

## MMHN Opportunity 5

### Re-imagining Maritime Skills Delivery in Victoria

MMHN Special Advisory Group: Maritime Skills, Education & Training MMHN

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It became clear to MMHN that causal factors such as the looming maritime skills shortages, the paucity of training opportunities in Melbourne and regional Victoria, absence of awareness of maritime career options and ill-informed decision-making by government, constituted a serious threat in the long term to Australia's national maritime capability. The consequences of this atrophy or depletion in state and national skills capability would be dire in the long-term for the economic prosperity of this island nation. MMHN adopted advocacy around maritime skills as a Key Objective. Advocacy in relation to maritime skills capability would be national and the funding stream for such training would be on a local, state and federal level.

This threat to Australia's national maritime capability has led to a re-think in relation to maritime training - on and off-shore. Much has happened subsequently to sharpen the focus on the acute national deficit in relation to maritime skills and training. This deficit constitutes a threat to Australia's national security and economic future. This has now been acknowledged by relevant national, state and industry bodies.

The COVID lockdown has clearly demonstrated that Australia, as an island nation, is utterly dependent on sustaining a strong maritime skills base to support the multi-faceted maritime industry sector on and off shore. Trained seafaring expertise is crucial for the sake of our economy and our national security.

Training decisions are being made based on multiple agendas – political, economic and in relation to Victoria, in particular, a TAFE system which is internally competitive, non-collaborative, risk-averse, directed ostensibly by industry demand – even though the mechanism for determining industry demands is acknowledged as inadequate. Decisions are not being made in response to national needs at all. Conditions have changed, policies need to change and key organisations within the TAFE sector need to respond to global change.

#### MMHN Response

Discussions with key stakeholders within local state and national education institutions and industry informed MMHN understanding that the path towards addressing the 'deficit' needed to be multi-faceted. Although maritime skills deficit is a national problem, MMHN argues that Victoria appears to have been tardy in formulating an effective response to the growing problem. Acute skills shortages across the maritime industry sector loom large.

## Maritime Skills Institute

Noting the absence of maritime industry training in Melbourne, Australia's major southern port city, MMHN initially focused advocacy on the establishment of a singular solution to the training 'deficit' – i.e. establishment of a Maritime Specialist Maritime Skills Institute in within Kangan TAFE at Docklands.

In collaboration with Offshore and Specialist Ships Australia (OSSA), MMHN has subsequently identified other actions and reforms which may address the deficit in the critically important national maritime capability. Regrettably, the breadth or scope of relevant skills training within the maritime industry today is poorly understood. For example:

- Advocating that decision-makers grasp the inter-related skillset elements within the Maritime Industry Sector (on-shore & off-shore) and the way this intersects with careers education, training and skills delivery, accreditation, permits and certification, marine technologies, and environmental, recreational boating, cruise tourism, specialist shipping, ferries and water transportation, coastal freight, logistics, stevedoring, extraction, aquaculture, the marine environment etc. etc.
- Advocating different and more flexible delivery models in the 'thin', training market across Victoria, e.g. collaboration opportunities rather than competition among those delivering maritime sector educational resources (TAFE, RTO's, AMC, AMSA, Universities and the RAN).
- Advocating wider industry collaboration among maritime industry organisations.

## Young People - Critical intervention

MMHN recognises that the path to addressing the national training skills deficit is multi-faceted and a 'long-game'. The engagement of young people is the critical intervention trigger. On the macro and micro level, MMHN aspires to:

- Grow awareness about careers in educators and students in the Maritime Industry (ashore and afloat), e.g. The OSSA Schools/CEAV Program (38 schools currently participate) liaises with relevant organisations including, sea scouts, yacht and boat clubs etc.
- Facilitate work placement and mentoring opportunities for maritime training (which may or may not include sea-time).
- Convince government to recognise the strategic importance of developing an Entry or Introductory Level Certificate course in Maritime Operations with support from both AMC and RAN.
- Convince the State government that, in relation to maritime training, the current TAFE model for 'demand driven' decision-making is simply not applicable. Determining skills 'demand' is an inherently problematic concept because TAFE delivery decisions are 'demand driven'.

