

# THE NAVY

THE MAGAZINE OF THE NAVY LEAGUE OF AUSTRALIA

**ASYMMETRY – THE  
BIG DILEMMA FOR  
MILITARY PLANNERS**

**NEW RAN LIGHT  
FLEET CARRIER  
PROPOSAL**



**THE AUKUS  
SUBMARINE  
PROGRAMME**



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**Front cover:** HMAS SYDNEY (DDG 42) sails past Balls Pyramid off Lord Howe Island as part of a regional presence deployment, March 2024 (Image LSIS Daniel Goodman RAN).

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## It can Get Worse – and Most Likely Will



Arleigh-Burke class Destroyer USS JACK H LUCAS DDG 125 (Image USNI).

The July issue considers asymmetry and asymmetric warfare in its many forms, relating also to AUKUS, the Russian-Ukraine maritime war, and proposals to build a new RAN Light Fleet Carrier (LFAC). John Hunter, author of the first paper (*Asymmetry – the Dilemma for Military Planners*), suggests that Asymmetric Warfare is:

*Warfare that is between opposing forces which differ greatly in military power and that typically involves the use of unconventional weapons, systems, and tactics.*

The implication is that “we” are not [yet] in a great power contest, in which both sides are balanced and both will necessarily contest asymmetrically and symmetrically. In fact, all wars accelerate what was perceived as the asymmetric up and until the war occurs – when the illusion of symmetry breaks down. It could be argued, that drones are the “new symmetry...” Notwithstanding, the fact that authors are considering asymmetric warfare suggests, potentially, three significant changes – alluded to in the Defence Strategic Review:

1. China is now more symmetrically powerful in depth than the US, in areas such as the South China Sea and the Pacific Islands – and, potentially in AI, Space, Energy, shipbuilding, and Antarctica – meaning Australia may already be “multi-enveloped,” without realising it;
2. The post Trump-Biden-? era US is no longer able to, or more importantly, perceived to be able to provide the Global Constabulary and Deterrence role it once did – up and until, perhaps, 30 August 2021 and defeat in Afghanistan. Followed by the Russian invasion of Ukraine, 24 February 2022, and Hamas’ attack on Israel, 7 Oct 2023.
3. Smaller nations – not just in the South Pacific but in Europe (even NATO members) – are waking up to the new reality being exercised by the *No Limits Axis* (NOLA) of Russia, China, and Iran, plus the BRICS (Brazil, Russia, India, China, and South Africa). While cutting deals and manoeuvring accordingly, they recognise they may have to “fight alone.” Without the support of the US. The more so, if the US currency stops being the petrodollar.

It will be recalled that up and until 1973, the “Prime” petro-currency was the UK Pound, when in 1974 – during the Oil Crisis (and a similar period of stagnation and political-economic instability) – Saudi Arabia made a deal with the US (when its share of world GDP was 36% – now 25% and falling relatively, at about 0.7% pa) to establish the USD as the petrodollar. This significantly stabilised the US

markets at the time (leading to significant economic pressure on the UK); rewarding the US Dollar with lower interest rates, than it might otherwise have enjoyed – and a creditor global role. The problem with this role for country’s not agreeing with the US, was that sanctions are applied in US Dollars. This worked (as for the British Empire) for so long as the US was seen to be politically, economically, industrially, and militarily powerful – and could be “credited” to verify – but changed with perceptions of risk, trust, indebtedness, defeat, and decline. The Saudis – following their pact with Iran, brokered by China – are similarly looking to disaggregate from the Dollar. With indication of Saudi Arabia joining the BRICS and supporting China to establish **mBridge** – a cross-border payments system that uses central bank digital currencies, rather than the USD.

Paper 1 by new author John Hunter considers asymmetry with respect to the Russian-Ukraine War concluding, *inter alia*:

*Certainly, one intended (or unintended?) consequence of carefully balancing ‘big iron’ with asymmetric systems will be better use of human resources. Navy recruitment is stalled, and more investments in asymmetric systems may result in a lower recruitment factor per hardware investment dollar. This benefit probably applies to all three services.*

*...Asymmetric systems lend themselves to lower cost wide-area defences – our coastline is lengthy. Defending it is a huge and very appropriate challenge for proponents of military asymmetric systems used as components of the joint warfare doctrine. Defence planners must include these systems in response to the massive buildup of naval and other military forces to our north.*

Paper 2, *The AUKUS Submarine Programme* (Third Place Essay Competition – Professional Section) by Kelvin Curnow examines the asymmetric deterrence apex provided by nuclear-powered submarines. He concludes:

*The programme to build nuclear-powered submarines is the most ambitious defence procurement programme ever undertaken by Australia. The SSN-AUKUS boats will give us strategic capabilities that only a handful of other*



Maritime Self-Defense Force JS KAGA (DDH 183) first-stage modification for F-35B, Kure, Hiroshima Prefecture 2024. (image JMSDF)



nations possess. Questions have been raised by some concerning the relatively small number of submarines that Australia will operate and what impact they would have should a foreign nation threaten Australia. The RAN's SSNs will be able to attack at will any land, surface or sub-surface targets with relative impunity and provide us with a weapon that will allow Australia to punch well above our weight, and signal to our main allies that we are serious about our defence and our willingness to operate in coalition with them.

Contrastingly, Paper 3, *AUKUS Nuclear-Powered Submarines* (Third Place Essay Competition – Non-professional Section) by Roger Jennings, argues *inter alia*:

*The purchase of five off the shelf, Virginia-class, Block V at 10,200 tonnes and 140 metres in length from the U.S. because it is a proven design and the most capable nuclear-powered submarine with forty (40) Tomahawk missiles in vertical launch silos.*

*Do NOT build nuclear powered submarines in Australia. Buy off the shelf Virginia-class, Block V at 10,200 tonnes and concentrate on a continuous build of surface warships of Hobart-class or Arleigh-Burke Flight Three class at a build rate of four per decade.*

*Australian taxpayers must not fund the design of a new nuclear powered British submarine which is unique to the Royal Navy because the Virginia-class, Block V submarine is a highly capable and proven design with very low risk and known costs derived from a long experience with Virginia-class submarines.*

Roger's position is not dissimilar to that argued by Dr Neil Baird over many years – and the subject of his new book. The last paper, by new author Steve Chaplin, *New RAN Light Fleet Carrier Proposal*, recommends aligning strongly with Japan to build a new Light Carrier, to be named HMAS AUSTRALIA III. Steve argues that the *Izumo-class* best fits the bill because:

- The class has a side elevator located to the rear starboard side of the ship, which can remove congestion of aircraft movement to and from the flight deck – this is something sadly omitted from the *Canberra-class* LHD.
- The ships have a stimulating turn of speed (30 kts) because of some very state-of-the-art gas turbines, allowing a very rapid transit to an area of operations, something the LHD's certainly do not have.
- The existing *Izumo-class* vessels are fitted out with an impressive self defence system with a grouping of Phalanx CIWS and the *SeaRAM* anti-missile CIWS, an absolute plus for the close air defence of the ship against anti-ship missiles and/or attacking aircraft/helicopters.
- Of tactical significance for the vessel is the Anti-Submarine Warfare (ASW) OQQ-23 bow mounted sonar. The *Canberra-class* LHD's do not have an ASW sonar system inbuilt to the ship.
- As for the vessel's size/class, it is an ideal "fit" for Australia, being some 27,000 tons, it slides very comfortably into the role as a "light fleet carrier", coupled with the attraction that changes to the accommodation set up can be readjusted to supplement the aviation crew component from a troop transport to aircraft/helicopter integration.

Steve considers that "...media statements in Australia made by the Minister of Foreign Affairs (Senator Penny Wong) in December, 2022, signify a very supportive and steadfast alliance between our two countries (Japan and Australia), notably defence co-operation and with this obligation, it would be patently obvious for Australia to purchase this type of light fleet carrier".



China to build 150 New Super Charge Uranium Reactors by 2055. See Red Duster.

Steve also considers the likely reaction of China to such a move – which the recent visit by the Chinese Premier perhaps gives the lie to? It is most doubtful that any of the measures recommended in all four papers will be adopted by this Government – or perhaps the next? Vested interests are such that Australia will continue to build in Australia – despite obvious advantages (including recommended by General Sir John Monash, in the 1920s) to build abroad. Specifically, to the US (for destroyers and submarines) and Japan / South Korea (for submarines, supply ships, and light aircraft carriers), with whom we will in all probability be fighting.

The other aspect, as argued by *The NAVY* and only just being picked up by the main stream media, is that cuts, inflation, and freezing Defence until 2027/28 (when it is set to increase between 5-6% pa) – even allowing for increases announced towards the end of the forward estimates (of about \$5B) – means that Defence spending will still be at 2% GDP in 2032. Where it was in 2023 and not at the 3% GDP it needs to deliver on AUKUS, by the early 2030s – without suffering yet more devastating cuts.

The position the Global West finds itself in, in 2024 is substantially weaker than at almost any time since the 1970s, and before that the 1930s. By some assessment, the *American Century* – which began in 1917 and US entry into WW1 – ended in Afghanistan, in 2021. A question is "who will dominate the next century?" – and all indications are that it will not be the US, or Europe. Each of the NOLA Axis is driven by a thirst for revenge, a dish they all feel is better eaten cold. The Chinese for their Century of Humiliation, 1848-1948; Russia for the humiliation it believes was imposed on it post the Cold War, 1992-2005, and Iran for the humiliation of the Shah years, imposed and deposed by the US and UK.

