	240.1	24.1	24.1	346.4	6.0	9.0	448.1	3.0	3.7
1786	143.7	75.3	42.0	208.3	45.1	31.1	244.2	9.4	14.7	349.7	4.1	3.0	430.1	1.0	1.4

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF CARGO < AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY

CONTINUED

TABLE II.10.C RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM RIGA TO AMSTERDAM

SHIP SIZES IN TONS	A - 100		B - 101 - 200		C - 201 - 300		D - 301 - 400		E - 401 - 500		F - 501 - 600		G - 600 +					
	1	II	1	II	1	II	1	II	1	II	1	II						
1787	171.9	48.9	47.0	182.1	35.6	26.3	283.8	5.1	4.9	336.8	0.3	0.3	418.0	1.5	1.4	-	-	
1788	181.3	110.0	52.4	224.7	64.3	39.1	299.1	15.9	13.8	323.3	1.3	1.2	428.0	0.6	0.6	-	-	
1789	184.8	101.2	51.3	233.3	69.8	40.9	302.2	22.3	18.2	494.0	48.3	31.2	431.0	5.4	5.1	268.0	48.0-94.7	
1790	189.4	97.6	49.4	232.0	70.6	41.3	359.7	42.8	29.7	428.0	19.8	13.6	-	-	-	-	-	
1791	192.8	100.0	50.0	230.7	76.4	43.3	362.0	40.6	28.9	381.3	22.7	18.5	-	-	-	-	-	
1792	192.3	86.3	46.3	211.3	55.2	35.6	327.3	30.4	23.3	489.0	51.4	33.9	452.0	0.9	0.9	-	-	
1793	123.6	57.1	30.3	200.5	47.0	32.0	294.0	16.6	14.2	442.6	10.4	23.3	-	-	-	-	-	
1794	136.9	68.8	40.8	173.2	30.7	23.8	295.8	21.4	17.6	-	-	-	484.0	0.0	0.0	-	-	
1795	128.2	86.5	46.4	171.3	36.1	26.3	-	-	-	392.0	0.0	0.0	-	-	-	-	-	
1796	136.8	83.0	43.4	199.2	49.1	27.0	293.0	37.5	27.2	439.0	24.7	22.3	-	-	-	-	-	
1797	151.3	92.6	44.1	198.9	37.2	27.1	273.1	14.7	12.8	324.0	0.0	0.0	-	-	-	-	-	
1798	134.2	62.0	38.3	173.0	37.2	27.1	232.0	7.1	7.0	344.7	2.0	1.9	-	-	-	-	-	
1799	100.0	4.2	4.0	174.0	28.4	21.2	-	-	-	-	-	-	-	-	-	-	-	
1800	136.0	82.9	48.3	197.4	48.3	19.2	261.5	20.0	20.0	-	-	-	-	-	-	-	-	
1801	132.0	74.4	42.7	201.3	59.6	37.3	294.0	13.1	11.8	-	-	-	-	-	-	-	-	
1802	148.8	95.9	48.0	223.0	60.5	37.7	335.5	22.0	34.5	498.2	24.3	30.7	-	-	-	-	-	
1803	142.6	85.1	46.0	214.9	64.9	39.4	317.0	43.4	30.3	449.0	14.0	25.4	670.0	60.3	37.6	742.0	43.2 20.2 1160.0 83.8 45.3	
1804	139.2	71.8	41.8	205.0	67.0	36.3	321.0	49.3	33.0	-	-	-	802.0	43.2	37.6	802.0	14.8 39.4	
1805	136.9	80.5	44.6	208.0	63.4	38.8	360.8	41.8	29.3	-	-	-	-	-	-	-	-	
1806	130.4	74.7	42.8	214.1	69.8	41.1	416.0	62.5	38.5	-	-	-	-	-	-	-	-	
1807	119.8	97.6	49.4	228.0	90.0	47.4	-	-	-	-	-	-	-	-	-	-	-	
1808																		
1809																		
1810																		
1811																		
1812																		
1813																		
1814	113.2	96.9	49.7	225.0	67.8	40.1	330.8	36.2	26.6	-	-	-	-	-	-	-	-	
1815	124.6	85.0	46.2	213.2	52.0	34.2	344.0	37.6	27.3	-	-	-	-	-	-	-	-	
1816	114.9	64.6	39.3	215.5	47.7	32.3	361.0	48.8	32.8	-	-	-	690.0	48.4	32.6	-	-	
1817	117.9	41.6	29.4	190.9	24.9	19.9	266.5	13.2	11.7	386.2	14.0	12.1	475.0	6.3	5.9	718.0	0.0 0.0	
1818	119.1	44.3	3.7	187.4	24.3	19.8	295.0	4.9	4.7	-	-	-	-	-	-	-	-	
1819	127.7	46.4	31.7	182.9	23.6	16.2	219.6	1.4	1.3	-	-	-	-	-	-	-	-	
1820	119.0	25.7	20.4	179.4	16.2	13.9	263.6	10.4	9.4	390.0	0.0	0.0	-	-	-	-	-	
1821	114.8	19.2	26.2	193.7	24.3	19.5	248.0	6.6	6.2	-	-	-	-	-	-	-	-	
1822	110.0	14.7	27.5	170.7	17.6	15.0	222.5	0.5	0.5	-	-	-	-	-	-	-	-	
1823	108.8	24.6	19.7	171.8	8.2	7.6	246.9	1.6	1.6	302.0	0.0	0.0	-	-	-	-	-	
1824	88.3	29.3	22.7	175.7	4.6	4.4	219.5	0.5	0.5	-	-	-	-	-	-	-	-	
1825	97.6	26.0	20.4	187.8	3.1	3.0	212.8	1.0	1.0	-	-	-	440.0	4.8	4.8	-	-	

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF CARGO < AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY







TABLE 11.16.0 RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM VIBORG TO AMSTERDAM

SHIP SIZES IN TONS	A			B			C			D			E			F			G		
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
1787	114.0	21.3	17.9	153.2	10.4	9.4	231.3	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1788	-	-	-	176.0	0.0	0.0	238.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1789	-	-	-	-	-	-	229.0	0.0	0.0	380.0	0.0	0.0	448.0	0.0	0.0	-	-	-	-	-	-
1790	63.0	0.0	0.0	181.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1791	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1792	64.0	77.8	43.8	148.0	8.0	7.4	239.0	0.8	0.8	-	-	-	-	-	-	-	-	-	-	-	-
1793	109.0	29.3	20.2	156.7	0.0	0.0	233.2	2.8	2.7	378.0	0.0	0.0	-	-	-	-	-	-	-	-	-
1794	100.0	28.2	22.0	198.0	9.8	4.5	225.5	0.0	0.0	380.0	0.0	0.0	-	-	-	-	-	-	-	-	-
1795	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	157.0	0.0	0.0	268.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1797	-	-	-	179.3	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1798	-	-	-	134.0	0.0	0.0	268.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1799	-	-	-	127.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	184.0	50.8	33.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1801	-	-	-	124.0	0.0	0.0	416.0	46.9	31.7	-	-	-	-	-	-	-	-	-	-	-	-
1802	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1803	100.0	78.6	44.0	-	-	-	376.0	49.2	33.0	-	-	-	-	-	-	-	-	-	-	-	-
1804	117.0	20.2	16.8	-	-	-	400.0	49.3	33.0	-	-	-	-	-	-	-	-	-	-	-	-
1805	120.0	28.6	22.2	173.3	31.3	23.0	345.0	34.7	25.9	-	-	-	-	-	-	-	-	-	-	-	-
1806	-	-	-	-	-	-	336.0	33.2	25.0	-	-	-	-	-	-	-	-	-	-	-	-
1807	84.0	35.5	26.2	218.0	53.8	34.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	225.3	52.3	34.0	352.0	29.7	20.8	-	-	-	-	-	-	-	-	-	-	-	-
1815	95.0	37.7	27.4	174.7	35.1	26.0	400.0	65.0	39.4	472.0	34.1	25.4	-	-	-	-	-	-	-	-	-
1816	-	-	-	183.0	38.0	27.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1817	-	-	-	173.0	16.1	13.9	264.0	4.8	4.9	-	-	-	-	-	-	-	-	-	-	-	-
1818	-	-	-	150.0	6.6	6.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1819	-	-	-	118.0	5.0	0.0	-	-	-	-	-	-	444.8	0.0	0.0	578.0	0.0	0.0	-	-	-
1820	-	-	-	127.3	1.4	1.0	232.0	-7.9	-5.6	346.0	0.0	0.0	445.0	0.0	0.0	-	-	-	-	-	-
1821	-	-	-	181.0	11.0	9.0	254.0	1.6	1.6	350.0	0.0	0.0	-	-	-	-	-	-	-	-	-
1822	-	-	-	-	-	-	250.0	0.0	0.0	340.0	0.0	0.0	-	-	-	-	-	-	-	-	-
1823	-	-	-	-	-	-	224.0	0.0	0.0	-	-	-	496.0	0.0	0.0	-	-	-	-	-	-
1824	-	-	-	169.0	0.0	0.0	274.0	0.0	0.0	336.0	0.0	0.0	-	-	-	-	-	-	-	-	-
1825	-	-	-	-	-	-	-	-	-	372.0	0.0	0.0	-	-	-	-	-	-	-	-	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF SHIP < AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

TABLE 11-16.C RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM REVAL TO AMSTERDAM

SHIP SIZES IN TONS	A 1 - 100			B 101 - 200			C 201 - 300			D 301 - 400			E 401 - 500			F 501 - 600			G 600 +		
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
1705	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE																				
1709	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1710	91.0	90.0	33.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1711	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1712	70.0	10.8	10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1713	80.0	10.4	10.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1714	70.0	43.0	3.05	-	-	-	312.0	41.8	29.5	-	-	-	-	-	-	-	-	-	-	-	-
1715	40.0	33.7	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	34.7	20.0	21.0	149.0	29.4	22.0	347.1	34.3	27.7	467.0	45.3	31.2	-	-	-	-	-	-	-	-	-
1717	44.0	0.0	0.0	277.7	64.0	70.7	343.0	23.7	2.0	-	-	-	-	-	-	-	-	-	-	-	-
1718	-	-	-	210.0	5.0	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1719	1.0	36.3	36.0	107.0	33.3	23.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1720	30.7	54.0	15.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1721	34.0	20.0	16.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1722	14.0	40.0	20.0	100.0	0.7	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1723	70.0	5.4	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1724	60.0	31.0	23.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1725	22.7	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1726	50.0	-12.9	-14.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1727	70.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1728	50.0	14.3	12.0	203.3	43.0	31.0	592.7	17.0	31.0	-	-	-	-	-	-	-	-	-	-	-	-
1729	9.0	40.0	20.0	192.4	57.7	36.0	417.0	75.1	42.7	-	-	-	-	-	-	-	-	-	-	-	-
1730	0.0	32.0	24.4	192.7	48.0	31.4	410.0	23.0	40.0	-	-	-	-	-	-	-	-	-	-	-	-
1731	80.0	26.3	20.8	217.0	49.5	33.1	391.2	63.0	39.7	-	-	-	-	-	-	-	-	-	-	-	-
1732	50.0	0.0	0.0	193.1	34.2	27.7	340.0	60.0	41.5	-	-	-	-	-	-	-	-	-	-	-	-
1733	70.0	0.0	0.0	100.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1734	120.0	38.3	27.0	202.0	54.7	30.4	430.0	91.3	47.7	580.0	44.0	47.1	-	-	-	-	-	-	-	-	-
1735	-	-	-	143.0	21.0	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1736	91.0	11.0	9.9	230.0	91.7	47.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1737	122.2	59.1	37.2	260.0	69.0	41.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1738	120.0	64.7	39.3	220.0	96.7	30.2	384.0	30.1	47.4	-	-	-	-	-	-	-	-	-	-	-	-
1739	111.8	52.0	34.5	177.0	41.9	29.0	400.0	70.0	43.0	600.0	40.2	40.0	-	-	-	-	-	-	-	-	-
1740	123.3	53.0	34.0	210.2	47.0	37.1	400.0	70.0	43.0	600.0	40.2	40.0	-	-	-	-	-	-	-	-	-
1741	114.0	53.0	34.0	200.0	50.0	34.7	300.0	70.0	41.0	-	-	-	-	-	-	-	-	-	-	-	-
1742	80.0	0.0	0.0	117.0	1.7	1.7	270.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1743	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1744	-	-	-	172.0	30.7	27.0	244.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1745	-	-	-	170.0	47.3	32.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF SHIP < AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

CONTINUED

-130-

TABLE II.10.2 RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM REVAL TO AMSTERDAM

SHIP SIZE IN TONS	A	B	C	D	E	F	G	
	101 - 150	151 - 200	201 - 250	251 - 300	301 - 400	401 - 500	501 - 600	
1746	142.7	114.4	150.7	210.0	17.3	333.3	110.0	50.9
1747	62.1	12.7	11.3	79.3	41.0	-	-	-
1748	117.0	40.0	20.0	120.0	0.0	0.0	-	-
1749	121.0	23.1	16.7	100.0	0.0	0.0	-	-
1750	111.0	27.1	21.3	219.0	0.0	0.0	-	-
1751	100.0	56.3	30.0	-	-	320.0	0.0	47.3
1752	70.0	33.0	20.0	100.0	0.0	0.0	-	-
1753	115.0	62.7	30.0	100.0	0.0	0.0	-	-
1754	122.0	41.0	20.0	-	-	-	-	-
1755	61.0	70.0	40.0	40.0	0.0	0.0	-	-
1756	117.0	95.0	39.7	100.0	0.0	0.0	-	-
1757	-	-	-	-	-	310.0	0.0	40.2
1758	-	-	-	-	-	-	-	-
1759	-	-	-	-	-	-	-	-
1760	70.0	77.3	43.0	100.0	0.0	0.0	-	-
1761	120.0	76.2	43.0	210.0	0.0	0.0	-	-
1762	120.0	33.0	30.0	200.0	0.0	0.0	-	-
1763	100.0	71.0	41.0	200.0	0.0	0.0	-	-
1764	101.0	66.7	41.0	100.0	0.0	0.0	-	-
1765	130.0	60.0	40.0	-	-	-	-	-
1766	100.0	77.0	41.0	-	-	-	-	-
1767	-	-	-	-	-	300.0	0.0	20.7
1768	120.0	87.0	40.7	-	-	-	-	-
1769	61.0	25.0	20.0	100.0	0.0	0.0	-	-
1770	150.0	72.7	47.1	100.0	0.0	0.0	-	-
1771	19.0	85.0	46.0	210.0	0.0	0.0	-	-
1772	180.0	87.0	47.0	100.0	0.0	0.0	-	-
1773	-	-	-	100.0	0.0	0.0	-	-
1774	120.0	69.0	41.0	100.0	0.0	0.0	-	-
1775	-	-	-	-	-	-	-	-
1776	110.0	50.0	30.0	100.0	0.0	0.0	-	-
1777	120.0	20.0	10.0	100.0	0.0	0.0	-	-
1778	70.0	40.0	20.0	200.0	0.0	0.0	-	-
1779	-	-	-	200.0	0.0	0.0	-	-
1780	-	-	-	-	-	-	-	-
1781	130.0	97.0	49.2	-	-	-	-	-
1782	100.0	81.0	40.0	100.0	0.0	0.0	-	-
1783	120.0	106.7	51.6	200.0	0.0	0.0	-	-
1784	-	-	-	200.0	0.0	0.0	-	-
1785	-	-	-	100.0	0.0	0.0	-	-
1786	-	-	-	-	-	-	-	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF CARGO < AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY

CONTINUED

TABLE II.10.4 - RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP - IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM REVAL TO AMSTERDAM

SHIP SIZES IN TONS	A 101 - 100	B 131 - 200	C 201 - 300	D 361 - 400	E 401 - 500	F 501 - 600	G 600 +
1797	-	-	-	-	-	-	-
1798	-	154.0	0.0	0.0	-	-	-
1799	-	-	-	-	-	-	-
1799	-	-	-	-	-	-	-
1799	-	-	-	-	-	-	-
1799	81.0	45.0	-	-	-	-	-
1799	-	-	-	-	-	-	-
1799	-	176.0	0.0	0.0	-	-	-
1799	-	-	-	-	-	-	-
1799	117.0	91.0	47.9	516.0	74.2	42.6	-
1799	109.0	59.7	35.6	-	-	-	-
1799	67.0	66.7	43.0	259.0	92.5	48.1	-
1800	-	-	-	-	-	-	-
1801	-	-	-	-	-	-	-
1802	134.0	97.1	49.3	246.0	64.0	39.0	-
1802	166.0	122.4	51.6	228.0	46.2	31.6	-
1804	-	-	-	-	-	-	-
1805	-	-	-	-	-	-	-
1806	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-
1814	10.0	26.9	20.8	146.0	32.7	24.7	-
1815	69.0	36.9	27.0	189.5	30.2	23.2	-
1816	-	-	-	-	-	-	-
1817	-	-	-	-	158.5	3.7	3.5
1818	-	-	-	-	-	-	-
1819	-	-	-	-	-	-	-
1820	-	-	-	-	170.0	0.0	0.0
1821	-	-	-	-	-	-	-
1822	-	-	-	-	-	-	-
1823	-	-	-	-	-	-	-
1824	-	-	-	-	-	-	-
1825	-	-	-	-	-	-	-
1825	-	-	-	-	-	-	-

1 - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 11 - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 111 - PERCENT BY WHICH AVERAGE SIZE OF CARGO < AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY

TABLE 11.16.F RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM ESTONIA TO AMSTERDAM

SHIP SIZES IN TONS	A			B			C			D			E			F			G		
	1-100	101-200	201-300	301-400	401-500	501-600	601-700	701-800	801-900	901-1000	1001-1500	1501-2000	2001-3000	3001-4000	4001-5000	5001-6000	6001-7000	7001-8000	8001-9000	9001-10000	
YEAR	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
17051	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17061	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17071	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1708	NO DATA AVAILABLE																				
17092	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1716	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1717	-	-	-	50.0	-55.0	-44.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1718	-	-	-	-	-	-	-	-	-	400.0	13.6	12.0	-	-	-	-	-	-	-	-	-
1719	-	-	-	-	-	-	-	-	-	4.4	14.8	12.9	436.0	0.0	0.0	-	-	-	-	-	-
1720	74.3	14.0	12.8	120.0	3.4	3.3	27.0	1.5	1.5	424.0	0.7	9.9	-	-	-	-	-	-	-	-	
1721	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1722	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1723	-	-	-	-	-	-	-	-	-	406.5	7.9	7.3	472.0	12.4	11.0	-	-	-	-	-	-
1724	100.0	4.2	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1725	38.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1726	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1727	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1728	94.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1729	-	-	-	-	-	-	232.0	0.6	0.6	-	-	-	-	-	-	-	-	-	-	-	-
1730	98.0	69.1	4.8	94.0	-24.2	-31.0	237.5	4.2	4.0	33.0	3.1	1.0	-	-	-	-	-	-	-	-	
1731	116.0	50.6	33.6	150.0	0.0	0.0	249.0	0.0	0.0	312.0	-	-	-	-	-	-	-	-	-	-	-
1732	77.3	13.7	12.1	130.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1733	-	-	-	162.0	3.8	3.7	248.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1734	120.0	45.5	31.3	-	-	-	211.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1735	-	-	-	180.0	-3.2	-3.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1736	-	-	-	152.0	4.6	4.4	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1737	-	-	-	136.0	0.0	0.0	236.0	-4.5	-4.7	320.0	0.0	0.0	-	-	-	-	-	-	-	-	-
1738	110.0	32.2	24.3	130.0	21.4	16.9	245.5	-	-	301.0	9.1	4.3	-	-	-	-	-	-	-	-	-
1739	116.7	65.9	39.7	173.3	32.0	24.8	240.0	2.0	2.0	325.0	1.4	1.4	-	-	-	-	-	-	-	-	-
1740	93.4	57.5	36.5	200.0	48.3	32.6	236.0	0.0	0.0	325.0	1.2	1.2	-	-	-	-	-	-	-	-	-
1741	81.3	53.0	34.6	324.0	107.7	51.0	274.5	0.0	0.0	334.0	-	-	-	-	-	-	-	-	-	-	-
1742	58.0	0.0	0.0	198.0	0.0	0.0	248.0	0.0	0.0	343.0	0.0	0.0	-	-	-	-	-	-	-	-	-
1743	-	-	-	149.0	0.0	0.0	229.3	0.0	0.0	350.5	1.6	1.6	-	-	-	-	-	-	-	-	-
1744	-	-	-	191.3	0.0	0.0	247.0	0.0	0.0	336.5	1.5	1.5	480.0	-	-	-	-	-	-	-	-
1745	52.0	4.0	3.6	172.0	8.9	8.1	273.5	1.2	1.2	331.4	0.4	0.4	-	-	-	-	-	-	-	-	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF SHIP < AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

CONTINUED

TABLE II.16.F RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM ESTONIA TO AMSTERDAM

SHIP SIZES IN TONS	A 101 - 100			B 101 - 200			C 201 - 300			D 301 - 400			E 401 - 500			F 501 - 600			G 600 +		
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
1746	7.1	8.2	7.0	-	-	-	274.0	0.0	0.0	343.0	6.0	5.7	-	-	-	-	-	-	-	-	-
1747	7.7	0.0	0.0	-	-	-	21.0	0.0	0.0	329.1	1.5	1.3	4.0	0.0	0.0	-	-	-	-	-	-
1748	111.0	14.4	12.6	-	-	-	278.0	0.0	0.0	333.6	1.2	1.2	-	-	-	-	-	-	-	-	-
1749	13.5	-	-	166.5	0.0	0.0	257.8	-1.5	-1.5	330.1	1.2	1.1	-	-	-	-	-	-	-	-	-
1750	23.0	0.0	0.0	112.0	0.0	0.0	234.7	0.0	0.0	33.0	0.0	0.0	-	-	-	-	-	-	-	-	-
1751	-	-	-	130.7	0.0	0.0	278.1	0.0	0.0	338.8	1.2	1.2	-	-	-	-	-	-	-	-	-
1752	-	-	-	124.7	-1.1	-1.1	262.0	0.0	0.0	337.2	0.3	0.3	-	-	-	-	-	-	-	-	-
1753	0.0	21.2	17.5	-	-	-	-	-	-	348.5	0.0	0.0	-	-	-	-	-	-	-	-	-
1754	14.0	39.7	28.4	171.0	4.9	5.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1755	122.8	74.4	42.7	165.1	41.4	29.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1756	122.0	395.0	78.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1757	74.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1758	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1759	92.1	22.1	14.1	112.0	0.0	0.0	242.3	0.0	0.0	340.0	1.2	1.1	-	-	-	-	-	-	-	-	-
1760	120.0	43.8	3.5	13.0	0.0	0.0	256.0	0.0	0.0	-	-	-	414.0	0.0	0.0	-	-	-	-	-	-
1761	143.7	68.0	41.8	172.0	60.7	37.8	353.0	40.0	21.1	-	-	-	-	-	-	-	-	-	-	-	-
1762	160.0	66.7	40.0	185.6	62.9	38.6	376.5	63.7	38.9	352.0	1.7	1.7	-	-	-	-	-	-	-	-	-
1763	-	-	-	144.3	15.6	11.3	254.4	4.9	4.2	332.0	0.0	0.0	-	-	-	-	-	-	-	-	-
1764	130.0	39.4	28.3	152.0	23.0	16.7	220.1	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1765	120.0	36.4	26.7	166.0	14.0	12.3	220.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1766	136.0	45.7	31.4	131.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1767	174.0	79.4	44.3	122.0	20.4	17.0	230.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
1768	162.8	45.0	45.0	174.4	29.9	23.1	-	-	-	119.0	54.9	39.5	-	-	-	-	-	-	-	-	-
1769	132.7	44.7	31.9	177.3	24.9	19.9	29.0	31.8	23.6	-	-	-	58.0	41.5	29.3	-	-	-	-	-	-
1770	172.3	78.8	44.1	174.7	37.1	27.1	113.3	31.7	24.7	373.0	0.4	0.6	56.0	36.4	26.9	-	-	-	-	-	-
1771	164.0	1.6	51.4	191.0	62.8	34.6	330.0	38.7	27.9	-	-	-	670.0	63.4	38.8	-	-	-	-	-	-
1772	135.4	54.9	39.4	207.1	51.6	31.6	34.0	4.1	24.6	610.0	50.0	31.3	33.0	14.1	24.9	-	-	-	-	-	-
1773	133.2	63.1	38.7	162.3	36.3	26.6	310.1	22.1	22.6	426.7	20.0	17.2	469.0	12.6	2.6	-	-	-	-	-	-
1774	193.1	112.5	52.0	197.4	35.6	35.7	317.0	38.0	37.0	410.0	31.0	23.9	621.0	44.4	30.8	-	-	-	-	-	-
1775	NO DATA AVAILABLE																				
1776	154.3	63.9	39.1	213.8	58.3	36.8	421.3	18.4	37.0	386.0	11.0	34.1	612.0	34.3	31.1	-	-	-	-	-	-
1777	166.6	83.3	45.5	215.4	60.5	37.7	421.3	51.4	37.3	374.0	27.0	21.8	310.7	36.0	27.0	-	-	-	-	-	-
1778	135.0	42.1	29.6	226.5	69.4	41.0	346.7	45.7	31.3	616.0	71.1	44.2	752.0	67.3	41.4	-	-	-	-	-	-
1779	136.0	112.5	52.9	222.9	71.2	41.2	42.0	61.3	38.1	-	-	-	750.7	77.4	47.4	-	-	-	-	-	-
1780	160.0	86.0	45.2	214.3	77.1	43.5	236.0	13.4	12.2	-	-	-	51.0	10.7	14.1	-	-	-	-	-	-
1781	-	-	-	206.3	53.5	34.3	-	-	-	640.0	56.7	47.0	-	-	-	-	-	-	-	-	-
1782	177.0	90.3	47.0	191.0	62.0	4.4	412.0	57.7	46.5	474.0	21.0	17.7	-	-	-	-	-	-	-	-	-
1783	130.6	64.8	39.3	215.1	53.0	34.6	235.3	4.1	4.0	33.0	-	-	44.0	0.0	0.0	-	-	-	-	-	-
1784	-	-	-	218.0	53.5	34.9	314.0	36.5	26.8	-	-	-	371.0	22.3	22.5	-	-	-	-	-	-
1785	-	-	-	206.3	52.1	34.2	373.3	49.7	33.2	419.0	6.9	5.4	442.0	-	0.1	-	-	-	-	-	-
1786	-	-	-	152.0	13.1	11.5	270.0	0.0	0.0	330.0	2.4	2.4	-	-	-	-	-	-	-	-	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF SHIP < AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

CONTINUED



TABLE II.10.F RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM ESTONIA TO AMSTERDAM

SHIP SIZES IN TONS	A 0 - 100	B 101 - 200	C 201 - 300	D 301 - 400	E 401 - 500	F 501 - 600	G 600 +
1787	90.7	33.7	145.3	20.8	17.2	-	-
1788	7.7	7.1	-	274.0	13.2	11.7	-
1789	131.0	44.0	30.5	167.3	18.4	15.5	-
1790	90.6	19.6	16.4	202.8	18.8	15.8	-
1791	92.5	37.0	27.0	156.3	20.3	20.8	-
1792	98.0	0.0	0.0	159.5	19.5	16.3	-
1793	120.0	66.7	40.0	172.0	17.8	15.1	-
1794	-	-	-	254.0	53.0	34.6	-
1795	-	-	-	-	-	-	-
1796	120.8	53.8	34.9	188.7	28.1	21.9	-
1797	111.0	109.4	52.3	176.0	69.2	40.9	-
1798	131.3	99.0	49.7	-	-	-	-
1799	124.0	106.7	51.6	-	-	-	-
1800	82.0	115.8	53.7	149.0	12.0	10.7	-
1801	-	-	-	-	-	-	-
1802	151.0	81.9	45.0	213.5	48.6	32.8	-
1803	117.4	79.5	44.3	232.7	90.7	47.6	-
1804	-	-	-	211.3	89.5	41.0	-
1805	202.0	124.4	55.4	196.6	46.3	32.0	-
1806	136.0	100.0	55.0	201.3	52.8	34.4	-
1807	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-
1815	-	-	-	-	-	-	-
1816	-	-	-	-	-	-	-
1817	141.0	58.9	37.1	136.0	15.3	13.2	-
1818	128.0	41.9	29.5	118.0	7.8	7.5	-
1819	-	-	-	191.8	43.4	30.3	-
1820	-	-	-	189.0	42.4	29.8	-
1821	122.7	45.2	31.1	280.7	44.4	30.0	-
1822	150.0	22.9	18.6	142.0	34.0	25.4	-
1823	110.0	28.0	20.0	-	-	-	-
1824	70.0	0.0	0.0	193.3	8.2	7.6	-
1825	84.0	10.3	9.4	180.0	12.5	11.1	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF CARGO < AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY

TABLE II.16.6 RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM FREDERIKSHAVN TO AMSTERDAM

SHIP SIZE IN TONS	A	B	C	D	E	F	G
YEAR	101-150	151-200	201-300	301-400	401-500	501-600	600+
1744			230.0				
1745	74.0	17.0	261.3				
1746			244.0				
1747	75.0	35.0	241.3	330.0			
1748	65.0	38.0	272.0	362.7			
1749	94.0	74.0	224.3	352.0	408.0		
1750	94.0	61.0	231.3	312.0			
1751	130.0	51.0	234.0				
1752			232.0				
1753							
1754	130.0	14.0					
1755	140.0	4.0					
1756							
1757	100.0	12.0					
1758	60.0	8.0					
1759							
1760	84.0	44.0					
1761							
1762							
1763							
1764							
1765							
1766	98.0	50.0					
1767							
1768							
1769							
1770							
1771							
1772							
1773							
1774	9.0	0.0					
1775							
1776							
1777							
1778							
1779							
1780							
1781							
1782							
1783							
1784							

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF CARGO < AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY

CONTINUED



TABLE 11.16.8 RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPPING FROM COURLAND TO AMSTERDAM

SHIP SIZE IN TONS	A 0 - 100	B 101 - 200	C 201 - 300	D 301 - 400	E 401 - 500	F 501 - 600	G 600 +
YEAR	---	---	---	---	---	---	---
1795-16	125.0	100.0	81.2	-	-	-	-
1797	138.0	93.8	42.3	192.0	77.8	43.8	386.0
1798	137.0	132.2	86.9	104.0	76.9	43.8	-
1799	-	-	-	-	-	-	-
1800	112.0	100.0	80.0	-	-	-	-
1801	-	-	-	-	-	-	-
1802	120.0	76.8	43.3	-	-	-	-
1803	-	-	-	-	-	-	-
1804	118.0	46.3	31.6	214.0	89.8	41.1	-
1805	118.0	103.4	50.8	-	-	-	-
1806	-	-	-	-	-	-	-
1807	-	-	-	214.0	94.8	48.6	-
1808-17	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-
1815	148.3	81.7	48.0	166.8	37.0	27.0	-
1816	98.0	100.0	50.0	148.5	37.0	27.3	-
1817	87.3	6.3	5.9	181.7	3.9	3.7	-
1818	-	-	-	-	-	-	-
1819	158.0	42.1	29.6	-	-	-	-
1820	107.3	47.7	32.3	-	-	-	-
1821	-	-	-	-	-	-	-
1822	-	-	-	-	-	-	-
1823-29	60.0	38.4	26.7	-	-	-	-
1824	-	-	-	-	-	-	-
1825-30	74.0	8.7	5.6	124.0	0.0	0.0	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF SHIP < AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

Notes to Tables III and Graphs III

- 1717 <sup>1</sup>Data available for January through March only.
- 1725 <sup>2</sup>Data available for January through July only.
- 1726 <sup>3</sup>Data for 1726 available for October through December only and listed as "1726 in 1727" with the 1727 D.M.H. Galjootsgeldregisters.
- 1779 <sup>4</sup>Includes one ship from Onega listed in the D.O.H. instead of the D.M.H. Galjootsgeldregisters that year.
- 1797 <sup>5</sup>D.M.H. Galjootsgeldregisters for 1797 - 1813 missing. Note in folios by N. de Roevereit, Adjunct Archivist, G.A.A. 1881 states, "Nothing found in chest." (G.A.A., PA6/62.)
- 1814 <sup>6</sup>Not able to ascertain whether data for 1814 complete or not.
- 1823 <sup>7</sup>Data available only for January through March. Missive of 26 March, 1823 terminates the collection of Galjootsgeld by the D.M.H. (G.A.A., PA6/62).



TABLE III.1 SHIPPING FROM RUSSIAN (WHITE SEA) PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

NUMBER OF SHIPS

YEAR	PORTS OF DEPARTURE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1726	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1727	ARCHANGEL	2	2	2	2	2	2	2	2	2	2	2	2	18
	TOTAL	2	2	2	2	2	2	2	2	2	2	2	2	18
1728	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1729	ARCHANGEL	2	2	2	2	2	2	2	2	2	2	2	2	20
	TOTAL	2	2	2	2	2	2	2	2	2	2	2	2	20
1730	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1731	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1732	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1733	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1734	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1735	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1736	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1737	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1738	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1739	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1740	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1741	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1742	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12

TABLE III.1 SHIPPING FROM RUSSIAN (WHITE SEA) PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

NUMBER OF SHIPS

YEAR	COSIS OF DEPARTURE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1725	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1726	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1727	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1728	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1729	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1730	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1731	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1732	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1733	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1734	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1735	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1736	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1737	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1738	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12
1739	ARCHANGEL	1	1	1	1	1	1	1	1	1	1	1	1	12
	TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	12

SOURCE: GAA, PA 6756-62

CONTINUED



TABLE 111.1 SHIPPING FROM RUSSIAN (WHITE SEA) PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

NUMBER OF SHIPS

YEAR	ESCH. OF DEPARTURE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1955	ARCHANGEL	4	1	-	4	3	-	-	-	3	3	1	4	23
	KOLA	-	-	-	-	-	-	-	-	1	-	1	2	4
	OMEGA	-	-	-	-	-	-	-	-	3	2	4	2	11
	OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	2
	TOTAL	4	1	1	4	3	-	-	1	6	5	6	8	48
1956	ARCHANGEL	1	-	3	2	6	-	-	-	3	6	10	2	37
	KOLA	-	-	1	2	-	-	-	-	2	-	-	-	5
	OMEGA	-	-	1	-	2	-	-	-	6	4	-	-	12
	OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	1
	TOTAL	1	-	5	4	8	-	-	-	11	10	10	11	58
1957	ARCHANGEL	-	-	-	3	2	1	-	1	5	5	7	2	26
	KOLA	-	-	1	-	-	-	-	-	-	-	-	-	1
	OMEGA	-	-	1	-	-	-	-	-	1	-	-	-	2
	OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	1
	TOTAL	-	-	3	3	2	1	-	1	6	5	7	3	26
1958	ARCHANGEL	2	-	1	2	1	-	-	-	-	5	4	3	16
	KOLA	-	-	1	-	-	-	-	-	2	-	-	-	3
	OMEGA	-	-	1	-	-	-	-	-	-	-	-	-	2
	OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	1
	TOTAL	2	-	3	2	1	-	-	-	2	5	4	3	22
1959	ARCHANGEL	-	1	3	3	2	-	-	-	-	1	1	6	17
	KOLA	-	-	-	-	-	-	-	-	-	-	-	-	1
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	1
	OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	1
	TOTAL	-	1	3	3	2	-	-	-	1	1	6	10	
1961	ARCHANGEL	5	-	2	4	-	-	-	-	1	6	6	-	24
	KOLA	-	-	-	1	-	-	-	-	-	-	-	-	1
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	1
	OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	1
	TOTAL	5	-	2	4	-	-	-	-	1	6	6	1	28
1962	ARCHANGEL	-	3	3	3	1	-	-	-	1	1	2	1	16
	KOLA	1	-	-	-	-	-	-	-	-	-	-	-	1
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	1
	OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	1
	TOTAL	1	3	3	3	1	-	-	-	1	1	2	1	20
1963	ARCHANGEL	-	-	4	2	2	1	-	-	-	-	4	11	27
	KOLA	-	-	-	1	-	-	-	-	-	-	-	-	1
	OMEGA	-	-	-	1	-	-	-	-	-	-	-	-	1
	OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	1
	TOTAL	-	-	4	2	2	1	-	-	-	4	4	11	31

TABLE III-1 SHIPPING FROM RUSSIAN (WHITE SEA) PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

NUMBER OF SHIPS

YEAR	OPERATING	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1958	ARCHANGEL	4	4	2	1	3	-	-	-	-	2	7	9	32
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	4	4	2	1	3	-	-	-	-	2	7	9	32
1959	ARCHANGEL	1	-	1	1	-	-	-	-	1	-	5	9	18
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	1	-	1	1	-	-	-	-	1	-	5	9	18
1960	ARCHANGEL	3	3	1	4	3	2	-	-	1	5	6	1	29
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	3	3	1	4	3	2	-	-	1	5	6	1	29
1961	ARCHANGEL	6	4	1	2	-	-	-	-	3	2	4	3	28
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	6	4	1	2	-	-	-	-	3	2	4	3	28
1962	ARCHANGEL	-	2	6	4	6	4	-	-	-	5	5	-	32
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	-	2	6	4	6	4	-	-	-	5	5	-	32
1963	ARCHANGEL	9	1	1	3	2	-	-	-	3	3	10	4	30
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	9	1	1	3	2	-	-	-	3	3	10	4	30
1964	ARCHANGEL	1	2	1	1	1	1	1	1	1	1	1	1	11
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	1	2	1	1	1	1	1	1	1	1	1	1	11
1965	ARCHANGEL	1	1	1	2	1	1	1	1	1	1	1	1	11
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	1	1	1	2	1	1	1	1	1	1	1	1	11
1966	ARCHANGEL	2	1	1	1	1	1	1	1	1	1	1	1	11
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	2	1	1	1	1	1	1	1	1	1	1	1	11
1967	ARCHANGEL	6	1	1	1	1	1	1	1	1	1	1	1	11
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	6	1	1	1	1	1	1	1	1	1	1	1	11
1968	ARCHANGEL	10	2	3	3	3	3	3	3	3	3	3	3	33
	OMEGA	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	10	2	3	3	3	3	3	3	3	3	3	3	33

TABLE III.1 SHIPPING FROM RUSSIAN (WHITE SEA) PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

NUMBER OF SHIPS

YEAR	PORTS OF ORIGIN	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1778	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1779	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1780	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1781	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1782	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1783	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1784	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1785	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1786	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1787	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1788	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1789	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1790	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1791	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1792	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1793	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1794	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1795	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1796	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1797	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1798	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1799	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	ARCHANGEL TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0





TABLE III.1.A SHIPPING FROM RUSSIAN (WHITE SEA) PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL BY PERCENTAGES

YEAR	NUMBER OF SHIPS											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1717 <sup>1</sup>	37	50	12	-	-	-	-	-	-	-	-	-
1718	-	-	23	21	17	7	11	-	-	5	1	9
1719	2	14	11	11	5	11	5	-	2	8	11	11
1720	18	11	4	2	20	-	-	-	-	6	4	31
1721	28	20	-	4	8	-	-	-	-	16	-	24
1722	22	22	9	13	9	4	4	-	-	-	-	13
1723	7	23	19	11	3	11	-	-	3	-	3	15 <sup>2</sup>
1724	35	25	5	5	5	5	5	-	5	10	-	-
1725 <sup>2</sup>	25	-	25	25	-	-	25	-	-	-	-	-
1726 <sup>3</sup>	19	4	4	-	-	-	-	-	19	14	14	23
1727	-	7	-	7	7	-	-	7	-	7	15	46
1728	23	15	-	-	15	-	-	-	-	30	15	-
1729	-	5	15	17	5	-	-	-	5	5	17	5
1730	32	8	-	8	25	16	-	-	8	-	-	-
1731	13	6	33	33	-	6	-	-	-	6	-	-
1732	6	-	25	6	12	-	-	12	25	-	6	6
1733	10	-	20	30	-	10	5	-	-	15	5	5
1734	-	-	3	3	-	-	-	32	17	10	7	28
1735	5	15	5	5	15	-	-	-	-	20	15	20
1736	-	20	10	5	15	10	15	-	-	10	15	-
1737	-	-	-	33	20	-	-	6	6	20	-	13
1738	-	-	-	31	18	-	-	-	21	21	10	8
1739	-	6	16	19	9	-	-	-	6	22	16	3
1740	1	-	1	10	3	-	-	-	21	11	31	18
1741	7	-	9	11	1	-	-	3	12	25	11	16
1742	-	22	5	20	14	2	-	-	8	14	11	-
1743	-	15	15	3	12	3	3	-	15	6	18	9
1744	4	-	12	15	12	20	8	-	-	-	4	24
1745	3	-	15	-	38	-	15	-	-	-	-	-
1746	-	-	11	26	21	10	-	-	-	-	-	10
1747	14	23	19	9	14	-	-	-	-	9	9	-
1748	13	5	-	5	27	5	11	-	-	-	-	11
1749	5	11	22	11	11	-	-	-	-	5	11	22
1750	-	2	8	2	8	2	2	-	38	5	8	17
1751	-	-	-	22	22	11	-	-	-	11	22	-
1752	-	6	10	6	6	-	-	6	6	13	20	3
1753	-	3	6	13	17	-	-	-	27	17	13	-
1754	7	-	7	3	7	3	-	7	10	7	17	32

SOURCE: GAA, PA 6749-52

CONTINUED:

TABLE III.1.1.A SHIPPING FROM RUSSIAN (WHITE SEA) PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL BY PERCENTAGES

YEAR	NUMBER OF SHIPS											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1755	3	-	10	17	17	3	-	3	17	3	17	6
1756	10	2	2	10	7	-	-	2	17	12	15	20
1757	1	-	9	7	18	-	-	-	18	21	18	5
1758	-	-	6	9	12	1	-	1	18	15	25	6
1759	8	-	20	8	4	-	-	-	8	20	16	12
1760	-	5	16	16	16	-	-	-	-	5	5	33
1761	19	-	7	19	-	-	-	-	3	23	26	-
1762	5	16	16	16	16	-	-	-	5	5	11	5
1763	-	-	12	9	16	3	-	-	-	9	12	35
1764	10	10	5	8	10	2	2	-	-	5	18	24
1765	-	-	4	9	-	4	-	-	4	-	22	45
1766	8	8	2	13	8	5	-	-	2	18	24	8
1767	18	12	3	6	21	-	-	-	9	6	12	9
1768	-	5	17	17	25	10	-	-	-	12	12	-
1769	24	2	2	6	5	-	-	-	8	8	27	13
1770	3	7	3	-	3	-	-	-	-	10	32	39
1771	2	-	2	4	2	-	-	-	18	20	10	40
1772	3	1	1	4	7	1	-	-	14	30	12	22
1773	12	2	4	2	16	-	-	-	4	22	20	18
1774	18	3	5	4	9	5	-	-	3	13	24	5
1775	12	-	6	16	-	-	-	-	6	12	14	14
1776	4	2	2	4	8	-	-	-	18	14	25	2
1777	3	3	6	16	19	-	-	-	-	3	16	32
1778	5	3	9	1	5	-	-	-	1	22	48	-
1779	4	23	19	-	4	4	-	-	-	14	19	9
1780	6	-	12	3	12	-	3	-	-	-	17	25
1781	11	3	11	7	-	3	3	-	-	26	26	3
1782	3	3	11	11	11	-	-	-	3	13	18	3
1783	16	6	3	3	12	6	-	9	9	-	12	12
1784	-	-	10	17	17	6	-	-	-	17	24	10
1785	-	5	10	-	25	5	-	5	10	15	15	10
1786	-	-	4	-	12	-	-	8	4	4	44	24
1787	3	3	3	6	9	3	-	-	24	9	36	3
1788	5	-	-	14	14	-	-	-	20	17	22	5
1789	2	5	2	2	-	2	-	2	2	27	29	21
1790	18	7	-	11	3	3	-	-	11	11	29	3
1791	15	-	15	-	5	-	-	-	5	20	15	25
1792	6	6	1	-	-	3	-	-	6	20	31	20

SOURCE: GAA, PA 6758-62

CONTINUED

TABLE III.1.6A SHIPPING FROM RUSSIAN (WHITE SEA) PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL BY PERCENTAGES

YEAR	NUMBER OF SHIPS											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1993	-	7	7	7	-	7	-	-	7	28	14	21
1994	2	2	-	8	-	2	2	-	20	20	26	5
1995	-	10	10	20	-	-	-	-	30	30	-	-
1996	-	-	-	-	-	-	-	-	-	38	46	15
1997	-	-	-	-	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	33	16	50
2015	-	7	-	3	-	3	-	-	3	18	29	33
2016	12	-	-	-	-	-	-	12	12	16	25	20
2017	4	4	-	-	-	-	-	1	30	34	17	8
2018	13	13	4	-	8	-	-	4	17	8	30	-
2019	16	-	16	-	-	-	-	-	-	41	25	-
2020	-	14	-	7	-	-	-	-	35	7	28	-
2021	-	-	-	-	14	-	-	-	21	21	14	28
2022	-	-	5	-	-	-	5	38	16	-	16	16
2023	-	100	-	-	-	-	-	-	-	-	-	-



TABLE III-2 BREAKDOWN OF WHITE SEA SHIPPING (PRIMARILY ARCHANGEL) TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +				
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
1717 <sup>1</sup>	1	13	100	6	-	-	-	-	2	25	568	23	4	50	1430	57	1	13	420	17	-	-	-	-	-	-	-	-	
1718	1	2	72	0	1	2	200	1	7	14	1960	10	24	47	9098	47	16	31	7046	36	2	4	1100	6	-	-	-	-	
1719	2	6	188	1	1	3	160	1	2	6	892	8	16	47	6230	48	13	38	5752	45	-	-	-	-	-	-	-	-	
1720	1	2	88	1	2	5	294	2	6	14	1608	10	24	55	9002	57	11	25	4770	30	-	-	-	-	-	-	-	-	
1721	-	-	-	-	-	-	-	-	2	8	576	6	17	68	6420	67	6	24	2580	27	-	-	-	-	-	-	-	-	
1722	-	-	-	-	1	5	136	2	1	5	300	4	16	73	6106	74	4	18	1708	21	-	-	-	-	-	-	-	-	
1723	1	4	62	1	1	4	120	1	7	27	1904	21	13	50	5080	56	4	15	1830	20	-	-	-	-	-	-	-	-	
1724	-	-	-	-	1	5	160	2	7	35	1084	29	9	45	3408	50	3	15	1320	19	-	-	-	-	-	-	-	-	
1725 <sup>2</sup>	-	-	-	-	-	-	-	-	2	50	820	38	1	25	400	30	1	25	432	32	-	-	-	-	-	-	-	-	-
1726 <sup>3</sup>	-	-	-	-	2	10	268	4	4	19	1080	15	9	43	3104	43	5	24	2240	31	1	5	540	7	-	-	-	-	-
1727	-	-	-	-	3	23	450	12	6	46	1602	44	2	15	672	16	2	15	920	25	-	-	-	-	-	-	-	-	-
1728	1	8	84	3	2	15	240	8	8	62	2196	69	2	18	654	21	-	-	-	-	-	-	-	-	-	-	-	-	-
1729	1	6	84	2	-	-	-	-	10	50	2552	51	4	24	1392	28	1	6	424	9	1	6	510	10	-	-	-	-	-
1730	-	-	-	-	1	8	196	5	7	58	1884	52	2	17	658	18	2	17	904	25	-	-	-	-	-	-	-	-	-
1731	-	-	-	-	2	13	324	8	10	67	2594	66	3	20	992	25	-	-	-	-	-	-	-	-	-	-	-	-	-
1732	-	-	-	-	5	31	770	17	5	31	1384	31	4	25	1436	32	2	13	890	20	-	-	-	-	-	-	-	-	-
1733	1	8	72	1	-	-	-	-	3	15	788	18	8	40	2910	39	6	30	2696	36	2	10	1056	14	-	-	-	-	-
1734	-	-	-	-	1	4	178	2	10	36	2516	24	6	21	2236	22	7	25	3196	31	4	14	2246	22	-	-	-	-	-
1735	-	-	-	-	-	-	-	-	1	5	250	3	7	35	2562	29	9	48	4272	40	3	15	1640	19	-	-	-	-	-
1736	-	-	-	-	-	-	-	-	8	25	1358	16	3	15	1130	14	10	60	4764	57	2	10	1092	13	-	-	-	-	-
1737	-	-	-	-	-	-	-	-	2	13	568	9	5	33	1900	30	5	33	2340	36	3	20	1622	25	-	-	-	-	-
1738	-	-	-	-	2	11	364	6	7	37	1760	27	3	16	1070	16	5	26	2278	34	2	11	1140	17	-	-	-	-	-
1739	-	-	-	-	1	3	156	1	3	10	848	6	8	26	2752	21	14	45	6220	44	3	10	1786	13	2	6	1320	16	-
1740	2	3	138	1	11	18	1914	8	7	12	1952	9	13	22	4886	20	15	25	6802	30	7	12	3600	17	8	8	3408	18	-
1741	-	-	-	-	9	17	1394	7	10	19	2564	13	14	26	5018	25	14	26	6476	33	4	7	2184	11	3	6	2050	10	-
1742	1	3	72	1	4	11	724	6	9	26	2330	20	10	29	3494	30	9	26	4178	35	2	6	1026	9	-	-	-	-	-
1743	-	-	-	-	8	24	1366	15	12	36	3864	33	9	27	3100	33	3	9	1356	14	1	3	528	6	-	-	-	-	-
1744	-	-	-	-	6	24	1006	14	9	36	2442	38	10	40	3616	51	-	-	-	-	-	-	-	-	-	-	-	-	-
1745	-	-	-	-	-	-	-	-	4	31	946	21	5	38	1776	39	4	31	1812	40	-	-	-	-	-	-	-	-	-
1746	-	-	-	-	-	-	-	-	6	32	1640	24	7	37	2424	36	6	32	2658	40	-	-	-	-	-	-	-	-	-
1747	-	-	-	-	1	5	190	3	8	34	2154	29	5	24	1864	25	5	24	2176	29	1	5	510	7	1	8	628	8	-
1748	-	-	-	-	1	6	200	3	2	11	556	8	9	50	3194	46	3	17	1364	20	3	17	1598	23	-	-	-	-	-
1749	-	-	-	-	1	6	138	2	4	22	1048	16	8	44	2840	43	3	17	1456	22	2	11	1070	16	-	-	-	-	-
1750	-	-	-	-	10	29	1632	17	10	29	2628	27	10	29	3538	37	4	12	1762	18	-	-	-	-	-	-	-	-	-
1751	-	-	-	-	1	11	190	5	-	-	-	-	4	44	1480	42	3	33	1332	38	1	11	548	15	-	-	-	-	-
1752	-	-	-	-	7	23	1218	12	4	13	1088	10	10	33	3622	34	4	13	1802	17	4	13	2200	21	1	3	610	6	-
1753	-	-	-	-	7	24	1232	13	5	17	1400	14	10	34	3512	36	2	7	638	9	4	14	2160	22	1	3	640	7	-
1754	-	-	-	-	-	-	-	-	3	11	712	6	12	43	4126	38	10	36	4494	41	3	11	1648	15	-	-	-	-	-
1755	-	-	-	-	4	14	514	5	5	17	1334	13	7	24	2420	23	12	41	5530	53	1	3	560	5	-	-	-	-	-
1756	-	-	-	-	2	5	264	2	2	5	544	3	19	47	6606	42	10	25	4406	28	6	15	3200	20	1	2	692	4	-
1757	-	-	-	-	3	5	412	2	1	2	296	1	26	51	10000	43	4	7	1738	7	13	24	6906	30	6	11	3954	17	-

