KEYNOTE SPEECHES FROM SEA POWER CONFERENCE 2017

SYDNEY, 3-5 OCTOBER 2017

Vice Admiral Tim Barrett, AO, CSC, RAN



Chief of Navy

When I spoke at the last Sea Power Conference in 2015, Navy was on the cusp of a strategic rebuilding and expansion that coincided with the initial announcement of the Government's commitment to a national, continuous shipbuilding strategy.

Since then, there has been clarity about how the Navy is to be rebuilt and expanded and much has been achieved. In early 2016, the Australian Government released a Defence White Paper and, this year, it followed with a companion Naval Shipbuilding Plan.

These documents outline the Government's vision for Australia's future naval capability. As important, they also give fidelity to the shipbuilding and ship-sustainment industry by providing a commitment to a permanent naval shipbuilding industry through three distinct lines of investment. These are:

 the investment in the rolling acquisition of new submarines, and continuous build of future frigates and minor naval vessels;

- the investment in modern shipyard infrastructure across the two construction shipyards in South Australia and Western Australia: and
- the investment in naval shipbuilding workforce growth and skilling initiatives, together with new-generation technology and innovation hubs.

As a consequence of these decisions, the Government announced that Naval Group will be our international partner to design the 12 future submarines. Already, we have formal government-to-government agreements in place, a functioning design centre has been built in Cherbourg (by Australian tradespeople with Australian materials) and the Australian project team there is filling rapidly. Meanwhile, the construction site in Osbourne is being secured, and yard design is in progress. The project is meeting its milestones.

Concurrently, Navy's two new tankers have been selected and work will soon commence on their construction—the first ship is expected to be delivered in 2019 and the second in 2020.

Much work has also been done on progressing the acquisition of 12 new offshore patrol vessels. These vessels will provide us with an advanced capability to undertake constabulary missions and be the primary ADF asset for maritime patrol and response duties. Tender evaluation is complete, and a decision is expected from Government later this year. Construction of the first two vessels will begin in 2018.

We have also made significant progress on the acquisition of nine future frigates. These will be able to conduct a range of missions, with a particular focus on anti-submarine warfare, and will incorporate the Australian-developed CEA phased-array radar. We are on schedule to commence construction in 2020.

Additionally, all the Seahawk Romeo helicopters have entered service and are undertaking operations, deployed in ships in the region and beyond. Both LHD [landing helicopter dock] HMA Ships Adelaide and Canberra have been commissioned and are already proving their utility and versatility, with participation in major exercises and deployments this year. And just last week, we commissioned HMAS Hobart—one of the most sophisticated warships ever to be operated by the Royal Australian Navy (RAN). She is Aegis-fitted, the first in her class, with two more to follow, and the first destroyer for the RAN since HMAS Brisbane was decommissioned 16 years ago.

The delivery of such new capability has allowed the RAN to revert to its practice of complex task group operations. This practice offers strategic utility to government by delivering the agility and responsive-ness that is at the heart of our approach to maritime warfare, and enables more effects to be achieved against an ever growing set of threat scenarios.

This year, the ADF has successfully completed Talisman Sabre 2017, which provided us with invaluable task group operational experience and improved our training, readiness and interoperability. It also provided us the opportunity to test and prove the readiness of the LHD HMAS *Canberra*.

And as we speak, the other LHD, HMAS *Adelaide*, is leading the Indo-Pacific Endeavour 2017 Task Group deployed into the Southeast Asia region. This deployment will demonstrate

the ADF's humanitarian and disaster relief regional response capability, as well as further supporting security and stability in Australia's near region through bilateral and multilateral engagement, training and capacity building. While this is not the first such deployment by the RAN in Southeast Asia, it will be the largest coordinated task group operation since the early 1980s. And these deployments will become a regular part of the ADF's ongoing commitment to regional security.

Indeed, it is important to note that beyond a commitment to new capability, the 2016 Defence White Paper also foreshadows a significant increase in investment in regional engagement, with plans to contribute to maritime security in several ways.

Firstly, with programs like the Pacific Maritime Surveillance Program, which will deliver up to 21 patrol boats with long-term sustainment to our Southwest Pacific neighbours to improve maritime awareness in that region. Secondly, with increased funds for defence cooperation in the vast array of maritime security fora and exercises that exist to provide stability within the region through the deliberate and disciplined approach to problem-solving and by reducing the chance of miscalculation.

