

Protecting Australia's sea routes

A paper based on a presentation to the Institute on 30 October 2018 by

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The Australian Fleet is central to the attainment of Australia's three key strategic interests. In 2018, Fleet units and task groups deployed in support of these strategic interests throughout the Indian and Pacific Oceans – as far afield as the Middle East. Fleet capabilities also are being upgraded and expanded, with the introduction of unmanned aerial systems to the Fleet, and, looking forward, with new classes of both frigates and offshore patrol vessels to be acquired.

Key words: Australia; Australian navy; Indo-Pacific region; sea routes; sea lines of communication; maritime trade routes; naval operations; naval exercises; fleet capabilities.

Australia's maritime domain is large and complex. Sharing no land borders with other nations and possessing 36,000 kilometres of coastline, the Australian Exclusive Economic Zone (AEEZ) is the third largest in the world covering 4 per cent of the earth's surface.

Australia is a maritime nation with an economy underpinned by international ocean-borne trade; and the sea is the most efficient highway for much of our domestic coastal trading. In 2015–16, 5540 uniquely identified cargo ships made a total of 30,056 port calls, importing goods worth AUD201.8 billion and exporting goods worth AUD218.9 billion. Australia relies on sea transport for 99 per cent of our exports; and, in terms of tonnes of cargo shipped and kilometres travelled, Australia is the world's fifth-largest shipping nation.

As a maritime nation, the importance of maritime security and open sea lines of communication are paramount to our national economy and economic prosperity; and, in accordance with various international conventions, we are obligated to provide a safe, secure, environmentally-sound, efficient and sustainable shipping environment.

In Australia, the maritime environment is front and centre of our defence strategy. In the 2016 Defence White Paper², Australia promotes three key strategic interests. In each, the importance of the maritime environment is self-evident:

- "... a secure, resilient Australia, with secure northern approaches and proximate sea lines of communication;
- a secure nearer region, encompassing maritime South East Asia and the South Pacific; and
- a stable Indo-Pacific region and a rules-based global order".

As a result, in 2017, Australia released its Naval Shipbuilding Plan which outlines the Commonwealth Government's vision for the Australian naval shipbuilding enterprise and the significant investment required in

coming decades in order to meet these interests.

So what role does the Royal Australian Navy (RAN) play in protecting our maritime trade? I think the best way to look at this is to look at what the Fleet has been doing over the last year.

Fleet Activities in 2018

The last 12 months has been a very busy time for the Australian Fleet at sea. Even today (30 October 2018), 22 of our ships with 1918 men and women are deployed around Australia and further abroad. We are busier than we have ever been and we continue to meet and exceed the demands placed on us. Whether in Australian waters or abroad, the image we project and our presence are instrumental in protecting Australia's sea routes.

Operations

Last month, HMAS *Ballarat* crash-landed for a search-and-rescue mission in the Indian Ocean. Just 24 hours prior, her ship's company had proceeded on leave as she prepared to deploy for 9 months to the Middle East Region. With 8-hours' notice, the crew were recalled and sailed 1500 nautical miles to aid in the rescue of two stranded sailors.

While *Ballarat* prepares to deploy for Operation Manitou, earlier this year we welcomed home *Warramunga* – the 66th ship to return from the Middle East Region. *Warramunga* made a significant impact on terrorist and criminal organisations by denying them approximately \$2.2 billion in funding from illegal narcotics – seizing around 31.8 tonnes of hashish and 2 tonnes of heroin. Throughout the 9-months deployment, *Warramunga* operated with 27 international ships, visited 12 ports, conducted 32 flag verification boardings, 19 escort taskings and 15 replenishments-at-sea. Her MH-60R Seahawk helicopter flew 182 sorties and spent almost 520 hours in the sky.

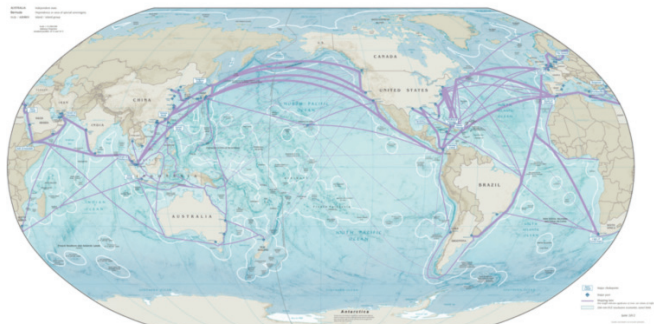
Closer to home, in August this year, the Australian Defence Vessel *Cape Fourcroy* joined a multi-agency task force off the northern coast of New South Wales to intercept a drug smuggling vessel in our own waters. Along with the Federal Police, Queensland Police and

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²Defence (2016). *2016 Defence white paper* (Department of Defence: Canberra).