By most measures, the Global West is going backwards, from its highwater-mark in 2005. After which, economically China began its "second leap forward," and the number of democracies began declining. The West assumes it is the political economy people wish to belong to – and its ideals are reflected in/by the UN. The fact is, that 42% of all nation states are Democracies, and declining since 2005 – and the UN is dominated and run "democratically" by the tyrannies and illiberal techno-autocracies, that make up the majority. Even more so, as the US backs off funding the monster it has become. On the battlefield, the West is also going backwards. In the current strategic context, Ukraine tragically cannot win, and Russia cannot lose. It is the same for Israel and Hamas. As ignoble as it may be, the best the West can do before it gets any worse (nuclear and or NATO) is push for an imperfect, ugly peace in both theatres. And hope – noting hope is not a plan – that it does not get any worse. ■

# STATEMENT OF POLICY

## For the maintenance of the Maritime wellbeing of the nation.

The Navy League is intent upon keeping before the Australian people the fact that we are a maritime nation and that a strong Navy and capable maritime industry are elements of our national wellbeing and vital to the freedom of Australia. The League seeks to promote Defence self-reliance by actively supporting defence manufacturing, research, cyberspace, shipping, transport and other relevant industries.

Through geographical necessity Australia's prosperity, strength, and safety depend to a great extent upon the security of the surrounding seas and island areas, and on unrestricted seaborne trade.

The strategic background to Australia's security is changing and in many respects has become much less certain following increasing tensions, particularly in East Asia involving major powers, and in Europe and the Middle East. The League believes that Australia should rapidly increase the capability to defend itself, paying particular attention to maritime defence.

### The Navy League:

- Believes Australia can be defended against attack by other than a major maritime power and that the prime requirement of our defence is an evident ability to control the sea and air space around us and to contribute to defending essential lines of sea and air communication with our allies.
- Supports a continuing strong alliance with the US.
- Supports close relationships with all nations in our general area particularly New Zealand, PNG and the South Pacific island States.
- Advocates the acquisition of the most capable modern armaments, surveillance systems and sensors to ensure technological advantage over forces in our general area.
- Advocates a strong deterrent element in the ADF enabling powerful retaliation at significant distances from our shores.
- Believes the ADF must be capable of protecting commercial shipping both within Australian waters and beyond, in conjunction with allies.
- Endorses the development of the capability for the patrol and surveillance of all of Australia's ocean areas, its island territories and the Southern Ocean.
- Advocates Government initiatives for rebuilding an Australian commercial fleet capable of supporting the ADF and the carriage of essential cargoes to and from Australia in times of conflict.
- Notes the Government intention to increase maritime preparedness and gradually increase defence expenditure to 2% of GDP, while recommending that this target should be increased to 3%.
- Urges the strength and capabilities of the Army (including particularly the Army Reserve) and Air Force be enhanced, and the weaponry, intelligence, surveillance, reconnaissance, cyberspace and electronic capabilities of the ADF be increased, including an expansion in its UAV capability.
- Considers that the level of both the offensive and defensive capabilities of the RAN should be strengthened, in particular with a further increase in the number of new proposed replacement frigates and offshore patrol vessels, noting the need to ensure essential fuel and other supplies, and the many other essential maritime tasks.
- Recommends bringing forward the start date of the replacement frigate program to both strengthen the RAN and mitigate the local industry capability gap.
- Recommends the timely replacement and increase in numbers of the current mine-countermeasure force.
- Strongly supports the early acquisition of large, long range and endurance, fast submarines and notes the deterrent value, reliability and huge operational advantages of nuclear powered submarines and their value in training anti-submarine forces.
- The League is concerned at the very long time before the projected 12 new conventional submarines can enter operational service, noting very serious tensions in the NW Pacific involving major maritime powers.
- Recommends very early action to provide a submarine base on the Eastern seaboard.
- Notes the potential combat effectiveness and flexibility of the STOVL version of the Joint Strike Fighter (F35 *Lightning II*) and supports further examination of its application within the ADF.
- Supports the development of Australia's defence industry, including strong research and design organisations capable of the construction and maintenance of all warships, submarines and support vessels in the Navy's order of battle, and welcomes the Government decision to provide a stable and continuous shipbuilding program.
- Advocates the retention in maintained reserve of operationally capable ships that are required to be paid off for resource or other economic reasons.
- Supports a strong and identifiable Naval Reserve and Australian Navy Cadets organisation.
- Advocates urgent Government research and action to remedy the reported serious naval recruiting and retention problem.

**As to the RAN, the League,** while noting vital national peacetime tasks conducted by Navy, including border protection, flag showing/diplomacy, disaster relief, maritime rescue, hydrography and aid to the civil power:

- Supports the maintenance of a Navy capable of effective action in hostilities and advocates a build-up of the fleet and its afloat support elements to ensure that, in conjunction with the RAAF, this can be sustained against any force which could be deployed in our area of strategic interest.

### The League:

- Calls for a bipartisan political approach to national defence with a commitment to a steady long-term build-up in Australia's defence capability including the required industrial infrastructure.
- Believes that, given leadership by successive governments, Australia can defend itself in the longer term, within acceptable financial, economic and manpower parameters.



## THE VICE PRESIDENT'S DIRECTED TELESCOPE

If the League is enjoying some shore leave, Vice President Mark Schweikert "Took the Con" and ordered full speed ahead.



The new RAAF MC-4Q Triton long range, high altitude, persistent ISR UAV. (RAAF)

### TRITON

Since the last edition of *The NAVY*, the RAAF's game changing new long range, high altitude, persistent, reconnaissance and surveillance unmanned aerial vehicle, Triton, finally arrived in Australia.

Developed under the US Navy's Broad Area Maritime Surveillance (BAMS) program, Triton provides real-time intelligence, surveillance and reconnaissance missions (ISR) over vast ocean and coastal regions and will complement and enhance the RAAF's existing Boeing P-8 Poseidon maritime patrol aircraft fleet. It can also search the way ahead for a fleet at sea.

The MQ-4C Triton can remain aloft for 30-40 hours at 55,000ft at speeds of up to 330 knots. Its main surveillance sensor is the AN/ZPY-3 Multi-Function Active Sensor (MFAS) X-band AESA radar with a 360-degree field-of-view. It is capable of surveying 7,000,000km<sup>2</sup> of sea (as well as shoreline or land) in a 24-hour period, or 5,200km<sup>2</sup> in a single sweep. Using the radar in inverse synthetic aperture mode, the MFAS can actually identify a target in all weather conditions. The aircraft has a constant satellite uplink with an advanced imaging electro optic sensor enabling the operator to visually identify potential targets of interest.

RAAF's 9 Squadron has been re-raised to fly the unarmed Triton from Edinburgh in South Australia.

So far, four have been ordered under the previous government. Another follow-on order of three was expected before the current Government's cuts to the Defence Budget and integrated investment program. It is unknown if any more will be ordered.

### SEA 3000

As part of the cuts to Defence by the current Government, HMAS ANZAC has been unexpectedly and rapidly decommissioned after 28 years of service. Her sister ship ARUNTA is expected to follow suite at any time.

The original plan was for the eight *Anzac-class* frigates to undergo a life of type extension and lethality upgrade known as a Transition Capability Assurance Program (TransCAP). In fact, the Government's own Independent Surface Fleet Review supported that plan with its recommendation being "Urgently execute the planned Transition Capability Assurance Program (TransCAP) activity to upgrade the *Anzac-class* frigates to prevent a Tier 2 capability gap". However, the current government has decided to cancel the TransCAP and instead use the money to invest in a very risky off the shelf rapid purchase to replace the Anzacs.

SEA3000, as it is known, will involve no Australianisation whatsoever of the new Tier 2 replacement frigates, including the use of the Australia designed and developed SAAB 9LV combat system or the world leading CEA radar system. Instead opting for a technical solution to somebody else's problem in order to be seen as being expedient. History shows that this decision will have the opposite effect. The new ships will also have less capability than the TransCAP-ed Anzacs they are designed to replace.

### MINEHUNTERS?

The RAN's minehunter fleet has taken a hit with two of its Huon class minehunters decommissioned without replacement, leaving only three left in service. The *Arafura-class* OPV was to be the base design for a new hydrographic and minehunter fleet however, with the recent 50% cut in the Arafura fleet, it is unsure what if any program or project is going to provide this maritime trading dependant island nation with the ability to demine choke points and harbours. See *Flash Traffic*.

### NSM

One piece of good news for Navy is the replacement of the Harpoon anti-ship missile with the much more advanced and stealthy Naval Strike Missile (NSM).

NSM has nearly double the range, can use GPS guidance for waypoints to avoid obstacles or attack from unexpected directions and uses a passive imaging infra-red guidance unit to identify and target pre-determined parts of a ship and do so without emitting any signals to alert it. NSM is being fitted to the *Hobart-class* AWDs, the six remaining Anzacs as well as the six *Hunter-class* when they enter service.

## RIMPAC

The media was awash recently with stories of Australia's almost non-involvement in the major and very important US led exercise RIMPAC.

Unlike other years, for 2024 Australia has sent just one warship (SYDNEY) and one P-8 maritime patrol aircraft. A far cry from exercises of before involving LHDs, hundreds of Army personnel and their equipment, helicopters, submarines, P-8s, fighters etc etc. See *Flash Traffic*.

## COLLINS RUST

The lack of awareness of naval issues, and even basic chemistry, in our general and 'defence media' was on show recently with much 'clutching of pearls' over a story about rust being found on some of our *Collins-class* submarines while in refit.

Placing large slabs of metal in salt water tends to produce rust. The fact it was found and now being remediated should be something to celebrate. If they found none then that should be the story. ■



HMAS SYDNEY arriving in Pearl Harbour, on her own. (USN)



## CAPTAIN EDWARD JOHN WILSON MN

Edward John Wilson, was born in Kogarah, NSW, on 26th May, 1939.

He was a longstanding member of the NLA NSW Division and originating contributor to *Red Duster*. This short obituary was kindly provided by Ted's wife Dr Trish Holdway, as written by Captain Richard Grono MN.

