

AVY LEAGUE OF AUSTRALIA 'ESTERN AUSTRALIA October 2023 Volume 7, Issue 10

## **DOWN THE VOICEPIPE** do you

#### **COMING UP**

NLWA Executive meeting Monday 8th. January 2024

Facility open each Wednesday morning 0900-1200

HMAS PERTH (I) Memorial Foundation Executive Meeting Saturday 9th. December 2023 commencing at 1000

ALL ARTICLES PUBLISHED IN THIS NEWSLETTER ARE PRINTED IN GOOD FAITH AND DON'T NECESSARY REFLECT THE VIEWS OF THE NAVY LEAGUE OF AUSTRALIA



#### Navy League of Australia Western Australia Division News update



Whilst October was a little light on activity wise, we did manage to get out on Sunday the 22<sup>nd</sup> which saw the hosting of our Jumbo Golf day, a day in which the sporting members and the not so sporting members gathered en-masse to play an abridged golf course. We literally could not have asked for better weather for a day of fun and frivolity. Thirty players, made up of NLWA members, partners and friends, 11 Officers and crew from HMAS PERTH III and 5 from the USMC all arrived at Melville Golf Centre by 9am and were on the course half an hour later. There were some glorious shots played, some not quite so glorious and some I'm not too sure could ever be replicated, but all in all it was a lot of fun and looking around it was clear to see by the smiling faces, laughter, teasing, cringing and looks of sheer bewilderment that everyone truly enjoyed their time. Ultimately, fun aside, this proved to be a few hours of exercise in the fresh

air, away from mobile phones, computers and the electronic gadgets which can consume us at times. A bbq lunch followed and we know not a single person went home hungry. A debt of gratitude goes to Bob Cullum for his assistance in planning, Ben Hunter from Melville Golf Centre, who just couldn't do enough for us, Windy Gale for his enthusiasm and entertainment on the course and each and every person who attended and made the day so much fun. We will look to make the golf challenge bigger and better next year with a few small prizes and who knows, maybe even a trophy for the overall winner. In addition to a little bit of fun, we also collected donations on the day and we were proud to make a nice little donation to the Merredin Military Museum, our chosen recipient.

The end of October sees us gearing up for November and Remembrance Day. Later that day, we look forward to another huge night of fun and entertainment at the 248<sup>th</sup> USMC Birthday Ball. More on this plus a couple of photos to follow in the next edition.

There you have it, short and sweet but that was the month that was.

Until next month

Brad























HMAS PERTH (I) MEMORIAL UPDATE Incorporating NLWA and the HMAS PERTH (I) Memorial Foundation Incorporated





As the final extension to the Memorial has been held up through continued Technical, Engineering and red tape issues, the final engineering to the glass and steel works is almost complete finally. However as fittings etc have to be sourced overseas the timeline for the opening will have to be re-scheduled as we can not guarantee that the structure will be completed by our timeline and the predicted opening on March 1st. 2024. After due considerable determination it will now be opened on Saturday the 29th. June 2024 which is the day that HMAS PERTH (I) was commissioned into the Royal Australian Navy, it is also the 82nd. Year of the sinking.

Jim O'Neill CMDR ANC RTD Project Manager

A small band of the business committee including contractors have been working extremely hard to overcome the obstacles we had not expected. In the meantime other activities have continued with the foundation and NLWA and recently Trevor Vincent and together with David Nicolson and his wife Megl attended the Re-Opening of HMAS OVENS at The Maritime Museum in Fremantle . The boat now looks like new and is attracting a lot of attention.

CMDR Bob Mummery OAM RAN RTD. Has been working in the back ground gathering information for the proposed opening. He has also given a presentation to Lions International on the progress of the memorial and also working closely with them to have a large model of HMS AMPHION shipped from Wales to WA Once arrived Lions International have undertaken to repair the model for public exhibition.

Recently we received a parcel of memorabilia from a HMAS PERTH (I) widow and family from Queensland, which included a Greek Doll a sailor had purchase whilst in the middle east on PERTH. He actually used the doll as a pillow whilst not able to re-join the ship because of heavy bombing of the harbour.

The Foundation continues to hear and receive memorabilia from EX PERTH family members and these items will be recorded and put on display once the memorial is complete. NLWA was invited to attend Government House on the 11th. November for a remembrance day recital and music afternoon 11 members were able to attend.

Having just recovered from COVID I hope you all remain safe and healthy and up to date with your vaccinations.



#### **BAE Systems secures SSN-AUKUS contract**

By: Liam Garman



#### <u>BAE Systems</u> confirmed that it has been awarded a £3.95 billion (\$7.5 billion AUD) contract from the United Kingdom's Ministry of Defence, enabling the company to move into the detailed design phase of the SSN-AUKUS.

BAE Systems, together with Rolls-Royce and Babcock, have been awarded £4 billion in contracts for the Detailed Design and Long Leads Phase for the SSN-AUKUS.

According to the United Kingdom's Ministry of Defence, the contracts will progress the SSN-AUKUS program through the design, prototyping and purchase of main long lead components for the first UK submarines.

The design of the SSN-AUKUS will be used by the Royal Australian Navy.

It is expected to enable construction to begin "in the coming years", with the first Australian vessels scheduled to commence construction in the early 2040s.

Under plans confirmed by the Commonwealth, Australia and the United Kingdom will both operate SSN-AUKUS submarines which will incorporate technology from all tripartite members.

The global defence contractor detailed that design work started in 2021, with the most recent contract covering development until 2028. Construction of the British boats are scheduled to commence toward the end of the decade.

The first submarine expected for delivery in the late 2030s.

UK Defence Secretary Grant Shapps explained that the SSN-AUKUS will be fundamental for securing Britain's place in the global order.

"This multi-billion-pound investment in the AUKUS submarine programme will help deliver the long term hunter-killer submarine capabilities the UK needs to maintain our strategic advantage and secure our leading place in a contested global order," SEC Shapps detailed.

"I'm committed to backing our defence industry, because it's only with the mission critical support of businesses like BAE Systems that the UK can develop the advanced equipment our Armed Forces need to defend the British people in a more dangerous world."

The SSN-AUKUS will replace the United Kingdom's Astute Class, which BAE Systems builds at their Barrow-in-Furness site.

BAE has to date delivered five Astute class submarines, with two more in advanced stages of construction. They are also building the UK's Dreadnaught class, with work underway for three of the next-generation nuclear deterrent submarines.

"We're incredibly proud of our role in the delivery of this vitally important, tri-nation submarine programme," Charles Woodburn, chief executive of BAE Systems said.

"This funding reinforces the Government's support to our UK submarine enterprise and allows us to mature the design, and invest in critical skills and infrastructure to support our long-term national security."

#### WA government to acquire patrol boat for northern waters

By: Robert Dougherty



Image credit: Dongara Marine

## A 24.95-metre large patrol vessel will be delivered to the Western Australia government under a multi-million-dollar contract.

Australian boat builder Dongara Marine will construct the vessel, which is expected to be used by the Department of Primary Industries and Regional Development (DPIRD) primarily in northern waters and be based in Broome, Western Australia.

The 24-knot, 16-crew capacity aluminium monohull patrol boat is anticipated to undertake mission in illegal foreign fishing interception, domestic fisheries compliance, marine park management, shark incident response, marine safety, sea search and rescue, as well as whale disentanglement.

It will also feature a 5.5-metre tender craft with a stern launch and recovery ramp to conduct inspections and boardings at sea.

Dongara Marine managing director Rohan Warr said the company expects that suppliers and subcontractors in Western Australia's Mid West will be able to contribute to the project, designed by Western Australian naval architecture firm Southerly Designs.

"The award of this project is great recognition for the work our staff, subcontractors, and suppliers have been doing building many different types of new vessels for government agencies, commercial operators, and private buyers," Warr said.

"We look forward to working with DPIRD to deliver a similarly successful shipbuilding project. In addition to a highly capable patrol boat that will bring lasting benefits to fisheries compliance operations, that success will also be evident in employment, training, and economic benefits that will flow from its construction.

"We have a highly qualified and skilled workforce (with over 60 staff) and supplier base in place but are always on the lookout for people and businesses who can add value to our projects and operations."