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

TABLE III.2 BREAKDOWN OF WHITE SEA SHIPPING (PRIMARILY ARCHANGEL) TO AMSTERDAM BY SIZE OF CARGO IN TONS

SIZES IN TONS	A C - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1758	-	-	-	-	6	19	886	7	-	-	-	-	12	38	4412	35	7	22	3236	26.	4	13	2130	17	3	9	1944	18
1759	-	-	-	-	2	8	204	2	2	8	538	5	7	29	2664	24	3	13	1460	13	5	21	2682	24	5	21	3662	33
1760	-	-	-	-	-	-	-	-	-	-	-	-	4	22	1448	15	4	22	1810	19	6	33	3312	35	4	22	2868	30
1761	-	-	-	-	1	4	150	1	1	4	248	2	3	12	1102	8	9	35	3666	26	2	8	1108	8	10	36	7212	63
1762	-	-	-	-	1	6	152	2	1	6	220	2	1	6	344	4	5	28	2266	24	5	28	2752	29	5	28	3836	40
1763	-	-	-	-	2	6	304	2	1	3	280	2	10	32	3736	28	11	35	4778	36	4	13	2178	16	3	10	2100	16
1764	-	-	-	-	1	3	180	1	4	11	1114	8	4	11	1416	8	12	32	5520	30	7	19	3952	21	9	24	6414	34
1765	-	-	-	-	-	-	-	-	1	5	220	2	5	23	1824	17	9	41	4050	39	5	23	2868	27	2	9	1504	14
1766	-	-	-	-	2	5	380	2	5	14	1236	8	11	30	3830	25	10	27	4406	29	5	14	2742	18	4	11	2834	18
1767	-	-	-	-	3	9	552	4	2	6	520	4	7	22	2576	18	10	31	4624	32	5	16	2796	20	5	16	3246	23
1768	-	-	-	-	-	-	-	-	2	5	580	3	8	20	2988	13	8	20	3634	16	9	22	4974	22	13	32	10066	48
1769	-	-	-	-	1	3	200	1	3	8	740	4	6	16	2296	12	6	16	2628	13	12	32	6844	35	9	24	6890	35
1770	-	-	-	-	-	-	-	-	1	4	240	2	3	11	1176	7	8	29	3758	24	7	25	3774	24	9	32	6804	43
1771	-	-	-	-	3	6	494	2	2	4	500	2	9	18	3132	13	16	33	7342	30	7	14	4010	17	12	24	8714	36
1772	2	3	60	0	8	13	1428	6	14	22	3742	16	15	24	5432	23	11	17	4976	21	3	5	1552	6	10	16	6792	28
1773	-	-	-	-	2	4	328	2	11	22	3014	14	11	22	3930	18	10	20	4544	21	6	12	3376	15	10	20	6666	31
1774	-	-	-	-	2	4	372	1	4	8	1886	4	13	25	4730	18	11	21	4980	18	5	9	2864	11	18	34	12982	48
1775	-	-	-	-	-	-	-	-	4	8	1660	4	9	18	3214	13	10	20	4534	18	13	27	7088	28	13	27	8998	36
1776	-	-	-	-	4	9	654	4	4	9	1070	6	17	39	6094	34	9	20	4112	23	8	18	4452	25	2	5	1344	8
1777	-	-	-	-	-	-	-	-	2	6	600	4	7	23	2528	17	15	48	6964	48	4	13	2314	16	3	10	2110	15
1778	-	-	-	-	1	2	188	1	4	7	1880	4	18	33	6534	27	17	31	7902	33	10	19	5510	23	4	7	2960	12
1779	-	-	-	-	2	10	382	4	3	14	824	8	2	10	756	8	7	33	3250	33	1	5	524	5	6	29	4128	42
1780	-	-	-	-	2	6	400	3	-	-	-	-	10	31	3584	25	9	28	4030	28	6	19	3330	23	5	16	3274	22
1781	-	-	-	-	-	-	-	-	2	8	522	4	2	8	632	4	7	27	3206	22	4	15	2130	15	11	42	7898	58
1782	-	-	-	-	-	-	-	-	3	11	740	6	11	41	3926	31	5	19	2306	18	3	11	1656	13	5	19	3952	31
1783	1	3	76	0	2	5	324	2	2	6	416	3	3	10	1084	7	7	23	3186	21	7	23	3874	25	9	29	6340	41
1784	-	-	-	-	1	3	182	1	2	7	590	4	6	21	2144	15	6	21	2720	19	4	14	2066	14	10	34	6810	47
1785	-	-	-	-	-	-	-	-	2	10	480	5	3	15	1190	10	3	15	1346	13	5	25	2804	26	7	35	4854	46
1786	-	-	-	-	-	-	-	-	7	8	564	5	1	4	320	3	14	56	6336	52	4	16	2232	18	4	16	2814	23
1787	-	-	-	-	-	-	-	-	3	9	736	4	3	9	1056	6	13	39	5974	36	7	21	3880	24	7	21	4776	29
1788	-	-	-	-	-	-	-	-	2	6	516	3	7	20	2408	15	14	40	6282	39	7	20	3868	24	5	14	3198	20
1789	-	-	-	-	1	3	198	1	-	-	-	-	12	32	4292	25	13	35	5830	34	5	14	2754	16	6	16	3886	23
1790	-	-	-	-	-	-	-	-	1	4	296	2	9	33	3352	26	6	22	2676	21	7	26	3848	30	4	15	2682	21
1791	-	-	-	-	2	10	264	3	1	5	284	3	6	30	2100	24	3	15	1332	15	3	15	1586	18	5	25	3152	36
1792	-	-	-	-	1	3	140	1	2	7	512	4	7	24	2444	19	6	21	2712	21	11	38	6128	47	2	7	1242	9
1793	1	7	108	2	-	-	-	-	1	7	300	5	3	21	988	16	2	14	868	14	6	43	3344	54	1	7	614	10
1794	-	-	-	-	-	-	-	-	4	12	962	6	7	21	2582	17	12	35	5494	36	8	24	4306	28	3	9	1834	12
1795	-	-	-	-	-	-	-	-	1	10	228	5	2	20	736	17	6	60	2722	65	1	10	520	12	-	-	-	-
1796	-	-	-	-	-	-	-	-	2	15	550	10	5	38	1862	34	4	31	1940	35	2	15	1122	20	-	-	-	-
1797	NO DATA AVAILABLE																											
1798	NO DATA AVAILABLE																											

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % 'I' IS OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % 'III' IS OF TOTAL CARGO TONNAGE FOR THE YEAR (\*\* = 100%)

TABLE III-2 BREAKDOWN OF WHITE SEA SHIPPING (PRIMARYLY ARCHANGEL) TO AMSTERDAM BY SIZE OF CARGO IN TONS

YEARS	A		B		C		D		E		F		G
	0 - 100	101 - 200	201 - 300	301 - 400	401 - 500	501 - 600	601 +						
1970	-	-	-	-	-	-	-	-	-	-	-	-	-
1971	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	-	-	-	-	-	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-	-	-	-	-	-
1987	-	-	-	-	-	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-	-	-	-	-	-
1989	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	-	-	-	-	-	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	-	-	-	-

I = NUMBER OF SHIPS CARRYING CARGOES IN THIS SIZE CATEGORY  
 II = % OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL CARGO TONNAGE IN THIS SIZE CATEGORY  
 IV = % OF TOTAL CARGO TONNAGE FOR THE YEAR (SEE PAGE 100K)

SOURCE: GAA, PA 6/98-62

TABLE III.3 BREAKDOWN OF WHITE SEA SHIPPING (PRIMARILY ARCHANGEL) TO AMSTERDAM BY SIZE OF SHIP IN TONS

YEAR	A			B			C			D			E			F			G			
	0 - 100	101 - 200	201 - 300	301 - 400	401 - 500	501 - 600	601 +	0 - 100	101 - 200	201 - 300	301 - 400	401 - 500	501 - 600	601 +	0 - 100	101 - 200	201 - 300	301 - 400		401 - 500	501 - 600	601 +
1717	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1718	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1719	2	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1720	2	5	1	2	5	3	2	7	16	1988	13	17	68	6132	68	4	16	1720	19	1720	19	1720
1721	-	-	-	-	-	-	-	-	-	800	12	3	14	1640	22	14	54	5094	67	-	-	-
1722	-	-	-	-	-	-	-	-	-	1620	25	13	65	4744	73	-	-	-	-	-	-	-
1723	1	4	5	1	5	10	1	6	23	490	41	2	50	700	59	-	-	-	-	-	-	-
1724	-	-	-	-	-	-	-	-	-	2318	38	10	48	3472	58	-	-	-	-	-	-	-
1725	-	-	-	-	-	-	-	-	-	2230	75	1	8	322	11	-	-	-	-	-	-	-
1726	-	-	-	-	-	-	-	-	-	2326	79	1	8	334	11	-	-	-	-	-	-	-
1727	-	-	-	-	-	-	-	-	-	3054	68	4	24	1326	30	-	-	-	-	-	-	-
1728	2	15	168	6	1	8	1	8	69	2472	74	2	17	658	20	-	-	-	-	-	-	-
1729	1	6	84	2	-	-	-	-	-	2594	66	3	20	992	25	-	-	-	-	-	-	-
1730	-	-	-	-	-	-	-	-	-	2504	73	1	6	312	9	-	-	-	-	-	-	-
1731	-	-	-	-	-	-	-	-	-	4158	63	2	10	670	13	-	-	-	-	-	-	-
1732	1	6	100	3	4	25	4	25	10	4738	72	2	7	646	10	-	-	-	-	-	-	-
1733	1	5	54	1	1	5	1	5	16	3894	73	4	28	1264	24	-	-	-	-	-	-	-
1734	-	-	-	-	-	-	-	-	-	3658	65	6	30	1974	35	-	-	-	-	-	-	-
1735	-	-	-	-	-	-	-	-	-	2342	56	5	33	1632	39	-	-	-	-	-	-	-
1736	-	-	-	-	-	-	-	-	-	2784	60	3	16	976	21	-	-	-	-	-	-	-
1737	-	-	-	-	-	-	-	-	-	4816	58	9	29	2988	36	-	-	-	-	-	-	-
1738	-	-	-	-	-	-	-	-	-	6250	60	6	10	2098	15	2	3	808	6	-	-	-
1739	-	-	-	-	-	-	-	-	-	7854	63	8	15	2670	21	-	-	-	-	-	-	-
1740	3	5	218	2	16	27	2	16	23	3560	43	7	20	2356	29	1	3	404	5	-	-	-
1741	1	2	72	1	13	24	1	13	24	3418	49	3	9	1034	15	-	-	-	-	-	-	-
1742	1	3	72	1	12	34	1	12	34	3620	60	4	16	1294	21	-	-	-	-	-	-	-
1743	1	3	100	1	15	45	1	15	45	1816	50	5	38	1608	44	-	-	-	-	-	-	-
1744	1	4	94	2	6	24	1	6	24	3518	70	4	21	1338	27	-	-	-	-	-	-	-
1745	-	-	-	-	-	-	-	-	-	3102	53	7	33	2380	41	-	-	-	-	-	-	-
1746	-	-	-	-	-	-	-	-	-	2706	54	5	28	1678	34	1	6	408	8	-	-	-
1747	-	-	-	-	-	-	-	-	-	2734	59	4	22	1374	30	-	-	-	-	-	-	-
1748	-	-	-	-	-	-	-	-	-	4462	62	1	3	366	5	-	-	-	-	-	-	-
1749	-	-	-	-	-	-	-	-	-	1060	40	4	44	1432	53	-	-	-	-	-	-	-
1750	-	-	-	-	-	-	-	-	-	2720	37	8	27	2760	37	1	3	408	6	-	-	-
1751	-	-	-	-	-	-	-	-	-	3520	52	6	21	2040	30	-	-	-	-	-	-	-
1752	-	-	-	-	-	-	-	-	-	3346	45	9	32	3188	43	-	-	-	-	-	-	-
1753	-	-	-	-	-	-	-	-	-	2652	37	9	31	3092	44	-	-	-	-	-	-	-
1754	-	-	-	-	-	-	-	-	-	2244	18	26	65	9104	74	1	2	412	3	-	-	-
1755	1	3	92	1	8	28	1	8	28	4492	28	29	53	10418	64	-	-	-	-	-	-	-
1756	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1757	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = NUMBER OF SHIPS OF TOTAL TONS OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = TOTAL SHIP TONNAGE FOR THE YEAR (100 = 100%)

TABLE 111.3 BREAKDOWN OF WHITE SEA SHIPPING (PRIMARILY ARCHANGEL) TO AMSTERDAM BY SIZE OF SHIP IN TONS

SIZES IN TONS	A 0 - 100				B 101 - 200				C 201 - 300				D 301 - 400				E 401 - 500				F 501 - 600				G 601 +			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1760	-	-	-	-	6	19	772	9	13	41	3274	38	13	41	4646	53	-	-	-	-	-	-	-	-	-	-	-	
1761	-	-	-	-	4	17	528	7	7	29	1754	24	12	50	4382	61	-	-	-	-	1	4	510	7	-	-	-	
1762	-	-	-	-	-	-	-	-	11	61	2802	51	6	33	2150	39	-	-	-	-	1	6	510	9	-	-	-	
1763	-	-	-	-	2	8	296	4	13	50	3386	43	9	35	3310	42	1	4	414	5	1	4	510	6	-	-	-	
1764	-	-	-	-	1	6	102	2	8	44	2012	35	5	22	1768	31	2	11	864	15	2	11	1042	18	-	-	-	
1765	-	-	-	-	5	16	792	9	16	52	4040	46	7	23	2550	29	2	6	838	10	1	3	532	6	-	-	-	
1766	-	-	-	-	5	14	624	7	15	41	3850	34	10	27	3576	32	6	16	2552	23	1	3	532	5	-	-	-	
1767	-	-	-	-	1	5	148	2	12	55	3010	46	7	32	2442	38	2	9	692	14	-	-	-	-	-	-	-	
1768	-	-	-	-	8	22	1270	12	12	32	2974	28	13	35	4704	44	4	11	1722	16	-	-	-	-	-	-	-	
1769	-	-	-	-	6	19	900	9	9	28	2324	24	14	44	5016	53	3	9	1292	14	-	-	-	-	-	-	-	
1770	-	-	-	-	1	2	174	1	15	38	3626	27	14	35	5072	38	10	25	4400	31	-	-	-	-	-	-	-	
1771	-	-	-	-	3	8	450	4	21	57	5286	49	7	19	2568	24	6	16	2428	23	-	-	-	-	-	-	-	
1772	-	-	-	-	1	4	156	2	18	54	3878	46	9	32	3142	37	3	11	1222	15	-	-	-	-	-	-	-	
1773	-	-	-	-	7	14	1124	8	26	53	6680	49	11	22	3714	27	5	10	2056	15	-	-	-	-	-	-	-	
1774	1	2	86	1	16	25	2608	17	31	49	7488	49	13	21	4348	28	2	3	836	5	-	-	-	-	-	-	-	
1775	-	-	-	-	12	24	1992	15	21	42	5120	39	14	28	4668	36	3	6	1298	10	-	-	-	-	-	-	-	
1776	1	2	94	1	7	13	1156	8	23	43	5660	37	15	28	5248	35	7	13	3048	20	-	-	-	-	-	-	-	
1777	-	-	-	-	7	14	1154	8	21	43	5308	39	19	38	6330	46	2	4	910	7	-	-	-	-	-	-	-	
1778	2	5	178	2	7	16	1196	10	21	48	5182	46	11	25	3610	32	3	7	1246	11	-	-	-	-	-	-	-	
1779	-	-	-	-	2	6	782	4	16	52	4130	45	10	32	3312	36	3	10	1352	15	-	-	-	-	-	-	-	
1780	-	-	-	-	6	11	1046	7	29	54	7394	49	15	28	4974	33	4	7	1732	11	-	-	-	-	-	-	-	
1781	-	-	-	-	2	10	326	5	10	48	2476	40	4	19	1262	20	5	24	2104	34	-	-	-	-	-	-	-	
1782	-	-	-	-	4	13	712	8	16	50	4164	46	10	31	3236	36	2	6	866	10	-	-	-	-	-	-	-	
1783	-	-	-	-	3	12	460	6	10	38	2602	33	9	35	3050	39	4	15	1780	23	-	-	-	-	-	-	-	
1784	-	-	-	-	3	11	518	7	18	67	4556	60	1	4	324	4	5	19	2266	30	-	-	-	-	-	-	-	
1785	3	10	214	3	2	6	224	3	14	46	3678	43	9	29	2978	35	3	10	1430	17	-	-	-	-	-	-	-	
1786	1	3	86	1	2	7	326	4	15	52	3780	44	6	21	2138	25	4	14	1832	21	1	3	516	6	-	-	-	
1787	-	-	-	-	3	15	476	8	7	35	1764	30	8	40	2688	46	2	10	938	16	-	-	-	-	-	-	-	
1788	-	-	-	-	3	12	498	7	14	56	3700	52	6	24	1988	28	2	8	938	13	-	-	-	-	-	-	-	
1789	-	-	-	-	4	12	556	6	17	52	4346	47	9	27	2946	32	3	9	1386	15	-	-	-	-	-	-	-	
1790	-	-	-	-	7	20	1244	13	16	46	4002	42	9	26	2982	31	3	9	1304	14	-	-	-	-	-	-	-	
1791	-	-	-	-	6	16	1022	11	25	68	6070	67	6	16	1928	21	-	-	-	-	-	-	-	-	-	-	-	
1792	-	-	-	-	3	11	514	7	17	63	4230	59	6	22	1934	27	1	4	492	7	-	-	-	-	-	-	-	
1793	2	10	192	4	6	30	1070	23	8	40	2036	44	4	20	1332	29	-	-	-	-	-	-	-	-	-	-	-	
1794	1	3	92	1	5	17	858	12	16	55	4116	56	7	24	2260	31	-	-	-	-	-	-	-	-	-	-	-	
1795	-	-	-	-	2	14	370	10	10	71	2672	72	2	14	642	18	-	-	-	-	-	-	-	-	-	-	-	
1796	-	-	-	-	10	29	1760	21	19	56	5030	60	5	15	1622	19	-	-	-	-	-	-	-	-	-	-	-	
1797	-	-	-	-	3	30	546	22	5	50	1292	53	2	20	608	25	-	-	-	-	-	-	-	-	-	-	-	
1798	-	-	-	-	2	15	346	10	6	46	1468	43	5	38	1572	46	-	-	-	-	-	-	-	-	-	-	-	
1799	NO DATA AVAILABLE																											
1798	NO DATA AVAILABLE																											

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = % OF TOTAL NO. OF SHIPS FOR THE YEAR

III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = % OF TOTAL SHIP TONNAGE FOR THE YEAR (00 = 100%)

TABLE III.3 BREAKDOWN OF WHITE SEA SHIPPING (PRIMARILY ARCHANGEL) TO AMSTERDAM BY SIZE OF SHIP IN TONS

YEAR	A		B		C		D		E		F		G			
	IN TONS	0 - 100	101 - 200	201 - 300	301 - 400	401 - 500	501 - 600	601 +	IN TONS	0 - 100	101 - 200	201 - 300	301 - 400	401 - 500	501 - 600	601 +
1900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1901	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1902	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1903	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1904	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1905	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1906	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1907	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1908	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1910	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1911	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1912	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1913	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1914	-	-	3 50	420 36	7 26	3146 47	9 33	-	-	-	-	-	-	-	-	-
1915	-	-	11 41	1748 26	7 29	964 21	3 13	-	-	-	-	-	-	-	-	-
1916	1 6	86 2	13 54	1834 40	21 29	8216 33	23 32	2634 11	6 8	3698 15	7 10	3698 15	5 8	3482 14	3 13	2020 24
1917	-	-	11 15	1858 7	10 43	1770 21	5 22	900 11	2 9	878 7	1 4	802 14	1 8	620 17	1 7	622 21
1918	-	-	2 9	348 4	6 50	390 11	1 8	488 13	1 6	-	-	-	-	-	-	-
1919	-	-	2 17	334 9	3 21	712 24	-	-	-	-	-	-	-	-	-	-
1920	-	-	10 71	1666 56	4 29	728 21	2 14	728 21	-	872 16	1 7	872 16	-	-	-	-
1921	-	-	7 90	1264 38	6 33	1480 38	2 11	620 15	-	-	-	-	-	-	-	-
1922	-	-	9 50	1504 36	-	-	-	-	-	-	-	-	-	-	-	-
1923	-	-	1 42	196 88	-	-	-	-	-	-	-	-	-	-	-	-

I = NUMBER OF SHIPS IN THIS SIZE CATEGORY  
 II = % OF TOTAL NO. OF SHIPS FOR THE YEAR  
 III = TOTAL SHIP TONNAGE IN THIS SIZE CATEGORY  
 IV = % OF TOTAL SHIP TONNAGE FOR THE YEAR (100 = 100%)

SOURCE: GAA, PA 6/88-82

TABLE III.4 WHITE SEA SHIPPING FROM RUSSIA (PRIMARYLY ARCHANGEL) TO AMSTERDAM, GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP < AVE. SIZE OF CARGO
1717 <sup>1</sup>	8	42518	314.75	2124	265.50	49.25	18.85	18.65
1718	51	19478	321.88	17644	345.96	35.92	10.38	9.41
1719	34	12922	380.06	11726	344.88	35.18	10.20	9.26
1720	44	15762	358.23	14770	335.68	22.55	6.72	6.29
1721	25	9575	383.04	8976	359.04	24.00	6.68	6.27
1722	22	8330	378.64	7642	347.36	31.27	9.00	8.26
1723	26	9002	346.23	7614	292.85	63.38	18.23	18.42
1724	20	6872	343.60	6524	328.20	17.40	5.33	5.06
1725 <sup>2</sup>	4	1352	338.00	1190	297.50	40.50	13.61	11.98
1726 <sup>3</sup>	21	7232	344.38	6026	286.95	57.43	20.01	16.68
1727	13	3644	280.31	2968	228.31	52.00	22.78	18.85
1728	13	3174	244.15	2948	226.77	17.38	7.67	7.12
1729	17	4962	291.88	4464	262.89	29.29	11.16	10.04
1730	12	3642	303.50	3326	277.17	26.33	9.50	8.68
1731	15	3910	260.67	3910	260.67	0.00	0.00	0.00
1732	16	4480	280.00	3414	213.38	66.63	31.22	23.79
1733	20	7820	376.00	5026	251.30	124.70	49.62	33.16
1734	28	10372	370.43	6594	235.80	134.93	57.29	36.42
1735	20	8724	436.20	5356	267.80	168.40	62.88	38.61
1736	20	8284	414.20	5632	281.60	132.60	47.09	32.01
1737	15	6430	428.67	4166	277.73	150.93	54.34	35.21
1738	19	6412	368.00	4620	243.16	104.84	43.12	30.13
1739	31	13052	421.03	8330	268.71	152.32	56.69	36.18
1740	60	22570	376.17	13758	229.30	146.87	64.05	39.04
1741	54	19686	364.56	12452	230.59	133.96	58.10	36.75
1742	35	11824	337.83	8252	235.77	102.06	43.29	30.21
1743	33	9414	285.27	6996	212.00	73.27	34.56	25.69
1744	25	7064	282.56	6047	241.68	40.88	16.91	14.47
1745	13	4534	348.77	3616	278.15	70.62	25.39	20.25
1746	19	6722	353.79	5046	265.58	88.21	33.21	24.93
1747	21	7522	358.19	5830	277.62	80.57	29.02	22.49
1748	18	6912	384.00	4982	276.78	107.22	38.74	27.92
1749	16	6552	364.00	4630	257.22	106.78	41.51	29.33
1750	34	9860	281.18	7154	210.41	70.76	33.63	25.17
1751	9	3550	394.44	2682	299.00	96.44	32.36	24.45
1752	30	10540	351.33	7408	246.93	104.40	42.28	29.72

SOURCE: GAA, PA 6/58-62

CONTINUED:

TABLE III.4 WHITE SEA SHIPPING FROM RUSSIA (PRIMARILY ARCHANGEL) TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED		AVERAGE SIZE OF CARGO IN TONS		TOTAL TONNAGE ACCORDING TO SIZE OF SHIP		AVERAGE SIZE OF SHIP IN TONS		DIFFERENCE AVE. TONNAGE CARGO - SHIP SIZE		X AVE. SIZE OF CARGO > AVE. SHIP		Y AVE. SIZE OF SHIP < AVE. CARGO	
		TONS	SHIPS	TONS	SHIPS	TONS	SHIPS	TONS	SHIPS	TONS	SHIPS	TONS	SHIPS	TONS	SHIPS
1763	29	9782	337.31	6780	232.76	104.88	44.92	31.00							
1764	28	10990	392.14	7428	265.29	126.86	47.82	32.38							
1765	29	10388	357.17	7104	244.97	112.21	45.81	31.42							
1766	40	18712	467.80	12374	309.35	83.45	28.98	21.24							
1767	38	23306	613.58	16220	426.84	186.74	43.49	30.40							
1768	32	12698	396.81	8682	271.63	125.18	48.08	31.88							
1769	24	11282	469.67	7174	298.92	167.83	58.18	38.96							
1769	16	9430	589.38	5462	303.44	285.94	72.68	42.08							
1769	26	13886	534.08	7914	304.46	229.62	72.89	42.18							
1769	18	9890	549.44	5788	321.56	227.88	65.69	39.88							
1769	31	13378	431.88	8782	283.28	148.60	58.63	34.87							
1769	37	18990	513.24	11334	306.32	196.92	64.07	39.08							
1769	22	16464	748.36	6492	295.09	180.64	61.21	37.97							
1769	37	18428	498.08	10670	288.38	129.70	44.89	30.84							
1769	32	14314	447.31	9632	297.88	148.44	50.17	33.41							
1769	46	22242	483.52	13272	331.00	224.28	67.89	40.33							
1769	37	19898	535.08	10732	290.08	239.62	82.61	48.24							
1770	28	18742	669.37	8388	298.83	262.64	67.87	46.69							
1771	49	24182	493.71	13874	277.82	216.69	78.22	43.89							
1772	53	23974	452.34	18366	343.90	136.63	56.02	38.91							
1773	56	21828	391.58	13678	281.86	178.00	66.91	40.09							
1774	53	27014	509.70	15204	286.87	222.83	77.68	43.72							
1775	49	24894	508.04	13762	279.82	228.41	61.68	44.94							
1776	44	17726	402.86	11412	259.36	143.50	59.33	38.62							
1777	31	14814	478.18	9176	296.80	172.86	58.28	30.79							
1778	54	24146	447.15	15146	280.48	166.87	59.42	37.27							
1779	21	9844	468.71	6166	293.71	176.06	59.92	37.47							
1780	32	14618	456.81	6978	280.54	176.26	62.82	38.88							
1781	29	14388	493.34	7882	303.18	250.23	82.84	46.22							
1782	27	12886	475.93	7686	283.54	182.37	64.32	39.14							
1783	31	15380	496.16	8824	274.97	218.88	79.49	44.29							
1784	29	14492	499.72	8678	299.24	200.48	67.00	40.12							
1785	28	10884	388.71	5884	293.30	235.96	80.43	44.88							
1786	28	12286	438.84	7124	284.94	208.88	72.18	41.82							
1787	33	16422	497.64	9234	279.82	217.82	77.84	43.77							
1788	38	16272	428.21	9802	271.49	193.43	71.85	41.81							

CONTINUED.



TABLE III.4 WHITE SEA SHIPPING FROM RUSSIA (PRIMARYLY ARCHANGEL) TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND OF SIZE OF SHIP

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP < AVE. SIZE OF CARGO
1789	37	16960	458.38	9020	243.78	214.60	86.03	46.82
1790	27	12854	476.07	7170	265.84	210.23	79.27	44.22
1791	20	8718	435.90	4630	231.80	204.10	86.29	48.89
1792	29	13178	454.41	7348	253.31	201.10	79.39	44.26
1793	14	6214	443.86	3704	264.87	179.29	67.76	40.39
1794	34	18148	448.53	8412	247.41	198.12	80.08	44.47
1795	10	4206	420.60	2468	246.80	175.80	71.81	41.80
1796	13	5474	421.08	3386	260.46	160.62	61.67	38.14
1797		NC DATA AVAILABLE						
1798		NC DATA AVAILABLE						
1799		NC DATA AVAILABLE						
1800		NC DATA AVAILABLE						
1801		NC DATA AVAILABLE						
1802		NC DATA AVAILABLE						
1803		NC DATA AVAILABLE						
1804		NC DATA AVAILABLE						
1805		NC DATA AVAILABLE						
1806		NC DATA AVAILABLE						
1807		NC DATA AVAILABLE						
1808		NC DATA AVAILABLE						
1809		NC DATA AVAILABLE						
1810		NC DATA AVAILABLE						
1811		NC DATA AVAILABLE						
1812		NC DATA AVAILABLE						
1813		NC DATA AVAILABLE						
1814	6	1886	309.33	1182	197.00	112.33	87.62	36.31
1815	27	10478	388.07	6642	246.00	142.07	87.78	36.61
1816	24	7416	309.00	4560	190.00	119.00	62.63	38.61
1817	73	26634	364.85	24996	342.41	22.44	6.88	6.18
1818	23	8312	361.39	8316	361.97	-0.17	-0.08	-0.08
1819	12	3766	313.83	3710	309.17	4.67	1.51	1.49
1820	14	3438	245.57	3000	214.29	31.29	14.60	12.74
1821	14	3722	265.86	3474	248.14	17.71	7.14	6.66
1822	18	4652	258.44	4222	234.56	23.89	10.18	9.24
1823	1	220	220.00	198	198.00	22.00	11.11	10.00

SOURCE: GAA, PA 6/58-62

TABLE III-B TOTAL TONNAGE OF CARGO SHIPPED FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1717	768	1410	340	-	-	-	-	-	-	-	-	-	2518
1718	-	-	4182	4378	3568	1800	2468	-	-	840	432	2138	19478
1719	480	2000	1650	1740	800	1602	698	-	100	648	1540	1672	12922
1720	2880	2120	760	292	2092	-	-	-	-	1020	760	5018	15762
1721	2820	1912	-	400	800	-	-	-	-	1500	-	2084	9576
1722	1910	1936	760	1240	576	400	400	-	-	-	-	1108	8330
1723	680	2128	1448	1270	420	1116	-	-	120	-	400	1420	9002
1724	2272	1860	400	420	320	160	400	-	260	680	-	-	6872
1725	256	-	432	400	-	-	260	-	-	-	-	-	1382
1726	1328	400	316	-	-	-	-	-	1176	1182	1130	1700	7232
1727	-	360	-	312	150	-	-	120	-	180	760	1762	3644
1728	640	690	-	-	400	-	-	-	-	748	576	-	3174
1729	-	400	1578	950	232	-	-	-	84	232	1082	424	4962
1730	1076	226	-	290	1160	594	-	-	296	-	-	-	3642
1731	494	256	1310	1438	-	286	-	-	-	156	-	-	3910
1732	238	-	1436	300	740	-	-	416	904	-	186	260	4480
1733	644	-	1390	2420	-	864	72	-	-	1232	372	506	7820
1734	-	-	568	580	-	-	-	3534	1126	944	808	3114	10372
1735	332	1480	200	380	1310	-	-	-	-	1540	1912	1700	8724
1736	-	1676	912	512	1176	930	1312	-	-	764	1062	-	8284
1737	-	-	-	1982	1352	-	-	468	480	1128	-	1020	6430
1738	-	-	-	2402	820	-	-	-	1226	1222	642	300	6612
1739	-	846	1784	2530	1222	-	-	-	640	3202	2252	576	13682
1740	280	-	84	2636	1132	-	-	-	3832	2036	8380	4220	22670
1741	1516	-	1844	2092	260	-	-	580	1804	5594	2878	3118	19686
1742	-	2756	722	2802	2038	456	-	-	590	1372	1088	-	11824
1743	-	1376	1384	460	1226	464	390	-	852	542	1876	880	9414
1744	400	-	670	968	1016	1674	526	-	-	-	160	1650	7064
1745	1680	-	656	-	1722	-	476	-	-	-	-	-	4534
1746	-	-	2220	1560	1370	804	-	-	-	-	-	768	6722
1747	1272	1868	1642	470	1028	-	-	-	-	538	704	-	7522
1748	2110	328	-	460	2150	440	664	-	-	-	-	760	6912
1749	308	724	1678	892	528	-	-	-	-	138	732	1560	6562
1750	-	186	902	250	1172	380	360	-	3016	708	796	1790	9560
1751	-	-	-	640	882	384	-	-	356	348	948	-	3880
1752	-	684	1144	810	1000	-	-	368	352	3472	2100	610	10940

SOURCE: GAA, PA 6/58-62

CONTINUED

TABLE III-5 TOTAL TONNAGE OF CARGO SHIPPED FROM WHITE SEA PORTS (PRIMARY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1753		192	714	1638	2004	-	-	-	2300	1902	1032	-	9782
1754	980	-	360	568	832	432	-	748	1102	702	1814	3522	10980
1755	432	-	1080	2062	1696	388	-	340	1670	300	1710	700	10358
1756	1692	532	376	1638	1294	-	-	376	2348	1984	2176	3296	15712
1757	364	-	2338	1150	4676	-	-	-	3662	4928	4706	1482	23306
1758	-	-	434	1450	2084	384	-	360	1340	2036	3508	1012	12608
1759	1844	-	1958	1252	920	-	-	-	478	2216	1852	1482	11202
1760	-	494	1168	2132	1440	-	-	-	-	626	372	3198	9430
1761	2020	-	1090	3346	-	-	-	-	528	2608	3294	-	13686
1762	152	1226	1732	2256	1512	-	-	-	640	432	1120	520	9590
1763	-	-	1664	1354	2278	700	-	-	-	1192	1740	4448	13376
1764	2500	2404	1218	1020	1910	456	280	-	-	1000	3430	4386	18596
1765	880	-	578	934	-	400	-	-	406	376	2300	4592	10466
1766	1282	1768	778	2504	954	700	-	-	432	2312	3410	1290	15428
1767	3510	1654	460	956	2696	-	-	-	892	620	1800	1726	14314
1768	-	1192	4460	3984	5326	2080	-	-	-	2404	2786	-	22242
1769	5344	588	722	1540	1352	-	-	-	1172	1430	4748	2702	19598
1770	840	894	240	-	472	-	-	-	-	1550	4888	6868	15782
1771	810	-	480	880	464	-	-	-	3644	3870	2542	11532	24192
1772	598	300	380	1696	2084	460	-	-	2614	7986	3370	4086	23974
1773	2722	268	920	230	3936	-	-	-	910	4354	4704	3784	21828
1774	6280	1142	1562	2362	2446	1030	-	-	580	3580	6864	1168	27014
1775	2272	-	1562	4416	-	-	-	-	1888	7732	3738	4166	24894
1776	1248	374	372	1126	636	-	-	-	2602	6308	4720	340	17726
1777	574	420	870	2148	3250	-	-	-	-	500	2450	4304	14516
1778	1500	900	2464	500	1460	-	-	400	320	4592	11810	-	24146
1779	700	1730	2030	-	182	300	-	-	-	1596	2406	920	9864
1780	964	-	1822	740	1418	-	666	-	-	-	5122	3886	14618
1781	1576	660	2176	1240	-	520	720	-	-	3272	3942	282	14388
1782	524	340	1948	1464	1752	-	-	-	488	3932	1748	384	12580
1783	2110	1192	414	672	2692	908	-	618	856	-	3684	2154	15300
1784	-	-	1340	2718	1916	1158	-	-	-	2078	3638	1644	14492
1785	-	252	1184	-	2856	456	-	360	1068	1562	1802	1044	10584
1786	-	-	320	-	1736	-	-	1014	656	468	5528	2544	12266
1787	482	766	432	1876	1448	744	-	-	3930	1264	5568	712	16422
1788	786	-	-	2350	1892	-	-	-	3096	3024	4136	988	16272

SOURCE: GSA, PA 6/58-62

CONTINUED:

TABLE III.5 TOTAL TONNAGE OF CARGO SHIPPED FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1799	364	622	370	418	-	346	-	466	506	4608	5198	4140	16960
1799	2604	736	-	1428	-	518	-	-	1534	1360	3888	438	12854
1798	1128	-	754	-	390	-	-	-	360	2034	1492	2840	8718
1792	766	798	140	-	-	456	-	-	1140	2998	4186	2734	13178
1793	578	578	576	500	-	100	-	-	614	2128	746	1172	6214
1794	1638	544	-	1266	-	246	-	-	3236	3240	4148	466	18148
1795	-	672	228	794	-	-	-	-	1256	1456	-	-	4206
1796	-	-	-	-	-	-	-	-	-	2190	2352	932	9474
1797	-	-	-	-	-	-	-	-	-	-	-	-	-
1798	-	-	-	-	-	-	-	-	-	-	-	-	-
1799	-	-	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	-	-	-	-	-	-	-	-	-	-
1801	-	-	-	-	-	-	-	-	-	-	-	-	-
1802	-	-	-	-	-	-	-	-	-	-	-	-	-
1803	-	-	-	-	-	-	-	-	-	-	-	-	-
1804	-	-	-	-	-	-	-	-	-	-	-	-	-
1805	-	-	-	-	-	-	-	-	-	-	-	-	-
1806	-	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	-	-	-	-	-	-	-	-	-	-
1815	-	608	-	368	-	700	-	-	218	1594	168	886	1856
1816	758	-	-	-	-	-	-	608	758	1304	2712	4694	10478
1817	1394	-	-	-	-	-	-	192	6598	8570	2182	1596	7416
1818	1864	1598	628	-	1080	-	-	326	1020	554	2044	2792	26634
1819	942	-	658	-	-	-	-	-	-	1194	946	-	8312
1820	-	410	-	372	640	-	-	-	962	128	926	-	3766
1821	-	-	-	-	830	-	-	-	716	678	490	1016	3438
1822	-	-	260	-	-	-	198	1940	870	-	592	792	4682
1823	-	220	-	-	-	-	-	-	-	-	-	-	250

SOURCE: CPA, PA 6/58-62

TABLE III.6 AVERAGE TONNAGE OF CARGO SHIPPED FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												AVERAGE FOR THE YEAR	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1717	256.0	352.5	340.0	388.0	396.4	375.0	411.3	-	-	-	280.0	-	427.6	314.8
1718	-	-	346.0	435.0	430.0	400.5	345.0	-	-	-	216.0	-	418.0	391.9
1719	408.0	400.0	612.5	292.0	321.3	-	-	-	100.0	-	340.0	-	359.4	360.1
1720	360.0	424.0	380.0	400.0	400.0	-	-	-	-	-	390.0	-	347.3	350.2
1721	402.0	362.4	-	413.3	288.0	400.0	400.0	-	-	-	-	-	369.3	393.0
1722	382.0	397.2	300.0	423.3	420.0	372.0	-	-	120.0	-	-	-	353.0	378.6
1723	390.0	354.7	289.6	420.0	320.0	160.0	400.0	-	260.0	-	340.0	-	-	346.2
1724	324.6	392.0	400.0	400.0	-	-	260.0	-	-	-	-	-	-	343.6
1725	268.0	-	432.0	400.0	-	-	-	-	-	-	-	-	-	338.0
1726	332.0	400.0	316.0	-	-	-	-	-	294.0	-	394.0	-	340.0	344.4
1727	-	360.0	-	312.0	150.0	-	-	120.0	-	-	180.0	-	293.7	290.3
1728	220.0	285.0	-	-	300.0	-	-	-	-	-	167.0	-	-	244.2
1729	-	400.0	263.0	316.7	232.0	-	-	-	84.0	-	232.0	-	424.0	291.9
1730	269.0	226.0	-	290.0	366.7	297.0	-	-	296.0	-	-	-	-	303.8
1731	247.0	256.0	262.0	287.6	-	256.0	-	-	-	-	156.0	-	-	260.7
1732	230.0	-	359.0	360.0	370.0	-	-	200.0	-	-	-	-	-	200.0
1733	332.0	-	347.5	403.3	-	432.0	-	-	-	-	410.7	-	200.0	376.0
1734	-	-	546.0	580.0	-	-	72.0	392.7	-	-	314.7	-	506.0	506.0
1735	332.0	483.3	500.0	300.0	-	-	-	-	225.2	-	385.0	-	444.9	370.4
1736	-	419.0	458.0	512.0	392.0	465.0	437.3	-	-	-	382.0	-	425.0	436.2
1737	-	-	-	396.4	450.7	-	-	-	-	-	376.0	-	-	414.2
1738	-	-	-	400.3	410.0	-	-	440.0	400.0	-	-	-	510.0	420.7
1739	-	423.0	356.0	421.7	407.3	-	-	-	306.5	-	305.8	-	300.0	348.0
1740	290.0	-	54.0	437.3	566.0	-	-	-	328.0	-	457.4	-	570.0	421.0
1741	370.0	-	360.0	340.7	260.0	-	-	-	294.8	-	290.0	-	383.6	376.2
1742	-	344.5	361.0	480.3	407.6	456.0	-	290.0	257.7	-	399.6	-	346.4	364.6
1743	-	274.0	276.0	400.0	396.5	464.0	-	-	196.7	-	274.4	-	-	337.8
1744	400.0	-	223.3	242.0	338.7	334.0	300.0	-	170.4	-	271.0	-	326.7	285.3
1745	420.0	-	326.0	-	344.4	-	263.0	-	-	-	-	-	278.0	282.0
1746	-	-	370.0	312.0	342.5	402.0	230.0	-	-	-	-	-	-	348.0
1747	424.0	373.0	410.5	235.0	342.7	-	-	-	-	-	-	-	384.0	363.0
1748	351.7	328.0	-	460.0	430.0	440.0	332.0	-	-	-	260.0	-	-	358.2
1749	300.0	262.0	419.5	440.0	264.0	-	-	-	-	-	130.0	-	360.0	304.0
1750	-	186.0	300.7	250.0	390.7	380.0	360.0	-	232.0	-	354.0	-	298.3	281.2
1751	-	-	-	320.0	441.0	384.0	-	-	356.0	-	340.0	-	-	394.4
1752	-	342.0	381.3	405.0	500.0	-	-	104.0	176.0	-	347.2	-	610.0	351.3

CONTINUED

SOURCE: GAA, PA 6/58-62

TABLE 111.6 AVERAGE TONNAGE OF CARGO SHIPPED FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												AVERAGE FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1753	-	182.0	357.0	498.5	400.8	-	-	-	287.5	380.4	-	-	337.3
1754	490.0	-	340.0	508.0	416.0	432.0	-	374.0	347.3	351.0	-	391.3	392.1
1755	432.0	-	353.3	412.4	339.2	388.0	-	340.0	334.0	380.0	-	399.0	367.2
1756	423.0	532.0	376.0	468.5	431.3	-	-	376.0	335.4	396.0	-	412.0	392.0
1757	364.0	-	467.6	287.5	467.6	-	-	-	366.2	410.7	-	494.0	423.7
1758	522.0	-	217.8	403.3	521.8	364.0	-	340.0	223.3	407.2	-	506.0	394.0
1759	-	-	391.8	620.0	620.0	-	-	-	239.0	443.2	-	494.0	468.0
1760	-	494.0	399.3	710.7	480.0	-	-	-	-	626.0	-	533.0	523.0
1761	364.0	-	545.0	669.2	-	-	-	-	528.0	434.7	-	-	526.4
1762	182.0	400.7	577.3	752.0	504.0	-	-	-	640.0	432.0	-	520.0	532.8
1763	-	-	416.0	451.3	455.0	700.0	-	-	-	397.3	-	404.4	431.8
1764	625.0	691.0	600.0	340.0	477.5	450.0	200.0	-	-	500.0	-	487.3	502.6
1765	680.0	-	578.0	487.0	-	400.0	-	-	406.0	376.0	-	459.2	475.7
1766	427.3	589.3	776.0	500.0	318.0	390.0	-	-	432.0	330.3	-	430.0	417.0
1767	585.0	413.5	469.0	478.0	365.1	-	-	-	297.3	310.0	-	450.0	447.3
1768	-	390.0	637.1	500.1	532.6	520.0	-	-	-	480.8	-	559.2	554.0
1769	593.8	500.0	722.0	513.3	676.0	-	-	-	398.7	476.7	-	540.4	524.7
1770	840.0	427.0	400.0	-	472.0	-	-	-	-	516.7	-	624.4	562.6
1771	810.0	-	400.0	425.0	444.0	-	-	-	404.9	387.0	-	578.6	493.7
1772	499.0	300.0	300.0	505.3	416.0	460.0	-	-	290.4	420.3	-	291.9	308.8
1773	453.7	268.0	460.0	230.0	482.0	-	-	-	485.0	395.8	-	420.4	436.6
1774	628.0	571.0	520.7	472.4	469.2	343.3	-	-	290.0	511.4	-	309.3	509.7
1775	454.0	-	520.7	532.0	-	-	-	-	336.0	483.3	-	599.1	508.0
1776	624.0	274.0	372.0	503.0	212.0	-	-	-	328.3	420.8	-	348.0	402.0
1777	574.0	459.0	435.0	429.6	541.7	-	-	-	500.0	500.0	-	430.4	468.3
1778	500.0	450.0	492.8	500.0	553.3	-	-	400.0	-	392.7	-	-	447.1
1779	700.0	300.0	507.5	-	182.0	300.0	-	-	-	532.0	-	-	460.7
1780	482.0	-	455.5	740.0	354.5	-	666.0	-	-	-	-	460.0	460.7
1781	525.3	640.0	725.3	620.0	-	520.0	720.0	-	-	-	-	480.8	466.8
1782	524.0	240.0	649.3	480.0	504.0	-	-	-	480.0	467.4	-	282.0	553.4
1783	422.0	590.0	414.0	673.0	673.0	454.0	-	206.0	265.3	436.9	-	304.0	465.0
1784	-	-	446.7	543.6	479.0	570.0	-	-	-	415.6	-	538.5	493.8
1785	-	252.0	592.0	-	571.2	454.0	-	360.0	534.0	520.7	-	548.0	499.7
1786	-	-	320.0	-	578.7	-	-	507.0	656.0	468.0	-	424.0	490.6
1787	482.0	746.0	432.0	530.0	482.7	744.0	-	-	491.3	421.3	-	712.0	497.6
1788	393.0	-	-	470.0	378.4	-	-	-	442.3	504.0	-	494.0	464.9

CONTINUED

SOURCE: GAA, PA 6/59-62

TABLE 111.6 AVERAGE TONNAGE OF CARGO SHIPPED FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												AVERAGE FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1769	364.0	214.0	376.0	410.0	-	346.0	-	466.0	506.0	460.0	464.4	517.6	450.4
1770	520.8	308.0	-	478.0	378.0	518.0	-	-	511.3	453.3	482.3	430.0	476.1
1781	376.0	-	251.3	-	300.0	-	-	-	360.0	508.5	497.3	512.0	435.9
1782	303.0	594.0	160.0	-	-	486.0	-	-	579.0	499.7	461.0	458.7	494.4
1783	578.0	578.0	578.0	300.0	-	100.0	-	-	614.0	532.0	373.0	300.7	443.0
1794	546.0	544.0	-	422.0	-	246.0	364.0	-	462.3	462.0	460.0	233.0	445.8
1795	-	472.0	250.0	397.0	-	-	-	-	418.7	485.3	-	-	420.6
1796	-	-	-	-	-	-	-	-	-	430.0	302.0	404.0	421.1
1797	-	-	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1798	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1799	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1800	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1801	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1802	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1803	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1804	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1805	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1806	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1807	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1808	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1809	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1810	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1811	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1812	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1813	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1814	-	NO DATA AVAILABLE	NO DATA AVAILABLE	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1815	-	400.0	-	368.0	-	700.0	-	-	210.0	310.0	160.0	206.3	300.3
1816	256.0	-	-	-	-	-	-	269.3	252.7	326.0	330.0	319.2	300.0
1817	301.3	488.7	-	-	-	-	-	192.0	299.9	342.0	451.7	465.3	364.0
1818	354.7	532.7	626.0	-	540.0	-	-	324.0	255.0	277.0	292.0	-	361.4
1819	404.8	-	329.0	-	-	-	-	-	-	238.0	315.3	-	313.0
1820	-	205.0	-	372.0	640.0	-	-	-	182.4	120.0	231.5	-	243.6
1821	-	-	-	-	419.0	-	-	-	239.7	223.3	245.0	254.0	205.0
1822	-	-	260.0	-	-	-	190.0	277.1	290.0	-	197.3	264.0	200.0
1823	-	220.0	-	-	-	-	-	-	-	-	-	-	220.0

SOURCE: CAN. SA 6750-62

TABLE III.7 PERCENTAGE TONNAGE OF CARGO SHIPPED FROM WHITE SEA PORTS (PRIMARY ARCHANGEL) TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1714	36.5	56.0	13.5	22.5	18.3	7.7	12.7	-	-	4.3	-	11.0
1715	-	-	21.3	13.5	6.7	12.4	5.3	-	0.8	5.0	2.2	12.9
1716	18.3	13.5	4.8	1.9	18.3	-	-	-	-	6.5	4.9	31.8
1717	29.4	20.0	-	4.2	8.4	-	-	-	-	16.3	-	21.8
1718	22.9	23.2	9.1	14.9	6.9	4.8	4.8	-	1.3	-	4.4	13.3
1719	7.0	23.6	16.1	14.1	4.7	12.4	5.8	-	3.8	9.9	-	18.8
1720	33.1	28.5	5.8	6.1	4.7	2.3	19.2	-	-	-	-	-
1721	19.2	20.6	32.0	20.6	-	-	-	-	16.3	16.3	-	23.5
1722	18.4	5.5	4.4	-	4.1	-	-	3.3	-	4.9	15.6	48.4
1723	9.9	18.6	-	-	18.9	-	-	-	-	23.6	18.1	-
1724	28.6	18.6	31.8	18.1	4.7	-	-	-	1.7	4.7	21.4	8.5
1725	29.5	6.2	33.5	36.8	31.9	16.3	-	-	8.1	-	-	-
1726	12.6	6.5	32.1	6.7	6.5	-	-	-	-	-	-	-
1727	5.3	-	18.5	32.2	16.5	-	-	9.3	20.2	4.0	4.2	5.8
1728	8.6	-	5.5	9.6	-	11.5	1.8	-	-	-	4.9	6.7
1729	3.8	16.6	5.7	4.4	13.0	-	-	34.1	18.9	16.4	4.9	30.8
1730	-	28.2	11.0	6.2	14.2	11.2	15.8	-	-	17.7	17.3	19.5
1731	-	-	-	28.8	21.8	-	-	-	-	9.2	12.1	-
1732	-	-	-	36.3	12.4	-	-	7.3	7.5	17.5	-	15.9
1733	-	6.3	13.7	19.4	9.4	-	-	-	12.5	18.5	9.7	4.5
1734	1.2	-	9.2	11.7	9.4	-	-	-	4.9	24.5	17.3	4.4
1735	7.7	-	9.4	18.6	1.3	-	-	-	17.0	9.8	37.1	18.7
1736	-	23.3	6.1	23.7	17.2	-	-	2.9	9.2	28.4	14.6	15.8
1737	-	14.6	14.7	4.9	13.8	3.9	3.2	-	5.8	11.6	9.2	-
1738	5.7	-	9.5	13.7	14.4	4.9	7.4	-	9.1	5.8	19.5	18.4
1739	17.1	-	14.5	-	38.0	23.7	18.5	-	-	2.3	-	23.4
1740	-	-	32.0	23.2	26.4	12.8	-	-	-	-	-	-
1741	16.9	20.8	21.8	6.2	13.7	-	-	-	-	7.2	9.4	11.4
1742	38.5	4.7	-	6.7	31.1	6.4	9.6	-	-	-	-	11.0
1743	4.6	11.1	25.6	13.6	8.1	-	-	-	-	2.1	11.2	23.8
1744	-	1.9	9.4	2.6	12.3	4.8	3.8	-	-	7.4	8.3	18.7
1745	-	-	-	18.6	24.8	10.8	-	-	31.5	9.6	26.7	-
1746	-	6.5	16.9	7.7	9.5	-	-	3.5	10.0	32.9	19.9	5.8

CONTINUED

SOURCE: CIA, PA 6/58-62



TABLE III.7 PERCENTAGE TONNAGE OF CARGO SHIPPED FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

MONTH OF ARRIVAL

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1753	-	2.0	7.3	16.7	20.5	-	-	-	23.5	19.4	10.5	-
1754	0.2	-	3.3	5.2	7.6	3.9	-	6.0	10.0	6.4	16.5	32.1
1755	4.2	-	10.2	19.9	16.4	3.7	-	3.3	10.1	2.9	16.5	6.8
1756	10.8	3.4	2.4	10.4	0.2	-	-	2.4	14.9	12.6	13.8	21.0
1757	1.6	-	16.0	4.9	20.1	-	-	-	19.7	21.1	27.0	6.4
1758	-	-	3.4	11.5	16.5	3.0	-	2.0	10.6	16.1	20.2	8.0
1759	0.3	-	17.5	11.2	0.2	-	-	-	4.3	19.0	16.5	13.2
1760	-	5.2	12.4	22.6	15.3	-	-	-	-	6.6	3.9	33.9
1761	20.4	-	0.0	24.4	-	-	-	-	3.9	19.1	24.1	-
1762	1.6	12.0	10.1	23.5	15.0	-	-	-	6.7	4.5	11.7	5.4
1763	-	-	12.4	10.1	17.0	5.2	-	-	-	8.9	13.0	33.3
1764	13.4	12.0	6.5	5.5	10.3	2.4	1.5	-	-	5.4	10.4	23.6
1765	0.4	-	5.5	0.9	-	3.0	-	-	3.9	3.6	22.0	43.9
1766	0.3	11.5	5.0	10.2	6.2	4.5	-	-	2.0	15.0	22.1	0.4
1767	20.5	11.6	3.2	6.7	12.0	-	-	-	6.2	4.3	12.6	12.1
1768	-	5.4	20.1	17.0	23.9	0.4	-	-	-	10.0	12.6	-
1769	27.3	3.0	3.7	7.9	6.9	-	-	-	6.0	7.3	24.2	13.8
1770	5.3	5.7	1.5	-	3.0	-	-	-	-	9.0	31.0	43.6
1771	3.3	-	2.0	3.5	1.9	-	-	-	15.1	16.0	10.5	47.7
1772	4.2	1.3	1.6	7.1	0.7	1.9	-	-	10.9	33.3	14.1	17.0
1773	12.5	1.2	4.2	1.1	10.0	-	-	-	4.2	19.9	21.6	17.3
1774	23.2	0.2	5.8	0.7	0.1	3.0	-	-	2.1	13.3	25.4	0.3
1775	0.1	-	6.3	17.7	-	-	-	-	4.0	31.1	15.9	16.7
1776	7.0	2.1	2.1	6.4	3.0	-	-	-	14.7	35.6	26.6	1.9
1777	0.0	2.0	0.0	14.0	22.4	-	-	-	-	3.4	16.9	29.7
1778	0.2	3.7	10.2	2.1	6.9	-	-	1.7	1.3	19.0	40.9	-
1779	7.1	17.5	20.6	-	1.0	3.0	-	-	-	16.2	24.4	-
1780	6.6	-	12.5	5.1	9.7	-	4.6	-	-	-	35.0	26.6
1781	11.0	4.6	15.1	0.6	-	3.6	5.0	-	-	22.7	27.4	2.0
1782	4.2	2.7	15.5	11.6	13.9	-	-	-	3.9	31.3	13.0	3.1
1783	13.0	7.0	2.7	4.0	17.0	5.9	-	4.0	5.6	-	24.1	14.1
1784	-	-	9.2	10.0	13.2	0.0	-	-	-	14.3	25.1	11.3
1785	-	2.0	11.2	-	27.0	4.3	-	3.4	10.1	14.0	17.0	0.9
1786	-	-	2.6	-	14.2	-	-	0.3	5.3	3.0	45.1	20.7
1787	2.9	4.7	2.6	6.6	0.0	4.5	-	-	23.9	7.7	33.9	0.3
1788	4.0	-	-	10.4	11.6	-	-	-	10.0	10.6	25.4	6.1

SOURCE: GAA, 6/58-62

CONTINUED

TABLE 111.7 PERCENTAGE TONNAGE OF CARGO SHIPPED FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

MONTH OF ARRIVAL

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1769	2.1	3.7	2.2					2.7	3.8	27.2	30.1	29.4
1770	20.3	5.7			2.9				11.9	18.6	30.0	3.4
1771	12.0		0.6		4.5				4.1	23.3	17.1	29.4
1772	5.8	6.8	1.1						0.7	22.8	31.5	20.7
1773		5.3	0.3						0.9	34.2	12.0	18.9
1774	10.8	3.8					2.4		21.4	21.4	27.4	3.1
1775		11.2	5.4						29.9	34.6		
1776										40.0	43.0	17.0
1777												
1778												
1779												
1780												
1781												
1782												
1783												
1784												
1785												
1786												
1787												
1788												
1789												
1790												
1791												
1792												
1793												
1794												
1795												
1796												
1797												
1798												
1799												
1800												
1801												
1802												
1803												
1804												
1805												
1806												
1807												
1808												
1809												
1810												
1811												
1812												
1813												
1814												
1815		7.6								43.2	9.1	47.7
1816	10.4								2.1	19.2	29.9	30.1
1817	0.3	5.5						10.9	10.2	17.6	29.4	21.8
1818	12.0	10.2	7.8					0.7	24.8	32.2	22.0	10.8
1819	25.7		17.8		13.0			3.9	12.3	6.7	24.6	
1820											26.1	
1821					16.6				20.0	3.7	26.9	
1822					22.3				19.2	16.0	13.2	27.3
1823						4.3		41.7	10.7		12.7	17.0