Ted joined his first ship to commence his four year apprenticeship with BHP, on 19th May, 1955, one week before his 16th birthday. Having usually come straight to sea from a sheltered home environment, this 4 year period of living and working in a closed environment amongst as many as 50 other seafarers, taught us tolerance; independence; life values and shaped our career path for the rest of our working lives. I was privileged to share a cabin with Ted for 10 months in 1958 as we sailed together on the *Iron Duke*.

In 1959, Ted finished his apprenticeship and in July of that year passed his 2nd Mates examination, immediately thereafter resuming his life at sea on BHP ships as 3rd and soon after, as 2nd Mate. In 1967, he passed his Masters exams and immediately thereafter, at the age of 28, sailed as Master on *Aramac* and subsequently, at the age of 30, commanded the Passenger ship, *Arrawatta*.

In, 1970 he came ashore due to failing eyesight and became Assistant Marine Superintendent with P&O Australia. At that time, prior to containerisation, the P&O Group had more than 500 ships, many of which called at Australian ports. Gradually, as containerisation and mechanisation took over the old break bulk trades, the job lost its appeal.

In 1976, Ted was invited to join MacDonald Hamilton & Coy Ltd in Sydney as General Manager of Dilmun Navigation Coy which operated a fleet of six small tankers supplying fuel to Papua New Guinea, the Solomon Islands, Fiji and the South Pacific countries generally. In January, 1984, Ted returned to work as Operations Manager of *Seatrade*, The, in 1990, Ted found another job as Shipping Manager for White Mining Australia Pty Ltd, which had been awarded a contract to develop a coal mine in India. He worked full time during that project, then on a consultancy basis when the original project was finished but other jobs enquiring marine operations came up, until 2015 when he finally retired. Retired from paid employment but he continued voluntary work with Meals on Wheels and as Secretary and the diligent editor for the Company Of Master Mariners, Australia for over ten years.

In December, 1982, Ted visited Captain Grono on the brigantine *Eye of the Wind*. In the process of his frequent visits aboard, he met the lovely, loving and lovable Trish Holdway. They married 10 months later and the rest is history. Ted doted on his daughter; approved of – and freely gave advice to – his son-in-law; cosseted his grandson and adored his wife.

The NLA mourns his loss – fair winds old friend.





# NIGEL DAVID (SHARKEY) WARD AND KRISTIAN NIGEL WARD

With acknowledgment to ANI and The TIMES obituaries

Father & Son – We will Remember Them (Image RN)

It was with great sadness that the NLA and *The NAVY* learned of the death of Commander Sharkey Ward DSC AFC RN on 17 May 2024 aged 80, tragically predeceased by his son and fellow FAA *Harrier* pilot, Lieutenant Commander Kris Ward RN, 15 November 2018, aged 45. Both FAA Top Guns represented a dying breed of FAA pilots – the like of which we are unlikely to see again. Not only because fixed-wing FAA pilots were essentially shut down in 2010, and the ending of the *Harrier* Program by the Cameron Government. But also by the combining of RAF and FAA for F-35B, and their operating from HMS QUEEN ELIZABETH (R08), almost a decade later. A time during which the hard-won skills of the FAA were lost and waned, as warned of by both Father and Son – when Britain, through its austerity program, turned its back on its Navy, and Defence. Perhaps irrecoverably so.

**Kristian Nigel Ward** was born in Oslo, Norway, in 1973, the elder son of Alison (née Taylor), an officer in the WRNS, and Commander Nigel “Sharkey” Ward.

Kris was eight years old at the time of the Falklands War, which had a major impact upon him. He recalled the morning of 1 April 1982, when, during a visit to his grandparents’ house, a telephone call came through for his father, telling him: “this is the duty commander. You are to prepare your squadron for war...” His younger brother, Ashton, recalled later, “Kris became a man, far too young. He took on the responsibility of taking care of me and looking after mum as best he could.”

**Nigel David Ward** was born in Medicine Hat in Alberta, Canada, in 1943, the son of Squadron Leader John Ward RAF, who was serving in Canada, with his wife, Margery.

On the morning of May 21, 1982, Lieutenant Commander “Sharkey” Ward was flying his *Sea Harrier* low over San Carlos Bay as British forces landed on the west coast of the Argentine-occupied East Falkland. Under a clear blue sky, he flew in battle formation – side by side, two miles apart – with Lieutenant Steve Thomas RN (FAA), descending from the northeast and setting up “a low-level race-track patrol in a wide shallow valley”, helping to protect the British ships below.

At the southerly end of the track, as the two pilots completed their turns, Ward, as he recalled in an interview later, “spotted two triangular shapes approaching down the far side of the valley under the hills from the west”. The objects were *Daggers*, the Israeli version of the French *Mirage* fighter bomber operated by the Argentine air force, and they were moving fast. Ward levelled out of his turn and pointed directly at them, increasing power to full throttle, and alerting Thomas to the presence of the enemy jets. “My voice was so excited and garbled that Steve could not understand a word,” said Ward.



Lieutenant Commander Kris Ward RN (Image RN)

He flew between the Argentine aircraft, lower than the leader and higher than the No 2, as they flashed passed his cockpit. He expected the enemy jets to press on to their target. In the face of the *Harriers*, however, the *Daggers* turned for home — but it was too late. Thomas came up behind the Argentine jets and destroyed two of them with Sidewinder missiles. Ward shot down a third, which entered the fight from the north and, as he found out later, had been firing at him.

“Adrenaline running high, I glanced round to check the sky about me,” Ward said. “Flashing underneath me and just to my right was the beautiful green and brown camouflage of the third *Dagger*. I broke right and down towards the aircraft’s tail, found the jet exhaust with my Sidewinder and released the missile. “It reached its target very quickly and the *Dagger* disappeared in a ball of flame. The engagement had lasted for roughly a minute and, although it all happened incredibly fast, in my mind it was registered as spectacular slow motion.”

Sharkey was the commander of 801 Naval Air Squadron, which was based in HMS INVINCIBLE. The aircraft carrier was one of two – the other was the Task Force flagship HMS HERMES – sent to the South Atlantic after the junta in Buenos Aires had ordered the invasion of the Falklands.

Influenced by the views of 800 Squadron on board HMS HERMES, Rear Admiral Sandy Woodward restricted the use of the Blue Fox radar and ordered the *Harrier* squadrons to perform combat air patrols at high level. Both directives were ignored by Ward. His squadron flew at low level, which enabled them to intercept enemy aircraft before they attacked the British ships. He made extensive use of the radar, which, he claimed, worked well and deterred the Argentinians. When they picked up signals from the *Harriers*’ radar,

they held back and avoided the British aircraft. The Argentinian pilots referred to the *Harrier* as “*La Muerta Negra*,” the Black Death. Ward claimed that the sinkings of HMS *ARDENT* and HMS *SHEFFIELD* were avoidable and that long-distance *Vulcan* raids on the runway at Port Stanley were unnecessary. He believed that the airfield could have been destroyed by the *Harriers* flying at night, but the idea was dismissed, even though 801 Squadron had, without formal authorisation, completed a successful programme of night flying.

Ward flew more than 60 combat missions in the Falklands and shot down three of the eight enemy aircraft destroyed by 801 Squadron, which is believed to have turned away more than 450 enemy attacks. He damaged another Argentine aircraft and was involved in several more “kills”. The unit lost four aircraft and two pilots, but none in air-to-air combat.

Sharkey challenged Rear Admiral Sandy Woodward, commander of the Task Force, over his conduct of the air war. Long after leaving the Navy, he became close friends with Woodward and campaigned with him for a change in the disastrous UK *Strategic Defence Security Review* (SDSR, 2010). Woodward later noted: “if Sharkey Ward had not disobeyed orders, we would have lost the Falklands war.” Needless to say, both Sharkey and Admiral Woodward were loathed by the British Royal Air Force.

The loss of the *Harrier* and fixed wing aviation was a result of an unholy alliance between the Conservative-Liberal Government, the RAF, and the British military industrial complex. The RAF were adamant that the RN did not need fixed wing aircraft – an argument they thought they had previously won in the 1960s. Only for the war-winning *Harrier-CVS phoenix* to arise again in the 1970s. In 2010 the RAF and a major British company went in the back door of No.10 to brief the then PM David Cameron (of Brexit infamy), that all the money had been spent on updating the GR9, so future post-cuts funding needed to be diverted to *Typhoon* and F-35. With the FAA and *Harrier* GR9 and their pilots (sacked) offered up for the RAF. The *Harrier* GR9 was indeed broken up, and all its parts sold as spares to the USMC. The greatest act of political economic (Marxist) strategic vandalism since the demise of the TSR2 (Carrier-compatible) fighter-bomber in the 1960s. Whose jigs were buried in the mid-Atlantic trench – exactly so as to prevent any future reconstruction.

There is an aside to the loss of the *Harrier*, in that an offer was made for the transfer of a FAA piloted *Harrier* GR9 squadron to the RAN FAA. But this was turned down. The initiative would have kept FAA fixed wing carrier expertise alive for a decade, in both the RN and RAN. A story to be told, another day.

### Like Father Like Son

During his four deployments as a *Harrier* pilot over Afghanistan (the USMC / Royal Marine / British Army weapon of choice was the *Harrier* flown by USMC and FAA (not RAF) pilots) Kris Ward flew 160-armed reconnaissance missions in support of coalition ground troops. Towards the end of one mission in 2007, when he was running short of fuel, he was called to the aid of a team of US special forces pinned down by more than 70 Taliban fighters. They had already suffered one very serious casualty and their radio operator's thumb had been shot off. Without any ammunition left Ward called in another *Harrier* and kept the Taliban at bay by flying at an extremely low level. This brave if dangerous tactic interrupted the assault and gave the second *Harrier* time to deliver a 1,000lb airburst bomb on target. The surviving Taliban fighters dispersed.

