

Sea Change: Australia's Naval Ambitions

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Credit: Lt. j.g. Emilio Mackie

The modernized ANZAC-class frigate HMAS Perth fires an Evolved Sea Sparrow Missile while operating in the Philippine Sea during Exercise Pacific Vanguard 2022, 31 August 2022.

When the former Commander of the Royal Canadian Navy (RCN) Vice-Admiral Craig Baines addressed Australia's Sea Power Conference earlier this year, his introductory remarks centred on his beloved Toronto Maple Leafs and their long-term Stanley Cup drought. His jokes were met with friendly laughter, despite the fact that those present were likely more familiar with actual drought than with ice hockey. We laughed because Australians are fond of Canadians – and like to think the feeling is mutual. Our many national similarities, including systems of government and increasingly multicultural societies, as well as the many occasions we've fought side-by-side in war, amongst other things, make our interactions easy and familiar.

But this fondness may sometimes lead us to minimise or overlook our differences. The direction of travel for our respective navies appears to be a case in point, with the pursuit of nuclear-powered submarines (SSNs) under the Australia-United Kingdom-United States (AUKUS) agreement perhaps the best demonstration of Australia's vaulting naval ambition.

This article will illuminate the Australian naval position for a Canadian readership: what we have; what we want; how we plan to get it; and what we plan to do with it. And in a reciprocal gesture, an article by Rob Huebert and Hugh Segal will appear in a forthcoming *Australian Naval Review* explaining the Canadian experience.

The Fleet in Snapshot

The Royal Australian Navy (RAN) currently comprises more than 16,000 personnel, and a fleet set to exceed 50 vessels for the first time in decades. The backbone of the fleet commissioned between the mid-1990s and early 2000s – all due to be replaced – includes eight ANZAC-class frigates (118m long with approximately 3,600t displacement), a dozen offshore patrol vessels, six Collins-class diesel-powered submarines, as well as various mine-hunters, oilers and survey ships. In the last 10 years, two Spanish-built Canberra-class amphibious assault ships (Landing Helicopter Docks (LHD)) have joined the fleet. At more than 230m long and 27,000 tonnes, they are the largest ships ever commissioned in the RAN; larger than the aircraft carriers last featured in the 1980s. Three new Spanish-designed but Australian-built Hobart-class Air Warfare Destroyers have also been commissioned, featuring the Aegis Combat System, SM-2 missiles and an embarked helicopter amongst other capabilities. In normal circumstances, this would be more than sufficient. But Australia faces a dramatically changed strategic environment because of China's economic growth, enhanced military capability (especially of its navy) and increasingly aggressive foreign policy.

The situation bears closer examination. Domestically, there have been increasingly overt attempts to force Australia to accept Beijing's preferences. Notably a campaign

by China of unofficial trade sanctions on copper, cotton, lobster, timber, wine and coal – previously worth more than AUD\$20 billion a year¹ – was enacted in 2020 after Australia called for an independent inquiry into the origins of COVID-19, and continues to this day. An infamous list of “14 grievances” handed by Chinese officials to the media in Canberra in late 2020 also mentioned the ban on Huawei from the rollout of Australia’s 5G network, the new laws prohibiting foreign political interference, and criticism of human rights violations in Xinjiang.² (This list was reportedly circulated at the 2021 G7 Summit to general consternation.)

In the Pacific Islands – Australia’s near abroad – China has signed a controversial security pact with Prime Minister Manasseh Sogavare of the Solomon Islands. Despite the energetic efforts of Australian intelligence chiefs, diplomats and ministers to dissuade Prime Minister Sogavare, and the longstanding security arrangements with Australia which have included several multi-billion-dollar deployments of police and defence personnel during the last two decades, the pact was signed. Assurances have been given to Australia and the United States that there will be no Chinese military base, long-term presence, or power projection capability located in the country, but since the presence of an adversary in these islands has long been considered a strategic nightmare, this will be watched closely.

