Operating a research vessel & cruise planning

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Vlaams Instituut voor de Zee vzw Flanders Marine Institute

Ship operations

- Crew: master, navigator, sailor, engineer
- Maintenance & Repair
- Insurances, harbor&pilot taxes, certification/inspection,
 shore staff, food, telecommunication,....

Science operations

- Calibrations, Insurances, M&R
- Technicians



Safe Manning

Master, 1st Mate, Boatswain, 4 deckhands, 1 chief engineer, 1 motorist, 1 engine help

- Maintenance & Repair
 - Continued & Regular maintenance
 - Dry docking (certification, hull cleaning, major m&r)
- Insurances: Hull & Machinery, P&I, casco, accident coverage
- Other costs: Food & fresh water, Communication, crew related costs

- Dedicated crew with ownership
- Good relationship with the crew is paramount



Crew: 50-60% FIXED

Fuel: 20% VARIABLE

Maintenance & Repair 20-30% VARIABLE

Other costs: 10% FIXED & VARIABLE

Use Daily rate or Cruise rate for budgetting

Science Operations Simon Stevin only a bit lower than ship costs



Be a member of a global community

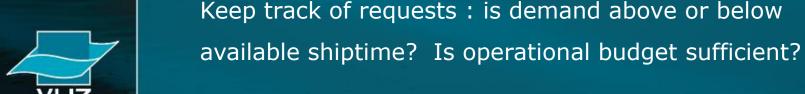
International Research Ship Operators IRSO International Marine Technicians InMarTech



Setting up a Cruise Schedule

Send out a call for shiptime on a regular/yearly basis

- Who?
- What & Why?
- Tools needed?
- Where?
- How many days? What period?
- How many people?
- Any special conditions?
 - Seasonal/Tidal requirements?
 - Day Night?
 - Foreign waters? > Dipclear requests





Setting up a Cruise Schedule

- Offer time at sea at certain locations and ask for participation
- Allow downtime for regular maintenance
- Look for partnership in using costly shiptime
- Carefully select the Principal Investigator / Chief Scientist



Cruise Planning

- Does the Research Proposal include shipcosts?
- Is my idea feasible; technical & operation wise?
 - Know the area
 - Know the ship (draught, cruise speed, winch capacity)
- What & where
 - determines time at sea
 - Transit times & fuel consumption
- Aim for multidisciplinary campaigns



Cruise Planning

- Send a detailed day-to-day planning to the RV operator beforehand so that a carefull planning is possible and the crew is very much informed on what is expected
- A detailed planning includes mobilisation, transit times,
 work at stations, sailing survey lines, demobilisation.
- Have a competent science party
- Have a technician onboard if possible
- Plan as if the cruise will encounter no issues
- Don't plan too much, have clear priorities and take technical failures & foul weather as certainties
- But also for unexpected observations



Cruise Reporting

- Not later than one month after the cruise
- Includes track, stations visited, samples obtained, observations made, data collected, problems encountered, achievements made.
- Will be used to
 - archive ship activities
 - reporting in case of dipclear
 - Documenting for future cruises
 - Situational description for analysis of results