But the generation and deployment of self-supporting and sustainable maritime task groups, capable of accomplishing the full spectrum of maritime security operations, calls for more than just an equipment list. There are fundamental attributes that a credible fleet needs to demonstrate for this to occur.

Over the last few years, the Navy has taken great steps forward in the regulated management of seaworthiness within the Fleet. This follows a similar path to the improvement in airworthiness of the aviation force. We are better managing and sustaining our platforms, infrastructure, communications and information systems, intelligence, and other mission and support systems for our current capabilities. That's not to say we have it all right but the lessons learned are being applied to the projects that will introduce the future fleet.

We are also working to have an integrated, diverse, resilient and deployable workforce that has the skills and competencies to deliver Navy's warfighting effects. We are also improving our culture to ensure that it supports an agile, resilient and innovative Navy that actively seeks ways to better deliver our warfighting effects.

As a result, we are participating more regularly in multinational exercises and through expanding our cultural understanding and language capabilities, to understand how we can make more effective and meaningful contributions during those exercises. This progress gives me great confidence that we are on track to achieve the long-term objectives that we have set ourselves to ensure that Navy is seen as a fighting system which is part of a joint warfighting organisation and a national enterprise.

As you can see, we are building a capable, lethal and agile Navy able to fulfil the tasks required of it now and into the future. A Navy that has the ability to deliver targeted and decisive lethality if government so requires. A Navy that has the ability to take decisions quickly, to manoeuvre naval force with speed and flexibility, and to enhance survivability by ensuring that our warfighters are able to adapt doctrine and tactics to meet the needs of the moment. A Navy that can adapt to the ever-changing strategic environment.

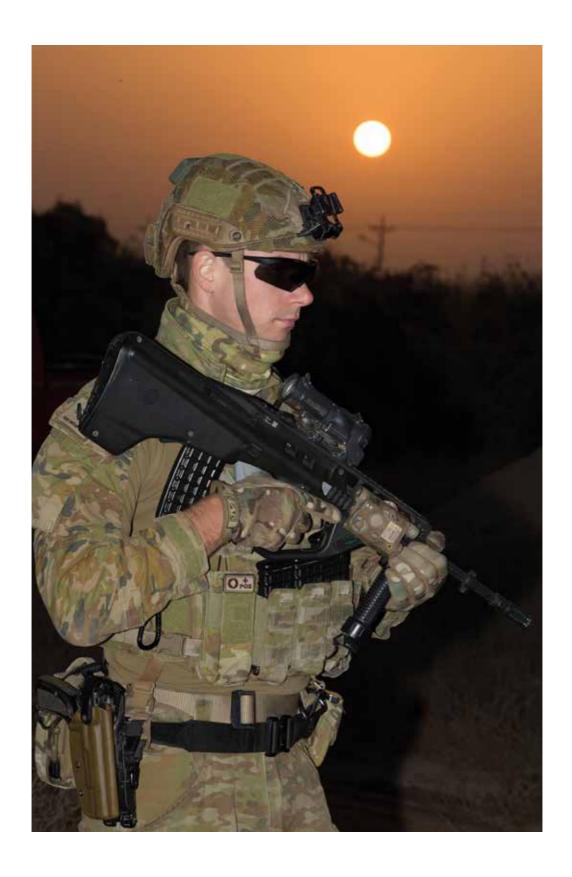
Even since the last Sea Power Conference in 2015, there have been unpredictable shifts in our strategic environment. The unprecedented missile and nuclear-weapons testing by North Korea, the impact of the South China Sea arbitration, and the increased possibility of miscalculations that could result in armed confrontations at sea. As well, the shifting of old alliances; the rapid rise in global terrorist networks in

Southeast Asia; changes in migration patterns; and the increased activities of international criminal syndicates, from coordinated illegal fishing enterprises to smuggling illegal migrants. These are just a few.

And so, we seek a Navy that has the ability to maintain our sovereignty, defend our territorial integrity, and protect our national interests wherever they may be threatened—regionally and, indeed, globally from the Middle East across the Indian Ocean, through the South China Sea, and in the Pacific. And because we know that no country can truly expect to act alone to solve the dynamic maritime challenges which are faced in our region, we seek to build a Navy that can work with and support our neighbours, friends and allies.

