

Belgian ‘power’ at sea?

Luc Vandeweyer

During the First World War, Germany reduced Belgium to beggary and inflicted serious damage to the latter at sea as well. Belgium lost 44 ships or – expressed in tonnage – 35.5 % of its merchant fleet. Nearly 300 sailors or 19% of Belgian seamen perished, a percentage which even exceeds that of soldiers killed at the front. These staggeringly high losses also had a great strategic impact, as they threatened the reinforcement of the forces at the Yser front and the capacity to transport sufficient food to the people in need in occupied Belgium. Did Belgium take action to counter the progressive destruction of its merchant fleet? Yes it did! Despite the need to reinforce the army at the river Yser as much as possible, the military commanders also sent troops into battle at sea, even though this was not easy, as the Belgian army did not have a maritime tradition nor any warships. For generations, Belgium had believed in a land strategy based on the defence of a ‘national stronghold’, in particular the fortified city of Antwerp. The core of the Belgian state had to survive an enemy invasion within this heavily defended belt of fortifications until the superpowers would oust the enemy. This did not mean the Belgian army would ‘stay out of the water’. After all, the Scheldt river split the Antwerp fortifications in two and the engineers had to construct pontoon bridges to allow the supply and movement of troops in case of a siege. It was therefore imperative for the Belgian army to control this broad river at any cost. The North Sea was quite different from the Scheldt river, however...

The Belgian government goes to sea

Traditionally, the Belgian shipping industry did not play a significant part in this strategy. Belgium was nevertheless obliged to pay some attention to its small surface area of territorial waters, as armed neutrality had been imposed on the country in 1839. This meant it had to defend its borders militarily in case of aggression. But for several decades it turned out to be unfeasible to deploy vessels that were capable of fending off attacks by intruding warships. The main armament was the naval



■ In the build-up to the First World War, Belgium did not have a Navy nor any vessels that could be effectively deployed against intruding warships. It did have fishery protection vessels such as this ship, *Ville d'Anvers*, that could help settle conflicts at sea in addition to performing fishery-related duties (VLIZ Collection)

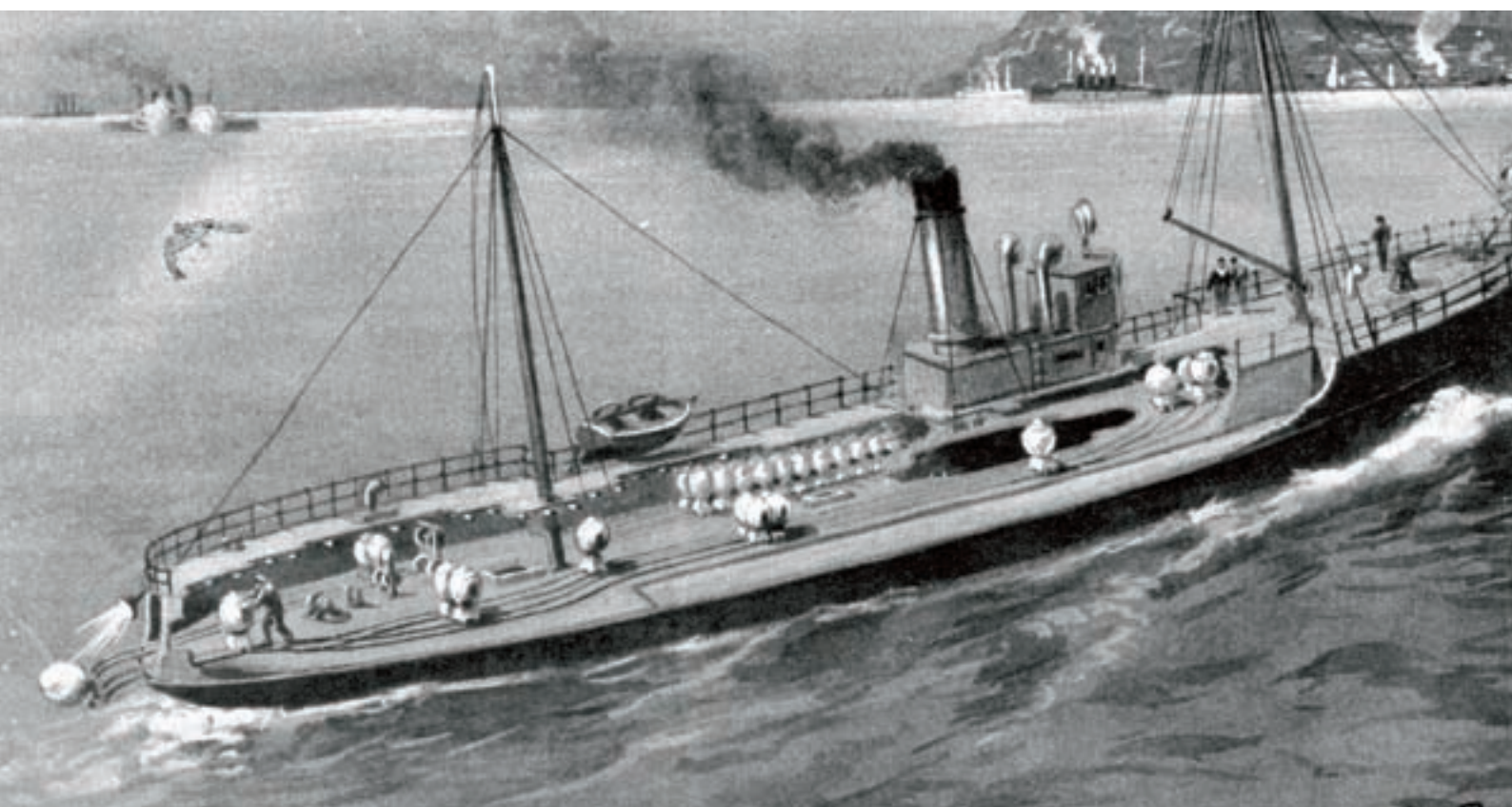
gun, and a small country like Belgium could not afford to keep up with the developments in artillery on ironclads.