SOURCE: CBA, 6/50-62

TABLE III-B TOTAL TONNAGE OF WHITE SEA SHIPPING FROM WHITE SEA PORTS (PRIMARILY ARHANGEL) TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1717	652	1152	320	-	-	1364	2370	-	-	694	-	-	-	2124
1718	-	-	3776	3658	3694	1364	2370	-	-	-	-	432	1958	17644
1719	304	1678	1306	1652	756	1362	632	-	84	524	1406	1632	1632	11726
1720	2590	1662	692	2698	2698	-	-	-	-	958	768	4906	4906	14770
1721	2612	1762	-	368	720	-	-	-	-	1528	-	-	1964	8976
1722	1838	1836	692	1088	536	368	488	-	-	-	-	900	900	7642
1723	540	1828	1286	1128	358	836	-	-	120	-	368	1256	-	7614
1724	2162	1636	308	376	276	168	688	-	488	768	-	-	-	6524
1725	868	-	348	368	-	238	-	-	-	-	-	-	-	1190
1726	1108	308	316	-	-	-	-	-	1146	948	838	1378	-	6026
1727	-	258	-	256	126	-	120	-	-	170	548	1498	-	2968
1728	378	598	-	-	528	-	-	-	-	748	512	-	-	2998
1729	-	246	1578	958	232	-	-	-	84	232	868	334	-	4464
1730	1676	226	298	298	844	594	-	-	296	-	-	-	-	3326
1731	494	256	1318	1438	-	258	-	-	-	156	-	-	-	3918
1732	238	-	968	372	676	-	-	614	658	-	142	232	-	3414
1733	484	-	1668	1748	-	948	84	-	-	632	268	272	-	5826
1734	-	-	312	296	-	-	-	2884	746	734	442	1868	-	6894
1735	244	828	312	272	844	-	-	-	-	958	876	1838	-	5386
1736	-	1232	582	332	888	534	926	-	-	496	730	-	-	5632
1737	-	-	-	1402	836	-	-	296	256	644	-	632	-	4166
1738	-	-	-	1568	698	-	-	-	898	984	432	286	-	4688
1739	-	486	1436	1686	838	-	-	-	378	1878	1326	312	-	8338
1740	186	-	54	1858	676	-	-	-	2526	1296	4796	2646	-	13758
1741	966	-	1156	1424	268	-	-	402	1228	3094	1652	2218	-	12452
1742	-	1978	642	1944	1376	348	-	-	376	848	678	-	-	8252
1743	-	1116	1234	348	868	244	188	-	644	1206	1206	736	-	6996
1744	278	-	594	876	930	1308	476	-	-	148	148	1426	-	6842
1745	1184	-	548	-	1368	574	476	-	-	-	-	-	-	3616
1746	-	-	1732	1704	1094	-	-	-	-	-	-	-	582	5846
1747	848	1402	1232	422	842	-	-	-	-	474	698	-	-	5838
1748	1544	228	-	468	1446	246	582	-	-	-	496	-	-	4982
1749	218	528	1186	642	416	-	-	-	-	138	486	1822	-	6438
1750	-	148	688	178	874	258	246	-	2388	516	638	1336	-	7184
1751	-	-	-	534	784	256	-	-	296	230	642	-	-	2682
1752	-	514	888	556	644	-	-	288	284	238	1484	488	-	7488

CONTINUED:

SOURCE: GAA, PA 6/58-62

TABLE 111.8 TOTAL TONNAGE OF WHITE SEA SHIPPING FROM WHITE SEA PORTS (PRIMARY ARCHANGEL) TO ARSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1753	-	166	526	1122	1376	-	-	-	1604	1226	726	-	6750
1754	696	-	234	364	572	362	-	524	716	376	1226	2380	7426
1755	252	-	652	1406	1136	232	-	194	1116	202	1186	456	7194
1756	1042	278	376	1042	944	-	-	376	2086	1532	1992	2546	12374
1757	246	-	1714	602	3004	-	-	-	3146	3398	2786	1034	16226
1758	648	-	434	944	1648	268	-	246	1132	1200	2212	876	8482
1759	-	258	1638	782	818	-	-	-	478	1176	1040	688	7174
1760	1010	-	642	1722	1026	-	-	-	262	328	236	1776	6442
1761	102	724	638	1762	1132	-	-	-	438	1594	636	352	5788
1762	-	-	1682	1626	1894	368	-	-	-	682	1020	2788	8782
1763	1408	1336	778	636	1410	488	166	-	-	544	1886	2664	11334
1764	468	-	276	796	588	408	-	-	202	376	1342	2642	6492
1765	736	1132	398	1496	588	424	-	-	248	1794	2326	1970	10670
1766	2266	966	268	582	2644	-	-	-	496	362	996	1086	9832
1767	-	572	2488	2766	3558	1168	-	-	-	1262	1468	-	13272
1768	2074	308	482	818	682	-	-	-	624	888	2688	1988	10732
1769	388	482	186	-	204	-	-	-	-	608	2710	3288	6396
1770	398	-	298	512	204	-	-	-	2264	7214	1416	6248	13674
1771	634	208	238	976	1272	208	-	-	1736	4616	2172	3248	15346
1772	1678	194	634	198	2376	-	-	-	494	2588	2668	2106	13878
1773	3426	644	962	1636	1534	624	-	-	316	1916	3720	682	16204
1774	1188	644	628	2332	-	-	-	-	582	4282	2118	2388	13782
1775	636	226	238	686	962	-	-	-	1714	4882	3128	236	11412
1776	398	294	582	1376	2038	-	-	-	-	268	1842	2722	9176
1777	968	522	1676	262	1866	-	-	-	228	2954	7304	-	18146
1778	424	1188	1188	404	102	208	-	-	-	688	1526	548	6168
1779	596	1134	1134	694	934	-	482	-	-	-	3178	2288	8878
1780	964	244	1184	758	1638	324	426	-	-	1686	2148	146	7882
1781	272	206	1188	682	1638	-	-	-	284	2520	1112	188	7486
1782	1174	634	236	304	1688	878	-	406	462	-	1834	1136	8824
1783	-	-	718	1888	1292	638	-	-	-	1062	2110	948	8678
1784	-	136	666	-	1768	272	-	238	488	682	996	506	5866
1785	-	-	204	-	1624	-	-	626	344	304	3286	1346	7124
1786	288	474	276	628	948	426	-	-	2012	614	3126	682	9234
1788	468	-	-	1384	1254	-	-	-	1664	1684	2572	514	6882

CONTINUED:

SOURCE: C.A.A. PA 6750-82



TABLE 111.9 AVERAGE TONNAGE OF WHITE SEA SHIPPING FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												AVERAGE FOR THE YEAR	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1787	217.3	288.0	320.0	-	343.0	341.0	-	-	-	231.3	-	-	391.0	265.8
1788	-	378.6	314.5	389.0	379.0	348.0	305.0	-	-	174.7	-	-	408.0	344.0
1789	323.0	378.4	348.0	282.0	299.0	-	-	-	84.0	316.7	-	-	388.4	338.7
1791	373.1	358.4	-	369.0	368.0	-	-	-	-	382.0	-	-	327.3	359.0
1792	366.0	367.2	346.0	362.7	368.0	369.0	400.0	-	129.0	-	-	-	309.0	347.4
1793	270.0	304.7	251.2	373.3	368.0	278.7	400.0	-	400.0	-	-	-	314.0	292.0
1794	308.0	328.0	308.0	378.0	276.0	168.0	400.0	-	400.0	-	-	-	-	320.2
1795	268.0	-	340.0	360.0	-	230.0	230.0	-	-	-	-	-	-	297.8
1797	277.0	300.0	310.0	288.0	-	-	-	120.0	206.5	316.0	279.3	274.0	-	287.0
1798	196.0	288.0	-	288.0	128.0	-	-	120.0	-	170.0	270.0	249.7	-	220.3
1799	-	295.0	-	264.0	264.0	-	-	-	-	187.0	256.0	-	-	220.8
1799	-	246.0	263.0	238.0	-	-	-	-	84.0	232.0	269.3	334.0	-	262.0
1799	208.0	226.0	207.0	290.0	281.3	297.0	-	-	296.0	-	-	-	-	277.2
1799	247.0	248.0	242.0	287.0	238.0	256.0	-	-	-	156.0	-	-	-	260.7
1799	238.0	-	247.5	272.0	-	-	-	207.0	162.5	-	142.0	232.0	-	213.4
1799	242.0	-	248.0	291.3	-	204.0	54.0	244.9	149.2	210.7	208.0	272.0	-	281.3
1799	-	270.0	312.0	272.0	-	-	-	-	-	244.7	221.0	268.7	-	236.5
1799	244.0	308.0	291.0	332.0	261.7	267.0	304.7	-	-	237.5	292.0	257.5	-	267.0
1799	-	308.0	-	296.4	266.7	-	-	-	-	240.0	243.3	-	-	281.0
1799	-	-	-	296.4	278.7	-	-	298.0	256.0	221.3	-	316.0	-	277.7
1799	-	-	-	260.0	243.0	-	-	-	224.5	246.0	216.0	256.0	-	243.2
1799	-	243.0	206.0	281.0	270.7	-	-	-	109.0	208.3	245.2	312.0	-	240.7
1799	104.0	-	84.0	259.7	348.0	-	-	-	194.3	106.7	282.4	240.5	-	229.3
1799	241.5	-	231.2	247.3	260.0	-	-	201.0	178.4	221.0	278.3	248.6	-	230.6
1799	-	247.3	331.0	294.9	275.2	346.0	-	-	125.3	169.6	169.5	-	-	235.0
1799	-	223.2	246.0	300.0	216.0	244.0	100.0	-	128.8	178.0	214.3	245.3	-	212.0
1799	270.0	-	190.0	228.5	310.0	261.6	238.0	-	-	-	140.0	237.7	-	241.7
1799	200.5	-	274.5	-	270.6	-	238.0	-	-	-	-	-	-	270.2
1799	-	-	200.7	268.8	273.5	287.0	-	-	-	-	-	281.0	-	269.6
1799	313.3	209.4	300.0	211.0	207.3	-	-	-	-	237.0	249.0	-	-	277.6
1799	248.7	220.0	-	408.0	293.2	246.0	291.0	-	-	-	-	240.0	-	270.0
1799	210.0	260.0	200.5	321.0	209.0	-	-	-	-	130.0	243.0	253.5	-	237.2
1799	-	140.0	216.7	190.0	291.3	256.0	246.0	-	177.5	250.0	210.4	222.7	-	210.4
1799	-	-	-	277.0	352.0	294.0	-	-	296.0	230.0	321.0	-	-	298.0
1799	-	257.0	206.0	270.0	332.0	-	-	140.0	142.0	233.0	247.3	400.0	-	240.0

CONTINUED

SOURCE: GAO, PA 6/59-62

TABLE 111.0 AVERAGE TONNAGE OF WHITE SEA SHIPPING FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												AVERAGE FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1763	-	164.0	263.0	266.5	275.6	-	-	-	200.5	245.2	182.0	-	232.8
1764	308.0	-	234.0	340.0	266.0	368.0	-	262.0	238.7	187.0	248.2	261.1	268.3
1765	282.0	-	264.0	297.2	226.0	232.0	-	194.0	223.4	202.0	237.6	328.0	248.0
1766	318.5	276.0	376.0	268.8	281.3	268.0	-	376.0	298.0	310.4	332.0	320.8	309.3
1767	246.0	-	342.0	223.0	300.4	-	-	-	314.6	283.2	278.6	344.7	294.9
1768	-	-	217.0	231.3	387.0	260.0	-	246.0	182.7	258.9	274.5	288.0	271.6
1769	334.0	-	328.2	378.0	818.0	-	-	-	239.0	235.2	270.0	293.3	296.9
1769	334.0	288.0	238.0	377.3	342.7	-	-	-	-	328.0	232.0	295.0	303.4
1769	322.0	-	331.0	323.6	-	-	-	-	282.0	264.0	287.1	-	304.8
1762	182.0	241.3	312.7	412.0	377.3	-	-	-	439.0	236.0	318.0	382.0	321.6
1763	-	-	200.6	342.0	376.8	386.0	-	-	-	227.3	285.0	289.7	282.3
1764	368.0	334.0	357.0	278.3	382.5	408.0	166.0	-	-	272.0	264.3	284.9	308.3
1765	466.0	-	274.0	398.0	-	400.0	-	-	292.0	376.0	268.4	264.2	294.1
1766	448.3	377.3	360.0	398.0	196.0	212.0	-	-	248.0	243.0	261.8	303.3	288.4
1767	377.7	241.5	204.0	261.0	377.7	-	-	-	163.3	191.0	249.0	338.3	297.9
1768	286.0	300.0	364.0	393.7	385.8	202.0	-	-	268.0	280.4	293.6	-	331.8
1769	319.3	248.0	482.0	270.0	341.0	-	-	-	268.0	266.7	269.0	310.0	290.1
1770	398.0	248.0	194.0	-	284.0	-	-	-	-	269.3	301.2	322.7	299.9
1771	398.0	-	298.0	286.0	284.0	-	-	-	244.9	221.4	283.2	312.4	277.0
1772	317.0	208.0	236.0	325.3	284.4	280.0	-	-	192.9	242.6	271.5	231.4	243.9
1773	313.0	164.0	317.0	198.0	296.0	-	-	-	247.0	234.5	266.0	234.0	261.6
1774	342.6	322.0	300.7	287.2	366.0	209.3	-	-	188.0	273.7	286.2	227.3	266.9
1775	238.0	-	277.3	291.5	-	-	-	-	184.0	268.3	302.3	341.1	276.6
1776	316.0	226.0	232.0	328.0	167.3	-	-	-	214.3	272.1	284.4	236.0	289.4
1777	304.0	294.0	271.0	278.2	339.7	-	-	-	-	268.0	306.4	272.2	296.0
1778	306.7	261.0	316.2	282.0	336.0	-	-	-	228.0	268.3	284.0	-	280.8
1779	424.0	231.2	297.0	-	182.0	202.0	-	270.0	-	316.7	381.8	270.0	293.7
1780	298.0	-	281.0	664.0	233.5	-	-	-	-	-	264.8	285.0	286.6
1781	361.3	346.0	381.3	375.0	-	324.0	436.0	-	-	240.0	306.9	146.0	303.2
1782	272.0	268.0	288.3	280.0	343.3	-	-	-	284.0	280.0	222.4	188.0	283.6
1783	234.0	317.0	234.0	364.0	422.0	286.0	-	162.0	184.0	-	305.7	322.7	275.0
1784	-	-	230.7	378.6	323.0	319.0	-	-	-	212.2	381.4	322.7	296.2
1785	-	136.0	334.0	-	383.6	272.0	-	230.0	243.0	267.3	332.7	253.0	293.3
1786	-	-	224.0	-	341.3	-	-	313.0	344.0	380.0	296.0	224.3	286.0
1787	250.0	474.0	278.0	310.0	316.0	420.0	-	-	291.5	204.7	266.5	492.0	279.8
1788	230.0	230.0	-	270.0	250.0	-	-	-	237.7	280.7	321.8	287.0	271.6

CONTINUED:

SOURCE: SAA, PA 6780-62

TABLE 111.0 AVERAGE TONNAGE OF WHITE SEA SHIPPING FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												AVERAGE FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1799	202.0	213.0	190.0	236.0	-	208.0	-	238.0	300.0	238.0	250.0	259.0	243.0
1798	202.0	185.0	-	317.3	202.0	274.0	-	-	284.7	256.7	260.5	292.0	268.0
1797	200.3	-	104.0	-	218.0	-	-	-	202.0	278.5	228.0	268.8	231.5
1796	238.0	223.0	92.0	-	-	200.0	-	-	264.0	281.0	230.0	261.0	263.3
1795	-	348.0	208.0	309.0	-	288.0	-	-	280.0	279.5	228.0	210.0	264.6
1794	318.3	268.0	-	223.3	-	148.0	236.0	-	242.3	247.4	260.7	162.0	247.6
1793	-	238.0	182.0	228.0	-	-	-	-	234.0	266.0	-	-	244.0
1792	-	-	-	-	-	-	-	-	-	267.5	234.7	320.0	260.8
1791	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1790	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1789	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1788	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1787	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1786	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1785	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1784	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1783	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1782	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1781	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1780	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1779	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1778	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1777	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1776	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1775	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1774	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1773	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1772	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1771	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1770	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1769	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1768	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1767	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1766	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1765	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1764	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1763	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1762	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1761	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1760	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1759	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1758	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1757	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1756	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1755	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1754	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1753	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1752	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1751	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1750	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1749	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1748	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1747	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1746	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1745	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1744	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1743	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1742	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1741	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1740	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1739	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1738	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1737	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1736	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1735	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1734	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1733	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1732	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1731	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1730	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1729	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1728	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1727	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1726	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1725	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1724	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1723	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1722	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1721	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1720	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1719	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1718	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1717	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1716	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1715	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1714	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1713	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1712	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1711	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1710	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1709	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1708	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1707	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1706	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1705	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1704	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1703	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1702	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1701	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1700	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1699	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1698	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1697	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1696	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1695	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1694	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1693	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1692	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1691	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1690	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1689	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1688	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1687	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1686	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1685	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1684	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1683	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1682	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1681	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1680	-	-	NC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-



TABLE III.10 PERCENTAGE TONNAGE OF WHITE SEA SHIPPING FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1737 <sup>1</sup>	30.7	54.2	15.1	-	-	7.7	13.4	-	-	-	3.9	11.1
1738	-	17.8	22.4	-	-	11.9	5.6	-	-	-	4.5	13.9
1739	2.9	16.0	10.1	-	-	11.9	5.6	0.7	-	-	2.4	13.9
1740	17.5	12.7	2.6	-	-	-	-	-	-	-	6.4	33.2
1741	29.1	26.6	4.0	-	-	-	-	-	-	-	17.0	21.9
1742	23.9	24.0	9.1	-	-	4.7	5.2	-	-	-	-	11.8
1743	7.1	24.0	10.7	-	-	11.0	4.6	1.6	-	-	4.0	16.5
1744	33.1	25.0	5.8	-	-	2.5	6.1	6.1	-	-	11.3	-
1745 <sup>2</sup>	21.0	-	20.6	-	-	-	19.3	-	-	-	-	-
1746 <sup>3</sup>	18.4	5.0	5.2	-	-	-	-	19.0	-	-	15.7	22.7
1747	8.7	8.7	8.6	-	-	-	-	4.0	-	-	5.7	50.5
1748	18.3	20.0	-	-	-	-	-	-	-	-	25.4	-
1749	-	5.5	35.3	-	-	-	-	-	1.9	-	5.2	7.5
1750	32.4	6.8	0.7	-	-	17.8	-	-	8.9	-	-	-
1751	12.6	6.5	36.0	-	-	6.5	-	-	-	-	-	-
1752	7.0	-	29.0	-	-	-	-	12.1	19.0	-	4.2	6.0
1753	9.6	-	21.1	-	-	11.3	-	-	-	-	12.6	5.4
1754	-	-	0.7	-	-	-	-	33.0	11.3	-	11.1	28.2
1755	0.6	15.5	5.8	-	-	-	-	-	-	-	17.7	19.2
1756	-	21.9	10.3	-	-	9.5	16.4	-	-	-	8.8	-
1757	-	-	-	-	-	-	-	7.1	6.1	-	15.9	15.2
1758	-	-	33.0	-	-	-	-	-	19.4	-	21.3	5.5
1759	-	5.8	20.2	-	-	-	-	-	4.3	-	22.5	3.7
1760	1.0	-	11.5	-	-	-	-	-	18.4	-	9.4	19.2
1761	7.8	-	11.9	-	-	-	-	3.2	9.9	-	13.3	17.7
1762	-	24.0	0.0	-	-	4.2	-	-	4.6	-	10.3	-
1763	-	16.0	4.9	-	-	3.5	2.6	-	4.2	-	5.1	10.5
1764	0.6	-	0.8	-	-	21.8	7.9	-	-	-	2.3	23.6
1765	33.0	-	15.2	-	-	-	13.2	-	-	-	-	-
1766	-	-	32.7	-	-	11.4	-	-	-	-	-	9.9
1767	16.1	24.0	21.1	-	-	-	-	-	-	-	8.1	8.5
1768	31.4	0.4	-	-	-	0.9	11.7	-	-	-	-	10.0
1769	0.7	11.2	25.6	-	-	-	-	-	-	-	3.0	10.3
1770	2.1	2.1	9.1	-	-	3.6	3.4	-	32.3	-	7.2	18.7
1771	-	-	20.7	-	-	9.5	-	-	11.8	-	8.6	23.9
1772	-	6.9	12.0	-	-	-	-	3.8	3.8	-	31.5	5.5

CONTINUED

SOURCE: C.A.A. PA 6/50-02

TABLE 111-10 PERCENTAGE TONNAGE OF WHITE SEA SHIPPING FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM  
DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1753	-	2.5	7.8	16.6	20.4	-	-	-	23.8	18.2	10.8	-
1754	9.0	-	3.2	5.6	7.7	5.8	-	7.1	9.6	5.0	16.5	31.6
1755	3.5	-	12.0	20.9	15.9	3.3	-	2.7	15.7	2.8	16.7	6.3
1756	10.2	2.2	3.0	8.4	6.8	-	-	3.0	16.9	12.5	16.1	20.7
1757	1.5	-	10.4	9.5	12.5	-	-	-	19.4	20.9	17.2	6.4
1758	-	-	5.0	11.4	17.8	3.0	-	2.8	13.0	14.8	25.4	6.6
1759	9.3	-	22.7	10.8	7.1	-	-	-	6.7	16.4	15.1	12.3
1760	-	4.7	13.1	20.7	18.8	-	-	-	-	6.8	4.2	32.4
1761	20.3	-	8.4	22.3	-	-	-	-	3.6	20.0	25.4	-
1762	1.8	12.5	16.2	21.4	19.6	-	-	-	7.6	4.0	11.0	6.1
1763	-	-	11.4	11.7	21.5	4.3	-	-	-	7.8	11.7	31.5
1764	12.9	11.8	6.9	7.3	12.4	3.5	1.5	-	-	4.8	16.3	22.6
1765	7.2	-	4.2	12.2	-	6.2	-	-	3.1	5.8	20.7	40.7
1766	6.9	16.6	3.7	18.7	5.5	4.0	-	-	2.3	16.0	22.1	10.2
1767	23.8	18.1	2.7	5.5	27.7	-	-	-	5.1	4.0	10.4	10.6
1768	-	4.3	18.8	19.8	26.8	8.8	-	-	-	9.4	11.1	-
1769	24.8	2.0	3.7	7.5	6.4	-	-	-	5.8	7.5	25.1	14.4
1770	4.7	5.9	1.9	-	3.4	-	-	-	-	9.6	32.3	42.3
1771	2.9	-	2.2	3.8	2.1	-	-	-	16.2	16.3	10.4	46.0
1772	4.1	1.4	1.5	6.4	8.3	1.8	-	-	11.3	30.0	14.1	21.1
1773	14.4	1.2	4.8	1.5	18.2	-	-	-	3.8	19.7	20.3	16.1
1774	22.5	4.2	5.9	9.4	10.1	4.1	-	-	2.1	12.6	24.5	4.5
1775	8.2	-	6.3	17.0	-	-	-	-	4.0	31.3	15.4	17.4
1776	5.6	2.0	2.0	5.7	4.4	-	-	-	15.0	35.8	27.4	2.1
1777	4.3	3.2	5.9	15.0	22.2	-	-	-	-	2.9	16.8	29.7
1778	4.1	3.4	10.4	1.9	6.7	-	-	1.8	1.5	19.5	48.8	-
1779	6.9	10.7	19.3	-	3.0	3.3	-	-	-	15.4	24.7	8.8
1780	4.4	-	12.5	5.2	18.4	-	4.5	-	-	-	35.4	25.4
1781	11.5	4.4	10.5	9.5	-	4.1	5.5	-	-	21.4	27.3	1.9
1782	3.6	3.5	15.1	11.2	13.5	-	-	-	3.3	32.9	14.5	2.8
1783	13.8	7.4	2.8	3.6	19.8	6.7	-	5.7	5.4	-	21.5	13.3
1784	-	-	8.2	21.9	14.9	7.4	-	-	-	12.2	24.3	11.2
1785	-	2.3	11.4	-	30.1	4.6	-	3.9	4.3	13.7	17.0	6.6
1786	-	-	3.1	-	14.4	-	-	8.8	4.8	4.3	45.7	18.9
1787	2.7	5.1	3.0	6.7	10.3	4.5	-	-	21.8	6.6	33.9	5.3
1788	4.8	-	-	14.2	13.2	-	-	-	17.5	17.7	27.1	5.4

CONTINUED:

SOURCE: C.A.B. PA 6/58-62

TABLE III.10 PERCENTAGE TONNAGE OF WHITE SEA SHIPPING FROM WHITE SEA PORTS (PRIMARILY ARCHANGEL) TO AMSTERDAM DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1949	2-2	4-7	2-2	2-6	-	2-3	-	2-6	3-3	26-4	30-6	23-0
1950	10-7	4-8	-	13-3	2-8	3-8	-	-	11-9	10-7	20-1	4-1
1951	13-8	-	10-5	-	4-7	-	-	-	4-4	23-8	14-8	20-2
1952	6-9	6-3	7-3	-	-	3-9	-	-	7-2	23-8	30-6	21-3
1953	-	9-3	7-8	8-1	-	7-8	-	-	7-6	30-2	12-3	17-0
1954	11-2	3-1	8-9	-	-	1-8	2-8	-	20-2	20-6	20-5	3-9
1955	-	9-7	6-6	10-7	-	-	-	-	20-7	36-3	-	-
1956	-	-	-	-	-	-	-	-	-	30-5	41-6	18-9
1957	-	-	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1958	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1959	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1960	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1961	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1962	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1963	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1964	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1965	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1966	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1967	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1968	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1969	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1970	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1971	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1972	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1973	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1974	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1975	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1976	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1977	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1978	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1979	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1980	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1981	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1982	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1983	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1984	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1985	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1986	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1987	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1988	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1989	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1990	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1991	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1992	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1993	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1994	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1995	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1996	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1997	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1998	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
1999	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2000	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2001	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2002	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2003	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2004	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2005	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2006	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2007	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2008	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2009	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2010	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2011	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2012	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2013	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2014	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2015	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2016	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2017	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2018	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2019	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2020	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2021	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2022	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-
2023	-	MC	DATA AVAILABLE	-	-	-	-	-	-	-	-	-

SOURCE: CMAU, PA 6/30-02

TABLE III.111 AVERAGE SIZE OF CAPERS AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPING WITH MISSING (WHITE SEA) PLATS (PROBABLY (CAMEL) TO A WHITE ROAD

YEAR	C - 100	101 - 230	231 - 300	301 - 400	401 - 500	501 - 600	600 +	YEARLY AVERAGE		
YEAR	CAPERS	SHIPS	CAPERS	SHIPS	CAPERS	SHIPS	CAPERS	SHIPS		
1717	100.0	80.0	100.0	200.0	200.0	350.5	326.0	420.0	310.0	205.0
1718	70.0	200.0	200.0	376.0	361.0	376.0	361.0	440.0	301.0	346.0
1719	80.0	100.0	276.0	325.0	363.0	325.0	363.0	402.0	300.0	340.0
1720	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	350.0	335.0
1721	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	300.0	350.0
1722	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	370.0	347.0
1723	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	340.0	292.0
1724	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	343.0	326.0
1725	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	330.0	297.0
1726	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	344.0	287.0
1727	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	280.0	228.0
1728	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	240.0	226.0
1729	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	291.0	262.0
1730	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	303.0	272.0
1731	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	280.0	260.0
1732	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	280.0	213.0
1733	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	370.0	251.0
1734	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	370.0	235.0
1735	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	430.0	267.0
1736	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	410.0	281.0
1737	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	420.0	277.0
1738	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	340.0	243.0
1739	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	421.0	262.0
1740	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	370.0	229.0
1741	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	360.0	230.0
1742	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	337.0	238.0
1743	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	285.0	212.0
1744	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	240.0	241.0
1745	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	353.0	265.0
1746	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	350.0	277.0
1747	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	360.0	276.0
1748	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	360.0	257.0
1749	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	361.0	210.0
1750	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	340.0	240.0
1751	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	351.0	246.0
1752	80.0	100.0	200.0	375.0	361.0	375.0	361.0	433.0	351.0	246.0

CONTINUED

TABLE III.111

TABLE 111.11 AVERAGE SIZE OF CABINES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPING FROM CUISIN (WHITE SEAL) LIGHTS (PEINER ILY MCWANGEL) TO AMSTERDAM

YEAR	C - 197		B - 200		A - 300		D - 400		E - 500		F - 600		G - 650		YEARLY AVERAGE	
	CABIN	SHIP	CABIN	SHIP	CABIN	SHIP	CABIN	SHIP	CABIN	SHIP	CABIN	SHIP	CABIN	SHIP	CABIN	SHIP
1753	-	-	176.0	147.8	200.0	254.7	351.2	341.3	419.0	-	540.0	-	640.0	-	337.2	232.0
1754	-	-	178.0	178.0	237.3	270.0	303.0	354.2	449.4	-	549.2	-	-	-	362.1	265.3
1755	92.0	-	128.5	158.5	206.0	241.1	305.7	343.6	460.2	-	550.8	-	-	-	357.2	245.0
1756	-	-	132.0	152.0	212.0	249.3	307.7	350.2	440.0	418.0	533.3	-	602.0	-	392.8	309.3
1757	-	-	137.0	153.0	217.0	249.0	317.1	359.2	439.5	-	531.2	-	659.0	-	423.7	294.0
1758	-	-	147.7	126.7	217.0	251.8	317.7	357.4	442.3	-	532.5	-	648.0	-	394.0	271.6
1759	-	-	102.0	132.0	205.0	250.5	319.6	355.2	408.7	-	526.4	510.0	732.4	-	466.8	290.9
1760	-	-	-	-	-	254.7	310.0	358.3	452.5	-	552.0	510.0	717.0	-	523.9	303.4
1761	-	-	150.0	142.0	243.0	260.7	317.3	367.8	429.6	414.0	554.0	510.0	721.2	-	526.4	304.5
1762	-	-	152.0	132.0	220.0	251.5	314.0	353.6	457.2	432.0	550.4	521.0	767.2	-	532.8	321.6
1763	-	-	152.0	158.0	200.0	252.5	313.0	364.3	439.4	419.0	544.5	532.0	705.0	-	431.5	282.3
1764	-	-	150.0	144.0	218.5	256.7	313.0	357.6	440.0	425.3	564.6	532.0	712.7	-	502.6	306.3
1765	-	-	148.0	148.0	220.0	250.5	314.0	346.5	450.0	446.0	573.6	-	752.0	-	475.7	295.1
1766	-	-	190.0	156.0	247.2	247.0	348.2	361.2	440.0	430.5	548.4	-	708.5	-	417.0	282.4
1767	-	-	104.0	150.0	260.0	250.2	348.0	358.3	463.4	430.7	550.2	-	649.2	-	447.3	297.9
1768	-	-	174.0	174.0	240.0	241.7	313.0	362.3	459.2	440.0	552.7	-	774.3	-	556.0	331.8
1769	-	-	200.0	150.0	240.7	251.7	302.7	366.5	430.0	404.7	570.3	-	763.0	-	529.7	290.1
1770	-	-	-	156.0	240.0	250.5	302.0	348.1	460.0	407.3	539.1	-	735.0	-	562.6	299.9
1771	30.0	-	144.7	150.0	253.0	250.9	348.0	337.0	458.5	411.2	572.9	-	726.2	-	493.7	277.0
1772	-	-	177.5	153.0	267.3	241.5	362.1	334.5	452.0	418.3	517.3	-	679.2	-	388.5	243.9
1773	-	-	144.0	140.0	274.0	243.6	350.5	313.4	459.4	432.7	562.7	-	646.6	-	436.6	261.6
1774	-	-	140.0	155.1	271.5	245.1	363.0	349.7	452.7	435.4	572.6	-	721.2	-	509.7	286.9
1775	-	-	144.0	144.0	245.0	270.0	357.1	311.2	473.4	455.0	545.2	-	632.2	-	506.0	279.6
1776	-	-	153.5	170.0	267.5	245.9	358.5	328.2	456.5	415.3	556.5	-	672.0	-	402.9	259.4
1777	-	-	-	191.0	305.0	250.1	351.1	331.2	464.2	459.7	576.5	-	723.3	-	468.3	296.0
1778	-	-	140.0	174.3	270.0	255.0	353.0	331.6	444.0	433.0	551.0	-	748.0	-	447.1	289.5
1779	-	-	171.0	143.0	274.7	247.0	378.0	315.5	464.3	426.0	585.0	-	600.0	-	469.7	293.7
1780	-	-	210.0	176.0	-	250.3	358.4	323.8	447.6	433.0	585.0	-	654.0	-	456.8	289.6
1781	-	-	-	153.0	241.0	250.2	315.0	330.9	454.0	445.0	532.5	-	713.0	-	553.4	303.2
1782	-	-	140.0	170.0	241.7	253.1	354.9	324.0	461.2	453.2	552.0	-	740.4	-	465.9	283.6
1783	76.0	-	142.0	112.0	204.0	252.7	341.3	336.9	455.1	476.7	553.4	-	794.4	-	493.5	275.0
1784	-	-	140.0	143.0	240.0	250.0	357.3	350.2	453.0	458.0	516.5	516.0	681.0	-	499.7	299.2
1785	-	-	-	154.7	240.0	250.0	356.7	336.0	443.7	450.0	560.6	-	643.0	-	529.2	293.2
1786	-	-	140.0	140.0	242.0	254.3	320.0	331.3	452.0	460.0	554.0	-	733.5	-	490.6	285.0
1787	-	-	150.0	150.0	245.0	255.5	352.0	327.2	459.5	462.0	554.3	-	642.3	-	497.6	279.8
1788	-	-	174.7	174.7	250.0	250.1	344.0	328.0	449.7	434.7	552.0	-	639.6	-	464.9	271.5

CONTINUED

STATES UN. 1980-82



TABLE III-12 RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES  
 BY SHIPPING FROM RUSSIAN (WHITE SEA) PORTS (EXCEPTLY ANCHORAGE) TO AMSTERDAM

SHIP SIZE	A - 101			B - 101 - 200			C - 201 - 300			D - 301 - 400			E - 401 - 500			F - 501 - 600			G
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	
1717	123.0	19.0	15.0	300.0	51.5	34.0	362.7	25.9	20.6	343.3	5.3	5.0	-	-	-	-	-	-	-
1718	72.0	9.0	9.0	226.7	14.1	12.4	326.7	16.7	14.3	308.4	10.4	6.4	496.9	6.7	6.3	-	-	-	-
1719	90.0	9.0	9.0	240.0	24.1	32.5	296.0	7.2	6.0	405.7	11.7	10.5	442.0	4.2	4.1	-	-	-	-
1720	171.0	23.2	19.0	200.0	21.2	17.5	240.4	4.6	3.9	300.6	7.6	7.0	442.0	1.6	1.8	-	-	-	-
1721	-	-	-	-	-	-	300.0	10.0	9.1	300.0	0.0	0.0	430.0	0.0	0.0	-	-	-	-
1722	-	-	-	130.0	0.0	0.0	300.7	25.0	20.0	302.0	7.0	7.0	420.0	0.0	0.0	-	-	-	-
1723	50.0	9.0	9.0	231.2	42.4	29.0	330.7	22.4	18.3	412.1	13.3	11.7	-	-	-	-	-	-	-
1724	-	-	-	100.0	0.0	0.0	290.0	0.0	0.0	300.0	0.0	0.0	-	-	-	-	-	-	-
1725	-	-	-	130.0	13.4	11.9	310.1	23.9	19.3	400.2	17.9	15.2	-	-	-	-	-	-	-
1726	-	-	-	150.0	0.0	7.5	299.3	20.0	17.2	500.0	0.0	0.0	-	-	-	-	-	-	-
1727	192.0	21.4	17.5	120.0	0.0	0.0	279.6	0.2	7.6	330.0	0.0	0.0	-	-	-	-	-	-	-
1728	0.0	0.0	0.0	-	-	-	200.0	13.4	11.8	300.0	0.0	0.0	-	-	-	-	-	-	-
1729	-	-	-	140.0	0.0	0.0	299.8	12.0	11.3	320.0	0.0	0.0	-	-	-	-	-	-	-
1730	-	-	-	162.0	0.0	0.0	299.4	0.0	0.0	330.7	0.0	0.0	-	-	-	-	-	-	-
1731	140.0	40.0	32.0	155.0	20.9	19.9	327.0	30.6	23.4	440.0	41.0	25.1	-	-	-	-	-	-	-
1732	72.0	10.3	25.0	210.0	73.0	42.0	300.0	53.4	37.0	410.0	21.4	18.3	-	-	-	-	-	-	-
1733	-	-	-	220.0	51.4	34.0	420.0	50.0	37.4	430.0	0.0	0.0	-	-	-	-	-	-	-
1734	-	-	-	250.0	25.3	20.0	420.0	0.0	0.0	520.0	0.0	0.0	-	-	-	-	-	-	-
1735	-	-	-	-	-	-	300.0	0.0	0.0	300.0	0.0	0.0	-	-	-	-	-	-	-
1736	-	-	-	270.0	0.0	0.0	410.7	57.0	36.0	402.4	50.5	32.7	-	-	-	-	-	-	-
1737	-	-	-	220.0	33.3	25.0	360.7	42.5	29.0	400.3	53.5	34.0	-	-	-	-	-	-	-
1738	-	-	-	250.0	0.0	0.0	300.0	0.0	0.0	543.1	0.0	0.0	-	-	-	-	-	-	-
1739	100.0	0.0	0.0	210.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1740	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1741	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1742	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1743	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1744	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1745	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1746	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1747	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1748	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1749	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1750	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1751	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-
1752	100.0	0.0	0.0	200.0	0.0	0.0	420.0	0.0	0.0	500.0	0.0	0.0	-	-	-	-	-	-	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO EXCEEDS AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF CARGO IS LESS THAN AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

TABLE III-12 RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES OF SHIPMENTS FROM RUSSIAN (WHITE SEA) PORTS (SPECIALLY ARRANGED) TO AMSTERDAM

SHIP SIZE IN TONS	A			B			C			D			E			F			G			
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	
1753	-	-	-	198.3	22.2	18.9	398.9	69.3	32.5	520.0	-	-	-	-	-	-	-	-	-	-	-	-
1754	-	-	-	292.0	53.3	36.8	369.7	54.3	35.2	494.2	-	-	-	-	-	-	-	-	-	-	-	-
1755	129.0	39.8	21.3	232.8	45.5	31.3	361.5	59.2	36.8	464.2	-	-	-	-	-	-	-	-	-	-	-	-
1756	-	-	-	214.5	31.1	29.1	295.3	62.6	38.5	414.9	-	-	-	-	-	-	-	-	-	-	-	-
1757	-	-	-	260.3	59.9	37.1	435.7	69.2	40.5	471.4	-	-	-	-	-	-	-	-	-	-	-	-
1758	-	-	-	147.7	14.8	12.4	414.2	54.4	39.2	487.5	-	-	-	-	-	-	-	-	-	-	-	-
1759	-	-	-	183.5	37.9	26.1	447.7	70.7	44.0	534.5	-	-	-	-	-	-	-	-	-	-	-	-
1760	-	-	-	-	-	-	449.5	75.1	43.2	644.3	-	-	-	-	-	-	-	-	-	-	-	-
1761	-	-	-	219.8	61.9	45.3	412.3	59.2	36.8	694.7	-	-	-	-	-	-	-	-	-	-	-	-
1762	-	-	-	152.6	49.3	32.4	436.5	73.7	42.4	632.0	-	-	-	-	-	-	-	-	-	-	-	-
1763	-	-	-	251.2	64.9	39.4	438.9	52.7	30.5	543.7	-	-	-	-	-	-	-	-	-	-	-	-
1764	-	-	-	270.4	66.5	39.9	445.3	73.5	42.4	558.6	-	-	-	-	-	-	-	-	-	-	-	-
1765	-	-	-	229.8	48.6	32.7	469.7	63.7	45.5	444.0	-	-	-	-	-	-	-	-	-	-	-	-
1766	-	-	-	244.5	54.3	35.1	431.8	73.9	42.5	472.0	-	-	-	-	-	-	-	-	-	-	-	-
1767	-	-	-	235.3	54.9	35.9	462.7	79.2	44.2	496.3	-	-	-	-	-	-	-	-	-	-	-	-
1768	-	-	-	204.0	69.9	37.9	458.8	89.5	47.2	573.9	-	-	-	-	-	-	-	-	-	-	-	-
1769	-	-	-	249.8	62.7	38.5	457.9	41.9	45.8	619.1	-	-	-	-	-	-	-	-	-	-	-	-
1770	-	-	-	249.8	53.4	35.3	477.2	94.5	45.8	648.2	-	-	-	-	-	-	-	-	-	-	-	-
1771	-	-	-	239.4	46.4	31.8	452.8	74.2	43.3	689.6	-	-	-	-	-	-	-	-	-	-	-	-
1772	169.0	35.0	25.2	221.0	35.6	26.2	399.7	66.3	32.8	522.5	-	-	-	-	-	-	-	-	-	-	-	-
1773	-	-	-	225.0	59.0	37.4	399.5	53.9	39.9	575.1	-	-	-	-	-	-	-	-	-	-	-	-
1774	172.0	63.0	45.3	276.9	58.0	44.8	439.3	79.3	42.8	633.6	-	-	-	-	-	-	-	-	-	-	-	-
1775	-	-	-	394.3	84.6	49.8	449.2	77.7	43.7	614.2	-	-	-	-	-	-	-	-	-	-	-	-
1776	132.0	46.3	32.5	266.3	55.9	35.6	376.5	52.5	34.5	528.8	-	-	-	-	-	-	-	-	-	-	-	-
1777	-	-	-	336.0	72.8	42.1	465.8	57.2	36.4	539.4	-	-	-	-	-	-	-	-	-	-	-	-
1778	-	-	-	258.3	48.2	32.5	487.1	59.7	37.4	522.0	-	-	-	-	-	-	-	-	-	-	-	-
1779	-	-	-	191.0	17.2	14.7	387.8	90.3	36.0	531.6	-	-	-	-	-	-	-	-	-	-	-	-
1780	-	-	-	279.0	51.1	33.9	414.8	59.4	37.3	558.0	-	-	-	-	-	-	-	-	-	-	-	-
1781	-	-	-	278.0	35.3	26.3	449.6	94.5	47.8	685.8	-	-	-	-	-	-	-	-	-	-	-	-
1782	-	-	-	278.7	61.5	36.1	408.7	61.5	38.1	448.0	-	-	-	-	-	-	-	-	-	-	-	-
1783	133.1	96.0	46.5	298.0	85.7	46.2	487.6	95.8	46.1	685.1	-	-	-	-	-	-	-	-	-	-	-	-
1784	-	-	-	286.0	76.5	43.3	464.4	42.9	45.3	627.0	-	-	-	-	-	-	-	-	-	-	-	-
1785	-	-	-	335.3	132.9	58.5	462.6	75.0	42.9	628.3	-	-	-	-	-	-	-	-	-	-	-	-
1786	-	-	-	244.5	48.1	36.8	478.9	94.5	46.4	567.7	-	-	-	-	-	-	-	-	-	-	-	-
1789	-	-	-	333.4	97.5	46.7	444.2	74.4	44.3	542.9	-	-	-	-	-	-	-	-	-	-	-	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO > AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF SHIP < AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

SOURCE: COM. 1966/59-62

CONTINUED



TABLE VIII-12 RELATION OF SIZE OF CARGO CARRIED TO SIZE OF SHIP IN EACH OF THE SHIP SIZE CATEGORIES  
OF SHIPPING FROM RUSSIAN (WHOLE SEAT) CENTS (PRINCIPALLY ANCHOR) TO AMSTERDAM

SHIP SIZE IN TONS	F			C			E			F			G		
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
1700	-	320.7	125.9	51.4	445.4	43.4	45.5	620.3	52.0	44.2	-	-	-	-	-
1700	-	354.7	122.2	55.3	443.5	78.3	43.8	577.3	79.1	44.2	708.0	43.5	36.5	-	-
1701	132.9	37.5	27.3	342.0	91.8	47.9	482.9	89.4	47.2	636.5	91.1	47.7	-	-	-
1702	140.3	42.2	34.3	318.0	23.9	45.4	471.3	43.1	45.4	561.7	12.2	42.0	-	-	-
1703	-	-	-	318.0	71.9	41.8	444.3	66.2	39.8	569.0	71.9	41.8	-	-	-
1704	-	-	-	322.8	43.3	45.3	466.6	43.3	45.4	536.4	65.4	31.5	-	-	-
1705	-	-	-	340.7	66.5	46.4	489.0	74.0	42.5	468.0	53.5	35.8	-	-	-
1706	-	-	-	315.0	42.1	45.1	394.3	51.2	36.0	495.6	57.4	36.6	-	-	-
1707	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1708	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1709	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1800	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1801	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1802	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1803	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1804	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1805	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1806	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1808	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1809	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1811	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1812	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1813	-	-	-	NO DATA AVAILABLE	-	-	-	-	-	-	-	-	-	-	-
1814	-	-	-	189.3	35.2	26.1	429.3	69.0	40.8	-	-	-	-	-	-
1815	-	-	-	253.6	59.0	37.3	303.7	53.7	34.5	595.8	59.0	37.1	-	-	-
1816	158.0	74.4	42.7	238.2	69.3	40.4	307.7	51.9	36.2	445.3	51.0	32.8	-	-	-
1817	-	-	-	203.5	28.5	17.0	247.4	9.0	8.0	303.7	7.4	6.9	546.0	3.4	3.2
1818	-	-	-	216.0	24.1	14.0	280.4	9.3	8.3	295.2	-16.0	-15.5	422.0	-6.2	-6.6
1819	-	-	-	196.0	17.0	14.0	261.0	13.0	12.0	346.0	1.5	1.5	528.0	5.2	4.5
1820	-	-	-	172.0	15.2	13.2	202.7	23.3	18.5	-	-	-	-	-	-
1821	-	-	-	193.1	19.3	9.7	277.1	14.2	12.5	322.0	-11.5	-13.0	-	-	-
1822	-	-	-	144.2	18.0	15.7	201.0	13.0	12.2	294.0	-5.2	-5.4	-	-	-
1823	-	-	-	220.0	11.0	10.0	-	-	-	-	-	-	-	-	-

I - AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY  
 II - PERCENT BY WHICH AVERAGE SIZE OF CARGO IS AVERAGE SIZE OF SHIP IN THIS SHIP SIZE CATEGORY  
 III - PERCENT BY WHICH AVERAGE SIZE OF SHIP IS AVERAGE SIZE OF CARGO IN THIS SHIP SIZE CATEGORY

SOURCE: COMSTAT/50-62

RUSSIAN WHITE SEA SHIPPING (PRIMARY ACCOUNTS) COMPARED TO RUSSIAN (BALTIC) AND  
 TOTAL RUSSIAN (BALTIC + WHITE SEA) SHIPPING TO AMSTERDAM, 1917-1922

YEAR	NUMBER OF SALES	TOTAL TONNAGE OF CARGO CARRIED	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	WHITE SEA SHIPPING AS A PERCENTAGE OF SHIPPING FROM RUSSIAN BALTIC PORTS		WHITE SEA SHIPPING AS A PERCENTAGE OF TOTAL RUSSIAN (BALTIC + WHITE SEA) SHIPPING	
				NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED
1917 1	8	2518	2120	84.2	8.7	5.8	8.4
1918	51	12076	11726	53.1	68.6	34.7	45.9
1919	34	12422	11726	32.1	54.7	24.3	35.4
1920	44	15762	14770	27.0	48.7	21.3	28.3
1921	25	9576	8975	14.8	22.9	12.5	18.6
1922	22	5339	7642	11.7	17.5	10.5	14.9
1923	26	5332	7616	16.8	23.8	14.4	19.7
1924	20	6372	6529	8.8	13.4	6.1	11.8
1925	4	1362	1198	1.2	1.8	1.2	1.8
1926	21	1222	6206	6.4	5.1	6.0	6.9
1927	13	3444	2028	5.1	6.2	4.2	5.8
1928	13	3174	2794	4.4	4.9	4.2	4.6
1929	17	4932	4464	7.4	8.6	6.9	7.9
1930	12	3642	3326	3.4	4.4	3.3	4.2
1931	15	3940	3910	4.8	4.5	3.6	4.2
1932	16	4440	3940	4.5	5.2	3.6	4.3
1933	20	7520	5885	6.9	9.9	5.6	8.2
1934	20	12372	6594	7.3	11.3	6.6	9.9
1935	20	9724	5326	6.7	7.7	6.5	10.2
1936	48	4264	5632	6.8	11.4	6.4	10.2
1937	15	5436	4164	4.8	5.5	4.4	7.4
1938	19	4512	4470	4.4	7.9	4.2	5.8
1939	31	13882	8338	3.9	14.6	6.2	12.7
1940	68	32470	13728	14.1	16.9	12.3	17.8
1941	54	17400	12432	12.8	15.4	11.3	16.9
1942	35	11624	8052	9.9	11.3	9.6	13.2
1943	13	9414	6796	9.1	6.8	8.4	9.5
1944	25	7394	5942	8.3	10.5	7.6	9.5
1945	13	8334	1616	4.7	6.5	4.5	6.1
1946	19	4722	5046	7.8	10.4	7.2	9.6
1947	21	4912	5430	8.2	12.4	7.6	11.4
1948	18	4912	4582	7.5	12.5	7.0	11.4
1949	18	4932	4538	6.6	10.2	6.2	9.2
1950	34	9642	7154	12.7	14.7	11.3	12.8
1951	4	3548	4202	3.9	5.9	3.6	5.6
1952	35	12432	7488	11.5	16.9	10.3	14.5

STATISTICS TABLES 1954 + 1955

CONTINUED

TABLE 111.13 RUSSIAN WHITE SEA SHIPPING (EXCLUDING ACHANGEL) COMPARED TO RUSSIAN (BALTIC) AND TOTAL RUSSIAN (BALTIC + WHITE SEA) SHIPPING TO WESTWARD, 1717 - 1925

YEAR	RUSSIAN WHITE SEA SHIPPING (EXCLUDING ACHANGEL)		TOTAL RUSSIAN (BALTIC + WHITE SEA) SHIPPING TO WESTWARD, 1717 - 1925	
	NUMBER OF SHIPS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	NUMBER OF SHIPS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP
1713	29	9782	11.2	15.8
1714	20	7920	10.2	17.0
1715	25	7100	10.4	20.9
1716	29	12374	15.5	45.5
1717	32	21036	33.7	69.2
1718	30	12239	17.1	28.5
1719	24	11282	10.3	18.0
1720	18	5430	6.7	17.3
1721	25	13734	11.2	23.0
1722	16	5700	7.7	14.8
1723	21	8752	12.0	21.8
1724	37	11374	14.9	28.3
1725	22	19462	9.9	17.0
1726	37	15420	13.3	28.9
1727	39	16316	16.6	27.4
1728	45	22242	15.6	32.9
1729	37	19530	12.4	24.3
1730	25	17752	12.7	24.5
1731	29	21142	27.4	54.5
1732	33	23076	29.4	31.2
1733	50	21624	17.9	30.1
1734	43	27014	15.6	31.7
1735	46	37724	19.2	27.7
1736	31	14514	12.5	29.5
1737	24	7102	23.4	33.2
1738	21	7056	9.3	15.9
1739	32	14410	14.1	21.6
1740	25	11304	25.2	79.3
1741	27	12592	12.6	27.8
1742	31	14334	11.5	22.5
1743	20	14422	11.2	20.3
1744	20	17752	6.2	16.1
1745	24	12442	12.5	19.5
1746	32	14222	12.9	25.5
1747	22	14272	13.6	26.3

CONTINUED:

SOURCE: TABLES 11.11 + 11.14

TABLE 111.13 RUSSIAN WHITE SEA SHIPPING (PRINCIPALLY RECHANGEL) (WEAVER TO RUSSIAN (BALTIC) AND TOTAL RUSSIAN (BALTIC & WHITE SEA) SHIPPING TO AMSTERDAM, 1717 - 1823

YEAR	NUMBER OF SALES	TOTAL TONNAGE OF CARGO CARRIED	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	WHITE SEA SHIPPING AS A PERCENTAGE OF SHIPPING FROM RUSSIAN BALTIC PORTS			WHITE SEA SHIPPING AS A PERCENTAGE OF TOTAL RUSSIAN (BALTIC & WHITE SEA) SHIPPING		
				NUMBER OF SHIPS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	NUMBER OF SHIPS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP
1760	37	1596	928	15.3	23.5	15.0	12.3	19.9	13.1
1761	27	1254	717	10.3	17.2	12.0	6.3	14.7	10.7
1762	20	3718	430	9.3	13.2	8.4	8.5	11.6	7.7
1763	20	1317	736	13.1	19.7	12.9	11.0	16.5	11.4
1764	14	6214	378	7.4	16.5	13.4	6.9	14.2	11.9
1765	34	1518	942	18.5	25.0	15.0	12.6	20.0	13.8
1766	10	220	206	19.6	50.5	44.2	16.4	33.5	30.7
1767	13	472	336	5.0	11.0	10.5	4.8	10.4	9.5
1768	NO DATA AVAILABLE								
1769	NO DATA AVAILABLE								
1770	NO DATA AVAILABLE								
1771	NO DATA AVAILABLE								
1772	NO DATA AVAILABLE								
1773	NO DATA AVAILABLE								
1774	NO DATA AVAILABLE								
1775	NO DATA AVAILABLE								
1776	NO DATA AVAILABLE								
1777	NO DATA AVAILABLE								
1778	NO DATA AVAILABLE								
1779	NO DATA AVAILABLE								
1780	NO DATA AVAILABLE								
1781	NO DATA AVAILABLE								
1782	NO DATA AVAILABLE								
1783	NO DATA AVAILABLE								
1784	6	185	1182	5.3	9.9	9.1	5.0	8.1	8.4
1785	27	1978	642	17.4	35.5	35.3	14.8	26.2	26.1
1786	24	741	458	11.1	15.8	15.4	10.0	14.4	13.4
1787	73	2634	2496	12.7	22.9	25.1	11.2	16.6	20.1
1788	23	312	810	24.0	35.3	41.4	15.3	26.6	29.3
1789	12	3766	3710	9.8	15.1	17.4	6.9	13.1	14.8
1790	14	3438	3093	10.9	12.3	12.0	5.8	11.0	10.7
1791	14	3722	3474	10.9	5.5	5.5	5.5	12.2	13.3
1792	14	452	422	29.0	31.2	32.6	22.5	24.9	24.6
1793	1	22	198	1.0	1.0	1.0	1.0	1.0	0.9

SOURCE: TABLES 111.1 & 111.2

TABLE III-10 SHIPPING TO WESTWARD FROM THE WHITE SEA (PRINCIPALLY ARCHANGEL) COMPARED WITH THAT FROM ST. PETERSBURG, 1717-1823.