Work is expected to commence on the vessel in October and be completed by September 2025, replacing a 25-year-old PV Walcott police patrol boat.

The vessel will be able to conduct extended voyages of up to 14 days with accommodation and food storage for 10 people, have a more efficient hull design with twin keels to provide improved stability and reduced roll, the latest navigation equipment, and infra-red night vision to support search and research and night-time patrols.

A fit-for-purpose fleet of research and patrol vessels is essential to the ongoing sustainability of the Western Australia fishing industry and the State's Marine Stewardship Council certification, according to Fisheries and Regional Development Minister Don Punch.

"Research, stock assessment and monitoring, and compliance work underpins the sustainability of our state's valuable fisheries and it is vital that we have a fit-for-purpose fleet of patrol and research vessels to support this work along WA's 12,000kilometre of coastline," he said.

"Investing in projects which support regional manufacturing also helps to generate local employment, in this case in the boat building and maintenance industry in the Mid West."

#### Where is the urgency? Surface fleet review delay only leaves us more vulnerable.

By: Stephen Kuper



# Revelations that the government's response to the findings of its own surface fleet review is still some time off, ultimately spells trouble for Australia's national security.

It goes without saying that as an island nation, Australia's sovereignty, security, and economic prosperity is intrinsically linked to the stability of our maritime surrounds and the nation's uncontested and unmolested access to the global maritime commons.

Recognising this fundamental strategic and tactical reality, the Albanese government's Defence Strategic Review, released in late-April 2023, has moved to fundamentally reshape the Royal Australian Navy.

This realignment of Navy's force structure and capability is part of government's recognition that the Australian Defence Force as a whole is no longer fit for purpose in the era of increased great power competition and multipolarity, heralding a shift away from a "balanced force" towards a "focused force" in the face of mounting great power competition in the Indo-Pacific.

First and foremost is the rapidly deteriorating geopolitical, tactical, and strategic situation emerging across the Indo-Pacific, necessitating the development of a flexible, future-proofed force capable of reliably responding to the tactical and strategic requirements placed upon the service by the nation's policymakers.

Highlighting this emphasis, the Defence Strategic Review states, "Australia's Navy must be optimised for operating Australia's immediate region and for the security of our sea lines of communication and mari-time trade."

Second is Australia's planned fleet of nuclear-powered, conventionally armed submarines to be delivered as part of AUKUS Pillar 1.

Lastly is the necessity to fundamentally overhaul the Navy's surface fleet in order to deliver "An enhanced lethality surface combatant fleet, that complements a conventionally armed, nuclear-powered

submarine fleet, is now essential given our changed strategic circumstances."

In response to these factors, the government also announced at the release of the Defence Strategic Review that the Royal Australian Navy's surface fleet would be undergoing a "short, sharp" review into the constitution of its force structure to support the delivery of the nation's new defence posture of "impactful projection".

All of these factors are set against the backdrop of repeated reminders by the government that we live in a truly unpredictable, dangerous, and competitive period of global history, not experienced since the interwar years.

Yet, despite this combination of factors, recent revelations have left questions about the government's commitment to deliver the necessary capabilities to ensure that the Royal Australian Navy in particular is fit for purpose in face of the deteriorating regional and global outlook.

Namely, the government's decision to delay its response to the findings of the review conducted by US Vice Admiral (Ret'd) William Hilarides, until Deputy Prime Minister and Defence Minister Richard Marles explained at a <u>Submarine Institute of Australia</u> event in mid-September, "Our intention is to provide our response to that, meaning the decisions which come from that, in really the first part of the first couple of months of next year. We'll try and get this out the door as quickly as we can, but that's essentially the timeframe that we're working on."

This is further reinforced by Defence Industry Minister Pat Conroy, who said, "It's an incredibly complex piece of work, detailing recommendations around platforms that cost tens of billions of dollars. It really will drive the structure of the Royal Australian Navy for 30, if not 50 years to come, and government will take our time working through its recommendations, and we will respond to it, and we're aiming to release a response in the first couple of months of next year at the latest."

While commendable they're taking the time to "do the hard yards", this seeming lack of urgency seems to fly in the face of repeated reminders about the precarious position in which we now find ourselves.

#### What we know so far

At the centre of VADM Hilarides' review emphasis is the major step change in the conceptualisation of Navy's mission profile, responsibilities and subsequently, the implications for force structure.

To this end, the government has spruiked plans to field two distinct tiers of surface combatant that are capable of "enhancing Navy's capability in long-range strike (maritime and land), air defence, and antisubmarine warfare requires the acquisition of a contemporary optimal mix of Tier 1 and Tier 2 surface combatants, consistent with a strategy of a larger number of small surface vessels".

This seems to indicate an "expansion" of the Royal Australian Navy's surface fleet, bulking the fleet out with smaller, corvette style vessels to provide a continuous, regional presence, with vessels that aren't as focused on high-intensity conflict, but still capable of adding something to any prospective fight.

The government envisages that these "Tier 2" vessels would be complemented by larger, more complex "Tier 1" vessels, similar to the Hobart Class and Hunter Class, respectively.

As part of this, it would seem that the Defence Strategic Review as the foundational document for the surface fleet review articulates the need to "significantly increase Navy's capability through a greater number of lethal vessels with enhanced long-range strike (maritime and land) and air defence capabilities, together with the ability to provide presence in our northern maritime approaches".

This approach, seems to in large part, predict the outcome, with mounting commentary advocating for corvettes to meet the "Tier 2" capability slot of Australia's still (let's face it) poorly misunderstood tactical and strategic requirements, highlighting just how quickly the "new and shiny" can seduce even the most discerning minds.

While we can (and will continue to) debate the individual platforms that best suit our requirement, again we come back to Australia's seeming lack of urgency in the face of this rapidly deteriorating global and regional circumstances – if they're so bad, where is our urgency?!

#### **Final thoughts**

The rapidly deteriorating geopolitical and strategic environment that is transforming the global and regional security paradigm requires a realistic analysis and assessment by Australia's policymakers.

Equally, while taking shortcuts to end up with 50 per cent of something, as opposed to 100 per cent of nothing is an admirable goal, however, ultimately it will only prove more costly in the long run as we scramble to rapidly develop high-end warfighting capability.

Equally, both the Australian government and the Australian public have to accept and understand that we will need to dramatically increase spending in our national defence and do so over the long term, rather than short term sugar hits or sleight of hand that push money out over the forward estimates and allow inflation to account for "increases" in spending, despite there being little-to-no new money in real terms.

Ultimately, this comes back to the government's shift away from a "balanced force" towards "focused force" as championed in the Defence Strategic Review. It equally fails to account for the planned increase in ADF personnel by 2040 and places ultimate hope in a series of as yet to be developed "wunderwaffe" or wonder weapons, like autonomous systems, cyber or tactical weapons like HIMARs and others to provide both "impactful projection" and deterrence against "any potential adversary".

Importantly, no one has said that defending the nation in this era of renewed and increasingly capable great power competition will be cheap or easy and we have to accept that uncomfortable reality.

## HII hits construction milestone for Virginia-class sub USS Arkansas

by Fatima Bahtić

HII's Newport News Shipbuilding (NNS) division has reached a significant milestone in the construction of Virginia-class submarine Arkansas (SSN 800).



Arkansas (SSN 800) is now "pressure hull complete," meaning that all of the hull sections were joined to form a single, watertight unit.

"It's exciting to reach pressure hull complete, because it's a visible sign that construction has progressed to the point where Arkansas really starts to take its final shape," said **Jason Ward**, NNS vice president of Virginia-class submarine construction.

"We absolutely understand the important mission ahead for Arkansas and are working with urgency to get this powerful national security asset to the Navy as soon as possible."



HII

This milestone comes following the christening of Massachusetts (SSN 798) and keel authentication of *Oklahoma* (SSN 802) at NNS so far in 2023.

*Arkansas* is the Navy's 27th *Virginia*-class fast attack submarine. The ship's sponsors are the six women of the historic group known as the Little Rock Nine, the first African American students to attend all-white Central High School in Little Rock, Arkansas, during desegregation. NNS honored all nine members, including the three men, during the November 2022 keel authentication ceremony.



