NAVY LEAGUE OF AUSTRALIA
WESTERN AUSTRALIA

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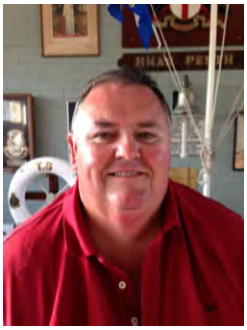
DOWN THE VOICEPIPE *do you hear there!*

COMING UP

HMAS PERTH (I) Memorial Executive meeting 16th. June 2022 1000

NLWA Executive meeting 04th. July 2022

Facility open each Wednesday morning 0900-1200



So here we are heading into June and rapidly approaching half way through the year. I'm not sure about everyone else but certainly for myself, I've been left scratching my head and thinking where did the month go.

May has always been a typically more subdued month than others and this month has been no exception with no real outings to speak of, invites to functions to attend or much of anything else. The only constant has been our ongoing renovation and redevelopment works to our facility though even that is not as fast paced as it was a couple of months ago. This month's changes include the blanking of some old and deteriorating windows, the installation of five flag poles and a new gate on the alleyway running alongside the building. Some granite and other materials have been ordered to enhance the new memorial wall but with ongoing sea freight delays we are still awaiting delivery. Also on order is the new boat shed and with a little luck, the materials needed won't be that far off now and in the next couple of months we should have the new structure in place.

Members are continuing to meet on a Wednesday morning for coffee and a chat and I encourage anyone interested to drop in from about 10am, even if it's just to get away from the mundane for an hour or so. If you haven't ventured down our way of late I'm sure you will be amazed at what has been achieved in a relatively short time.

As mentioned above, the month of May has been very quiet and sadly I don't have much more to speak about. Hopefully June will prove a bit more fruitful and with it, a more in-depth message as to what has gone on, what is about to occur, where we've been and what we've done.

Until next month,

Regards

Brad

New models of HMAS PERTH (II) & (III) Joining HMAS PERTH (I)

As we head towards the end of the financial year our project continues to pick up momentum. Navy League WA has completed sinking the gas and water pipes at the front of the facility and renewing the ageing piping. New back flows have been installed together with a mains pressure rectric system so that the existing memorial wall is not tarnished with bore water. The new boatshed for the Australian Navy Cadets has been ordered and will be delivered and erected in the next eight weeks.

Lighting has been installed at the base of the memorial wall and the concrete plinth, to carry the compass rose has been ordered together with the propellor and shaft to be inserted, the granite compass rose is on order and we await the arrival from overseas.
Trevor and myself have continued painting in the refurbishment of the existing memorial facility and we have commenced the repaint of the main deck which will be completed once the ANC training craft are relocated into the new boatshed.
As stage one of the project wraps us planning for the final stage two part of the project is underway. Colgan Industries have been tasked with finalising the structural and engineering drawings for the glass and steel structure, once we have received these we will sign off on the specifications so that the plans can be submitted to council for final approval.
We have ordered a corflute sign to be placed on the front verge to inform public what is progressing on site.

RAN debuts new high-speed uncrewed surface vessel

By Julian Kerr | Jervis Bay | 2 June 2022

The RAN's latest and definitely its fastest surface asset, the Devil Ray T38, made its autonomous debut on Jervis Bay as part of Exercise Autonomous Warrior 2022.

The catamaran-hulled 38ft Unmanned Surface Vessel (USV), powered by twin 300 hp diesel outboards, boasts a burst speed of more than 80 knots (148 kph), a payload capability of 2,041 kg, a range of more than 500 nautical miles at a cruise speed of 25 knots, and operates in conditions up to Sea State 7. The T38 is capable of fully-autonomous, semi-autonomous and full operator control modes. Initially manned by a two-strong crew, autonomous operations began in Jervis Bay on 25 May, watched among others by a Special Forces group.

Developed and manufactured by Florida-based Maritime Tactical Systems (MARTAC), the T38 can be fitted with a wide range of sensors as well as being able to remotely launch and recover onboard USVs and Unmanned Underwater Vehicles (UUVs) from an aft ramp, as well as operate as a tow vehicle. Five of the type are in service with the UK Royal Navy and a number equip the US Navy's Bahrain-based Task Force 59, established in September 2021 to rapidly integrate unmanned systems and artificial intelligence with maritime operations in the US 5th fleet's area of operations covering the Arabian Gulf, Gulf of Oman, Red Sea and parts of the Indian Ocean.

Autonomous Warrior 2022 began on 16 May and ended on 27 May, involving approximately 300 personnel from 40 organisations across Australia, the UK and the US testing leading-edge technologies designed to confront emerging maritime security challenges. The simulated missions demonstrated capabilities including mine countermeasures; survey, surveillance, reconnaissance; undersea warfare; intelligence gathering; force protection; interoperability and interchangeability.

In addition to testing the capabilities of autonomous vessels, aircraft and vehicles, the exercise also tested sophisticated Command and Control (C2) technologies used to receive, process and present data inputs from multiple systems to inform command decisions and direct autonomous systems' actions. The RAN's T38 was acquired for test and experimentation along with a MARTAC T12, an electrically-powered virtual double of the T38 but only 12ft long and able to 'nest' on the larger craft's stern ramp while capable of deploying the same range of sensors.

The man-portable T12 offers 30 hours station-keeping time, payloads of up to 64kgs and a range of 64 nautical miles. While primarily designed for harbour-based and near-shore operations, it remains operational in conditions exceeding Sea State 4. During Autonomous Warrior 2022, a Royal New Zealand Navy (RNZN) T12 operated in tandem with the RAN USV.

Director General Warfare Innovation - Navy, Commodore Darron Kavanagh, told *ADM* the T38 had been acquired to leverage Task Force 59's experience with the type.

We also have the ability to put the T12 on the T38, launch it from there and try interesting things about how autonomous systems actually 'nest'," he commented.

"The T38 has endurance so it can get you somewhere fast and then you might use the T12 for a stealth-type mission. It's really about us exploring the opportunities that these sorts of things present to us."

By **Baird Maritime** - June 6, 2022

The Samoa Police Service's Guardian-class patrol boat Nafanua II during the Pacific Island Forum Fisheries Agency's Operation Kurukuru, November 13, 2020 (Photo: US Embassy in Samoa)

What on earth have the Samoans done to Australia, that warrants us giving them another Guardian patrol boat when it is of no use to them?
In 1976, Australia donated the ferry *Queens Salamasina*, designed and built in Western Australia, which was too deep in draught to get within 200 metres of the ferry terminal at Mulifanua. The ferry became an economic millstone around the neck of Samoa.

Three years ago, we gave them a Guardian patrol boat, *Nafanua II*, a skinny monohull with exposed propellers and rudders either side of the keel, absolutely useless for South Pacific small harbour access, and easily damaged, which it was. So after a AU$2 million exercise bringing it by barge all the way to Cairns, it was classed as a total write-off.
Just firing up the high-powered Guardian-class boats adversely affects the GDP of these nations, so most of the time they lie idle. Only Fiji's Sitiveni Rabuka has had the boldness to say to Australia in 2002 at the Interferry Conference on the Gold Coast, "Please do not treat us as beggars and give us a boat that carries 14 people and a gun. When I have hundreds of my people stranded on a beach after a cyclone or tsunami, I need a practical vessel that can carry and land ambulances, medical aid, bulldozers, etc."

So now with the usual patronising attitude, our Foreign Minister says, "We are giving you another Guardian-class patrol boat as a gift". The inexperienced Minister Wong should have added, "Or is there something else you would prefer?" The Samoans would have answered promptly, as they have a good knowledge of what vessel types work, but are too gracious a race to reject this unwanted gift.

Australia has a track record of foisting unsuitable "gifts" into the South Pacific, hence the Chinese had an easy entry to all these nations by asking "What would you like?" (despite the underlying terms and conditions).
Stuart Ballantyne
Owner, Sea Transport Solutions

VESSEL REVIEW | SARTHAK & SAKSHAM – INDIAN COAST GUARD'S NEWEST LONG-RANGE EEZ PATROL VESSELS

By **Baird Maritime** - June 3, 2022

ICGS Sarthak (Photo: Indian Ministry of Defence)

India's state-owned Goa Shipyard (GSL) recently handed over two new stee-hulled offshore patrol vessels (OPV) ordered by the Indian Coast Guard.

