

Reflections on the RAN Light Frigate project (Project Sea 3000)



by **Captain Ian Pfennigwerth, OAM RAN (Ret'd)**

Member, Royal United Services Institute for Defence and Security Studies - New South Wales

Following the Government's 2023 Defence Strategic Review, an independent analysis of the future needs of the RAN (Royal Australian Navy) recommended that the surface force of the Australian Fleet comprise nine 'Tier 1' ships and a new class of up to 11 'Tier 2' frigates. The recommendations were accepted by the Government in June 2024, with the new frigate titled 'Project Sea 3000'. This paper attempts to explain to readers the probable strategic background to the 'Project Sea 3000' decision and the merits or otherwise of the approaches being taken. It also briefly sketches the challenges this decision will present to the RAN – and the nation – organisationally and operationally.

Key words: Project Sea 3000; surface fleet; light frigate.

To bring readers up to date, following the Australian government's 2023 Defence Strategic Review (DSR), it was decided that an independent analysis of the future needs of the RAN was necessary. This recommended that the surface force of the Australian Fleet should comprise nine 'Tier 1' - read 'all-round capable', ships and a new class of up to 11 'Tier 2' - read 'less capable', frigates. The latter would be chosen from an international design, with the first flight of three wholly constructed overseas. These recommendations were accepted by the Government in June 2024, with the new frigate titled 'Project Sea 3000'. In November the government announced that the short list of four potential ships had been reduced to two – the German MEKO A210 and the Japanese Mogami Class.

The anticipated outcome is positive for Australia and its navy. This paper does not discuss the merits of any particular frigate design but attempts to explain to readers the probable strategic background to the Project Sea 3000 decision and the merits or otherwise of the approaches being taken. It also briefly sketches the challenges this decision will present to the RAN – and the nation – organisationally and operationally.

Strategic considerations

The only foreseeable prospect of Australia and its interests coming under sovereignty-threatening attack would be through miscalculation by the Chinese Communist Party (CCP). Convinced that China's time has come, the CCP has been engineering challenges to the current world order by positing Beijing as offering the 'Global South' a new means of countering the 'oppressive' measures forced on them by the 'Global North' – what we

regard as 'The West'. Through its Belt and Road Initiative, manipulation of the expanded cast of the BRICS (Brazil, Russia, India, China, South Africa) alternative trade organisation and its rise to leadership of key United Nations agencies, China's influence in Africa, Asia and South America is stronger than ever.

The war in Ukraine and Western sanctions against Moscow have elevated Beijing to leadership of the Communist world and its fellow travellers. Middle East conflicts have provided China with ample scope for mischief in the region, although not as much as Beijing might have expected. Meanwhile, the CCP has repositioned the Chinese economy to give it a substantial lead in rare earths, high technology and information sciences. Beijing has bet the bank on boosting its economic power through huge and costly investment in manufacturing, aiming to become the world's supplier of everything – check the current manufacturing woes being experienced by Germany for the desired outcomes of this policy. China is already the owner of the largest merchant fleet in the world (as well as having the largest navy by numbers) and continues to build more ships for foreign customers faster than anybody else.

In short, if President Xi Jinping's ambition was to make China the greatest power in the world, it's probably as close as it's going to get to now. Internal financial problems and an ageing population are beginning to impose limits on growth, while a 'push-back' by the West and China's Asian neighbours is raising the costs of potential glory. Tariffs on Chinese manufactures are being imposed widely, and the plans of US President-elect Trump promise more economic pain.

Australia conducts nearly 40% of its foreign trade

with China while taking halting steps to defend itself and its interests against the same country. We register as the 11th largest economy in the world and, with a population of 27 million, our country is larger than all but five of the EU countries. Well connected in SE Asia, we have strong defence and technology relationships with Europe and the US. A major exporter of raw materials, energy and food to the world, Australia has a long and distinguished record of service to the UN. Our economy has already shown itself resilient to meddling by China.

