

Address by Vice Admiral Tim Barrett, AO, CSC, RAN

Chief of Navy

to the Australian Strategic Policy Institute

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Good Morning Ladies and Gentlemen. I would like to start by thanking ASPI for the opportunity to speak. As Chief of Navy, I see this as a great opportunity. Having been in the position for some eight months now, I have a pressing need to express some of my views on some key aspects of Navy's future requirements and this conference provides me the perfect platform to do so. But, let's clarify some things up-front. I will not be using it as an opportunity to further define the top level requirement for SEA 5000, nor pre-empt an announcement on the frigate decision. But I am counting on the fact that what I do say today will have some influence on the outcome. During the course of this conference you will hear from many well qualified speakers who will dwell on the precise aspects of their particular organisation, their projects and their roles in the delivery of capability. My aim is to stick to the broader considerations of 'why' and 'how' and not necessarily the 'how many' and 'where'. This should not be a surprise to those who understand the contemporary role of the Service Chief in the ADF, but I will seek to reinforce this understanding of my role during the course of the presentation.

I intend to discuss three significant issues that are important to me in the surface combatant debate - **lethality, effects and ship availability**. Let me be clear on that—lethality, effects and ship availability. I have no doubt that other principles or concerns will be raised over the next two days, but these three reflect my current thoughts and are worth a discussion in a forum like this. As I alluded to, I won't be discussing, in detail, platform numbers or industry policy *per se*; there are others who will present on the Force Structure Review and related issues. But I will pass some quick thoughts on the industry to add fervour to the debate before I conclude. I think this is important because, as President Kennedy once said, 'too often we enjoy the comfort of opinion without the discomfort of thought.' My task is to add to the debate and to possibly promote some contestability – the current catchphrase.

Let me start by making the observation that during my watch as CN, not only will we see the acceptance into service of the LHD, the Seahawk Romeos and the first of the AWD, but we will also be required to finalise the plans for the concurrent replacement of a significant number of other major naval capabilities all due in the coming decades. The confluence in the timing of these program schedules has complicated the job of our national decision-makers, as they are faced with an increasing complexity and magnitude of the decisions that need to be made and the inherent inertia that naturally flows from making such large commitments. But they are decisions that need to be made. And if made decisively and deliberately, they will present opportunity for industry by

providing greater certainty. At this point, though, I would like to say that we should not be surprised by the magnitude of these decisions. Every major naval shipbuilding program has, and will continue to consume, a significant amount of Defence spending. While large, I believe it is not disproportionate. I would also say that with this confluence; and with the sheer size of the aggregate spend that now has to be considered, the debate over significant ship building programs has overshadowed the strategic capability debate that still needs to be had.

So my job, as CN, is to ensure that everyone who impacts on the critical decisions that will generate the future fleet grasps the strategic purpose, the operational concepts and the capability requirements around which the future fleet is designed and funded, thereby ensuring expenditure is proportionate to the need. We are not simply buying the weapon; each ship, in itself, is a small township that generates its own power, water and sewerage; it sustains hundreds of people for months on end; it will stay in theatre for extended periods and be capable of delivering its ordnance at any time during that whole period. Given Australia's unique strategic position, you cannot simply buy naval capability, of consequence, off the production line like a C-17. Note that I am not advocating unique requirements.

So let me briefly reiterate some key points. Australia is an engaged, global player. We are a successful trading nation. We are a beneficiary of and a contributor to a system of global trade, finance and communication. This reflects the fact that we are a nation with valuable sovereign territory, including some of the largest maritime areas of the world. As part of the ADF, the Australian Navy contributes to enforce our sovereignty, defends our interests, and maintains the international systems on which, along with our friends and allies, our way of life depends. A sophisticated nation with global interests needs a capable Navy with global reach and global influence. These statements reflect current government strategic guidance.

But the environment in which we operate is changing. Many nations in our region are increasing their maritime focus – either with changing patterns of trade, the emergence of prominent offshore resource claims, or even sovereignty claims. This is a maritime century and there is a clear focus on the Indo Pacific region. Our response, to promote Australia's interests in this maritime domain, needs a balanced ADF force structure with joint operational capability. We are a middle power. As such, our influence and force size do not allow us to meet all contingencies alone. No one element of the force can be configured to retain a purely sovereign capability, at the expense of all others. Balanced force design is critical. As part of that response, the major surface combatants of the fleet provide the Government with options, *significant* options to represent Australia's national resolve and meet the full spectrum of threats that may challenge us within the maritime environment.

With that brief strategic thought in mind I'd like to tackle the first of issues that I think underpins the heart of Navy's requirements – that of **lethality**. This is a consideration for all surface fleets, however, large or small.

In 1982 I spent a year on exchange with the Royal Navy. It was an extraordinary year to be in the UK as their government took them to war in the Falklands. I recall the intense debate over the deployment of warships into harm's way. What stuck in my mind was a ship's Commanding Officer who resolutely said – 'we build warships to go to war – why else would we build them?' Perhaps it

was a different time and a distant event, but there are some principles here that underpin Naval requirements, more generally—and that is the need to rigorously discuss warfare.