ICGS *Sarthak* ("Meaningful") and ICGS *Saksham* ("Capable") are the final two units of eleven Samarth-class OPVs ordered by the coast guard from GSL. The Samarth-class vessels were designed and built after the coast guard decided to expand its maritime patrol assets in the wake of the deadly Mumbai terror attacks in November 2008.

The newer OPVs are further improvements of the coast guard's Sankalp-class patrol vessels, the most noticeable differences being a wider beam and more powerful engines.

Sarthak and *Saksham* each have a length of 105 metres, a beam of 13 metres, a displacement of approximately 2,350 tonnes, and space for 18 officers and 108 enlisted personnel. Two MTU 20V8000 M71L 9,100kW diesel engines drive controllable-pitch propellers to deliver a maximum speed of 26 knots and a range of over 6,000 nautical miles or an endurance of 20 days.

ICGS Sarthak *(Photo: Indian Ministry of Defence)*

The propulsion arrangement also includes Walchandnagar Industries gearboxes, a Geeta Engineering Works steering system, and a fin stabiliser system jointly developed by GSL and Naiad Dynamics.

Also available are a flight deck for one twin-engine utility helicopter and deck space for four small high-speed boats to be used for boarding and search and rescue. The boats include two Gemini Marine RIBs built by Goa-based Aquarius Shipyard.

Each vessel's armament consists of a Medak/Shipunov 30-millimetre naval gun and two 12.7-millimetre heavy machine guns fitted on stabilised remote weapons mounts. A gunnery simulator is also fitted to aid in crew training. The electronics include an integrated bridge system, an integrated platform management system, and a power management system.

Sarthak and *Saksham* were commissioned into service in October 2021 and March 2022, respectively. The vessels will be operated by the coast guard on EEZ surveillance duties off India's western and southwestern coasts. Other missions include maritime sovereignty patrols, law enforcement, anti-piracy patrols, environmental protection, and emergency response. For the latter roles, the OPVs have equipment for oil spill containment and external firefighting duties.

VESSEL REVIEW | NUYINA – HEAVY-DUTY ICEBREAKING RESEARCH VESSEL FOR AUSTRALIAN SERVICE

By **Baird Maritime** - June 9, 2022

Photo: Australian Antarctic Division

The Australian Antarctic Division (AAD), the Australian government's lead agency in scientific activities related to Antarctica and the Southern Ocean, has been operating a new large research vessel capable of transporting personnel and cargo even under harsh environmental conditions.

Named *Nuyina* after an Aboriginal Tasmanian palawa kani word for "southern lights," the vessel was designed by Knud E. Hansen and the Damen Shipyards Group and built by Damen Shipyards Galati in Romania over a period of four years, concluding in August 2021. The AAD regards the vessel as a "floating research station" and a lifeline asset for the transport of vital personnel, equipment, and other cargo to and from Australia's research stations on the frozen continent. The vessel is also capable of operations even under conditions of Sea State nine (wave heights of over 14 metres) and Beaufort Force 12 (hurricane-force winds) and temperatures as low as minus 30 degrees Celsius.

The Lloyd's Register-classed *Nuyina* has an LOA of 160.5 metres, a moulded beam of 25.6 metres, a maximum draught of 9.2 metres, and a full load displacement of over 24,000 tonnes. The vessel can deploy a wide range of vehicles, including helicopters, landing barges, and amphibious trucks to support resupply operations, in addition to providing a modern platform for marine science research in both sea ice and open water with a large moonpool for launching and retrieving sampling equipment and remotely operated vehicles (ROVs). Dry cargo totalling 1,200 tonnes and 96 TEUs can be transported along with 1.9 million litres of fuel to be supplied to remote research stations.

Unique to the vessel is a hybrid propulsion system to provide both the high power needed for icebreaking and silent running for science operations. The propulsion system is a combined diesel-electric and diesel (CODLAD) arrangement with two 19,200kW diesel engines and four diesel generators driving electric motors with controllable-pitch propellers. This configuration enables the vessel to reach a maximum speed in excess of 16 knots, an open-water cruising speed of 12 knots, and a speed of three knots when breaking through 1.65-metre-thick ice. Economical cruising will yield a range of over 29,000 kilometres.

Photo: Australian Antarctic Division

The engine room on deck two is split into two separate rooms to provide an enhanced level of safety and redundancy. Each room houses one diesel engine and two diesel generators.

Three bow and three stern thrusters aid in close-quarters manoeuvring, such as during berthing/unberthing and avoiding glaciers and other large chunks of surface ice. The thrusters also operate in conjunction with the vessel's own dynamic positioning (DP) system for station keeping during resupply or rough weather.
Sensitive acoustic instruments are mounted on dual drop keels and multi-beam bathymetric sonars will enable sea-floor mapping. Flexible and modular science laboratories provide scientists with a diverse selection of facilities needed for conducting vital research in various fields. Some of the scientific equipment are from Scanmar, including acoustic instruments to map and visualise the seafloor and organisms in the water column, and instruments to measure atmospheric gases, cloud properties, wave heights, and ice conditions.
The trawl deck on deck four is the scientific heart of *Nuyina*, where nets, sediment corers, rock drills, cameras, mooring systems, robotic vehicles, and many other oceanographic instruments are deployed using a variety of winches and cranes. Most deployments are achieved using a 30-tonne A-frame, using winches housed below deck and protected from the elements. If required, crew can safely control the deployment from a small office overlooking the trawl deck. Scientists can monitor their deployments from their smartphones or computers, anywhere on the ship, through data and/or vision provided by cameras and sensors mounted on equipment and via fibre-optic winch cables.

Photo: Knud E. Hansen

The vessel also has a "monkey deck" that hosts a range of meteorological sensors that measure wind, pressure, temperature, and humidity. Scientists also run instruments that measure solar radiation and clouds and have access to heated observation boxes for the study of seabirds, whales, and other marine mammals. Other equipment on the monkey deck and the adjoining crow's nest are radars and satellite navigation equipment.
The bridge provides excellent 360-degree visibility thanks to the incorporation of full-length, floor-to-ceiling windows. This provides the crew with a bird's eye view of current and impending weather, waves, and icebergs in all directions around the ship.
Besides the typical sensors and instruments for communication and navigation, there are also consoles for operating equipment such as the ship's lights, drop keels, acoustic instruments (for seafloor mapping), and the DP system.
The significant volumes of data collected by the vessel during its expeditions are captured on two portable storage devices that can each hold 80 terabytes. To make the data useful to end users, the data are formatted and organised to comply with the AAD's onshore data management system. At the end of each voyage, the data are uploaded to a cloud for anyone to access.

Photo: Australian Antarctic Division

Like the bridge, the vessel's observation deck provides panoramic views across the bow. Expeditioners can also use this space to relax in a comfortable lounge setting while watching the surroundings outside. This area also features a small tea room and an adjacent meeting room.

The array of vehicles that can be transported by *Nuyina* includes a fleet of small watercraft that provide essential scientific and logistical support. Among these vessels are a science tender, two personnel transfer tenders, a stern tender, and two barges. These smaller craft have dedicated stowage positions on board the larger ship plus small cranes for lifting and securing them in place, power outlets to charge batteries and warm up engines, and facilities for refueling.

Accommodations for the 32 crewmembers and 117 passengers is spread across five decks. Those crewmembers in senior roles reside on deck eight, directly underneath the observation deck, for quick access to the bridge. The ship's doctors run a medical facility

on deck seven, which also has direct access to the flight deck in case a patient needs to be evacuated by helicopter. The majority of expeditioners share two-bed cabins in the lower and more stable part of the ship – decks six and five, and a small number on deck four. The cabins each have bunk beds, two desk spaces, cupboards and drawers, and an en suite bathroom. The mess and galley area provides the crew with relaxed café-style dining and includes a large self-servery and adjoining scullery with industrial dish washing facilities. The galley boasts a full-scale commercial kitchen containing ovens, cooktops, microwaves, dishwashers, stainless steel sinks, and a bread maker.

Photo: Knud E. Hansen

Nuyina is being operated by UK-based Serco, through Serco Australia, on behalf of the Australian government. The vessel sailed on its first voyage to Antarctica in December 2021 and completed the journey of over 13,000 kilometres in 39 days to reach Australia's Davis and Macquarie Island research stations and resupply these with over one million litres of fuel, enabling continued operations for another year. Two helicopters and their respective crews were also transported by the massive vessel on this trip for deployment out of Davis research station.