YEAR	WHITE SEA SHIPPING (ARCHANGEL)				SHIPPING FROM ST. PETERSBURG				PERCENTAGE BY WHICH ARCHANGEL SHIPPING < ST. PETERSBURG SHIPPING			
	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED
1717	8	2518	2124	6	994	674	6.0	-153.3	-118.1			
1718	51	19676	17684	6	1059	1620	-537.5	-952.6	-969.1			
1719	34	12922	11726	15	1814	1650	-126.7	-612.3	-610.7			
1720	44	15752	14776	19	3494	2640	-131.6	-351.1	-429.1			
1721	27	9576	8376	18	1476	1190	-78.6	-548.6	-649.2			
1722	22	8330	7642	18	2396	1932	-22.2	-547.7	-317.1			
1723	26	9032	7614	21	5138	2708	-23.8	-186.9	-181.2			
1724	29	9872	5524	42	5328	4668	52.4	-29.0	-33.2			
1725	4	1352	1190	42	4762	4038	90.5	71.6	70.5			
1726	21	7232	6026	59	8398	7220	64.4	13.9	16.5			
1727	13	3546	2958	26	3790	3184	56.0	3.9	6.8			
1728	13	3174	2944	43	5934	4910	69.8	46.5	60.0			
1729	17	4962	4454	14	2278	2244	-21.4	-117.8	-98.9			
1730	12	3642	3326	27	3910	3846	55.6	6.9	13.5			
1731	15	5910	3910	32	5330	4630	53.1	26.6	15.6			
1732	16	4490	3614	26	4430	4124	-0.9	-0.9	17.2			
1733	20	7520	5026	19	2486	2628	-5.3	-180.8	-91.2			
1734	28	10372	6594	36	5256	4654	22.2	-97.3	-33.1			
1735	26	8724	5356	24	3654	3420	16.7	-138.5	-53.9			
1736	20	8204	5432	35	5266	4476	42.9	-57.3	-19.8			
1737	18	5430	4166	52	10708	16094	71.2	40.0	56.7			
1738	19	6612	4626	64	18986	16802	77.4	63.4	72.5			
1739	31	13052	9330	32	6188	5416	3.1	-110.9	-53.8			
1740	60	22576	13758	44	8195	7304	-36.4	-176.4	-86.1			
1741	34	19646	12452	92	24298	20584	44.9	19.0	39.5			
1742	35	11624	8252	47	9546	8612	25.5	-23.9	4.2			
1743	33	9416	5766	40	7044	6694	17.5	-32.6	-4.7			
1744	25	7664	6942	53	8278	7618	52.8	14.7	13.9			
1745	13	4536	3816	31	3946	3744	58.1	-14.9	3.4			
1746	19	5722	5046	31	6038	3846	38.7	-11.3	-31.8			
1747	21	7522	5830	57	8676	7148	63.2	12.8	18.4			
1748	18	5912	4582	38	4500	3968	40.0	-53.8	-25.6			
1749	18	6952	4630	33	4702	4080	45.5	-39.3	-15.8			
1750	34	9542	7154	40	3054	2516	-78.0	-212.6	-184.3			
1751	4	3552	2552	37	5898	4370	75.7	39.8	38.6			
1752	30	13540	7404	43	6574	5154	30.2	-60.3	-43.7			

SOURCE: TABLES III-1, III-4

CONTINUED

TABLE III.10 SHIPPING TO AUSTRIAN FROM THE WHITE SEA (PRINCIPALLY ARCHANGEL) COMPARED WITH SHIPPING FROM ST. PETERSBURG, 1717 - 1823.

YEAR	WHITE SEA SHIPPING (ARCHANGEL)				SHIPPING FROM ST. PETERSBURG				PERCENTAGE BY WHICH ARCHANGEL SHIPPING ST. PETERSBURG SHIPPING			
	NUMBER OF SHIPS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	NUMBER OF SHIPS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	NUMBER OF SHIPS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	NUMBER OF SHIPS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	NUMBER OF SHIPS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP
1753	29	9762	6750	67	6678	5456	32.3	46.5	-23.7			
1754	26	13760	7428	35	6570	3670	26.0	-135.1	-91.9			
1755	29	13356	7104	23	2616	2584	-26.1	-267.6	-174.7			
1756	40	15712	12374	46	6046	5520	13.0	-159.8	-123.9			
1757	55	23326	16220	47	6502	5886	-17.0	-174.1	-175.6			
1758	52	12628	8492	37	6362	4846	13.5	-98.2	-79.4			
1759	24	11202	7174	41	7706	5054	41.5	-45.3	-41.9			
1760	18	9430	5462	25	5854	3478	35.7	-61.1	-57.0			
1761	26	13686	7916	15	3326	2056	-73.3	-311.5	-265.0			
1762	18	9530	5788	37	7676	4670	51.4	-24.9	-23.9			
1763	31	13374	8752	37	6422	5054	16.2	-58.8	-73.2			
1764	37	19524	11334	23	4188	2604	-45.5	-344.0	-304.2			
1765	22	10466	6462	26	6240	3322	16.4	-67.7	-95.4			
1766	37	15428	10670	30	6648	6122	-23.3	-131.4	-150.9			
1767	32	12314	9532	43	9246	5192	25.6	-49.9	-63.6			
1768	40	18242	12272	36	9034	6654	-11.1	-146.2	-184.6			
1769	37	14526	10732	45	10522	6062	17.2	-86.3	-77.4			
1770	28	15262	8398	22	5034	2576	-27.3	-212.9	-182.2			
1771	49	24132	13576	27	5758	3512	-61.5	-319.4	-286.5			
1772	43	23974	15366	36	7274	4362	-75.6	-229.6	-252.3			
1773	50	21828	13078	40	7514	4246	-25.0	-190.4	-208.0			
1774	53	27014	15284	37	6942	4528	-47.2	-235.9	-208.5			
1775	40	24694	13702	27	5166	3098	-61.5	-360.0	-342.3			
1776	44	17226	11412	16	2762	1762	-175.0	-542.2	-547.7			
1777	51	14516	9176	42	7444	4882	26.2	-95.0	-67.8			
1778	54	24144	15146	71	13904	6360	23.9	-73.7	-61.2			
1779	21	7864	6168	55	10898	7526	61.8	9.5	18.0			
1780	32	14618	8578	53	11268	6034	36.6	-29.5	-48.8			
1781	26	14332	7882	18	3576	1914	-44.4	-362.3	-301.3			
1782	27	12550	7656	31	5942	3086	12.5	-128.6	-148.1			
1783	31	15326	8524	23	5346	2934	-34.8	-166.2	-190.5			
1784	29	14692	8678	64	14760	7898	54.7	1.8	-9.9			
1785	26	12584	5866	12	2582	1286	-66.7	-294.6	-356.1			
1786	25	12254	7124	22	4006	2242	-13.4	-206.3	-214.9			
1787	33	14422	9234	14	3498	2022	-72.7	-389.5	-356.7			
1788	35	16272	5562	36	7564	3824	7.0	-115.1	-148.5			

SOURCE: TABLES II.4 + III.4

CONTINUED

TABLE III-14 SHIPPING TO AFRICA FROM THE WHITE SEA (REPAIRS AROUND) COMPARE WITH THAT FROM ST. PETERSBURG, 1717 - 1923.

YEAR	WHITE SEA SHIPPING (A-CHANGEL)				SHIPPING FROM ST. PETERSBURG				PERCENTAGE BY WHICH A-CHANGEL SHIPPING < ST. PETERSBURG SHIPPING			
	NUMBER OF SHIPS	TOTAL TONNAGE CARRIED	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	NUMBER OF SHIPS	TOTAL TONNAGE CARRIED	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	NUMBER OF SHIPS	TOTAL TONNAGE CARRIED	NUMBER OF SHIPS	TOTAL TONNAGE CARRIED	NUMBER OF SHIPS	TOTAL TONNAGE CARRIED
1700	37	16500	9820	51	16100	5750	2706	-67.1	-50.9			
1701	27	12250	7170	33	7100	3510	16-2	-91.0	-104.0			
1702	20	8710	6630	37	6702	4710	85.5	-0.2	1.7			
1703	29	13170	7300	19	4116	2200	-52.4	-185.5	-221.3			
1704	34	5210	3700	26	4850	2612	46.2	-25.5	-41.8			
1705	30	15140	2412	23	4519	2300	-47.0	-235.3	-250.3			
1706	10	5200	2448	4	702	300	-150.0	-490.1	-530.9			
1707	13	5070	3300	23	3942	2002	43.6	-30.9	-41.0			
1708	NO DATA AVAILABLE											
1709	NO DATA AVAILABLE											
1710	NO DATA AVAILABLE											
1711	NO DATA AVAILABLE											
1712	NO DATA AVAILABLE											
1713	NO DATA AVAILABLE											
1714	NO DATA AVAILABLE											
1715	NO DATA AVAILABLE											
1716	NO DATA AVAILABLE											
1717	NO DATA AVAILABLE											
1718	NO DATA AVAILABLE											
1719	NO DATA AVAILABLE											
1720	NO DATA AVAILABLE											
1721	NO DATA AVAILABLE											
1722	NO DATA AVAILABLE											
1723	NO DATA AVAILABLE											
1724	NO DATA AVAILABLE											
1725	NO DATA AVAILABLE											
1726	NO DATA AVAILABLE											
1727	NO DATA AVAILABLE											
1728	NO DATA AVAILABLE											
1729	NO DATA AVAILABLE											
1730	NO DATA AVAILABLE											
1731	NO DATA AVAILABLE											
1732	NO DATA AVAILABLE											
1733	NO DATA AVAILABLE											
1734	NO DATA AVAILABLE											
1735	27	13070	6642	35	6700	3102	79.3	63.8	62.9			
1736	20	7010	4902	30	4902	4052	28.5	-55.3	-63.9			
1737	25	2530	3300	170	3300	2700	20.0	-53.2	-60.2			
1738	23	9312	4316	17	3190	3070	51.0	21.6	18.7			
1739	12	3700	3710	15	2630	1770	-35.3	-100.2	-255.7			
1740	14	3030	3000	27	4330	2900	25.0	-43.2	-100.1			
1741	14	5702	3470	19	2400	1902	45.1	10.7	-0.5			
1742	10	1652	1252	9	1252	900	28.3	-00.7	-02.0			
1743	1	220	100	1	42	42	-100.0	-207.0	-300.7			
1744	1	220	100	1	42	42	0.0	-023.0	-371.0			

Notes to Tables IV

- 1709/1710 <sup>1</sup>Data were available for 1709 only for the months of November and December. For the year 1710 data were available for the months of January through October only. Data for these two years have therefore been combined to constitute a single year.
- 1714, 1814 <sup>2</sup>Data available only for January through April.
- 1754 <sup>3</sup>For this and subsequent years data for St. Petersburg are taken from the D. M. H. Galjootsgehidregisters (G. A. A., PA6/59-62).
- 1799 <sup>4</sup>No data available for St. Petersburg. No data available for January through March.
- 1804 <sup>5</sup>No data available for St. Petersburg.
- 1809 <sup>6</sup>Continental Blockade.







TABLE 11-2  
 NUMBER OF SALES SHIPPINGS TO AIRBORNE BY SIZE OF CARRIER IN TONS  
 IN FIVE YEAR PERIODS, 1979 - 1984

YEAR	A - 100					B - 200					C - 300					D - 400					E - 500					F - 600					G - 801 & over					
	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	
1979	42	29	649	12	99	28	28	200	29	34	16	115	22	37	17	162	31	1	0	53	1	0	53	1	0	53	1	0	53	1	0	53	1	0	53	1
1980	76	26	111	16	79	24	182	26	53	18	182	26	29	8	182	17	2	1	181	1	0	181	1	0	181	1	0	181	1	0	181	1	0	181	1	
1981	84	24	124	17	81	23	287	28	54	15	182	26	29	8	182	17	2	1	181	1	0	181	1	0	181	1	0	181	1	0	181	1	0	181	1	
1982	143	28	231	16	84	22	218	15	115	17	467	29	85	13	301	27	6	1	311	2	0	311	2	0	311	2	0	311	2	0	311	2	0	311	2	
1983	173	11	200	25	136	16	517	25	138	14	417	25	63	7	272	17	5	1	281	2	0	281	2	0	281	2	0	281	2	0	281	2	0	281	2	
1984	317	16	417	16	175	15	468	22	134	11	656	23	37	3	162	8	7	1	171	2	0	171	2	0	171	2	0	171	2	0	171	2	0	171	2	
1985	319	37	488	28	182	21	678	28	180	17	531	31	15	2	668	4	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1986	388	32	428	26	172	19	482	26	148	17	699	39	29	2	806	5	3	0	171	1	0	171	1	0	171	1	0	171	1	0	171	1	0	171	1	
1987	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1988	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1989	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1990	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1991	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1992	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1993	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1994	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1995	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1996	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1997	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1998	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
1999	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2000	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2001	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2002	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2003	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2004	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2005	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2006	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2007	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2008	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2009	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2010	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2011	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2012	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2013	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2014	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2015	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2016	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2017	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2018	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2019	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2020	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2021	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2022	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0	
2023	448	11	421	31	184	15	270	23	95	13	321	28	5	1	212	2	1	0	586	0	0	586	0	0	586	0	0	586	0	0	586	0				

MEMORANDUM OF SALES BY MONTHS BY SIDE OF SHIP IN YEARS

YEAR	1929					1930					1931					1932					1933					1934				
	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V
1929	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1930	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1931	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1932	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1933	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1934	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

III = TOTAL SHIP SALES IN THIS SIDE CATEGORY  
IV = V "III" IS OF TOTAL SHIP SALES FOR THE YEAR (FOR = 1000)

MEMORANDUM FOR THE YEAR 1934





TABLE 10-1-10 BALTIMORE SHIPPING FROM SWEDISH FIRMS (INCLUDING FIRMS IN FINLAND) TO AMSTERDAM DURING 1919, AND AVERAGE TONNAGE OF CARGO CARRIED AND SIZE OF SHIP AT FIVE YEAR INTERVALS, 1919 - 1929

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED IN TONS	AVERAGE TONNAGE OF CARGO CARRIED BY SHIP ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARRIED - AVE. TONNAGE CARRIED BY SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF CARGO < AVE. SIZE OF SHIP
1919	2074	272,67	251.33	1.33	2.53	0.53	
1924	2002	307,00	152.78	4.22	2.31	2.78	
1929	1936	134,00	132.90	1.79	1.35	1.33	
1934	1102	131.30	131.02	0.28	3.23	3.13	
1939	1100	131.70	132.05	1.35	1.30	1.37	
1944	872	111.05	110.72	1.23	1.11	1.10	
1949	1400	143.32	125.67	5.65	4.52	4.32	
1954	522	101.30	110.08	-6.78	-5.66	-4.86	
1959	500	100.35	97.25	3.10	0.89	0.88	
1964	1112	101.02	97.07	7.15	7.31	6.81	
1969	712	101.97	102.02	1.76	1.72	1.69	
1974	702	100.24	117.12	32.12	27.02	21.52	
1979	700	100.30	116.08	32.68	20.41	21.02	
1984	620	107.07	96.05	32.02	33.95	25.35	
1989	1000	117.43	100.53	16.90	16.91	16.39	
1994	1000	107.97	92.14	35.84	62.02	37.73	
1999	620	101.02	95.71	57.80	62.50	37.69	
2004	520	100.05	92.21	57.74	57.74	36.61	
2009	700	100.05	93.25	62.80	62.80	36.61	
2014	620	101.02	76.08	36.36	73.32	42.32	
2019	620	101.02	70.02	40.72	56.02	36.23	
2024	402	100.00	90.00	60.00	71.11	41.56	
2029	400	100.05	106.73	60.12	41.36	29.25	
2034	NO DATA AVAILABLE						
2039	500	100.27	95.23	39.85	41.02	29.18	
2044	400	100.01	133.07	13.70	10.27	9.31	
2049	300	100.00	96.00	9.60	9.60	9.60	

SOURCE: COM. OF 1930-32

TABLE IV-A-C PALETTE SUBPAC RATED YEARS IN COMPARISON TO AVERAGE GIVING TOTAL AND AVERAGE TONNAGES OF CANOE

YEAR	NUMBER OF CANOES	TOTAL TONNAGE OF CANOES	AVERAGE SIZE OF CANOES IN TONS	TOTAL TONNAGE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CANOE - SHIP	% AVE. SIZE OF CANOE > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP > AVE. SIZE OF CANOE	
1907-11	12	1728	142.33	1002	83.50	18.83	22.95	19.45	
1908	20	5202	140.21	3006	131.93	68.29	45.70	31.36	
1909	5	446	89.20	378	75.60	13.60	17.99	15.25	
1910	9	102	111.27	528	58.67	44.60	76.52	43.75	
1911	10	2100	110.11	1406	73.79	37.62	51.67	33.81	
1912	10	2004	110.11	1406	70.11	32.20	42.05	29.66	
1913	21	2436	116.00	1638	77.91	38.14	50.31	33.67	
1914	30	4402	146.73	2702	77.68	30.68	49.82	33.29	
1915	12	1104	90.33	810	68.17	22.13	45.97	31.69	
1916	10	2406	110.67	1530	65.22	48.44	56.88	36.24	
1917	20	2802	140.10	1700	77.50	62.19	81.05	45.04	
1918	5	708	133.60	606	119.20	16.46	11.95	10.60	
1919	16	2216	138.50	1016	63.50	58.00	56.50	36.10	
1920	40	5608	140.20	3202	80.05	60.15	74.52	42.79	
1921	201	12006	140.17	6002	60.00	80.17	77.41	43.03	
1922	71	11270	158.85	6302	67.94	69.00	78.39	43.90	
1923	61	3606	140.15	5136	67.11	68.13	69.62	47.35	
1924	37	3200	170.26	1700	80.75	77.68	66.36	46.36	
1925	17	2506	170.26	1700	100.58	70.58	79.23	42.81	
1926	17	2506	150.31	1370	80.59	70.12	69.49	47.23	
1927	30	4402	146.73	2700	90.00	61.53	74.98	46.05	
1928	2	408	203.60	206	113.80	90.80	79.05	44.53	
1929	23	3002	130.52	2290	61.04	61.22	67.20	40.21	
4 WE DATA AVAILABLE									
1930	26	4102	157.77	2930	63.46	64.31	68.81	46.76	
1931	16	1702	112.62	1330	83.83	28.79	33.93	25.33	
1932	8	1200	142.50	1006	125.00	53.50	40.51	29.83	

SOURCE: CANOE REGISTRATION



TABLE 10-10-10 OCEANIC SHIPPING FROM ELIZABETH, NEW JERSEY, AND BILBAO TO WESTERN GIVING TOTAL AND AVERAGE TONNAGES  
 OF CARGO CARRIED AND SIZE OF SHIP BY FIVE YEAR INTERVALS, 1750 - 1820

YEAR	TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARRIED - SIZE OF SHIP	X AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	Y AVE. SIZE OF SHIP > AVE. SIZE OF CARGO
1750	26702	220-70	12742	170-55	50-25	31-58	23-71
1760	28000	271-25	21800	202-06	68-10	33-59	25-15
1770	13696	221-07	13066	189-70	41-10	22-78	14-52
1780	10170	152-02	11000	113-10	39-43	30-80	25-20
1790	10210	130-00	13530	116-00	40-30	30-59	25-20
1800	48000	137-03	26364	80-67	47-36	52-81	30-52
1810	14110	147-03	12572	96-71	50-32	52-04	30-23
1820	10170	118-78	11070	77-58	41-28	53-11	30-09
1830	10002	123-00	7020	80-58	39-06	46-16	31-59
1840	12300	128-00	8300	88-00	40-06	48-53	31-20
1850	12110	133-00	8132	89-30	43-71	48-92	32-05
1860	10510	150-33	6230	90-52	60-82	60-52	60-60
1870	10000	170-00	9070	90-05	77-02	78-06	43-06
1880	10000	161-22	10806	91-58	69-04	76-65	43-25
1890	13000	142-00	8010	83-00	59-17	70-91	61-09
1895	10336	141-05	10700	81-10	59-01	73-83	62-47
1900	12070	146-02	10000	85-20	60-83	83-04	45-371
1905	12000	151-00	10300	80-00	71-18	80-50	47-12
1910	10000	130-05	10000	72-07	68-58	91-36	47-70
1920	40302	150-00	21150	70-02	71-76	90-93	47-03
1930	20000	145-50	12700	77-12	68-37	89-31	47-19
1940	2700	103-07	1122	70-00	68-22	91-27	47-72
1950	10000	127-00	3000	57-00	50-23	87-02	46-05
1960	5122	113-02	2000	65-20	48-52	70-06	47-02
1970	10000	111-20	9000	70-02	35-22	66-30	31-07
1980	6000	105-07	3000	81-20	20-21	29-70	22-05

IF DATA AVAILABLE

SOURCE: CARRON 1900-1902

TABLE 10-A-1E DALLAS SHIPPING FROM BAKING TO MASTERSHIP GIVING TOTAL AND AVERAGE TONNAGES OF COGEO CARRIED AND SIZE OF SHIP AT FIVE YEAR INTERVALS, 1779 - 1824

YEAR	NO. SHIPS	TOTAL TONNAGE CARRIED	AVERAGE SIZE OF COGEO IN THOUS. TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN THOUS. TONS	DIFFERENCE AVE. TONNAGE CARRIED - SHIP SIZE OF COGEO	% AVE. SIZE OF COGEO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP < AVE. SIZE OF COGEO
1779	50	15300	306.76	12250	245.00	61.76	20.21	20.13
1782	52	17012	327.34	14306	275.69	66.65	20.75	19.51
1785	66	19336	300.66	16562	250.83	76.82	25.46	25.46
1788	100	29720	297.20	20410	204.10	100.70	33.79	29.45
1791	107	37106	347.65	20000	187.81	100.75	29.45	30.01
1794	200	60000	300.00	40000	200.00	75.00	25.00	25.00
1797	180	29000	161.11	18000	100.00	59.11	36.72	28.61
1800	170	27000	158.82	17000	100.00	58.82	37.25	28.37
1803	160	24000	150.00	16000	100.00	50.00	33.33	28.99
1806	170	26000	152.94	17000	100.00	52.94	34.66	29.61
1809	180	27000	150.00	18000	100.00	50.00	33.33	29.61
1812	180	27000	150.00	18000	100.00	50.00	33.33	29.61
1815	180	27000	150.00	18000	100.00	50.00	33.33	29.61
1818	180	27000	150.00	18000	100.00	50.00	33.33	29.61
1821	180	27000	150.00	18000	100.00	50.00	33.33	29.61
1824	180	27000	150.00	18000	100.00	50.00	33.33	29.61

SOURCE: C.A. 14 1000-102

TABLE 10-A-F CANTON SHIPPING FROM BOSTON EAST PASSAGE PORTS (INCLUDING MEWEL) TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND SIZE OF SHIP AT FIVE YEAR INTERVALS, 1779 - 1824

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE TONNAGE OF CARGO CARRIED IN YEARS	AVERAGE SIZE OF SHIP IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARRIED - SIZE OF SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP < AVE. SIZE OF CARGO
1779-1	0	534	130.50	167.50	430	167.50	31.00	20.24	27.38
1780-2	6	708	131.33	107.67	646	107.67	23.67	21.96	18.62
1781-3	3	292	97.33	92.00	276	92.00	5.33	5.00	5.00
1782-4	5	430	86.00	50.00	290	50.00	20.00	40.23	32.56
1783-5	6	630	71.67	66.00	308	66.00	5.67	8.59	7.91
1784-6	6	310	77.50	56.50	256	56.50	21.00	37.17	27.10
1785-7	5	430	86.00	66.00	308	66.00	20.00	31.52	23.96
1786-8	3	210	70.00	60.00	204	60.00	2.00	2.94	2.66
1787-9	3	302	117.33	56.67	152	56.67	60.67	131.50	56.82
1788-10	6	670	100.75	60.25	716	60.25	19.50	21.05	17.63
1789-11	12	2012	234.33	100.67	2306	100.67	30.67	17.36	14.79
1790-12	6	1002	160.33	171.67	1030	171.67	8.67	5.05	4.81
1791-13	15	3136	165.05	96.42	1932	96.42	68.63	71.18	41.59
1792-14	11	1006	135.00	82.10	906	82.10	52.91	64.30	39.17
1793-15	22	4024	182.36	103.01	3088	103.01	17.05	19.52	9.52
1794-16	23	3088	134.26	94.05	2088	94.05	31.50	32.73	28.66
1795-17	23	3210	140.50	119.00	2088	119.00	27.50	23.11	18.77
1796-18	23	4430	162.03	117.72	3416	117.72	35.10	29.82	22.97
1797-19	22	3522	160.09	130.02	3054	130.02	21.27	15.32	13.29
1798-20	33	4150	125.76	90.91	3054	90.91	26.85	27.14	21.35
1799-21	6	500	137.50	71.50	206	71.50	66.00	42.31	42.00
1800-22	38	3012	126.19	76.39	2308	76.39	49.81	45.25	39.47
NO DATA AVAILABLE									
1801-23	18	2364	147.75	90.25	1664	90.25	57.50	63.71	38.92
1802-24	21	3376	129.90	90.50	3026	90.50	26.43	26.02	21.15
1803-25	30	4006	113.70	100.33	3612	100.33	13.66	13.63	11.82

BASED ON DATA AVAILABLE

TABLE IV-A-6 CALYIC SHIPPING FROM STETTIN TO ANKERSHAM SIXTING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND SIZE OF SHIP AT FIVE YEAR INTERVALS, 1799 - 1924

YEAR	TOTAL TONNAGE OF CARGO CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SHIP	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP < AVE. SIZE OF CARGO
1799	100	100.00	230	230.00	-130.00	-52.17	47.83
1804	1000	134.29	1042	131.67	271	20.6	2.02
1809	2000	136.30	2000	133.52	4.00	3.04	3.51
1814	3000	72.00	2000	67.22	23.22	32.16	32.05
1819	5100	65.00	3200	67.77	27.31	47.26	32.04
1824	4400	62.13	3300	70.00	21.67	30.75	23.52
1829	3100	61.00	2800	58.16	3.73	6.41	6.02
1834	2000	70.00	2300	70.00	0.00	13.12	11.00
1839	1000	65.00	1000	60.00	1.00	1.55	1.52
1844	800	70.00	800	72.00	-	-	-
1849	1500	97.00	1500	93.53	6.25	6.45	6.45
1854	2000	70.00	1700	71.30	0.59	0.86	0.85
1859	3000	64.00	3000	60.13	3.87	6.03	6.03
1864	7000	77.23	7376	73.03	4.20	5.44	5.44
1869	3000	60.00	3012	70.02	0.01	0.51	0.51
1874	4000	65.19	4000	65.13	0.06	0.09	0.09
1879	1000	100.00	1000	100.00	0.00	0.00	0.00
1884	1500	100.00	1500	100.00	0.00	0.00	0.00
1889	2000	100.00	2000	100.00	0.00	0.00	0.00
1894	3000	100.00	3000	100.00	0.00	0.00	0.00
1899	4000	100.00	4000	100.00	0.00	0.00	0.00
1904	5000	100.00	5000	100.00	0.00	0.00	0.00
1909	6000	100.00	6000	100.00	0.00	0.00	0.00
1914	7000	100.00	7000	100.00	0.00	0.00	0.00
1919	8000	100.00	8000	100.00	0.00	0.00	0.00
1924	9000	100.00	9000	100.00	0.00	0.00	0.00

NO DATA AVAILABLE

1870-1874

TABLE IV.4.4. BALTIC SHIPPING FROM OTHER GERMAN PORTS TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO  
 YEAR 1940-1952

YEAR	NO. SHIPS	TOTAL TONNAGE CARRIED	AVERAGE SIZE OF CARGO IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - SIZE	% AVE. SIZE OF CARGO > AVE. SIZE OF SHIP
1701/1710	3	710	236.67	610	270.00	-31.33	-11.60
1711	4	646	160.50	604	151.00	19.50	9.31
1712	9	542	60.22	720	80.00	-19.78	-24.72
1713	16	1046	65.38	706	43.50	21.88	27.05
1714	14	1226	87.57	1100	78.57	9.00	10.28
1715	140	13340	95.29	10350	70.92	24.37	22.43
1716	120	1200	100.00	900	65.00	35.00	18.41
1717	73	6102	83.59	4004	69.81	13.78	22.64
1718	20	1502	75.10	1550	77.50	-2.40	1.92
1719	27	1750	64.81	1016	67.26	-2.45	-3.77
1720	27	2530	93.70	2592	70.00	23.70	-2.00
1721	14	1204	86.00	1116	79.71	6.29	7.31
1722	22	1700	77.27	1400	63.64	13.63	13.63
1723	20	2070	103.50	4050	81.12	22.38	28.47
1724	29	2410	117.59	2010	90.20	27.39	23.01
1725	14	1442	103.00	800	63.29	39.71	30.54
1726	7	574	82.00	402	57.43	24.57	29.97
1727	7	620	88.57	442	63.14	25.43	36.72
1728	4	370	92.50	210	52.50	40.00	41.67
1729	39	3972	101.85	2200	56.41	45.44	42.97
1730	37	3602	97.35	2114	57.14	40.21	41.95
1731	20	1600	80.00	900	45.00	35.00	33.95
1800	53	3400	64.15	2032	38.34	25.81	40.24
MC DATA AVAILABLE							
1810	21	1600	76.19	1114	53.05	23.14	41.90
1811	27	2152	79.70	1004	60.81	18.89	16.17
1820	27	2920	108.37	2470	91.48	16.89	15.54

SOURCES: GAA, PA 78/94-102

TABLE IV.0-1. SHIPPING FROM UNSPECIFIED BALTIC PORTS TO AMSTERDAM GIVING TOTAL AND AVERAGE TONNAGES OF CARGO CARRIED AND SIZE OF SHIP AT FIVE YEAR INTERVALS, 1700 - 1924

YEAR	NUMBER OF SHIPS	TOTAL TONNAGE CARGO CARRIED	AVERAGE SIZE OF CARGO CARRIED IN TONS	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	AVERAGE SIZE OF SHIP IN TONS	DIFFERENCE AVE. TONNAGE CARGO - AVE. SIZE OF SHIP	% AVE. SIZE OF CARGO - AVE. SIZE OF SHIP	% AVE. SIZE OF SHIP - AVE. SIZE OF CARGO
1700/1710	22	9792	263.27	4970	225.91	37.36	16.54	14.19
1710-2	2	474	237.00	428	214.00	23.00	10.75	9.77
1715	0	2004	200.50	1790	223.75	36.75	16.02	14.31
1720	7	1344	192.14	1204	172.00	20.14	13.06	11.00
1725	15	2004	137.60	1700	113.20	24.40	15.40	13.37
1730	0	3336	97.02	3916	71.24	25.76	36.19	26.57
1734	24	3104	132.07	2820	117.09	14.92	12.07	11.24
1739	57	9520	167.07	7000	124.39	42.68	34.36	30.12
1744	13	1004	83.36	976	75.00	8.36	11.07	9.90
1749	3	432	144.07	422	140.67	1.40	-	-
1754	24	5022	209.25	4300	180.00	19.25	10.13	9.20
1759	2	434	217.00	434	217.00	-	-	-
1764	2	200	100.00	200	100.00	-	-	-
1769	0	800	222.00	642	160.50	159.48	30.32	27.70
1774	2	100	70.00	110	55.00	15.00	27.27	24.30
1779	3	102	61.00	114	38.00	23.00	37.70	33.83
1780	2	200	99.25	160	80.00	19.25	19.25	17.27
1785	2	200	100.00	200	100.00	-	-	-
1790	1	100	100.00	100	100.00	-	-	-
1795	1	100	100.00	100	100.00	-	-	-
1800	1	100	100.00	100	100.00	-	-	-
1805	1	100	100.00	100	100.00	-	-	-
1810	1	100	100.00	100	100.00	-	-	-
1815	1	100	100.00	100	100.00	-	-	-
1820	1	100	100.00	100	100.00	-	-	-
1824	1	100	100.00	100	100.00	-	-	-
1828	1	100	100.00	100	100.00	-	-	-
1832	1	100	100.00	100	100.00	-	-	-
1836	1	100	100.00	100	100.00	-	-	-
1840	1	100	100.00	100	100.00	-	-	-
1844	1	100	100.00	100	100.00	-	-	-
1848	1	100	100.00	100	100.00	-	-	-
1852	1	100	100.00	100	100.00	-	-	-
1856	1	100	100.00	100	100.00	-	-	-
1860	1	100	100.00	100	100.00	-	-	-
1864	1	100	100.00	100	100.00	-	-	-
1868	1	100	100.00	100	100.00	-	-	-
1872	1	100	100.00	100	100.00	-	-	-
1876	1	100	100.00	100	100.00	-	-	-
1880	1	100	100.00	100	100.00	-	-	-
1884	1	100	100.00	100	100.00	-	-	-
1888	1	100	100.00	100	100.00	-	-	-
1892	1	100	100.00	100	100.00	-	-	-
1896	1	100	100.00	100	100.00	-	-	-
1900	1	100	100.00	100	100.00	-	-	-
1904	1	100	100.00	100	100.00	-	-	-
1908	1	100	100.00	100	100.00	-	-	-
1912	1	100	100.00	100	100.00	-	-	-
1916	1	100	100.00	100	100.00	-	-	-
1920	1	100	100.00	100	100.00	-	-	-
1924	1	100	100.00	100	100.00	-	-	-

NO DATA AVAILABLE

SOURCES: G.A. PA 70/90-102

TABLE 10-5 TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM THE BALTIC AT FIVE YEAR INTERVALS, 1729-1874.  
 DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1700-1710 <sup>1</sup>	6042	5528	14034	6512	3348	2998	3004	574	1246	60	1760	7578	52206
1710-2	-	-	-	-	112	12098	12050	16616	14446	5254	4502	8214	69988
1710	3100	3524	3998	3226	2502	3862	4918	9124	7078	11114	19996	9934	73508
1720	6070	6060	10402	5990	9642	8712	16876	19708	10066	12180	19904	17442	142605
1720-3	6278	4752	5406	7916	8788	7676	17976	34946	23464	19468	11884	18992	165142 <sup>1</sup>
1720-4	204	6060	6028	3644	13192	29062	28894	38004	31176	18298	14704	12958	286634
1730	2596	10164	2040	12194	9566	16138	34420	13466	19762	29186	17862	6436	172856
1730-1	1300	3964	4416	4000	12832	11268	21628	37396	16268	19148	23744	7764	184248
1740	1096	542	3978	4262	7878	9036	19218	31760	11146	9236	11462	6574	116996
1740-2	486	936	816	6934	7666	12152	24938	13774	19566	18472	6902	16542	127840
1750	3076	3662	7004	6314	8238	16926	26298	22904	16398	9534	18712	9214	144384
1750-1	6000	3336	2004	2500	6048	6946	29422	6124	13398	22862	13268	2416	113116
1760	7676	3964	5162	6856	6328	13194	26664	18266	19598	9366	9536	19668	143748
1760-2	3536	3652	8628	6746	20336	26474	22918	19906	21284	71978	17304	4688	165614
1770	4076	3346	11226	7690	14404	14886	26346	20168	26224	18954	8688	6248	157614
1770-1	4332	1762	4298	3074	8506	26428	17276	19678	9666	12492	12362	14294	129148
1780	9000	2996	3192	3976	6524	16138	14828	19122	18282	11974	16284	16462	131222
1780-2	1334	1310	7908	8974	2336	9694	11948	24014	16744	14664	16188	11468	128796
1780-3	322	3286	2814	3906	3136	12918	35098	17666	26698	13668	11626	8822	138888
1780-4	390	3122	5418	5420	1168	8786	30958	24928	21616	21828	17416	11432	150056
1790	1802	1952	3208	6818	13098	21988	24498	11218	13564	14354	5228	2396	122318
1790-1	318	-	1302	1864	916	332	736	612	336	336	646	-	6768
1800	1774	168	1356	1648	3882	6894	11936	10964	5572	5988	9986	5156	64968
1800-2	-	-	-	-	-	-	-	-	-	-	-	-	-
1810-3	-	-	-	-	376	4198	6366	7362	8614	4538	4712	2648	38738
1810-4	3126	600	974	536	4294	5924	16816	19288	6032	7138	8762	4678	72164
1820	590	726	1000	928	5376	6798	4136	5772	11728	4894	1112	834	43924

SOURCES: GAA, PA 78/90-102





TABLE 10.7 PERCENTAGE OF TOTAL TONNAGE OF CARGO SHIPPED TO AMSTERDAM FROM THE BALTIC AT FIVE YEAR INTERVALS, 1769-1824, DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL												MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC								
1769/1770 <sup>1</sup>	11.0	10.4	20.6	12.5	6.0	5.0	17.3	17.2	23.7	1.1	2.0	0.1	3.4	14.9						
1771-2	-	-	-	-	0.2	3.4	5.2	6.1	12.4	12.4	20.0	7.3	21.2	6.9						
1773	4.2	4.0	5.0	4.4	3.4	6.1	5.2	11.3	11.4	12.7	9.0	15.1	11.2	12.4						
1774	4.5	4.2	7.3	2.8	6.8	4.0	4.0	10.9	21.0	14.2	12.7	8.9	7.1	12.4						
1775	3.8	2.5	3.3	0.8	5.3	12.9	9.3	14.4	19.4	15.5	11.4	11.6	10.3	10.3						
1776	6.1	3.4	3.0	1.6	8.0	7.0	6.9	10.9	7.8	9.9	9.2	14.9	7.3	6.4						
1777	1.9	6.2	3.2	7.0	5.9	7.0	6.9	13.2	22.8	9.9	7.9	14.4	10.3	6.7						
1778	8.6	2.2	2.7	3.5	7.0	6.9	7.7	10.4	27.2	6.5	9.0	14.4	9.0	5.6						
1779	1.6	8.5	3.4	3.6	6.7	7.7	9.9	19.2	10.0	15.3	11.8	14.4	6.7	11.6						
1780	8.4	6.7	6.6	5.4	6.0	11.7	11.7	18.2	15.9	5.4	11.8	3.8	11.6	0.4						
1781-2	2.0	2.7	5.1	4.4	5.7	6.1	6.1	26.8	5.4	11.8	10.9	19.5	11.7	2.9						
1783	4.1	3.0	2.2	2.3	5.2	4.0	9.2	15.6	12.0	12.0	12.9	6.3	6.0	13.7						
1784	5.3	2.7	3.9	4.8	4.4	6.0	9.2	13.6	9.7	12.0	12.0	11.8	9.3	2.8						
1785	2.0	2.3	5.2	4.1	12.3	10.0	10.2	16.7	12.6	12.6	7.0	9.7	9.0	0.0						
1786	2.9	2.1	7.1	4.9	9.2	10.2	10.2	13.4	11.7	11.7	7.0	9.7	9.0	11.3						
1787	3.4	1.4	3.2	2.0	6.6	20.0	20.0	12.8	14.9	14.9	13.9	9.1	7.8	12.3						
1788	4.9	2.2	2.4	3.0	5.0	12.3	12.3	12.8	14.9	14.9	13.9	9.1	7.8	12.3						
1789	6.1	1.8	5.9	7.0	1.0	7.4	7.4	6.3	10.3	10.3	10.3	11.4	12.0	8.9						
1790	8.6	2.5	1.8	2.7	2.6	9.7	9.7	20.9	13.3	13.3	13.1	10.3	8.8	6.1						
1791	6.3	2.1	3.0	3.0	8.8	5.8	5.8	20.3	16.3	16.3	14.3	13.9	11.3	7.6						
1792	1.0	1.6	2.7	6.6	11.4	17.9	17.9	20.0	9.2	9.2	11.1	11.7	4.3	2.8						
1793	4.7	-	20.4	10.1	13.6	4.9	4.9	11.6	9.1	9.1	9.0	5.0	9.6	-						
1804-5	2.0	0.1	2.0	2.9	5.7	12.1	12.1	17.2	10.4	10.4	8.3	12.0	14.9	7.7						
1806	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1814	-	-	-	-	1.0	10.6	10.6	16.3	19.5	19.5	22.2	11.7	12.2	6.8						
1816	4.3	1.6	1.3	6.7	6.6	8.2	19.0	19.0	20.7	20.7	9.2	9.9	12.1	5.7						
1824	1.3	1.7	2.9	2.1	12.2	19.5	19.5	9.4	13.1	13.1	20.7	11.1	2.5	3.9						

SOURCES: GAA, PA 78/94-102

TABLE IV-8 TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM THE GALTIC AT FIVE YEAR INTERVALS, 1709 - 1924.  
 DISTRIBUTED ACCORDING TO REGISTERED POINT OF ARRIVAL

YEAR	MONTH OF ARRIVAL												TOTAL FOR THE YEAR
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1709/1710	4500	4304	11624	5602	2020	2432	2726	420	900	64	1502	6450	43730
1710	-	-	-	-	120	9092	9114	13190	11934	8660	3020	4164	95000
1719	2608	2000	3080	2000	2200	3322	3702	7000	6100	6010	14100	5220	63500
1720	5000	5150	7970	4002	6000	6000	12000	12200	10120	10710	12000	14120	116170
1720	2700	3022	4230	2402	6050	6020	16790	31070	20022	18432	4000	13324	130770
1729	90	5004	4200	3132	9200	10330	19700	30700	21092	15050	11050	9030	149200
1730	2492	10000	4922	10204	6022	10010	30020	11092	17200	17712	19500	9320	147390
1739	1012	2892	3290	7020	9700	7492	16700	31190	13020	12210	22000	5702	133002
1740	1402	300	2010	4020	6050	7390	10110	20100	9990	8252	10310	5000	100000
1749	600	670	500	5400	3200	9200	22000	11750	17030	16990	6002	11000	109200
1750	2972	3220	6100	5070	5000	11500	23002	19900	19132	9170	19100	8000	122310
1759	2000	2000	2000	2000	3000	9170	20100	4000	10590	10120	6950	14002	91020
1760	5912	2022	2070	6190	4112	8002	23000	13020	11120	7970	6950	14002	110170
1769	2322	2990	6172	9000	12000	19002	17700	11352	16072	16000	4300	3072	122002
1770	2010	1020	2322	6090	9090	11170	20070	13550	10970	19110	4000	4300	113550
1779	2000	1200	2000	2390	9290	19790	12192	10030	6370	9010	9000	10000	93120
1780	4100	2010	2310	3002	4010	9300	11972	14100	12322	4300	7000	11000	92070
1789	110	200	200	200	1000	2002	8120	10020	11010	9000	11930	2030	93300
1789	302	2000	1310	2700	2250	6000	20070	12000	11010	10210	10200	7102	95000
1789	2000	2000	3000	4022	710	2000	23000	14000	13000	10200	12300	8000	100702
1790	1400	1100	2000	4030	8090	14052	20100	7000	10000	13100	4000	1700	91200
1799	210	-	730	610	532	200	952	392	200	220	422	-	4100
1800	1002	92	752	1000	2200	4002	6002	6710	3370	4020	9032	2072	30912
1800	NO DATA AVAILABLE												
1810	-	-	-	-	200	2030	4000	4020	9000	2500	2070	1002	20232
1819	2000	610	970	390	3200	4720	9350	10002	5320	5150	6000	3000	57200
1820	502	620	900	802	4000	5050	3000	5200	10500	4200	900	770	39002

SOURCES: CIA, PA 78/90-102

TABLE 10-5 AVERAGE SHIPPING TONNAGE TO AMSTERDAM FROM THE BALTIC AT FIVE YEAR INTERVALS, 1700 - 1920.

YEAR	MONTH OF ARRIVAL										YEARLY AVERAGE		
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT		NOV	DEC
1700/1710	109.7	173.2	219.9	218.9	188.0	202.7	272.6	215.0	141.1	64.0	142.8	221.0	206.3
1710/1720	106.2	150.3	193.8	177.9	60.0	200.6	106.0	191.3	192.2	186.8	166.1	186.9	189.3
1720/1730	106.2	140.4	199.4	177.9	100.7	194.2	155.9	147.6	150.9	165.7	214.0	201.0	178.1
1730/1740	109.3	142.0	168.4	142.3	124.7	123.0	207.0	209.0	150.0	153.0	207.0	196.2	171.0
1740/1750	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1750/1760	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1760/1770	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1770/1780	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1780/1790	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1790/1800	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1800/1810	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1810/1820	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1820/1830	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1830/1840	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1840/1850	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1850/1860	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1860/1870	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1870/1880	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1880/1890	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1890/1900	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1900/1910	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0
1910/1920	109.3	142.0	168.4	142.3	124.7	123.0	187.3	183.0	153.2	170.1	160.0	173.0	164.0

SOURCES: GAA, PA 78/94-102

TABLE IV.10 PERCENTAGE OF TOTAL TONNAGE OF SHIPPING TO AMSTERDAM FROM THE BALTIC AT FIVE YEAR INTERVALS, 1705-1824, DISTRIBUTED ACCORDING TO REGISTERED MONTH OF ARRIVAL

YEAR	MONTH OF ARRIVAL											
	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
1705/1710	10.3	10.3	20.6	13.0	0.0	5.0	0.2	1.0	2.3	0.1	3.9	14.7
1715	-	-	-	-	0.2	10.3	10.4	23.7	20.7	5.4	6.9	7.4
1719	4.1	4.7	5.9	4.5	5.2	5.9	11.1	9.7	15.1	15.1	22.3	6.2
1724	4.7	4.4	6.9	3.5	5.2	11.9	10.4	13.9	9.2	11.6	11.6	12.2
1729	3.4	2.5	3.1	4.8	4.0	10.7	23.4	14.6	13.3	6.8	6.8	9.0
1734	0.1	3.6	2.9	2.1	0.2	12.3	20.6	14.7	10.1	7.8	7.8	6.5
1739	1.7	7.2	3.1	7.0	4.0	9.8	20.6	11.7	12.0	10.0	10.0	3.6
1744	0.6	1.9	2.5	5.3	7.3	5.0	12.5	10.2	9.2	10.9	10.9	4.3
1749	1.4	0.4	3.0	4.0	6.0	7.3	16.0	9.9	8.3	10.3	10.3	5.4
1754	0.4	0.6	0.5	5.1	5.3	8.4	20.5	16.1	15.6	6.1	6.1	10.5
1759	2.4	2.6	5.1	4.6	4.6	9.5	19.2	12.4	4.2	12.4	12.4	6.6
1764	2.0	2.0	2.3	2.8	4.3	5.6	20.5	11.9	10.7	11.7	11.7	2.1
1769	5.4	2.7	3.5	9.0	3.7	7.0	21.6	10.1	7.2	6.3	6.3	13.5
1774	1.9	2.4	5.0	4.4	4.8	10.0	14.5	13.7	13.7	6.8	6.8	2.5
1779	2.0	1.7	7.4	5.4	8.0	9.8	17.7	12.8	13.3	9.6	9.6	3.8
1784	3.3	1.3	3.2	2.6	5.7	21.2	13.1	6.8	10.1	10.2	10.2	11.7
1789	4.3	2.2	2.8	3.3	4.4	10.1	12.9	13.4	10.1	8.6	8.6	12.9
1794	0.1	1.4	4.2	2.8	2.8	4.2	23.2	13.2	10.1	13.4	13.4	5.7
1799	0.4	2.1	1.6	2.0	2.4	7.2	13.5	13.5	10.7	10.6	10.6	7.4
1804	0.3	2.0	3.3	3.8	0.7	4.6	22.3	12.8	15.9	11.8	11.8	9.5
1809	1.0	1.3	2.9	5.3	6.9	16.1	22.1	12.0	14.5	4.8	4.8	2.8
1814	5.2	-	17.8	10.7	12.8	6.8	13.3	4.9	5.9	10.2	10.2	-
1819	2.0	0.1	1.9	2.7	5.8	11.9	16.6	8.7	10.4	14.5	14.5	7.6
1824	-	-	-	-	-	-	-	-	-	-	-	-
1819	-	-	-	-	1.1	16.9	16.7	22.4	11.8	11.9	11.9	6.9
1824	4.6	1.1	1.5	0.7	4.7	8.3	16.3	9.3	9.6	11.3	11.3	6.1
1829	1.4	1.0	2.5	2.1	11.9	15.3	5.4	27.1	10.9	2.6	2.6	2.0

SOURCES: G.A.A. PA 78/90-102

NO DATA AVAILABLE

TABLE IV.11 AVERAGE SIZE OF CARGOES AND OF SHIPS IN TONS IN EACH OF THE SIZE CATEGORIES OF SHIPPING TO AMSTERDAM FROM THE BALTIC AT FIVE YEAR INTERVALS, 1700-1824

YEAR	A		B		C		D		E		F		G		H		YEARLY AVERAGE	
	CARGO	SHIP	CARGO	SHIP	CARGO	SHIP	CARGO	SHIP	CARGO	SHIP	CARGO	SHIP	CARGO	SHIP	CARGO	SHIP		
1700/1710	55.0	60.2	153.9	147.7	259.1	257.0	340.8	340.1	439.7	439.1	530.0	-	-	-	-	-	206.0	206.3
1710	72.9	64.2	147.1	149.7	260.0	257.4	343.9	333.2	441.2	419.6	541.3	-	-	-	-	-	230.1	189.3
1719	70.2	66.0	140.1	140.0	255.7	254.2	337.0	340.1	435.2	424.0	506.0	-	-	-	-	-	266.1	178.1
1724	69.3	61.0	142.2	145.7	259.1	257.8	350.3	351.4	440.4	414.0	519.0	-	-	-	-	-	210.7	171.0
1725	72.0	67.4	144.9	159.8	255.4	256.5	353.4	351.5	444.0	420.4	523.6	-	-	-	-	-	195.9	166.0
1729	70.2	68.3	140.0	136.0	255.1	243.7	340.9	321.3	431.9	-	534.3	-	-	-	-	-	170.0	120.5
1734	70.9	68.2	144.5	135.9	249.2	242.4	333.0	324.4	440.5	408.0	500.0	-	-	-	-	-	187.3	159.7
1739	72.7	63.0	145.7	139.8	249.5	246.4	335.8	326.3	434.8	-	470.7	-	-	-	-	-	183.9	148.9
1744	70.7	71.8	142.7	137.2	250.8	244.0	338.0	334.3	424.4	408.0	500.0	-	-	-	-	-	169.0	142.3
1749	77.0	70.0	142.0	126.0	253.3	247.9	340.7	334.0	427.5	408.0	-	-	-	-	-	-	178.3	152.0
1754	75.3	77.2	149.0	137.4	240.8	238.5	345.1	345.3	417.7	402.0	-	-	-	-	-	-	170.0	151.4
1759	72.0	70.0	149.0	134.2	244.2	241.1	350.0	354.3	429.0	413.2	-	-	-	-	-	-	195.0	150.3
1764	73.9	78.0	152.0	133.3	237.1	237.2	349.2	352.1	429.1	413.0	540.0	-	-	-	-	-	202.7	155.0
1769	72.2	72.0	151.0	134.1	240.3	237.2	350.0	350.0	422.0	417.0	550.0	-	-	-	-	-	196.9	149.7
1774	76.7	72.3	151.4	122.9	236.2	230.4	357.3	340.7	424.5	419.8	550.9	-	-	-	-	-	196.8	141.8
1779	70.4	66.2	148.7	127.7	235.0	237.5	350.5	344.0	434.9	431.2	529.2	-	-	-	-	-	191.0	137.0
1784	71.1	67.8	148.0	133.0	239.0	237.0	344.4	339.0	434.5	439.4	521.0	-	-	-	-	-	199.0	130.7
1785	71.8	67.7	148.3	130.2	239.1	236.8	343.8	340.7	432.0	442.0	525.0	-	-	-	-	-	201.2	130.7
1789	81.0	65.7	148.1	131.0	242.3	242.5	345.0	349.0	433.0	443.4	530.0	-	-	-	-	-	204.1	147.5
1799	81.0	62.2	143.9	131.3	239.0	242.0	345.0	350.0	444.1	441.0	524.0	-	-	-	-	-	202.2	140.4
1794	72.9	62.1	144.6	134.4	241.4	237.8	343.9	373.0	443.5	443.9	-	-	-	-	-	-	172.0	128.9
1799	58.0	47.9	137.0	127.0	224.5	-	-	-	-	-	-	-	-	-	-	-	96.0	59.2
1809	71.1	69.7	142.9	127.5	231.1	229.7	333.2	336.0	470.0	-	518.0	-	-	-	-	-	111.8	65.0
1809	NO DATA AVAILABLE																	
1814	73.3	57.1	141.7	130.2	234.9	234.4	344.0	-	400.0	-	-	-	-	-	-	-	140.0	90.1
1819	79.0	63.2	141.2	139.9	227.1	231.0	300.5	363.3	470.7	455.0	510.0	-	-	-	-	-	716.0	724.0
1824	79.0	64.5	147.9	153.3	221.5	224.1	334.0	345.2	-	-	542.4	-	-	-	-	-	894.0	894.0

SOURCE: GAA, PA 76/94-102



TABLE 19-13 SHIPPING FROM RUSSIA AS A PERCENTAGE OF ALL SHIPPING FROM THE MALTIC TO AMSTERDAM AT FIVE YEAR INTERVALS, 1769 - 1824

YEAR	NUMBER OF SHIPS	PERCENTAGE FROM RUSSIA	TOTAL TONNAGE OF CARGO CARRIED	PERCENTAGE FROM RUSSIA	TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	PERCENTAGE FROM RUSSIA
1769/1770	212	17.9	52286	18.7	43730	78.4
1771	204	11.9	69906	7.4	95648	6.9
1772	257	29.7	73506	32.1	63566	33.7
1773	677	33.7	142600	25.8	116178	41.2
1774	842	29.6	163142	48.7	136776	51.2
1775	1186	19.8	206654	28.7	149266	32.3
1776	923	61.7	172836	94.7	147398	99.8
1777	895	39.8	164246	54.4	132282	97.5
1778	766	42.8	116906	57.3	168490	61.4
1779	717	37.9	127640	58.4	169260	56.3
1780	908	34.8	146324	44.8	122314	49.9
1781	588	46.2	113116	55.1	91824	68.5
1782	769	29.1	143746	49.7	116170	53.2
1783	643	38.8	165614	48.6	122682	54.4
1784	861	29.3	197614	54.7	113958	49.6
1785	676	33.3	129140	48.4	93124	53.2
1786	859	48.7	131222	51.7	92874	58.7
1787	640	40.5	128794	54.1	89300	62.7
1788	650	34.8	132640	49.5	82400	58.2
1789	726	32.4	150856	47.9	104782	57.3
1790	788	33.2	122310	49.4	91240	57.8
1791	76	12.9	6760	28.1	4140	23.2
1800	599	14.8	64960	24.1	80912	29.7
1809	NC DATA AVAILABLE					
1810	269	42.4	38736	54.1	24232	53.3
1811	556	22.1	72160	34.6	57240	37.2
1824	259	24.2	42926	36.1	39042	48.7

SOURCES: TABLES 11.0 AND 14.0

TABLE IV, 14 TONNAGE MOVEMENTS FROM THE BALTIC AND RUSSIA TO AMSTERDAM, 1764 - 1825.