Further afield, Australia has national interests in the maintenance of the free and open Indo-Pacific region, which includes crucial maritime thoroughfares for Australian exports of energy and minerals, and imports of refined fuels, among other things. China’s unilateral moves in the South China Sea and threatening behaviour to Taiwan are concerning, as are the increasingly frequent

unprofessional and unsafe actions from the Chinese military towards Australian ships and planes.

These adverse developments have affected Australian public opinion towards China. According to annual polling by the Lowy Institute, an astonishing 75 per cent of Australians say it is very or somewhat likely that China will become a military threat to Australia in the next 20 years, an increase of 29 points since 2018.³

Towards Bold Horizons

It is a rare day indeed when the Australian navy makes international news. But the tripartite announcement of the AUKUS pact on 15 September 2021, by US President Joe Biden, then-UK Prime Minister Boris Johnson and then-Australian Prime Minister Scott Morrison, brought unprecedented attention to the plan to acquire nuclear-powered submarines (SSNs) for the RAN. It would be imprecise to describe AUKUS as merely a plan to sell SSNs to Australia, as Canadian Prime Minister Justin Trudeau put it.⁴ It also involves enhanced cooperation on a range of advanced defence technology areas including cyber, artificial intelligence, quantum technologies and undersea capabilities. Later, hypersonic weapons were added, while the pursuit of nuclear power and nuclear weapons was specifically excluded. AUKUS is also frequently misidentified as an alliance, which it is not, although it is necessarily a pact built upon the foundation of a variety of long-standing security and intelligence-sharing arrangements.

The AUKUS agreement prompted the cancellation of Australia’s deal with the French company Naval Group (formerly DCNS) which was contracted to design 12 so-called *Attack*-class diesel-powered boats which were to be built in Adelaide. The French government reacted with outrage, to put it mildly, matched only by its preceding



Former Commander Royal Canadian Navy, Vice-Admiral Craig Baines, speaks at the Sea Power Conference at Indo Pacific 2022 in Sydney, Australia, 10 May 2022.

Credit: LSIS Daniel Goodman



HMAS *Sydney* sails in the Pacific Ocean as part of Exercise Pacific Vanguard, 22 August 2022.

nonchalance as the project experienced delays, cost increases and fluctuating commitment to Australian industry content.

Aside from the changed strategic environment, there are also operational reasons for seeking SSNs. Australia has run a fleet of six diesel-powered submarines since 1965: first the British-designed *Oberon*-class (which several countries including Canada also operated); and then the Swedish-designed Australian-built *Collins*-class submarines which have been in service since around the start of this century. The *Collins*-class boats are expected – with the near-certainty of life-of-type extensions, including the possibility of being fitted with Tomahawk land-attack missiles for the first time – to continue in service to around 2040.

Rear-Admiral Matt Buckley, Head Nuclear-Powered Submarine Capability, described the rationale for SSNs to the Sea Power Conference earlier this year. According to him, “[s]ubmarines are a bit like a queen in a game of chess ... when you bring a nuclear-powered submarine into the mix it is like having additional moves you can play on the chess board, you add enormous mobility, increased speed, increased range and increased firepower.”⁵ Former Chief of Navy Vice-Admiral Michael Noonan highlighted other operational concerns to the Goldrick Seminar in Canberra, shortly after the AUKUS announcement. He noted that changes in the Indo-Pacific strategic environment, in particular the oft-discussed point at which the oceans become “transparent,” was a prime consideration. “Certainly, the ability to operate a conventionally powered submarine within the first island chain undetected rapidly diminishes from the late 2030s onwards,” he said.⁶

An 18-month consultation period of the various task forces of the three states is due to conclude with a report in March 2023. The key announcements will relate to which SSN design Australia is seeking to obtain, where it will be manufactured, when the submarines will be delivered, and how much they will cost. It seems likely that the design of either the British *Astute*-class or American *Virginia*-class will be chosen, or their intended replacements SSN (R) or SSN (X) respectively. The task force may also indicate the preferred location for a new Pacific Ocean-facing submarine base to balance the existing base in Perth on the Indian Ocean. Port Kembla – south of Sydney – is a possibility, as are the port cities of Newcastle or Brisbane. Lavish attention to the notion of ‘nuclear stewardship’ can be expected. Australia operates one nuclear facility for scientific research and the production of medical isotopes in Sydney, and recent comments from Vice-Admiral Jonathan Mead, RAN’s Chief of Joint Capability, emphasised that a “nuclear mindset ... must reflect unwavering commitment to safe and secure stewardship of nuclear propulsion

technology.”⁷ Estimates put the costs at AUD\$70 billion or AUD\$116B inflation-adjusted (CAD\$65B or CAD\$104B inflation-adjusted) as a minimum.⁸