Belgium did have fishery protection vessels to maintain authority at sea as well as to exercise certain police powers in accordance with the law of 6 January 1884 and the agreements made with the neighbouring countries. These ships were charged with the duty of monitoring the fisheries activities as well as settling conflicts and giving assistance to fishermen in distress. One of these fishery protection vessels was *Ville d'Anvers* (launched in 1886), a so-called “aviso”. These small but fast boats, equipped with sails as well as an engine, were also used to train both merchant marine and naval officers. One of them, Count de Borchgrave d'Altena, opted to continue his training as a naval officer. The Belgian government asked the French navy to enable him to gain practical experience on one of its warships. Although he was able to acquire experience in France for eleven and a half years, this did not result in an independent Belgian navy.

Yet change was in the air. The technical development of the “torpille” (basically a floating bomb) into the (self-propelled) “torpedo” posed a serious threat to vessels, including the most heavily armoured warships. Floating naval mines also constituted a considerable hazard to ships. Furthermore, these weapons could be deployed by relatively small ships. This meant the end of the period of maritime powerlessness.

On the eve of WWI, Belgium had no navy but it did have a civil administration with maritime competences. The Marine Affairs Administration was not just responsible for the fishery protection vessels but also for the pilot boats and state packet boats of the Ostend-Dover line. By now, the Marine Affairs Administration had recognised the growing threat of war in Europe.

Still they did not consider the expansion of naval capacity, since the Second International Peace Conference held at The Hague in 1907 had extended the laws of war in an attempt to restrict the use of force as much as possible and ensure the safety



■ This German drawing shows how naval mines were laid to block ports (*Die Wochenschau*, 1915)

of civilian vessels (including the merchant fleet). However, the 1907 Hague Convention would not defuse the growing international crisis nor solve the problem of how to protect the Belgian coast.

Armed forces at sea?

Taking a stand against foreign warships

The 1907 Hague Convention made it legally possible to arm merchant ships and convert them into so-called “auxiliary cruisers”, on condition that the crew was uniformed and subject to military discipline. This meant that Belgium would be able to maintain its armed neutrality at sea at low cost and in the relatively short term. This was quite a relief for the government, which absolutely wanted to keep out of a war, and to do so it needed to uphold Belgian neutrality at all costs.