YEAR	TOTAL TONNAGE OF CARGO CARRIED		TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	
	FROM THE BALTIC	FROM RUSSIA	FROM THE BALTIC	FROM RUSSIA
1764	143,748	64,660	110,170	58,696
1765	138,072	61,722	105,418	52,974
1766	168,744	73,870	129,462	66,180
1767	174,274	82,260	108,592	41,970
1768	148,894	67,636	108,084	50,072
1769	165,614	80,492	122,892	66,828
1770	179,066	64,252	124,192	52,752
1771	135,008	44,328	97,608	33,098
1772	164,946	76,782	106,702	60,018
1773	143,184	72,512	103,622	57,712
1774	157,614	85,316	113,598	65,816
1775	179,066	64,252	124,192	52,752
1776	135,008	44,328	97,608	33,098
1777	164,946	76,782	106,702	60,018
1778	143,184	72,512	103,622	57,712
1779	157,614	85,316	113,598	65,816
1780	179,066	64,252	124,192	52,752
1781	135,008	44,328	97,608	33,098
1782	164,946	76,782	106,702	60,018
1783	143,184	72,512	103,622	57,712
1784	157,614	85,316	113,598	65,816
1785	179,066	64,252	124,192	52,752
1786	135,008	44,328	97,608	33,098
1787	164,946	76,782	106,702	60,018
1788	143,184	72,512	103,622	57,712
1789	157,614	85,316	113,598	65,816
1790	179,066	64,252	124,192	52,752
1791	135,008	44,328	97,608	33,098
1792	164,946	76,782	106,702	60,018
1793	143,184	72,512	103,622	57,712
1794	157,614	85,316	113,598	65,816
1795	179,066	64,252	124,192	52,752
1796	135,008	44,328	97,608	33,098
1797	164,946	76,782	106,702	60,018
1798	143,184	72,512	103,622	57,712
1799	157,614	85,316	113,598	65,816
1800	179,066	64,252	124,192	52,752

NO DATA AVAILABLE

CONTINUED



TABLE IV.14 TONNAGE MOVEMENTS FROM THE BALTIC AND RUSSIA TO AMSTERDAM, 1764 - 1825.

YEAR	TOTAL TONNAGE OF CARGO CARRIED		TOTAL TONNAGE ACCORDING TO SIZE OF SHIP	
	FROM THE BALTIC	FROM RUSSIA	FROM THE BALTIC	FROM RUSSIA
1800	25,232	13,906	22,072	9,018
1801	13,218	11,050	24,794	6,972
1802	206,228	67,712	123,134	42,756
1803	121,434	39,640	69,402	23,876
1804	66,968	16,168	38,912	10,010
1805	84,360	36,300	50,018	22,476
1806	20,944	13,156	12,872	8,182
1807	11,136	1,644	7,168	2,640
1808	NO DATA AVAILABLE			
1809	NO DATA AVAILABLE			
1810	NO DATA AVAILABLE			
1811	NO DATA AVAILABLE			
1812	NO DATA AVAILABLE			
1813	NO DATA AVAILABLE			
1814	38,778	20,066	24,232	12,924
1815	53,044	29,536	33,266	18,832
1816	107,236	44,234	68,130	29,538
1817	223,496	116,320	184,320	99,614
1818	82,472	22,920	42,976	20,080
1819	72,164	24,950	57,240	21,320
1820	136,064	27,900	101,242	24,980
1821	80,148	26,700	64,972	22,684
1822	60,188	14,012	44,324	12,946
1823	78,260	21,868	66,864	20,784
1824	13,927	16,718	39,042	15,868
1825	34,278	9,028	29,598	8,402

Source: O.A.A., PA6/59-62 and PA78/99-102. In March 1763, the gul-footgold on the cargo tonnage was reduced by the D.O.I. from one to one-half stiver per last. However, the bookkeepers continued to receive their 5% commission for their duties on the basis of one stiver per last. They, therefore, started to keep separate totals of the monies collected for both the cargo tonnage and ship tonnage thus making it possible by using these figures to calculate the above tonnages. FOR FOOTNOTES USE KEY TO TABLES II.

Notes and Key to Tables V.1 - V.4

<sup>1</sup>Information for these columns available for 1724 and 1725 only.

<sup>2</sup>Applies only to 1724 and 1784.

<sup>3</sup>For 1784 and 1785 based on the STA entries coupled with the GGR entries.

SOUND TOLL ACCOUNTS

Column

- A = The number of ships passing the Sound stating as port of destination a Dutch port.
- B = The number of ships passing the Sound stating Amsterdam as their port of destination.
- C = The number of ships (of "A") located in the GGR.
- D = The number of ships (of "C") whose STA port of departure conflicts with that stated in the GGR.
- E = The number of ships (of "C") whose STA port of destination conflicts with that stated in the GGR.
- F = The number of ships (of "C") whose STA homeport of the captain conflicts with that stated in the GGR.<sup>1</sup>
- G = The number of ships (of "A") where the homeport of the captain and port of departure are identical.
- H = The number of ships (of "A") whose homeport of the captain is Dutch.
- I = The number of ships (of "H") whose homeport of the captain is Amsterdam.
- J = The number of ships (of "C") whose homeport of the captain is Dutch according to the GGR.<sup>1</sup>
- K = The number of ships (of "J") whose homeport of the captain is Amsterdam according to the GGR.<sup>1</sup>

<

Notes and Key to Tables V.1 - V.4 (Cont'd)

GALJOOTSGELDREGISTERS

Column

- L = The number of ships arriving in Amsterdam via the Sound.
- M = The number of ships (of "L") arriving in Amsterdam during May through December.<sup>2</sup>
- N = The number of ships (of "L" or "M") located in the STA.
- O = The number of ships (of "N") whose GGR port of departure conflicts with that stated in the STA.
- P = The number of ships (of "N") whose GGR port of arrival (Amsterdam) conflicts with the port of destination as stated in the STA.
- Q = The number of ships (of "N") whose GGR homeport of the captain conflicts with that stated in the STA.<sup>1</sup>
- R = The number of ships (of "L" or "M") where the homeport of the captain and port of departure are identical.<sup>3</sup>
- S = The number of ships (of "L") whose homeport of the captain is Dutch.<sup>1</sup>
- T = The number of ships (of "S") whose homeport of the captain is Amsterdam.<sup>1</sup>
- U = The number of ships (of "N") whose homeport of the captain is Dutch according to the STA.
- V = The number of ships (of "U") whose homeport of the captain is Amsterdam according to the STA.

TABLE 7.1 Comparison of shipments through the Baltic Sea, 1950-1954, as reported by the Third Toll Accounts with ship arrivals in Amsterdam according to the Galjoetsregisters for 17th

Code	Port of Departure	HOUD TOLL ACCOUNTS													GALJOETSREGISTER												
		A*	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V				
201AAL	Aalborg	1	1	0	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
201HEW	Helsingør	17	17	11	1	-	-	-	17	6	1	1	13	12	10	-	-	-	-	-	-	12	-				
202AAO	Abo	1	1	1	1	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
209NOL	Kristianstad	1	1	1	1	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
211OEL	Göteborg	8	8	5	1	-	-	-	8	2	2	2	8	7	5	5	5	5	5	5	5	5	5				
221GTC	Stockholm	72	75	72	0	0	0	0	72	4	1	1	77	70	74	17	1	0	0	0	17	10	2				
232NOK	Norrköping	10	10	6	0	0	0	0	10	5	1	1	12	12	12	11	2	0	2	2	8	10	2				
234KAM	Kalmar	2	2	1	1	0	0	0	2	1	1	1	4	4	4	4	4	4	4	4	4	4	4				
238WTF	Wijköping	2	2	2	1	1	1	1	2	1	1	1	3	3	3	3	3	3	3	3	3	3	3				
239VET	Ventersvik	5	5	5	1	1	1	1	5	1	1	1	7	7	7	7	7	7	7	7	7	7	7				
241KAK	Karlshamn	12	12	12	0	0	0	0	12	4	5	3	22	22	22	22	22	22	22	22	22	22	22				
242KAM	Karlshamn	3	3	3	0	0	0	0	3	1	1	1	6	6	6	6	6	6	6	6	6	6	6				
243AAM	Ahus	1	1	1	0	0	0	0	1	1	1	1	4	4	4	4	4	4	4	4	4	4	4				
246LAD	Långkröna	3	3	3	0	0	0	0	3	1	1	1	6	6	6	6	6	6	6	6	6	6	6				
247KAM	Kristianstad	2	2	2	1	1	1	1	2	1	1	1	5	5	5	5	5	5	5	5	5	5	5				
251HEC	Helsingør	1	1	1	1	1	1	1	1	1	1	1	4	4	4	4	4	4	4	4	4	4	4				
299BRS	Brosund	2	2	2	2	0	0	0	2	0	0	0	2	2	2	2	2	2	2	2	2	2	2				
<b>Total for Denmark and Sweden</b>		<b>105</b>	<b>98</b>	<b>72</b>	<b>14</b>	<b>0</b>	<b>21</b>	<b>44</b>	<b>33</b>	<b>14</b>	<b>30</b>	<b>62</b>	<b>82</b>	<b>73</b>	<b>61</b>	<b>8</b>	<b>0</b>	<b>13</b>	<b>37</b>	<b>35</b>	<b>8</b>	<b>19</b>	<b>11</b>				
301PKE	Frederikshamn	8	8	6	0	0	2	0	7	4	0	0	11	11	11	11	11	11	11	11	11	11	11				
306VIB	Viborg	16	16	12	1	0	5	0	16	7	12	23	36	36	36	36	36	36	36	36	36	36	36				
319STP	St. Petersburg	32	34	27	0	0	0	0	32	8	22	42	64	64	64	64	64	64	64	64	64	64	64				
329MAR	Marsa	90	87	78	2	1	12	0	90	8	79	169	248	248	248	248	248	248	248	248	248	248	248				
341REV	Reval	5	4	5	2	1	3	0	5	3	3	11	17	17	17	17	17	17	17	17	17	17	17				
352RIO	Riga	29	23	25	2	2	21	0	29	17	75	133	197	197	197	197	197	197	197	197	197	197	197				
<b>Total for Russia</b>		<b>253</b>	<b>242</b>	<b>203</b>	<b>5</b>	<b>4</b>	<b>52</b>	<b>0</b>	<b>246</b>	<b>61</b>	<b>202</b>	<b>322</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>				
371LIB	Libau	4	4	6	1	0	0	0	4	1	6	11	17	17	17	17	17	17	17	17	17	17	17				
372WIN	Windau	4	4	4	1	0	0	0	4	2	4	10	16	16	16	16	16	16	16	16	16	16	16				
<b>Total for Courland</b>		<b>12</b>	<b>12</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>3</b>	<b>10</b>	<b>21</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>				
401KON	Königsberg	100	104	79	3	0	13	5	100	15	87	182	279	279	279	279	279	279	279	279	279	279	279				
411MEM	Memel	4	4	4	0	0	0	0	4	0	4	8	12	12	12	12	12	12	12	12	12	12	12				
412PIL	Pillen	7	7	5	0	0	0	0	7	0	5	12	17	17	17	17	17	17	17	17	17	17	17				
421DAZ	Danzig	203	195	170	7	0	22	11	203	45	127	275	422	422	422	422	422	422	422	422	422	422	422				
431LEI	Elbing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
432RUC	Rückerwalde	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
444KOB	Kolberg	2	2	2	0	0	0	1	2	0	0	2	3	3	3	3	3	3	3	3	3	3	3				
451STT	Stettin	51	54	50	4	1	20	0	51	4	44	100	154	154	154	154	154	154	154	154	154	154	154				
459ANE	Anklam	1	1	1	0	0	0	0	1	0	0	1	2	2	2	2	2	2	2	2	2	2	2				
459POP	Pomerania	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
462WOL	Wolgast	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
463STR	Stralsund	4	4	4	0	0	0	0	4	0	4	8	12	12	12	12	12	12	12	12	12	12	12				
469RUC	Rückerwalde	1	1	1	1	0	1	0	1	1	1	3	4	4	4	4	4	4	4	4	4	4	4				
471ROT	Rostock	2	1	2	1	1	1	1	2	1	1	4	6	6	6	6	6	6	6	6	6	6	6				
491ORZ	Baltic (unspecified)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
<b>Total other Baltic Ports</b>		<b>294</b>	<b>279</b>	<b>222</b>	<b>22</b>	<b>2</b>	<b>52</b>	<b>21</b>	<b>258</b>	<b>100</b>	<b>256</b>	<b>432</b>	<b>642</b>	<b>642</b>	<b>642</b>	<b>642</b>	<b>642</b>	<b>642</b>	<b>642</b>	<b>642</b>	<b>642</b>	<b>642</b>	<b>642</b>				
<b>Total for all ships</b>		<b>764</b>	<b>731</b>	<b>597</b>	<b>43</b>	<b>7</b>	<b>170</b>	<b>65</b>	<b>549</b>	<b>178</b>	<b>493</b>	<b>833</b>	<b>1277</b>	<b>1277</b>	<b>1277</b>	<b>1277</b>	<b>1277</b>	<b>1277</b>	<b>1277</b>	<b>1277</b>	<b>1277</b>	<b>1277</b>	<b>1277</b>				

\* Consult Key to Tables V.1-V.4 for the full titles for columns A, B, etc.

TABLE V.2 A comparison of shipping through the Sound destined for Amsterdam according to the Sound Toll Accounts with ship arrivals in Amsterdam according to the Gelijkotsgeld registers for 1725

Code	Port of Departure	SOUND TOLL ACCOUNTS													GELIJOOTSGELDRGISTERS												
		A*	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V				
201HEH	Heligink	10	10	13	3	0	0	0	19	0	10	0	10	0	10	0	0	5	10	0	12	0	12	5			
202AAO	Amsterdam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
209FEL	Finland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
211SEL	Sehle	5	5	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
218TTC	Stockholm	70	29	25	1	0	0	10	0	1	1	1	1	32	0	30	5	0	9	17	6	1	1				
231VTS	Vladiv	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0				
232GOT	Gotland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
233NOR	Norrböping	11	11	11	1	0	0	7	0	0	0	1	0	10	0	10	1	0	0	0	0	0	0				
234KAL	Kalmar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
235VST	Vestervik	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
241KAR	Karlshamn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
242KAR	Karlshamn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
243AAR	Aarhus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
244LAD	Landskrona	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
247KRI	Kristianstad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
249SUN	Sundsvik	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
290SVE	Sweden(undefined)	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
<b>Total for Denmark and Sweden</b>		<b>96</b>	<b>35</b>	<b>24</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>4</b>	<b>12</b>	<b>30</b>	<b>1</b>	<b>87</b>	<b>0</b>	<b>77</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>37</b>	<b>26</b>	<b>0</b>	<b>16</b>	<b>9</b>				
301FRI	Frederikshavn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
308VIB	Viborg	18	18	14	0	0	0	1	10	0	14	0	17	0	15	0	0	4	0	17	0	12	1				
319PET	St. Petersburg	53	53	40	0	0	0	24	0	41	27	37	7	43	0	42	0	0	22	1	35	4	31				
329HAR	Helsingfors	145	145	130	0	0	0	55	0	143	62	128	11	123	0	112	0	0	57	1	111	9	111				
341REV	Reval	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
352RIG	Riga	183	172	152	14	1	0	0	172	40	149	31	147	0	127	0	0	43	0	125	26	126	27				
<b>Total for Russia</b>		<b>410</b>	<b>406</b>	<b>356</b>	<b>17</b>	<b>1</b>	<b>125</b>	<b>7</b>	<b>379</b>	<b>134</b>	<b>137</b>	<b>51</b>	<b>343</b>	<b>0</b>	<b>307</b>	<b>11</b>	<b>0</b>	<b>129</b>	<b>5</b>	<b>298</b>	<b>41</b>	<b>287</b>	<b>105</b>				
371LIB	Libau	10	10	0	0	0	0	0	10	4	0	1	6	0	10	0	0	2	0	0	0	6	2				
372WIN	Windau	8	8	7	0	0	0	0	0	6	7	3	13	0	12	0	0	3	0	12	2	12	4				
<b>Total for Courland</b>		<b>18</b>	<b>18</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>10</b>	<b>15</b>	<b>4</b>	<b>19</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>13</b>	<b>2</b>	<b>18</b>	<b>6</b>				
401KON	Königsberg	177	129	76	11	0	0	10	7	10	0	10	106	0	97	0	0	22	4	87	7	7	19				
411HEM	Hemel	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
412PIL	Pillau	13	13	0	0	0	0	0	1	12	1	0	0	0	0	0	0	0	0	0	0	0	0				
421DAZ	Danzig	276	264	151	0	0	0	19	235	47	132	22	187	0	156	10	0	12	14	145	37	139	43				
431ELI	Elbing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
443RUG	Rügenwalde	2	2	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0				
444KOB	Kolberg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
449KAI	Kaamin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
451STP	Stettin	67	66	54	2	0	0	0	54	0	42	0	53	0	56	0	0	32	0	45	0	41	32				
459ANK	Anklam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
469UCK	Uckerunde	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
462WOL	Wolgast	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
463STR	Stralsund	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
471ROT	Rostock	2	1	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0				
491OEE	Baltic(unspecified)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
<b>Total other Baltic Ports</b>		<b>524</b>	<b>502</b>	<b>324</b>	<b>25</b>	<b>1</b>	<b>86</b>	<b>47</b>	<b>574</b>	<b>108</b>	<b>277</b>	<b>2</b>	<b>395</b>	<b>0</b>	<b>341</b>	<b>42</b>	<b>0</b>	<b>135</b>	<b>34</b>	<b>306</b>	<b>53</b>	<b>290</b>	<b>105</b>				
<b>Total for all ships</b>		<b>1048</b>	<b>1021</b>	<b>779</b>	<b>70</b>	<b>2</b>	<b>248</b>	<b>54</b>	<b>865</b>	<b>264</b>	<b>659</b>	<b>83</b>	<b>844</b>	<b>0</b>	<b>743</b>	<b>78</b>	<b>0</b>	<b>283</b>	<b>76</b>	<b>648</b>	<b>99</b>	<b>611</b>	<b>225</b>				

\* Consult Key to Tables V.1 - V.4 for the full titles for columns A, B, etc.

TABLE V.3

A comparison of shipping through the Baltic Sea, Germany, or other ports, according to the Grand Toll Accounts with ship arrivals (interim) according to the All-Port Registers for 1924.

Code	Port of Departure	GRAND TOLL ACCOUNTS										ALL-PORT REGISTERS								
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
20700A	Bornholm	1	1	1	0	0	0	1	1											
202A/C	Abo	3	3	0	0	0	0													
201ULE	Uleaborg	1	1	1	0	0	1	0												
209JAF	Jarvisstaden	0	0	0	0	0	0	0												
209KAZ	Gl. Karlsby	2	0	0	0	0	1	0												
209KIL	Kristinestad	0	0	0	0	0	0	0												
209WAA	Waas	1	1	1	0	0	0	0												
211GKL	Gefle	5	4	4	0	0	0	0												
221STO	Stockholm	27	17	19	0	0	0	11	0											
223RNY	Rorupping	0	0	0	0	0	0	0												
224KAM	Kalmar	1	1	1	0	0	0	0												
225NYT	Nybyting	2	2	0	0	0	0	0												
241KAR	Karlshamn	1	1	1	0	0	0	0												
242KAR	Karlshamn	1	1	1	0	0	0	0												
243AAR	Ahus	0	0	0	0	0	0	0												
247KAR	Kristianstad	4	0	0	0	0	0	0												
251HAR	Halmstad	0	0	0	0	0	0	0												
263VAR	Varberg	0	0	0	0	0	0	0												
266SRH	Strömstad	0	0	0	0	0	0	0												
<b>Total for Denmark and Sweden</b>		<b>52</b>	<b>42</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>2</b>	<b>1</b>			<b>56</b>	<b>52</b>	<b>46</b>	<b>14</b>	<b>9</b>	<b>30</b>	<b>1</b>	<b>1</b>	
271VZK	Vrederskloster	12	12	11	1	0	0	0												
203VIB	Viborg	11	6	3	0	0	0	0												
203WAM	Wammelsu	0	0	0	0	0	0	0												
203MIE	Mierjose	0	0	0	0	0	0	0												
203PZK	Petersburg	15	14	13	0	0	10	27	12											
203MAR	Marve	5	5	5	0	0	0	0												
241REV	Revel	1	1	1	0	0	0	0												
243AAR	Araraburg	11	0	0	0	0	0	0												
243RHO	Riga	202	161	200	0	0	10	71	45											
243RHO	Riga	0	0	0	0	0	0	0												
<b>Total for Russia</b>		<b>202</b>	<b>161</b>	<b>200</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>71</b>	<b>45</b>			<b>170</b>	<b>141</b>	<b>170</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>120</b>	<b>37</b>
271VZK	Vrederskloster	0	0	0	0	0	0	0												
271VZK	Vrederskloster	0	0	0	0	0	0	0												
270DOR	Donskoye	1	0	0	0	0	0	0												
<b>Total for Courland</b>		<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>												
401KON	Königsberg	164	160	77	1	0	0	17												
411MEM	Memel	115	69	75	1	1	0	75												
412PIL	Pillau	102	145	97	74	1	1	1												
421DAZ	Danzig	40	78	35	0	0	0	0												
431ELI	Elbing	0	0	0	0	0	0	0												
444ROB	Rolberg	7	7	5	0	0	0	1												
449TRH	Trondheia	0	0	0	0	0	0	0												
451STT	Stettin	44	41	58	0	0	0	9												
471NOT	Notowidjardj	1	1	1	0	0	0	0												
491OHE	Ostern (arrived)	0	0	0	0	0	0	0												
<b>Total other Baltic Ports</b>		<b>44</b>	<b>429</b>	<b>271</b>	<b>77</b>	<b>2</b>	<b>41</b>	<b>135</b>	<b>44</b>			<b>287</b>	<b>225</b>	<b>245</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>208</b>	<b>115</b>
<b>Total for all ships</b>		<b>1059</b>	<b>748</b>	<b>541</b>	<b>77</b>	<b>2</b>	<b>95</b>	<b>445</b>	<b>126</b>			<b>632</b>	<b>523</b>	<b>512</b>	<b>95</b>	<b>20</b>	<b>39</b>	<b>208</b>	<b>115</b>	

\* Consult Key to Tables V.1 - V.4 for the full titles for the ports, etc.

TABLE V.4 A comparison of shipping through the Sound destined for Amsterdam according to the Sound Toll Accounts with ship arrivals in Amsterdam according to the Galjoetsgeldregisters for 1785.

Code	Port of Departure	SOUND TOLL ACCOUNTS								GALJOETSSELDRREGISTERS							
		A	B	C	D	E	G	H	I	L	M	O	P	R	U	V	
019BOA	Bornholm	1	1	1	1	0	0	0	0	1	1	1	0	0	1	1	
202AAC	Abo	3	3	3	0	0	0	0	0	3	3	0	0	3	0	0	
209JAK	Jakobsstad	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	
209KAE	Ol. Karleby	3	2	2	3	0	2	0	0	0	0	0	0	0	0	0	
209KAR	Karleby	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	
209KAS	Kasko	1	1	1	0	0	1	0	0	1	1	0	0	1	0	0	
209WAA	Wasa	1	1	1	0	0	1	0	0	1	1	0	0	1	0	0	
211GEL	Gefle	5	5	5	0	0	4	0	0	4	4	0	0	3	0	0	
221STC	Stockholm	29	21	21	1	0	7	1	0	24	22	0	0	8	0	0	
233MOK	Norrköping	0	0	0	0	0	0	0	0	4	4	1	1	4	0	0	
239BOM	Borgholm	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	
239VER	Vertervik	1	1	1	0	0	0	0	0	3	3	2	0	0	0	0	
241KAK	Karlshamn	1	1	1	0	0	1	0	0	1	1	1	1	0	0	0	
242KAH	Karlshamn	1	1	1	0	0	1	0	0	1	1	1	1	0	0	0	
243AAH	Ahus	0	0	0	0	0	0	0	0	4	4	4	2	2	1	0	
247KHN	Kristianstad	5	4	4	1	2	2	1	2	0	0	0	0	0	0	0	
<b>Total for Denmark and Sweden</b>		<b>97</b>	<b>45</b>	<b>44</b>	<b>6</b>	<b>0</b>	<b>26</b>	<b>2</b>	<b>0</b>	<b>52</b>	<b>50</b>	<b>14</b>	<b>0</b>	<b>24</b>	<b>2</b>	<b>1</b>	
301FRK	Frederikshamn	15	13	13	1	1	4	9	6	13	13	2	1	4	8	4	
308VIE	Vilborg	12	8	7	2	0	0	11	6	5	5	1	0	0	5	5	
308WIE	Wierjokka	0	0	0	0	0	0	0	0	1	1	1	0	0	1	1	
319STP	St. Petersburg	0	15	7	1	1	4	11	8	12	11	0	0	1	8	8	
327MAR	Marya	0	69	70	0	0	0	0	0	72	76	1	0	0	52	54	
341REV	Reval	0	1	1	0	0	0	0	0	1	1	0	0	1	0	0	
343ASN	Arnöborg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
342PIC	Pige	0	1	1	0	0	0	0	0	110	110	7	0	5	54	23	
361PER	Perman	12	10	10	0	0	0	0	0	10	10	0	0	0	10	7	
<b>Total for Russia</b>		<b>381</b>	<b>241</b>	<b>212</b>	<b>12</b>	<b>0</b>	<b>19</b>	<b>251</b>	<b>144</b>	<b>335</b>	<b>222</b>	<b>17</b>	<b>0</b>	<b>11</b>	<b>150</b>	<b>108</b>	
371VLD	Libau	0	11	10	0	0	0	0	0	14	13	0	1	2	8	1	
372WIL	Windau	0	2	1	0	0	0	0	0	0	0	1	1	0	1	1	
379DOM	Domszoo	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	
<b>Total for Courland</b>		<b>92</b>	<b>14</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>32</b>	<b>17</b>	<b>16</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>4</b>	
401KON	Königsberg	157	132	71	2	0	24	72	0	102	74	22	0	22	27	4	
411MEM	Memel	153	56	36	3	0	0	70	15	29	27	1	0	0	0	0	
412PIL	Pillau	237	195	143	113	3	0	33	6	15	12	3	0	0	1	0	
421DAZ	Danzig	53	57	53	2	0	10	38	10	51	51	4	1	1	25	7	
431ELI	Elbing	0	0	0	0	0	0	0	0	115	113	113	1	1	44	44	
444KOB	Kolberg	4	4	2	0	0	2	1	0	0	2	0	0	0	0	0	
451STP	Stettin	33	31	27	1	0	10	9	3	29	27	0	0	6	9	3	
459ANK	Anklam	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	
459SWI	Swinemünde	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	
451ROT	Rostock	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	
491OKE	Baltic (unspecified)	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	
<b>Total other Baltic Ports</b>		<b>665</b>	<b>470</b>	<b>333</b>	<b>121</b>	<b>3</b>	<b>51</b>	<b>267</b>	<b>43</b>	<b>346</b>	<b>329</b>	<b>146</b>	<b>2</b>	<b>36</b>	<b>116</b>	<b>62</b>	
<b>Total for all ships</b>		<b>1195</b>	<b>769</b>	<b>623</b>	<b>130</b>	<b>11</b>	<b>101</b>	<b>364</b>	<b>199</b>	<b>650</b>	<b>617</b>	<b>174</b>	<b>11</b>	<b>73</b>	<b>283</b>	<b>175</b>	

\* Consult Key to Tables V.1 - V.4 for the full titles for columns A, B, etc.

TABLE V.5 PASSAGES OF WEST-BOUND SHIPS THROUGH THE SOUND FROM RUSSIAN PORTS TO HOLLAND AND ELSEWHERE  
ACCORDING TO THE SOUND TOLL ACCOUNTS, 1715 - 1783.

YEAR	PORTS OF DEPARTURE																								
	ST. PETERSBURG					WARSA					RIGA					LIXONIA AND ESTONIA					TOTAL FOR RUSSIA				
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1715	7	2	9	10	11	0	0	0	0	2	130	3	133	133	156	32	0	32	32	32	169	5	174	179	201
1716	2	1	3	2	16	0	0	0	0	0	92	2	94	97	115	14	4	18	15	22	108	7	119	114	193
1717	2	1	3	2	18	0	0	0	0	0	38	2	37	36	78	2	0	2	4	4	39	3	42	42	100
1718	11	2	13	11	53	1	0	1	1	3	69	3	72	71	102	4	0	4	4	4	85	5	90	87	162
1719	23	1	24	23	40	11	0	11	11	14	75	10	85	79	116	6	0	6	6	6	119	11	126	119	170
1720	13	0	13	16	36	29	0	29	29	29	85	0	93	91	114	9	0	9	10	10	132	8	140	142	189
1721	13	0	13	16	28	59	0	59	59	62	106	0	106	109	145	3	0	3	3	3	101	0	101	105	230
1722	23	1	24	28	78	80	1	81	80	65	80	4	84	86	145	8	0	8	8	10	161	6	167	172	298
1723	29	0	29	40	106	30	0	30	31	43	88	9	103	103	178	5	0	5	6	6	162	5	167	180	323
1724	34	1	35	38	102	89	2	91	89	109	97	3	100	109	197	4	0	4	4	4	224	6	230	236	414
1725	40	16	56	43	145	126	3	129	127	154	176	6	184	184	281	3	0	3	3	3	345	27	372	387	583
1726	62	8	70	67	175	111	6	117	113	146	157	6	163	163	243	3	0	3	3	4	312	20	332	346	568
1727	30	1	31	34	94	126	2	128	127	149	143	16	159	149	256	2	0	2	2	5	301	13	314	312	504
1728	36	6	42	17	119	125	2	127	125	154	132	5	137	139	227	10	1	11	15	11	303	14	317	296	511
1729	19	9	21	17	76	91	2	93	91	118	132	11	143	139	260	15	2	17	15	22	254	20	274	262	476
1730	22	10	32	26	148	182	4	186	182	192	184	11	195	189	299	32	1	33	32	33	390	26	416	399	672
1731	38	8	43	41	127	187	9	196	187	236	176	12	188	177	264	34	0	34	34	36	432	29	461	439	663
1732	24	6	30	27	135	236	10	246	236	301	69	7	96	98	189	12	2	14	13	17	361	25	386	374	642
1733	21	2	23	25	127	237	5	242	237	292	131	4	135	142	231	4	0	4	4	6	393	11	404	408	656
1734	24	6	30	24	123	226	0	226	226	279	141	6	147	147	227	16	1	17	16	18	407	13	420	413	647
1735	25	4	29	27	132	136	1	137	136	182	165	8	173	168	286	7	0	7	7	8	333	13	346	340	608
1736	39	12	51	41	133	87	0	87	87	119	147	6	153	151	249	13	1	14	14	18	286	19	305	293	519
1737	51	4	55	54	165	137	2	139	138	196	145	8	153	155	306	21	0	21	21	29	354	14	368	368	696
1738	73	7	80	75	174	192	1	193	192	243	173	9	182	181	319	28	7	35	28	41	466	24	490	476	777
1739	31	4	35	35	170	142	0	143	144	172	222	13	235	229	385	58	3	61	58	68	454	28	474	466	795
1740	48	9	57	52	182	182	2	184	184	132	238	48	286	254	404	88	9	97	88	110	476	68	544	498	828
1741	86	7	93	93	222	93	6	99	113	181	228	28	256	261	451	93	6	99	93	67	420	47	467	520	891
1742	61	0	61	69	203	138	4	142	139	179	155	2	157	168	313	23	2	25	23	26	377	8	385	399	721
1743	21	1	22	27	151	202	1	203	203	233	188	1	189	121	229	23	1	24	23	25	394	4	398	374	598
1744	56	2	58	57	191	182	4	186	182	124	150	8	158	150	258	19	2	21	19	22	327	16	343	328	595
1745	32	2	34	37	121	139	1	140	140	165	92	4	96	98	241	31	2	33	31	37	295	9	304	306	564
1746	34	7	41	40	166	85	2	87	86	109	130	15	145	139	314	20	1	21	20	23	269	25	294	285	612
1747	41	11	52	46	223	84	4	88	85	126	128	11	139	135	318	26	2	28	26	33	279	28	307	292	692
1748	24	10	34	29	131	48	0	48	48	85	96	14	110	117	278	48	0	48	48	45	280	24	224	241	529
1749	31	4	35	42	162	119	3	122	124	157	111	18	129	141	315	39	1	40	39	42	300	26	326	346	676

A = NUMBER OF SHIPS TO HOLLAND WITH CAPTAINS HAVING A DUTCH HOMEPORT  
 B = NUMBER OF SHIPS TO HOLLAND WITH CAPTAINS HAVING A NON-DUTCH HOMEPORT  
 C = TOTAL NUMBER OF SHIPS TO HOLLAND (A+B)  
 D = TOTAL NUMBER OF ALL SHIPS WITH CAPTAINS HAVING A DUTCH HOMEPORT  
 E = TOTAL NUMBER OF ALL SHIPS

CONTINUED.

1  
CO  
DO  
1



TABLE V.5 PASSAGES OF WEST-BOUND SHIPS THROUGH THE SOUND FROM RUSSIAN PORTS TO HOLLAND AND ELSEWHERE ACCORDING TO THE SOUND TOLL ACCOUNTS, 1715 - 1783.

YEAR	SIA-ELIENSING					NARVA					BIGA					LIXONIA AND ESTONIA					TOTAL FOR RUSSIA				
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1780	23	5	28	31	180	171	3	174	174	206	98	9	107	131	326	19	1	20	19	24	311	18	329	398	746
1781	28	15	40	42	191	132	4	136	136	194	86	16	101	121	318	29	0	29	31	32	272	34	306	332	712
1782	34	9	43	48	259	125	6	132	133	184	118	16	134	168	309	38	0	38	43	51	315	33	348	412	883
1783	54	6	60	74	294	128	6	133	135	194	120	12	132	166	375	27	2	29	28	40	329	25	354	403	883
1784	32	7	39	73	250	127	6	133	140	205	174	18	184	226	470	20	1	21	20	33	253	24	277	329	950
1785	33	2	35	47	300	160	3	163	112	169	97	3	100	130	261	9	2	11	11	27	239	10	249	308	687
1786	37	2	39	62	285	2	0	2	3	26	135	11	146	178	389	8	0	8	6	15	199	13	212	261	691
1787	31	0	39	64	238	0	0	0	0	26	132	4	136	168	328	1	0	1	1	5	184	12	196	253	596
1788	26	2	32	43	218	27	2	29	30	54	119	1	126	184	323	1	0	1	1	1	177	5	182	220	566
1789	49	1	46	59	275	61	3	64	66	93	172	3	175	200	374	9	1	10	9	12	207	8	298	334	786
1790	31	1	32	48	204	1	0	1	1	19	178	0	178	203	341	9	1	10	9	11	219	2	221	261	578
1791	13	2	15	29	173	4	0	4	5	32	239	3	242	280	491	22	2	24	24	37	278	7	285	338	693
1792	34	5	39	66	249	39	0	39	41	68	213	4	217	254	449	25	0	25	30	48	331	9	340	391	814
1793	29	5	34	47	202	72	2	74	77	132	191	2	193	254	486	14	0	14	17	38	308	9	317	395	858
1794	18	4	22	37	244	81	2	83	87	148	175	5	180	229	456	13	0	13	17	25	287	11	298	370	673
1795	26	5	31	51	319	89	0	89	92	123	185	5	188	215	426	11	2	13	19	44	251	12	263	347	812
1796	19	4	23	31	218	87	3	90	92	156	165	3	168	206	416	13	0	13	17	37	284	10	294	346	824
1797	32	3	35	60	304	56	2	58	62	102	140	6	146	181	361	14	2	16	14	26	262	18	277	337	793
1798	28	5	33	84	345	78	2	80	83	122	161	11	172	190	403	16	1	17	17	22	283	19	302	374	692
1799	40	9	49	92	439	66	3	69	71	123	200	9	209	245	479	21	4	25	22	33	327	25	382	430	1074
1770	25	5	30	68	405	61	2	63	62	115	181	15	186	207	447	23	1	24	23	34	260	23	283	362	1091
1771	23	7	30	68	405	60	1	47	47	112	212	4	217	244	527	40	3	43	40	66	322	18	337	399	1178
1772	44	13	57	95	418	66	0	66	47	99	279	36	315	333	697	41	6	47	46	76	410	58	468	521	1276
1773	39	13	52	87	406	64	0	64	56	82	222	25	247	292	531	36	5	41	36	48	351	43	394	481	1187
1774	32	7	39	100	504	53	0	53	53	89	272	27	299	340	601	48	6	54	50	87	405	46	448	543	1281
1775	21	6	27	48	388	81	0	81	82	91	269	20	325	379	637	78	1	79	83	138	455	27	482	548	1248
1776	26	4	30	53	485	58	0	58	59	89	137	20	187	199	420	44	3	47	50	79	265	27	292	391	1079
1777	50	5	55	123	668	56	0	56	57	101	180	19	199	237	466	43	0	43	50	64	329	24	353	477	1281
1778	74	14	88	181	469	39	0	39	39	73	163	28	188	235	457	25	4	29	32	54	381	43	344	457	1083
1779	61	22	103	113	526	38	0	38	38	55	139	26	165	196	460	27	5	32	30	60	282	53	338	374	1101
1780	43	16	59	49	403	32	0	32	32	56	175	18	193	209	491	19	8	27	25	47	269	42	311	318	807
1781	0	21	21	0	995	1	C	1	1	33	3	100	103	3	439	2	0	0	0	33	6	127	133	4	1100
1782	0	27	27	1	486	2	7	9	2	46	5	106	111	5	524	0	22	22	0	56	7	162	169	4	1072
1783	10	33	43	13	414	31	16	47	31	78	49	200	249	68	716	9	40	49	11	83	99	289	388	103	1291

A = NUMBER OF SHIPS TO HOLLAND WITH CAPTAINS HAVING A DUTCH HOMEPORT  
 B = NUMBER OF SHIPS TO HOLLAND WITH CAPTAINS HAVING A NON-DUTCH HOMEPORT  
 C = TOTAL NUMBER OF SHIPS TO HOLLAND (A+B)  
 D = TOTAL NUMBER OF ALL SHIPS WITH CAPTAINS HAVING A DUTCH HOMEPORT  
 E = TOTAL NUMBER OF ALL SHIPS

TABLE V.6

PERCENTAGE DISTRIBUTION OF PASSAGES THROUGH THE SOUND FROM RUSSIAN PORTS TO HOLLAND AND ELSEWHERE  
ACCORDING TO THE SOUND TOLL ACCOUNTS. 1715 - 1783.

YEAR	ST. PETERSBURG				NARVA				RIGA				LIVONIA AND ESTONIA				TOTAL FOR RUSSIA		
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C
1715	77.8	90.9	81.8	8.5	0.0	0.0	0.0	1.0	97.7	85.3	85.3	77.6	100.0	100.0	100.0	15.9	97.1	87.1	88.0
1716	66.7	12.5	18.0	18.5	0.0	0.0	0.0	0.0	97.9	84.3	81.7	79.2	77.8	68.2	81.8	14.4	93.9	74.5	79.2
1717	66.7	11.1	16.7	18.0	0.0	0.0	0.0	0.0	94.4	46.2	47.4	78.0	100.0	100.0	50.0	4.0	92.9	42.0	42.0
1718	84.8	20.8	24.5	32.7	100.0	33.3	33.3	1.9	95.8	69.6	70.5	63.0	100.0	100.0	100.0	2.5	94.4	93.7	93.6
1719	98.8	57.5	60.0	22.5	100.0	78.8	78.6	7.9	88.2	66.9	72.0	66.3	100.0	100.0	100.0	3.4	91.3	66.9	78.8
1720	100.0	44.4	36.1	19.0	100.0	86.2	86.2	15.3	91.4	79.8	81.6	60.3	100.0	100.0	98.0	5.3	94.3	79.1	74.1
1721	100.0	50.0	46.4	11.8	100.0	95.2	95.2	26.1	100.0	75.2	73.1	60.9	100.0	100.0	100.0	1.3	100.0	77.7	76.1
1722	95.8	39.9	30.8	26.2	98.0	76.9	78.5	21.8	95.2	59.3	57.9	48.7	100.0	80.0	80.0	3.4	96.4	57.7	56.0
1723	100.0	37.7	27.4	31.8	100.0	72.1	69.8	12.9	95.1	57.9	57.9	53.5	100.0	100.0	83.3	1.8	97.0	54.1	50.2
1724	97.1	37.3	34.3	24.6	97.8	81.7	83.5	26.3	97.0	53.3	50.8	47.6	100.0	66.7	66.7	1.4	97.4	57.0	55.0
1725	71.4	29.7	38.6	24.9	97.7	82.5	83.8	26.4	95.7	65.5	65.5	48.2	100.0	100.0	100.0	0.5	92.7	61.2	63.8
1726	68.6	38.3	40.0	30.8	94.9	77.4	80.1	25.7	96.3	67.1	67.1	42.8	100.0	75.0	75.0	0.7	94.3	60.9	62.1
1727	96.8	36.2	33.0	18.7	96.4	85.2	85.9	29.6	92.5	58.2	59.8	50.8	100.0	48.0	48.0	1.0	95.9	61.9	62.3
1728	85.7	14.3	35.3	23.3	98.4	81.2	82.5	30.1	96.4	61.2	60.4	44.4	90.9	136.4	100.0	2.2	95.6	57.9	62.0
1729	76.2	22.4	27.6	16.0	97.8	77.1	78.8	24.6	92.3	53.5	55.8	54.0	88.2	68.2	77.3	4.6	92.7	59.0	57.0
1730	68.8	17.6	21.6	22.0	97.4	79.2	81.3	28.6	94.4	63.2	65.2	44.5	97.0	97.0	100.0	4.9	93.8	59.4	61.9
1731	81.4	32.3	33.9	19.2	98.4	79.2	83.1	35.6	93.6	67.0	71.2	39.8	100.0	94.4	94.4	8.4	93.7	66.2	69.8
1732	80.0	20.0	22.2	21.0	98.9	78.4	81.7	46.9	92.7	51.9	50.8	29.4	85.7	76.5	82.4	2.6	93.5	58.2	60.1
1733	91.3	19.7	18.1	19.4	97.9	81.2	82.9	44.8	97.0	61.5	58.4	39.2	100.0	66.7	66.7	0.9	97.3	62.2	61.6
1734	80.0	19.5	24.4	19.0	100.0	81.0	81.0	43.1	95.9	64.8	64.8	25.1	94.1	88.9	94.4	2.8	96.9	63.8	64.9
1735	84.2	29.9	22.0	21.7	99.3	75.8	75.3	29.9	95.4	58.7	60.5	47.8	100.0	87.5	87.5	1.3	98.2	59.9	56.9
1736	76.5	30.8	38.3	25.6	100.0	73.1	73.1	22.9	96.1	60.6	61.4	48.0	92.9	77.8	77.8	3.5	93.8	56.5	58.0
1737	92.7	32.7	33.3	23.7	98.6	70.4	70.9	28.2	94.8	50.7	50.0	44.0	100.0	72.4	72.4	4.2	96.2	52.9	52.0
1738	91.3	43.1	46.0	22.4	99.8	79.0	79.4	31.3	95.1	56.7	57.1	41.1	86.0	68.3	68.4	5.3	95.1	61.3	63.1
1739	88.6	20.6	28.6	21.4	100.0	83.7	83.1	21.6	94.5	59.5	61.0	48.4	99.1	85.3	89.7	8.6	95.8	58.6	59.6
1740	84.2	20.6	31.3	22.8	98.1	78.8	78.8	15.9	83.2	62.9	78.8	48.8	96.7	80.0	88.2	13.3	87.5	60.1	65.7
1741	92.5	41.9	41.9	24.9	89.8	74.8	39.1	16.9	89.1	57.9	58.8	50.6	89.8	79.1	88.1	7.5	89.9	58.4	62.4
1742	100.0	34.0	38.0	28.2	97.2	77.7	79.3	24.8	98.7	53.7	50.2	43.4	92.0	88.5	96.2	3.6	97.9	59.3	53.4
1743	95.5	24.3	19.8	18.6	99.5	87.1	87.1	39.0	99.1	52.8	47.6	38.3	95.8	92.0	96.0	4.2	98.9	62.5	59.9
1744	96.6	29.8	30.4	32.1	96.2	82.3	85.5	20.8	94.9	58.1	61.2	43.4	90.5	86.4	95.5	3.7	95.3	55.1	57.6
1745	94.3	30.6	28.9	21.5	99.3	84.8	84.8	29.3	95.8	48.7	39.8	42.7	93.9	83.8	89.2	6.6	97.0	54.3	52.9
1746	82.9	24.1	24.7	27.1	97.7	78.9	79.8	17.8	89.7	44.3	46.2	51.3	95.2	87.0	91.3	3.8	91.5	46.6	48.0
1747	78.8	28.8	23.3	32.2	98.5	67.5	69.8	18.2	92.1	43.5	44.8	44.8	92.9	78.8	84.8	4.8	98.9	62.2	44.4
1748	70.6	22.1	26.0	24.3	100.0	64.7	47.1	15.8	87.3	42.1	39.6	51.6	100.0	88.9	88.9	8.3	89.3	44.7	41.6
1749	88.6	25.9	21.6	24.8	97.5	79.0	77.7	23.2	86.0	44.8	61.0	46.8	87.5	92.9	95.2	6.2	92.0	51.2	48.2

A = PERCENTAGE OF SHIPS TO HOLLAND WITH CAPTAINS HAVING A DUTCH HOMEPORT  
 B = PERCENTAGE OF ALL SHIPS FROM THIS PORT WITH CAPTAINS HAVING A DUTCH HOMEPORT  
 C = PERCENTAGE OF ALL SHIPS FROM THIS PORT WHICH WENT TO HOLLAND  
 D = PERCENTAGE OF ALL SHIPS FROM THIS PORT OF ALL SHIPS FROM RUSSIA

CONTINUED:

TABLE V.6 PERCENTAGE DISTRIBUTION OF PASSAGES THROUGH THE SOUND FROM RUSSIAN PORTS TO HOLLAND AND ELSEWHERE ACCORDING TO THE SOUND TOLL ACCOUNTS, 1715 - 1783.

YEAR	ST. PETERSBURG				NARVA				RIGA				LIVONIA AND ESTONIA				TOTAL FOR RUSSIA		
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	E	F	
1750	82.1	17.2	18.6	24.1	98.3	84.5	84.5	27.6	91.6	39.8	31.8	45.6	95.0	79.2	82.3	3.2	94.5	47.6	44.1
1751	62.5	23.2	22.1	25.4	97.1	75.0	73.9	25.8	88.1	38.4	32.1	44.2	100.0	96.9	90.6	4.5	88.9	48.6	43.0
1752	79.1	26.3	18.6	29.3	94.0	72.3	72.3	28.8	88.1	43.2	34.4	44.1	100.0	84.3	74.5	5.8	90.5	46.7	39.4
1753	90.0	29.1	23.6	29.4	98.2	89.6	88.6	22.5	90.9	44.3	35.2	43.5	93.1	70.8	72.5	4.6	92.9	48.7	41.0
1754	82.1	29.2	19.6	26.1	98.5	88.3	84.9	21.4	94.8	48.1	39.1	49.1	95.2	68.6	63.6	3.4	93.6	47.9	39.4
1755	94.3	15.7	11.7	35.0	97.1	86.3	80.9	19.7	97.0	38.2	27.7	42.1	81.8	48.7	48.7	3.2	96.0	39.9	29.1
1756	96.8	23.4	22.3	38.4	100.0	11.5	7.7	3.8	92.5	44.2	37.9	55.7	100.0	48.0	33.3	2.2	93.9	34.9	28.7
1757	88.4	35.3	24.8	39.8	8.0	0.0	8.0	3.3	97.1	50.1	48.6	56.8	100.0	28.0	28.0	0.8	93.9	42.3	32.0
1758	93.8	19.7	14.7	36.6	93.1	85.6	53.7	9.1	99.2	47.7	37.2	54.2	100.0	100.0	100.0	0.2	97.3	38.3	30.5
1759	97.8	21.5	16.7	36.4	98.3	71.0	68.8	12.3	98.3	53.2	46.5	49.7	90.0	75.0	83.3	1.6	97.3	44.2	39.0
1760	96.9	23.5	19.7	35.5	100.0	5.3	5.3	3.3	100.0	59.5	52.2	59.3	90.0	81.8	90.9	1.9	99.1	45.4	36.4
1761	86.7	16.8	8.7	25.0	100.0	15.6	12.5	4.8	98.8	62.1	53.7	65.1	91.7	64.9	64.9	5.3	97.5	48.8	41.1
1762	91.5	26.5	23.7	30.6	100.0	60.3	57.4	8.4	98.2	56.6	48.3	55.2	100.0	62.5	52.1	5.9	97.4	48.8	41.8
1763	85.3	23.3	16.8	23.5	97.3	58.3	56.1	15.4	99.6	52.3	39.7	56.6	100.0	44.7	42.1	4.4	97.2	48.0	36.9
1764	81.8	15.2	9.0	27.9	97.6	58.8	56.1	17.0	97.2	50.2	39.5	52.2	100.0	68.8	52.8	2.9	96.3	42.4	34.1
1765	83.9	16.2	9.8	34.5	100.0	80.4	48.0	13.5	96.9	58.0	37.2	47.1	84.6	43.2	29.5	4.8	95.4	38.0	28.8
1766	82.6	23.7	10.7	26.1	96.7	59.0	57.7	18.9	98.2	49.5	46.4	56.5	100.0	45.9	35.1	4.5	96.6	44.4	35.7
1767	94.5	28.3	18.1	38.3	96.6	68.8	58.9	12.9	94.6	50.1	41.0	45.5	87.5	53.8	61.5	3.3	94.6	42.5	34.9
1768	84.8	24.3	9.6	38.7	97.5	68.8	68.6	13.7	93.6	47.1	42.7	45.2	94.1	77.3	77.3	2.5	93.7	41.9	33.9
1769	81.8	21.0	11.2	40.9	95.7	57.7	56.1	11.5	95.7	51.1	42.6	44.6	84.8	66.7	79.8	3.1	92.9	40.0	32.8
1770	83.3	16.5	7.4	40.5	96.8	53.9	54.8	11.5	91.0	46.3	37.1	44.7	95.8	73.5	78.6	3.4	91.9	36.2	28.3
1771	76.7	14.6	8.5	39.7	97.9	42.0	42.6	9.6	98.2	46.3	41.2	45.0	93.8	68.6	65.2	5.6	95.5	34.1	28.8
1772	77.2	23.2	13.9	32.1	100.0	47.5	48.5	7.8	88.6	47.8	45.2	54.6	87.2	65.7	67.1	5.5	88.2	40.8	36.4
1773	75.0	19.6	10.9	42.9	100.0	68.3	65.9	7.1	89.9	55.6	46.5	45.9	87.8	75.0	85.4	4.1	89.1	41.6	34.1
1774	82.1	19.8	7.7	39.3	100.0	59.6	59.6	6.9	91.8	56.6	49.8	46.9	88.9	57.5	62.1	6.8	91.0	42.4	34.7
1775	77.8	12.5	7.0	30.8	100.0	57.1	56.0	7.3	93.8	59.5	51.0	51.0	98.7	61.5	58.5	18.8	94.4	45.8	36.6
1776	86.7	17.1	6.2	44.9	100.0	66.3	65.2	8.2	87.3	46.3	36.5	39.9	93.6	66.7	62.7	7.0	90.8	36.2	27.1
1777	98.9	23.4	9.7	47.3	100.0	56.4	55.4	8.4	90.5	50.9	42.7	38.8	100.0	75.8	65.2	5.9	93.2	39.7	29.4
1778	84.1	32.2	18.0	44.5	100.0	52.4	53.4	6.9	86.7	51.4	41.1	43.4	86.2	59.3	53.7	5.1	87.9	43.4	32.7
1779	75.6	21.5	19.6	47.8	100.0	63.6	63.6	5.8	84.2	42.6	35.9	41.8	84.4	58.0	53.3	5.4	84.2	34.8	30.4
1780	72.9	12.2	14.6	48.4	100.0	57.1	57.1	5.6	90.7	42.6	39.3	49.2	78.4	53.2	57.4	4.7	86.5	31.6	31.2
1781	0.0	0.0	3.5	54.1	100.0	3.0	3.0	3.0	2.9	0.7	23.5	39.9	25.0	0.0	24.2	3.0	4.5	8.4	12.1
1782	0.0	0.2	6.1	41.6	22.2	4.3	19.6	4.3	4.5	1.0	21.2	48.9	0.0	8.8	39.3	5.2	4.1	8.7	19.8
1783	23.3	3.1	10.4	32.1	66.8	39.7	60.3	6.0	19.7	12.3	34.8	55.5	18.4	13.3	59.8	6.4	25.5	11.1	20.1

A = PERCENTAGE OF SHIPS TO HOLLAND WITH CAPTAINS HAVING A DUTCH HOMEPORT  
 B = PERCENTAGE OF ALL SHIPS FROM THIS PORT WITH CAPTAINS HAVING A DUTCH HOMEPORT  
 C = PERCENTAGE OF ALL SHIPS FROM THIS PORT WHICH WENT TO HOLLAND  
 D = PERCENTAGE OF ALL SHIPS FROM THIS PORT OF ALL SHIPS FROM RUSSIA

TABLE VI.1 SHIPPING NETWORKS MUSKIE PORTS AND NOTTERHAM, 1763 - 1822.

