

**National Research Vessel Task Team
Meeting – June 18, 2020**

Last updated: February 18, 2021

Present:

Douglas Bancroft, CSSF
Douglas Wallace, MEOPAR
Rodrigo Menafrá, MEOPAR
Bridget Graham, MEOPAR
Richard Dewey, Ocean Networks Canada/University of Victoria
Guillaume St. Onge, ISMER
Erin Bertrand, Dalhousie University
Casey Hubert, University of Calgary
Philippe Tortell, University of British Columbia
Feiyue Wang, University of Manitoba
Anne de Vernal, UQAM
Greg Cutter, Old Dominion University
Suzanne Carbotte, Colombia University
Clare Reimers, Oregon State University
Jennifer Vollrath, DFO
Alexandre Forest, Amundsen Science
Rachel Sipler, Memorial University
Calvin Campbell, NRCAN on behalf of Daniel Lebel on behalf of Stephen Locke
John Jamieson, CCOD and Memorial University of Newfoundland
Melissa Anderson, University of Toronto
Marcel Babin, Takuvik International Research Laboratory (U Laval & CNRS) and Amundsen
Science
Paul Myers, CNC-SCOR
Jay Cullen, University of Victoria
Rachel Chang, Dalhousie University
Erik Lapointe, Reformar
Adrian Schimnowski, Arctic Research Foundation

Absent:

Liz Boston, NSERC
Carey Ryan, Nova Scotia Offshore Energy Research Association
Philippe Archambault, ArcticNet
Kent Moore, University of Toronto
Geoff Green, Students on Ice and C3
Mark Hannington, GEOMAR
Erin MacNeil, DRDC
Aaron Plamondon, Irving

Idea of a partnership between Canada and France for shared ship time presented by Alexandre Forest and Marcel Babin: Doug Wallace introduced Alexandre Forest from Amundsen Science. Below is a summary of the questions that were asked after Alexandre finished his presentation.

Question from Greg Cutter - The Pourquoi Pas is very expensive, so much so that they can't use it. Is the Amundsen that expensive (fuel would be my guess as the biggest cost)?

Answer: The Pourquoi Pas is cheaper than the Amundsen.

Question from Greg Cutter – Whose sampling equipment like CTD/rosette and multi-corer do you use?

Answer: Double the time that you use the ship, multi-national collaboration with the French. The French could get the equipment from the CNRS, that would not be a problem.

Question from John Jamieson – What is your definition of North Atlantic?

Answer: Very unclear, French ships are in the North Atlantic, but not often in the North Pacific (even though they are in the Pacific). There are Canadian ships in the Arctic, and there is a clear appetite needed from the French community. This is not geographically constrained, but it is financially constrained. This has even been discussed in the Antarctic.

Question from Erik Lapointe – What about being auto-sufficient ourselves?

Answer: Even if Canada is auto-sufficient, we would still pursue this sort of opportunity. Increased opportunities are so great, this is the way to go in the future. It is the Decade of the Ocean so we need to pursue those initiatives. Doug Wallace noted that this was a valid point from Erik.

Question from Richard Dewey – Have you had discussions with CFI yet?

Answer: CFI Perspective – increasing amount of science on the Amundsen, even outside of our mandate – the facility is fully used, CFI discussion – fully open, program that Canada would like to sustain over time

Marcel – Increase science on the Amundsen, which is helping the Atlantic community get more ship-time

Question from Suzanne Carbotte – How undersubscribed is the Amundsen?

Answer: Huge contraction in the oil industry, vessels being moth-balled, might want to look at purchasing a ship to develop fleet capacity. The Amundsen has been oversubscribed for a number of years, ArcticNet was almost fully taking advantage of the ship time, developing this over time, more diversity is good over time.

Question from Doug - How much of Amundsen time will the French community want to access?

Answer: we will see at the beginning, if we have one major project every second or third year. A major project - one or two legs, will enable significant progress in offering this opportunity.

This will stimulate a lot of cooperation. It will not be 25% of ship-time. Doug Wallace mentioned that Canada needs to address other options.

Comment from Philippe Tortell – All in favour of international collaboration, trading Arctic and Atlantic capacity, hiring a lot of young people, capabilities in other regions – not going to have a significant ocean impact in the Arctic

Question from Philippe Tortell – just the Amudsen or other ships as well?

Answer: CGC is nervous about allowing other ships, this could be other options in the future – the Laurier could be suitable for a given mission, more work to be done.

Question from Rachel Sipler - Do you envision there to be "banking" options for the points system or would this need to be balanced on an annual basis? Keeping in mind funding cycles, emergency response, etc...

Answer: We would like to change this, we are constrained so much in Canada – we need to have discussions with CFI and NSERC – ability of ship, different system in France, believe that we have no other choice than changing the system – already discussed with NSERC – more efforts to be made – good voice to change that.

Comment from Jen Vollrath – Broader community feedback, here from the feds, status quo is no longer an option, looking at developing a collaborative agreement with the French – in theory there would be support to help with global stewardship of the ocean – interesting to see how the networks are coming together.

Response from Alexandre: Same page on the status quo, take a bite at a time, one step at a time, big collaborative agreement – really big thing at the beginning, simple things, simple agreement (FOF and Amudsen), portal small and then large, explore first, case by case

Jennifer – This does not have to be complicated, develop opportunities within Canada. With each small step we move in the same direction.