#### A Better Idea for a Canadian Frigate?



Leaders in maritime innovation, OSK Design, is proud to introduce their latest design, the Arctic frigate, an exceptional vessel meticulously crafted for operations in the North Atlantic, High North, and Greenland regions. This multi-purpose Arctic frigate is set to redefine maritime capabilities with its significant features and capabilities. One of the notable features of the Arctic frigate is its fully operational helicopter, ready to take on a key role in its missions. This helicopter is a critical asset for Arctic operations, allowing for airborne scouting, transport, and search and rescue missions in the challenging Arctic environment.

#### Mission-ready versatility, arctic-ready and an exceptional mobility

The Arctic frigate is a true workhorse, designed to excel in a wide range of missions. The Arctic frigate is classed for year-round operation in the arctic, capable of withstanding the most challenging ice conditions while maintaining optimal performance. With a length of 125 meters, a beam of 18.0 meters, a maximum draught of 6 meters, and a top speed of 23+ knots, this frigate is built for swift and agile navigation in the most unstable waters.

Equipped to handle any situation, the Arctic frigate boasts an impressive arsenal, including a gun, missile launcher, and overhead weapon systems, ensuring readiness for both offensive and defensive maneuvers. Operating in one of the harshest environments on Earth demands extraordinary capabilities.

#### Mission flexibility redefined

The Arctic frigate is powered by a state-of-the-art diesel-electric system (PODs), offering both efficiency and maneuverability. A crew capacity of 60-125+ depending on the task, a fully equipped helicopter, and a drone capacity for air, surface, and underwater operations ensure that the Arctic Frigate is ready for any mission. With two RHIBs (Rigid-Hulled Inflatable Boats) up to 9 meters in length and one stern-launched boat up to 12 meters, the vessel is equipped for swift and effective search and rescue missions.

The mission bay is designed to accommodate various modular systems and stores, such as the ACTAS ASW system, mine-laying modules, oil spill booms and equipment for the Arctic Standby Force, allowing for mission-specific adaptability. With its large, modularized mission bay, this vessel is adaptable for Anti-Submarine Warfare (ASW), surface and air surveillance, maintenance of sovereignty, search and rescue, disaster relief and enhanced self-defense.

With the Arctic frigate, OSK Design has designed a vessel that represents the pinnacle of maritime engineering and innovation. It is uniquely prepared to meet the demands of operations in the Arctic, offering a combination of versatility, power, and adaptability.



## Submarine proposal still stands – Hanwha

#### By Nigel Pittaway

On the opening day of the ADEX 2023 exhibition in Seoul, Hanwha Ocean has confirmed that its proposal to supply diesel electric submarines to the Royal Australian Navy still stands, despite the AUKUS arrangement for nuclear-powered vessels.

The original offer, made before the AUKUS announcement last September, was intended to replace the Collins-class submarine Life of Type Extension (LOTE) program. Hanwha Ocean said the delivery of a number of its KSS-III (Jangbogo-III) Batch II submarines, to be built in Korean yards, would remove the risk associated with the Collins LOTE.

The company's Head of Naval and Special Ship Overseas Marketing Team, Jason Kim, told ADM that the offer could now also de-risk Australia's plans to acquire leased Virginia-class submarines from the US in the 2030s; and new SSN-AUKUS submarines, which are not to begin construction for the Navy until at least 204

Hanwha Ocean and Hyundai Heavy Industries (HHI) are building the KSS-III for the Republic of Korea Navy (ROKN) in three batches. Three Batch II boats are still to be delivered and the first Batch III boat will be delivered in 2028.

Kim said the Hanwha yard can build two submarines simultaneously and has the capacity to expand the facility to produce four boats at the same time. He said the production cycle for each submarine is around 50 months.

The KSS-III Batch III boats will have an Air Independent Propulsion (AIP) system which uses a PH1 hydrogen fuel cell that allows the submarine to remain submerged for over 20 days.

The submarine also has six Vertical Launch System (VLS) cells, capable of launching Hyunmoo-4 Submarine-Launched Ballistic Missiles (SLBM).

Hanwha is also proposing the KSS-III for Poland and the Philippines, and sees Canada as a potential customer. Ottawa's Canadian Patrol Submarine Programme (CPSP) is looking for at least four – and as many as 12 – submarines to replace its Victoria-class SSKs and is expected to make a decision in the 2026-2027 timeframe.

Kim said Hanwha Ocean is also considering the establishment of a 'Jangbogo User's Group', which would set up support centres around the world.

"It is an alternate solution for Australia to consider," Kim told ADM. "Our technology is rock-solid."

Disclaimer: The writer is staying in Seoul as a guest of the Korean Government.



#### VESSEL REVIEW | BUCHA – UKRAINIAN NAVY PLACES LOCALLY-BUILT GUNBOAT INTO SERVICE By Baird Maritime - October 20, 2023.



Photo: Ukrainian Ministry of Defence

The Ukrainian Navy has taken delivery of a new armoured gunboat built by Kyiv-based shipyard Kuznia na Rybalskomu.

Named after a city in northern Ukraine, *Bucha* is the eighth vessel to be constructed under the Project 58155 series of small armoured artillery boats (Mali bron'ovani artileriys'ki kateri; MBAK), otherwise known as the Gyurza-M class. The Gyurza-M boasts are upgraded and slightly larger variants of the earlier Project 58150/Gyurza-class gunboats, which were originally built by Kuznia na Rybalskomu exclusively for Uzbekistan's armed forces.

As with its Gzurza-M class sisters, *Bucha* has a length of 23 metres, a beam of 4.8 metres, a draught of only one metre, a displacement of 54 tonnes, and space for five crewmembers. Two diesel engines deliver a top speed of 25 knots and a range of 900 nautical miles at a cruising speed of 12 knots.



Photo: Ukrainian Ministry of Defence

The MBAK's armament consists of two Katran-M close-in weapon systems (CIWS) mounted on remotely operated stations fore and aft. Each CIWS unit includes a 30mm autocannon, two anti-ship/anti-armour missiles, a 30mm automatic grenade launcher, and a 7.62mm machine gun. The electronics suite meanwhile includes a navigation radar, a laser rangefinder, and an electro-optical targeting sensor. The gunboat also has some protection from hostile fire thanks to the use of anti-ballistic steel for the superstructure, the engine compartment, and the storage area for the crew's weapons. The wheelhouse itself boasts large windows ensuring enhanced all-round visibility. All onboard systems including those for navigation and communication are monitored from the wheelhouse via an integrated bridge system.

*Bucha* was designed by the State Research and Design Shipbuilding Centre. It will be operated primarily in shallow inland and coastal waters, performing maritime security patrols and providing naval gunfire support for friendly ground forces.

## I was wrong: Compared to the DSR, Defence of Australia would have given us 'real' power

26 OCTOBER 2023 By: <u>Stephen Kuper</u>



When introduced, the Defence of Australia doctrine and associated force structure drew quite a bit of flak, particularly from the mid-to-late 1990s. However, when compared to what has been proposed under the Defence Strategic Review, it goes without saying, my criticism was wrong.

No major public policy is perfect, there is no escaping that reality, and in the realm of Australian public policy, this is arguably the undeniable status quo.

Australia's history of defence and national security policy is as storied as the nation itself, with the wild oscillations between the various policies, doctrines, and ensuing force structures which shape the way the nation has and continues to interact with the region and the broader world.

Equally relevant when assessing Australia's history of defence policies, doctrines, and ensuing force postures is the impact of the world's great powers and their actions, ambitions, and designs for the globe. Beginning with Australia's earliest "great power relationship", the British Empire, much of the nation's early period of defence policy was heavily influenced by the direct interests, designs, and ambitions of the British Empire in the "Far East".

Serving as a bastion of the Empire far from the centre of imperial power however presented significant challenges, particularly as the relative power of the British began to decline in the years following World War One. Coming to a head with the fall of Singapore in 1942, Australia looked to America for a new "great and powerful friend" under the arms of whom we could gain some semblance of safety and security throughout the Second World War. Learning the lessons of the Second World War, namely the uncomfortable reality that despite the best of intentions, our great and powerful friends may not always have the capacity to come to our aid when needed, the Australian government and people were stirred to action.