Australian Criminal Intelligence Commission, the boat, crewed by the RAN, assisted in the arrest of two men and the seizure of more than 600 kilogrammes of cocaine bound for the Australian drug market.

Map of the World Oceans, June 2012



A Pacific-Ocean centred map of the world and its principal sea-lines of communication, June 2012

[Source: <http://www.eaglespeak.us/2012/12/southeast-asia-india-china-and-sea-power.html>]

Duration and Frequency of Deployments

The length of deployments is increasing, too. Seven-to-nine month deployments are becoming common. Last month, HMAS *Toowoomba* completed a 7-month deployment to South East Asia, the South West Pacific and the United States. During her trip, she sailed over 40,000 nautical miles, equivalent to 1.85 times around the world.

HMAS *Melbourne* is 5 months into a 7-month deployment – participating in seven back-to-back exercises and regional engagements. I caught up with *Melbourne* last month as she sailed into Zhenjiang for a port visit and she now is making her way to South Korea and Japan.

The length of our deployments has not only increased but also the frequency. Only two years ago, we deployed our first task group – this year, we had two task groups concurrently deployed which saw over 3000 personnel at sea each day for a 2-week period. Not bad for a Navy of only 14,000 sailors.

Indo-Pacific Endeavour

Perhaps one of most successful deployments of 2018 has been Indo-Pacific Endeavour – a major annual maritime activity that delivers on the promise of the 2016 Defence White Paper to deepen Australia’s engagement and partnerships with regional security forces.

Indo-Pacific Endeavour 2018, between June and September, saw HMA Ships *Adelaide*, *Melbourne*, *Toowoomba* and *Success*, constitute a task group and undertake a 3-month journey across the Pacific, working with Pacific Island partners in support of regional prosperity and security. Collectively, they visited Fiji, Tonga, Vanuatu, Samoa, Papua New Guinea and the Solomon Islands conducting numerous community service and engagement activities.

Minehunters

This year has certainly been a year of firsts and lasts. Three weeks ago, I farewelled minehunters, *Huon* and *Gascoyne*, as they deployed to South Korea and Japan

– the furthest ships of this class have deployed in 70 years. We will continue to deploy our minehunters further afield so that they develop their skills in a wide range of environments and learn from the foreign navies with which they will interact.

Fleet Replenishment Ships

Our oldest ship, HMAS *Success*, celebrated 32 years of service and her last full year before she decommissions. Just because she is getting old, it does not mean that she is not busy. This year, she conducted a 5-month deployment through Asia and the Pacific. The deployment included visits to eight ports in seven nations, two international exercises, numerous regional engagement activities and, most impressively, 60 replenishments-at-sea.

The replacement for HMAS *Success* will arrive in Australia next year (2019). HMAS *Supply* will be the first of two new replenishment ships that will be introduced into service. The second, HMAS *Stalwart*, which will replace HMAS *Sirius*, will arrive 18 months later.

Air-Warfare Destroyers

This year, our newest ship, HMAS *Hobart*, embarked on her first overseas deployment – and on Sunday we will commission the second air-warfare destroyer, HMAS *Brisbane*. This class of ship is one of the most sophisticated and advanced warships that this nation has ever owned and will significantly change the way we combat a threat, specifically in the air-warfare sphere.

This complex warship will also challenge the way we operate. Being in the operations room of an air-warfare destroyer is truly a remarkable and almost overwhelming experience. The sheer amount of information available to a command team is something to which we will have to become accustomed.



The air-warfare destroyer HMAS Hobart (III)
[Source: Department of Defence]

New Fleet Capabilities

The Hunter-class Frigate

The intricacies of the air-warfare destroyer will only be matched when the Hunter-class frigate is brought into service in the late 2020s. This year our government

announced the future frigate programme – one of Australia's most significant investments in military capability. BAE Systems will be fully responsible for the delivery of nine frigates, all being built in Australia with Australian workers. This warship will possess cutting-edge anti-submarine warfare technology, providing us unprecedented capability to detect and destroy a submarine threat and enhance our interoperability with our allies.

