

Communiqué

Marine National Facility Steering Committee

Meeting #96 and #97

The 96th and 97th meetings of the Marine National Facility Steering Committee were held in Hobart on 13 July 2023 and 17 November 2023 respectively.

Message from Steering Committee Chair – Dr Sue Barrell AO

The 97th meeting of the Steering Committee marks my final as Chair and I look back with pleasure at what the Marine National Facility (MNF) has achieved over the last 5 years. It has been a time of enormous change and challenge.

We developed and introduced a new strategy to ensure we maximised the use of the facility for national benefit while continuing to deliver world class science outcomes. With the guidance of the Steering Committee, the MNF team introduced and progressively improved the operational support systems that our science and scientists benefit from, which spanned ship-time applications through to robust health and safety systems. Operating a vessel of the size and complexity of RV *Investigator* (RVI) and delivering a 300 day/year science program are challenges in themselves, but COVID threw an additional, unexpected and very complex spanner in the works.

Throughout it all, the spirit of the MNF team and voyage participants remained high and excellent science and national benefits have been delivered. With safety the number one objective, especially as we navigated COVID, it was challenging at times to keep all of our stakeholders satisfied, but every effort has been made to remain collaborative and to communicate the reasons for operational changes and to ensure the approved program of voyages was delivered. I congratulate everyone involved and, at a personal level, express my thanks to the members of the Steering Committee for their contributions and to the MNF team for their immense support.

Carbon Offset and Reducing Emissions

The Steering Committee noted that, while RVI continues to provide a world class platform for marine research activities, it also faces the challenge of working towards carbon net zero targets. While alternatives to marine diesel fuel are emerging, for example green ammonia, the use of carbon emission reduction strategies and carbon credits for residual emissions will be required.

Importantly, the introduction and use of the Marine Facilities Planning (MFP) System (previously MAPS) provides the MNF with a powerful tool for a full carbon accounting across our logistics supply chain, as well as ship fuel burn calculations. The Steering Committee is supporting the MNF

as it explores opportunities to reduce emissions through fuel burn savings. One option being explored is an adjustment to RVI's standard cruising speed, which has the potential to significantly reduce fuel burn. This work is ongoing and updates on collected data will be presented in a future communique.

MNF Restructure

Steering Committee congratulated CSIRO on the recent finalisation of a thorough workforce and capability review. This aimed to ensure that the MNF has the right people, capability and leadership to safely and effectively deliver our business objectives now and into the future. As a result, a workforce restructure was undertaken, and new capabilities have been added to support the technical delivery of voyages. New capability has also been added to key support services such as risk safety and compliance. These additional elements will help ensure the continued safety and effective use of the research platform.

Sydney Open Day

The MNF in partnership with Australian National Maritime Museum, delivered its first public open day since 2019. The event was a huge success with members of the Steering Committee also attending. This free event was fully subscribed at over 1000 registrations. Feedback from the public and stakeholders was incredibly positive, and it is pleasing to see that these types of engagements are starting to come back into the event calendar for RVI.

RVI 100 Voyages

The MNF celebrated its 100th voyage in September 2023 with a very fitting Hobart-Sydney voyage allowing the public of its home berth to be present for a send-off supported by TasPorts. The Steering Committee congratulates the MNF on this significant milestone and notes it is well positioned for the next 100 voyages. To recognise this milestone, the MNF shared a map that shows the 100 delivered voyages.