It is working with our neighbours to maintain and advance the internationally-recognised, rules-based global order that has been so conducive to ensuring maritime stability, and open and reliable maritime trade in our region. We all have a vested interest in regional peace and stability, unimpeded trade, and freedom of navigation and overflight in our region.

Sea Power Conference 2017 affords us the opportunity to reflect on the work that has been done over the past two years: to consider if our current thinking about what the Navy of the future needs to be is accurate; and to develop the ideas and concepts that inform our future thinking and planning, all while meeting the current and future challenges of the dynamic regional environment in which we operate.



KEYNOTE SPEECHES FROM SEA POWER CONFERENCE 2017

SYDNEY, 3-5 OCTOBER 2017

Major General Kathryn Toohey, AM, CSC

Head Land Capability (representing Chief of Army)

The theme of this year's conference, 'The Navy and the Nation', is an appropriate focus when we consider that our Navy is in the midst of the most ambitious recapitalisation of the Fleet since World War 2.

The submarines, frigates and offshore patrol vessels that are planned, in conjunction with the two Canberra-class LHDs [landing helicopter dock], three Hobart-class air warfare destroyers, and the MRH-60 Romeo and MRH-90 Taipan helicopters already in hand will go a long way to ensuring Australia has a regionally competitive, if not superior, future naval force. And the sheer scale of this recapitalisation—more than \$90 billion and a time-frame spanning three decades—highlights that this is truly a 'national enterprise' for Australia.

The 2016 Defence White Paper places Australia's security firmly within the maritime environment of the Indo-Pacific region. This region contains the world's busiest international sea lanes, as well as

nine of the world's ten busiest ports. Australia, as an island nation, is economically reliant on global trade and our freedom of navigation at sea. As such, the importance of a maritime strategy to the security of our nation remains clear and uncontested. Looking beyond our shores is not a choice, it's a necessity.

I use 'maritime strategy' in the sense offered by the British strategist Julian Corbett's 1911 definition. He wrote that 'by maritime strategy, we mean the principles which govern a war in which the sea is a substantial factor'. Corbett goes on to stipulate that maritime strategy is about the relationship between the Navy and the Army in a war plan. Today, of course, we would also add air, cyber and space power to that equation.

This is consistent with Admiral Barrett, in his welcome letter to this conference, stating that 'Navies do not exist for their own sake, nor do they exist in isolation'. Notwithstanding the significance of both our Navy and the current

shipbuilding enterprise to our nation, he is tacitly acknowledging the reality that Australia's current and future national security depends on the joint force and the nation.

Accordingly, my remarks today will address the work underway between the Australian Navy and the Australian Army (and our other partners) to ensure Australia has the joint force it needs to secure our national security interests in the Indo-Pacific region.

One of the capstone capabilities essential to enabling a successful maritime strategy is a joint amphibious capability. This is not a new idea but rather has been a part of Australia's strategic identity since Federation. Ken Gleiman and Peter Dean described in their 2015 assessment for the Australian Strategic Policy Institute the significant role amphibious warfare has played in Australian military history. The Gallipoli landings of 1915 and the New Guinea campaign are wellknown examples. However, as Gleiman and Dean highlight, not as much attention is paid to the maritime sustainment of Australia's operations in Vietnam, nor the amphibious operations conducted in Vanuatu (1998), Somalia (1993), Bougainville (1990 and 1994) and East Timor (1999 and 2006).

The strategic direction of the 2016 Defence White Paper reinforces the importance of our new amphibious capabilities, centred on the Canberra-class LHDs and HMAS Choules. These ships provide a significant increase in the ADF's amphibious capacity and endurance. Their physical size and capability will ensure the critical role they play in joint amphibious operations will be centre in our minds into the future and not a historical footnote.

Talisman Sabre 2017 represented a significant milestone in the development of the ADF's joint amphibious capability. This biennial exercise provides the opportunity to practise with regional and coalition partners a range of operations across the broad spectrum of conflict. This year, HMNZS Canterbury joined HMAS Canberra and Choules to form the ANZAC Amphibious Ready Group. The amphibious landing on Talisman Sabre was the biggest amphibious landing Australia has conducted since the Operation OBOE landings in Borneo in 1945.