Under the broader protective global umbrella provided by the United States and to a lesser extent, the British Empire, Australia embraced the doctrine of Forward Defence, leveraging operational skills across the domains of warfare, developed during the war, to implement a strategic umbrella in what is now known as the Indo-Pacific. Forward Defence would be characterised by a robust force structure that included strategic bombers, aircraft carrier battlegroups and an Army designed for great power conflict.

Alliances played a central part of enhancing the strength of Australia's robust, muscular doctrine and force posture of engaging forward, deep into Southeast Asia.

However, it wasn't to last, with the newly elected Whitlam government overturning Forward Defence in light of it being linked to Australia's disastrous participation in the Vietnam conflict without a clear successor. That is, at least, until the Hawke government and the 1986 Dibb Review and ensuing 1987 Defence White Paper titled, <u>Defence of Australia</u>, which shifted away from the doctrine, policy, and force structure of Forward Defence to emphasise the creation of a "balanced force".

#### Failing to deliver on Defence of Australia

Championed by Australian strategist Paul Dibb, the Defence of Australia white paper released in 1987 advocated "selfreliance" and a sense of "balance" between the individual services to maximise the deterrence and active response capabilities available to the Australian Defence Force.

At the core of this decision was the growing recognition that Australia didn't have to develop major strategic capabilities, and more importantly for our policymakers, we couldn't afford to, based on our limited materiel, financial and manpower resources.

Dibb's white paper highlights this, stating: "This government's policy of defence self-reliance gives priority to the ability to defend ourselves with our own resources. Australia must have the military capability to prevent an enemy from attacking us successfully in our sea and air approaches, gaining a foothold on our territory, or extracting political concessions from us through the use of military force. These are uniquely Australian interests and Australia must have the independent military capability to defend them."

As the potential for peer competitor conflict subsided and the Islamic terrorism became the priority, successive Australian governments embraced the post-Cold War peace dividend and significantly scaled back the nation's investment in its defence capabilities and doctrines, despite rhetoric and maintaining spending at the vaunted 2 per cent of GDP (periodic exceptions notwithstanding).

All of this seemed to go swimmingly, with Australia only ever expected to provide niche capabilities to larger, coalition forces, and would enjoy a period of "warning time" that would give the nation sufficient time to build the domestic capabilities to deter and fight any potential adversary.

With the benefit of hindsight, we now know that while much of the Western world was focused on disastrous interventions in the Middle East, equally ambitious, revisionist, and committed powers were quietly watching, investing, and positioning themselves to eventually replace the post-Second World War order.

However, perhaps unsurprisingly, given the elation in the aftermath of the Soviet Union's collapse, the force structure proposed by the Defence of Australia policy wasn't necessarily always delivered by successive governments.

#### An emphasis on 'Continental Defence'

It is inescapable that much of the emphasis of the Defence of Australia Police is focused upon the continental defence of the Australian continent and the control of the critical "Sea-Air Gap" in our northern approaches through Southeast Asia. In order to deliver this, the 1987 Defence White Paper called for a major reorientation of the Australian Defence Force, focusing on developing a "joint" and "balanced force" depending on advanced warning, technological supremacy, self-reliance and alliances all providing "mass" to Australia's otherwise limited resources.

Long-range strike was at the core of the Defence of Australia, with the nation's long-range strike capabilities centred on the Air Force's fleet of F-111s with a range in excess of 5,000 kilometres and the nation's fleet of Oberon Class submarines and eventually, Collins Class submarines.

Controlling the "Sea-Air Gap" depended on the F-111 fleet and Australia's then-new, classic F/A-18A/B Hornet fleet and what was projected to be a surface fleet of "16 to 17 major surface combatants" made up of the Perth Class guided missile destroyers and Adelaide Class frigates, supported by a large number of "Tier 2" surface combatants, our venerable Anzac Class frigates.

This combination of capabilities would ensure Australia's control of the critical sea lanes of communication that crisscross Southeast Asia and the airspace across northern Australia and the region.

Meanwhile, the Defence of Australia's proposal for Army emphasised the development of a "highly mobile force" which would deliver as the white paper explains, "We need a force structure that includes a light air portable force, capable of rapid deployment; forces capable of following up an initial deployment; and the availability of greater combat power to reinforce deployed formations if necessary."

If all of this is sounding a tad familiar, don't worry, you're not alone.

The combined long-range strike capacity to be delivered by the Air Force and Navy has not been replaced since the retirement of the F-111 fleet and due to a number of ongoing issues with the Collins Class fleet.

Now, on paper, the Defence Strategic Review proposes a number of solutions in its transition from the "Balanced Force" to a "Focused Force", but is it enough and is it right?

#### I was wrong and the 'Focused Force'

Beginning with the "Balanced Force", the Defence Strategic Review defines it as: "A balanced force is designed to be able to respond to a range of contingencies when the strategic situation remains uncertain. This force design required that the ADF respond to low-level threats related to continental defence, regional operations in support of Australian interests and global support to our alliance partner, the United States.

"In this approach, while the balance of the force was primarily designed for the Defence of Australia, the broader purpose of the ADF was for it to be structured to respond to a range of contingencies. This conceptual approach to force structure planning, which has led to like-for-like replacements in military platforms in the ADF, is deeply ingrained in Defence's culture," the DSR explains.

Conversely, the Defence Strategic Review defines a "Focused Force" thus: "This conceptual approach to force structure planning will lead to a force designed to address the nation's most significant military risks. The capabilities required to address identified threats will also provide latent capability to deal with lower-level contingencies and crises." As part of this emphasis on developing a "Focused Force", we are seeing the focus on "long-range" weapons systems including HIMARS, including the Precision Strike Missile (PrSM) missiles with a maximum projected range in excess of 500 kilometres, LRASM again with a maximum range of less than 950 kilometres, and Tomahawk with a range between 1,500–2,500 kilometres, respectively, and of course, the planned nuclear submarine fleet.

We are still to find out just how significant the changes to the Navy will be, although all the conjecture seems to point to a hybrid mix of niche, high-end capabilities and mid-tier platforms but in larger numbers.

Meanwhile, Air Force remains in a state of limbo with the scuttlebutt indicating that Australia will not pursue the acquisition of the final squadron of F-35As to bring our fleet to 100 airframes, while minor expansions to the intelligence, surveillance, and reconnaissance and air lift fleets round out projections for the Air Force.

Equally, for Army, the government announced, "1st Brigade will be light, agile, and quick to deploy in the littoral environment. Third Brigade will be an armoured brigade designed for amphibious operations with the Royal Australian Navy in order to secure decisive terrain. Seventh Brigade will be motorised and optimised to project by air and sea to respond to regional contingencies."

Minister for Defence Richard Males reinforced the importance of this, stating, "These changes to Army are about responding to the recommendations of the Defence Strategic Review to maintain peace, security, and prosperity in our region.

"This will mean Army has a concentration of people and capabilities in Australia's north, making it easier to deploy for training, major exercises or to support our partners and allies in the region," the defence minister explained.

Despite all of this and the rhetoric out of the government surrounding the capabilities outlined in the Defence Strategic Review, it is pretty clear the Defence of Australia policy, despite its very, very significant flaws is VASTLY superior to what has been proposed under the Defence Strategic Review.

Simply put, while I have been wrong in my criticism of the Defence of Australia policy, it is clear we need to do better.

#### **Final thoughts**

The rapidly deteriorating geopolitical and strategic environment that is transforming the global and regional security paradigm requires a realistic analysis and assessment by Australia's policymakers.

Equally, while taking shortcuts to end up with 50 per cent of something, as opposed to 100 per cent of nothing, as proposed by the government is an admirable goal. However, ultimately, it will only prove more costly in the long run as we scramble to rapidly develop high-end warfighting capability.

Equally, both the Australian government and the Australian public have to accept and understand that we will need to dramatically increase spending in our national defence and do so over the long term, rather than short-term sugar hits or sleight of hand that push money out over the forward estimates and allow inflation to account for "increases" in spending, despite there being little-to-no new money in real terms.