The voyage also served as an opportunity for personnel from the AAD and Serco to conduct a series of tests on many of the onboard scientific systems as part of a commissioning process to set up the vessel for the next 30 years of operation. Other activities on this first voyage include capturing 15,000 Antarctic krill and mapping 93,155 square kilometres of the seafloor.

'Cut me some slack'

MONDAY MOTTO

'Cut me some slack' is an expression that has been used for many years, and was an instruction given when a ship was docking.

Tying a ship to a pier was always a difficult task and required two teams of men equipped with mooring ropes.

To 'cut me some slack' meant to loosen the rope. As one rope was pulled to haul the ship closer, the other line was released or given slack, which would continue until the ship was properly aligned and docked.

Nowadays, it means to make allowances for a person's behaviour, or to be less strict with someone.

Undersea autonomous capability; the trade-off between crewed and uncrewed

|
07 JUNE 2022

By: **Christopher Skinner**

Opinion: Former naval officer and defence industry analyst Chris Skinner refutes the notion that defence must choose between crewed or uncrewed vehicles.

Learned colleagues were surprised when I objected to their treating crewed submarines, nuclear or conventional, as superior to autonomous uncrewed vehicles (AUV) which have been in the news a lot lately.
My emphatic differentiation was based on the fundamental premise that an AUV, no matter how far developed the artificial intelligence (AI) and machine learning (ML) that is embodied, there is still an inherent limitation of historical conceptual thinking that does not constrain highly intelligent human command, sensory or weapons operators.

The central issue with human capability is the ability to imagine and to investigate phenomena that have not been previously encountered and are therefore absent from any big data resource which is essential to ML and AI. Submarine command teams can surprise an enemy by acting in unexpected ways, based on long experience and judgment of an adversary and of the battle-space environmental conditions. Sensor operators become steeped in the look and feel of their domain and will note the minutest new phenomenon and investigate and interpret it until a conclusion can be drawn. This will be a human conclusion that no machine can produce.

But this is not to say that AUVs are anything but a vital augmentation to our maritime capability in the undersea domain. We need them urgently and we need lots of them. To carry out the repetitive tasks in deeper and more hazardous circumstances than a crewed submarine can do. And at much less cost in either acquisition or in sustainment, and with only a modest overhead of additional investment to handle the preparation, tasking, deployment, recovery, and refurbishment of the AUV. Another challenge that applies to both crewed and uncrewed vehicles is command, control and communications and that presents both an opportunity and a challenge from the discontinuous comms with any undersea capability while wholly submerged. This also affects the operation of AUVs in coordinated operations, whether just a few of them or a larger number where individual behaviour is less important than that of the collective behaviour of the swarm.

There is a trade-off to be performed here that Australia is ideally positioned to undertake in parallel with the Nuclear Powered Submarine Task Force and other AUKUS initiatives. The trade-off should look at the overall undersea domain and tabulate the various capability that we derive from SSN, AUV and static or wire-guided undersea capabilities. The operational depth, speed, endurance, cost of ownership (acquisition, infrastructure and other investments, sustainment, disposal), workforce requirements, other risk factors, domestic industry potential and so on should all be compared and a range of optimum solutions determined. Then the market should be tested for rapid acquisition of a heterogenous array of capabilities that will undoubtedly include both crewed submarines and AUVs of various kinds.

The key point that I made to my colleagues is that this should not be seen as a choice of alternatives. Rather it is an optimisation process to determine the most cost-effective mix. And that is doable and will also provide some great opportunities for further development of local industry to cover those capabilities as is already starting to happen with the “Ghost Bat” (formerly Loyal Wingman) uncrewed aerial vehicle (UAV) and the recently announced SeaWolf project, a 12-metre autonomous underwater vessel developed in concert with Cellula Robotics.

Elsewhere we note accelerated acquisition programs of extra-large uncrewed undersea vehicles [XLUUV] such as the Boeing Orca, all with flexible payload space and power capacity for extended duration tasks limited only by the planning and deployment capacity of the operating unit.

For Australia, we have an enormous maritime domain and total dependence on maritime trade by air and sea. There is clearly a task to know what is happening within this activity and to respond to intrusions and threats to our national and regional security. We need a large number of autonomous vehicles to undertake the routine and time and space-consuming tasks of surveillance and investigation of these domains, and we need specialised and high-capability crewed platforms to undertake the selective response to anomalies detected and investigated by our autonomous uncrewed assistants.
So in the very much needed force structure review to be undertaken this year by our new government we should look in the various domains and especially in the undersea domain for a combined approach that identifies the range of combinations of crewed and uncrewed autonomous platforms to perform a range of tasks, then to be optimised for local industry involvement, cost of ownership, required workforce and other factors.

And let’s stop the futile discussion of whether we should choose between crewed and uncrewed capabilities.
Cristopher Skinner served 30 years in the Royal Australian Navy as a Weapons and Electrical Engineering Officer in six surface warships, in the South-East Asian Treaty Organisation, the Vietnam War and surveillance of the North-West Indian Ocean. In two of these ships, he was the action Weapons Control Officer for ASMD and AAW watchkeeper for area air defence dealing with engagement decisions in real time. Shore service included secondment to the Defence Research Centre, Salisbury, the US Naval Sea Systems Command to manage the lead-ship trials for a joint frigate project and the initial project director for the ANZAC frigate program of 10 ships for Australia and New Zealand. He is a member of several naval and geopolitical institutes, but the opinions expressed here are his own.

Dutton backs Virginia Class, touts off-the-shelf option

09 JUNE 2022

By: **Charbel Kadib**

The federal opposition leader has shed light on his preferred pathway for Australia's future nuclear-powered submarine program.

Former defence minister Peter Dutton has thrown his support behind the acquisition of US-designed Virginia Class submarines for the Royal Australian Navy under the AUKUS agreement.

According to Dutton, the Virginia Class submarine — currently under consideration by the Nuclear-Powered Submarine Task Force, along with the UK's Astute Class platforms — became the "obvious" choice. The federal opposition leader made particular note of the platform's capability benefits. "It is capable of launching missiles vertically, and is a mature design," he wrote in a piece published by *The Australian.*

Unlike the UK's Astute Class, he added, construction of the Virginia Class would involve fewer modifications. "The British option would have involved a new design, which is problematic in any ship build -because time and cost blowouts and design faults are inevitable," he observed. Notably, Dutton touted the possibility of an off-the-shelf purchase of two Virginia Class submarines before 2030.

"I believed it possible to negotiate with the Americans to acquire, say, the first two submarines off the production line out of Connecticut," he wrote. "This wouldn't mean waiting until 2038 for the first submarine to be built here in Australia. "We would have our first two subs this decade. I had formed a judgment that the Americans would have facilitated exactly that." The two initial submarines would be in addition to a further eight vessels built in South Australia, taking the total size of the prospective RAN fleet to 10.

To appease the British, Dutton suggested the government could have considered expanding BAE Systems' Hunter Class frigate program or exploring other work opportunities for British contractors. The opposition leader went on to criticise what he has described as "alarming" comments from newly appointed defence minister Richard Marles, who recently said he is "open" to the possibility of developing a "son" of Collins platform to fill the interim capability gap.

Minister Marles told the *ABC* addressing the capability gap is his "number one priority".

"…It's important to state upfront that there is no more important platform that Australia has in terms of shaping its strategic circumstances than having a capable long-range submarine," the Minister said.

"It's why making sure that we have the successor to Collins in place as quickly as possible in a form which is highly capable is critically important." Minister Marles said the 2040s delivery timeline for the nuclear-powered submarines is "too far away".

"I feel confident that within that period we can make substantive decisions which advance the whole question of where we go with submarines, how we get our capability sooner and how we deal with the capability gap," he added. But according to Dutton, a diesel-electric platform delivered in the 2030s would be redundant, given China's progress in the undersea warfare space.

"It is unfeasible because [Minister Marles] wouldn't have the new class of subs (with old diesel-electric systems) in the water before the Chinese have the technology making them easily detectable and inoperable," he wrote. "And as defence leaders here and in the US strongly advised me, Australia doesn't have the construction workforce, let alone the crew capability, to run three classes of submarines."

Type 45 destroyers to receive significant missile upgrade

The UK will become the first European nation to operate a Maritime Ballistic Missile Defence detect and destroy capability.