What we do share with China is an almost total dependency on freedom of navigation of the vessels carrying our imports and exports. In Beijing, this vulnerability has long been recognised: loss of control or access to its east coast would be catastrophic for China, which has invested massively in the provision of naval strength and defensive systems to protect its approaches. Nearly 25% of the national budget has been spent on building up the People's Liberation Army, developing advanced weaponry, and building illegal military bases to command the South China Sea. Admiral Dong Jun is Minister for Defence – a marked departure from filling the post with Generals. It is less clear that Australia has recognised our vulnerability. While AUKUS (Australia-United Kingdom-United States) will immensely strengthen our ability to respond to military pressure, the Government's program for building up conventional forms of attack and defence seems disjointed. Project Sea 3000 will deliver a welcome improvement in our defence capabilities, but it will also test our national capabilities across the board.

Organisational considerations

The decision to source the first flight of new frigates from overseas yards is recognition that Australia's capability for building surface warships has markedly declined since the Anzac frigate project - contract let late 1989, final ship of ten commissioned in 2006. 14 Armidale Class patrol boats were built in Henderson Western Australia by Austal - contract award December 2002, first boat commissioned June 2005 and the last in February 2008. However, the Navantia-designed Hobart Class AWDs (Air Warfare Destroyers) built by ASC (Australian Submarine Corporation) were delivered three years behind schedule and it seems the River Class frigates being built by the same firm will set new records for tardy delivery. Austal has been nominated to build the second Sea 3000 flight of between five and eight frigates. This will be a considerable step for a yard that has previously only constructed smaller warships. So, the first question is whether Australia has the capacity to construct the AUKUS SSN, the River Class, the Army's landing

craft and the Sea 3000 frigate simultaneously as well as implement the Hobart class AWD upgrade; we need reassurance on that in the form of firm plans – and a fallback option if the answer is negative.

Now the second question: do we have the capability of supporting a 20-ship surface fleet along with more numerous lighter surface craft (the Army's future landing ships included) plus the AUKUS Pillar 1 SSNs by the mid-2030s? HMAS *Stirling* is going to be a very busy base, possibly also supporting deployed units of other AUKUS partners, while planned at-sea support for deployed ships by additional tankers and a depot ship have been cancelled by the government. (The two tankers the RAN currently operates are out of service with serious mechanical defects). To apply any naval pressure on China in the uncertainty of the South East Asian environment in which it would be conducted requires logistics resupply and afloat support capabilities, as well as minelaying and sweeping capacity. There is more than an element of doubt that the nation has the skills to provide the RAN with the support it needs in operating, maintaining, updating and enhancing its ships through their service lives. Again, a credible plan for developing that capability is required.

For Australia to have any impact on Chinese defence planning, the ADF (Australian Defence Force) should be equipped, organised and trained in anti-shipping operations – and in defending our own vulnerable sea lines of communication, onshore facilities and resources sites from hostile attack. The third question is do we have such a strategy and, if so, how do all the measures announced by the government fit within it? A sub-set of that question is if China were to withdraw its merchant ships from the Australian market, how would we import and export the goods and material we need to survive?

Finally, with an increase required in qualified submariner numbers up to around 2000, the RAN - already below authorised strength - is going to struggle to man all the Tier 1 and Tier 2 surface vessels slated for delivery over the next 15 years. In the light of Defence recruitment falling far short of expectations, how will this gap in numbers and the appropriate level of skills and experience be filled?

Operational considerations

It has been accurately observed that a navy is a 'system of systems'. All parts of the naval system for selecting and training its personnel deliver their graduates to form a ship's company, equipped for and competent in managing the systems onboard to deliver a required level of performance in its operation. As a general observation, the ease with which individual men and women can assimilate their

roles in the operation of ships to which they are posted is a function of standardisation, and strenuous (and sometimes expensive) efforts are made to ensure that equipment and capabilities are standardised across the Fleet. Project Sea 3000 explicitly rejects that dogma. Briefly, whatever the manufacturer chooses to build into the selected frigate will be delivered to the RAN – ‘no changes!’.