Ultimately, this comes back to the government's shift away from a "Balanced Force" towards "Focused Force" as championed in the Defence Strategic Review and the foundational problem that is our lack of clearly defined role and objectives for our own defence capabilities.

This reality equally fails to account for the planned increase in ADF personnel by 2040 and places ultimate hope in a series of as yet to be developed "wunderwaffe" or wonder weapons, like autonomous systems, cyber or tactical weapons like HIMARs and others that are being shoehorned into fulfilling "strategic" roles to provide both "impactful projection" and deterrence against "any potential adversary".

Importantly, no one has said that defending the nation in this era of renewed and increasingly capable great power com-

## AUSTRALIAN NAVAL SHIPBUILDER TO EXPAND INTO UK MARKET By **BairdMaritime**



Photo: Austal

Australian naval shipbuilder Austal has entered into a memorandum of understanding (MOU) with UK-based the Harland and Wolff Group to pursue shipbuilding opportunities in the UK. The MOU calls for the transfer of technology, skills, and shipyard capabilities required to build the next generation of patrol vessels for the UK for maritime security agencies. Austal said both parties have identified opportunities in the UK market, including the Border Force vessel replacement programme. The companies intend to work jointly in a non-exclusive partnership on such opportunities.

#### Generational anxiety: Can Australia 'calm the fear' of nuclear-powered submarines?

By: Robert Dougherty



United States Navy Virginia Class submarine USS Mississippi arrives at Fleet Base West, Rockingham, Western Australia for a routine port visit. Photo: CPOIS Yuri Ramsey

Time will tell if the Australian public can overcome decades of national fear regarding nuclear-powered submarines, weapons, and related nuclear energy technology.

The Australian Submarine Agency (ASA) might be hoping that obstacle can be conquered, as they publish some slick new advertising and explanation material for the nuclear-powered submarines that this country will one day possess. ASA championed the safety and strategic value of Australian conventionally armed, nuclear-powered submarines as part of Nuclear Science Week with an "Introduction to Nuclear-Powered Submarines" video explanation on 16 October. The agency was originally established in July this year to safely and securely acquire, construct, deliver, technically govern, sustain, and dispose of Australia's conventionally-armed nuclear-powered submarine capability for Australia via the AUKUS partnership.

Drawing parallels to increasing tensions in the South China Sea and regions around Australia, the new marketing content states that "the Indo-Pacific has become a centre of strategic competition. Our nuclear-powered submarines will provide Australia with a potent, stealthy and agile capability edge".

Australia is on the path to those submarines after a joint-announcement made earlier this year between the United Kingdom, the United States of America, and Australia.

The first SSN-AUKUS is scheduled for delivery from the UK to the UK's Royal Navy in the late 2030s, with the first domestically constructed SSN-AUKUS delivered from the Commonwealth to the Royal Australian Navy in the early 2040s.

In the meantime, plans continue for the United States to sell Australia nuclear-powered and conventionally armed Virginia Class submarines in the early 2030s with the deal pending Congressional approval.

But what's the benefit of those vessels over diesel-electric submarines?

Nuclear-powered submarines do not require surface recharge time where they are raised above the surface to charge batteries, according to the ASA.

Nuclear-propelled submarines also have unlimited range (disregarding crew supplies) and a superior transit speed of 25plus knots as opposed to their diesel alternatives with a travel distance of 11,500 kilometres and transit speed of 8–12 knots.

In a simplified science lesson, it further clarifies that the reactor of the nuclear-powered submarine creates a controlled chain reaction of nuclear fission with uranium atoms. Each creates more energy per atom than fossil fuels, according to the ASA.

In addition, the video states nuclear-powered submarines have four layers of protection and submarine crews receive an average annual dose of radiation of less than 0.1mSv compared to long haul pilots (3-4mSv) and the general public (1-4mSv).

It also praises alliances with the United States and the United Kingdom, which operate 500 naval nuclear reactors and have travelled more than 240 million kilometres.

"Australia will achieve the highest possible safety security and non-proliferation standards. We will safely and securely deliver nuclear-powered submarines to protect Australia and our national interests," the ASA said.

I fear this is where it may lose many members of the Australian public due to generational opposition to nuclear power, memories of Cold War-era rhetoric, and a fierce determination against the development of nuclear energy systems domestically.

Two-thirds of Australians (67 per cent) are either "strongly" or "somewhat" in favour of the decision to acquire nuclearpowered submarines under AUKUS, a similar result to that in 2022 (70 per cent), according to the Lowy Institute Poll 2023. However, in 2023, the proportion of Australians who say they "strongly" favour the submarine acquisition dropped by seven points to 26 per cent.

In an April survey, the Lowy Institute Poll asked Australians about the impact they think the submarines will have on regional stability. Australians have mixed feelings in response to this question. Three in 10 (28 per cent) think the submarines will deter military conflict and help ensure stability in the Indo-Pacific region, while two in 10 (20 per cent) think they will increase the risk of military conflict and instability. Around half either say the submarines will make no difference (32 per cent) or are not sure of their impact (20 per cent).

Nevertheless, the Australian anti-nuclear movement runs deep domestically against introduction of nuclear energy production, uranium mining, and nuclear weapons testing in the Pacific; at odds with expansion of nuclear-related technology in countries such as the US, France, the UK, China, and South Korea.

Let's hope public trust in nuclear fissure and fusion technology gains momentum before the submarines arrive.

Royal Navy nuclear submarine dived towards 'danger zone' after malfunction - reports



File image of a Royal Navy Vanguard-class submarine (Picture: Crown Copyright). A Royal Navy nuclear submarine descended towards dangerous depths because of a failed gauge, it has been reported.

A Vanguard-class submarine encountered a malfunction in its depth gauge, leading the crew to incorrectly perceive they were at a normal depth when, in reality, they were navigating at a deeper level, according to The Sun.

The Sun reported that the submarine was about to enter the "danger zone" when engineers spotted a second gauge at the back of the vessel that indicated the correct depth and disaster was averted.

It's said the submarine was in the Atlantic and was preparing to go on a patrol when the gauge stopped working, leading personnel to believe the boat was level when it was in fact still diving. Vanguard-class submarines carry Trident ballistic missiles - the UK's nuclear deterrent - and are nearly 150 metres long with a displacement of 15,900 tonnes.

Reports say 140 crew members were on board when the gauge was said to have malfunctioned. A source told The Sun: "It's not the engineers' job to control the sub's depth but they saw how deep they were and realised something was wrong.

"Technically the sub was still at a depth where we know it can operate, but if it ever has to go that deep the whole crew is piped to action-stations.

"That hadn't happened. The sub wasn't supposed to be there, and it was still diving. And if it had carried on going, it doesn't really bear thinking about."

The Ministry of Defence typically doesn't comment on submarine operations.

A Royal Navy spokesperson said: "Our submarines continue to meet their commitments, deploying globally on operations, protecting national interests, and keeping us and our allies safe. "While we do not comment on specific details regarding submarine operations, safety of our personnel is always the highest priority."

The Royal Navy's Vanguard-class consists of four nuclear-powered ballistic missile submarines – HMS Vanguard, Vengeance, Victorious and Vigilant.

The subs are set to be replaced in the next decade by the new <u>Dreadnought-class</u> which are currently being built.

At least one British submarine carrying nuclear weapons has been on patrol continuously since

Lift off: Ramp and catapult - which is best launch method for aircraft carriers?



#### Ramp and catapult - why do we have two launch options? Aircraft carriers have relied on technological concepts that are decades old in order to get their aircraft into the air. The two most common methods are catapults and ramps, which are also known as ski jumps, with some modern carriers using a mixture.

Currently, Royal Navy aircraft carriers such as the flagship HMS Queen Elizabeth employ the use of a ramp, whereas US aircraft carriers use the catapult. But which, if any, is "better"? Forces News has taken a look at the differences in an attempt to find out.