24th May 2022 at 4:10pm

The Royal Navy's Type 45 destroyers are among the most advanced in the fleet and carry out a range of activity (Picture: MOD Crown Copyright).

The UK has committed to a "significant upgrade" of its fleet of *Type 45 destroyers*. In doing so, the UK is set to become the first European nation to operate a Maritime Ballistic Missile Defence capability that can detect and destroy Anti-Ship Ballistic Missiles.

The upgraded defence system will help UK forces combat the increasing threats posed by anti-ship ballistic missiles at sea by developing the missile into a maritime variant.

Type 45 Destroyers: All you need to know
All six Royal Navy destroyers in port amid tensions with Russia
Royal Navy's Type 45 Destroyers to get £500m firepower upgrade

The Ministry of Defence (MOD) has placed an initial contract for this work with Missile manufacturer MBDA which, when delivered, will be worth more than £300m and support more than 100 jobs across the UK. Defence Procurement Minister Jeremy Quin said: "As we face global uncertainty, alliances and greater defensive capability are more important than ever.

"Joining our French and Italian counterparts will see us collectively improve the cutting-edge technology our Armed Forces possess."

Last year, it was announced that the Type 45 destroyers would receive a £500m upgrade to their firepower capability (Picture: MBDA).

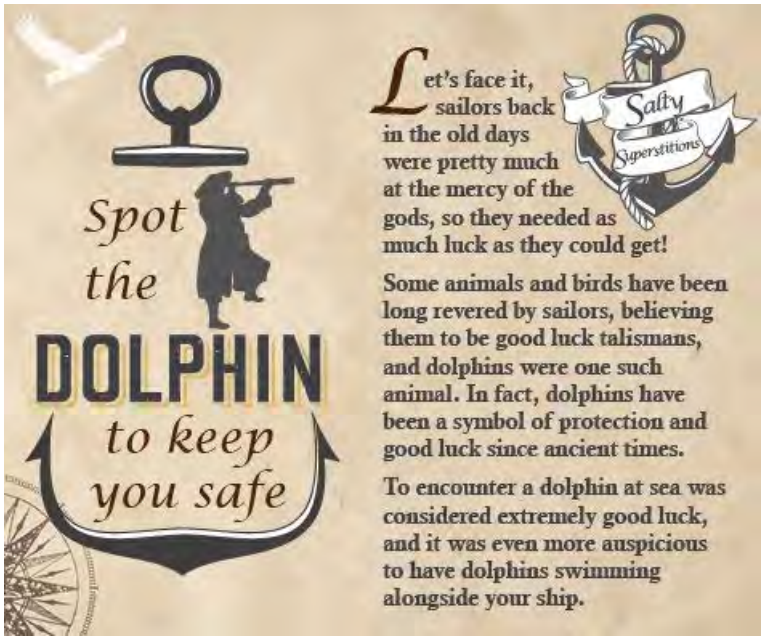
The Upgrades
The signing of the tri-national agreement is the first formal step in the upgrade of the six Type 45 vessels.
This will include converting existing missiles to the ASTER 30 Block 1 standard, previously used only in French and Italian land systems, as well as updates to the SAMPSON multi-function radar (MFR) and Sea Viper command and control missile system, under the full Sea Viper Evolution programme.

Sea Viper's upgrade will boost the lethality of the Type 45 vessels, hoping to ensure the Royal Navy remains poised to defend the surface fleet and the Maritime Strike Group against complex air threats.
The Sea Viper Evolution programme follows recent contract awards to introduce the Common Anti Air Modular Missile (CAMM) into the Type 45. This will see the missile outload of the platform increase from 48 to 72 missiles.
The Royal Navy's Type 45 destroyers are among the most advanced in the fleet and carry out a range of roles, including defence from air attacks, counter-piracy operations and providing humanitarian aid.

There are six in the fleet – HMS Dragon, HMS Defender, HMS Diamond, HMS Duncan, HMS Dauntless and HMS Daring.

Type 45 Destroyer HMS Defender using her Sea Viper air missile defence system during Exercise Formidable Shield in 2019 (Picture: MOD).

Defence Command Paper
Upgrading the defensive capability of the Type 45 fleet was committed to in the Defence Command Paper, as part of the *Integrated Review* last year. Being able to defend against anti-ship ballistic missiles will add to the current capability of the destroyers to defeat threats from the air.
Mr Quinn added: "It is another example of us delivering on the commitments from the *Defence Command Paper*, helping protect our service personnel when faced with the most severe threats."



The ‘transformative’ impacts of Australia’s nuclear subs program

03 JUNE 2022

By: **Reporter**

Will Australia’s nuclear submarine procurement program fundamentally reshape the RAN’s identity?

A fleet of at least eight nuclear-powered submarines have been promised under the AUKUS partnership between Australia, the UK and the US.

Late last year, the Commonwealth government co-signed the Exchange of Naval Nuclear Propulsion Information Agreement – a legally-binding arrangement granting Australia access to advanced nuclear technology from partner states. The agreement establishes a framework for the disclosure and use of information related to naval nuclear propulsion.

However, Defence is yet to select a platform, with the UK’s Astute Class and the US’ Virginia Class submarines proposed as options. A Nuclear-Powered Submarine Taskforce was established to work with US and UK stakeholders over an 18 month-period to determine a procurement pathway for Australia. The group’s considerations include requirements for design, construction, maintenance, infrastructure, industry capacity, nuclear safety, environmental protection, crewing and training.

The taskforce is also expected to advise on building timeframes, costs and supply needs. But what will be the lasting impacts of Australia’s nuclear-powered submarine procurement plan?

Richard Dunley, history lecturer at the UNSW Canberra, draws on the United States and the United Kingdom’s own experiences to offer insight into the “transformative” consequences of Australia’s nuclear transition. He cites First Sea Lord Caspar John of the British military, who in 1962 described the British Polaris project as a millstone, which “hung round our necks” and “potential wreckers of the real navy”. “While it may be questioned whether or not Admiral John’s fears proved well founded, it is indisputable that the decision of the British government to pursue nuclear submarines and a continuous at-sea nuclear deterrent, or CASD, came at a considerable opportunity cost for the Royal Navy,” Dunley writes in ASPI’s *The Strategist*.

The lecturer observes that the British government’s assurances the CASD would not weigh on broader Royal Navy funding “naturally slipped”, leading to “bitter interservice fighting”.

“By the early 1980s senior naval leaders were describing the CASD as the ‘cuckoo in the nest’ because of the way the costly programs were funded at the expense of traditional surface-fleet capabilities,” Dunley continues.

Dunley notes similar assurances to provide full funding support for Australia’s nuclear submarine program were made by the former Morrison government, but adds that given the multi-decade delivery timeline, it is unlikely successive governments would continue to offer a “blank cheque”.

As such, future RAN leaders may need to sacrifice funding for other maritime capabilities to sustain the nuclear submarine program.

“The current relatively benign financial situation has also served to limit opposition to this extraordinarily costly project from the other services,” he adds.

“If we see tighter defence budgets this is almost certain to change, further driving pressure on the navy to make cuts elsewhere.”

However, financial constraints are not the only opportunity costs associated with the AUKUS project, Dunley continues. The UNSW lecturer flags the impact of “massive technological acquisitions” on human resources, as has been highlighted by Vice Admiral Jonathan Mead.

“The Nuclear-Powered Submarine Taskforce he heads has already spawned at least seven divisions, nine high level trilateral working groups and numbers more than 200 people,” Dunley writes.
“To support this, it has pulled in talent from across the Navy, Defence and wider government.
“This concentration of personnel is essential to get a project as complex as this one off the ground, but in what are relatively small organisations, such efforts come at the cost of diverting people from other areas.”
Dunley reflects on the Cold War period, during which the US Navy Special Projects Office drained the Navy of its technical talent and diverted resources from other key projects.

The success of the UK’s Polaris program may also have come at the expense of other capabilities, including surface-to-air missiles.
“Given the small talent pool in Australia, the risk of similar problems occurring with the submarine taskforce is extremely high,” Dunley warns.
“The AUKUS submarine project comes with an additional layer of complexity in the form of
the regulatory and legislative changes necessary to allow Australia to safely and legally acquire, build and run nuclear submarines.

“Although much of this might lie outside the direct purview of the navy, it is still going to be a huge endeavour that will take up a considerable chunk of Defence’s ‘bandwidth’, with resultant impacts elsewhere.”
However, according to Dunley, the greatest impact of the AUKUS program is its potential to “significantly and permanently alter the culture and identity of the RAN”.