The first batch of three will be named HMA Ships *Flinders* (II), after the South Australian region named for explorer Captain Matthew Flinders, who was the first to circumnavigate Australia and identified it as a continent; *Hunter*, after the New South Welsh region named for Vice-Admiral John Hunter, first fleet captain and second governor of New South Wales; and *Tasman*, after the state and sea named for explorer Abel Tasman – first known European explorer to reach Tasmania, New Zealand and Fiji.

Just like the number of consoles on an air-warfare destroyer, the Hunter-class frigate brings its own unique challenges. The anti-submarine warfare equipment that we currently have on our ships is the same technology our ships had during World War II. Fundamentally, we have not changed the way we do anti-submarine warfare in about 70 years. The future frigate will be fitted with technology that we do not currently possess and the challenge will be training our people to most effectively use this equipment.

Naval Unmanned Aerial Systems

As we change the way we look at warfare, we are also branching out in other areas. On 25 October 2018, I commissioned 822X Squadron, our first Naval Unmanned Aerial Systems Unit. The squadron will operate two specialised unmanned aerial vehicles: the ScanEagle, a long-endurance, low altitude aircraft with a wing-span of 3.1 metres; and the Schiebel Camcopter, based on a rotorcraft design. These two assets will be primarily used for shipboard operations, where they will be employed on intelligence gathering, surveillance and reconnaissance. The squadron will also have the capacity to support other activities, such as search-and-rescue and natural-disaster recovery.

Offshore Patrol Vessels

In the not too distant future, we will also introduce 12 new offshore patrol vessels. While we have operated patrol vessels for a long time, these will present a unique challenge, particularly in terms of their size. Our current patrol boats are 400 tonnes and 56 metres long, our new offshore patrol vessels will be 3000 tonnes and almost 100 metres long – too big to classed as a minor war vessel. They will change the way in which we employ our force.

Naval Aviation

This year, HMAS *Albatross*, home to our Fleet Air Arm, celebrated the 70th anniversary of the establishment's commissioning. Just as our ships are busier than

ever, so are our aircraft. At the Sea Series exercises in June this year, we had a record-breaking Air Combat Element afloat. Along with army helicopters, there were seven aircraft embarked on HMAS *Canberra*. This is the highest number of aircraft that we have had embarked on a Royal Australian Navy ship since the aircraft carrier HMAS *Melbourne* was decommissioned 36 years ago.

The 'Romeo' (MH-60R) submarine hunter and anti-surface warfare helicopters are now at the forefront of our Fleet Air Arm and, since their introduction in 2013, have passed the fleet milestone of 10,000 flying-hours. They have now completed more than 3500 sorties all around the world and remain the world's most cutting-edge and lethal anti-submarine warfare technology.

Conclusion

The Australian Fleet is central to the attainment of Australia's three key strategic interests, as each has a strong maritime component. Fleet units and task groups have deployed in support of these strategic interests in 2018 throughout the Indian and Pacific Oceans – as far afield as the Middle East and the United States: patrolling maritime trade routes and showing-the-flag; on operations in the Middle East; conducting border protection, disaster relief and search-and-rescue missions closer to home; exercising with allies throughout the Indo-Pacific Region; and training and supporting our neighbours in the South Pacific.

Fleet capabilities also are being upgraded and expanded, with the introduction of unmanned aerial systems to the Fleet, and, looking forward, with new classes of both frigates and offshore patrol vessels to be acquired and to begin entering into service late next decade.

The Author: Rear-Admiral Jonathan Mead became Commander Australian Fleet on 19 January 2018. Following graduation from the Royal Australian Naval College in 1986, he served with the fleet first as a clearance diver and then as an anti-submarine warfare officer, including in HMA Ships *Melbourne* and *Arunta*. In 2005, he took command of HMAS *Parramatta* and saw active service in the North Arabian Gulf – his ship was awarded a Meritorious Unit Citation and he was appointed a Member of the Order of Australia. After studies at the Indian National Defence College in 2007, he became Australia's Defence Adviser to India. In 2011, he deployed to the Middle East as commander of Combined Task Force 150, responsible for maritime counter terrorism, and was awarded a Commendation for Distinguished Service. He later commanded the Surface Force then, following promotion to rear-admiral in 2015, was Head Navy Capability. He holds a master's degree in management and a PhD in international relations. He is the author of *Indian national security: misguided men and guided missiles* (K W Publishers: New Delhi, 2010). [Photo of Admiral Mead: Department of Defence]