Operated by CSIRO, Australia's National Science Agency, on behalf of the nation

WorkSafe Tasmania 2023 HSE Awards

Steering Committee was very pleased to see the excellent results the MNF achieved during the 2023 WorkSafe Tasmania HSE Awards ceremony, held in Tasmania on 3 November. It is very pleasing to see the MNF awarded the prestigious Leadership Excellence Award, which recognises outstanding leadership in HSE across several key areas:

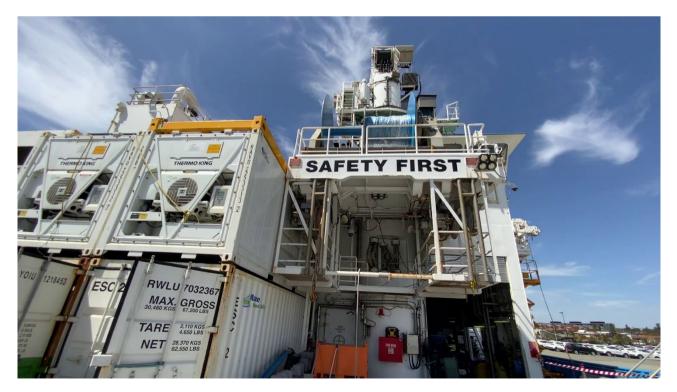
- Fostering a positive safety culture
- Commitment to continuous improvement
- Engagement through participation and collaboration
- Commitment to sharing information and consultation.

This is a great achievement and recognised the continuous efforts to evolve and improve the way safety management is delivered in a complex and challenging operating environment.

Coastal Vessel Partnership

The Steering Committee is highly supportive of the MNF partnership with South Australian Research and Development Institute (SARDI) to trial the utilisation of the MNF Governance framework and Committee led application of assessments for the scheduling of its southern coastal fleet. This type of partnership helps deliver better outcomes for researchers and efficiencies for funding agencies and operators. Both the 2023 and 2024 application rounds for SARDI have been managed through the MNF framework with efforts underway to incorporate the activity into the Marine Facilities Planning system.

Voyage Medical Review and Medivac Lessons Learnt



The Steering Committee noted the significant complexities involved in managing incidents at sea and commended the MNF in their response to recent incidents. To benefit ship user awareness and understanding of what is involved, the Steering Committee asked the MNF to present a case study on the management of medical emergencies at sea, drawing on the experience from the Antarctic voyage earlier this year.

Medical Emergency Management in Remote Locations

During several 2023 voyages, our MNF team responded to voyage participant medical issues that occurred on board. The Steering Committee commended the MNF team for their excellent management of these issues in what is a challenging and remote environment. The professionalism shown in these situations by our MNF staff, crew, and of course our health care practitioners on board, showcases the team's dedication to the health, safety and wellbeing of all participants.

The MNF take a range of measures to ensure the health, safety and wellbeing of those onboard who travel and work onboard RVI in such environments. These include:

- All potential participants on remote area voyages undergo a detailed medical assessment that includes full physical, dental, pathology and radiological assessments. The medical aims to identify, assess and manage potential risks from pre-existing medical conditions and risk factors prior to participants even stepping onboard.
- All remote area voyages include a qualified remote area doctor and a nurse or paramedic on board RVI to provide specialist medical care. The medical team onboard are supported by 24/7 telemedical resource and can access specialists from major hospitals.
- RVI has diagnostic and emergency care equipment in the ship's operating theatre, and a range of medications are maintained on board.

Despite these additional resources for remote area voyages, it is still likely that any serious medical emergency will require the ship to return to port to seek advanced medical care for the patient. It should be noted that the primary purpose of the onboard facilities and medical team is to get a patient back to advanced care safely, rather than to provide a capability for advanced medical procedures at sea. This would always be a last resort and only where a significant risk is posed to the patient without immediate medical intervention.

Upon the emergence of a medical emergency or other serious incident, an emergency response is initiated by CSIRO and onboard and onshore teams are stood up. This response can involve standing up multiple levels of response depending on the nature of the emergency. These teams then follow a pre-prepared plan that ensures the response is conducted methodically and effectively.

Following a serious incident with a medical evacuation, the team will conduct a review and capture any lessons learnt to determine what could be done better or avoided completely.

Effective communication is critical in any issue or incident management situation and there are always improvements to be found in this space. The MNF is continually working to review its approach to identifying and communicating responsibilities of the MNF and its partners under the *Work Health and Safety Act* Person Conducting Business Undertaking (PCBU) framework.