#### Ramp

Developed in the 1970s, the ramp or "ski jump" is a feature of the new Queen Elizabeth Class aircraft carriers, helping to launch the latest generation of jets. It offers some advantages over the so-called "cat and trap" systems. Ski jumps allow the aircraft to use their engines to take off unassisted, with the ramp adjusting their angle of attack for a safe climb away from the front of the ship.

Trevor Hollingsbee, a defence and security analyst, told Forces News: "It does enable the carrier to operate smaller, cheaper aircraft, and the carriers themselves are of course cheaper and more affordable. "You have what's called a 'clearer deck' which means you can operate - and are currently operating - drones and various types of helicopters, sometimes simultaneously with the aircraft."

However, he said there are limits to the take-off weight of the aircraft that use this system, therefore limiting the amount of fuel and weapons they can carry.





#### Catapult

A catapult is sometimes seen as a more versatile and effective option for launching and recovering aircraft on an aircraft carrier rather than a ramp.

Mr Hollingsbee said that the catapult mechanism "really flings" the aircraft off the carrier, however unlike the ramp "it requires a great deal of equipment and a great deal of energy which has to be supplied to it".

Some reasons why a catapult may be preferred over a ramp on an aircraft carrier are:

- Speed: A catapult can launch an aircraft much faster than a ramp, allowing for a quicker launch and recovery of the aircraft.
- Distance: A catapult can launch an aircraft much farther than a ramp, allowing for greater flexibility in terms of where the aircraft can take off from and land.
- •

• Weight: A catapult can launch heavier aircraft than a ramp, as the aircraft's weight is not as much of a factor in the launch.

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#### Electromagnetic catapult

The US's newest aircraft carrier, the <u>USS Gerald R Ford</u>, on her first major deployment earlier this year was using the latest in aircraft launching technology - an electromagnetic catapult. Mr Hollingsbee told Forces News: "It doesn't require the major machinery backup which the steam catapult requires, it is much less demanding on power and water.

"It can also launch various types of aircraft, at various weights, without requiring much adjustment between launches." However, the defence and security analyst did highlight one key disadvantage of the newer electromagnetic launch process.

"It's been a very long gestation period, I think they are still speaking reliability with them," he cautioned.

An F/A-18 Hornet prepares to be launched by catapult from the flight deck of the USS Nimitz (Picture: US Department of Defense)



#### BAE Systems to provide Hunter class Mk 45 naval guns



BAE Systems has received a contract to deliver multiple shipsets of the Mk 45 medium-calibre gun and automated

#### Ammunition Handling System (AHS) for the Royal Australian Navy's future fleet of Hunter class frigates.

BAE's Mk 45 gun system combines the five-inch, 62-calibre Mk 45 Mod 4A naval gun with a fully automated AHS that continuously supplies the gun with ammunition, in high sea state conditions, without assistance from the crew; this automated gun system increases sailor productivity, reduces risk to sailor safety, and increases the operational capability of the Mk 45 at sea.

The Mk 45 gun system will equip the Royal Australian Navy with a common, adaptable gun system that can easily integrate advanced munitions to provide the firepower required to meet the Hunter class deterrence mission.

Brent Butcher, vice-president and general manager of weapon systems at BAE Systems, welcomed this contract announcement, saying: "We are proud to partner with BAE Systems Maritime Australia to deliver the Mk 45 gun system and Ammunition Handling System to the Royal Australian Navy."

Work on the contract will begin in 2023 and finish in 2036. Engineering work will be completed in Minneapolis, Minnesota, and production will occur in Louisville, Kentucky.

"The highly reliable Mk 45 system maximises the lethality of the Hunter class frigates, offers the capability to integrate advanced munitions, and supports additional future technology upgrades. With this system fielded on 11 fleets across the globe, it has proven it offers high reliability," Butcher added.

The Mk 45 system Mod 4 incorporates a host of major upgrades, including a 62-calibre barrel, strengthened gun and mount subsystems, advanced control system enhancement, and a reduced signature, low-maintenance gun shield. These improvements provide Naval Surface Fire Support (NSFS) at ranges of more than 20 nautical miles (36 kilometres) with the new five-inch US Navy-developed cargo projectile and an improved propelling charge.

BAE Systems has delivered over 280 shipboard applications to the US Navy and 11 fleets across the globe. Full life-cycle support is keyed to the customer and can be supplemented by the worldwide logistics system supporting the US Navy.

### Adelaide University research reveals high rates of lung cancer in Navy vets



## A University of Adelaide and Oxford University study has discovered asbestos exposure led to a higher incidence of asbestos-related lung cancers in British and Australian naval personnel than in other armed forces.

The data sets were collected from 30,085 United Kingdom and Australian personnel who served in the '50s and '60s, a time when asbestos-containing materials were present in British and Australian naval vessels.

Three of the four cohorts had previously been studied by the University of Adelaide and the UK Health Security Agency to identify the effects of radiation exposure from British nuclear testing; however, a raised incidence of mesothelioma, a cancer strongly linked to asbestos exposure, was seen in naval personnel in all cohorts.

The University of Adelaide's Dr Richie Gun and Oxford University's Dr Gerry Kendall were prompted by this finding to examine the dataset for the occurrence of lung cancers, which can also arise from asbestos exposure.

Meanwhile, the fourth cohort was Australian veterans of the Korean War, which had been studied by the Australian Department of Veterans' Affairs and the Australian Institute of Health and Welfare.

Dr Gun said, "We found the lung cancer rate was higher overall in naval personnel than in the other armed services, and, while smoking remains the dominant cause of lung cancer, it is unlikely the excess could be explained by a higher smoking rate in the navy."

The researchers have estimated that the proportion of lung cancers related to onboard asbestos exposure were of the order of 27 per cent in Australian seamen and 12 per cent in British seamen.

"Although actual measurements of airborne asbestos levels were not available, and estimates are difficult, we have concluded that the higher lung cancer rate in sailors was most probably caused by onboard asbestos exposure. This conclusion was strengthened by the occurrence of deaths in sailors from asbestosis, a condition which is non-cancerous but is nevertheless disabling and potentially fatal," Dr Gunn explained.

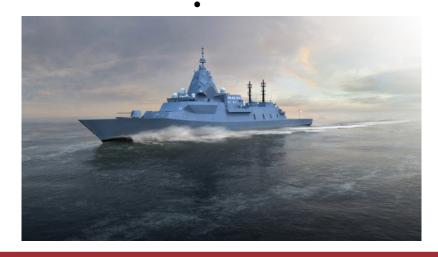
While there is a ban on imports and strict regulatory control of asbestos-containing materials in Australia, they still pose a risk to workers and some householders. There were 142 cases of asbestosis and 111 asbestosis deaths in 2021–22 reported in the NSW Dust Diseases Register.

Dr Gun explained that the effects of asbestos exposure are likely being underestimated unless lung cancer is considered alongside mesothelioma and asbestosis.

"Although it remains true that smoking causes most lung cancers, other agents such as asbestos can contribute to the incidence of cancer in an exposed population. Moreover, we know from other studies that the combination of smoking and asbestos exposure has an enhanced influence on lung cancer risk; this interactive effect would have contributed to the observed lung cancer excess," he said.

The discovery of a link between asbestos exposure and a higher incidence of lung cancer is a timely reminder of the need for protections against exposure to other harmful airborne dusts.





## Defence admits failures in Hunter selection process

By Ewen Levick | Melbourne | 13 November 2023

The Department of Defence has admitted that it 'did not conduct an effective limited tender process' for the design of the \$45 billion Hunter class frigates.

An ANAO report into the program, tabled in Parliament on 10 May, was sufficiently critical of Defence's procurement processes to suggest that "further training and oversight may be required of Defence officials involved in high-level planning and advising on major capital acquisition projects, at all levels."

Findings in that report included that contract expenditure to date had not been effective in delivering on project milestones, and "lack of design maturity" had resulted in a fresh 18-month delay to the project, with the first of the nine Hunter-class vessels intended to replace the RAN's Anzac-class frigates now expected to be delivered in mid-2032 rather than early 2031. Now, Secretary of the Department Greg Moriarty has admitted that Defence's own tender processes resulted in risks that are now being realised.