An advantage of exercises such as Talisman Sabre is to be able to rehearse the deployment of amphibious forces into the region to support stability and/or humanitarian assistance and disaster relief operations. In that regard, this year also saw HMAS *Choules* integral to the 3rd Brigade-led joint task force response to Tropical Cyclone Debbie in northern Australia.

When he addressed this forum two years ago, Chief of Army reflected that he was confident in Army's ability to generate a broad spectrum amphibious capability. He identified that his concern was:

[How Army would] successfully undertake a range of amphibious activities consistently, but not exclusively, of those other tasks the ADF must maintain (such as conventional combat and stabilisation in the case of land forces), relearning very hard lessons.

His concern drove two fundamental questions for Army: 'What must be maintained as dedicated specialist expertise?' and 'What can be rotated within the general Land Force'. Two years later, we assess that we are on track to realising an appropriate balance in response to these questions.

Firstly, unlike many other nations, Australia has chosen to integrate Army, Navy and Air Force staff into one joint amphibious task group head-quarters, instead of having separate maritime and landing staffs. This year, Army reinforced the headquarters with additional staff and a permanently constituted Commander Land Forces.

Colonel Malcom Wells was appointed the first Commander Land Forces in March this year. Colonel Wells works very closely with (and indeed his office is adjacent to that of) the Commander Amphibious Task Force, Captain Brett Sonter. My recent visit to the Task Group Headquarters, hosted by these two key amphibious leaders, affirmed to me that this joint headquarters has become the focal point for amphibious planning and execution in the ADF.

Secondly, in mid-October this year, Army's amphibious trials unit, the Second Battalion, The Royal Australian Regiment (2RAR), will formally transition to become a specialised infantry battalion focused on amphibious reconnaissance and small boat operations. It will be designated

2RAR (Amphibious) and will be Army's standing specialist unit contribution to the amphibious force under command of the Commander Land Forces. This will strengthen our ability to deploy a battalion group by sea for a contingency within our region.

In the longer term, land-based anti-ship missiles and long-range fires capabilities included in the Integrated Investment Program will provide an opportunity for Army to make further contributions to amphibious operations and the joint force.

Like our Navy, Army has embarked on a major period of modernisation that will recapitalise the force over the next 15 years. Among other key capabilities, Army will introduce into service a fleet of more lethal, better protected and more capable armoured fighting vehicles that will underpin our contribution to the joint force. These vehicles are being acquired under the Land 400 program.

In addition to supporting amphibious warfare, Army needs to master conventional combat and stabilisation operations. Such operations may be conducted far from home in the face of an aggressive and adaptive enemy. Our recent experience, gained from over a decade of operations in the Middle East region, demonstrates that technology has dramatically increased the lethality available to our enemies, while markedly lowering its cost.

Improvised explosive devices [IEDs] can be assembled from readily available technology for as little as A\$30. IEDs, combined with the proliferation of rocket-propelled grenades, mean protection is the price of credible participation on the modern battlefield, no matter what the role. By protection, I mean the combination of materials, tactics, and passive, active and reactive systems.

As a result of this, we are building your Army to be able to survive and win in increasingly lethal and complex environments. Land 400 Phase 2 is replacing the current ASLAV [Australian light armoured vehicle] combat reconnaissance vehicle. Tenders for this project have closed and we expect a government decision on the preferred vehicle during the first half of 2018. Whichever vehicle is selected, it will be deployable by C-17 and able to be landed by a Canberra-class LHD

or by HMAS Choules.

Government has already provided funding in the Integrated Investment Program to ensure the growth in vehicle protective weight, necessary in response to increased lethality, is matched by the continued ability to embark land forces on our amphibious ships. Future programs will enhance and/or replace the in-service ship-to-shore connectors, such as landing craft, as well as the capability provided by HMAS *Choules*. These projects will be essential to ensure continued alignment between land and maritime capabilities.

Chief of Army noted during a recent Australian Strategic Policy Institute presentation that:

Our Army and the ADF will always be relatively modest in size. The Army will always operate as a component of the ADF. And the ADF will always operate as a component of the Australian national effort; a national effort that historically has always been part of a coalition. The logic of this is irrefutable, it is the only way we can generate sufficient strategic weight for the most pressing of problems.