A few days later two bearded special forces soldiers entered the *Harrier* operations room. They had travelled a considerable



Commander Sharkey Ward DSC AFC RN (Image RN)

distance to get there. At 6ft 4in, Ward was pretty tall, but one of these soldiers was 6ft 8in.

The American picked up the British pilot in a bear hug and said: “Man, you saved my life!

As a fighter pilot who had — with his colleagues — put his life on the line, along with his Father and Rear Admiral Woodward, he was desperately disappointed by the outcome of the 2010 SDSR, which withdrew all *Harriers* from service. Kris’ passionate disagreement on the disbandment of the *Harrier* squadrons and the sacking of all their pilots was that he challenged David Cameron, live on national television:

*I have flown 160-odd missions over Afghanistan in the Harrier, and I am now facing redundancy. How am I supposed to feel about that, Sir?*

Cameron thanked him for his service to his country, but said the decision to retire the *Harrier* was “right” at a time of “difficult decisions.” On the way out of the UK Permanent Joint Headquarters (PJHQ) he apparently said to Kris privately as he was walking past him: “I hear you.” Perhaps Cameron did not understand the insult that conveyed, along the lines of “with respect Sir,” and “I hear what you say?”

Asked what sort of a pilot his late son was, Sharkey Ward gave the following:

*Strafing ground targets successfully with gunfire from a high-speed jet in a dive requires complete control of the aircraft and supreme skill. For safety reasons, the closest the aircraft gets to the 15ft-by-15ft canvas target before pulling up is 700 yards. Most pilots, including yours truly, achieve a best score of about 25 per cent hits on the target flag. During advanced flying training on the Hawk, students had four strafing sorties. On each of the first three, Kris scored more than 75 per cent then 45 per cent on the final trip — completely unheard of in modern times.*

Tragically, Kristian took his own life aged only 45, after suffering from mis-diagnosed and untreated combat-related post-traumatic stress disorder (obituary, December 28, 2018). It is said his Father, Sharkey, never recovered from the loss of his eldest son. Kris’ handle of “Mental Ward” is perhaps poignantly tragic in this respect.

Sharkey’s own prescient epitaph paraphrased is worth recalling for both Father and Son:

*Deo gratias vixerunt; Gratias Futuo recesserunt! Non videbimus sicut iterum*

(Thank God they lived, thank f\*\*\* they’re Gone! We will not see their like again).

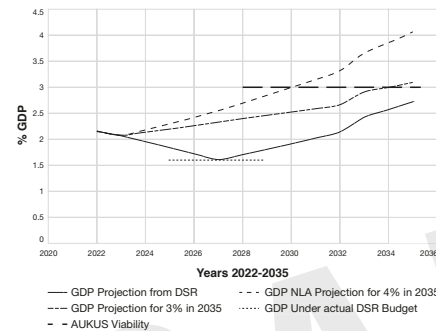




## WHEELS FALLING OFF

### NLA Defence Analysts

From the launch of the Defence Strategic Review in 2023, NLA Defence Analysts have sought to draw the attention of Australia and Defence of the threat posed not by the DSR per se – but the failure to fund the DSR appropriately.



### Defence Budget Profiles 2022-2032

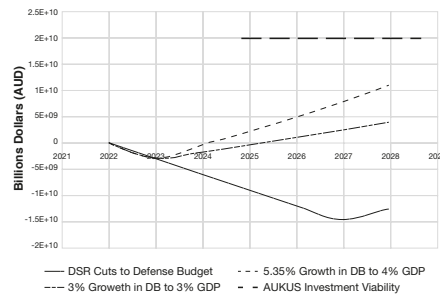
The two principle speaking authors of the DSR, Stephen Smith and Professor Peter Dean, have on various occasions publicly drawn attention to the requirement to fund DSR appropriately. Kim Beazley separately raised the fact that, to deliver on AUKUS – the Government needed to increase Defence expenditure by about 3% per annum, to raise Defence spending at 3% of GDP by 2033.

Put simply, the current Defence budget amounts to about 2% GDP, or \$50B a year. To deliver on AUKUS plus maintain the rest of Defence, requires 3% of GDP and a growth path from 2% GDP. To deliver AUKUS in the current timeline means being at 3% GDP by 2032-2033.

The equation is quite simple. AUKUS will cost about 1% of GDP by 2033-2032, or \$25B of the Defence Budget, in 2023 prices. When, by 2032, the Defence Budget will need to be at \$75B a year, in 2023 prices.

Allowing for the cuts that the Government implemented (against Smith's and Dean's advice), Defence Cost Inflation of 6-8% pa, and allowing for budget hand backs due to underspend overshoots (\$900,000 in 2023 and expected to be the same in 2024) – by growing the budget at as little as 3% a year (or leaving growth as was), the Defence Budget would have been at 3% GDP by 2032-2033.

Instead, almost certainly advised by one of the senior international management consultancies – there are only two that Prime Minister & Cabinet office listen to (and that in actuality run the PM&C) – the decision was taken to freeze spending and effectively cut about \$3-4B a year from the Defence budget over the next 10 years. The combined effect being to remove up to 15% of the Defence Budget a year until the forward estimates kick in (2028) and additional funding (of about \$5B) is released to AUKUS.



### The Impact of Cuts, Freezing, Underspend and Defence Cost Inflation on the Defence Budget 2022-2027

This is the underlying deceit being played on Defence and our International Allies. If the Government had continued to increase Defence spending at 3% a year, it would have been in a position to make savings (cuts) and deliver on Defence and AUKUS.

### More by Design than Accident

It would be kind to call this by accident but increasingly it appears to be by incompetent (or, worse, deliberate) design.

Although not yet admitted, the Enterprise Resource Planning (ERP) program is:

1. already consuming up to 3% of the Defence Budget;
2. likely to blow out to a \$8B program (from \$2B);
3. will not and cannot deliver at the correct version without further freezing Defence. In other words, stopping the very change and adaptation that is so vitally needed, right now. Today.

Not only does ERP actively prevent adaptation and change – but it consumes vital funding from the Defence budget. The ERP monster is also consuming 1000s of people already – who would be better off leading changing, than managing stasis.

The cost of ERP will be up to 3% of the Defence Budget for the next four years, and then up to \$500M a year to run. Further reducing the vital cash flows – fundamental to enabling change.

### Enabling the Flows

The critical aspect of the Defence Budget is managing the flows of people and capital into, through, and out of Defence.

In very simple terms the Defence Budget can be divided into three:

- People
- Capability
- Logistics and basing

In a balanced Defence budget, all three would be “in balance.” In other words, at \$50B a year, each expenditure line would be receiving \$16.7B (33%). In actuality, the people line is about \$20B a year – and growing. Which means, to maintain balance, the Budget should – in 2023 prices – already be at \$60B.

Since this is not the case, the ADF is already taking risk against basing and logistics – the strategic essentials necessary to maintain any campaign – while preserving capability and people. Since people need basing and logistics. The result is that, the current Defence Budget is imbalanced – about 40% is spent on people; 36% on Capability, and 24% on Basing and Logistics. Where basing and logistics are the sinews – like education, training, recruitment, retention, accommodation and standards – that hold Defence together.

There are two other “hidden imposts.” The first is that a successful and adaptive Defence budget allocates about 15% of its expenditure as contingency – essentially for Research, Development, and Experimentation (RDE). The current RDE expenditure, including for DSTG, is about 5% or \$2.5B a year. The remaining \$5B being pulled back to pay for people, capability, and ERP. Noting ERP contributes nothing towards adaptation and change, and that RDE is the adaptive part of the budget – Defence is further frozen. Even before the current cuts, freezing, and DCI this was the case – contributing further to underspends.

### See table on page 21

#### 1. Defence Imbalance in 2024, with only 5% being spent on RDE

The other impost, is necessary and indeed vital bureaucratic support – the fourth arm. The generally accepted ratio of teeth to tail, is about 1 public servant to every three to four ADF personnel. The current ratio is about one to 2.75. This also hides another factor, that 68% of the public service support is contracted. A case of the tail wagging the dog?

Broadly, this means that for every \$1.00 spent on a digger, sailor, or aviator \$1.60 is spent on APS/Contracted support. Put another way, up to 17% of Defence Spending never leaves Canberra, the ACT, or the DOD.

The Government and DOD response to the APS crisis has been to freeze funding for contractors. This has resulted in three things:

1. The Primes have got stronger, since they no longer have to compete with other human-skill providers and what funding there is, is run through them. Meaning, there is no competition;
2. The APS being required to do more – without the skillsets necessary, and at the same time;
3. Unable to recruit contracted support, due to 1.

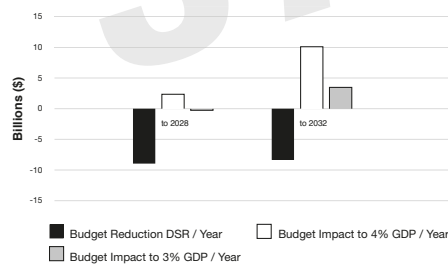
It was always going to be a shock to the system – but if the Government and DOD were rightly serious about growing the APS and reducing reliance on contracted support, they needed a strategy for achieving this. Such a strategy might have been:



- A. Grow the APS as a proportion of support staff from 32% to 64% over 10 years;
- B. Cap the current numbers of supporting staffs at 50,000 until such time as the ADF grew to more than 150,000 personnel – so emphasising productivity (rather than cutting);
- C. Put in play recruiting, education, training, and retention measures to encourage people to join the APS and to be up-skilled through their careers.