AUKUS faces many challenges. It has survived the recent change in Australian government, and the public remains supportive. A recent Lowy Institute poll indicated that 70 per cent of Australians were “somewhat” or “strongly” in favour of acquiring nuclear-powered submarines, with a majority saying AUKUS will make Australia safer.⁹ But the alignment of international politics is at least as significant, and whilst the UK’s role in AUKUS is considered important, the US role is critical. Australia has examined the possibility of nuclear-powered submarines in the past, with sources anecdotally reporting a US attitude of “don’t ask, as refusal may offend.”¹⁰ But the administration of President Joe Biden has been receptive, with key National Security Council officials expressing the view that Australia had been a good ally of the United States over time, has not wilted in the face of Chinese coercion, and its capability ambitions should therefore be supported.¹¹ It is yet to be seen whether a change of personnel or party in the US Congress or White House will prove problematic.

Another challenge is the timelines. Australia has wrestled for too long with how to replace the *Collins*-class. By most reasonable assessments, even with the *Collins*-class life-of-type extensions, a capability gap may occur around the late 2030s or early 2040s. Various options to fill such a gap have been canvassed, from an interim conventionally-powered submarine class, to homeporting US and/or UK SSNs in Australia, to co-crewing US or UK vessels with Australian submariners. Australia’s new Defence

Minister Richard Marles has publicly acknowledged that strategic demands are more important than local construction per se, which may unlock faster pathways and minimise a potential gap.¹²

An emerging challenge is the issue of nuclear proliferation, which has not been mitigated by Australian assurances. International Atomic Energy Agency (IAEA) representatives have recently visited Australia to discuss regulatory safeguards with senior officials and political leaders.¹³ But with US Navy SSNs using highly-enriched uranium (HEU), which can also be used in weapons, China has been campaigning to have AUKUS branded a proliferation threat. China has had some success in enlisting Australia’s neighbours such as Indonesia, which is now lobbying the 120 states of the Non-Aligned Movement. How serious this challenge becomes is yet to be seen.

In the future, AUKUS could expand beyond the original three partner states. Kurt Campbell, the Indo-Pacific Affairs Coordinator on the US National Security Council, described it as “open architecture.”¹⁴ With Canada nestled within similar security and intelligence-sharing alliances, its already privileged status within US defence export control system, its forthcoming Indo-Pacific Strategy, and its nascent efforts to replace the conventionally-powered *Victoria*-class submarines, it would seem like a prime candidate.

Submarines are not the sole focus of the RAN’s fleet expansion plans. Australia is also seeking to replace the eight aging *ANZAC*-class frigates with nine *Hunter*-class frigates, which – like the RCN’s Canadian Surface Combatant – are based on BAE System’s Global Combat



Credit: POIS Christopher Szumlanski

The amphibious assault ship HMAS *Canberra* returns to home port of Fleet Base East in Sydney, 4 September 2022, after its regional presence deployment.



Chief of the Defence Force General Angus Campbell (background) and Secretary of Defence Greg Moriarty during a press conference to announce the AUKUS partnership and nuclear submarine acquisition plan at Parliament House, Canberra, 16 September 2021.

Ship/Type 26 frigate. Expected to cost approximately AUD\$50bn adjusted for inflation,¹⁵ the *Hunter*-class will feature Australian-developed CEA Phased-Array Radar and the US Navy's Aegis Combat Management System, boasting stealthy anti-submarine warfare characteristics and significant air and surface warfare capabilities.