Underpinning a joint force, we need a joint integrated command and control or combat system that allows the sharing of timely operational information between domains and nations—an easy thing to write but significantly more challenging to deliver and implement. However, we are making progress. Indeed, Army's battle management system operated from within the operations room on HMAS *Canberra* during Talisman Sabre this year. And, through the work of the Head of Joint Capability Management and Integration, Rear Admiral Peter Quinn, Army, Navy and Air Force are alive to the requirement to make appropriate single-Service trade-offs to support better joint outcomes.

In conclusion, this conference presents an excellent opportunity to strengthen relationships between joint, industry, regional and international partners to assure the continued stability, security and prosperity of the Indo-Pacific region.

This region is defined by two oceans of overwhelming scale and size, effectively comprising vast, maritime watery deserts. However, the other story of the Indo-Pacific region is one of crowded, dense and rich areas of human endeavour on land. The region contains the most populous nation on earth and the largest democratic nation on earth. Eight of the world's ten most populous states are Indo-Pacific nations. Over 50 per cent of the world's people live here.

These two factors—big oceans and an equally big scale of human endeavour—are perhaps best combined to create a story about the littoral. And, I would suggest, activity within the littoral is perhaps the unifying and definitive theme of the region.

All domains—maritime, land, air, space and cyber—are required to work together to realise success in this most complex of environments. Army is working hard to ensure we are delivering credible, strong and complementary land forces to assure this outcome. And, by doing so, we are in effect supporting our Navy and the nation.

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Air Marshal Leo Davies, AO, CSC

Chief of Air Force



My last presentation to this conference was in 2015. It was more of a scene-setter. It talked about the forthcoming Defence White Paper. It talked about the Force Posture Review. It talked about the First Principles Review. A lot has been delivered since. But I think there's still a lot to come, so this gives me an opportunity to talk about air power. But not air power on its own. It's no longer a context of the Battle of Britain, so 'on our own' can no longer be the case.

Chief of Navy's description of Navy 'as a fighting system which is part of a joint warfighting organisation and a national enterprise', recalling Alfred Mahan's description of sea power as the instrument by which a nation exercises command of the sea, is a very useful context. I agree that the Royal Australia Navy (RAN) is the primary means to provide that outcome. But I offer that the Royal Australian Air Force (RAAF) is a significant partner and that air power offers an important enhancement.

My presentation is not so much about history or about doctrine, policy or strategic guidance. This has been covered by Chiefs of Army, Chiefs of Navy and Chiefs of Air Force over many years. It is about the part that Air Force is playing. All three Services and the non-Service groups are being guided by a force design principle. Multi-domain operations, as articulated by this conference's theme of 'the Navy and the Nation', are already real and they're becoming increasingly more possible.

So let me pose a thought or a perhaps question: 'How do we get to know what is above, on and below perhaps a 10,000 or 100,000 square mile piece of maritime domain?'. But, perhaps even more importantly, how do we make sure that everyone else who needs to know, does know—whether it's the frigate, the air warfare destroyer, the Triton [unmanned aircraft], the P-8 Poseidon [maritime patrol aircraft], the RAN's 'Romeo' [anti-submarine/anti-surface warfare]



helicopter or the LHD [landing helicopter dock] with the army that it carries?

Chief of Joint Operations, the Vice Chief of the Defence Force and the Service Chiefs are about closing what is perhaps currently an air-sea gap. Pulling the 'stitching' closer, getting synergy and becoming totally networked. The RAAF is on the journey to becoming a fifth-generation air force. Critically, this means being integrated across multiple domains.

So, it is not without some sophistication that joint warfighting is the very first of the Air Force's strategy vectors. We need to have a shared understanding of what we do—that's the education. In 'the Navy and Nation', it's the human dimension. Joint training—that for me is the application. In 'the Navy and the Nation', that's the fighting system. Force design, doctrine and planning is the answer. In 'the Navy and the Nation', that's part of the national enterprise.

Our fifth-generation Air Force will possess attributes whose key functions are to support and integrate across domains. Perhaps some practical scene-setting might be useful.