### By 2032/3

Examining the Defence Budget, given the above cuts, freezing, underspends, ERP, and Defence Cost Inflation (DCI), Defence spending may reduce to 1.5% GDP in real terms by 2027. Equivalent to cuts, freezing, underspend and DCI removing up to 15% of the Defence Budget a year, to 2028. Even allowing for additional AUKUS spending of \$5B in 2027/28 and increases in Defence Spending of 5-6% from 2028, the Defence Budget will not have recovered to 2% of GDP until 2032.



### Defence Budget Profiles Per Year to 2028, and 2032.

The choice becomes alarmingly clear to anyone who can do the math. Something the main stream media and the financial and Defence correspondents appear unable to do.

The choice is:

1. Cut the existing Defence Budget by 50% to pay for AUKUS. Essentially hollowing out the rest of Navy, Army, and Air Force by 50%, or;
2. Cut AUKUS to preserve the rest of Defence, or;
3. Defer AUKUS until 2032 – when the projected Budget is due to grow to 3% GDP (by 2036/7). Essentially postponing AUKUS for a decade.

3% GDP just gets you over the nuclear-power threshold. To then sustain the AUKUS program and the rest of Defence – the budget needs to be at 4% GDP by 2040. The current projected budget – if increased at 5-6% growth a year from 2028 – will not reach 4% GDP until 2044/5.

### Main Threat

As General Senator Jim Molan and Mark Schweikert maintained in their submissions published in *The NAVY*, the main threat timeline is between 2025 and 2027. As also

kindly outlined by President Xi Jinping. In more recent announcements, Xi has indicated that this date may well be brought forward – if China's strategic context improves (and worsens for the West) more than it already is. What Xi and the CCP is not going to do, is to give the West time to rearm itself.

Before WW2, both Germany and the UK started to rearm in 1932. Germany was expecting to achieve maximum warfighting capacity by 1942. By going to war in 1939 (although it was not until 1940 that the war really commenced in earnest), the Germans peaked early. Britain by surviving – just in 1940 – was able to hold on until 1942, after which time its productivity (and that of the US and its Empire) began to eclipse that of Germany and Japan.

In the timelines of today, it is not 1932 – but more like 1937. We think we may have 5 years – but, in reality, it may be only two.

### DETERRENCE

Deterrence for Australia is not based upon nuclear-weapon submarines. Nonetheless, AUKUS submarines represent the tip of the ADF Deterrence spear. If they are successful, they will never be used. If they are used, Deterrence will have failed. As it did before the 1982 Falklands War, when nuclear-powered submarines were used operationally for the first time to sink Argentinean ships and enforce a maritime blockade. Partly because unlike in the 1970s, the UK did not deploy a nuclear-powered submarine beforehand to deter the Argentinean junta. The Argentinians also deployed their submarines – one of which was lost to air-surface action in South Georgia – to attack the British Task Force. There is evidence to show that one submarine had a solution on HMS INVINCIBLE but, for various reasons, the attack failed. Since 1982 nuclear-powered submarines have been used for “shore bombardment” using, for example, *Tomahawk* cruise missiles. When Deterrence has failed...

Nuclear-weapon armed SSBN have not been used. It could be argued that they successfully prevented the Cold War going hot. But they did not prevent the multiple small wars, including the attack on the US, on 911.

In broad terms and recognising that “capacity like quantity has a quality of its own,” Deterrence is based upon:

**Capacity** – including industrial and research and the ability to keep on going. Capacity can also be considered as the ability to absorb the shocks and bounce back. So also contributing to resilience.

**Capability** – including the capability of universities, schools, industry, health services, research, and the States – in addition to the capability of the equipment

and crews making up the ships, aircraft, and armour of Army, Navy, and Air Force and the supporting recruiting, education, training, and industrial base.

Lack of Australian Capacity and Capability was evident during the COVID pandemic – as it was in many other countries. However, it will be recalled that face masks and vaccines all had to be imported, in the initial phases. Face masks are still being imported from China.

**Will/Intent** – this is the hidden element and vital X Factor that wins or loses wars, and that underpins credible Defence. As Napoleon said “morale is to the physical, as four is to one”. It is also recognised in the French WW1 doctrine of *L'offensive à l'outrance* (“attack to excess”).

Then Lieutenant Colonel Louis Loyzeau de Grandmaison's concept was to combine both “elan et sûreté” – where sûreté combined close artillery support underpinned by logistics “in depth.” In other words, Grandmaison argued for the intent and will (elan) with which the French fought the opening months with the sûreté (capability and capacity) to sustain and win. The French fought the opening years of the war largely with Elan – losing 20% of their Army in the opening months of 1914. Grandmaison was killed in action as a Major General on 18 February 1915.

Without doubt, Australia has some fabulous young people – the *Millennials* currently aged between 20-36, who are already beginning to prove their mettle. Above and beyond Gen Y – and perhaps harkening back to the *Great Generation* that fought WW2.

They need the tools – the sûreté necessary to deter, so as to prevent war, and if they have to fight – that they have the capability and capacity to do so.

The current ADF is left with neither the capacity nor the capability necessary to endure beyond a dog watch. Meaning that, very rapidly, all the ADF may be left with is that wonderful elan – the rugged mongrel toughness that has always characterised the Australian digger, sailor, and aviator.

The Chinese may have done their homework – as it appears have now our principle allies the US, Japan, India, Singapore, Canada, and the UK – they know Australia has at best one-shot. Albeit ADF will fight like Lions...

### Managing the Escalator

The critical element of Deterrence, is about managing the escalator up and down – so one protects the Deterrence switch. This means also having a second-strike capability – not just being a one shot. Second-strike in the Australian context means being able to fight on beyond first contact with a near, or soon to be, near peer apex competitor.



It also requires a conventional Army, Navy, and Air Force all to be a part of holding the line and managing the escalator up, and down. It cannot be one-way (up) – Australia also need to be able to walk back down. The current escalator tragically appears to be going one way only...

Managing the escalator requires politics, diplomacy, élan et sûreté and capability and capacity as much at home, as deployed – to ensure that our bluff is not called. That Australia can back up its words with the capability and capacity necessary to endure. That means the conventional Army, Navy, and Air Force are essential to the Australian Deterrence posture. Having AUKUS alone – if indeed a submarine is ever delivered – will not be enough. Nor will it allow for Deterrence or managing the escalator down as well as up. Instead, the ADF will simply become a tripwire – as West Germany was during the Cold War. A place no nation would wish to be...

## A DEFENCE BUDGET FOR ALL SEASONS

A returning or new Government in 2024 or 2025 will need urgently to put the wheels back on. Given the stranglehold of the Canberra elites and their biases (70% of the Canberra electorate voted for the Voice), it is appearing increasingly unlikely that any Government will be able to do what is required, in the time available. Whatever their colour, but more so if LNP.

Even allowing for Defence reshaping (cuts), the budget has to be restored to allow for annual increases from next year of between 6-8% – sufficiently large enough to arrest the excess swings and underspends now occurring. And to move Army, Navy, and Air Force from protecting their deckchairs – to getting them off the Titanic! To a place where they can fight from. That is called strategy...

A *fighting-chance* Defence Budget in 2032 should be at 3% GDP, growing to 4% GDP by the late 2030s. By protecting the rest of defence (from AUKUS) that budget should look like:

See table on page 21

### 2. AUKUS Defence Budget at 3% GDP by 2032.

An adaptive budget preserving a contingency for change (Research, Development and Experimentation) at 3% GDP would look like:

See table on page 21

### 3. Adaptable Contingent Defence Budget at 3% GDP

Assuming 5% of the Defence Budget is spent on Research, and the same proportion on Development and Experimentation – this would mean increasing the DSTG budget 8-fold. The current DSTG simply could not cope – it is wrong-facing and imperfectly

led. It would not simply mean rebadging “research in Defence” as Research (not just science and technology) but bringing in leaders and experts from industry, CSIRO (if it can get away from being a green, renewables and diet organisation) and the education sectors – universities and TAFE. It would mean re-engaging Research for Commonwealth.

## Crewing Defence

Noting the need to crew the ADF (and APS/ Contracted support elements) it will also be necessary to grow the Defence population.

Maintaining present Active: Reserve ratios and allowing Navy to grow to crew the hulls currently under order, and Army to grow a Littoral Army Fleet (by the 2030s) – due, if funded, to be the second largest Fleet in Oceania after the RAN, hopefully serving as *His Majesty's Australian Army Vessel* not ADV – and RAAF to grow to support its aircraft and bases, at 3% GDP the population may be:

See table on page 21

### 4. Potential Crewing at 3% GDP by 2032

The above ADF population would need to be set today, to grow appropriately by 2032. No such demand order is being set or contemplated – which will inevitably mean that ships go uncrewed and, or, gapped. Critically, Australia needs to answer the question “for a population of more than 25 Million how large should its armed force be?” 170,000 appears about right – 90,000 where ADF is in 2024, is probably sub-critical.

By the same calculus the ADF by the late 40s – assuming we get that far without a fight – at 4% GDP might look as follows:

See table on page 21

### 5. Potential Crewing at 4% GDP by late 2030s

The critical issue is to set the requirements at the political-strategic level and then allow the ADF population to grow to meet the task at hand. Noting that the Government has recently created the Space Force – which is currently coming from all three services – though mainly from RAAF.

## COLLINS IN LOTE AND RANKIN UNDERTAKING EMERGENCY REPAIRS

The Australian Submarine Force is down by two submarines COLLINS for LOTE and RANKIN due to emergency repairs following the identification of advanced deterioration of some of its watertight fixtures and fittings. It does not bode well.