Voyage Medical Review

In recent months the MNF has worked closely with their medical service provider to conduct a review of the marine medical assessment standards and clinician onboarding processes. Though the process has not been fully finalised, Steering Committee is pleased that continuous review and improvement of these key systems is applied, to ensure delivery of high levels of medical risk management. The review has incorporated external, independent assessment of the standards to achieve a safe and balanced approach to the assessment. As part of this process several key changes supporting medical equipment and medication tracking and management have been implemented, as well as a new process for the effective onboarding of clinicians is being rolled out. The Steering Committee has a strong focus on safe operations, and it is pleasing to see the changes taking place as lessons are learnt and applied.

Ship Management Contract

The Steering Committee noted the significant milestone of the signing of a new ship management services agreement for RV *Investigator* with MMA Offshore Limited on 24 August 2023.

The Steering Committee extended its thanks to ASP Ship Management for their 10-year partnership with CSIRO which has resulted in the delivery of excellent marine research to benefit the nation, and which included commissioning and bringing RVI into service.

Looking forward, the Steering Committee have great confidence that the partnership between CSIRO and MMA will continue building on the successes to date. It was noted that MMA have extensive experience in successfully and safely managing vessels for diverse operations and are well placed to make a strong contribution to the MNF mission.

Midlife Refit

The Steering Committee noted with interest the upcoming midlife refit (MLR) of RVI planned for August 2024. This activity will ensure the vessel maintains compliance with all relevant International Maritime Organisation codes and conventions as part of the five-year survey cycle of drydocking. Furthermore, the MLR will deliver an exciting range of modifications and upgrades to the ship and its science systems in preparation for the next 10 years of operation.

In particular, the MLR will include major servicing and upgrades to ship operating, safety and integral science support systems. MNF is developing a detail MLR scope of work to ensure the RVI remains a world-class research platform through to its programmed end-of-life in 2039.

NCRIS Funding Outcome

On 19 October 2023, the Federal Department of Education announced the recipients of its 2023 National Collaborative Research Infrastructure Strategy (NCRIS) Grant Program which supports funding of national research infrastructure and facilities, including the MNF.

The MNF received \$59.3 million over four years to fund the facility to 2026-27, which includes capital funding to support investment in new technologies and funding for RVI's very important

mid-life refit in 2024-25. However, this is less than what's required for full year operations of the vessel, so our MNF Leadership Team is currently assessing how this might impact our future voyage schedules. We will keep our community informed once we know more.

Committee Membership Changes: farewells and welcomes

Steering Committee membership

The Steering Committee farewelled National Marine Science Committee (NMSC) ex-officio member Kim Picard and wished her well as she moves on to a new opportunity overseas. The Steering Committee also welcomed Dr Michele Allan AO as the new CSIRO Board representative on the Steering Committee. Steering Committee meeting #97 was also the final official meeting for the current Chair, Dr Sue Barrell AO who has served the committee in this capacity for two terms. The CSIRO Board is in the process of identifying and appointing a new chair to take over this role, so wonderfully filled by Sue in recent years.

NBAC and RAC membership

The Steering Committee welcomed new members joining the MNF sub-committees in 2023: National Benefit Advisory Committee (NBAC) and Research Advisory Committee (RAC). Both committees are currently undertaking a review of applications for sea time on RVI received for 2025-26.

Joining the RAC are A/Prof Jochen Kaempf and A/Prof Patti Virtue AAM. Joining the NBAC are Mr Peter Cochrane (chair), Mr Rhys Arangio, Dr Lyn Goldsworthy, Ms Emily Jateff and Dr Chels Marshall.

The Steering Committee also thanked and farewelled Dr Jo Mummery and Dr Clinton Foster from NBAC following their two terms of expertise and support.

Dr Sue Barrell

Chairperson, MNF Steering Committee