A P-3 Orion [maritime patrol aircraft] joining the surface action group gets a joining

instruction message on the ground before we leave. We get perhaps a HF [high frequency] update enroute but that's in voice. Maybe a HF-covered radio teletype handover message that might give us some ranges or some basic thermal indicators. What's the water doing?

Arrival on station, Link 11 [tactical data link] on UHF [ultra-high frequency]. Most of the contacts the P-3 gets will say 'unknown surface'. We can't transmit or receive any tracks for the S-70B [Navy's Seahawk helicopter], unless perhaps there is a voice communication. In fact, no correlated tracks are available at all. Everything has to be verified by voice. It has to be amplified by voice.

Any fast jet traffic in the area is on Link 16 [military tactical data exchange network]. But we don't have Link 16 to the surface action group. Anti-submarine warfare begins—we put maybe 32 sonar buoys in the water, and they're all time-shared. There is no link of that information to the helicopters. Any join by a helicopter to the P-3's area is by voice. It is slow. It is human intensive.

What about a P-8? It departs base with beyond line-of-sight Link 16 feed of air surface and subsurface contacts already. DSN [Defence Secret Network] nexus chat communications enroute updated from air warfare

destroyer and the frigates. RAAF Edinburgh sends analysis of previous missions that includes acoustics, screen prints, electromagnetic spectrum and what the water is doing.

The PWO [principal warfare officer] on board can talk directly to the TACCO [tactical coordinator] or the sensor managers. About 40 megabits a second permits video streaming, imagery and sensor data—intricate sensor data. Common data links support multiple channels, which means more tactical application at each station, on the ships and in the aircraft. We're not drowned any more by communications. Extended agency awareness, probably Headquarters Joint Operations Command, of the P-8 through DSN nexus pagedrops build a common operating picture.

Fast jet traffic is aware via Link 16. JREAP [Joint Range Extension Applications Protocols] available if required. We know about them; they know about us; we know where the enemy is. Multi-static ASW [anti-submarine warfare] field deployed, perhaps up to 60 buoys. And with that many on board again if we need to, and there is no time sharing. We can cover between four and five times the volume of water, and with every hour that passes, with increasing fidelity.

In my mind, we don't have to wait for the submarine any more. An ASW contact is gained, Link 16 assigned, the Romeo is aware, and the Romeo can prosecute.

As Chief of Navy has put it, 'a new way of getting stitched up'. However, it will take improvements in programming. We can't just do it continuing the way we currently plan and execute. But I have some good news. What we've already learned in the transition of our current P-3 crews to P-8 is that they learn quickly. This is an exciting aircraft and set of systems that allow them to do more and they learn to do it quickly.

We used to ask: 'Why does a LHD need Link 16?'. What we must now ask is: 'How could you deploy it without Link 16?'. I would like to see white uniforms and green uniforms on board our

P-8s, on board our E-7 Wedgetails [early warning and control aircraft]. I almost said on board Triton [unmanned aircraft] but not quite. But, certainly, on board Growler [electronic warfare aircraft]. We need to build our joint cadre. We need to get that from real and enduring education.

I've spoken here mainly about the P-8 in a narrow setting. But in the combat scenario I just mentioned, there would likely be a Wedgetail managing the airspace, a Triton finding out first what is out there, as well as space-based assets, and Growler aircraft controlling the electromagnetic spectrum. All of these are contributors, and I could spend another 10 or 15 minutes on each indicating how they'll work with a modern navy.

How would the RAN design our modern Air Force to meet the sea power delivery end-state? I suggest that it wouldn't be too much different in terms of the order of battle. But what I do believe is that the Air Force doesn't know all the answers and how to apply what it is we are growing. We need the Navy to help us. So our intent is to close the air-sea gap.

I asked earlier about the 10,000 square miles or the 100,000 square miles. I had the pleasure to fly a F-35 [joint strike fighter] simulator in Arizona not too long ago. I'm not a Hornet [multi-role fighter aircraft] pilot. I'm an F-111 [strike aircraft] pilot by trade and, before that, P-3B and P-3C TACCO. But I do know what the F-35 gave me. It gave me data, it gave me information, it gave me intelligence, it gave me decision making. Not a single-target mentality that perhaps we were quilty of not many years ago.