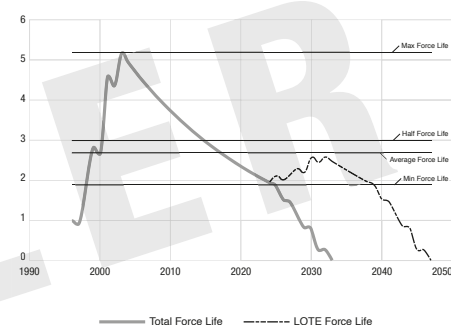


HMAS RANKIN Returning Home to Fleet Base West, 2020  
(Image LSIS Ronnie Baltoft)

According to the Dönitz cycle, with six submarines, Australia can just about manage between 1.4 and 1.5 submarines permanently on station. When this falls to four, this falls to as low as 95% availability. It is one of the reasons why their needs to be a minimum of 9 nuclear-powered AUKUS submarines – to provide for a minimum of two submarines permanently on station – on both east and west coasts. Which eight submarines would not give – in addition to minimum requirements for reactors. See also *Red Duster*.

Dr Neil Baird (A good plan expediently executed today, is better than a perfect plan executed tomorrow, *The NAVY*, Vol 83, No. 4, 2021) recognised this when addressing the high-risk \$6B LOTE program:

Considering taking the *Collins-class*, and extending its Total Life from 2024, when COLLINS is due to achieve Design Life, and assuming it is possible to restore back to Half-Life (by almost doubling individual hull life remaining) it may be possible to extend force life from 2024 to 2039.



### Collins-class Theoretical Life of Type Extension (LOTE)

LOTE is taking already *lived* materiel and seeking to extend life-of-class beyond Design Life, or that of its component steel. In the case of the *Collins-class*, extending Force Design Life by almost a third (31 years). Beyond the very real question of risk posed to our sailors by LOTE, we should also ask ourselves:

if we would be happy for any of our children (or grandchildren) to be driving a 1980s Toyota Corolla (designed in the late 1970s), in the 2020s, let alone the 2030s and 2040s?



Baird advocated (by weighted analysis, as an interim measure rather than expensive and risky extension of the *Collins-class*, for the procuring of either the Korean *Jangbogo (III)-class* extension (produced under licence with TKMS) or the Japanese *Tagei-class*.

See table on page 21

#### 6. Submarine Replacement Weighted Options

### NO SUPPLY OR STALWART

Another disastrous purchase has been the SUPPLY and STALWART. Currently the two Replenishment Oilers are out of combat. SUPPLY is in dry-dock to sort out a bent shaft – that appears to keep bending. While STALWART broke down in Darwin – where she is apparently fulfilling the need as HMA Static Bunker for Navy. Unable to move anywhere under her own steam – until approval is made for a dash to Sydney. When the dry dock becomes vacated (by SUPPLY).

The procurement has been a complete disaster. Navy should have gone in with the RN for its MARS Replenishment Oilers built by Daewoo in South Korea. These immensely well-built ships (to NATO and RN standards, with the correct steel) would immediately have been in class – not Spanish Orphans. The two RAN vessels would have increased the class to nine: 5 RFA vessels; one Norwegian vessel (HNoMS MAUD), and the two Australian oilers.

The reason Australia did not go for a ship in NATO class, built regionally, is as always complicated. One of the reasons being apparently that Daewoo can turn these ships out in 2 months, and Australia simply did not have the capacity to crew them in time!

As for Submarines, so for Replenishment Oilers and AOR. To support one oiler on station at any one time requires a minimum of five AO/AOR. Realistically, six AO/AOR would maintain between 1.4 and 1.5 supply ships on station at any one time. Seven AO/AOR would give some capacity – ensuring 1.5 on station at any time. Which, given future demand of Army / Navy requirements, appears a minimum capacity and capability.

Given the unfolding OPV (*Arafura-class*) disaster – which is by no means resolved yet, the best thing to do might now be to scrap the SUPPLY and STALWART and buy the 7 (upgraded MARS) Replenishment Oilers needed by RAN directly from Daewoo. And run them as Royal Australian Fleet Auxiliary (RAFA) vessels, in support of Army and Navy. The Army, assuming funding comes through will have the second largest South Pacific fleet by the 2030s...



HMS HUON. (Image Navy)

### HMAS HUON DECOMMISSIONS WITH NO REPLACEMENT

Navy decommissioned the Minehunter Coastal (MHC), HMAS HUON, on 30 May 2024. She was commissioned on 15 May 1999 – 25 years ago – and has reached her design life. She was the lead ship of the six-strong *Huon-class*. Two of its sister ships, HMAS HAWKESBURY and HMAS NORMAN, were decommissioned in 2018 and put up for sale, though no buyers were found. The status and operational seaworthiness of those two ships is unknown.

The MHC vessels were to have been replaced and programs were in hand from at least 2009, including using modified versions of the *Arafura-class* offshore patrol vessel.

Cuts to the *Arafura* programme combined now with the apparent stranding of the class by Navy, means that not only was the MHC program cut – but that there is now no suitable replacement for this highly sophisticated and competent class of warship. There appears also no current plans or project to replace the *Huon-class* – yet every asymmetric anti-access scenario Australia is likely to face, includes the application of these ships for both homeland defence and expeditionary purposes.

As for submarines and oilers, the replacement class needs to be at least 12 strong to allow for 2.8 to 3 MHC to be on station at any one time.

This calls for a new design approach to the MHC – which is exactly what was being called for in the early 2000s. It may mean, for example, optional crewing to allow for the ship to operate as a USV. However one looks at it, a minimum class of 12 will just about get Navy (and Army) across the start-line in any future conflict. The need is not for 12 (the number of FF and DD is currently 10) but to have up to 36 of these vessels (with 8 available at any one time).

The challenge Navy, research, and industry should be answering is “how to deliver such a capability at this capacity – and crew them accordingly?” It can be done – but not by continuing to do what we are thinking and doing today...

### RIMPAC

Recent announcements have indicated that only one ship (HMAS SYDNEY, DDG 42) will represent Australia at RIMPAC 2024 and a P-8A *Poseidon*. RIMPAC is the largest maritime exercise in the world. In 2022, recovering from COVID, Australia sent:

- 1600 personnel,
- three warships (a Frigate, an oiler and a *Huon-class* MHC),
- a *Collins-class* submarine,
- two P-8A *Poseidon* aircraft,
- and an army amphibious combat group, together with mine warfare and clearance diving teams.

Serious questions are being asked of Australia now by its major Allies – including the US, Japan, Singapore and India.

The obvious reasoning, as explained previously, is that Navy has no oilers to send – STALWART was intended to accompany HMAS SYDNEY; there is not a *Collins-class* submarine available (now the service is down to 95% availability), and the same goes for sending a *Huon-class* MHC.

Previous embarrassment was caused by the Navy's failure to send a ship to support Allies in the Red Sea. At that stage, Navy had readied a ship to deploy – and could have sustained such a commitment. However, the de-commissioning of HMAS ANZAC now means that Navy can keep fewer than two Frigates on station at any one time.

The critical element, is the political will and intent – which appears missing. It also reflects the very real and parlous condition of the Navy and the ADF at this stage. It also may suit a political narrative with respect to China and being seen doing just enough to “support the US where we must while not disagreeing with the Dragon”. It also may explain, partly, why the Prime Minister did not attend the NATO Summit.

### GREENWICH STATION

#### SIX NEW MRSS FOR UK AMPHIBIOUS FLEET

Six new multi-role support ships (MRSS) are to be ordered by the RN and Royal Marines. They will deploy on a wider variety of amphibious operations, and are designed to carry vehicles, aircraft, insertion craft and a range of USV/UAV – and act as primary casualty receiving ships. The ships are crewed by the Royal Fleet Auxiliary – the Merchant Navy arm of the British Navy. Ships weapons crews, maintainers and aircraft are provided by the RN, RM and FAA – coming under the direction (not Command) of the RFA Master. It is an interesting relationship that has worked well in the past – often providing the best of both worlds. Merchant Navy ship handlers – with the professional arms of the Sea Service, represented by the Fleet Air Arm and the Royal Marines.





Multi Role Support Ship. (Image RN)

The UK MoD has entered the first, or concept, phase of the MRSS Program. It is uncertain whether the ships will be built in British yards – and while a new Labour Government might stress this – precedent was set by the building of other RFA crewed vessels (the MARS-class) in South Korea, by Daewoo.

This represents another opportunity for Australia to get it right. HMAS CHOULES requires replacing, and Army is looking at one or two of these ships for its Littoral Manoeuvre force.

If Navy and Defence was to move now, they could seek to purchase ideally at least three of these ships. Applying the Dönitz cycle, the ideal number would be 6 – to keep at least 1 AOR on station at any one time, with a surge capacity.

This order will bring the total number of UK-built ships and submarines on order to 28, with Type 26 and Type 31/2 in Scotland, Astute and Dreadnought (SSBN) submarines in Barrow-in-Furness, and fleet solid support ships being built in in Belfast and Devon.

Secretary of State for Defence, Grant Shapps reported

*I am delighted, delighted to announce today that I have given a green light for the acquisition of up to six new Multi Role Support Ships. These will replace all of our current amphibious fleet. Providing more flexibility more cutting-edge technology and better support to our amphibious and littoral strike operations.*

The First Sea Lord, Admiral Sir Ben Key, said.