The Marine Affairs Administration did not stand by idly either. Engineer A. Pierrard, senior official at the Marine Affairs Administration, stated in a report dated 25 October 1910 that the state packet boats could be armed with guns. He also proposed to replace the existing fishery protection vessels with ships that had military capabilities. The acquisition of ships and their conversion into minelayers could also be considered. Only through such means would Belgium be able to take a stand against the intrusion of foreign warships in its territorial waters and, if need be, take



■ Charles de Broqueville (*Wikipedia*)

action. This intrusion of foreign warships was a real problem. In the summer of 1913, for instance, French submarines and torpedo boats entered the Belgian national waters several times. The departments concerned in Brussels communicated extensively on that matter. But Belgium did not have any armed ships yet, so all the authorities could do was protest. This created the risk that foreign powers could seize the opportunity to accuse Belgium of not being neutral in reality. In

other words, it could provoke an invasion. That something had to be done was beyond dispute.

Plans of De Borchgrave and De Broqueville nipped in the bud

Since 1909 Belgium had systematically expanded its military force. Catholic politician Charles de Broqueville played a crucial part in this. To get his arms programme accepted, which was highly controversial including in his own party, he combined the role of Prime Minister and Minister of War. He succeeded in considerably extending conscription and thus expanded the land forces significantly. But what about the naval forces? These did not come to the attention of the government until 1913, when the Prime Minister first saw the Pierrard report, three years after it had been drawn up. The threat of war had now increased even further. Could newly-built fishery protection vessels be converted into torpedo boats as a last resort? This was certainly technically feasible, as the French navy had already proved. In addition, two state packet boats could be equipped to serve as minelayers. This would allow Belgium to block the entrance to the coastal ports of Ostend and Zeebrugge. Such an act would send out a powerful message.

The Prime Minister definitely wanted to do something. On 22 May 1914 he dispatched a remarkable report to head of state King Albert I. Its contents were not very reassuring. Belgium had to face the possibility of an enemy landing at the coastal



■ Ostend packet boat *La Flandre* was moored in the harbour of Ostend when the Germans arrived on 15 October (14/18 op Zee, *Belgische schepen en zeelui tijdens de Grote Oorlog*, Freddy Philips)

ports. Moreover, Zeebrugge was important for ensuring the country's supply in the long run, as the neutral Netherlands could close off the river Scheldt. Belgium therefore had to expand its defensive capabilities. In the meantime, De Borchgrave d'Altena had used his maritime knowledge to reinforce the fortifications around Antwerp, but he had more to offer. De Broqueville suggested to the King that a real navy should be

established which would be able to defend not just the Scheldt but also and particularly the North Sea coast. De Borchgrave could be put in command. Yet reality soon caught up with this proposal, launched at the end of May 1914. War was imminent. In early July, the senior officials of the Marine Affairs Administration were informed of the plan to take the best state-owned ships in Antwerp and the coastal ports to safety to

protect them from being commandeered by warring navies. Additional fuel reserves were also built up. The Belgian army started to mobilise openly at the end of July. It was to no avail. The Germans presented an ultimatum on 2 August, which was resolutely rejected by the Belgian government.

An enemy invasion from the east

Stronghold Antwerp

Now it was all hands on deck. Engineers started to build pontoon bridges across the Scheldt, which required vessels. The fortification's garrison included *pontoniers* (pontoon bridge builders) but since April 1903 a *compagnie de torpilleurs et d'artificiers* (torpedo and explosives expert company) had also been available to defend the Scheldt with their artillery and mines. These torpedo and explosives experts had a few small boats with light guns at their disposal. When the German invasion began on 4 August 1914, the Belgian government ensured that part of the Marine Affairs Administration moved to the fortified city of Antwerp. They were still concerned about the coast as the maritime plans had not yet been implemented. De Borggrave had been appointed *commandant de la surveillance côtière* (coastal surveillance commander), but he did not have any means at his disposal, so Belgium continued to depend on foreign support. This became clear when the government enlisted the help of the British



■ The pontoon bridge across the Scheldt in Antwerp in 1914 (Antwerp City Archives)

to defend the Ostend-Dover line after one of the packet boats noticed a “torpille” and was forced to turn around on 6 August. Such explosives could also enter the Scheldt river, carried by the incoming tide. The British government replied that their admiralty could not promise to send a warship to deactivate “torpilles”.