The appeal of this approach to the bean counters is understandable; changes cost money and induce delay. The USS *Constellation* frigate was supposed to have 85% commonality with its Italian FREMM forebear; that’s now closer to 15% and costs and delivery dates have moved well right. Australia cannot afford either such costs or delay, so this edict superficially makes sense. In practice, what it means is that the RAN may end up with two fleets, in which Tier 1 ships will be unable to operate effectively with Tier 2s. That problem cascades all the way down the system chain to recruitment and training. Moreover, as the RAN has worked strenuously to be able to integrate seamlessly into USN (United States Navy) formations, the potential outcome is that the light frigates may not possess this capability.

There is more; it makes eminent sense to have a high degree of commonality in weapons and sensors across the Fleet, not only from the training and employment viewpoint but also because of logistics. Guided weapons don’t come cheaply, and having different weapons will complicate the load-out issues for replenishment ships servicing Tier 1 and Tier 2 clients. When it comes down to having not enough money to supply both Tiers with a full weapons load, which will get preference?

Turning now to the manning issue, building and commissioning a new class of naval ship requires a lot of people, many of whom may not wear uniform at all. The common factor is a high level of technical and managerial skill, and these billets in the project office will need to be filled until after the final light frigate commissions. A proportion of them will serve in the manufacturer’s yard overseas. At the next level will be the folk who are to become familiar with the operation of all the new ships’ systems so that they can train the sailors who will operate and maintain them at sea - top people with a lot of naval experience – and therefore in high demand everywhere. Finding and retaining them is going to be a problem as one consequence of having a significantly reduced number of sea billets in the latter part of this decade to select from as the Anzac’s are retired. Simulation is fine, but sea training is what makes a ship’s company tick and, with reduced manning both an objective and a necessity, sea-going experience becomes the glue that holds the ship’s company together and makes it

work as it should. As we continue paying off Anzacs the opportunity for gaining that experience will decrease.

Conclusion

To give the Government its due, it is good that the RAN is to get something to arrest its decline into strategic irrelevance. This is important for our standing, not just within AUKUS but also as a clear sign to Beijing of our intent and capability to resist coercion. The choice of a foreign manufacturer of the initial flight of light frigates was essential (but why stop at three?) as the shortcomings in our naval shipbuilding ability have become abundantly clear. (The junior officers and sailors who will man the last of the River Class frigates have not yet been born!). But the Project Sea 3000 program is doomed to failure unless there is an honest and searching examination of the issues I have raised:

1. Can it be demonstrated that the nation is capable of handling four military ship construction programs simultaneously?
2. Do the government’s plans include the need for afloat replenishment and maintenance support for the RAN in Southeast Asian waters?
3. Where will the Project Sea 3000 frigates fit into the defence of Australian seaborne trade, with the supplementary question of how will we trade at all if China withdraws its vessels?
4. How will an expanding RAN be manned with the trained and experienced people it needs to operate the Fleet of the 2030s and beyond?

The Author

Ian Pfennigwerth joined the RAN College in 1958 and served at sea in minesweepers and frigates, commanded a guided missile destroyer and served in the carrier *Melbourne* as a member of the Fleet Staff. A communications specialist, on completing UK courses he had two years exchange with the Royal Navy, and served in the Australian Embassy in Washington in 1974-76. His later career included the ADFA Secretariat, the Directorates of Electronic Warfare, Naval Intelligence and finally Command & Control, Computers, Communications EW and Intelligence. Ian served as the Australian Defence Attache Beijing in 1989-1991, and completed full-time naval service in 1992. He was awarded an OAM in 2023 for his contributions to military history, primarily through his authorship on 14 books on the subject.