Again, drawing from the US and British experience, he notes the construction of the first nuclear submarines and the subsequent development of Polaris was a “huge undertaking”, which “changed the nature” of those organisations.
“Admiral Hyman Rickover’s influence on the US Navy is well known, but in Britain as well, many of the officers associated with these projects went on to significant leadership positions,” he writes.
“The exciting nature of the technology served as a draw for talented young officers, and the prominence afforded to submarines by the Cold War ensured that the identities of both the USN and the RN were rapidly reshaped, with submarines at their heart and, increasingly, submariners at the helm.”

He observes that Since HMAS Melbourne was decommissioned in 1982, the RAN has primarily been a surface navy.
The “route to the top” has mostly been reserved for command of surface combatants.
“Between 1982 and 2008 seven of the eight officers who served as chief of the naval staff or chief of navy had commanded a guided missile destroyer, a pattern that has broadly continued with other surface combatants,” he writes.
“Although it is going to be a very long time before one of the commanders of an AUKUS submarine goes on to lead the RAN, the program seems certain to reshape the service long before then.”

Dunley concludes: “The relative weight and significance of the project, and its role as a magnet for talented officers, will ensure that it will shape the careers of many of the service’s future leaders.
“The primacy of the surface navy seems likely to be challenged, and with it the very identity of the RAN.”

Naval Group receives compensation for Attack Class cancellation

11 JUNE 2022

By: **Charbel Kadib**

The Commonwealth government has reached a settlement with the French shipbuilder to compensate for the cancellation of the former $90 billion Attack Class submarine contract.

Prime Minister Anthony Albanese has announced €555 million (AUD$830 million) would be paid to Naval Group after completing negotiations to compensate for the termination of the former SEA1000 contract to deliver 12 diesel-powered Attack Class submarines to the Royal Australian Navy.

The former Morrison government had scrapped the deal in favour of a nuclear-powered alternative promised under the AUKUS agreement. The decision received bipartisan support from the then Labor opposition, but caught the ire of French President Emmanuel Macron, who temporarily withdrew French ambassadors from Canberra. When asked by an Australian journalist if he felt misled by former prime minister Morrison, President Macron famously replied, “I don’t think, I know”.

Prime Minister Albanese has described the settlement as “fair and equitable”, adding he looks forward to “moving forward” with Australia’s relationship with France.

“Australia and France share deep historical ties of friendship, forged in common sacrifice in war,” he said. “We are both vibrant democracies, committed to upholding human rights and fundamental values.” Prime Minister Albanese stressed the importance of the enduring relationship between the nations, particularly amid mounting tensions in the Indo-Pacific.

We deeply respect France’s role and active engagement in the Indo-Pacific,” the prime minister added.

“Given the gravity of the challenges that we face both in the region and globally, it is essential that Australia and France once again unite to defend our shared principles and interests: the primacy of international law; respect for sovereignty; the rejection of all forms of coercion; and taking resolute action on climate change.” Prime Minister Albanese has accepted an invitation to meet with President Macron in Paris.

“I look forward to taking up President Macron’s invitation to visit Paris at an early opportunity, and to continuing to work closely with him as we deepen the strategic partnership between our nations,” he said.

NAVY

USS Connecticut underwater crash was ‘preventable,’ Navy investigation finds

By
CAITLIN DOORNBOS

STARS AND STRIPES • May 23, 2022

The Seawolf-class, fast-attack submarine USS Connecticut returns to its homeport in Bremerton, Wash., on Dec. 21., 2021, following a scheduled deployment in the U.S. 7th Fleet area of operations. (Sophia Brooks/U.S. Navy)

WASHINGTON — Poor navigational planning, management and watch-team execution led to the USS Connecticut’s underwater crash in October, according to a Navy investigation that recommended punishment for several of the submarine’s leaders and crew.

“This mishap was preventable,” Rear Adm. Christopher Cavanaugh wrote in the investigation’s report, which was released Monday. “Prudent decision-making and adherence to required procedures in any of these three areas could have prevented the grounding."

As director of Pacific Fleet’s maritime headquarters, Cavanaugh led the investigation, which analyzed what caused the submarine’s collision with an undersea mountain that injured 11 sailors and damaged the Seawolf-class submarine’s ballast tanks and sonar sphere, according to the Navy.

Ballast tanks help provide a submarine’s buoyancy, while sonar spheres allow sailors to sense what is around them in undersea waters.

The submarine, which is based in Bremerton, Wash., was operating “in a poorly surveyed area in international waters” in the South China Sea when it ran aground, according to the report.

The report found in the time before the Oct. 2 crash, the navigation review team “failed to identify and properly mark at least ten charted hazards to navigation in the vicinity of the grounding” before sending the submarine through the waters.

“The [team], including the [commanding officer], incorrectly assessed that Connecticut would be operating in an open ocean environment,” the report found. “They should have recognized the ship would be in restricted waters based on the planned track passing near multiple navigation hazards.”

“Had they done so, a modified piloting party would have been stationed with additional watch-standers focused on navigation safety,” the report added.

While much of the investigation's details are redacted in the report, it indicated at least some of the crew's watch-standing team were aware that something was amiss on the navigational chart, but the information was not communicated effectively. Before the crash, at least one sailor detected sonar readings were not matching the navigational chart of the undersea area. However, the officer of the deck did not report the hazard to the Connecticut's commanding officer, who was not standing duty at the time.

"The CO was unaware of the ship's proximity to the navigation hazard," the report said. "The [officer of the deck] stated he was concerned with the shallower-than-expected soundings but that he did not assess a need to take aggressive action … [or] consider ordering a lower speed."
Most other details of what happened in the minutes before the grounding were redacted, but Cavanaugh wrote there were other factors that led to the incident.

"No single action or inaction caused this mishap, but it was preventable," he said. "It resulted from an accumulation of errors and omissions in navigation planning, watch team execution, and risk management."
After the crash, leaders announced the incident and the Connecticut began to sink lower because the ballast systems were damaged, according to the report.

The ship's leaders then worked on other ways to help the Connecticut rise, which included pumping about 100,000 pounds of water out of the submarine, the report said. However, an electrical fire broke out in one of the pump's motor controllers, which was soon extinguished.
The commander of Submarine Group 7, which oversees submarine operations in the Indo-Pacific, then ordered the ship to travel to Guam, according to the report. During the trip, the front part of the submarine, known as the bow dome, fell off, but the Connecticut continued its transit, arriving in Guam on Oct. 8.

"Actions immediately following the grounding were effective," Cavanaugh said in the report. "The crew put the ship in a stable condition on the surface, managed injuries and equipment damage and transited to Guam safely and securely."
Still, Cavanaugh recommended nonjudicial punishments for the Connecticut's commanding officer Cmdr. Cameron Aljilani, executive officer Lt. Cmdr. Patrick Cashin, and several unnamed sailors who were on duty at the time. He also recommended "administrative counseling" for Master Chief Sonar Technician Cory Rogers, the chief of the boat.

The Navy in November fired Aljilani, Cashin and Rogers "due to a loss of confidence" after the collision.
The submarine is now undergoing repairs and thus "will be unavailable for operations for an extended period of time," according to the report, which did not detail the cost of the repairs.

ROYAL NAVY RETIRES TWO TRAFALGAR-CLASS SUBMARINES

By **Baird Maritime** - May 23, 2022

The Royal Navy Trafalgar-class nuclear submarine HMS Talent participates in a coordinated anti-submarine warfare exercise with a Royal Navy Westland Lynx HMA.8 helicopter in the Mediterranean Sea in October 2013. (Photo: US Navy/Mass Communication Specialist 2nd Class Amanda R. Gray)

The Royal Navy decommissioned two of its remaining Trafalgar-class submarines in a ceremony at Devonport Naval Base on Friday, May 20. HMS *Trenchant*'s operational career came to an end last year, while HMS *Talent* completed its final patrol earlier this spring. Both nuclear-powered boats served for 32 years as hunter-killer submarines.

Their mission was to protect the Royal Navy's ballistic missile submarines and to detect, track and classify targets. The boats are capable of gaining intelligence, covertly inserting troops ashore, or striking at enemy submarines and ships with Spearfish torpedoes and targets ashore with Tomahawk cruise missiles. The retirement of the Trafalgar-class submarines will help make way for the newer Astute-class boats.