Since the announcement of the *Hunter*-class plan in June 2018, a process of customising the 'immature' design has run into difficulties and delays (first steel cut in 2024; first ship to be delivered 2031). Growth in the size of the vessel from around 8,000 tonnes to over 10,000 tonnes has raised questions over speed, power and performance. Safety issues have been raised for crew members who could become trapped below deck by floodwaters in "credible damage conditions."¹⁶ The former Defence Minister Peter Dutton said earlier this year that concerns had been raised, and were being addressed, and having looked carefully at the project, the government would proceed.¹⁷

Made in Australia?

With these two major acquisitions of frigates and submarines, plus an array of smaller vessels required, the government attempted to kill multiple birds with one stone by introducing a Naval Shipbuilding Plan in 2017. It came after a report by the RAND Corporation which indicated that Australian shipbuilding experiences a 30-40 per cent cost premium compared to the United States mostly due to the 'boom and bust' cycle.¹⁸ The plan consolidated naval shipbuilding at Osborne in South Australia and Henderson in Western Australia, with several other uneconomic shipyards (such as BAE System's Williamstown shipyards in Melbourne) closing and many smaller coastal shipyards excluded.

The Naval Shipbuilding Plan began with high expectations of being able to supply naval platforms, deliver certainty to industry and value to the taxpayer. It "gives the most detailed and long-term guide for the defence

industry, government and the defence apparatus, both uniformed and non-uniformed, of any such plan in our nation's history," wrote former Minister for Defence Industry, Christopher Pyne.¹⁹ According to Pyne,

It gives everyone involved confidence about the future of our continuous shipbuilding program. A drumbeat of new vessels at least every two years for decades to come is something Australia has never enjoyed before. As these projects come to fruition, new governments will make decisions to build further classes of naval vessels, ensuring that our ship- and submarine-building and sustainment and maintenance will become a significant part of our strategic industrial base for the foreseeable future.²⁰

Five years later, and the report card is decidedly mixed. The Osborne shipyard, the physical assets of which are owned by the federal government, occupies more than 100 hectares of the Lefevre Peninsula in South Australia. Osborne South has undergone significant upgrades to enable BAE Systems Maritime Australia to prototype and eventually start building the *Hunter*-class frigates. Now free of the cancelled *Attack*-class, Osborne North's submarine construction yard is currently responsible for full-cycle dockings of the *Collins*-class, will be responsible for the life-of-type extensions of the *Collins*-class, and is currently being expanded from 20 hectares to 65 hectares while undergoing assessment as a possible SSN manufacturing facility.

There has been a decidedly higher tempo of ships produced – albeit smaller naval vessels – at Henderson shipyards in Western Australia, produced at facilities funded by both the Commonwealth and state governments which host a number of commercial operators. Australia's current *Armidale*- and *Cape*-class patrol boats are being replaced with a single class of *Arafura*-class Offshore Patrol

Vessel (OPV), with German shipbuilder Luerssen Australia building the final 10 vessels at Henderson (after the first two were built in South Australia). They will primarily have constabulary and border patrol duties. In addition, 22 steel patrol boats are being constructed – 39.5m long and capable of traveling at 20 knots – and given to Australia’s Pacific Island neighbours under the Pacific Patrol Boat Replacement Project to increase regional capability to protect fisheries, address transnational crime and undertake search and rescue. The first vessel was delivered to Papua New Guinea in 2018, and other states since then including Tuvalu, Tonga, Samoa and Fiji. Henderson, where an AUD\$4.3 billion large-vessel dry berth was announced earlier this year,²¹ is also currently conducting the ANZAC frigate mid-life upgrades, which are expected to conclude next year, and in the coming decades various mine-hunter and survey ship replacements are expected to be built.

As delays to the *Hunter*-class frigates materialised and the *Attack*-class was cancelled, it has become apparent that the budget is not being spent. Reports suggest that for the four years from 2020-21 to 2023-24, the navy’s acquisition spend will be AUD\$5.3 billion less than the AUD\$17.8 billion it was aiming for.²² No formal government reporting on the progress of the Naval Shipbuilding Plan has been conducted.