"After initial pass and up until first pass, there was no consistent expression of the goals and purpose of the procurement. Planning for the procurement fell into a process of disjointed advice to government that did not include deliberate steps to maintain clear coherent goals and a procurement method commensurate with the scale, scope and risk of the procurement," Moriarty wrote on 10 November. The submission also acknowledges poor record-keeping: "The absence of formal documentation means that there is no evidence to demonstrate that the shortlisting activities and decision were commensurate with the scale, scope and risk of the decision."

Moreover, the submission acknowledges that Defence focused too heavily on capability requirements and did not pay enough attention to risk, particularly given 'other tender criteria' that included a mature, in-the-water design (which the heavily-Australianised Hunter class was not). "The focus on achieving capability requirements displaced sufficient attention to the risks as well as the consideration of the tenders against other criteria which information was assessed and documented as part of the process," Moriarty wrote.

According to the original ANAO report, Defence's Capability and Investment Committee had decided in February 2016 that Italy's FREMM multipurpose frigate and Spanish shipbuilder Navantia's modified F-100 were considered the most viable designs and that either the UK's BAE Systems Type 26 or the French variant of the FREMM design should be progressed as a third option for the competitive evaluation activity.

Records of the rationale for the selection by the Defence Secretary (the decision-maker) of the BAE Type 26 design as the third option to be recommended to government had not been retained by Defence, the ANAO said. Last week, <u>BAE Systems revealed</u> an 'up-gunned' Hunter class proposal which will increase the number of vertical launch system (VLS) cells from 32 to 96, at the expense of some of the high-end anti-submarine warfare (ASW) equipment such as the towed array sonar, and the Hunter's mission bay aft of the funnel.

The Hunter program is awaiting the outcome of the Surface Fleet Review, now not expected to be made public until the end of the first quarter next year.

### Navantia puts forward Tasman and Flight III surface ship designs

By: <u>Robert Dougherty</u>



## Navantia has thrown its hat into the ring for consideration for the Royal Australian Navy's future surface fleet with a series of new warship designs.

It unveiled a new Tier 2 multi-role combatant capability Tasman Class corvette at the Indo Pacific 2023 International Maritime Exposition in Sydney this week. The 3,000-tonne design, based on five Alpha 3000 ships already being put into service with Saudi Arabia, features a crew of 90 with total capacity for 124 personnel, 16 VLS, four quad anti-ship missile launchers, close in weapons systems, and a 57mm main gun.

Navantia is also offering a heavier 3,700-tonne design, as well as a self-described "big brother" to the current Royal Australian Navy Hobart Class destroyer, the Flight III destroyer.

The Tier 1 Flight III design has options for directed energy weapons, 128 VLS, a five-inch millennium main gun. A Navantia spokesperson said all three designs are mature and very detailed and have received enormous interest throughout their exhibition in Sydney across the Indo Pacific conference. Earlier this month Austal, Civmec, and Navantia Australia announced they have partnered to offer the Australian government a proposal to deliver six corvettes in recognition of the Navy's urgent need for increased strike capability.

Those designs were developed by Navantia, the corvette combining the manoeuvrability of a Tier 2 vessel, with the weaponry of a major surface combatant. The corvettes would reportedly require a smaller crew than larger ships, without compromising on integrated anti-air, anti-surface, anti-submarine, electronic and asymmetric warfare capabilities, including sovereign solutions such as the Saab Australian combat system and CEA Technologies radars.

The three companies have been collaborating to develop a detailed proposal since November 2022. The proposal was first presented to the Commonwealth in response to the 2023 Defence Strategic Review (DSR) and the independent analysis of the Navy's surface combatant fleet. The three companies are updating and expanding the proposal, now named the Tasman Class corvette.

The corvettes would be constructed entirely in Henderson, Western Australia, with production able to start rapidly as work on the design is well advanced and based on an operational reference vessel.

Austal chief executive officer Paddy Gregg said the corvette program will establish a genuine regional shipbuilding enterprise in Western Australia.

"Integrating the workforce, supply chain, facilities, systems and processes of the three partners will pave the path towards the consolidation of resources as recommended in the 2023 Defence Strategic Review," he said.

"Austal recognises the strategic importance of a national shipbuilding capability, and we are excited by what this proposal would mean for continuous, sovereign shipbuilding, particularly in Western Australia. We have a long and close association with building ships on time and budget for the Royal Australian Navy, collaborating with the Department of the Defence, building ships based on third-party designs, and established relationships with valued supply chain partners. The Tasman Class opportunity is an extension of these relationships.

"Building Australia's corvettes in Western Australia will establish both a genuine long-term shipbuilding enterprise at Henderson and the platform for continuous naval shipbuilding in the region – an enterprise that brings together the Commonwealth, regional shipbuilders, and their supply chains to establish a new warship construction hub."

The proposed corvette designs would include NSM Anti Surface launchers and MK-41 vertical launch system cells, alongside existing Australian payloads, including the Saab 9LV combat management system, the CEA FAR OPVR radar, the newly announced Naval Strike Missiles, and the MH60-R Seahawk helicopter.

"Civmec look forward to working together with Navantia and Austal to deliver six or more seaworthy corvettes on schedule and to budget," according to Civmec executive chairman Jim Fitzgerald. "Civmec takes pride in our state-of-the-art, purposebuilt ship construction, ship repair and maintenance facility we have built in Henderson. The facility can comfortably accommodate the proposed construction drumbeat of the corvettes in addition to our existing and future contracts. Civmec is committed to adding value to the Australian maritime landscape, and the Henderson facility is a testament to that commitment. Civmec is excited about the prospect of continuing to invest in infrastructure to support continuous naval shipbuilding in Henderson.

"We view this opportunity as one that will deliver both national and regional opportunities for Australian industry and deliver the best outcome for the Commonwealth and the Royal Australian Navy. Combined Civmec, Austal and the wider AMC Precinct have direct access to the skilled workforce required to support a program of this size, and together with Navantia's technological expertise, will deliver locally built, internationally renowned naval ships."



OPINION | CHINA'S SONAR PULSE POSES ANOTHER TEST OF AUSTRALIA'S WILL By <u>Sam Roggeveen</u> - November 21, 2023.



HMAS Toowoomba departs Sydney Harbour to participate in Exercise TALISMAN SABRE 2017. (Photo: Royal Australian Navy) China's harassment of the Australian warship HMAS Toowoomba off the coast of Japan, which reportedly caused minor injuries to naval divers attempting to clear a fishing net from the frigate, is the latest in a string of provocations by China's military against Australian, American, and Canadian ships and aircraft operating in Asian skies and waters. China has repeatedly flouted long-standing conventions that are intended to ensure safety during military intercepts in the air and at sea. Australia-China relations have improved markedly since the election of Prime Minister Anthony Albanese, with the latter's recent visit to Beijing marking a new high point. The assertive phase of China's international behaviour, the so-called "Wolf Warrior" era, might be nearing its end, or at least past its peak. But if so, apparently nobody told the PLA - China's military. So, the question that arises is whether these incidents are evidence of a clear policy direction, or instead a consequence of poor military command and control combined with inadequate training. What can Australia do in such cases? "Without international police to enforce the law, the strongest side generally wins, no matter the legal niceties." This latest incident recalls a passage in the memoir of Australia's former prime minister Malcolm Turnbull, A Bigger Picture. Turnbull, who held the top job from 2015–18, justified his decision not to sail Australian naval vessels within 12 nautical miles of China's artificially constructed islands in the South China Sea, even though Australia did not legally recognise China's claim to these islands and surrounding waters: If one of our ships were to be rammed and disabled within the 12-mile limit by a Chinese vessel, we don't have the capacity to escalate. If the Americans backed us in, then the Chinese would back off. But if Washington hesitated ... then China would have achieved an enormous propaganda win.