By Geoff Ziezulewicz
Wednesday, May 11

Since its commissioning in 2018, the littoral combat ship Omaha has developed cracks in its hull and superstructure that limit the speed it can travel and the sea states it can operate in. Internal records obtained by Navy Times show such crack risks extend throughout the fleet of Independence-class LCS. (Navy)

Half of the Navy's littoral combat ship fleet is suffering from structural defects that have led to hull cracks on several vessels, limiting the speed and sea states in which some ships can operate, according to internal records obtained by Navy Times and confirmed by sea service officials.

The Navy has not previously disclosed the cracks in the Independence-class version of the LCS or the class-wide repercussions of the defects, nor has it identified which ships suffer from the issues. But documents obtained by Navy Times warn that cracks can grow if the ships transits faster than 15 knots in seas with maximum wave heights of about eight feet. The troubling revelations come as the Navy continues to grapple with a class-wide transmission issue in the Freedom-class variant of the LCS, and sea service leaders seek to decommission all of those ships, years ahead of the expected end of their service lives. Naval Sea Systems Command spokesman Alan Baribeau said in a statement that the service first identified "cracks in higher-stress areas of the structure" on Independence-class ships in late 2019, when the problem became apparent on Coronado, the second ship of the class, which was commissioned in 2014.

Such cracks have since been discovered on six of those LCS variants, according to Baribeau, nearly half of the 13-ship Independence class fleet.

Cannibalized parts, systems that sailors can't fix: LCS maintenance woes could get worse, watchdog warns

A Government Accountability Office report raises questions about the Navy's LCS maintenance strategy.

By Geoff Ziezulewicz

Baribeau said the issue "does not pose a risk to the safety of Sailors on board the ships."

"Analysis of the bow structure with the combined vertical and lateral loads did not identify any hot spots below the waterline, and this specific detail does not occur below the waterline," he said. The shipbuilder, Austal USA, has incorporated a "revised configuration" to hulls still under construction or warrantee, while the Navy is — or will be — fixing the affected in-service ships, according to Baribeau. "Modification consists of replacing deck plate and shell plate with thicker material, among other actions," he said. Baribeau did not specify the nature of those "other actions," and said an overall cost for fixing all the ships was not available, as "the U.S. Navy's mitigation plans are being developed as part of each ship's maintenance and modernization."

Austal USA referred questions for this report back to the Navy. Those plate replacement efforts are significant, according to Bradley Martin, a retired surface warfare officer who spent two-thirds of his 30-year career at sea. “Taking out deck plate and shell plate can’t be done outside a big availability and, if nothing else, it will add to the ship’s weight, which will likely slow it down,” said Martin, now director of Rand’s National Security Supply Chain Institute. “This really looks like a huge, bad deal for this ship class.”

US Navy investigates potential LCS class-wide design flaw

The U.S. Navy is nearing a conclusion that it has a big problem on its hands.

By David B. Larter

Baribeau did not answer specific questions about crack size or their location on the Independence-class ships, only saying in an email that “crack size and visibility do not impede the ability of Independence-class ships from meeting operational requirements.” While NAVSEA contends that the crack issue does not hinder the ability of such ships “to get underway and execute missions,” the documents obtained by Navy Times show the problem is limiting how fast ships with afflicted hulls can go and the sea states in which they can operate.

Omaha, a $440 million LCS commissioned in 2018 — which has since been turned into a training vessel — is one of the ships suffering such cracks. According to a temporary standing order, or TSO, issued by Omaha’s command on July 8, 2021, and obtained by Navy Times, the ship was operating under “speed and sea state” in order to “limit crack propagation.” The order prohibited Omaha from traveling faster than 15knots — 17 mph in “sea state 4,” a level entailing a maximum wave height of 8.

USS OMAHA (LCS 12) TEMPORARY STANDING ORDER NUMBER 073

Date: 08 Jul 21
Cancellation Date: 08 Jan 22

1. References: (a) LCS-12-0001-2020
   (b) Email from NAVSEA 05D to CSD 11 N4
   (c) MSG DTG 121730Z MAR 20

2. Component: INDEPENDENCE CLASS Variant FR 35, 36, and 46 Structural cracks

3. Problem Discussion/Degree of Non-Compliance: NAVSEA assessed LCS 4-26 and 28 have under-designed structural defects at FR 35, 36, and 46. Metal fatigue is assessed to be caused from stresses in the lateral and vertical plane. To limit crack propagation; speed and sea state restrictions are imposed.

4. Affected Watch Stations: OOD, RCO

5. Required Actions: The following restrictions and instructions are implemented to track and reduce metal fatigue at FR 35, 36, and 46:

   1) Ship operations restricted to 15 knots in Sea State (SS) 4 (max significant wave height 2.5m/8.2ft), avoiding bow and beam seas as far as practicable. Ship should follow published Seaway Operator Guidance (SOG) for SS 0-3.

   2) No operation in SS 5 or greater. If SS 5 is unavoidable, ship should slow down to 10 knots if in head, bow, or beam seas.

   3) All cracks shall be marked and dated by maintenance team. Ships force shall conduct daily inspections while underway to check for crack growth, or

A temporary standing order issued by the command of the littoral combat ship Omaha imposes restrictions on speed and operating in rough seas in order to limit the spread of structural cracks. (Navy) That order also prohibits the ship from operating in any higher sea state. In other words, the risk of structural cracks means that a ship envisioned as a speedy fleet asset is now limited in speed or rough waters.

Asked whether the entire Independence fleet is under speed and sea state restrictions due to the crack risk, NAVSEA’s Baribeau wrote that “all Independence variant ships have been inspected and are able to meet their operational requirements.” Asked whether the six ships suffering from hull cracks are operating with those cracks, Baribeau again responded that “all Independence variant ships have been inspected and are able to meet their operational requirements.”

The four-to-eight foot wave range of sea state 4 is “fairly common,” according to Martin, who reviewed the records for Navy Times. “Being unable to go at speed in sea state 4 is a pretty significant limitation,” he said. “Fifteen knots is a transit speed, a very normal transit speed, less than half of LCS’s supposed maximum speed.”

While NAVSEA states that the crack issue is not hindering operational requirements, a 2021 investigation into Omaha’s command notes that the ship “has more restrictive seakeeping limits due to cracks in her aluminum hull and superstructure,” and that those limitations played a role in hindering a transit from San Diego to Everett, Washington, in November.

2 MAY 2022 By: **Reporter**

Will surface ships and armoured vehicles still play a critical role in the future battlespace?

Last month, the Commonwealth government gifted Ukraine 20 Thales-built Bushmaster protected mobility vehicles, including two ambulance variants, to support the country's military campaign against the Russian invasion. This was in response to a request from President Volodymyr Zelenskyy during his remote address to a joint sitting of Federal Parliament on 31 March. The request could be seen as a reflection on the continued importance of armoured capability in the modern battlespace despite Russia's own difficulties deploying heavy combat vehicles to the frontline. Continued investment in next-generation surface vessels from modern defence forces, including the Australian Defence Force, also suggests the capability would form a key part of future force postures.

However, Andrew Davies, senior fellow at ASPI and former director of ASPI's defence and strategy program, says both armoured vehicles and surface ships are in "the decline phase of their history". Pointing to historical examples of the "significantly reduced utility" of military capabilities, Davies concedes that armoured vehicle and surface combatants could still be useful in future warfighting scenarios, albeit in a limited capacity. "Strictly speaking, no capability is ever entirely useless. There are probably still occasional circumstances in which the crossbow, horse cavalry charge or 16-inch guns of a battleship would still be effective weapons," he writes. "But those instances are so rare that no one sees the benefit of including them in modern force structures."

He observes that militaries are conservative by nature, stating they tend to preserve capabilities that have deployed successfully in the past. "So, weapons systems usually don't disappear overnight; instead, it happens gradually over time," Davies writes. "There were several horse cavalry charges during World War II (and many of them were successful), and the last two Iowa Class battleships (the *Missouri* and the *Wisconsin*) took part in shore bombardments during the 1991 Gulf War. "There are just more reliable or cost-effective ways to produce those effects these days." To support his thesis on the decline of surface ships and armoured vehicles, Davies flags rapid changes in warfighting trends. He begins by pointing to the "phenomenal increase" in the swift and precise delivery of lethal force. "It's hard to exaggerate how rapid that increase has been — it is well beyond exponential," Davies continues. "The result has been a steady, though less mathematically dramatic, decline in the density of combatants on the battlefield, as militaries take a small-target approach through dispersion."