Maritime Strategy

It is crucial when discussing increased capabilities that the purpose is clear. What is Australia going to do with this biggest navy in decades? The 2020 Defence Strategic

Update characterised the armed force’s mission as “Shape, Deter, Respond.”²³

In the navy’s case, an obvious manifestation of *shape* has been task group-sized naval diplomatic activities across the region over the last five years under the banner of Indo Pacific Endeavour (IPE), Australia’s annual defence-led international engagement activity. Beyond the regular engagement navies foster with each other, IPE has done several explicit things. First, it served a key role in introducing the *Canberra*-class amphibious assault ships to the region, providing reassurance that a ship with ‘assault’ in its name is equally suited to performing humanitarian and disaster relief. Second, it has contributed to the popularisation of the term Indo-Pacific over older constructs such as Asia-Pacific. But perhaps less successfully, it carried a message to the Pacific island states that Australia should remain the security partner of choice. With the Solomon Islands recently exercising this choice by signing a security pact with China, and with IPE22 once again overlooking the Solomons and other Pacific Islands for an Asian itinerary, an ambivalence about the ability of the navy to shape the strategic environment seems evident.

Australia has used its capabilities to help *deter* revisionist powers – China, in particular – from efforts to change the status quo illegally or unilaterally in the Indo-Pacific region. For example, despite China’s attempts to enclose the South China Sea within its nine-dash line, the RAN has continued to sail through these international waters as permitted by law, as it has done for the best part of a century. It has not, however, gone as far as the US Navy



Credit: LSIS Richard Cordell

The *Collins*-class submarine HMAS *Rankin* conducts helicopter transfers in Cockburn Sound, Western Australia, 12 February 2021.



A computer-generated graphic of the Australian navy's future **Hunter-class** frigate. The **Hunter-class** will use the same Type 26 hull as the Canadian Surface Combatant but with major changes to incorporate the Australian CEFAR2 radar suite and Saab Australia combat system.

with formal freedom of navigation operations within 12 nautical miles of disputed or artificial features.

As far as Australia's willingness to *respond* in the maritime domain, former Defence Minister Peter Dutton said last year that if the United States sought to defend Taiwan, "it would be inconceivable that we wouldn't support the US."²⁴ The 2022 Lowy Institute Poll indicated a slim majority of Australians agree, with 51 per cent in favour using the Australian military if China invaded Taiwan and the United States decided to intervene.²⁵ Many have speculated that an upgrade to SSNs may also oblige the RAN to commit to a frontline undersea combat role alongside the US Navy, rather than distant blockade and choke-point patrol as is sometimes ascribed to the *Collins-class* now.

Conclusion

Australia has recognised its changed strategic circumstances and responded ambitiously. Details of the plan for nuclear-powered submarines are due early next year, at the same time as a defence strategic review of force posture and force structure concludes. But turning ambitions into capability – or more precisely, hulls – is a process almost always accompanied by difficulty and delay.

Walter Cronkite once said of Australia, "[t]oo many reporters, not enough news."²⁶ Into the current vacuum, commentary of varying quality pours in. Those vexed by delays in frigates swing between cancelling the *Hunter-class*, arming offshore patrol vessels or restarting the Air Warfare Destroyer production line. Some portray AUKUS as a beauty pageant between the UK and US boats, endlessly speculating on which is the best. Some even suggest Australia should return cap in hand to France for a conventional or nuclear design and invite France to join AUKUS. (Surprisingly, a truly tripartite submarine deal, wherein the United States, UK and Australia arrive at a common AUKUS-class design and jointly manufacture the boats across the three states much like the F-35 joint strike fighter, has not been properly discussed.)