The German invasion force did not attack the fortified city of Antwerp until several weeks after the invasion. When the German artillery systematically eliminated the belt of fortifications in late September, Antwerp soon turned out to be indefensible. On 6 October the King decided to send the bulk of the army to the coast. The pontoon bridges across the Scheldt had more than proved their usefulness by now. Now they had to be destroyed.

The Belgian retreat

The objective was to create a base around the ports of Ostend and Zeebrugge so that the army could regroup. This suddenly highlighted the strategic value of the Belgian coastal ports. But the German pressure was too great. The Belgian army therefore marched on towards the French border, but they failed to destroy the harbour facilities. Eventually, the greater part of the Belgian coast fell into the hands of the enemy. The German advance was only halted in the Yser plain in the second half of October, partly thanks to the rising water.

The Belgian government retreated to the French coastal city of Le Havre. They were joined by a few senior officials from the Marine Affairs Administration, including A. Pierrard. They had a lot of work to do as the Belgian merchant fleet had for the most part escaped from the Germans and numerous fishing vessels were moored in French, Dutch or British ports. As a result, Belgium still had the means to contribute to the war effort against the invading force at sea. However, Belgium waited a long time before it really began to deploy merchant and fishing ships in the war. The decree-law of 2 February 1916 finally regulated the commandeering of ships.

In the meantime, the German navy had bared its teeth. On 12 December 1916, Mr Pierrard informed the minister that 16 Belgian ships had been sunk. It goes without saying that the protection of the remaining freighters was of great importance. He asked whether the Belgian army could place guns and gunners on the ships so that they could defend the vessels against German attackers.

Armed ships

A total of 66 steamboats with a collective tonnage of 180,640 tonnes were still sailing under Belgian flag at that time. Of these ships, 25 were commandeered by the state and 25 other vessels exclusively carried out transports to supply food to the occupied part of Belgium. These ships had to be



■ A torpedo barely misses an enemy ship (Die Wochenschau, 1915)

particularly well protected. The remaining 16 ships were more or less free but they risked being commandeered, as all warring nations were short of transport capacity. Mr Pierrard pointed out that many of these remaining vessels were too small and too weak to cross the Atlantic. Moreover, he was very concerned about the supply of food to the population in occupied Belgium. New steps in the militarisation of the fleet were not to jeopardise this.

In early 1917 he thought there were too few Belgian ships to carry much-needed food supplies to the German-occupied zone. He feared this lack of transport capacity would even be felt after the war. This is why Mr Pierrard sounded the alarm in a memorandum to Minister of Transport Paul Segers on 4 February 1917. He found the scarcity of available tonnage alarming and was convinced that more losses would follow due to the aggression of German U-boats. He hoped that arming merchant ships would help solve this problem, as American merchantmen were also being armed with guns, both on the bow and on the afterdeck. His disturbing statements are hardly surprising. On 1 February 1917 Germany had announced it would engage in unrestricted submarine warfare against

enemy merchantmen and fishing vessels. From then on, the battle against U-boats was an absolute priority for the Allies. Belgium could not stay behind, and the Marine Affairs Administration formally established the *Dépôt des Equipages* (Crew Depot) in early May 1917.



■ The production of torpedoes in Germany (*Marinekorps Flandern, De Vlaamse kust en het hinterland tijdens de eerste Wereldoorlog, Johan Ryheul*)

The Dépôt des Equipages: a thorn in the side of the Marine Affairs Administration

The decision had in fact already been taken in January, when the competent ministers aimed at the formation of a war fleet in addition to the civilian Marine Affairs Administration. This Dépôt was actually a training centre and hub for sailors and had to make it possible to replace crew members of neutral nationality with Belgians, since neutral seamen pulled out en masse now that they risked their lives too. On 3 May 1917, the cabinet of the Minister of War informed the General Headquarters that the Dépôt would also be used for the military training of sailors and gunners who operated the artillery pieces mounted on the ships. The Dépôt was established at Grand Fort Philippe near the small French port of Gravelines. In addition to a staff and training facilities there were two companies of sailors and one platoon of naval gunners.