YEAR	ANCHORAGE	PRESTONHAM	VIKING	STANTON	MAWA	NEWAL	AMERSBURG	MUSKIE	TERRE	SIKA	VIKING	LIKAG
YEAR	A	B	C	D	E	F	G	H	I	J	K	L
1763	1	1	1	1	1	1	1	1	1	1	1	1
1764	1	1	1	1	1	1	1	1	1	1	1	1
1765	1	1	1	1	1	1	1	1	1	1	1	1
1766	1	1	1	1	1	1	1	1	1	1	1	1
1770	1	1	1	1	1	1	1	1	1	1	1	1
1771	1	1	1	1	1	1	1	1	1	1	1	1
1772	1	1	1	1	1	1	1	1	1	1	1	1
1773	1	1	1	1	1	1	1	1	1	1	1	1
1774	1	1	1	1	1	1	1	1	1	1	1	1
1775	1	1	1	1	1	1	1	1	1	1	1	1
1776	1	1	1	1	1	1	1	1	1	1	1	1
1777	1	1	1	1	1	1	1	1	1	1	1	1
1778	1	1	1	1	1	1	1	1	1	1	1	1
1779	1	1	1	1	1	1	1	1	1	1	1	1
1780	1	1	1	1	1	1	1	1	1	1	1	1
1781	1	1	1	1	1	1	1	1	1	1	1	1
1782	1	1	1	1	1	1	1	1	1	1	1	1
1783	1	1	1	1	1	1	1	1	1	1	1	1
1784	1	1	1	1	1	1	1	1	1	1	1	1
1785	1	1	1	1	1	1	1	1	1	1	1	1
1786	1	1	1	1	1	1	1	1	1	1	1	1
1787	1	1	1	1	1	1	1	1	1	1	1	1
1788	1	1	1	1	1	1	1	1	1	1	1	1
1789	1	1	1	1	1	1	1	1	1	1	1	1
1790	1	1	1	1	1	1	1	1	1	1	1	1
1791	1	1	1	1	1	1	1	1	1	1	1	1
1792	1	1	1	1	1	1	1	1	1	1	1	1
1793	1	1	1	1	1	1	1	1	1	1	1	1
1794	1	1	1	1	1	1	1	1	1	1	1	1
1795	1	1	1	1	1	1	1	1	1	1	1	1
1796	1	1	1	1	1	1	1	1	1	1	1	1
1797	1	1	1	1	1	1	1	1	1	1	1	1
1798	1	1	1	1	1	1	1	1	1	1	1	1
1799	1	1	1	1	1	1	1	1	1	1	1	1
1800	1	1	1	1	1	1	1	1	1	1	1	1
1801	1	1	1	1	1	1	1	1	1	1	1	1
1802	1	1	1	1	1	1	1	1	1	1	1	1
1803	1	1	1	1	1	1	1	1	1	1	1	1
1804	1	1	1	1	1	1	1	1	1	1	1	1
1805	1	1	1	1	1	1	1	1	1	1	1	1
1806	1	1	1	1	1	1	1	1	1	1	1	1
1807	1	1	1	1	1	1	1	1	1	1	1	1
1808	1	1	1	1	1	1	1	1	1	1	1	1
1809	1	1	1	1	1	1	1	1	1	1	1	1
1810	1	1	1	1	1	1	1	1	1	1	1	1
1811	1	1	1	1	1	1	1	1	1	1	1	1
1812	1	1	1	1	1	1	1	1	1	1	1	1
1813	1	1	1	1	1	1	1	1	1	1	1	1
1814	1	1	1	1	1	1	1	1	1	1	1	1
1815	1	1	1	1	1	1	1	1	1	1	1	1
1816	1	1	1	1	1	1	1	1	1	1	1	1
1817	1	1	1	1	1	1	1	1	1	1	1	1
1818	1	1	1	1	1	1	1	1	1	1	1	1
1819	1	1	1	1	1	1	1	1	1	1	1	1
1820	1	1	1	1	1	1	1	1	1	1	1	1
1821	1	1	1	1	1	1	1	1	1	1	1	1
1822	1	1	1	1	1	1	1	1	1	1	1	1

A = SHIPPING FROM MUSKIE PORTS TO NOTTERHAM VIA HULLANDHAM, 1773 - 1822  
 B = SHIPPING TO MUSKIE PORTS FROM NOTTERHAM VIA HULLANDHAM, 1773 - 1822  
 C = SHIPPING FROM MUSKIE PORTS TO NOTTERHAM VIA MAASBIELE, 1763 - 1822  
 D = SHIPPING TO MUSKIE PORTS FROM NOTTERHAM VIA MAASBIELE, 1763 - 1822  
 \* = ONE SHIP TO MUSKIE UNIDENTIFIED

TABLE VI.2

RATES OF ASSURANCE ON SHIPPING BETWEEN DUTCH AND BALTIC (PRIMARILY RUSSIAN) PORTS FROM 1724 - 1825.\*

YEAR	PREMIUMS IN PERCENTAGES FOR EACH MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1724	-	-	-	-	-	-	2	2	3½	4-7	-	-
1725	-	-	-	2	1½	-	-	-	-	7-10	-	-
1726	-	-	2½	1½	2	2	1½	2-3	3½	4½-8	9	-
1727	-	-	2	-	2	2	-	-	-	4-7½	-	-
1728	-	-	2½	2	-	1½-2	2½-3	-	-	4	-	-
1729	-	-	2½	2	1½	-	-	1½	4	5	7-8½	-
1730	-	-	-	1½-2	1½	1½	1½-2	2-4	4½-5	5½	-	-
1731	-	-	-	1½	1½	1½-1½	1½-1½	1½-4	4-7	8-9	-	-
1732	-	-	1½	1½	1-2	1½	1½-2	1½-3	3-4	3½-8	4½	-
1733	-	-	1½	1½	1½-1½	1½-2	-	3	2½-4	2½	8	-
1734	-	-	1½	1½	-	1½	1½	1½-4	1½-4	8-8	5-8	-
1735	4	-	2-3	1½-3	1½-2	1½	1½-1½	1½-1½	1½-4½	2½-8	3½-7	-
1736	-	3	3	1½	1½	1½	1½-1½	1½	1½-4	4	-	-
1737	-	-	1½	1½	1½	1½	1½	1½	3-4	3-9	4	-
1738	-	-	-	1½	1½	1½-2½	-	1½	2½-4	-	-	-
1739	-	-	1½-2	1½	1½	1½	1½	1½	2-5	4-5	-	-
1740	-	-	-	1½	1½	1½	1½	-	-	6	-	-
1741	-	-	1½	-	-	-	-	1½-5	2-5	-	-	-
1742	-	-	-	-	-	-	2	-	-	-	-	-
1743	-	-	-	2	1½	-	-	-	-	-	-	-
1744	-	-	-	1½	2½	2½	-	-	-	-	-	-
1745	-	-	-	-	-	-	-	2-2½	-	-	-	-
1746	-	-	-	-	-	3	-	1½	3-5	4½	-	-
1747	-	-	-	-	-	3	2½	-	-	-	-	-
1748	-	-	-	3	-	-	2	2½	-	-	-	-
1749	-	-	-	-	-	-	1½	3	4-6	-	-	-
1750	-	-	-	-	-	1½	-	-	-	-	-	-
1751	-	-	-	1½	-	-	1½	2-4	-	-	-	-
1752	-	-	1½	-	-	1½	-	2	-	-	-	-
1753	-	-	1½	-	-	-	-	-	-	-	-	-
1756	-	-	-	-	-	-	-	-	-	-	-	-
1757	-	-	-	-	-	1½	-	-	-	-	-	-
1758	-	-	-	-	-	-	-	-	-	-	-	-
1759	-	-	-	-	-	-	-	-	-	-	-	-
1760	-	-	-	-	1½	-	-	-	-	-	-	-
1761	-	-	-	-	1½	-	-	-	-	-	-	-
1762	-	-	-	-	-	-	-	-	-	-	-	-
1763	-	-	-	-	-	-	-	-	-	-	-	-
1764	-	-	-	3	-	-	1½	-	-	-	-	-
1765	-	-	-	-	-	-	3	-	2½	-	-	-
1766	-	-	-	-	-	-	-	3	9	-	-	-
1767	-	-	-	-	1½	-	1½	-	-	-	-	-
1768	-	-	1½	-	1½	-	1½	-	-	-	-	-

\*Notes at end of table.

CONTINUED

TABLE VI.2

**RATES OF ASSURANCE ON SHIPPING BETWEEN DUTCH AND BALTIC (PRIMARILY RUSSIAN) PORTS  
FROM 1724 - 1825.**

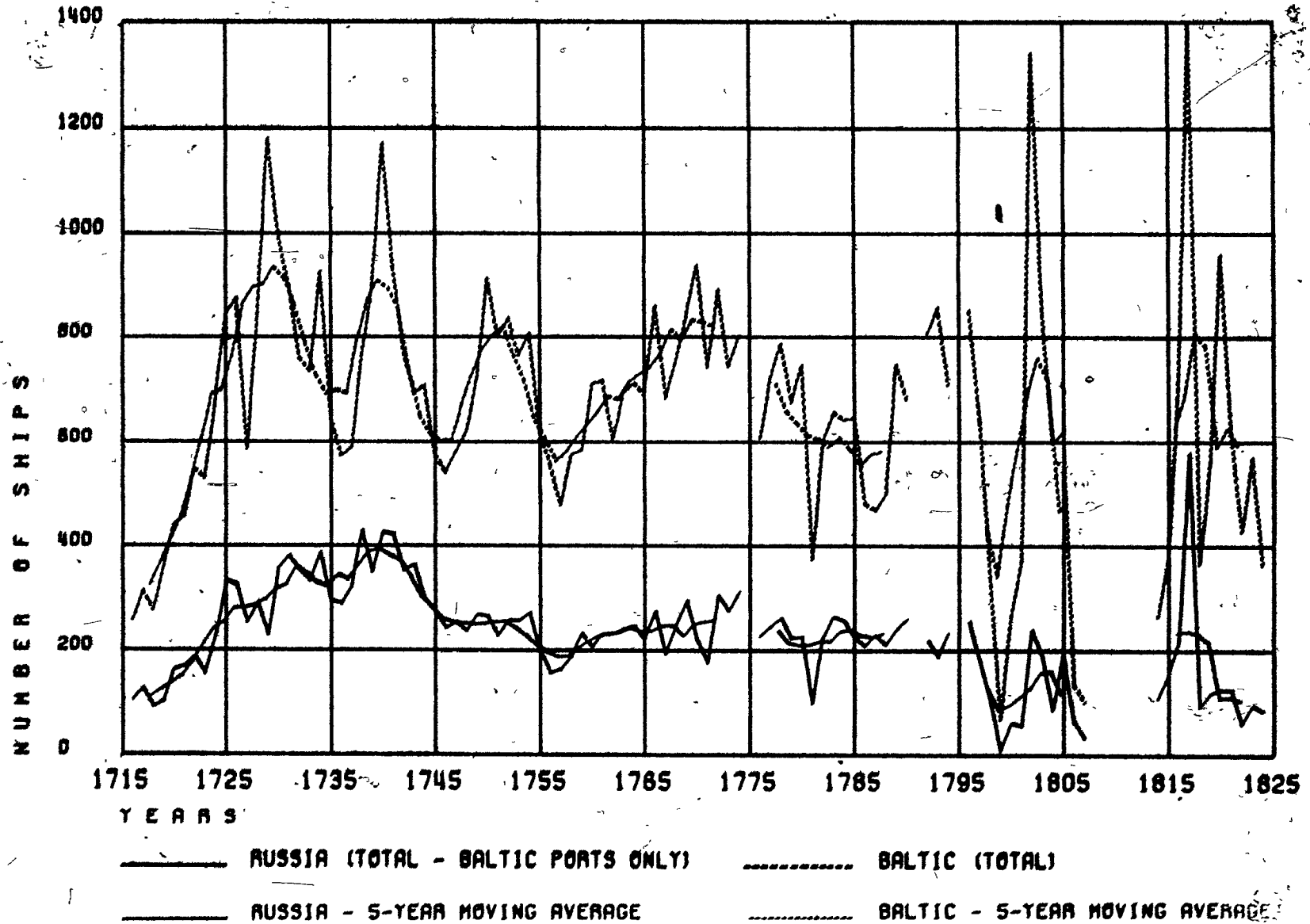
YEAR	PREMIUMS IN PERCENTAGES FOR EACH MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1814	-	-	-	-	-	-	4-5	2-7	7-10	8½	15	-
1815	-	-	-	-	1½-3½	2-3	2	3½-5½	3-6½	8-11	13-15	-
1816	-	-	-	2	2	1½	1½-2½	3½-4	6½-7	8-11	11-16	15
1817	-	-	-	2-3	2½	1½	1½-2½	3½-4½	5½-6½	7-11	-	-
1818	-	-	2	1½-3	1½-2½	1½	2	1½-3½	4½-6	9-10	11-14	-
1819	-	-	-	1½	1½-2½	1½	1½-2½	3	4-8	7-9	10-13	-
1820	-	-	1½	1½	1½	1-1½	1½	2-3	2½-5½	4-7	-	-
1821	-	-	-	1	1½	1½	1½	2-4	4-5	7½	-	-
1822	-	-	-	1½	1½	1½	1½	1½-3	3½-5	9-10	-	14
1823	-	-	-	-	3	1½-2	1½	1½-3	5	-	-	-
1824	-	-	-	1½	1½	1½	1½-3	3½-5	3½-5	5½-8	11	-
1825	-	-	1½	1½	1-1½	1½	1½-2	2½-5	4½	8½-12	10	-

\* The rates of assurance presented here were taken from the Register van loopende risico's ter zee 1724-1784 which form part of the extant archives of the Maatschappij van Assurantie, Vlootvaartende en Zevening of Rotterdam (O.A.R., Nos. 243-260, 18 vols.). The rates are those which were quoted at Rotterdam but not necessarily only for shipping to and from Rotterdam. The figures presented in Table VI.2 represent the most common rate or range of rates quoted in each month. Rates for values of less than f.1,000 were not included since the administrative costs involved for insuring such small sums raised the premiums above the normal rates. For many months especially those in the years 1740 to about 1770 no rates were given at all and the number of rates quoted per month varies considerably. It is possible to do a much more detailed presentation than that given here but that would be a study by itself.

Some of the extraordinary high rates which might be considered of interest for ships sailing to non-Dutch ports were: June 1778 from Riga to Bourdeaux at 10%, September 1780 from Helsing to Cadix at 16%, July 1794 from St. Petersburg to Lisbon at 20%, September 1794 from Kronstadt to Cadix at 28%, September 1799 from Riga to Nantes at 13% and August 1805 from St. Petersburg to San Sebastian at 15%.

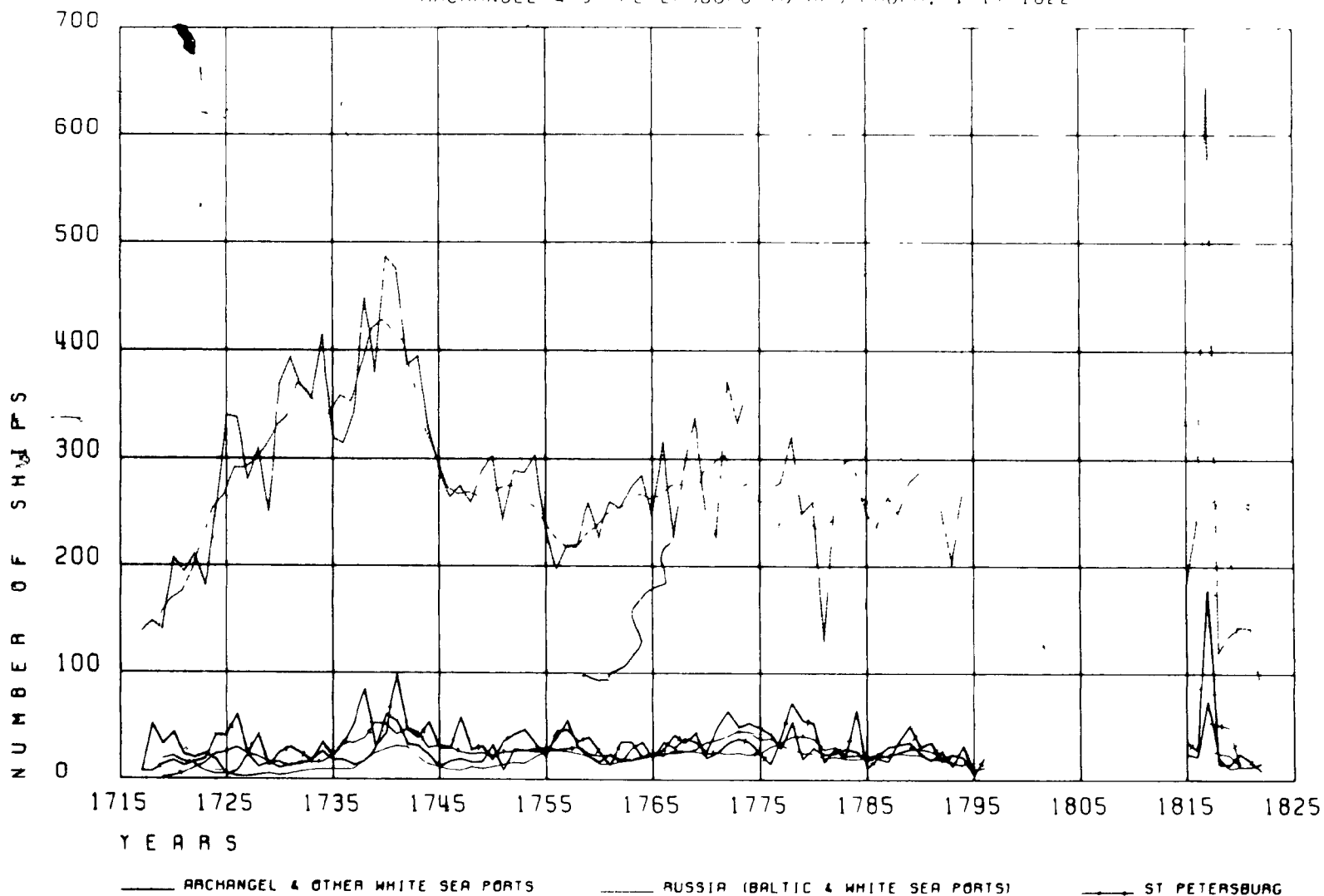
GRAPH 11.1

SHIPPING FROM THE BALTIC AND RUSSIA (BALTIC PORTS ONLY)  
TO AMSTERDAM (1716 - 1824).



GRAPH II.1 A

SHIPPING FROM RUSSIA (BALTIC & WHITE SEA PORTS),  
ARCHANGEL & ST PETERSBURG TO AMSTERDAM, 1717-1822

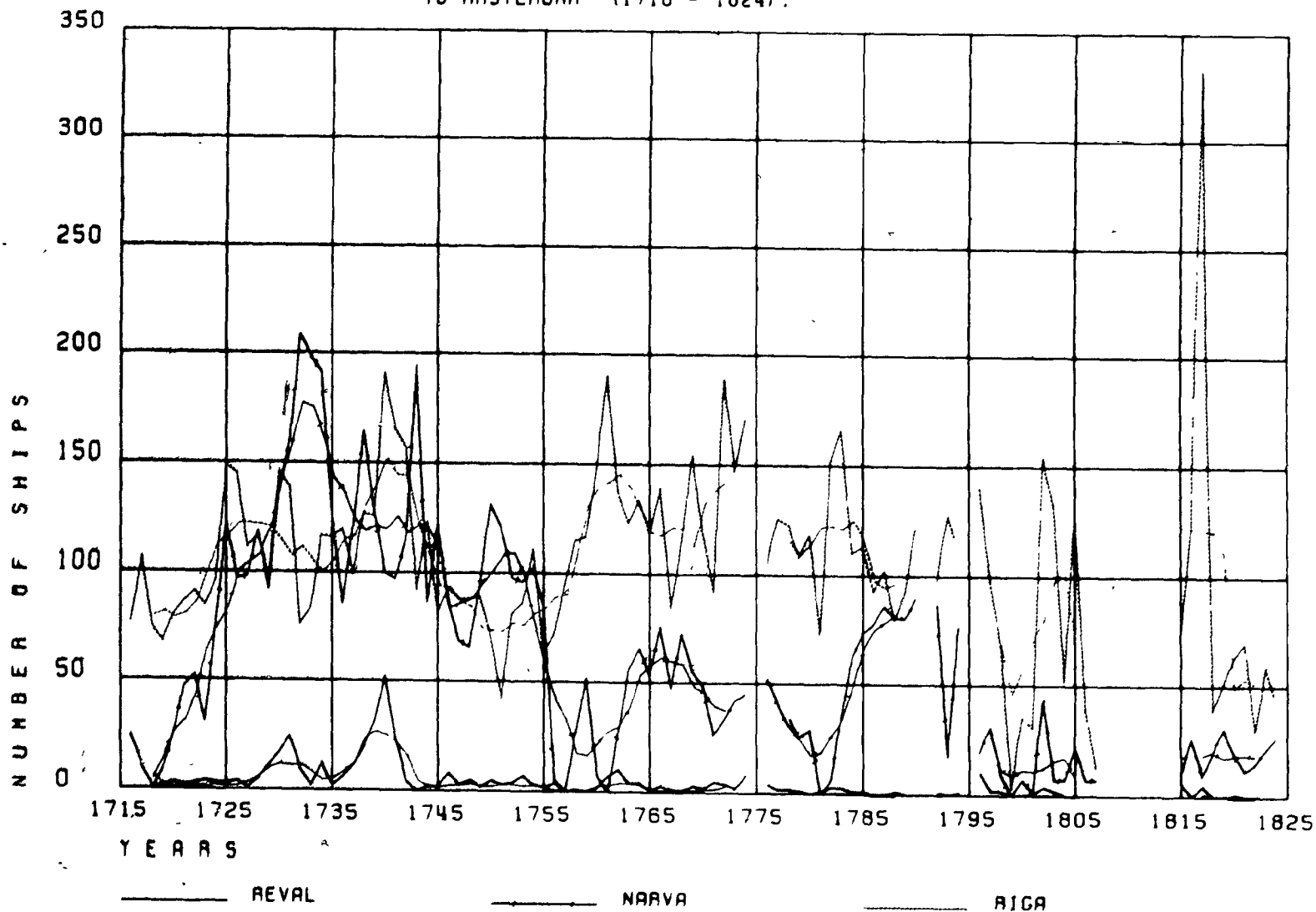


CORRESPONDING SYMBOLS IN RED INDICATE 5 YEAR MOVING AVERAGE



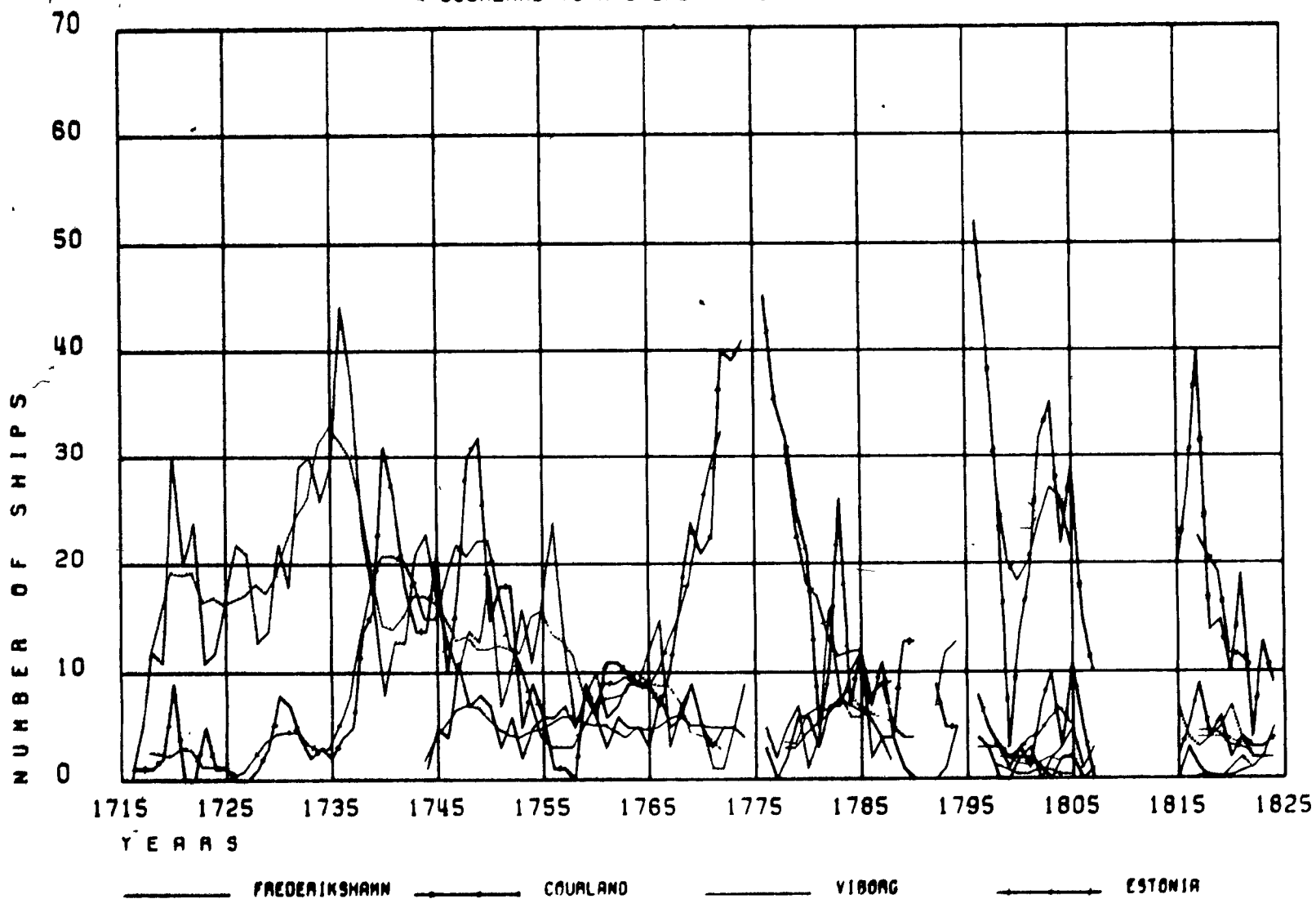
GRAPH II.1.8

SHIPPING FROM NARVA, REVAL & RIGA  
TO AMSTERDAM (1716 - 1824).



GRAPH II.1.C

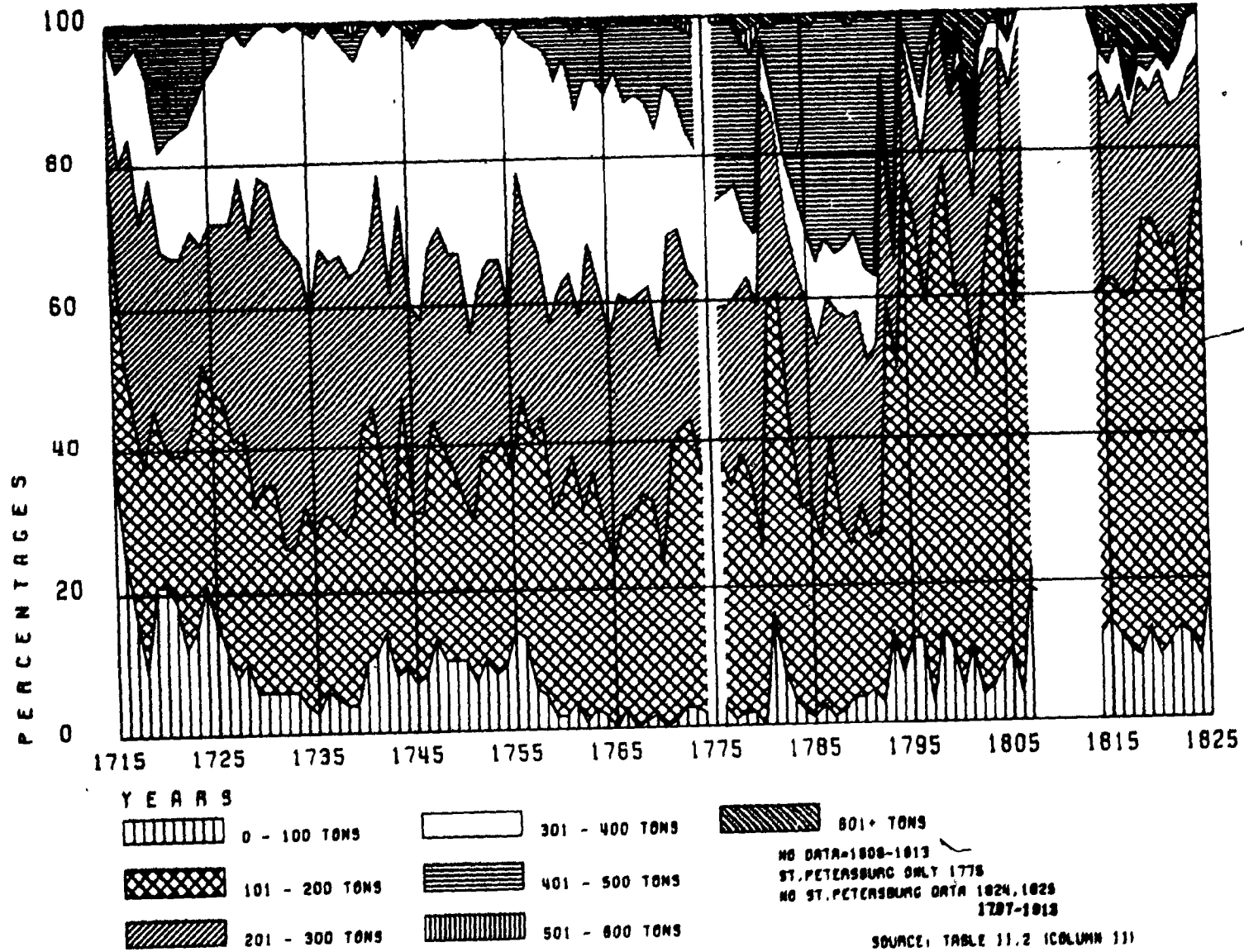
SHIPPING FROM ESTONIA, VIBORG, FREDERIKSHAMN  
& COURLAND TO AMSTERDAM (1716 - 1824).



CORRESPONDING SYMBOLS IN RED INDICATE 5-YEAR MOVING AVERAGES

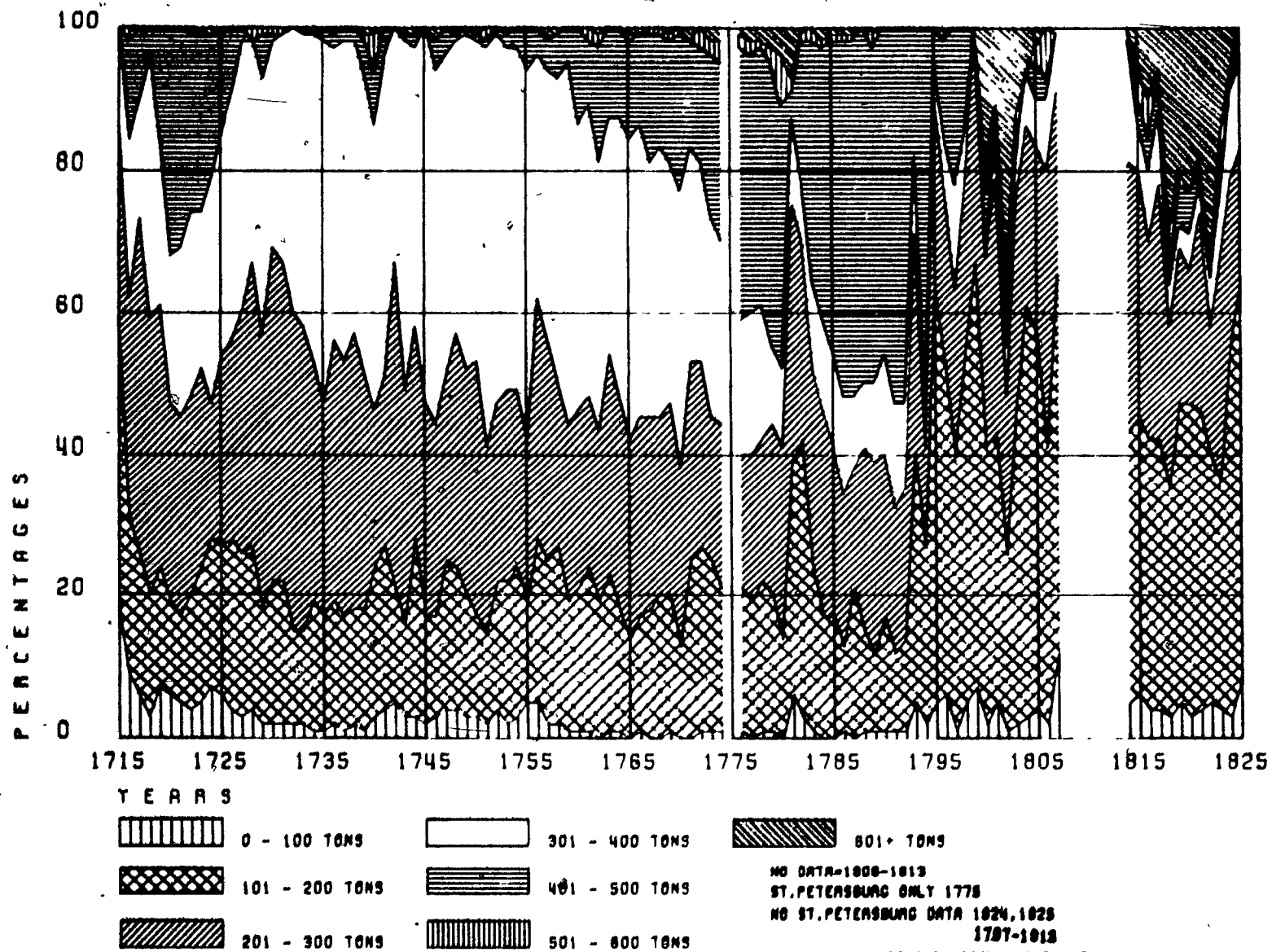
GRAPH 11.2(1)

PROPORTIONS OF BALTIC SHIPPING FROM RUSSIA  
TO AMSTERDAM ACCORDING TO SIZE OF CARGO (1715-1825)



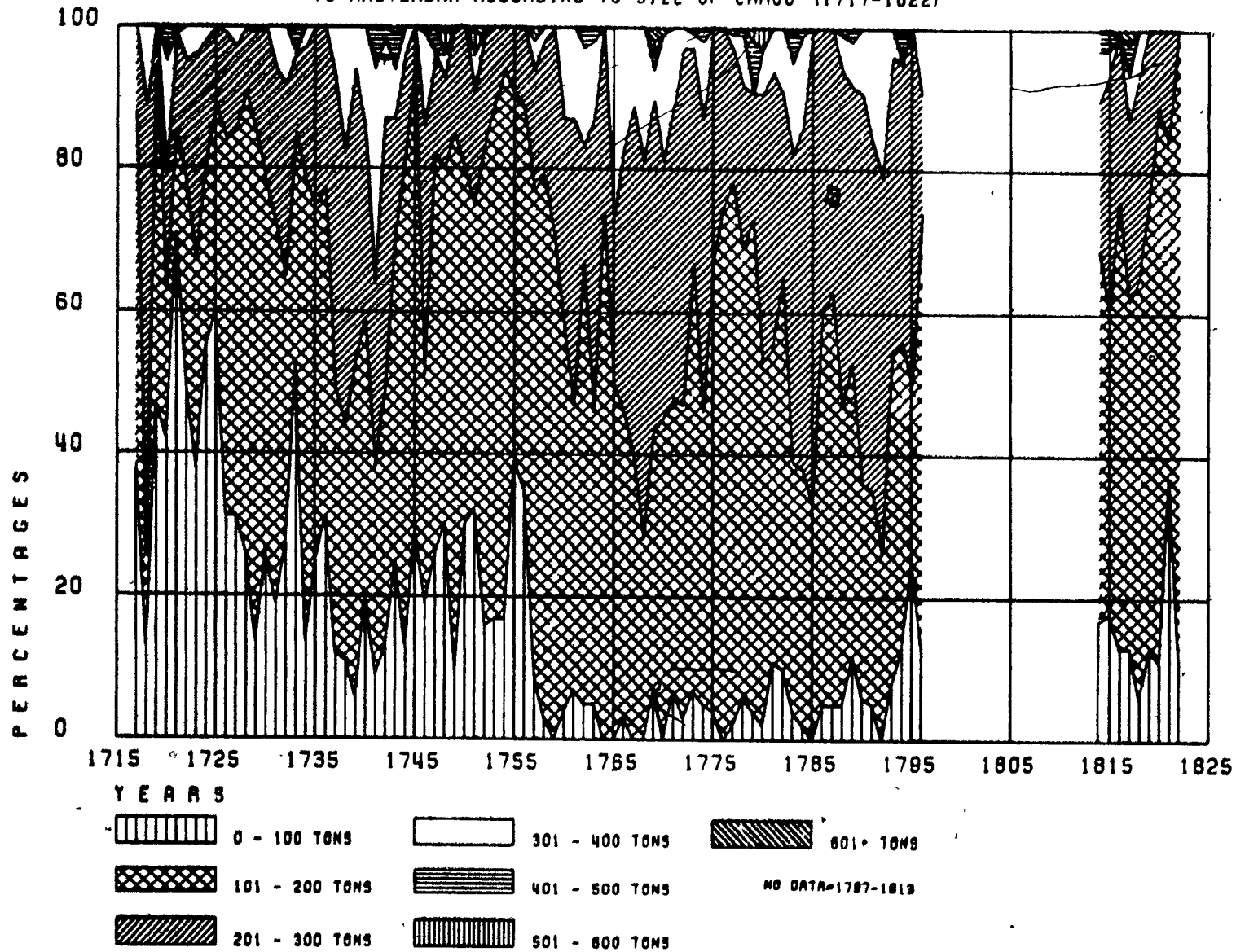
GRAPH 11.2 (2)

PROPORTIONS OF CARGO TONNAGE CARRIED FROM BALTIC RUSSIA  
TO AMSTERDAM ACCORDING TO SIZE OF CARGO (1715-1825)



GRAPH 11.2.A (1)

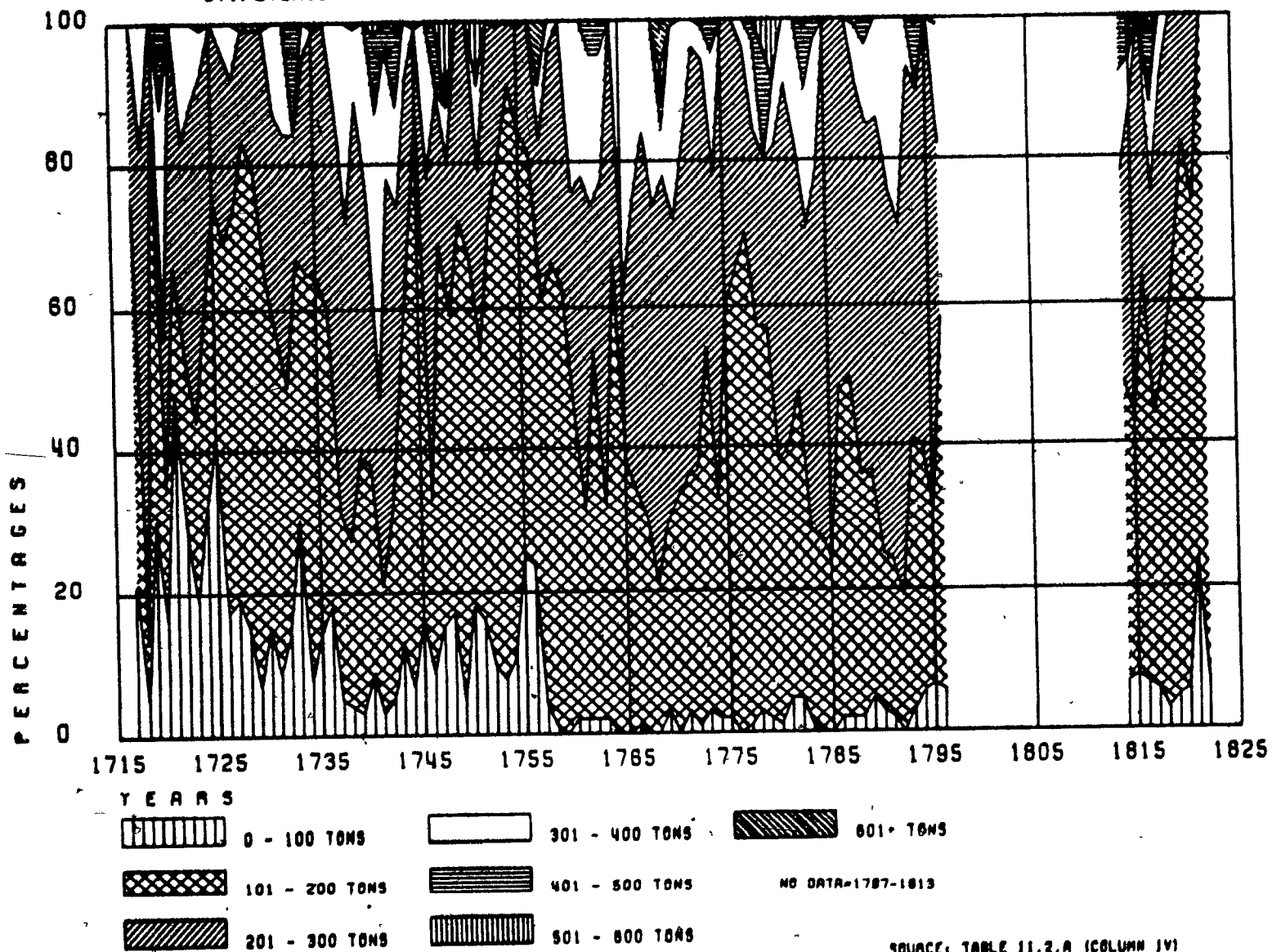
PROPORTIONS OF SHIPPING FROM ST. PETERSBURG  
TO AMSTERDAM ACCORDING TO SIZE OF CARGO (1717-1822)



SOURCE: TABLE 11.2.A (COLUMN 11)

GRAPH 11.2.A(2)

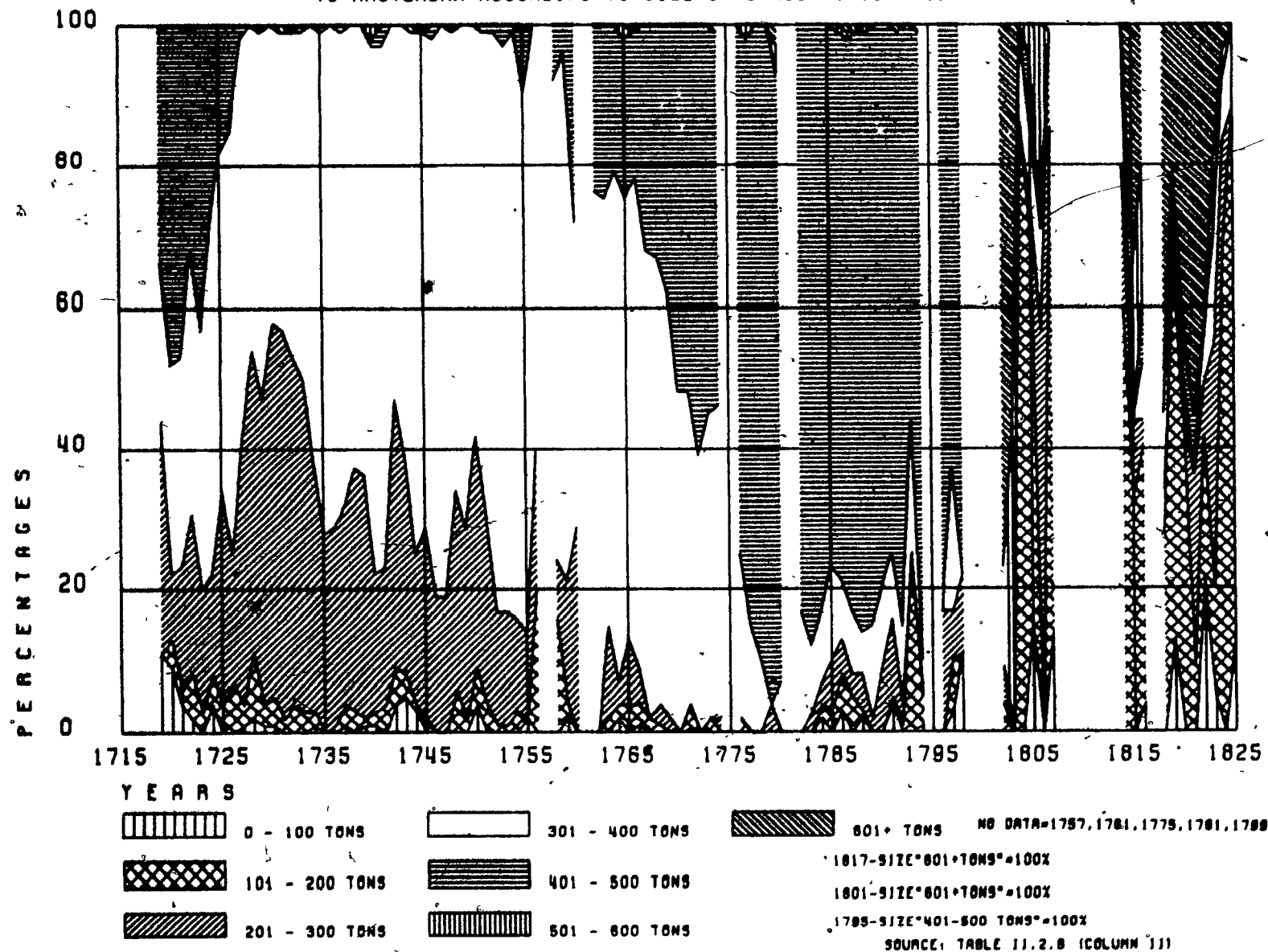
PROPORTIONS OF CARGO TONNAGE CARRIED FROM  
ST. PETERSBURG TO AMSTERDAM ACCORDING TO SIZE OF CARGO (1717-1822)



SOURCE: TABLE 11.2.A (COLUMN IV)

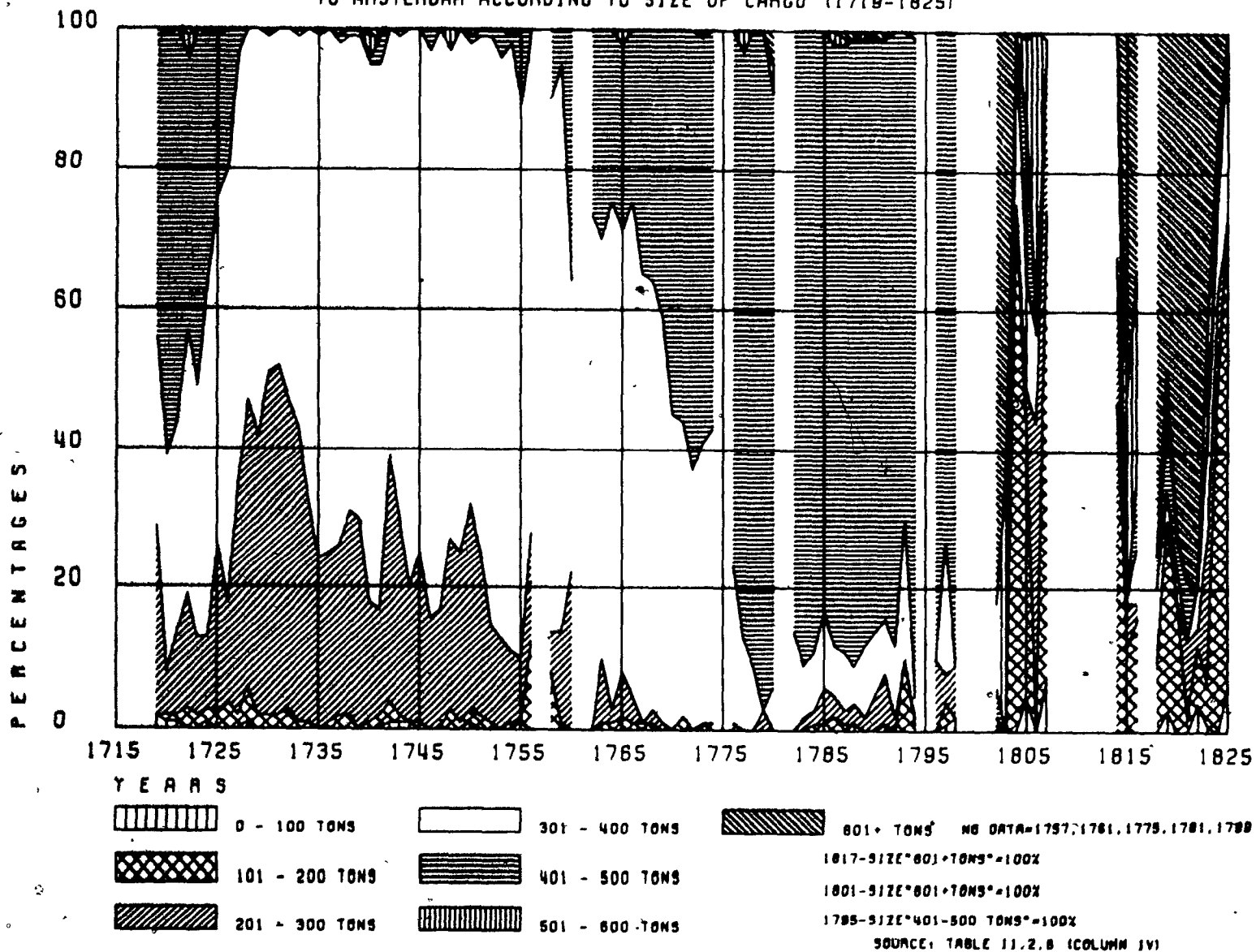
GRAPH 11.2.8 (1)

PROPORTIONS OF SHIPPING FROM NARVA  
TO AMSTERDAM ACCORDING TO SIZE OF CARGO (1719-1825)



GRAPH 11.2.8 (2)

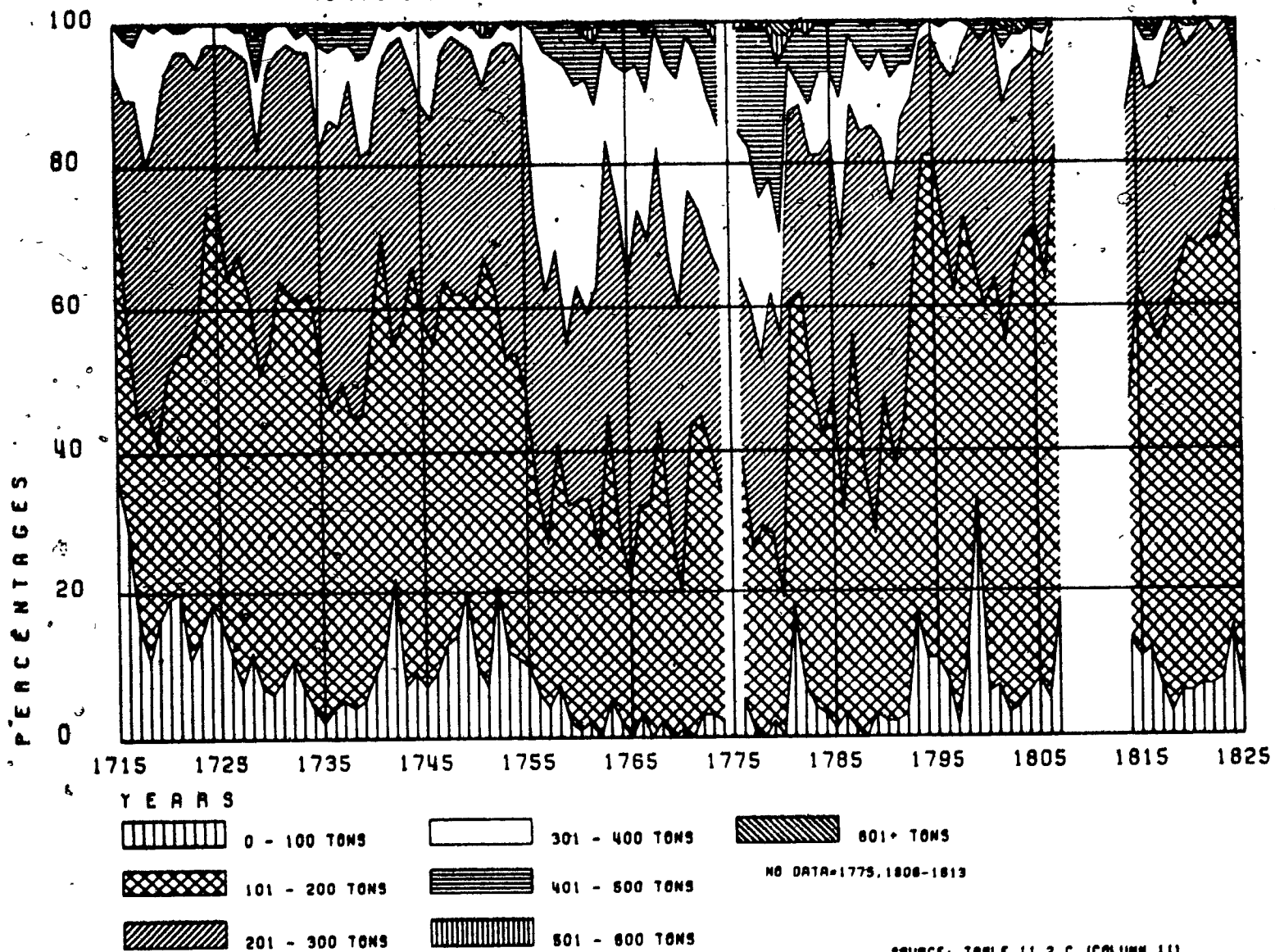
PROPORTIONS OF CARGO TONNAGE CARRIED FROM NARVA  
TO AMSTERDAM ACCORDING TO SIZE OF CARGO (1719-1825)