There are clear areas of concern:

- Given that maritime careers options are poorly understood or have not been promoted for decades, student led demand is suppressed.
- Given that industry has for decades been recruiting cheaper foreign seafarers, demand is a theoretical concept.
- Demand re blue-water maritime training is markedly different from on-shore maritime career options.
- Accurately assessing maritime skills demand is a difficult as well as protracted exercise – and there is little time to overcome decades of apathy. Australia's predicament is acute.

## The tide is turning re Australia's has a maritime skills deficit

### Australian Industry Standards

April 2018 Executive Summary extract

*“The Maritime industry is an intrinsic part in the Australian economy in the provision of importation and export of goods, as well as tourism and other value added activities. The Australian Maritime industry has estimated annual revenue of \$5.76 billion. Over 95 per cent of Australian exports are carried by sea and 10 per cent of the world's cargo passes through Australian ports. The Maritime industry will continue to face increased workforce pressures, including competition from skilled international workers competing for local jobs and access to training. The ageing workforce is also a continued area of concern. Succession planning will be vital to maintain a robust and sustainable industry into the future.” See:*

[https://www.australianindustrystandards.org.au/wp-content/uploads/2018/07/DRAFT-Maritime-Skills-Forecast-2018-Final\\_v2.pdf](https://www.australianindustrystandards.org.au/wp-content/uploads/2018/07/DRAFT-Maritime-Skills-Forecast-2018-Final_v2.pdf)

**February 2020** - Two years on, the federal government officially endorsed the Maritime Skills Training Package, see <https://training.gov.au/Training/Details/MAR>

**2019 Boating Industry Association** (Victoria) Recreational Boating peak body undertook recreational boating industry training needs assessment.

### Maritime Skills Training in Melbourne

- Given the size and growth of the boating industry in Victoria, the paucity of maritime education and training in Melbourne is inexplicable. There is an opportunity to consolidate what marine training occurs in Melbourne and readily expand the scope of training offered without any significant investment.
- An unmet need appears to exist for training in the recreational boating industry e.g. marine engineering and electronics, small boat building, sail making, electronics repair skills, heritage boat restoration etc.
- Delivery of marine technology, marine services and related training courses will enhance Melbourne's credibility as an international port city, will activate Docklands and will support the recreational boating industry, which is a major economic driver in this State. Training in the Docklands area will encourage watercraft-based employment of all types (e.g. tourism, ferry transport, recreation boating, shipping). Increased numbers of students and staff will generate economic up-lift for Docklands.

### Maritime Training delivered elsewhere in the State

- Victoria University no longer delivers maritime training
- Kangan deliver some maritime electronic training and fibre glass training
- GoTAFE in Werribee offers some small boat courses
- Chisholm Institute of TAFE delivers skills training for the NAVY
- Kangan TAFE located in Docklands has the opportunity for expansion into the adjacent Fox land if necessary.

## Government stakeholders

- **State Government, Department of Education and Training**

The *Jobs and Training Needs Report* (Metro Melbourne, 2019) estimated that there were 200-300 Marine Craft Construction apprenticeships required in 2019. Each year for the past decade the Federal Government National Skills Needs List has included all marine trades - Boatbuilding and Marine mechanics.

The Victorian Skills Commission is ultimately responsible for determining industry skills requirements in Victoria.

- **PwC Skills**, the national skills service organisation with responsibility to determine strategic direction of maritime skills training. The PwC Industry Sector Forecast prepared by PwC Skills in 2018.

- **Australian Maritime Safety Authority**

Australia's national regulatory body, promoting the safety and protection of our marine environment and combats ship-sourced pollution. They provide the infrastructure for safety of navigation in Australian waters, including lighthouses and maintain a national search and rescue service for maritime and aviation. AMSA reports that in order to work in the Australian maritime industry, accredited qualifications (or 'tickets') from a registered training organisation are required. Fields include maritime safety, pollution response or handling dangerous cargo, and specialist training. Specialist training is necessary for responding to or handling dangerous cargo. See <https://www.amsa.gov.au>

- RAN recognises that while construction of new vessels will occur in South Australia and Western Australia, it should not be overlooked that Victorian expertise in Advanced Manufacturing and Marine Technology will be integral to these interstate projects. There is a national skills shortage. Training in maritime technology as well as seamanship will be critical.