Cooperation between the military and the Marine Affairs Administration did not go smoothly, however. Their objectives were too far apart. The Marine Affairs Administration wanted to deploy as much cargo ships as possible while the Ministry of War wanted to create naval capacity to protect those cargo ships. This required vessels to be berthed at the quayside for a while so that they could be equipped with artillery pieces. The Marine Affairs Administration found this hard to accept. Mr Cornellie and another officer paid a visit to Mr Pierrard on 26 October 1917. Mr Cornellie had been captain of a packet boat but he was also a reserve officer and now in military service. Both officers informed Mr Pierrard that the command of the Dépôt would be fully transferred to the military.

Mr Pierrard explained the Marine Affairs Administration's point of view: the Dépôt had to be a reservoir of able seamen and only in the second place a training centre for military who would fight in the war. In his view, the military's only task was to provide solid training to gunners and nothing more. He added that recent experience had taught that the gunners aboard Belgian ships were

often insufficiently trained. The military therefore had to set their own house in order first, he thought. Mr Pierrard added that the old fishery protection vessel *Ville d'Anvers* would soon be transferred to Mr Cornellie and was available for training purposes in Calais. The ship had to make it possible to train ship mechanics and gunners in realistic circumstances at sea. Mr Cornellie knew *Ville d'Anvers* very well since he had served as an officer on the ship. However, the Marine Affairs Administration continued to demand that the captain and the chief mechanic would be answerable to the civilian administration.

The Marine Affairs Administration wished to reduce the influence of the military as they feared that the ships would otherwise also be deployed for the Allied war effort. This could provoke a German reaction that would threaten the supply of food to occupied Belgium. Mr Pierrard therefore wanted the Marine Affairs Administration to keep in charge of the deployment of Belgian vessels. In his opinion, the Ministry of War was in the wrong position to act in this delicate matter. This conflict no doubt delayed the development of naval power. Mr Bultinck, a colleague of Mr Pierrard at the Marine Affairs Administration in London, felt differently, however. He was in favour of close cooperation, even with the navies of the Allies.



■ A typical 75 mm gun mounted on a pedestal from 1916. Many merchant ships were equipped with this type of gun (*14/18 op Zee, Belgische schepen en zeelui tijdens de grote oorlog, Freddy Philips*)



■ Torpedoes carried a very heavy explosive charge but could be launched by relatively small vessels. This is how German propaganda illustrated the operations of the Flanders Flotilla in the Channel (*Die Wochenschau*, 1915)

Gunners on board

Mr Bultinck had seen a report (dated 19 November) by M.C. Simon, former captain of the port of Bruges. In this report, Mr Simon asked whether the virtually inexistent training of captains was the cause of the heavy losses inflicted on the Belgian merchant fleet. British experience had shown that well-trained captains had a 95% chance of escaping from an approaching German U-boat. He did not beat around the bush and recommended the British training course to the Union of Belgian Shipowners, established in London. He also found an audience on the Continent. In December the Ministry of War decided to have eight officers of the *Dépôt des Equipages* take the British course. Only two Belgian captains had been given this opportunity in the past, and those two had convinced Mr Bultinck. Now the Ministry of War agreed.

Mr Pierrard came round, as the gunners came under the command of the captain. The training course would improve the command and thus increase the captain's authority. He also approved of Bultinck's efforts to have the captains of the state packet boats take

the course. After all, the training course only took four days. The Cornellie report on training dated 23 February 1918 especially highlighted the usefulness of practical demonstrations at sea. This involved a U-boat attack and target practice with a naval gun. There were only three gunners on board so the civilian crew also had to help operate the gun and keep watch. Every participant in the course could fire six rounds at a moving target at sea in practice. Civilian naval officers were taught how to operate the gun as well. They even went aboard a submarine. The training course was short yet intensive and had a very practical focus.