*The MRSS programme is an important milestone in our Future Commando Force modernisation programme. And it takes the number of Royal Navy vessels in design, on order or under construction to 28. Which will require a very big expansion in our shipbuilding capacity because I am determined will be built here in the UK.” “Our commitment to MRSS and up to 28 new ships and subs for our Navy really does cement this as the new Golden Age of British shipbuilding. ■*



### 1. Defence Imbalance in 2024, with only 5% being spent on RDE

	People	Capability	Basing & Logistics	RDE Contingency	Total
<b>Defence Budget 2% GDP at 2024</b>	\$20B	\$18B	\$9.5B	\$2.5B	\$50B
<b>Percentage</b>	40	36	19	5	100

### 2. AUKUS Defence Budget at 3% GDP by 2032.

	People	Capability	Basing & Logistics	Total
<b>Conventional</b>	\$16.6B	\$16.6B	\$16.6B	\$50B
<b>AUKUS</b>	\$8.3B	\$8.3B	\$8.3B	\$25B
<b>Total 3% GDP</b>	\$25B	\$25B	\$25B	\$75B

### 3. Adaptable Contingent Defence Budget at 3% GDP

	People	Capability	Basing & Logistics	RDE 15% Contingency Tythe	Total
<b>Defence Budget 3% @ 2032</b>	\$21.25B	\$21.25B	\$21.25B	\$11.25B	\$75B

### 4. Potential Crewing at 3% GDP by 2032

<b>Crewing at 3% GDP by early 30s</b>	Navy	Army	Air Force	APS	Total
<b>Active/APS</b>	21,000	45,000	22,000	25,000	113,000
<b>Reserve / Contractor</b>	6,000	30,000	7,000	25,000	68,000
<b>Total</b>	27,000	75,000	29,000	50,000	181,000

### 5. Potential Crewing at 4% GDP by late 2030s

<b>Crewing at 4% GDP by late 30s</b>	Navy	Army	Air Force	APS	Total
<b>Active/APS</b>	24,000	60,000	27,000	31,000	142,000
<b>Reserve / Contractor</b>	8,000	40,000	10,000	25,000	83,000
<b>Total</b>	32,000	100,000	37,000	56,000	225,000

### 6. Submarine Replacement Weighted Options

Class	Allied Partner/ Relationship	Regional Ally / Proximity	Trade & Defence Liaison	Logistics Chain	Extension Characteristic Modifications	Total Weighting
<b>KSS-III (Jangbogo III) Extension</b>	2	1	2	2	1	8
<b>Navantia SA80 Extension</b>	3	3	3	4	2	15
<b>Type 212 CD Extension</b>	3	3	3	3	2	14
<b>Taigei-class Extension</b>	1	1	1	1	4	8
<b>Other European</b>	3	3	5	5	5	21



## NUCLEAR POWER: AUSTRALIA V CHINA

The announcement by the Hon Peter Dutton MP to review the John Howard (OM OA SSI) era *Australian Radiation Protection and Nuclear Safety Act 1998, Subsection 10(2)* “prohibiting the CEO of the Australian Radiation Protection and Nuclear Safety Agency from granting a licence for the construction or operation of any of the following *nuclear installations*: a nuclear fuel fabrication plant; a nuclear power plant; an enrichment plant; or a reprocessing facility” is welcome. If Australia is serious about developing its own sovereign capabilities in energy and industry, then it needs to be serious about base load energy – at prices industry and the public can afford.

Much criticised, China is pursuing a twin track approach. On the one hand investing in 43 new coal-fired power plants and 18 new blast furnaces by 2040 – which it is building at a rate of about 3 new facilities a year; while also building 150 new nuclear power stations by 2055, at a rate of 5 a year.

According to the US Energy Information Administration and S&P, China’s Energy “consumption grew by almost 6% in 2023 – natural gas (12%), nuclear (11%), and renewables (8%). In 2023, non-fossil fuels accounted for 49% of total installed electricity generation capacity, most of which came from hydroelectric (11%), solar (21%), and wind (15%).” China is not yet as energy demanding as developed countries – but this is changing.

In Australia, Fossil fuels contributed 68% of total electricity generation in 2022, including coal (47%), gas (19%) and oil (2%).

### China Good

China would not entertain for one moment not having sufficient base load. It is aiming by 2060 to grow energy production by 20%, with 60% base load generation from *Reliables*, Coal, Oil, Gas and Nuclear (COGN), which is its growth path.

*Renewables*, as Australians know, come with additional environmental, financial, and grid costs – where the density and concentration of production is much lower – and viable sites finite. China’s energy mix by 2060 is estimated to be 40% Coal, 8% Gas, 12% Nuclear (where the real growth remains) – with *Renewables* falling (as a proportion) to: hydroelectric (9%), solar (18%), and wind (13%).

### Australia Bad

By comparison, ignoring volume of carbon production, China is “greener” than Australia, and the US. It sensibly recognises the *Reliables* versus *Renewables* argument – by recording Nuclear as a non-fossil fuel. Which, of course, it is! On this basis, 52% of China’s energy production will be non-fossil fuels by 2060 – while preserving reliable base load production and its industrial, commercial, and civil bases.



SAMSUNG is developing a SMR Offshore Power Barge (Image Seaborg).

Australia is fast running out of space and time if it is to achieve a similar affordable mix – while reducing carbon and preserving reliable base load. Noting that unreliable *Renewables* are a finite and increasingly expensive environmental resource, when going offshore etc., a realistic breakdown for Australia would be: 30% Coal; 20% Gas; 15% Nuclear; 2% oil – and 35% *Renewables*. Hydrogen for the moment is a “branch” pipedream – less deliverable than nuclear, even in the medium term. Without Nuclear in the mix – as the LNP have recognised – there will be no long-term, sustainable, cost-effective (affordable) reduction of carbon.

### Madness

The madness in Australia’s energy debate was the removal by Law, by a Liberal Government! of Nuclear Power from the energy mix. Of all the misdirected nonsenses this law must be amongst the worst. Akin to the Allies declaring war on Blitzkrieg (a doctrine, an art, and a science) in 1940 – not the Germans.

Australia always has and always will have the most to benefit from nuclear power. Not only for base load but for reducing carbon footprint (DGs running on tanker-delivered diesel in remote mining communities).

Whether Dutton has the will of the party room to take his proposals for a referendum – for it to be agreed – is yet to be determined. Or whether he will win the next election taking Nuclear Power to the Ballot Box. What is true, is that if Australia is to retain its sovereign, industrial, energy capability – including diesel and petrol refining on shore (not in Singapore or holding bunkerage in the US) – it will need to retain Reliable, affordable, power generation at at least 60%.

Without nuclear, Australia will have to maintain coal and gas energy production. Even allowing for reducing coal as a proportion, from 47% to 30% – without Nuclear, this would mean almost doubling the current number of Gas Power generators. All in a short period of time – with only a relative reduction in carbon production. Gas also produces Carbon and has a more dispersed

footprint, with its own environmental implications!

By introducing Nuclear to the mix, Australia could, by the 2050s, have achieved a similar “balance of power” to China – with 50% of energy production coming from non-fossil fuels. The play off is between Coal, Gas, and Nuclear – noting that 70-80% of France’s power comes from Nuclear.

### SMR

From a maritime perspective, borrowing from a Russian concept, a safe secure way of providing power to remote communities/ mines, even cities, would be by barge mounted *Small Modular Reactors*. Come the cyclone or tsunami, they can be disconnected from the grid and driven away under their own “steam.” To plug and play – another day.

### Last Word?

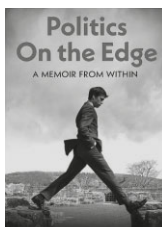
Perhaps Australia needs to take a leaf from the playbooks of China, Russia, and Iran – if we are to start to learn and adapt to the world, we find ourselves in? The last word may be left to Konstantin Kisin at the Oxford Union Debate, April 2023:

*Image you are Xi Jinping and at 10 years old there is a Cultural revolution [when] your father is put in prison; your mother had to disown your father; your sister killed herself, and you were sent to a village where you lived in a cave.*

*Years later, having clawed your way up [the CCP] to be the undisputed supreme leader of the very CCP that destroyed your family, and you know the main thing to stay alive and stay in power is growing prosperity and sustaining growth. [And you are going to threaten that by endangering energy production. You think he would do that?]*

Neither should Australia think it is isolated from the laws of physics, or supply, and demand. If Australia is to restore its sovereignty, grow its prosperity and sustain growth – it will not get there by unaffordable *Renewables*, or coal, or gas alone. Something will have to give – as the Pollies may well find if/when the lights go out. ■





**Rory Stewart**

## POLITICS ON THE EDGE

A Memoir from Within

By Rory Stewart

Penguin Random House (24 Sep, 2023)

ISBN: 9781787332713

Hardcover: \$45.00

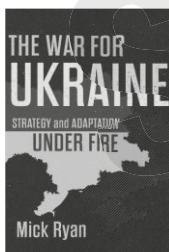
Rory Stewart OBE FRSGS FRSL served in the British Army and then as a “diplomat” in the Balkans and Iraq, before starting a charity in Afghanistan. Later as an MP (2010-2019) for a seat in Cumberland and the “debateable lands” between Scotland and England, he became (in order) secretary of state for International Development, Prisons Minister, Minister for Africa, Minister for Development, Environment Minister, and Chair of the Defence Committee.

Perhaps Stewart remains at heart both a romantic and a *Reiver*, an Anglo-Scottish “raider” from the 13th to 17th centuries. From where we get the term blackmail. At the end of the read, one is uncertain as to whether one likes Rory

(or not) – which is, in any case, irrelevant. While admiring his passion, there may also be an aspect of the dilettante – neither Conservative nor Liberal (Tory); never staying long enough to be an Army Officer, or diplomat, or charity leader. His longest commitment being his tour of duty as an MP – not as a Minister. Where he often led by admirable example, taking on the senior Civil Service, putting in play some excellent policies – but never staying long enough to put them into practice. Readers may also be aware of Rory through his excellent podcast “The Rest is Politics” with Alastair Campbell (of Tony Blair “fame”).

Notwithstanding, if one wants a glimpse into the breaking of Britain and its strategic failures, including the seemingly venal incompetency of its senior Civil Service, the Military (in parts) and Politicians – this is essential reading. Stewart identifies that “Peak Democracy” came in 2005, after which their economies began to contract relatively and democracies to reduce. Before also the defeats in Iraq, Afghanistan, Syria and, quite probably, Ukraine and Israel. Loathed by Cameron, Rory joins an admirable and select group – including Sir Nicholas Soames and Ken Clarke – to be sacked from the Conservative Party.