If the Australian government is willing to match its ambitions with resolve, and nurture the support that the public is already offering (according to the polls), Australia will assuredly get the future navy it needs and deserves. 🇦🇺

Notes

1. Will Glasgow, "Whatever Happens with Coal, Beijing's Coercion Campaign Won't be Forgotten in Australia," *The Australian*, 11 July 2022.
2. Jonathan Kearsley, Eryk Bagshaw and Anthony Galloway, "If You Make China the Enemy, China Will be the Enemy: Beijing's Fresh Threat to Australia," *The Sydney Morning Herald*, 18 November 2020.
3. For more, see Lowy Institute, "The Lowy Institute Poll 2022: China."
4. Prime Minister Justin Trudeau quoted in Robert Fife and Steven Chase, "Canada Caught Off Guard by New Security Pact between US, Australia and Britain," *The Globe and Mail*, 17 September 2021.
5. Rear-Admiral Matt Buckley (RAN), "Keynotes and Introduction," Sea Power Conference 2022, Day 1, Session 1, 10 May 2022.
6. Vice-Admiral Michael Noonan (RAN), "Perspectives on Maritime Operations: Keynote," ANI Goldrick Seminar 2021, 1 October 2021.
7. Vice-Admiral Jonathan Mead (RAN), "Keynotes and Introduction," Sea Power Conference 2022, Day 1, Session 1, 10 May 2022.
8. Andrew Nicholls, Jackson Dowie and Marcus Hellyer, "Implementing Australia's Nuclear Submarine Program," Australian Strategic Policy Institute, 14 December 2021, p. 5. Note: in September 2022 the Canadian dollar was worth \$1.13 Australian dollars.
9. Lowy Institute, "The Lowy Institute Poll 2022: Acquiring Nuclear-Powered Submarines."
10. Inter alia see Peter Jennings, "Would the US Sell Us Nuclear Boats?" in "Submarines: Your Questions Answered," Australian Strategic Policy Institute, 4 November 2020, p. 60.
11. Jake Sullivan, US National Security Advisor, "2021 Lowy Lecture," Lowy Institute, 11 November 2021.
12. David Crowe, "Marles to Prioritise Strategic Need over Local Construction in Boat Decisions," *The Sydney Morning Herald*, 8 August 2022.
13. Stephen Dziedzic and Andrew Greene, "International Atomic Energy Agency Head to Inspect Safeguards for Australia's Nuclear Submarine Program," Australian Broadcasting Corporation (ABC), 2 July 2022.
14. Sasha Fegan, "Kurt Campbell on What America is For, 'Rather Than What We're Against,'" Lowy Institute, *The Interpreter*, 1 December 2021.
15. Ben Packham, "Labor has 'Laser' Focus on Getting Defence Procurements Back on Track," *The Australian*, 5 June 2022.
16. Ben Packham, "\$45bn Hunter-class Frigates Slow, Unsafe: Defence," *The Australian*, 1 February 2022.
17. Charbel Kadib, "Dutton Allays Hunter Class Frigate Fears, BAE Responds," *Defence Connect*, 2 February 2022.
18. Paul DeLuca and Roger Lough, "Australian Naval Shipbuilding: First Things First," *The RAND Blog*, 22 January 2021.
19. Christopher Pyne, *The Insider: The Scoops, the Scandals and the Serious Business within the Canberra Bubble* (Australia: Hachette Australia, 2021), p. 186.
20. *Ibid.*
21. Charbel Kadib, "PM Announces \$4.3bn Investment in Naval Shipbuilding Capability," *Defence Connect*, 15 March 2022.
22. Marcus Hellyer, "Navy Faces Strategic Risk of Aging Capabilities," *The Australian: Indo Pacific* 2022, 10 May 2022.
23. Commonwealth of Australia, Department of Defence, "2020 Defence Strategic Update," 2020, p. 4.
24. "'Inconceivable' Australia Would Not Join US to Defend Taiwan – Australian Defence Minister," Reuters, 13 November 2021.
25. Lowy Institute, "The Lowy Institute Poll 2022: China."
26. In the early 1980s, Australian columnist Peter Ruehl told the famous anchorman of his embarrassment at the provincial obsessions of a group of Australian journalists traveling with a Minister in New York. "Australia," Cronkite replied. "Too many reporters, not enough news." Quoted in Joseph Poprzeczny, "PM's Retirement Just Not News," *Businessnews.com.au*, 6 June 2006.

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