GRAPH 11.2.C(1)

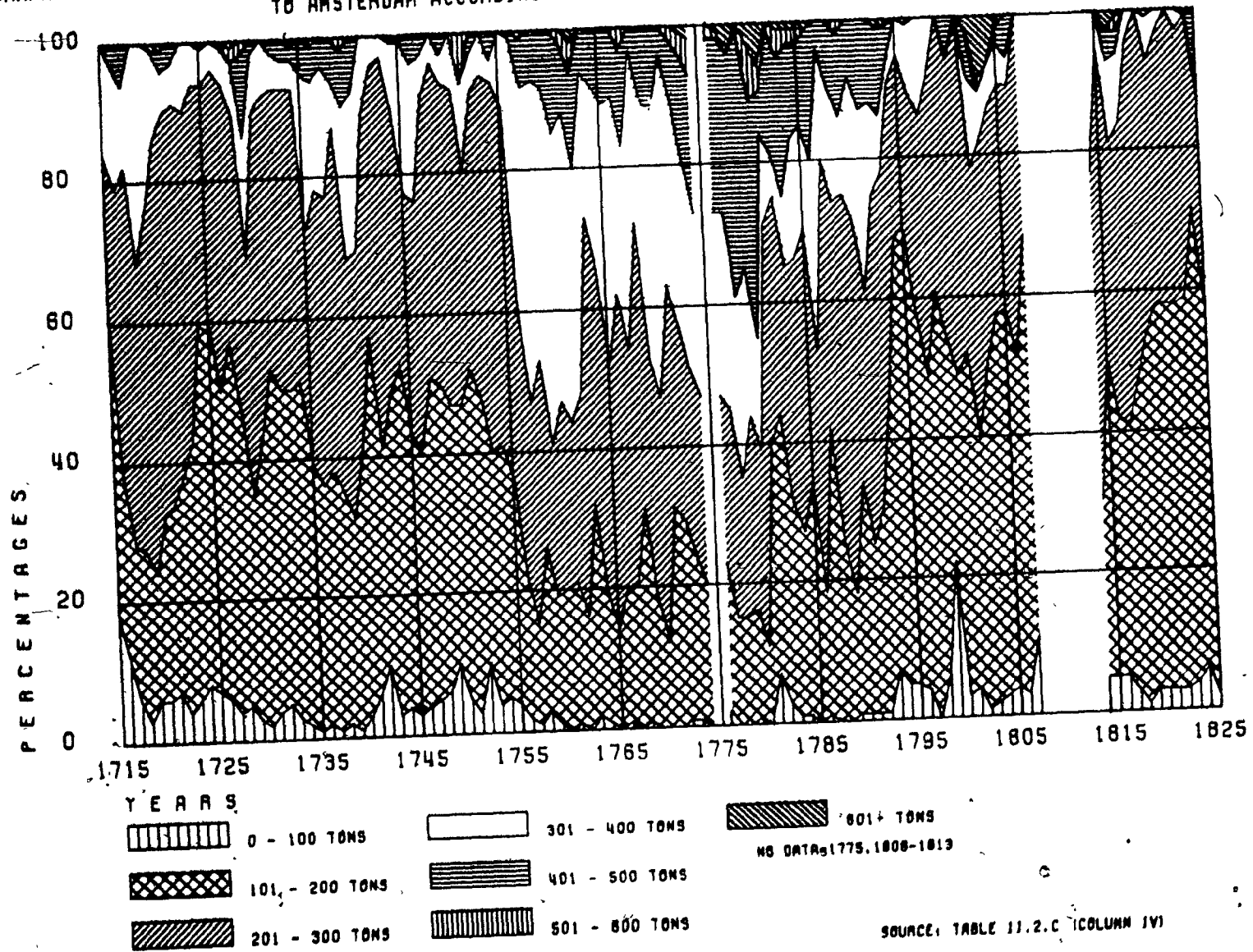
PROPORTIONS OF SHIPPING FROM RIGA  
TO AMSTERDAM ACCORDING TO SIZE OF CARGO (1715-1825)



SOURCE: TABLE 11.2.C (COLUMN 11)

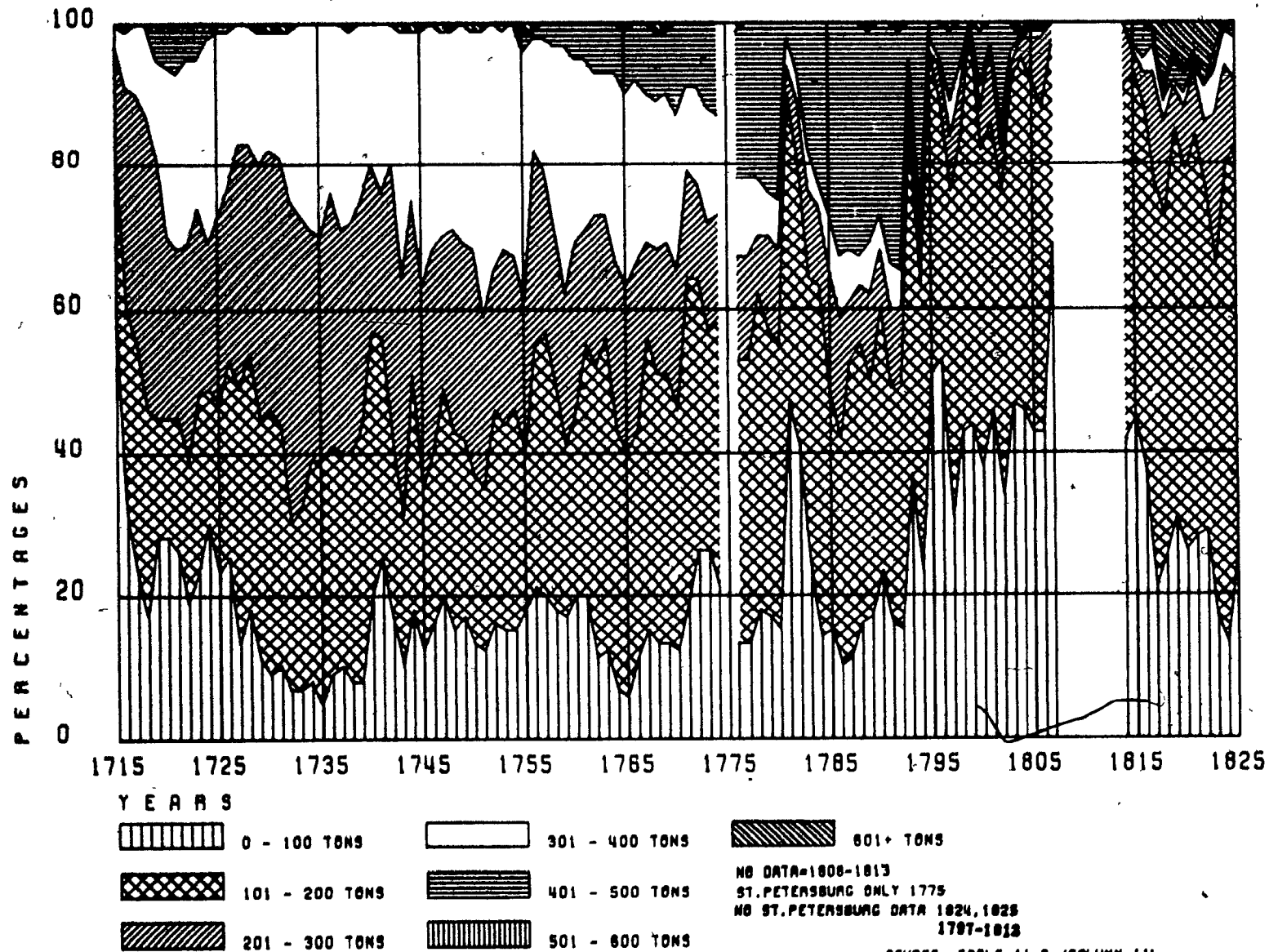
GRAPH 11.2.C (2)

PROPORTIONS OF CARGO TONNAGE CARRIED FROM RIGA  
TO AMSTERDAM ACCORDING TO SIZE OF CARGO (1715-1825)



GRAPH 11.3 (1)

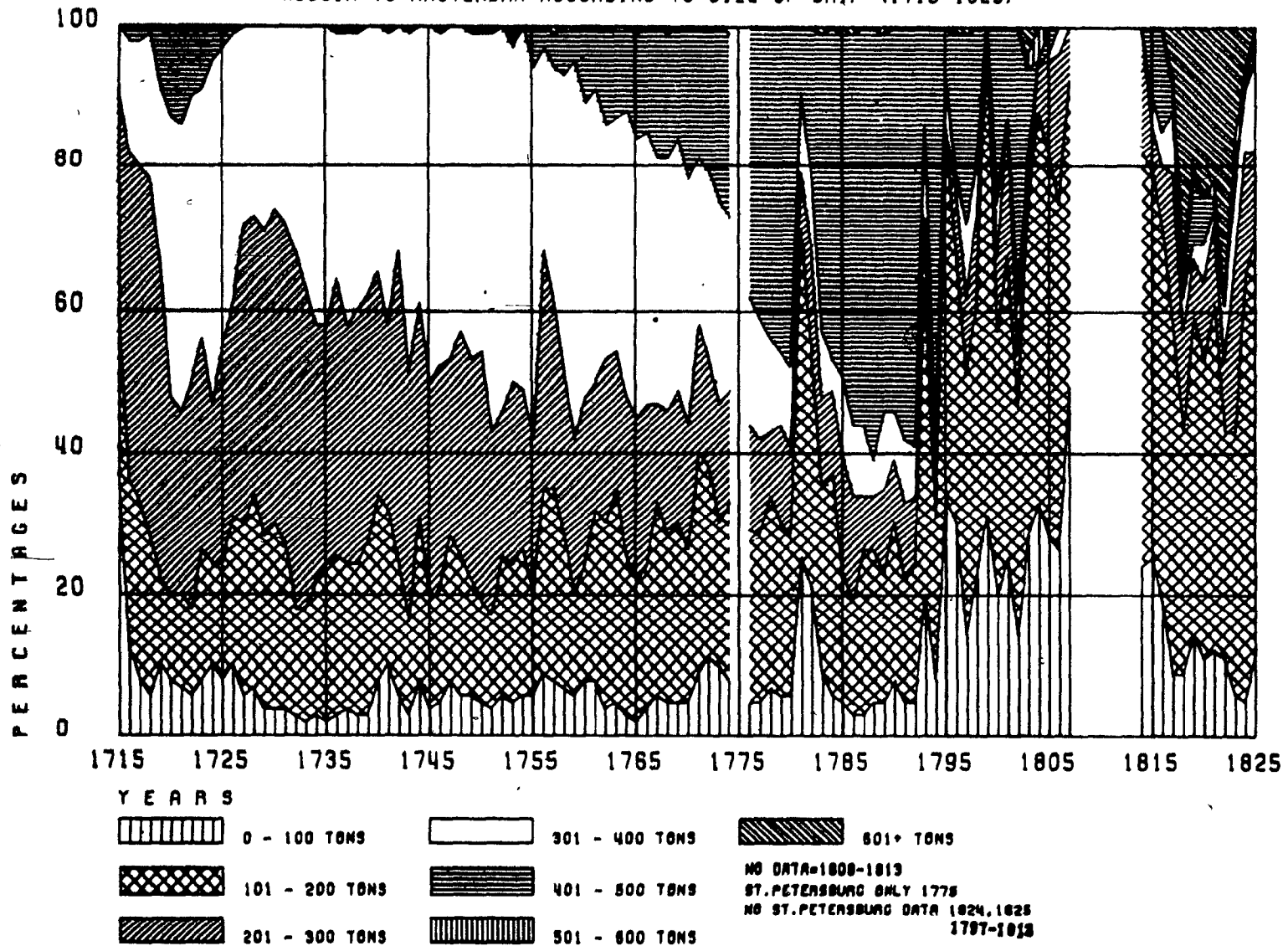
PROPORTIONS OF BALTIC SHIPPING FROM RUSSIA  
TO AMSTERDAM ACCORDING TO SIZE OF SHIP (1715-1825)



SOURCE: TABLE 11.3 (COLUMN 1)

GRAPH 11.3(2)

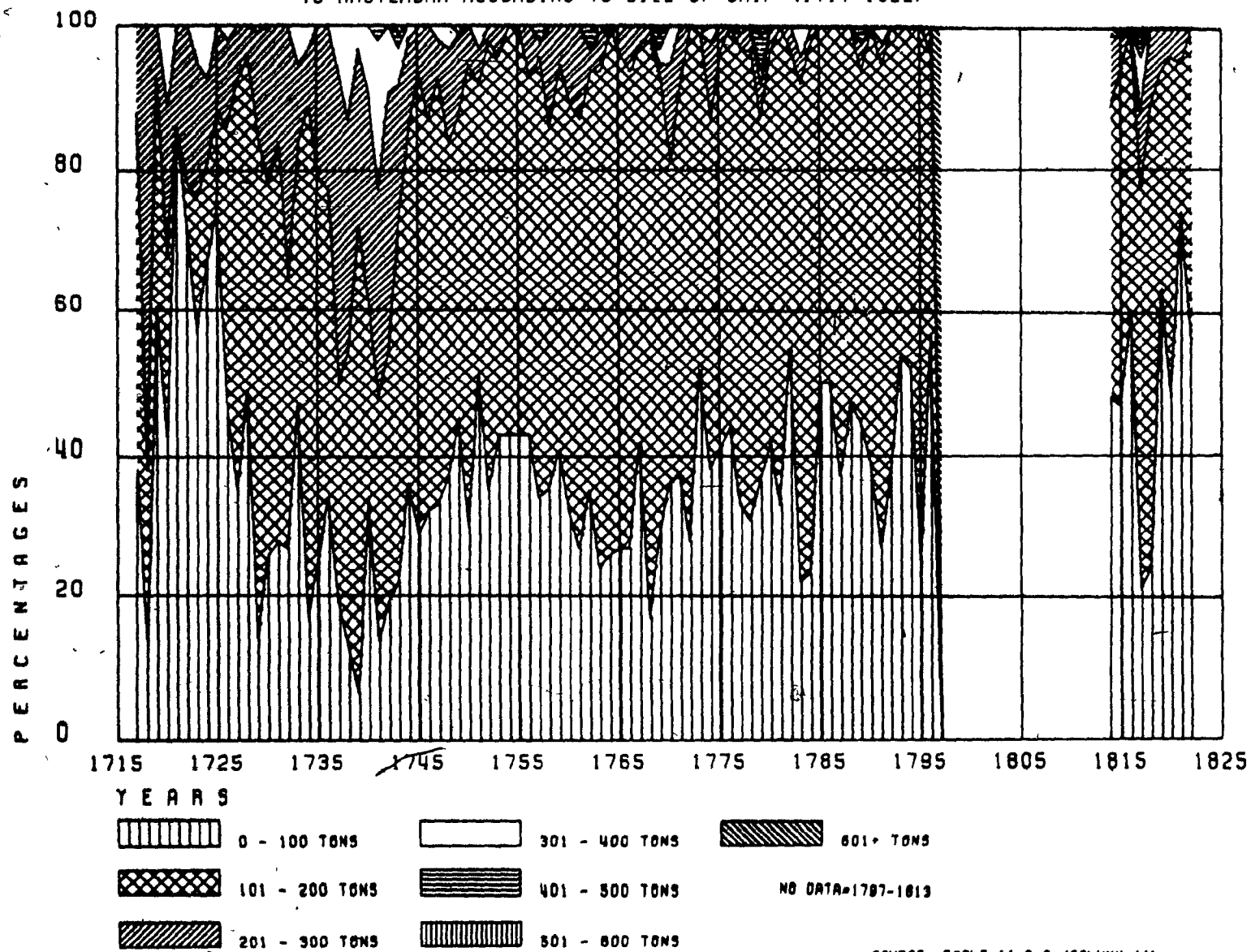
PROPORTIONS OF SHIPPING TONNAGE FROM BALTIC  
RUSSIA TO AMSTERDAM ACCORDING TO SIZE OF SHIP (1715-1825)



SOURCE: TABLE 11.3 (COLUMN IV)

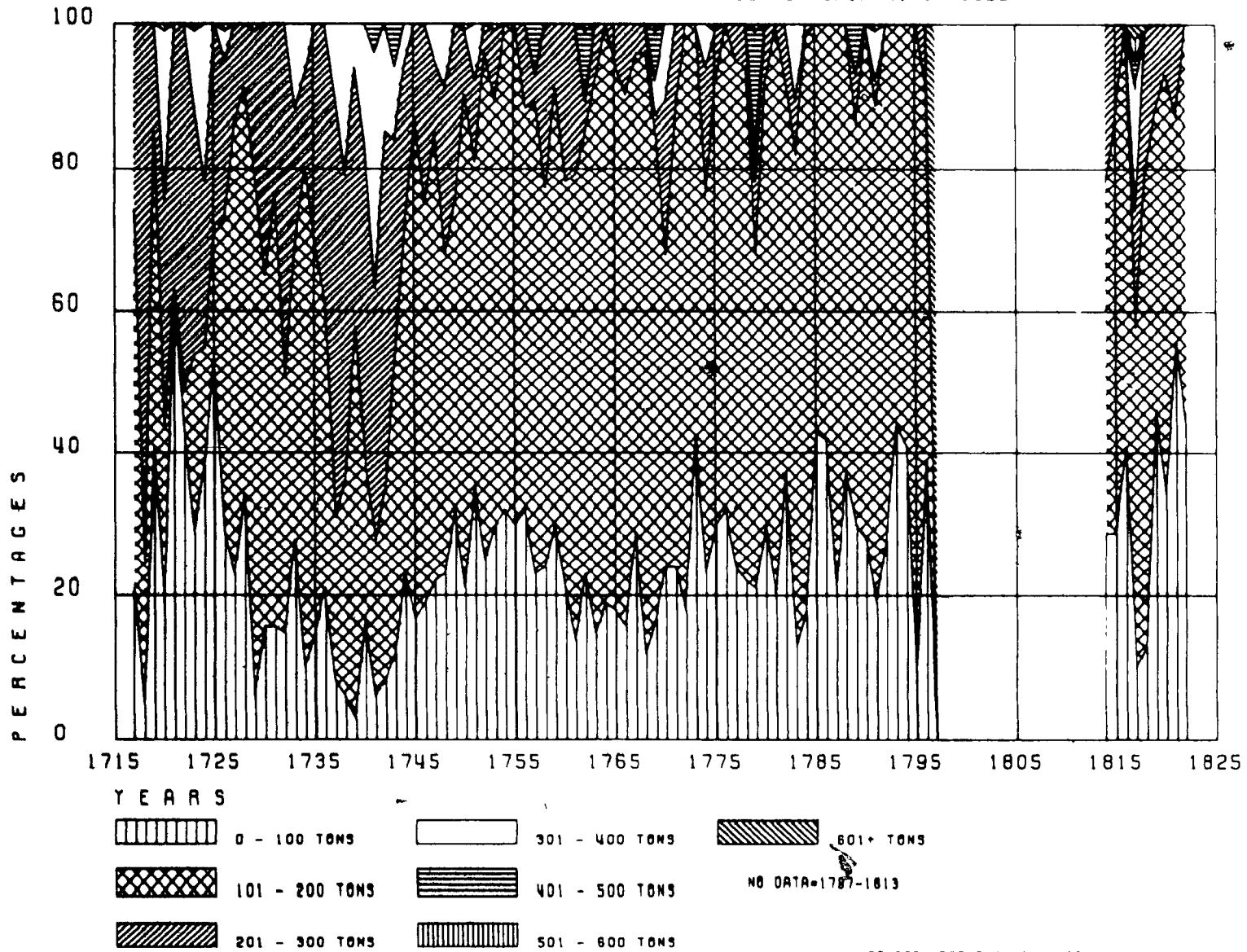
GRAPH 11.3.A (1)

PROPORTIONS OF SHIPPING FROM ST. PETERSBURG  
TO AMSTERDAM ACCORDING TO SIZE OF SHIP (1717-1822)



GRAPH 11.3.A(2)

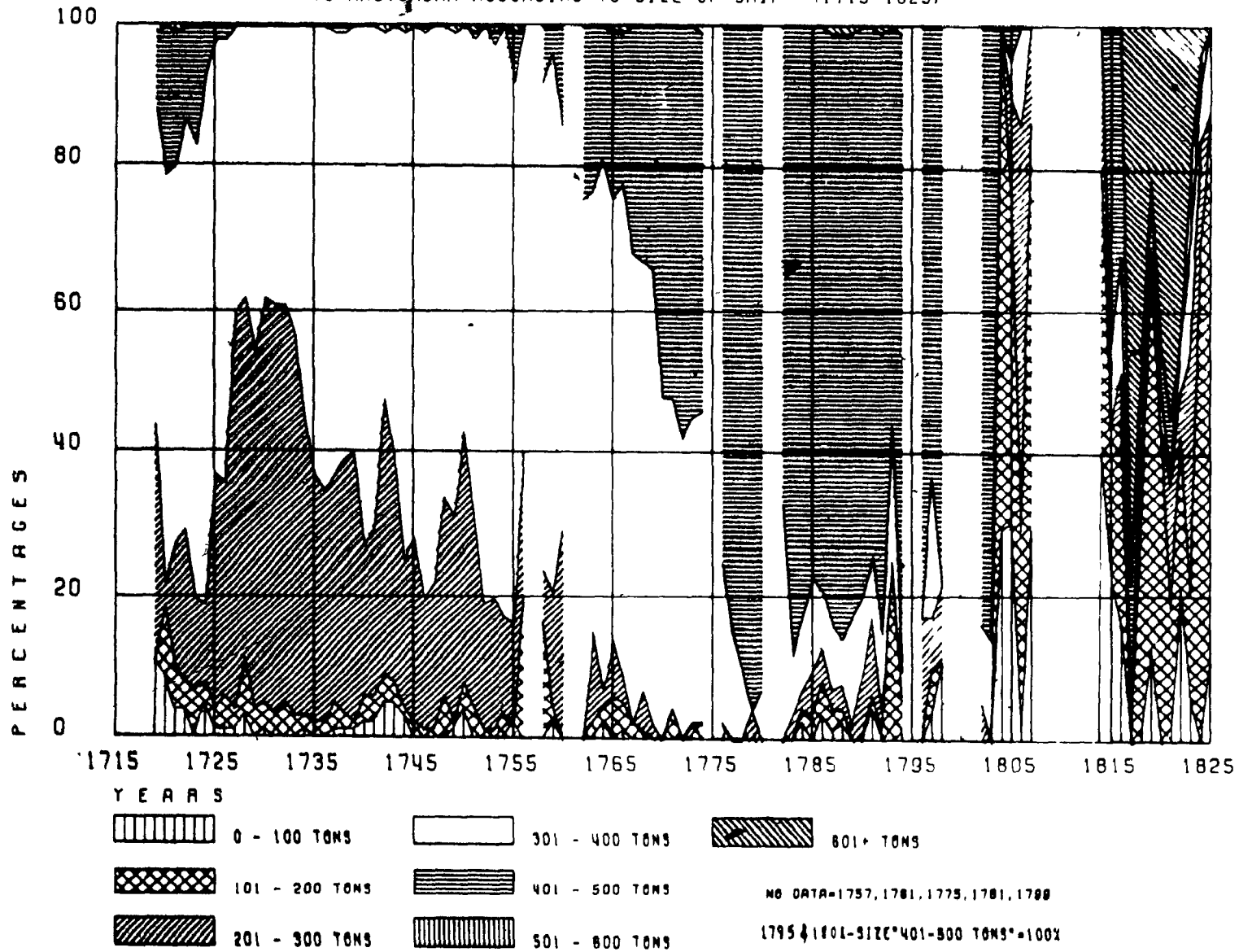
PROPORTIONS OF SHIPPING TONNAGE CARRIED FROM ST. PETERSBURG TO AMSTERDAM ACCORDING TO SIZE OF SHIP (1717-1822)



SOURCE: TABLE 11.3.A (COLUMN IV)

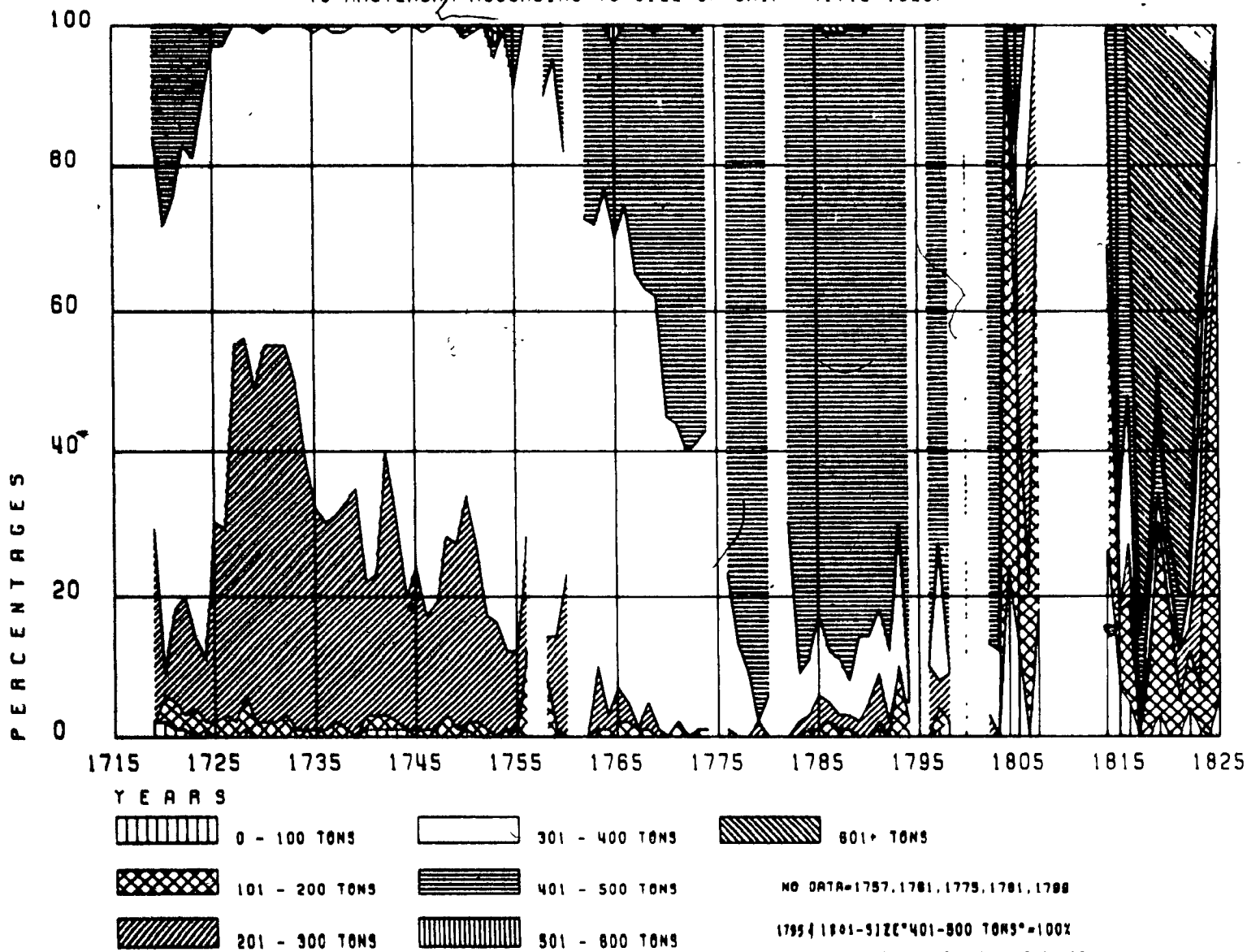
GRAPH 11.3.B(1)

PROPORTIONS OF SHIPPING FROM NARVA  
TO AMSTERDAM ACCORDING TO SIZE OF SHIP (1719-1825)



GRAPH 11.3.8(2)

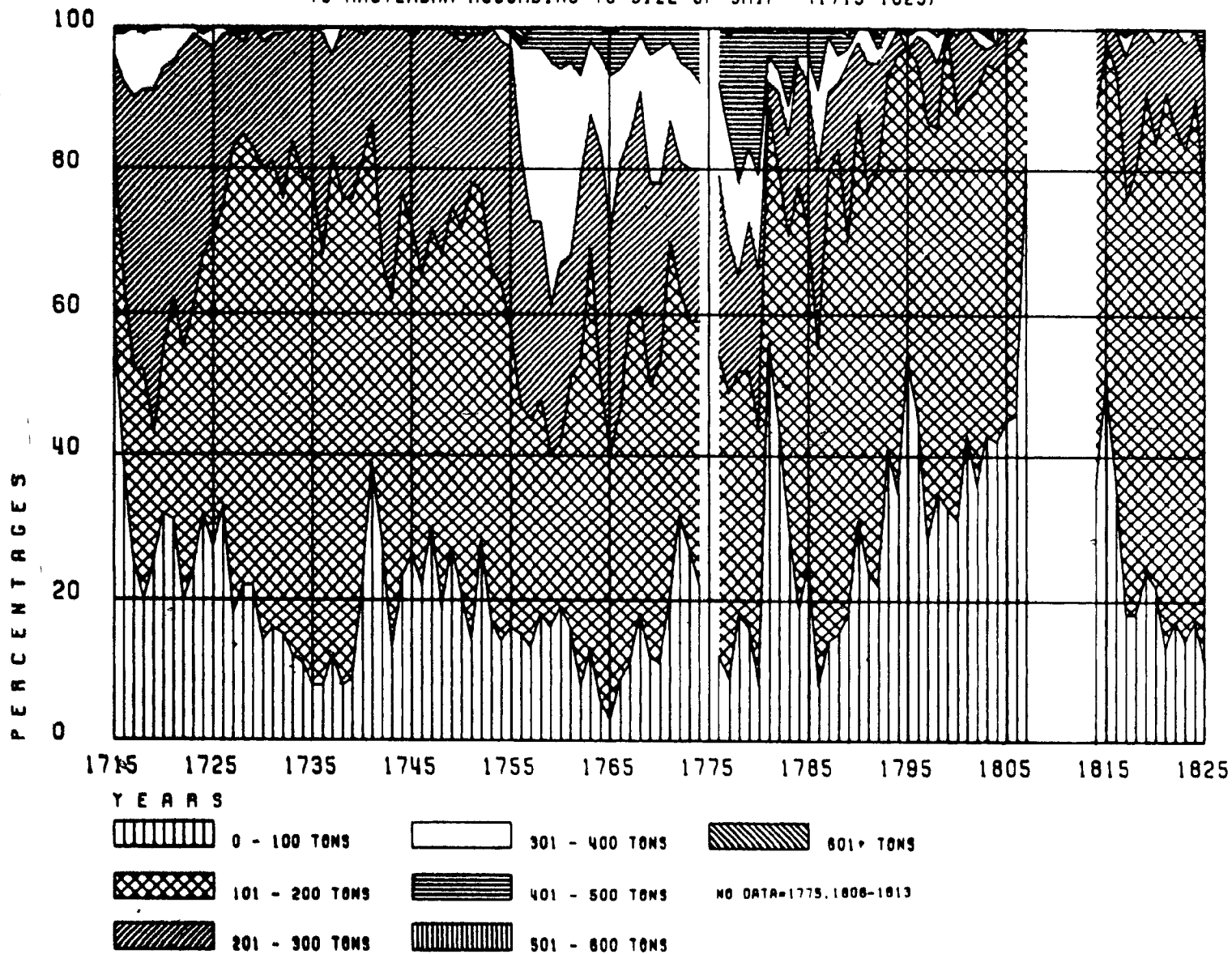
PROPORTIONS OF SHIPPING TONNAGE CARRIED FROM NARVA  
TO AMSTERDAM ACCORDING TO SIZE OF SHIP (1719-1825)





GRAPH 11.3.C(1)

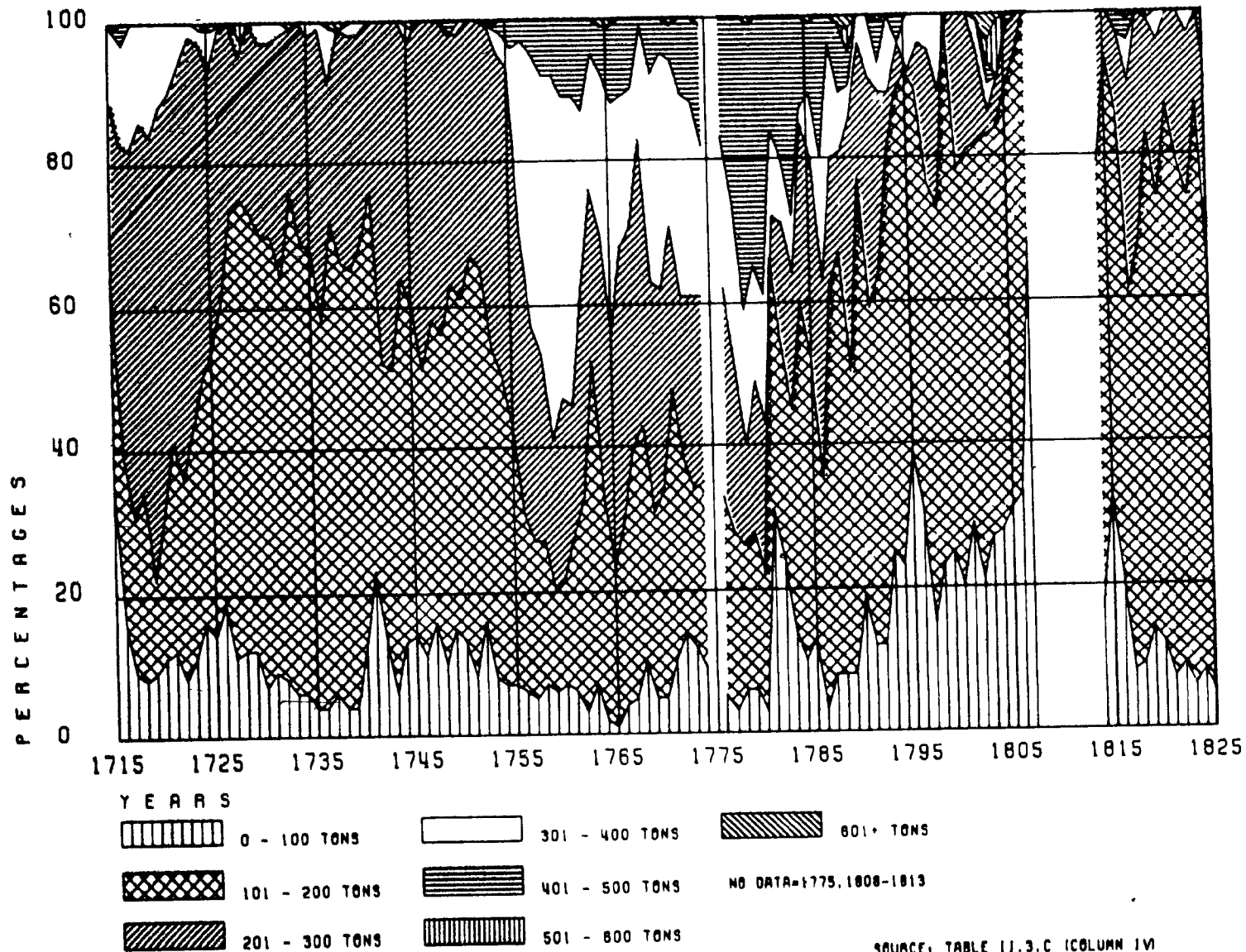
PROPORTIONS OF SHIPPING FROM RIGA  
TO AMSTERDAM ACCORDING TO SIZE OF SHIP (1715-1825)



SOURCE: TABLE 11.3.C (COLUMN 11)

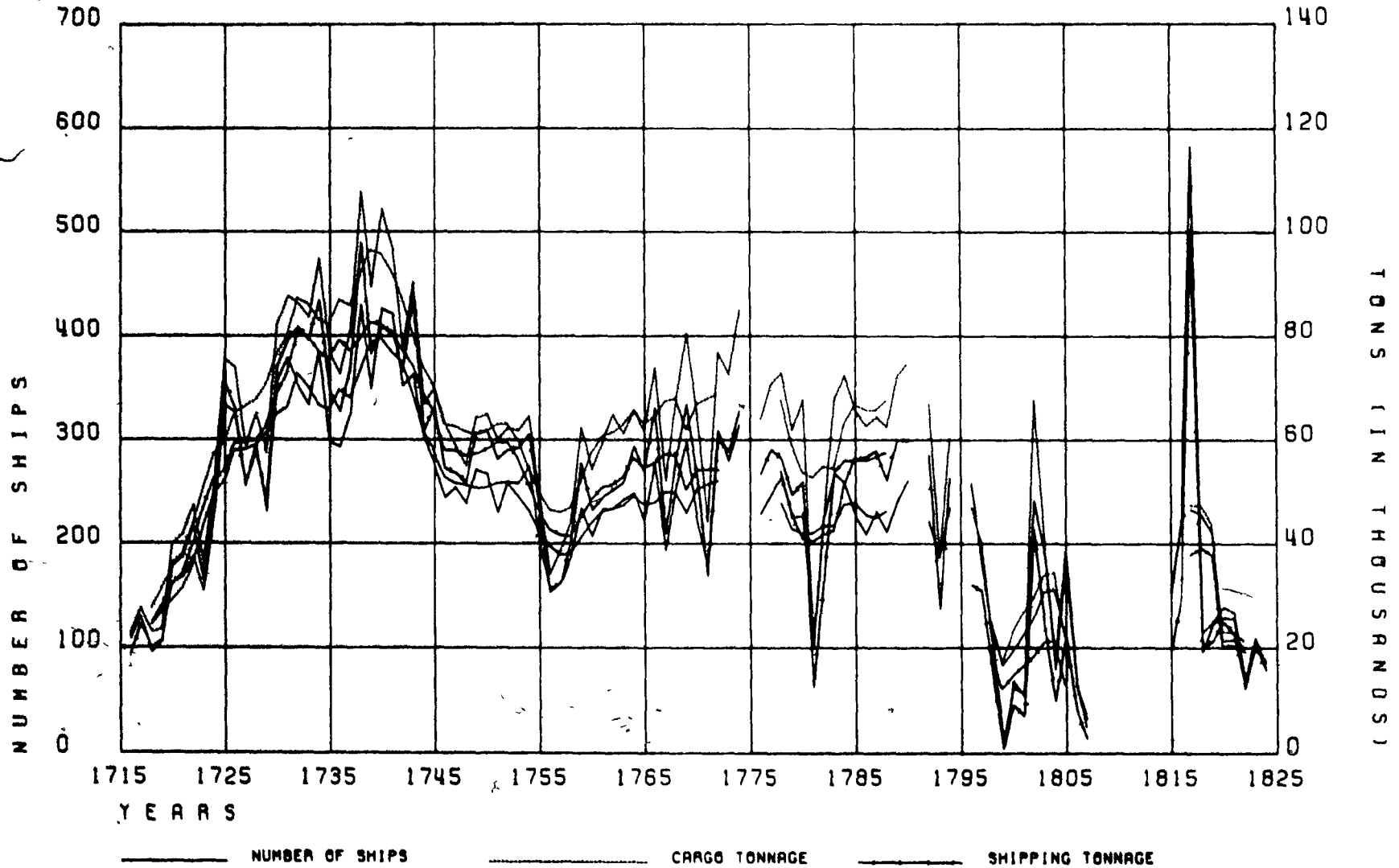
GRAPH 11.3.C(2)

PROPORTIONS OF SHIPPING TONNAGE CARRIED FROM RIGA  
TO AMSTERDAM ACCORDING TO SIZE OF SHIP (1715-1825)



GRAPH 11.4

SHIP & TONNAGE MOVEMENTS FROM RUSSIA  
(BALTIC PORTS ONLY) TO AMSTERDAM (1716-1824).

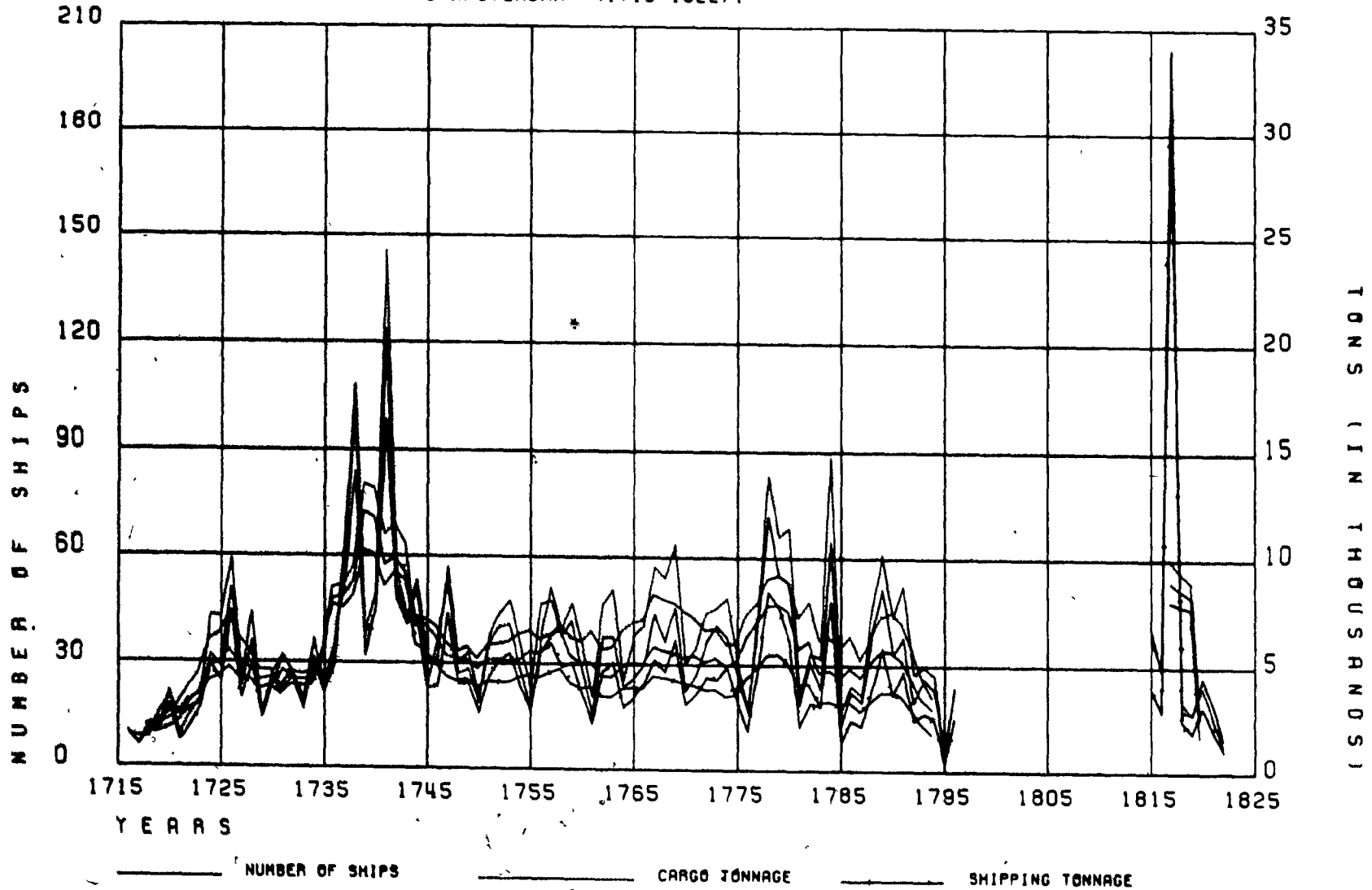


CORRESPONDING SYMBOLS IN RED INDICATE 5-YEAR MOVING AVERAGES

SOURCE: TABLE 11.4

GRAPH II.4.A

SHIP & TONNAGE MOVEMENTS FROM ST. PETERSBURG  
TO AMSTERDAM (1716-1822).

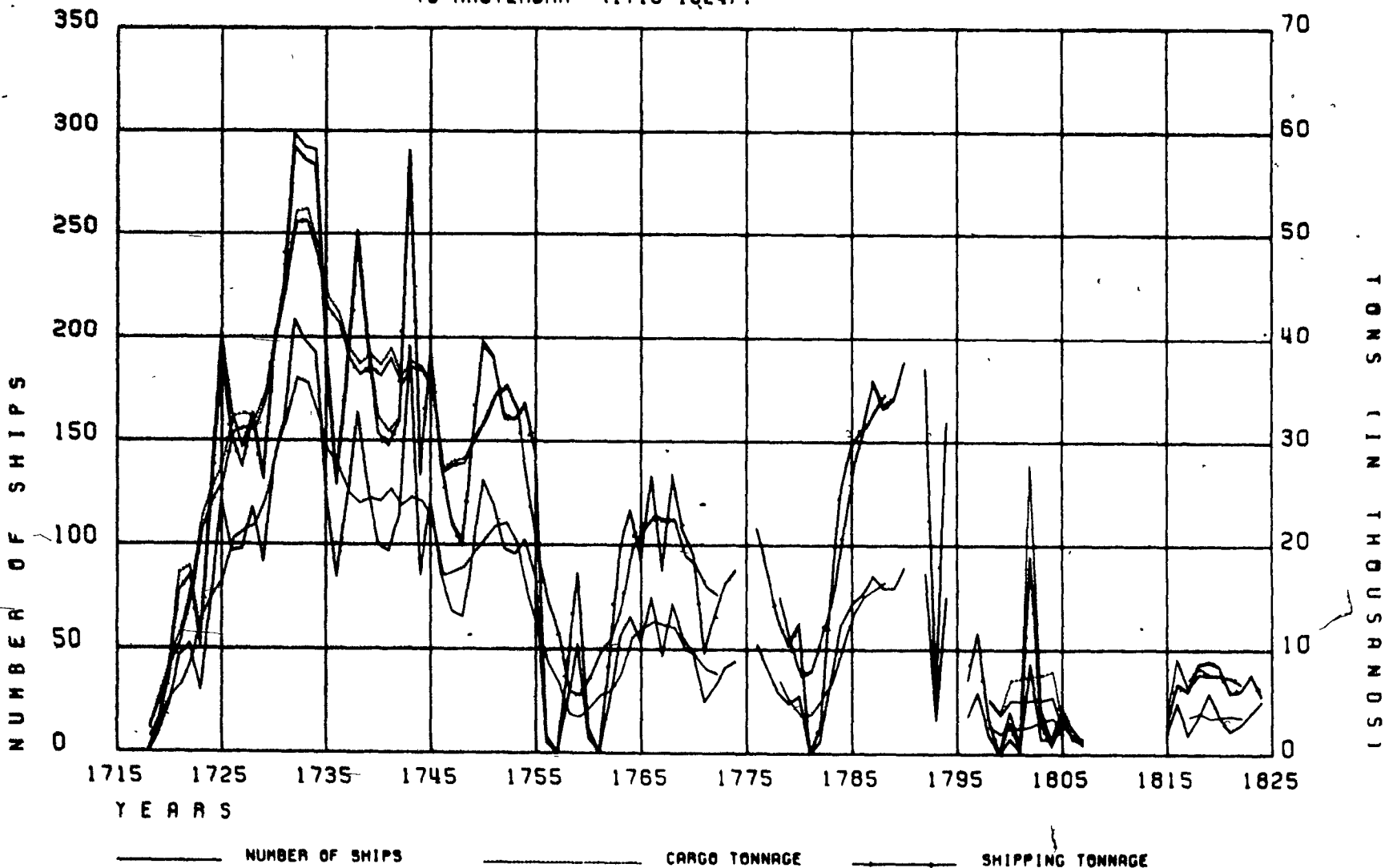


CORRESPONDING SYMBOLS IN RED INDICATE 5-YEAR MOVING AVERAGES

SOURCE: TABLE II.4.A

GRAPH 11.4.B

SHIP & TONNAGE MOVEMENTS FROM NARVA  
TO AMSTERDAM (1716-1824).

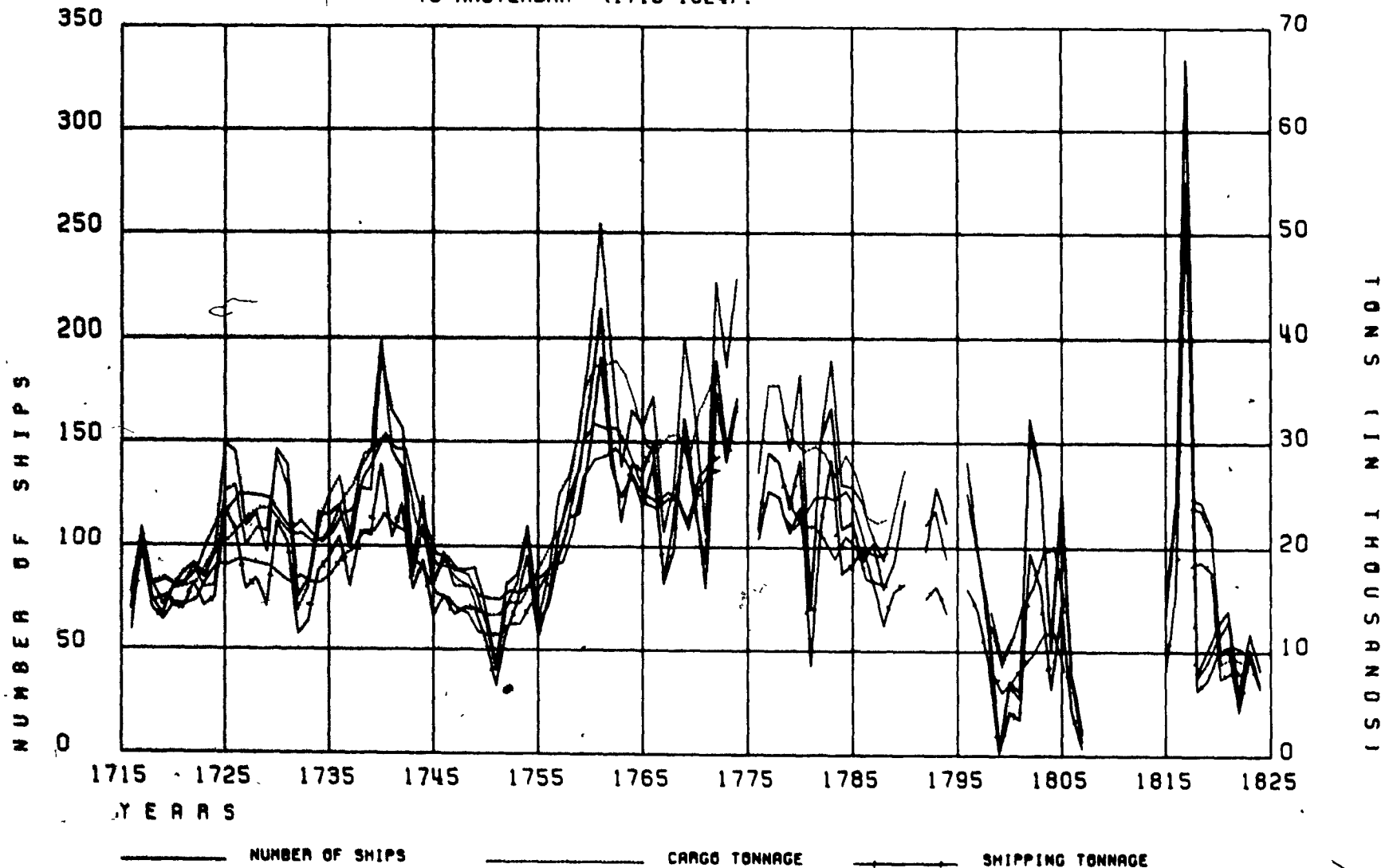


CORRESPONDING SYMBOLS IN RED INDICATE 5-YEAR MOVING AVERAGES

SOURCE: TABLE 11.4.B

GRAPH II.4.C

SHIP & TONNAGE MOVEMENTS FROM RIGA  
TO AMSTERDAM (1716-1824).

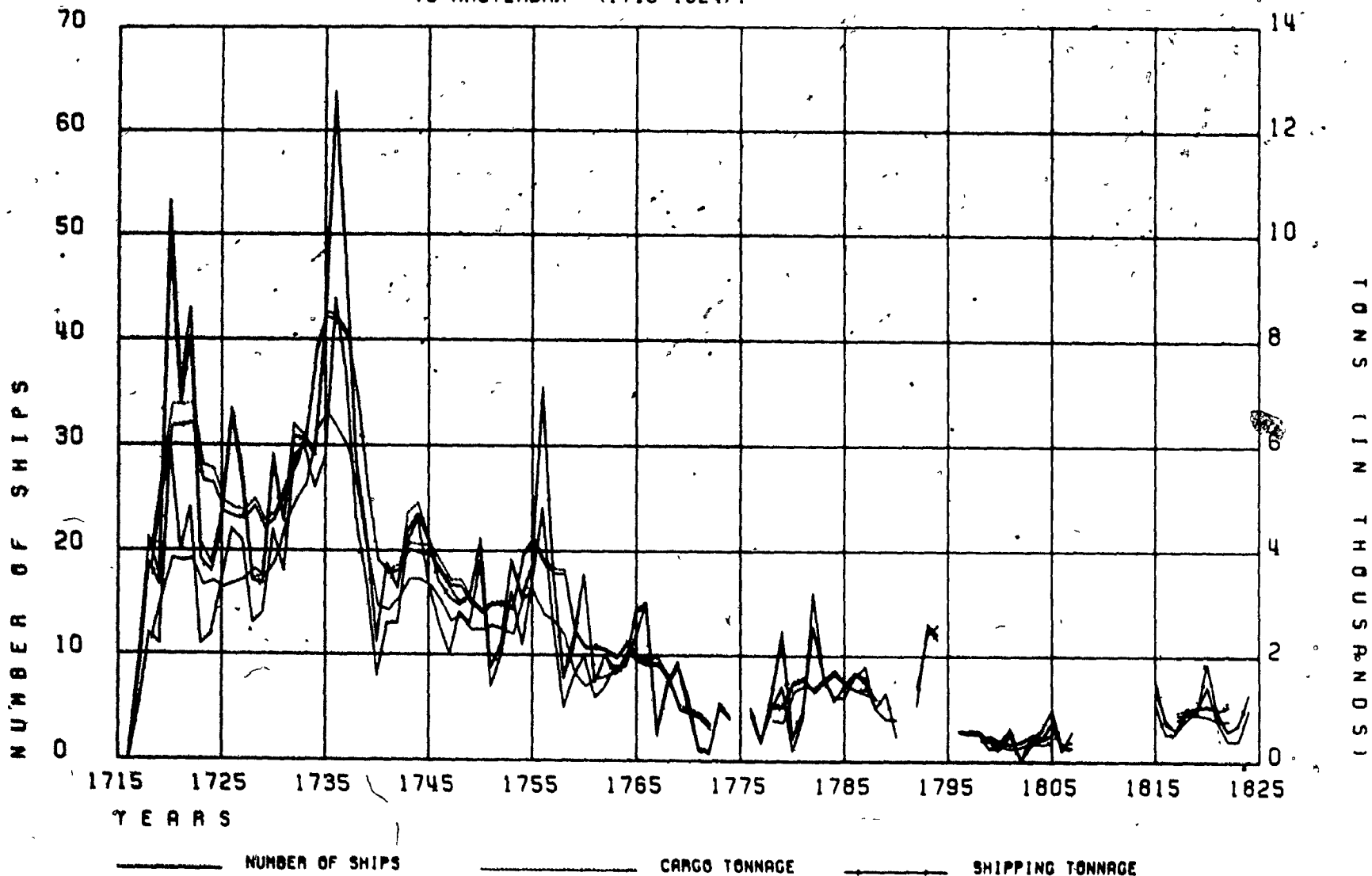


CORRESPONDING SYMBOLS IN RED INDICATE 5-YEAR MOVING AVERAGES

SOURCE: TABLE II.4.C

GRAPH 11.4.0

SHIP & TONNAGE MOVEMENTS FROM VIBORG  
TO AMSTERDAM (1716-1824).