He goes on to claim tanks and ships are "inherently lumpy", and would increasingly become a liability as offensive threats evolve. "Up to now they've managed to get by with more or less acceptable loss rates because the offensive weapons they face have generally been just a little too slow in arriving or a little too inaccurate to completely overwhelm the defences," he writes.

"But it's also clear that the speed and accuracy of weapons systems are still improving, with the added complication of the ubiquity of drones of various shapes, sizes and lethality." Davies claims while it is possible to develop new defensive systems, they "tend to be more expensive than the weapons they are defending against" and can "drive up the unit cost of the platforms they protect" without delivering additional offensive value. "All of the elements of the calculus weigh against expensive lumpiness," he adds. "Like the weapons systems of the past that are now universally agreed to be obsolete, today's major systems will one day be anachronisms."
Davies concludes that surface ships and armoured vehicles could become "anachronisms" as early as the 2030s.
"I'm tempted to say that they will not disappear with a bang but will gradually fade away — but there will actually be quite a few bangs in the process," he writes.

AUSTRALIAN-CANADIAN PARTNERSHIP TO INTRODUCE NEW SERIES OF UNMANNED NAVAL VEHICLES

By **Baird Maritime** - June 2, 2022

Photo: CNW Group/Cellula Robotics

British Columbia-based technology company Cellula Robotics and Australian unmanned systems specialist Trusted Autonomous Systems (TAS) are presently working on a new series of fuel cell-powered, extra-large unmanned underwater vehicle (XLUUV). Funded by the Royal Australian Navy (RAN) and in collaboration with sovereign subcontractors, project SeaWolf is set to debut the first 12-metre XLUUV hull in the fourth quarter of 2022.

Some notable features of the SeaWolf project include a mission range of over 5,000 kilometres powered by a state-of-the-art fuel cell power system and two modular 2,500-litre flooded payload bays. With a 12- by 1.7-metre hull, SeaWolf can be shipped in a single 40-foot ISO container. As part of the work on the SeaWolf project, Cellula will establish a new office in Brisbane. The company also plans to put up additional design and construction facilities for the XLUUVs in Australia. demonstration missions with the prototype SeaWolf XLUUV will take place in Australia in the first quarter of 2023.

NEW DESIGN PROPOSED FOR FUTURE ROYAL AUSTRALIAN NAVY SUPPORT SHIP

By **Baird Maritime** - May 11, 2022

Photo: BMT

Engineering firm BMT has proposed a variant of its proprietary multi-role logistics vessel design to fulfil the Royal Australian Navy's requirement for a new fleet support ship. The vessel will have the ability to transport troops, vehicles, and equipment in support of amphibious warfare and littoral operations. Aviation facilities for helicopters and equipment for replenishment at sea will also be incorporated in the design. The vessel will also be designed to operate as a humanitarian disaster response platform with space for accommodating enhanced medical facilities.

FRENCH NAVY'S FIRST BARRACUDA-CLASS SUBMARINE ENTERS SERVICE

By **Baird Maritime** - June 9, 2022

Photo: Official Twitter account of Admiral Pierre Vender, Chief of Staff of the French Armed Forces

The French Navy commissioned its first Barracuda-class nuclear-powered attack submarine in a ceremony on Friday, June 3.

Measuring nearly 100 metres long and capable of a maximum submerged speed of over 25 knots, *Suffren* will be used for anti-surface warfare, strike warfare, and special operations support missions. Armament includes torpedoes, anti-ship missiles, land attack cruise missiles, and mines.

Suffren was designed and built by French defence company the Naval Group. Five other Barracuda-class submarines are in various stages of construction and are scheduled to enter service between 2022 and 2031.

Navy says it will lose millions by not committing to 10 destroyers in upcoming contract

By Megan Eckstein
Thursday, May 19

The future guided-missile destroyer Jack H. Lucas (DDG 125) is launched on June 4, 2021, at Huntington Ingalls Industries, Ingalls Shipbuilding division in Pascagoula, Miss. Jack H. Lucas is the first Arleigh Burke-class guided-missile destroyer to be built in the Flight III configuration. (Huntington Ingalls Industries photo)

WASHINGTON — The U.S. Navy doesn't want to promise to buy too many ships in the next five years, in case it can't follow through due to budget or supply chain constraints.

But its unwillingness to guarantee work to shipbuilders will cost the sea service millions of dollars in the long run, a top official told Defense News.

The Navy needs more Flight III Arleigh Burke-class destroyers, as the cruisers begin to exit the fleet and the Flight I DDGs near the end of their planned service lives. A number of lawmakers have said they're open to funding three new destroyers a year compared to the expected two a year, something industry — the Ingalls Shipbuilding yard in Mississippi and the General Dynamics Bath Iron Works yard in Maine, plus their suppliers — would welcome.

But the Navy only has two a year in its near-term shipbuilding plans.

Moreover, it only plans to ask for nine guaranteed ships in its upcoming five-year procurement contract, which, if executed to that minimum level, would be a decrease in workload for the shipbuilders.

The legislative proposal the Navy will soon send Congress will ask for authority to buy nine ships, plus an option for a 10th ship to continue the two-a-year pace as well as additional options to buy a third ship each year if Congress appropriates additional funds, Jay Stefany, the principal civilian deputy to the assistant secretary of the Navy for research, development and acquisition, told House Armed Services seapower and projection forces subcommittee members in a May 18 hearing.

This request, he said, gives flexibility to scale up to the three-a-year procurement rate industry and some lawmakers want. It also allows the Navy to stay at nine ships if funding levels are lower than expected, if inflation crowds out the shipbuilding budget, if labor and supply challenges drive up the cost of ships or another contingency arises.

But Stefany said this flexibility comes at a cost. The savings in multi-ship contracts come from guaranteeing work. In this case, Bath Iron Works and Ingalls Shipbuilding can ask their suppliers for quotes on material and systems based on buying nine ship sets. They'd get a better price if they asked for a quote for 10 ship sets and an even better price if they asked for 15 ship sets upfront.

"A 10-ship multiyear will save us more than a nine-ship multiyear. That cost is not overly large, but that's a decision that the department's made of value versus flexibility," Stefany told the subcommittee.

After the hearing, Stefany told Defense News his team was still working to compare the cost of a nine-ship versus a 10-ship contract. Generally, he said, “it’s in the millions, but it’s not a huge number.”
He noted the option ship for each year would essentially cost the Navy full price, rather than the 7% to 8% savings that come with economic order quantity savings.
The option ships “would be priced higher because they’re not guaranteed.”

The future destroyer John Basilone (DDG-122) is about 70% complete at the Bath Iron Works shipyard in Maine. The Flight IIA Arleigh Burke-class destroyer, photographed on Nov. 16, 2021, will be the next destroyer transitioned into the water for completion. (Bath Iron Works photo)
Rep. Rob Wittman, the top Republican on the subcommittee, told Stefany during the hearing he doesn’t think the flexibility is worth the cost.

“Fewer ships, or being able to take out ships, is not the direction we should be going,” he said. In his opening remarks, which he submitted in writing after the hearing, Wittman, of Virginia, said “I reject the administration’s anemic shipbuilding request and will seek to expand our shipbuilding plans required to meet our warfighting requirements by accelerating construction of our destroyers, frigates and auxiliary ships.”

Rep. Jared Golden, a Democrat from Maine, criticized the Navy for “talking about a desire to see these two yards get to a place where they can do three ships per year,” but not taking firm steps to help them achieve that goal, such as committing to work so the yards can hire and train a sufficiently large workforce.

Broader shipbuilding instability

The Navy faces a similar situation with its guided-missile frigate program.
Stefany said in the hearing that Wisconsin-based Fincantieri Marinette Marine invested in increasing its capacity to build the Constellation-class frigate, but the Navy plans to buy them in a sawtooth pattern of one, then two, then one, then two each year in the near term.
Stefany called this the “minimum sustaining rate” to keep Fincantieri’s production line moving.
Vice Adm. Scott Conn, the deputy chief of naval operations for warfighting requirements and capabilities, said at the hearing the Navy would buy more if it could afford it.
“That profile is affordability, plain and simple,” he said.