RAN advises that although Victoria is one of the most populous states it accounts for only 12 per cent of Navy recruits. This is inconsistent with strong historic links between the Navy, the state of Victoria and the City of Melbourne in particular. The RAN originated as the *Victorian Naval Brigade* formed in the 1800s prior to Federation, Navy headquarters were in Melbourne at Victoria Barracks until moving to Canberra in the mid-1960s.

Note: TAFE NSW recently acted to boost engagement with Navy maritime training *TAFE NSW Strengthens Pathways to Naval shipbuilding jobs*.

See <https://www.defenceconnect.com.au/maritime-antisub/4354-tafe-nsw-strengthens-pathways-to-naval-shipbuilding-job>

- **Australian Merchant Navy**

Member organisation for all merchant marine ratings, officers, engineers current and retired. See <http://australianmerchantnavy.com>

## Education Stakeholders

- **Australian Maritime College (University of Tasmania)**

Incorporates the ARC Research Training Centre for Naval Design and Manufacturing (RTCNDM). Travel to Tasmania is an inhibitor. In 2021 AMC expresses interest opportunities to collaborate with TAFEs (i.e. outsourced delivery of its courses). There is the potential for collaboration between several universities in Melbourne and collaboration with the AMC. In 2018, the AMC “*expanded the national footprint*” and commenced delivering short courses and post-graduate courses at a newly-created Study Centre at the National Maritime Museum in Sydney.

- **Offshore and Specialist Ships Association (OSSA)** has within its vision stronger engagement with young people to disseminate information around the diversity of careers within shipping and related industries. OSSA noted an absence of careers advice in this sector of the modern economy. OSSA members are determined that this deficit be addressed.

- **The International Specialist Skills Institute. Carlton**

A Melbourne based independent, national organisation that for over two decades has worked with Australian governments. Its vision is to be the leading provider of fellowships, which address specialised skills in key areas of Australian industry and education. The potential for collaboration around enabling promotion of specialist maritime skills training.

- **The Nautical Institute (AMC Tasmanian Branch)**

An international professional organisation for maritime professionals, based in the United Kingdom. It was established in 1971 and has the status of a company limited by guarantee and is registered with the Charity Commission. It has over 7,000 members in over 110 countries.

- **Australian Maritime and Fisheries Academy (AMFA)**

AMFA has campuses at Port Lincoln, Port Adelaide, South Australia and Darwin Northern Territory. Hagan Stehr – Chair. Delivers training in maritime, fishing and seafood industry See <https://www.amfa.edu.au>

## Industry stakeholders

- **Boating industry** sources indicate that the sector could absorb graduates with an expanded set of maritime technical and other related skills. Growth in the cruise ship industry and coastal tourism in the region may offer employment dependent on new skills.

- **Better Boating Victoria** an entity established in 2018 by the State government recognizing the economic importance of recreational boating industry and indicative that support for the recreational boating sector has been identified and this is likely to include skills training.

- **Boating Industry Association Victoria (BIAV)** in its 2019 report *Future Outlook* by Ben Scullin states: *The Department of Education and Training is estimating our 2019 total Victorian industry ‘training needs’ to be in excess of 300-400 apprentices above current numbers.*

- **Maritime Industry Australia Ltd. (M.I.A.L)** in July 2019 produced the Seafaring Skills Census Report, an industry wide analysis on skills demands in the maritime industry – on and offshore. It indicates that the demand for qualified seafarers will rise and there is already a deficit in certain skill-sets.

- **Women’s International Shipping and Trading Association**

Industry peak body for women in management in maritime transportation and related trades. Presence in Australia since 1974. See: <https://www.wista.net/>

- **Port Education Centre, Fisherman’s Bend**

Owned and operated by the Port of Melbourne, the Port Education Centre hosts education and training seminars for school and community groups and the logistics industry. Most port activities not accessible to the public, but the Port Education Centre provides a unique opportunity to see and learn about the port’s operations and the vital role it plays in the national economy.