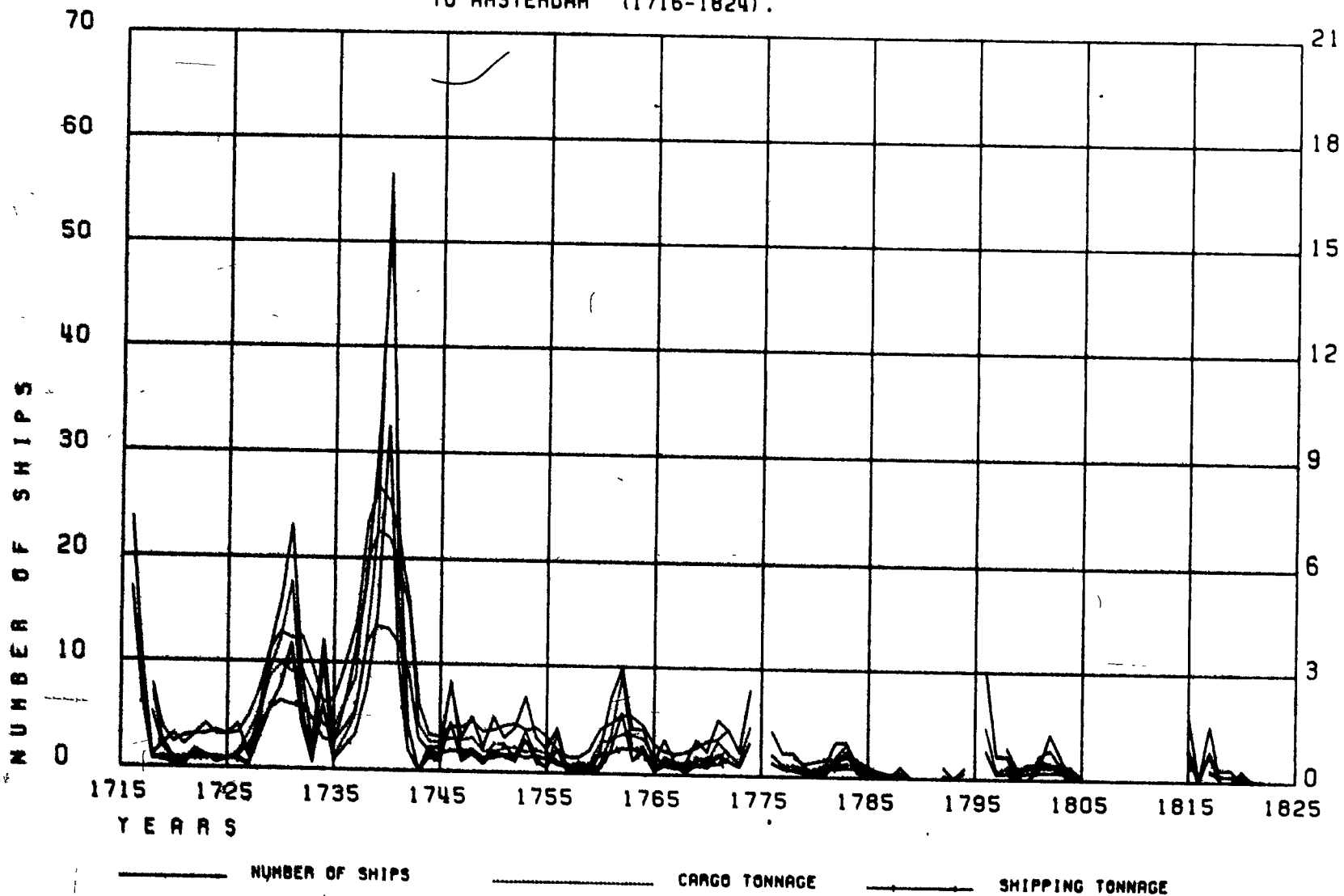


CORRESPONDING SYMBOLS IN RED INDICATE 5-YEAR MOVING AVERAGES

SOURCE: TABLE 11.4.0

GRAPH-11.4.E

SHIP & TONNAGE MOVEMENTS FROM REVAL  
TO AMSTERDAM (1716-1824).



CORRESPONDING SYMBOLS IN RED INDICATE 5-YEAR MOVING AVERAGES

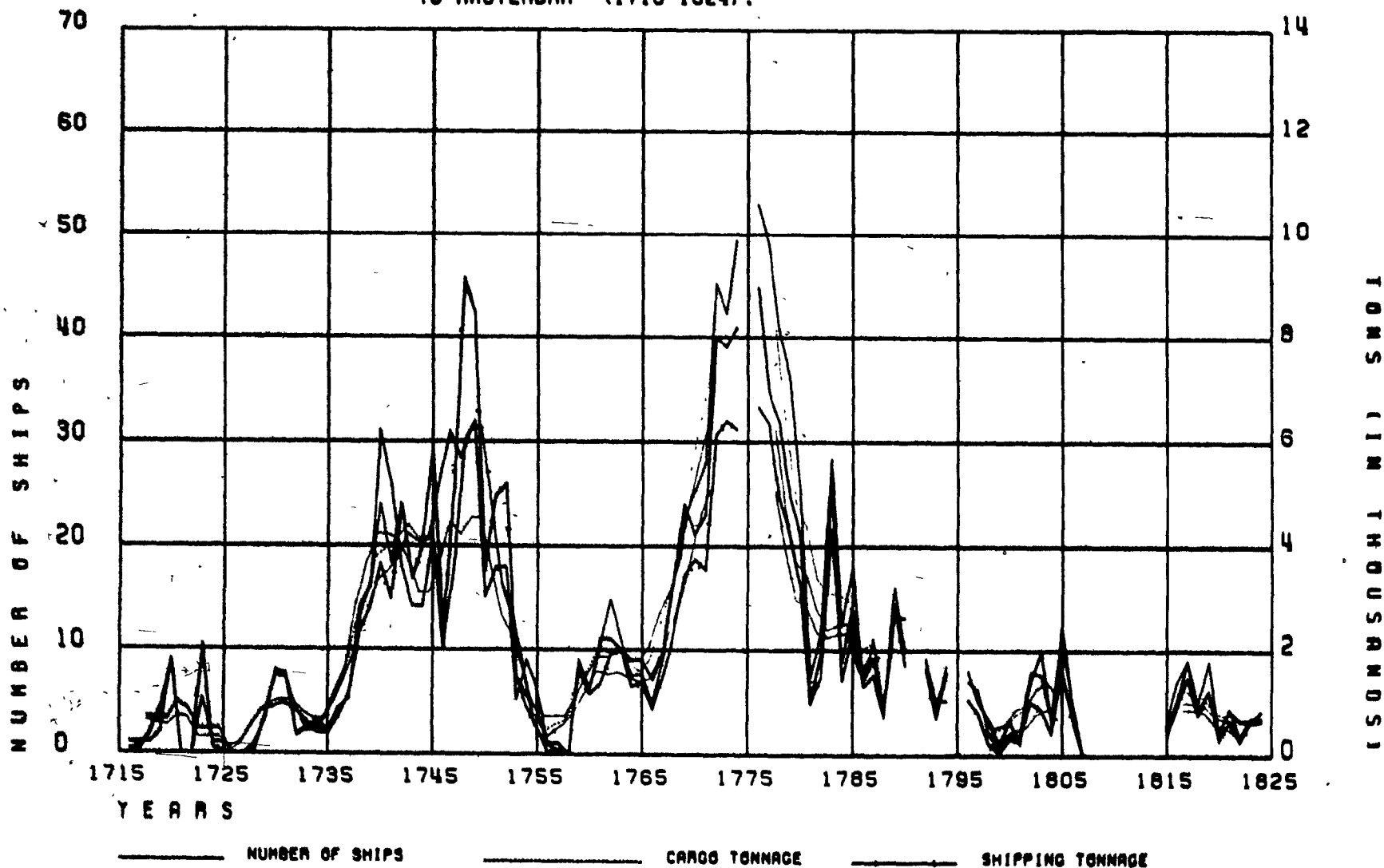
SOURCE: TABLE 11.4.E

TONS (IN THOUSANDS)



GRAPH 11.4.F

SHIP & TONNAGE MOVEMENTS FROM ESTONIA  
TO AMSTERDAM (1716-1824).

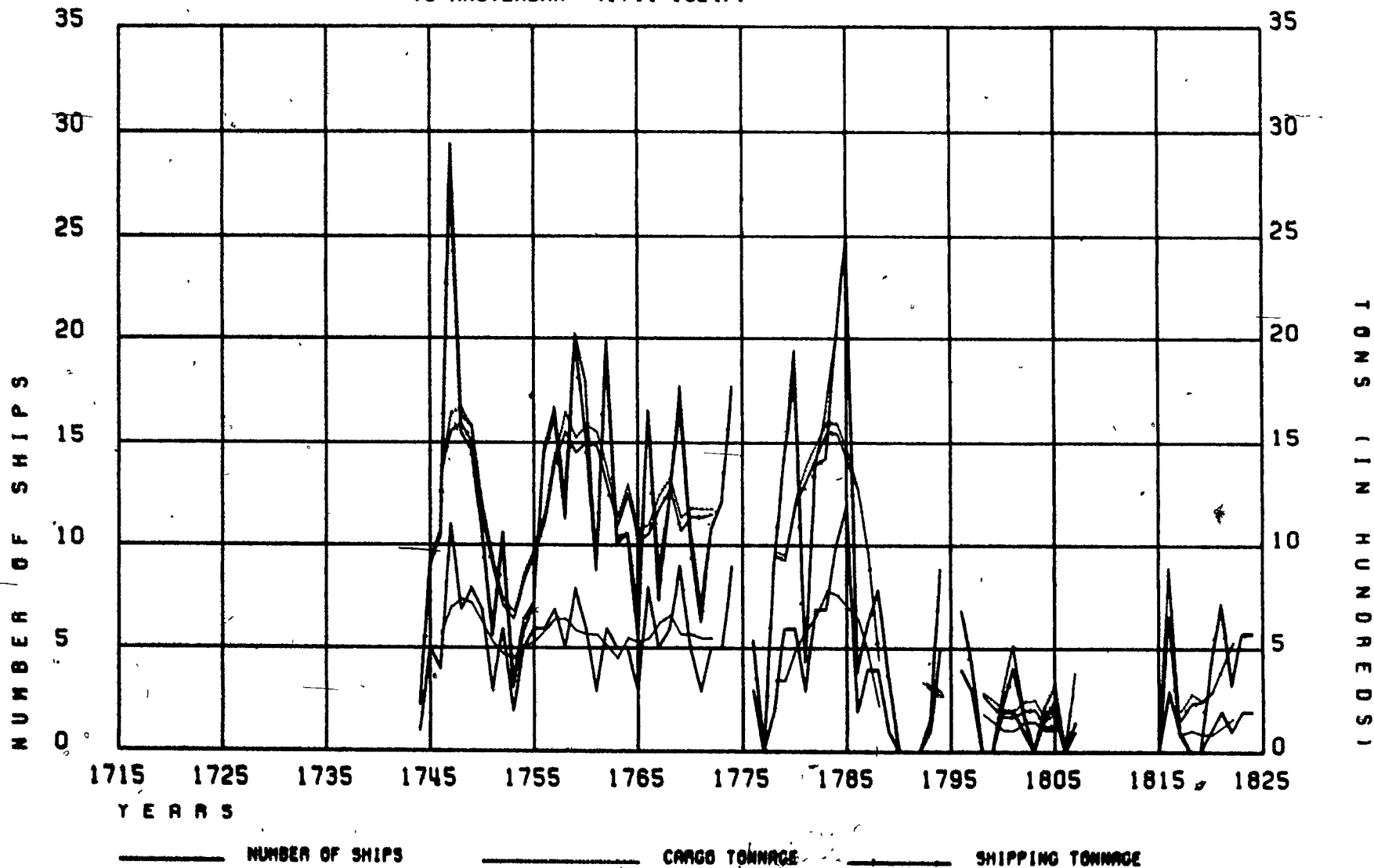


CORRESPONDING SYMBOLS IN RED INDICATE 5-YEAR MOVING AVERAGES

SOURCE: TABLE 11.4.F

GRAPH II.4.G

SHIP & TONNAGE MOVEMENTS FROM FREDERIKSHAMN  
TO AMSTERDAM (1744-1824).

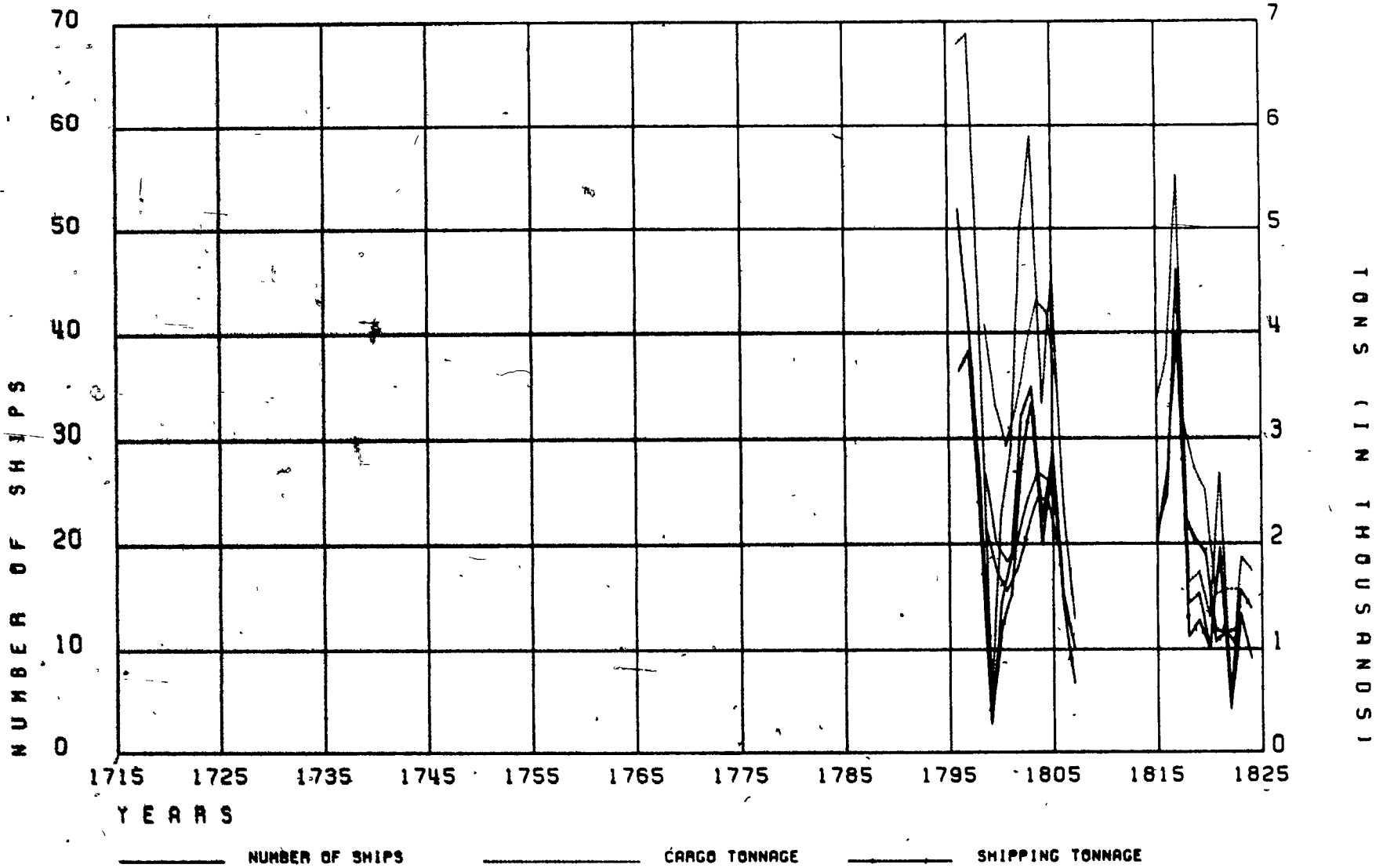


CORRESPONDING SYMBOLS IN RED INDICATE 5-YEAR MOVING AVERAGES

SOURCE: TABLE II.4.C

GRAPH II.4.H

SHIP & TONNAGE MOVEMENTS FROM COURLAND  
TO AMSTERDAM (1796-1824).

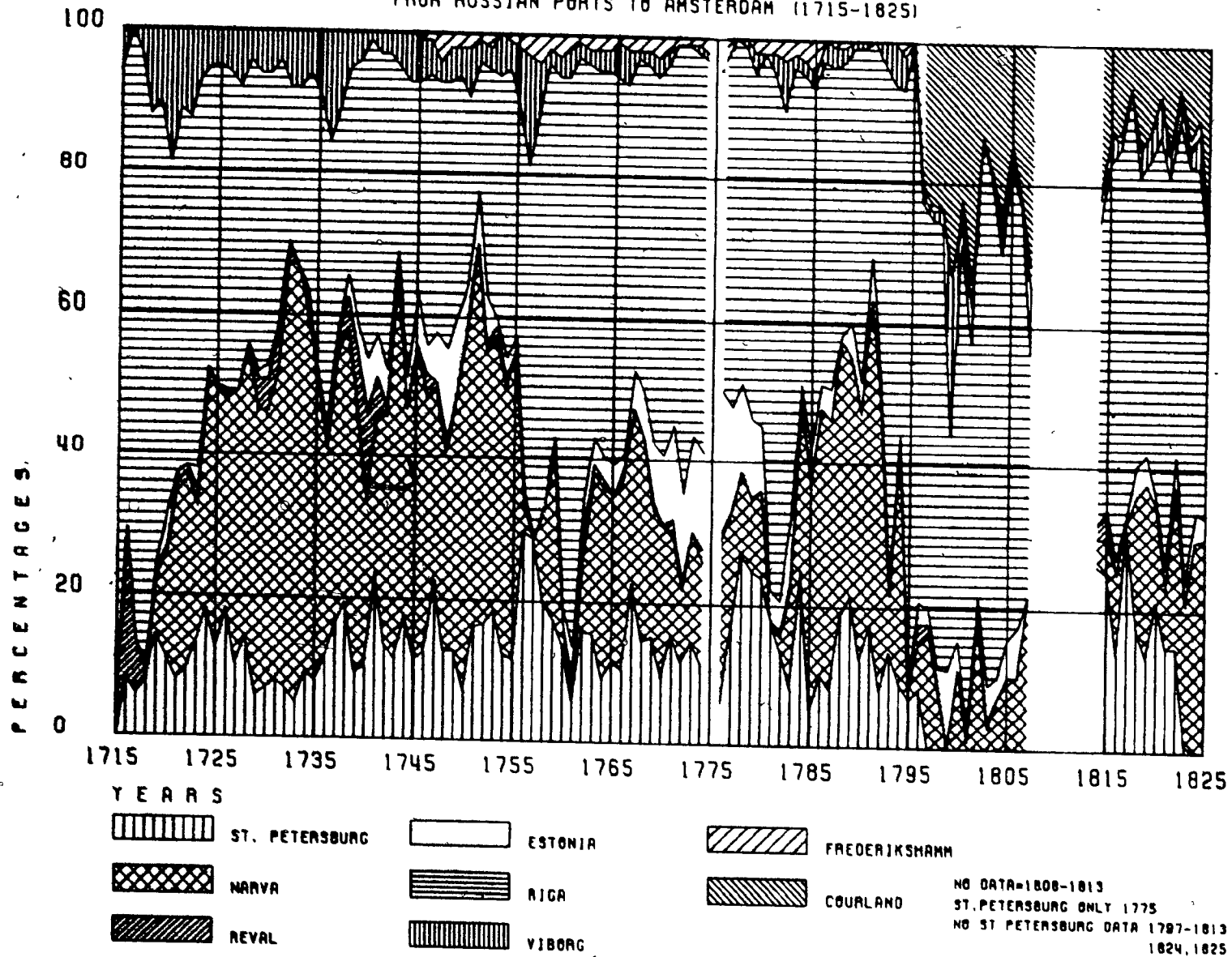


CORRESPONDING SYMBOLS IN RED INDICATE 5-YEAR MOVING AVERAGES

SOURCE: TABLE II.4.H

GRAPH 11.5

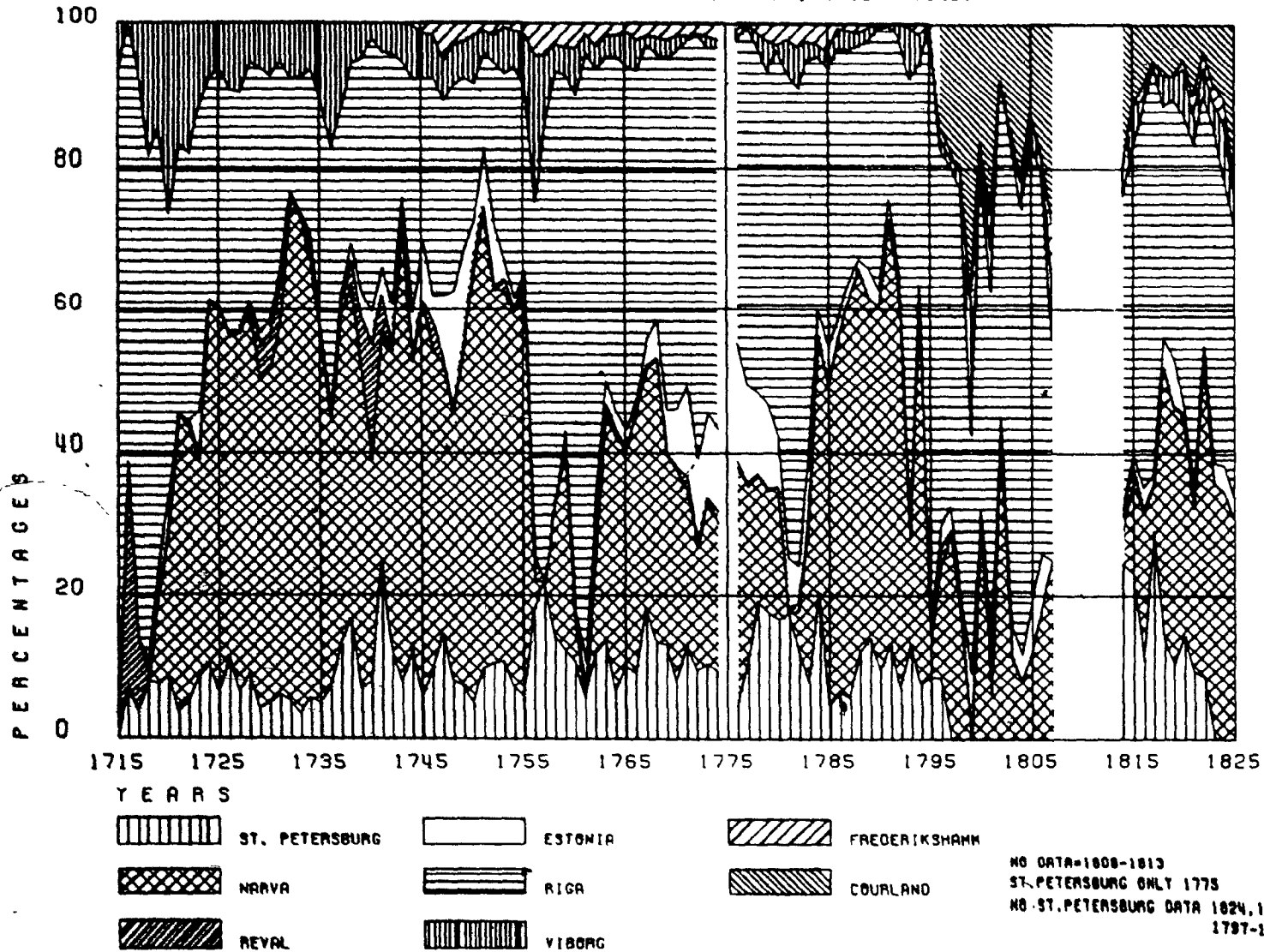
PROPORTIONS OF BALTIC SHIPPING  
FROM RUSSIAN PORTS TO AMSTERDAM (1715-1825)



SOURCE: TABLE 11.1 A

GRAPH 11.6

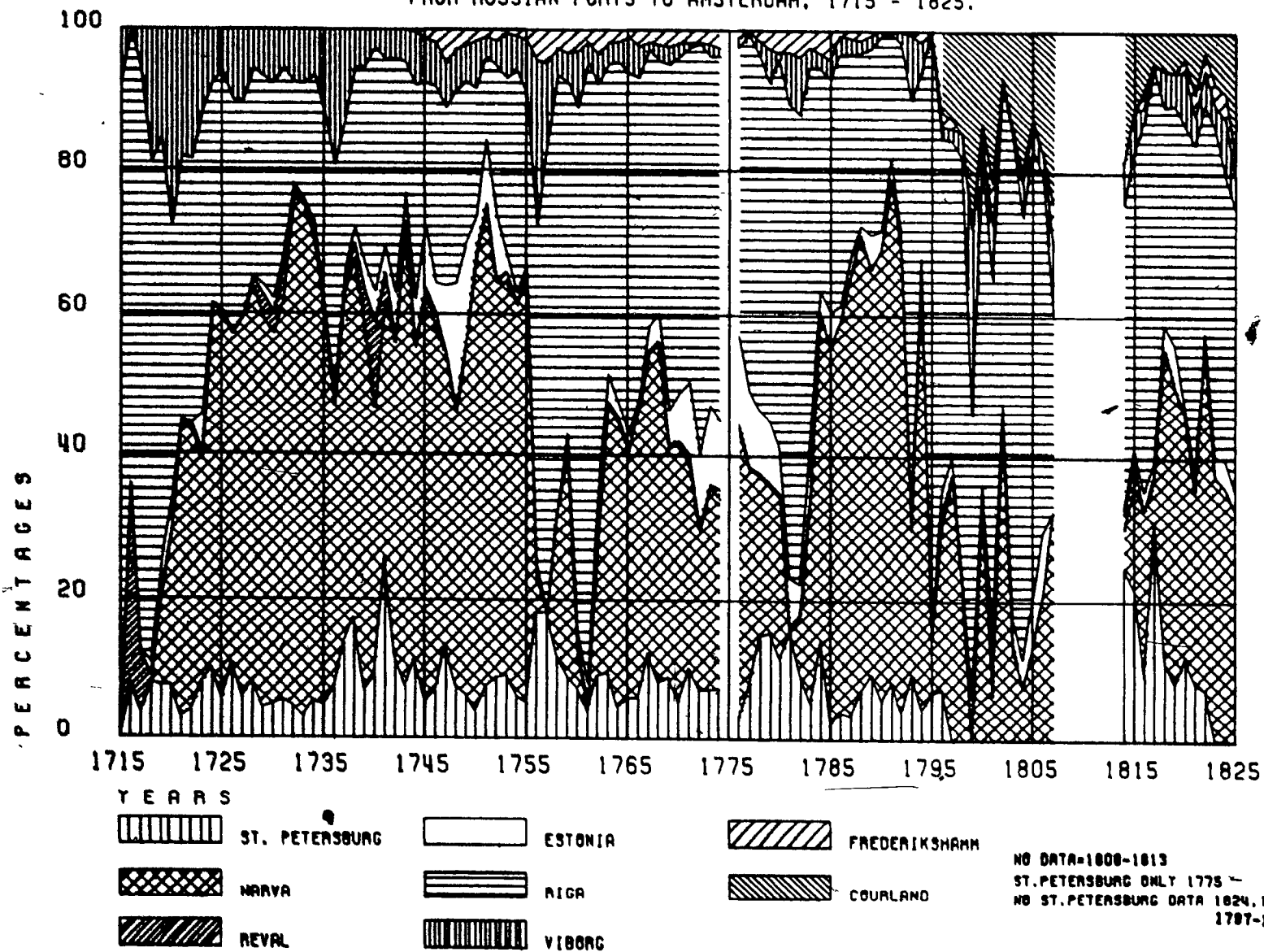
PROPORTIONS OF CARGO TONNAGE OF BALTIC SHIPPING  
FROM RUSSIAN PORTS TO AMSTERDAM, 1715 - 1825.



SOURCE: TABLE 11.5

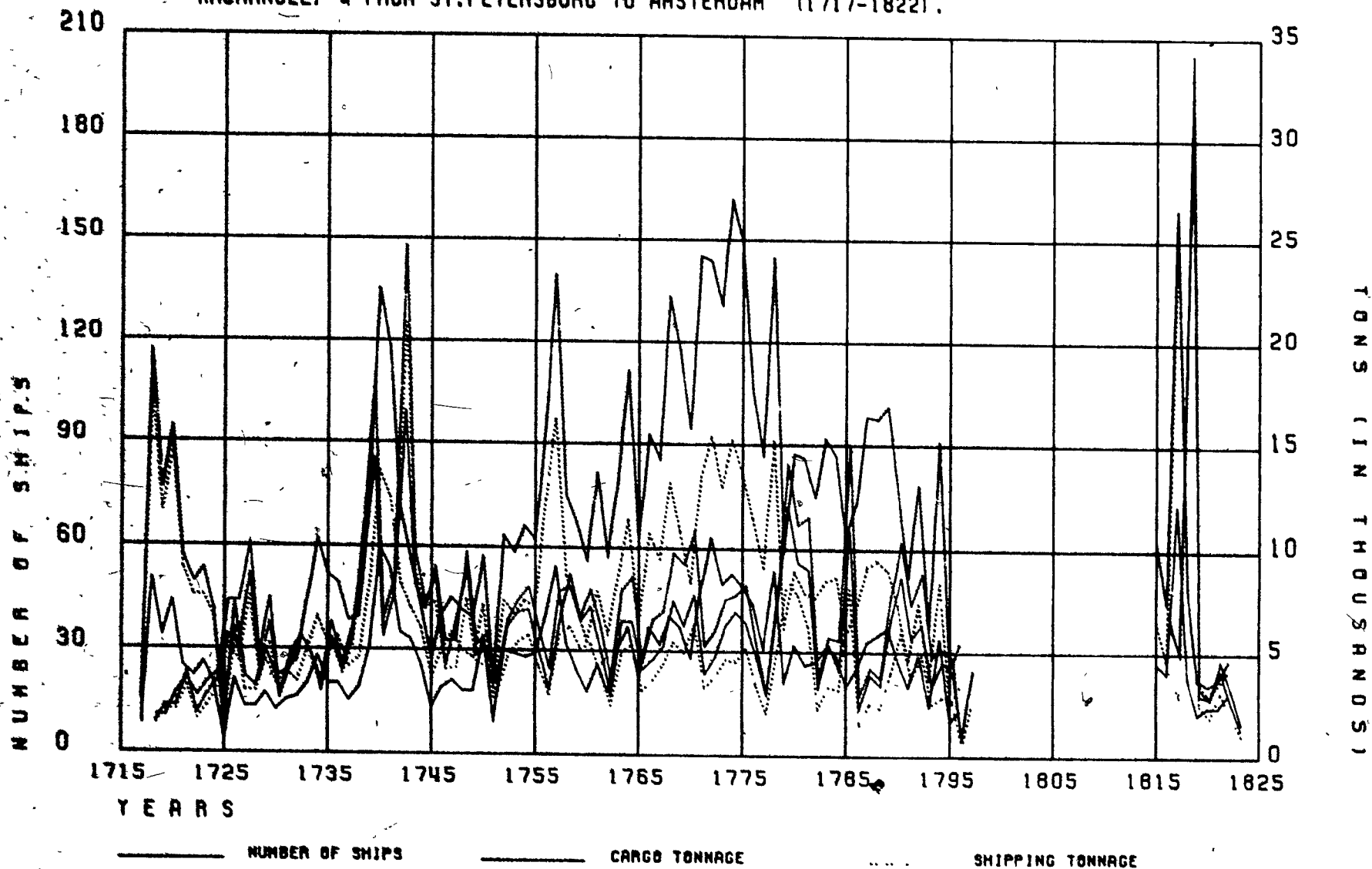
GRAPH II.7

PROPORTIONS OF SHIP TONNAGE OF BALTIC SHIPPING  
FROM RUSSIAN PORTS TO AMSTERDAM, 1715 - 1825.



SOURCE: TABLE II.7

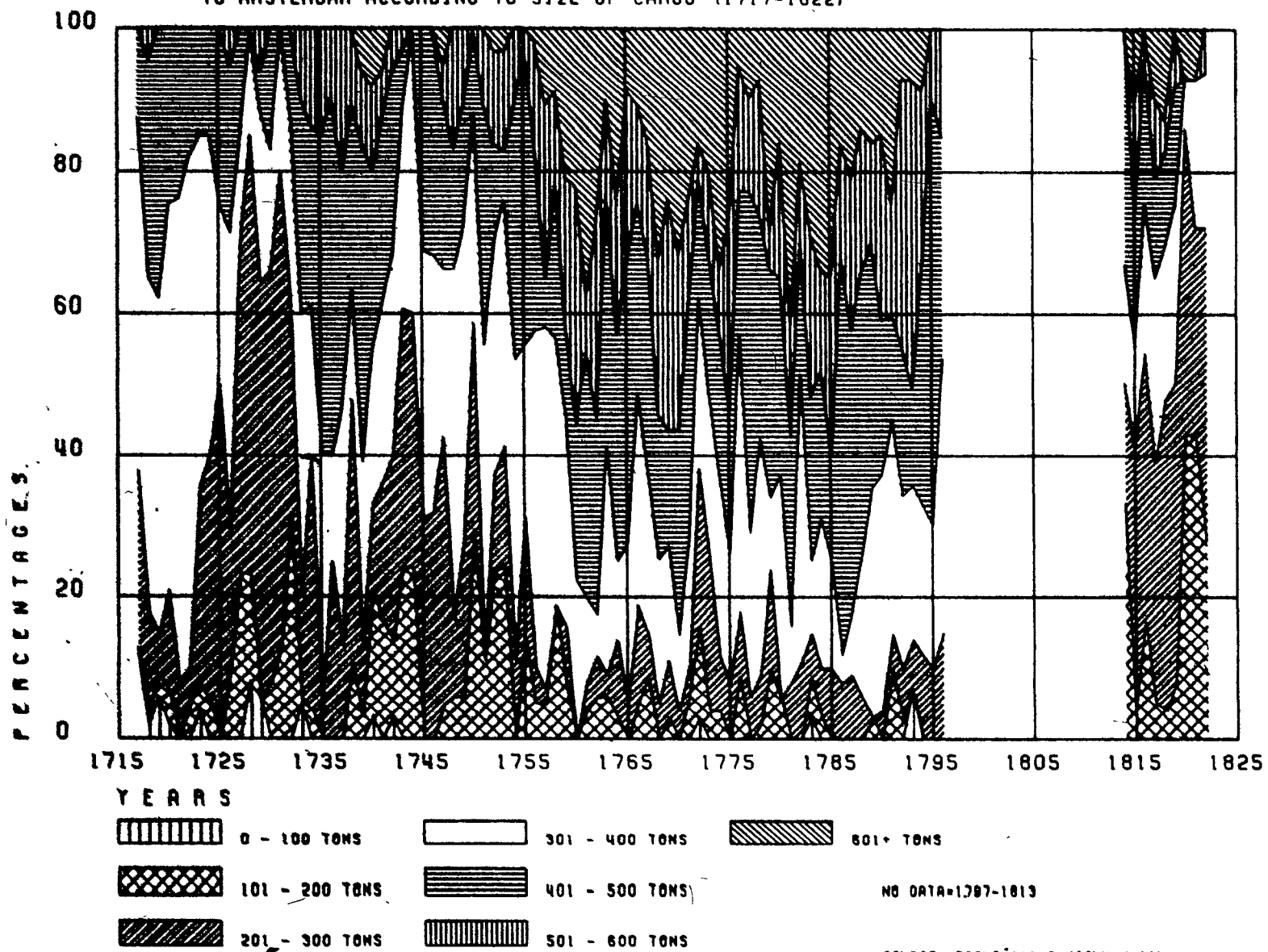
GRAPH III.1 SHIP & TONNAGE MOVEMENTS FROM RUSSIAN WHITE SEA PORTS (PRIMARILY ARCHANGEL) & FROM ST. PETERSBURG TO AMSTERDAM (1717-1822).



CORRESPONDING SYMBOLS IN RED INDICATE ST. PETERSBURG DATA

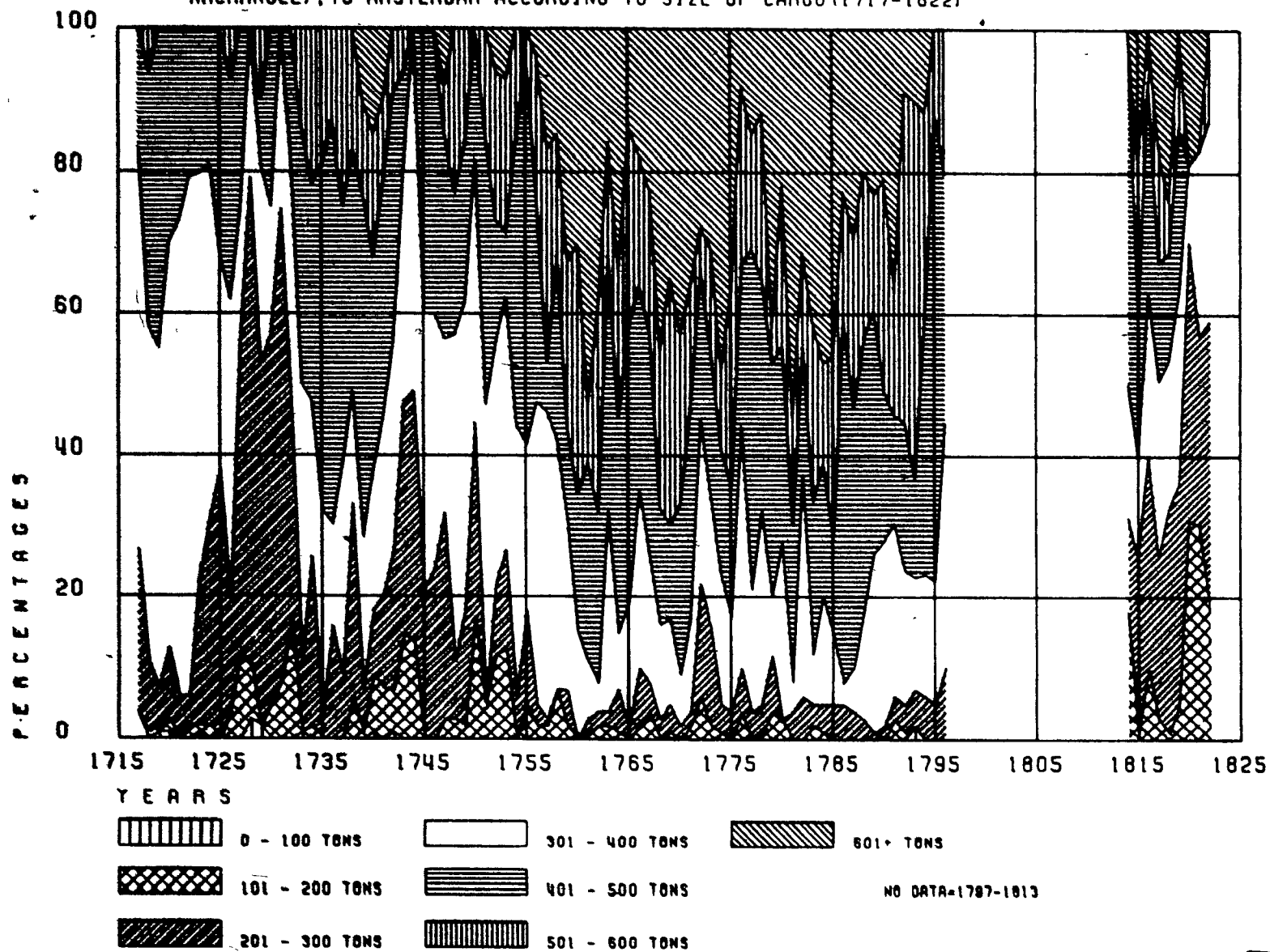
SOURCE: TABLES II.4.A & III.4

GRAPH III.2(1) PROPORTIONS OF SHIPPING FROM THE WHITE SEA (PRIMARILY ARCHANGEL)  
TO AMSTERDAM ACCORDING TO SIZE OF CARGO (1717-1822)

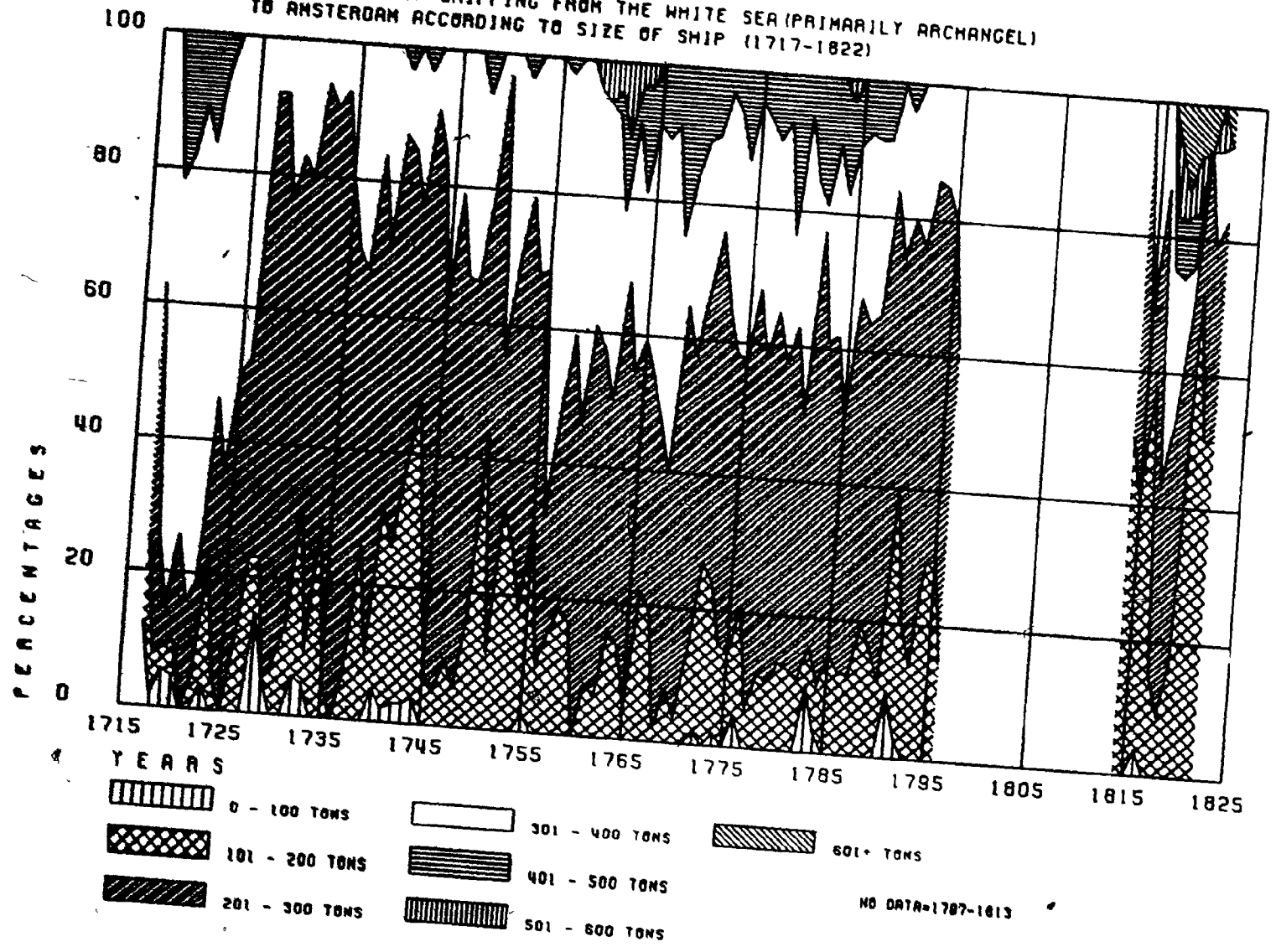




GRAPH III.2(2) PROPORTIONS OF CARGO TONNAGE CARRIED FROM THE WHITE SEA (PRIMARILY ARCHANGEL), TO AMSTERDAM ACCORDING TO SIZE OF CARGO (1717-1822)



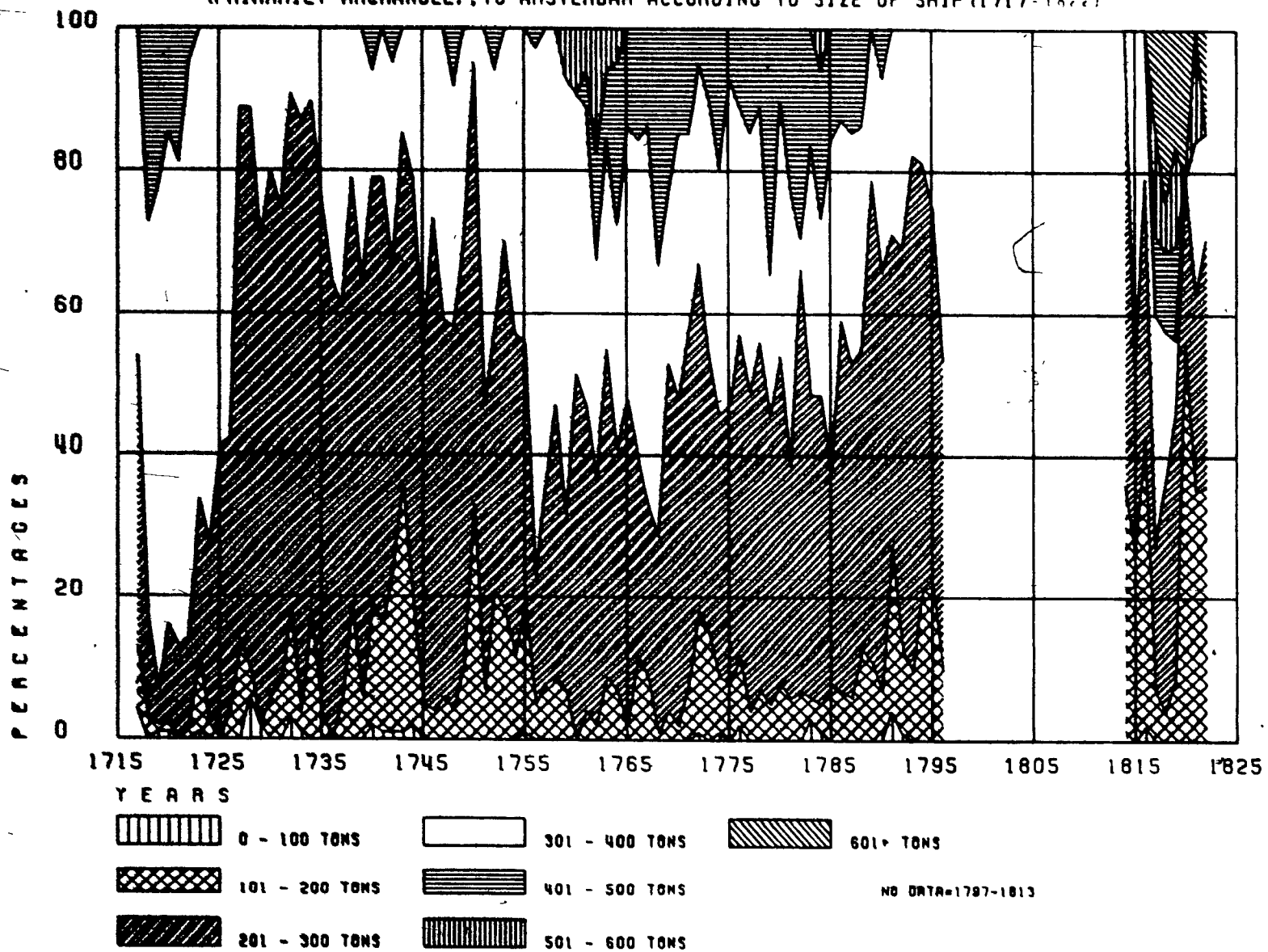
GRAPH III.3(1) PROPORTIONS OF SHIPPING FROM THE WHITE SEA (PRIMARILY ARCHANGEL) TO AMSTERDAM ACCORDING TO SIZE OF SHIP (1717-1822)



NO DATA-1787-1813

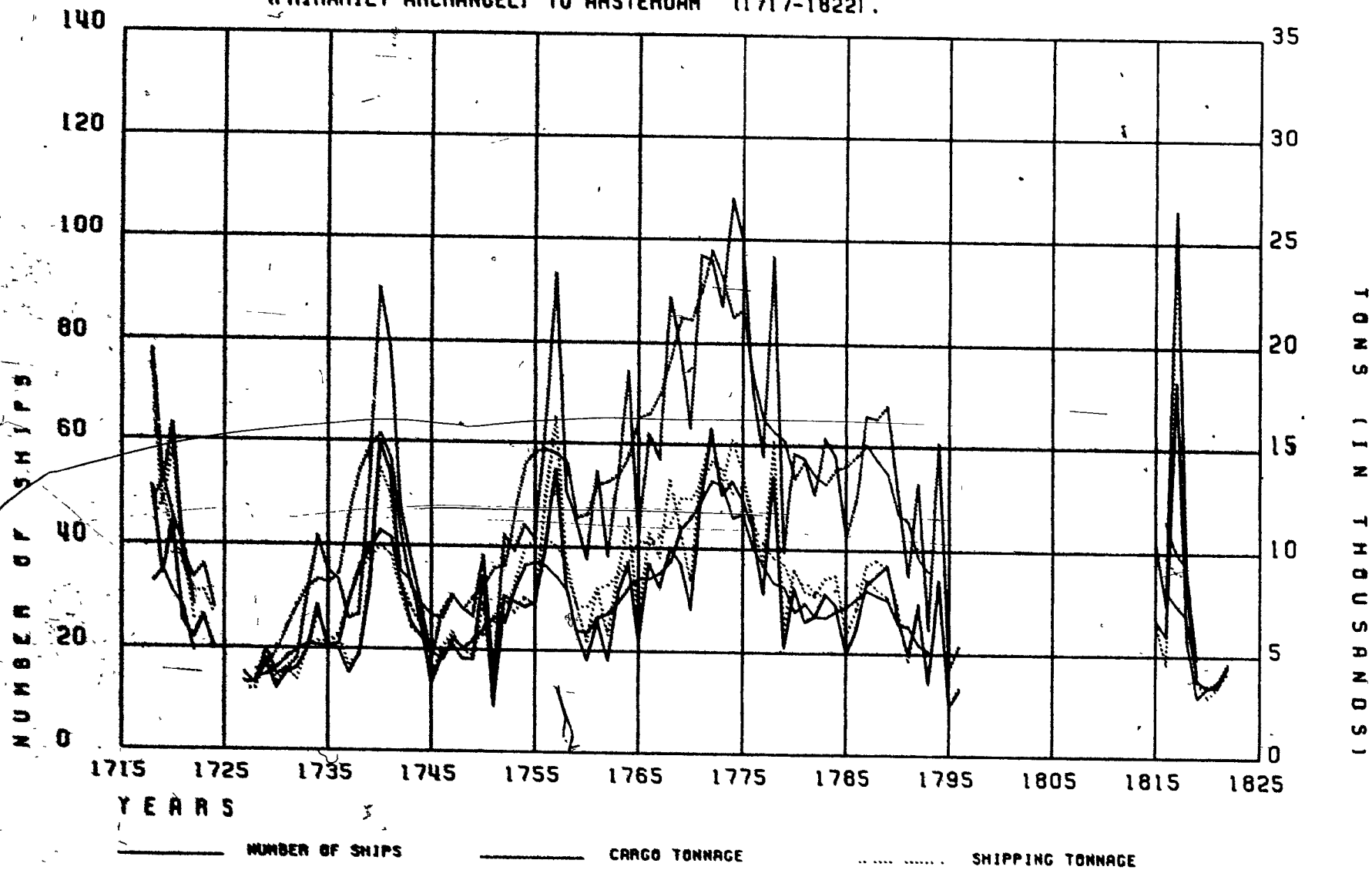
SOURCE: TABLE III.3 (COLUMN 1)

GRAPH III.3(2) PROPORTIONS OF SHIPPING TONNAGE CARRIED FROM THE WHITE SEA  
(PRIMARILY ARCHANGEL), TO AMSTERDAM ACCORDING TO SIZE OF SHIP (1717-1822)



GRAPH III.4

SHIP & TONNAGE MOVEMENTS FROM RUSSIAN WHITE SEA PORTS  
(PRIMARILY ARCHANGEL) TO AMSTERDAM (1717-1822).



CORRESPONDING SYMBOLS IN RED INDICATE 5-YEAR MOVING AVERAGES

SOURCE: TABLE III.4