Ingalls Shipbuilding launched the San Antonio-class amphibious transport dock Richard M. McCool Jr. on Jan. 7, 2022. (Huntington Ingalls Industries)

Stefany confirmed during the hearing the Navy would pay more for LHA-10 due to the elongated build cycle.

Rep. Elaine Luria, D-Va., criticized the approach, telling Navy officials they "submitted a request that you admit is more expensive in the long run and essentially guts the workforce" at Ingalls Shipbuilding, the sole provider of amphibious ships.

George Nungesser, Ingalls' vice president of program management, told reporters in a May 11 call the yard essentially views the LHA program as having a gap.

"Gaps — they cause concerns. You don't know how to go plan for the future or how to hire, train or retain a skilled workforce," he said.

"We've experienced this type of gap" when the Navy ended the Arleigh Burke production line in the 2000s but then later restarted it, leaving Ingalls with a five-year gap between ships. That meant essentially a new workforce constructing the DDGs, after much of the original skilled workforce moved on to other ship programs at Ingalls or other employers altogether.

"We know that impacts the supply base, things of that nature, and increases pricing, and so that's why we're trying to figure out how do we move to a four-year [gap between ships]" despite what the Navy's long-range shipbuilding plan and five-year budget plan lays out.

The House Armed Services Committee will take up the annual defense authorization bill next month, which will shed more light on Congress' plans for both the destroyer multi-year contract and the rest of the shipbuilding portfolio.

About Megan Eckstein Megan Eckstein is the naval warfare reporter at Defense News. She has covered military news since 2009, with a focus on U.S. Navy and Marine Corps operations, acquisition programs, and budgets. She has reported from four geographic fleets and is happiest when she's filing stories from a ship. Megan is a University of Maryland alumna.

US NAVY COMMISSIONS DESTROYER FRANK E. PETERSEN JR

By **Baird Maritime** - May 16, 2022

The US Navy commissioned its newest guided missile destroyer, USS *Frank E. Petersen Jr*, in a ceremony at the Port of Charleston in Charleston, South Carolina, on Saturday, May 14. The 71st overall Arleigh Burke-class destroyer was built by Huntington Ingalls Industries' Ingalls Shipbuilding division in Pascagoula, Mississippi. It was launched on July 13, 2018, and delivered to the navy on November 30, 2021.The 513-foot (156-metre) ship is powered by four GE LM2500 gas turbines that deliver a speed of 31 knots. Armament includes a 127-millimetre naval gun, 25-millimetre autocannons, a 20-millimetre close-in weapon system, torpedoes, surface-to-air missiles, and land attack cruise missiles.*Frank E. Petersen Jr* will be homeported at Joint Base Pearl Harbor-Hickam, Hawaii.

NavyTimes

Ronald Reagan Carrier Strike Group deploys from Yokosuka

By Diana Stancy Correll
May 21, 06:27 AM

The U.S. Navy's only forward-deployed aircraft carrier Ronald Reagan departs Commander, Fleet Activities Yokosuka for a regularly scheduled deployment May 20. (Tetsuya Morita/Navy)

The aircraft carrier Ronald Reagan and its strike group deployed Friday — months after returning to its homeport of Yokouska, Japan, from a five-month deployment last year.

The strike group deployed to promote stability in the 7th Fleet and is "expected to work with allies and partners, promote adherence to a rules-based international order, as well as maintain presence and flexibility," according to the Navy. The carrier strike group includes Carrier Air Wing 5, guided-missile cruisers Antietam and Chancellorsville, along with shipsm crew and staff from Destroyer Squadron 15, and staff from Carrier Strike Group 5.

"Ronald Reagan's forward deployed presence underscores our nation's commitment to our allies and partners," Capt. Fred Goldhammer, Ronald Reagan's commanding officer, said in a news release. "Our crew has worked very hard to make the ship ready to face any future challenge, and I am tremendously proud of their efforts. The Sailors onboard Ronald Reagan are incredibly talented and resilient, and their unwavering commitment to our mission helps ensure that our nation's maritime presence remains strong."

The Ronald Reagan concluded its last deployment in October. In addition to 7th Fleet, the carrier operated in 5th Fleet to support the withdrawal of U.S. and coalition forces from Afghanistan and to relieve aircraft carrier Dwight D. Eisenhower at the end of its double-pump deployment.

Carrier Air Wing 5 provided airpower for U.S. and coalition forces during the withdrawal process, and personnel assigned to the Reagan Carrier Strike Group facilitated evacuating more than 7,000 U.S. citizens and evacuees from Afghanistan as part of Operation Allies Refuge.
In 7th Fleet, the carrier conducted multiple carrier operations with the Carl Vinson Carrier Strike Group, the United Kingdom's HMS Queen Elizabeth and its strike group, and ships with the Japan Maritime Self-Defense Force.

ADF Cadets want you! Call for adult volunteers

13/05/2022 Posted by Mike Hughes 395 Views 0 Comments Army Cadets, Australian Army Cadets, Australian Navy Cadets

The Australian Defence Force is looking for adult volunteers to lead and inspire young people as part of the Navy, Army and Air Force cadets.
CAPTION: *Australian Navy Cadet instructor Lieutenant AJ Hughes instructs Cadet Seaman Charlee Bell with driving a Rigid-Hulled Inflatable Boat. Photo by Sam Thies.*

ADF Cadets is Defence's leading youth development program, supporting 13- to 18-year-olds through activities that help them thrive in a team environment, improve communication skills and become responsible members of the local community.

Defence's Head of ADF Cadets, Major General Douglas Laidlaw, said the program helped young people become more confident, capable and resilient. "The cadets program provides rewarding, challenging and exciting activities for youth in hundreds of locations around Australia," Major General Laidlaw said.

"However, it wouldn't be able to provide the experiences it does without the support from the local community and the involvement of volunteers." ADF Cadets volunteers come from a diverse cultural and professional backgrounds. They are supported with training to develop their leadership skills.

"You don't need any previous military experience to help out as a volunteer," Major General Laidlaw said. "Whether you have a little time to give or a lot, you will be welcomed into a close-knit, supportive and friendly community of volunteers who are putting the future of our nation in good hands." ADF Cadets is an inclusive organisation that provides opportunities for young people from a wide range of social backgrounds and abilities.

There are about 28,000 cadets currently enrolled in the program across the three services.

The call for adult volunteers is a key component of a number of initiatives being implemented to enhance the ADF Cadets program.

To find out more about volunteering with ADF Cadets, visit www.cadetnet.gov.au/volunteer.

HMAS PERTH (I) MEMORIAL FOUNDATION INCORPORATED

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OR

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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.

So why don't you join us!

You do not need to have had a previous maritime history. Merely the basic requirements you need is to have an interest in maritime affairs.
Your membership will include a regular UpToDate news on maritime affairs, a monthly newsletter, and include a quarterly copy of the Navy League's magazine 'The Navy '. Together with outings and mateship.

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The Navy League of Australia Western Australia Division – **Membership Application**

I wish to be come a member of the Navy League of Australia, the objects I support.

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Please email or post your application to the above address.

JOIN THE AUSTRALIAN NAVY CADETS

What cadets do

Get Out There! If you're into adventure, you'll get as much as you can handle as an Australian Navy Cadet. You'll get to go sailing, hiking, canoeing and camping. Plus you'll learn everything about seamanship. From navigational training to Naval signals and communication.

But it's not all fun and games. You'll have to study first aid and pass muster in parade training. But if you can take on the challenge the rewards are good.

To join you must:

- Be a person ordinarily resident in Australia.
- Be at least 12 years and 6 months old and under the age of 19 years.
- Produce a statement from your family or any medical practitioner as to your ability to participate in Cadet activities.

So if you're ready to get fully trained in adventure, get into the Australian Navy Cadets and get out there!

In 88 Units across Australia, sponsored by the Royal Australian Navy, over 2,500 staff and cadets learn about sailing and seamanship, develop leadership skills and learn how to communicate effectively. The ANC is a voluntary youth organisation which trains young adults to become better citizens for the community. This training involves nautical and maritime activities within a military environment.

They develop confidence, pride and self-discipline whilst having an ocean of fun and making loads of new friends along the way.

Check out our website at www.cadetnet.gov.au/anc, find a Navy Cadet Unit near you and set sail on the voyage of a lifetime.

For information on how to join the ANC, email
ANCrecruiting@cadetnet.gov.au

THE NAVY

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

The Hon. Secretary, NSW Division
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