In other words, Australia could disagree with China on the legality, but without international police to enforce the law, the strongest side generally wins, no matter the legal niceties. Turnbull's reference to Australia's "inability to escalate" really meant that, in a test of strength over a legal disagreement, China could bring more to the fight than Australia could. Might makes right. The Turnbull government calculated that forcing a test of wills only to lose was worse than avoiding such a test. The trouble is, avoiding confrontation implies that you are unwilling to stand by your legal claims, and that hands the initiative to the other side. "A provocation between naval ships or military aircraft does not im-ply that Australia would need to respond in a tit-for-tat way." The underlying issue raised by Turnbull and reinforced by the HMAS Toowoomba incident concerns the principles and interests that Australia is prepared to make sacrifices for. Successive Australian governments have sincerely claimed to support international law and the rules-based order, both of which China is trying to bend to its will through these incidents. But as the Turnbull passage illustrates, there are limits to the sacrifices Australia is willing to make and risks it is prepared to take to back up such principles. So, China's provocations serve a clarifying function: they force Australia to clearly define its limits. What kind of behaviour will Australia tolerate, and what will it not? Of course, even if China were to breach those lines, it doesn't mean Australia should respond directly. A provocation between naval ships or military aircraft does not imply that Australia would need to respond in a tit-for-tat way. Turnbull's caution still applies – if Australia escalated a military confrontation, Beijing would respond, and would have much more in reserve. The "escalatory ladder" favours China. So, Australia would need to find indirect ways to demonstrate its resolve, whether economic or diplomatic. A final note on the Turnbull passage, relating to his judgment that, "If the Americans backed us in, then the Chinese would back off." Turnbull's confidence is, I believe, misplaced. The clarifying function referred to earlier applies to Washington as well as Canberra. When a dangerous intercept occurs, the United States will ask itself: how important is this to us, really? Important enough to go to war over? Australia should prepare itself for the likelihood that the answer will be a firm "no". This story originally appeared on The Interpreter, published by the Lowy Institute for International Policy.

### Navy creates three new IT submarine ratings to promote specialization

## By Diana Stancy Correll



The Ohio-class ballistic-missile submarine Kentucky arrives at Naval Base Guam, Aug. 28, 2023. (MC2 Gregory Pickett II/Navy)

The Navy is creating three separate ratings for <u>information technology</u>, or IT, <u>personnel serving on subma-</u> <u>rines</u> to specialize in communications, network security and electronic warfare. The change means that sailors currently in the information systems technician rating <u>aboard submarines</u> will convert into these new ratings to facilitate "mastery" in one specific area of expertise, <u>according to a naval administrative message</u>, or <u>NAVADMIN</u>, released late last month.

"While the shipboard network knowledge base will be shared, these career paths will be distinct; each managed by separate training pipelines and [Navy Enlisted Classification] codes," the NAVADMIN said. "All submarine IT Sailors will become knowledgeable in network fundamentals, but will be specialists in communications, Network security, or electronic warfare."

Officials said the change stems from feedback from a <u>Submarine Force survey</u> where sailors said they'd prefer three separate ratings. Additionally, the official said the "existing accession pipeline does not allow for rating growth."



#### Navy crafts new cyber rating, designator to streamline roles

## The new rating and designator will predominantly be assigned to shore billets such as staff positions and leadership positions, and instructor billets.

#### By Diana Stancy Correll

"Revising ITs into three ratings will increase accession production by 33% and allow for growth in the three new ratings to improve fill in the Force," the Navy official said in an email to Navy Times. The revised ratings are available for all active duty sailors, while Reserve sailors may only convert to the communications and network security ratings.

Commands will coordinate with their immediate superior in command, type commanders, and the Bureau of Navy Personnel by the end of the year to determine which career realignments best accommodate the needs of the Navy and commands for all active duty sailors E-1 to E-9. "Commands should ensure that each Sailor selects an appropriate career path based on their current Navy Enlisted Classification (NEC) codes and qualifications," the NAVADMIN said. "Amplifying information on the process for selecting career paths will be provided via a separate execute order."

The Bureau of Naval Personnel will coordinate the realignment for Reserve sailors. All of the new ratings will complete their own Navy-wide Advancement Examinations that will kick off in January 2024, and produce their own advancement quotas. Those in the information systems technician, submarine rating who've already received approval to retire before the end of February will not undergo the rating realignment process.

## Hanwha Ocean pens \$600M deal to build two Ulsan-class Batch-III frigates for ROKN

#### November 13, 2023, by Fatima Bahtić

South Korean shipbuilding giant Hanwha Ocean, formerly DSME, has signed a contract to build two next-generation Ulsan-class Batch-III frigates for the Republic of Korea Navy (ROKN).



#### Hanwha Ocean

As informed, the company signed a deal worth KRW 790 billion (\$600 million) with the Defense Acquisition Program Administration (DAPA).

The construction project concluded this time is the final project of the Ulsan-class Batch-III plan to replace the Republic of Korea Navy's aging patrol ships and frigates. Hanwha Ocean was selected as the preferred bidder for the Ulsan-class Batch-III fifth and sixth shipbuilding project last July.

The Ulsan-class Batch-III frigate is a 3,500-ton class, 130 meter long ship that can travel up to 30 knots (55km per hour). The vessel incorporates anti-aircraft and anti-submarine detection capabilities, and hybrid propulsion that combines low- and medium -speed electric propulsion with gas turbine propulsion engines for high-speed sailing.

The fifth ship is scheduled to be delivered to the Republic of Korea Navy in December 2027, and the sixth frigate is slated for delivery to the Republic of Korea Navy around June 2028.

"The ship for which Hanwha Ocean received orders this time is the last ship of the Ulsan-class Batch-III project and is significant in that it will also play a leading role in the exploration and development of the follow-up frigate project to be developed in the future," according to Hanwha Ocean.

Hanwha Ocean has contributed to strengthening the Republic of Korea's naval power and independent defense capabilities by producing high-quality ships. The company is the only shipbuilder that has built the entire lineup of the FFX-I, II, and III projects, which are domestic projects that introduced new combat concepts since 2000.

### BAE unveils new Hunter Class frigate model to silence critics

By: Robert Dougherty



<u>BAE Systems</u> Australia has surprised commentators and critics with a newly upgraded model version of the Hunter Class frigate on display at the Indo Pacific 2023 International Maritime Exposition.

The multi-billion-dollar Hunter Class Frigate Program (HCFP) has drawn significant criticism from industry commentators as BAE provides nine frigates optimised for anti-submarine warfare for the Royal Australian Navy.

These ships would replace the current Anzac Class frigates based on the UK's Type 26 Global Combat Ship.

The new design unveiled at the show replaces the standard mission bay and instead adds an additional 64 MK41 vertical launch cells and as many as eight more Naval Strike Missiles; the ships fielding a total of 96 VLS and 16 NSMs.

Late last month, the company called for confidence in the Hunter Class, rebuffing recent scrutiny in a public statement from maritime managing director Craig Lockhart.

"This 'go-to' narrative far too often comes from those who haven't visited the shipyard or have the context around the program," he said.

"While public scrutiny is to be expected, and rightly so, on any program that comes at expense to the taxpayer, I find that Australia is unique in how it publicly debates its defence programs.

"These are dedicated people who are working tirelessly to provide a capability; specifically selected by the Royal Australian Navy (RAN), that will provide Australia with a world-leading, highly capable and versatile multi-mission warship."

The Australian federal government previously signed the contract with ASC Shipbuilding (now known as BAE Systems Maritime Australia) in December 2018 to build the Hunter Class frigates under Project SEA 5000 Phase 1.

## Interested in Australia's Future? Join the Navy League of Australia



The Navy League of Australia was established in Australia in 1900, and in 1950 became an autonomous national organisation with a Federal Council and Divisions covering all states and territories. Its aim today, as it was in 1900, is to create and interest in the sea and to keep before the Australian people the fact that we are a maritime nation and that a strong Navy and a sound maritime industry are indispensable elements to our national wellbeing and vital to the freedom of Australia.

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#### For information on how to join the ANC, email <u>ANCrecruiting@cadetnet.gov.au</u>



All enquiries regarding The Navy magazine, subscriptions and editorial matters should be sent to:

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Hon Secretary CMDR Jim O'Neill ANC RTD PO Box 735 Fremantle WA 6959 Bandjoneill.1@bigpond.com Catch us on Facebook and the web Navy League of Australia Western Australia Division Web: www.navyleaguewa.org.au Facebook: Navy League of Australia WA Division @navyleaguewa



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