Feiyue Wang said that this was great initiative, Arctic capacity – lack of funds to fund full campaign

Paul Myers shared a comment about students and networks of students

Comment from Melissa – Calls for Open Berths on these Canadian/French Cruises

Roundtable News Update: Doug Wallace asked everyone to share any news.

- Jay Cullen – Not a lot to report, clean water sampling
- Doug Bancroft – Nothing to report.
- Clare Reimers – Oregon, US Vessel front – building three vessels (West, East, Gulf), anticipated that the first one will be available in May 2022, operations starting a year later (regional class – 199 feet, 16 scientific 13 crew)
- Richard Dewey – Institute of Ocean Science – water properties website changed to new ship request website, entire new website to request Coast Guard Vessels

- Jennifer Vollrath– Canadian Ocean Infrastructure Portal – this will help understand what the supply and demand is in Canada – DFO monitoring trends, what do we actually need to accomplish scientific objective?
- Richard Dewey noted that you must be a federal employee to have an account – Co-PI could be make edits, bit more restrictive for academics // Tully cruise – 2 weeks of Tully time – valiant effort – 12 hours operations 1 person per cabin, food in cabins – only 8 scientists – keep some activity going
- Paul Myers – Letters of Intent Frontiers Transformation Program, how to fit that into budget and timing – on-going coordination – French/Canadian cooperation
- Feiyue Wang – Churchill Marine Observatory currently under construction but near competition, heading there in early August
- Adrian Schimnowski – William Kennedy – cancelled due to COVID-19, next meeting in Sydney BC, 2 mooring retrieval, easy to work around COVID-19 restrictions, the government of NWT has a 20 year agreement – 1 month sea trial last October, July 15-October 1 Great Slave Lake – sail the Mackenzie River and the Arctic in the future, Martin Bergmann and Jenny Pierre – operations shut down – dry dock – operations next year
- Jay Cullen - Coast Guard changed their cost recovery model in 2019 and this information was not communicated directly to research scientists. Went from 100% fixed cost 100% voyage cost to NSERC to 50% fixed and 100% voyage. Diminished cost. Impacts planning and proposal budgets -information did not filter down
- Jennifer Vollrath– return to field operations, very busy times, hydrographic work, safe navigation – working close with coast guard
- Calvin Campbell noted that they have lost some time
- Melissa Anderson – Western Pacific – collaborations with Americans and German – create proposal – training a bunch of students – will have focus on getting them to sea
- Erin Bertrand – OFI project biological pump in Labrador Sea – lack of ships in Canada – relying on German cruise due to COVID-19 – bumped to 2022
- Doug Wallace & Erin Bertrand – MORI idea – money for industry with OSC – EOI – led by Humboldt Industries – was not approved in EOI phase – chance to move forward to build some labs
- John Jamieson– one project going on right now on the East Coast, using private company and the ship that they have leased – West Coast cruise fund the Falkor? A lot of research not on Canadian research vessels – putting together STAC proposal on the Tully – trying to get ship time
- Rachel Sipler– OFI project that was funded that was time on Parks Canada – R.V. David Thompson working with Nunatsiavut to see if can go north.

Discussion about possible Research Tools and Instruments Grant Program (RTI):

Present: Erin, John, Jay, Adrian, Rachel, Paul, Richard, Rachel, Melissa, Casey, Philippe, Doug1, Doug2, Rodrigo

The deadline for this submission is in October. The idea is perhaps to purchase as many as two containers as mobile infrastructure to move on and off of ships. The RTI grants are for

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\$150,000, so the proposal would have to be mindful of that, although there may be other outside contributions.

Erin Bertrand:

- Containers that would have a winch and CTG, and then a clean lab for trace metal work, industry
- Who would own these items? Everything is meant to work as a system – West Coast, East Coast, and North

Doug Bancroft:

- Cold rooms, H2S containers, labs for atmospheric chemistry. Sophistication does not have to come from the box – could be on the box – very sophisticated laboratories
- Atmospheric chemistry and geochemists if infrastructure could be jointly used – bring communities together
- Get information from Coast Guard and Navy – AOPS will not be ready to use for like 4 years
- MORI Vessels to be used on ships like the Condor – designed to use labs for collaboration. Ships not equipped for science

Jay Cullen:

- Moving container between ships causes grief – might have to go into the deck and weld, power and voltage might be different – internal consistency we could make that happen

Philippe Tortell:

- Is that a big enough problem – one or a few containers – is that impractical?

Jay Cullen:

- We have to be realistic – there has to be some thought on refitting them

Doug Wallace:

- Power condition part of that – water/power/communication, part and work as a system

Doug Bancroft:

- Level of flexibility of MORI to move to other ships – issues on sea containers – how water and power are brought to ships are issues – if you are flexible and if it is built for one ship you can likely use it on another

Philippe Tortell:

- We need another meeting, other things to get us going – 1 research questions that we can address (sensors, use, deployment, questions to ask), 2- cost for these things 2 is what we can afford – West/East coast, quotes and what's possible – half a page of context – in order to advance science and oceanography equipment at sea, bringing regions in the country – power, water supply

Doug Bancroft:

-Clare might be sitting on some design labs – add to Google Doc