The F-35, the air warfare destroyer, the future frigate and the future submarine program are all indicators of where we're heading. The Air Force and the Navy are growing. We need to grow together. We are building a fighting system and, in my view, Air Force is here to play its part in our national enterprise.



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SYDNEY, 3-5 OCTOBER 2017

Vice Admiral David Johnston, AM, RAN

Chief Joint Operations

As Chief Joint Operations, I largely am the beneficiary of the work of the Service Chiefs and those within their organisations, because I am the 'employer' of the ADF, having picked up all of the work that goes into the generation of the force.

In my role I have a number of responsibilities, and I'm going to cover just a few. Many of you would expect that I plan, conduct and lead operations, and that's true. I am also the joint collective trainer for the large exercises where we look to deliver joint capabilities. That role comes back to Joint Operations Command.

What is less understood is my role in reducing risks to future operations. I'll focus on Navy capabilities but they could be switched to land and air in many of the things I'll talk about. I will show how the work of Navy contributes to the government's requirements in the delivery of effects to enable national security. Joining the dots should enable you to see how your

particular contribution matters, and contributes to that outcome.

I'm going to very briefly pick up and bookmark Chief of Navy's comments, which Major General Toohey and Chief of Air Force also mentioned, about the integration of capabilities, and I'll throw to you—from a joint commander's perspective—a couple of the key challenges I see as we continue to develop the ADF.

In order to talk first about how Navy contributes to the output of government, let me give a quick update. I work to Defence White Paper outcomes, as we all do, but mine are very clearly expressed in strategic defence interests and strategic defence objectives. It's pretty simple: a resilient Australia with secure approaches, a secure near-region, and a stable Indo-Pacific reinforcing the rules-based global order. That sets the work we aim to do in Joint Operations Command.

We do that in concert with the Service Chiefs and the other groups in Defence by focusing on operations, exercises and our international cooperation program, as well as the engagement we do—from Service Chief or Group Head-level down to the way an Able Seaman will conduct themselves when they step ashore.

How then in Joint Operations Command do we pick up on those three series of objectives? Well, I run three lines of effort, and everything fits within these three lines.

We seek to know the environment in which we work. And that is understanding what's occurring there. Gaining familiarity with it and building the confidence of the force to be able to operate successfully—for Navy to fight and win in that environment.

We seek to partner—our second line of effort. That's building relationships, building interoperability, building capacity among our partners where it's important, and mitigating current and future risks by the activities that we perform in operations, exercises and our other areas across Defence.

Finally, we respond, and that's those circumstances when government directs an output from us, and where the ADF is tasked with being able to deliver a national security effect.

What might surprise you is that I aim to spend as much of our effort in the first two lines of effort as we can. The more we know and the more we partner, the least we will likely be required to respond, because we have been able to address the risks that are emerging in our environment.

I'm now just going to dive into those three strategic defence objectives. Again, just to highlight within the second node—the partner line of effort—the manner in which naval forces and our land and air elements contribute to the responsibilities we carry.

For our first strategic objective, knowing our exclusive economic zone and the approaches to Australia from north through to south is a key element we have been focusing on. I draw one example of why that's important: theatre anti-submarine warfare. Chief of Navy has referenced, with the substantial growth of submarine capabilities in our region, that knowing our

environment—and understanding it such that we can then operate successfully in it—is a key element that we have been building over time and reinforcing recently.

So our environment is key. We invest significant efforts in understanding what's occurring in the water space, on the surface and in the air, and making sure that we know what it occurring through those areas that are important to Australia. And the contributors to that—from a naval perspective—are out there every day to build that understanding to ensure that we're able to deliver on that outcome.

Within our ability to partner are Navy-led exercises such as Kakadu. But equally the Talisman Sabre exercises and the other occasions that we bring, as a joint force, our partners into our region to train and work with us, and to build our own capability and understanding of operating with others in our environment.

I also want to highlight the need for an interagency approach. We work hard between Navy, Army and Air Force. We work hard with our international military partners to build interoperability. But I have been pushing to make sure we work as closely with our interagency partners here in Australia, such that we're able to work across all the national security contributors to make sure that we are effective in what we do.

Finally, we respond when we need to. Our maritime operations in the north, particularly those to reinforce our border security, are well known. In recent times—and with our partners in Maritime Border Command—we have done substantial work in the last 12 months in disrupting the movement of narcotics into our country.