See: <https://www.portofmelbourne.com/community-education/port-education/port-education-centre/>

## **Models for Maritime Training Skills Delivery in Victoria**

MMHN has identified three delivery models for consideration by State authorities:

- Single Institute
- Collaborative, with a single auspicing institute
- Group Training Model

### **1. Single Institute Example**

Kangan TAFE Institute – Context: There are obvious advantages in establishing a Marine Skills Centre within an existing TAFE and, for a number of reasons, at Docklands. All of the ‘attributes’ listed below could possibly also apply in other regional TAFEs. However, there are clear economic advantages to a Docklands capital city location, e.g. international students, proximity to port and need to activate Docklands. So - Kangan is:

- Already an international presence and relationships with China, Korea, India, Indonesia, Sri Lanka, South America and Malaysia – all maritime nations requiring maritime training.
- Already delivers training in marine technology and allied marine retail services. The scope of training though currently limited, could be expanded to include delivery of non-accredited units related to licensing and safety.
- Already delivers marine technology (yet has no water access.)
- Could deliver training related to Watercraft Licensing.
- Could deliver AMSA approved credentials in Water Safety and Response consistent with and compliant with the National Training Plan.
- Could apply to Australian Maritime College for permission to deliver a suite of programs (as has recently occurred in Sydney).
- Could collaborate with and access the planned City of Melbourne Marine Operation Service Depot for training purposes.
- Could deliver marine related hobby courses (e.g. navigation, boat repair, sail making).
- Could expand training in maritime skills – related to cruise shipping, events, hospitality, retail.
- Could collaborate with GoTAFE on Marine restoration
- Plans are proposed expand Kangan into a new Fox development adjacent and to the north of Kangan TAFE. Note: Kangan Institute hosted the 2019 Global Skills Challenge. Australia’s biggest international skills excellence competition in 2019 – 500 competitors and officials from 15 different countries competing in a range of 24 trades and skills, from carpentry and cookery through to 3D game design and cloud computing. WorldSkills Australia CEO Brett Judd said Australia was regarded as a high performing Vocational Education Nation, and we were currently 10th on the WorldSkills rankings after the 2017 International Championships.

## Ship Building - Why not Australia?

Noting that Australia has built very few passenger ships, a proposal by the Peninsula Ship Society recently put an ambitious proposal to the Tasmanian government. In essence, to re-ignite – perhaps the word ‘resurrect’ is more appropriate – the island’s shipbuilding heritage.

The major passenger ships built in Australia were all built, after the war, for the Australian National Line: *Princess of Tasmania* (1959), *Empress of Australia* (1965), *Australian Trader* (1969). They were all built in state dockyards: Cockatoo Island, Sydney and Newcastle are long gone, as are the shipyard in Whyalla and the Evans Deakin facility in Brisbane. That leaves few options. Williamstown and Garden Island are closely linked to the Navy and presumably not available for commercial shipbuilding. This may also apply to facilities in Adelaide that over the years have built tugs and submarines. All those classic Australian pre-war ships, like *Kanimbla* and *Manoora* were built overseas.

So, what capability remains in Australia? The AUSTAL shipyard in Henderson WA and the INCAT shipyard in Hobart, TAS are both successful commercial shipyards currently operating in Australia. But both these shipyards specialize in the construction of high-speed aluminium catamarans – not ideal for Bass Strait conditions and so are not likely to be considered for any replacement vessel for the *Spirit of Tasmania*, which is to be made of steel and 212 metres in length. Peninsula Ship Society is calling on the Tasmanian government to establish a task force to investigate the feasibility of building the new Spirits of Tasmania in Australia. What a universally appealing idea that certainly is! The TT-Line Company, operators of *Spirit of Tasmania*, announced in December 2019 that two purpose-built ships would be built to replace the current Spirit of Tasmania fleet by 2021 – maybe offshore?

## Federal Politics appears to be a determining factor in maritime training

The government of the day must be persuaded to recognise the critical importance of sustaining the national maritime capability whether in shipping or in training. For example:

In the 2018 Federal election, with the return of a Coalition government an opportunity for change political landscape in relation to for Maritime education and career opportunities did not occur. See Extract from ALP Election Policy Platform states: *The new Labor Government promises to enhance Australia’s economic sovereignty and national security by creating a Strategic Fleet to secure access to fuel supplies, even in times of global instability. Labor will appoint a Taskforce to guide the establishment of the Strategic Fleet, which is likely to include up to a dozen vessels including oil tankers, container ships and gas carriers. Labor will address skills shortages in the Australian maritime sector by re-establishing the Maritime Workforce Development Forum, abolished by the Coalition Government after it took office in 2013.* See: <https://www.alp.org.au/policies/australian-shipping-industry>