It also made clear that many people aboard the Belgian ships were insufficiently familiar with naval guns. So this training course came not a moment too soon. Yet the deployment of naval guns also had disadvantages. Direct-fire artillery pieces could only be used against surface-running German submarines that intended to use their gun. This was indeed the usual strategy if no warships were nearby. But what if the attack came from a submerged submarine that intended to use torpedoes? Did the latest developments in the field of artillery

make it possible to solve this problem? This is where Belgian engineer and officer Van Deuren came in.

A mortar against U-boats?

Pierre Van Deuren had worked on the development of a simple mortar for a long time. It had to provide the front-line infantry with the necessary power to destroy opposing German positions. He also saw possibilities in the war at sea. Experience had taught that a German U-boat could do serious damage with her gun if she was able to approach within one kilometre. This was exactly the distance at which the Van Deuren mortar could be fired efficiently.

But how was this done? The high-arching ballistic trajectory of the finned mortar round made a direct hit on the submarine virtually impossible. But this was largely compensated by the fact that the mortar bomb contained a much bigger explosive charge than the shell of a direct-fire gun. Van Deuren devised an explosive charge of 30 to 50 kg. An impact within 50 to 100 metres from the submarine was sufficient to give the



■ Thanks to the large stabiliser fins, these mortar rounds held a steady course over their trajectory (Luc Vandeweyer)

enemy a good shaking. The U-boat would certainly be hindered in her attack operation, especially if the finned bombs came down on the sea surface in quick succession. If a submarine was bombarded in this manner, there was a good chance that the attack would be aborted.

In addition, firing a mortar from a boat was much easier than firing a gun. As the launch tube was always set at 45 degrees, less expertise and training were required to operate it. Van Deuren claimed he would be able to arm a thousand ships in three months. But his mortar had to be tested first. This took place in close collaboration with the French navy in the summer of 1917. A mortar was fired from a ship at a demarcated area of 75 metres by 25 metres, 700 metres away on a beach east of Calais to see where the bombs would fall. Rounds were fired both in calm and turbulent conditions to determine the precision of the shots. Everything worked properly during the tests. The precision of the mortar at sea was comparable to that on land, so they were on the right track. During a test in turbulent conditions the operators achieved very reasonable results in terms of accuracy, even though the boat was rolling a lot. The assessment committee also had a 47 mm naval gun tested. On comparison, the mortar turned out to perform much better. Moreover, the finned bombs made it possible to hit submerged U-boats from the moment their periscope was detected. This was not feasible with a regular naval gun.

Too late, the war was over

It took too long for the mortar to become operational on board the Belgian merchant fleet. In the meantime, the tide had turned on the western front. The summer of 1918 heralded the decline of Germany's military might. An armistice was signed on 11 November. The war was over, but it was not until 11 April 1919 that a memorandum followed which allowed the gunners to leave the merchant fleet, mainly because the freighters were no longer commandeered. In addition, the peace negotiations in Versailles progressed well and it was clear that the German navy no longer posed a threat. Now that all hostilities had ceased, what was to be done with the built up military capacity at sea?

Belgium had lost a large part of its merchant fleet, but at least the development of a Belgian navy had started. Was Belgium able and willing to expand its naval power in the coming peacetime as well? It certainly was within the bounds of possibility, if only because German warships were made available after 11 November 1918. But the Belgian authorities did not wish to invest in this after an international détente set in 1925. The option of a navy was discarded again, yet this would be only temporary, as history has shown.

Sources

- Lists of ships sunk and crew members killed can be found in *Onze helden, gestorven voor het vaderland, België's epische strijd van 1914 tot 1918*, Brussels 1922, p. 226 and 229-230.
- The first attempted historiography of the development of military power at sea is: Louis Leconte, *Les ancêtres de notre Force navale*, 1952.

In the meantime, a lot of records have become accessible, partly to be found in the files transferred by the army's historical service to the documentation centre of the Royal Army and Military History Museum. Another part is located in the Belgian military archives, which were first confiscated by the German army and then by the Red Army, and can now also be studied in the Royal Army and Military History Museum.

The archives of the Marine Affairs Administration located in the Belgian General State Archives are also very important, especially files 8001, 8002, 8010, 8008, 8033-8044.