Let me now move to the second of our strategic objectives, which is very much around maritime Southeast Asia and the Southwest Pacific. Many of those in a naval uniform are accomplished in an environment where we sent task groups but often single ships in the past. However, 'up top' now is different to what it has been over the last decade: it is now significantly focused on understanding our environment and working with partners.

Chief of Navy mentioned Indo-Pacific Endeavour 2017 as an example of that, with the six-ship task group—with Army and Air Force elements

contributing—both knowing our environment and working with our partners to build and make sure we understand how to work in it, and that they know how to work with us. So that activity is a key one for us this year, and we will see it repeated every year as we deploy ADF elements in various tasks throughout our region.

In relation to the second objective, I'll highlight two further examples. The first was the tragic loss of Malaysian Airlines MH-370 in the Southern Indian Ocean that required us to work with a significant number of partners to search for that aircraft and bring search-and-rescue efforts to bear.

But equally our humanitarian and disaster response. At the moment, HMA Ships *Choules* and *Huon* are enroute to Vanuatu to be ready to support an evacuation from Ambae Island and to assist with the setting up of displaced-person camps. Humanitarian operations in our region are a key part of responding within our environment, as is Navy's support to stability operations, which we have had to conduct over a number of years.

The third and final defence objective is our global remit. That relates to the maintenance of the rules-based global order and working with coalition operations wherever government requires. And this is where we build the relationships to provide responsiveness and effectiveness where we need it. It is everything from the work that a ship will do conducting training with other maritime nations, all the way through to the work that the Chief of the Defence Force and the Service Chiefs do in their senior engagements as we meet people in our region.

It's a key part of what we do and it leads to the full spectrum of outcomes that we may be required to generate, of which our contribution through the Middle East region—now longstanding in its 64th rotation—has been a key element.

One example to set the scene for my final comments. Operation FIJI ASSIST was our support after Tropical Cyclone Winston—the largest storm system to hit the Pacific—collided with Fiji last year. Australia was asked to provide assistance, and did across a number of government agencies. But what I want to highlight is the integrated approach that was necessary to deliver this outcome.

It started with P-3 [maritime surveillance aircraft] support that conducted surveillance around the islands to help build an understanding of the damage that had occurred. It then moved quickly to airlift, to move humanitarian aid, and then military equipment so that we could establish a land-based rotary-wing capability. Then the first deployment of the LHDs [landing helicopter dock] with HMAS Canberra taking a substantial land force component to generate the effects ashore. It was a highly integrated mission and a good example, from humanitarian operations through the spectrum to high-end warfighting capabilities, of the way that we will need to fight and work together.

In closing, I want to reiterate that the way the ADF needs to respond to challenges is through integrated output. Integrated across our three Services. Integrated within the joint environment. Integrated with our government partners and other agencies, and then with our partners offshore—the coalitions we bring together.

The first two elements to bring that design and doctrine are largely what the Service Chiefs look after. The last two components—training and certification—are collectively what we bring together to ensure forces can deliver what they need.

I have highlighted a few of the areas where I believe the integrated nature of our work is fundamental. Knowing our environment can only be done properly in an integrated environment, and takes significant work to develop. Theatre anti-submarine warfare is an integrated problem to deliver the outcome that you need over broad areas. And air and missile defence—a very topical issue—is also a highly integrated function that brings together all three Services—and the intelligence agencies—to deliver those effects.

Most of these joint effects are well known to you. But it's also in the background where the integrated work is essential. Logistics, health, intelligence and communications—none of them now work if they are not in an integrated environment. For example, I did a count recently of the work it takes to move one Mark 82 bomb from the stores base in Australia to the air task group providing support through Operation OKRA [air combat and support operations in Iraq]. There are seven different parts of Defence that come together to achieve that—different

groups who need to work together to move one single bomb.

That's indicative of the support we need, and the integrated nature by which we need to work to bring those outcomes together. So, your work matters. The integrated nature by which Navy, Army and Air Force come together is essential

to achieve the three strategic defence objectives the government charges us with. As we move forward, I ask that you think not only through the lens of your own contribution but those of the partners that you will need to work with to understand how to build those bridges and integrated mechanisms with them.