This is a surgical book that pulls no punches – the tragedy is that the incompetent, lazy, correct corruption described can be translated to the US and Australia. Worth buying if you want to know where the skeletons may be hidden.



## THE WAR FOR UKRAINE

Strategy and Adaptation Under Fire

By Mick Ryan

USNI (13 Aug 13, 2024)

ISBN-10: 1682479528

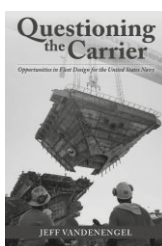
ISBN-13: 9781682479520

Hardcover: \$55.00

Major General Mick Ryan AO (Ret) served in Iraq and Afghanistan before leading several international-political military reviews and retiring as the Commander of the Australian Defence College. Much of his education has been in the US – a distinguished graduate of Johns Hopkins University School of Advanced International Studies, as well as the USMC Command and Staff College and USMC School of Advanced Warfare. He is a Fellow at the Center for Strategic and International Studies and the Lowy Institute. Ryan holds a Masters and a Bachelor's degree but has not completed a PhD.

This is a detailed and extremely well referenced and researched book about the Ukraine War, largely concentrated in 2023 – rather than 2024 (its publishing date). It is written more at the tactical level – with, perhaps, too little emphasis on strategy, and how the West now gets out of the mess its in. This might not be surprising, given the author's background – but disappointing. Written as it was largely in 2023, the conclusions perhaps come from that time – when apparently (despite the limited success/failure of the Ukrainian 2023 offensive) – Ukraine was seen to be “winning,” and Russia retreating. In 2024, the roles are reversed – Russia has learned and is applying the very same tactics against the Ukrainians. With Stalin's maxim – “that quantity has a quality all of its own.”

From a tactical perspective, this book is of interest – regarding drones, grey warfare, etc., but as a book providing answers it falls well short. Whether the West likes it or not, Russia, with China and Iran, have a strategy that they are working towards. The West does not. The question is “how does this end?” For example, if one attacks NATO, one may as well go Nuclear (as Putin has made very clear), or if one goes Nuclear, one gets NATO. Ryan provides no answers – perhaps because this is now a symmetric war of mass between major powers and proxies. Where asymmetry and surprise can only get you so far, for so long...



## QUESTIONING THE CARRIER

Opportunities in Fleet Design for the U.S. Navy

By Jeff Vandenengel

USNI (15 Nov, 2023)

ISBN-10: 168247870X

ISBN-13: 9781682478707

Hardcover: \$55.00

The author, Jeff Vandenengel is a naval officer with tours on three fast-attack submarines. Winner of the 2019 *Admiral Willis Lent Award* as the most tactically proficient submarine department head in the Pacific Fleet, he deployed to the Western Pacific three times and to the Atlantic during the Russian invasion of Ukraine.

This is an excellent book – with one omission. It does not appear to have a singular conclusion, but a series of vignettes. Perhaps there is more to come? The authors notes that “[without] conventional naval combat since World War II, it is very difficult for navies to know what platforms and weapons will prove successful in future fights at sea and which are already obsolete.” He also assesses that “for decades, the U.S. Navy's answer to the question of fleet design focused on the large nuclear-powered aircraft carrier (CVN),” – questioning if this will get the USN across the start line in a major global conflict. Against a near-peer apex competitor, concentrated on mass. In Part I, Vandenengel outlines a hypothetical fleet; in Part II he examines why the nation should make those changes to the fleet structure, NOW!

Jeff outlines the systemic, bureaucratic inertia to change. Change is expensive and means the transfer of social power – from the civil to the military industrial complex. In a democracy military change is jealousy constrained and safeguarded. It is now too late.

The author may usefully have read *Important trends and junctures in warship design – Redux*, [1] in which the Versatile Modular Fleet is proposed. A fleet deriving from the Stalin's maxim for quantity, “where scale also has a quality all of its own”. The move is to rapidly commercialise the current Fleets – using perfectly viable merchant hulls and adapting them for military (and merchant) purpose. Underpinned by the financial markets – as was Nelson's Navy. This Fleet also applies the maxim that “one needs to be able to afford (politically, economically, and military) to lose an asset, if one is to use it – and vice versa.” This gives rise to scale. Allied navies need far more interconnected, smaller platforms fulfilling the role of a singular, complicated, high value Frigate, Destroyer, Minehunter etc. – and much larger and more Air Transport Capable [carriers], based on affordable, converted ISO Container Ships. Which can withstand the hits. A time and concept that appears to have come – as the RN and possibly even the RAN begins to shift and shape accordingly.

A good read – perhaps ready for the second as a VMF solution?

## REFERENCE

- [1] Reay Atkinson, S., C.J., Skinner, K.F. Joiner, N.H.M., Caldwell, & A. Swidan, *The NAVY* - Journal of the Navy League of Australia, 2020. Vol 82, Issue 3: pp. 7-13.



# THE NAVY LEAGUE OF AUSTRALIA ANNUAL MARITIME AFFAIRS ESSAY COMPETITION



## TOPICS:

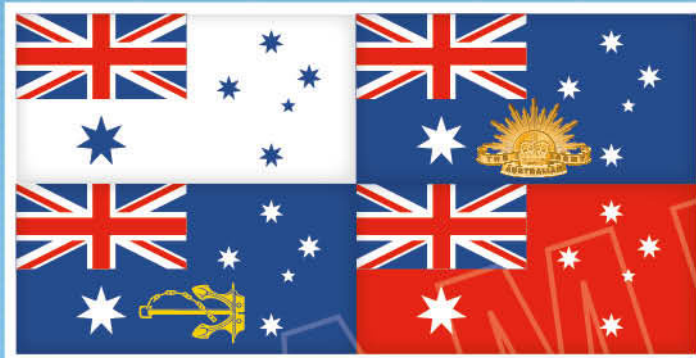
- 21st Century Naval Warfare
- Australian Naval History
- Australian Industrial and Merchant Navy Maritime Strategy
- Australian Strategic Alliances: AUKUS, QUAD, Five-Eyes, FPDA, ANZUS.

## CATEGORIES:

A first, second and third prize will be awarded in each of two categories:

**Professional category**, which covers Journalists, Defence Officials, Academics, Naval Personnel and previous contributors to *The NAVY*; and **Non-Professional category**.

Essays should be 2,500-3,000 words in length and will be judged on accuracy, content and structure.



## PRIZES:

	1ST PLACE	2ND PLACE	3RD PLACE
Professional	\$1,000	\$500	\$250
Non-Professional	\$500	\$200	\$150

Essays should be submitted in Microsoft Word format to:

**Emailed to:** [editorthenavy@hotmail.com](mailto:editorthenavy@hotmail.com)

OR (less preferably with a soft copy to be sent through on request) posted to:

Navy League Essay Competition  
Box 1719 GPO, SYDNEY NSW 2001

Submissions should include the writer's name, address, telephone and email contacts, and the nominated entry category.

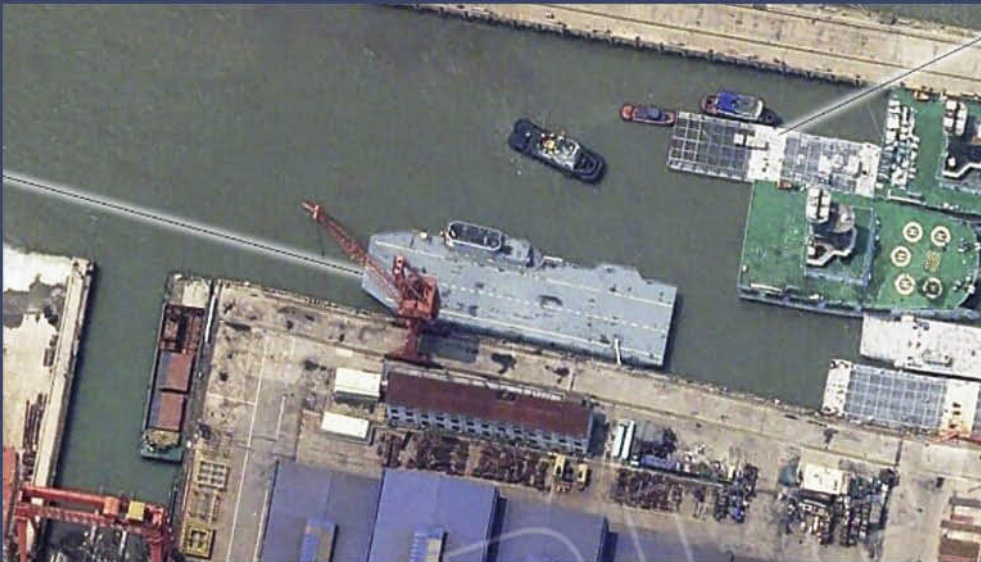
*The NAVY* reserves the right to reprint all essays in the magazine, together with the right to edit them as considered appropriate for publication.

**SUBMISSION DEADLINE:**

**Saturday 17 August 2024**

Prize-winners announced in the January-March 2025 Issue of *The NAVY*.





**HATCH:** Imagery indicates China may be building a Drone carrier for PLAN.



**MATCH:** South Korea's Hyundai Heavy Industries launched the first of two 3200 tonne corvettes on order for the Philippine Navy. BRP MIGUEL-MALVAR FF60 (Image HHI).



**DESPATCH:** Commanding Officer of HMAS HUON, Lieutenant Commander Rodney Weeks RAN concludes the Decommissioning Ceremony at HMAS WARTERHEN (Image LSIS David Cox) – see Flash Traffic.