Some would argue that it has become unfashionable to talk about prosecuting war rather than building peace. Like all citizens, I see a thriving economy, a confident diplomacy and a cohesive society as the best guarantors of long-term stability and security. But the fact remains the ADF provides government, when required, the ability to ‘continue policy by other means’ as Clausewitz would have it. Together with my fellow service chiefs and departmental colleagues, it is my task to address the “what if” question – what if an aggressor wants to constrain Australia’s freedom (freedom to trade; freedom to move?) We need to ensure that the Chief of the Defence Force has at his, or her, command the capabilities necessary to deliver a range of escalating measures including decisive lethality should the Government so direct.

There is consistency between my views and those of other naval forces. I would like to quote a recent comment by Vice Admiral Thomas Rowden USN who is currently serving as the Commander Naval Surface Forces in US Pacific Fleet, who says:

‘Going on the offensive is a mind-set, a way of thinking about naval warfare. It means thinking a good bit more about how to destroy *that* than how to defend *this* ... We will still need to be able to defend high value units, amphibious forces, convoys, and logistics — but we will increasingly defend them by reaching out and destroying threats before those threats are able to target what we are defending’.

This is an important facet in the requirements debate. Lethality brings consequences to all aspects of our fleet’s acquisition. For instance, in the platform domain it constantly challenges the tension between, say, commercial builds and full military build; that is, affordability versus survivability (with the attendant discussion of its utility during damage control situations).

Likewise, in the combat system domain we need to understand where new technology is taking us and how it will shape our fleet design and future lethality. For example, the impact that networked sensors will have on our lethality and tactical reach? And how should we prioritise offensive versus defensive weapons? Each of these issues ultimately leads to a decision as to how you can employ the ship (if at all) during escalating conflict.

For me this is topical as I watch the good progress being made in the introduction of the LHD into service and the reverie behind the discussion that the ship was acquired principally for Humanitarian Assistance and Disaster Relief. That was not government’s intent when the decision was made to acquire the LHDs. It will be their ability to posture for operational manoeuvre and deliver a comprehensive and lethal land force ashore that will confirm their utility. Once that is proven and practiced, HADR will be an alternate mission outcome of great strategic importance. Bottom line, lethality remains a key determinant in the requirements phase.

The second issue I want to raise is that of understanding the effects sought early during the requirements stage. There is a tendency, in all quarters – government, defence and industry – to leap onto the numbers of ships or submarines needed before full consideration of the effect we are trying

to deliver is understood— an input mentality rather than an outcome focus. And, given the earlier discussion about ship building program costs, this is understandable; what is often not understood is the value in representing the requirement in terms of effect and risk, which prompts discussion of alternate solutions – in essence, it's about capability not about the platform.

As I have said, one of the core responsibilities of the Service Chiefs is to ensure that the conceptual foundations and structural principles on which their service operates are well understood by decision-makers and operators alike during the force design process. But it is then essential to translate these concepts into effects to be achieved rather than to a prescribed solution which may focus solely on the platform. For example, the concept of Theatre Anti-Submarine Warfare (Theatre ASW) is gaining currency in the ADF. It reflects the fact that by 2030 about half of all the world's submarines will be operating in our near region.

In its simplest form Theatre ASW is about gaining sufficient undersea domain awareness through cooperation across navies using all available means, to be able to locate all submarines with sufficient fidelity to allow you to act where you need, and when you need, to maintain the initiative. In referring to 'all available means' I contend that this means everything from all-source intelligence, Alliance management, space-based assets, P-8s, towed arrays such as the one likely to be carried by the SEA 5000 frigate, sea-bed arrays **and** but not exclusively, the numbers in your submarine force. Therefore, within an effects-based regime, a meaningful contribution to Theatre ASW across a range of capabilities (and even diplomatic engagements) could lead to a disproportionate outcome in our favour, allowing us to resolve our sovereign needs by placing our ASW capabilities in the right place at the right time.

A second example relates to the surface combatant force itself and how it is currently viewed. Most see the 'surface fleet' as individual platforms configured to act alone and therefore 'weaponed up' to do so. This is not an unsurprising notion because for the last two decades the Navy has largely operated in single units on many operations with task group formations being the exception. Future strategic planning will need to see the fleet revert to Task Group operations as the norm. And while the increasing capability threat has been a principal driver for this change, to offer appropriate protection for critical mission elements, such as the LHD, a whole range of likely future scenarios based on effects planning will see surface combatants operating as Task Groups, more often than not.

The Task Group methodology offers strategic utility to government by delivering the agility and responsiveness that is at the heart of the 21st century approach to maritime warfare. Re-packaging our capability this way enables more effects to be achieved against an ever-growing set of threat scenarios. It requires all ships within the task group to be network-enabled across the ADF spectrum. It requires ships to collaborate on their offensive capability, sharing fire-control data and controlling weapons across the task group using cooperative sensor netting and over-the-horizon engagement. But it also requires each ship to provide collective self-defence to the group.

In basic terms there are no passengers in the task group and each ship complements each other to give effect to the task group mission. You've heard it before – the sum is greater than the parts. With this in mind the tanker can contribute but the general purpose frigate will still need to be a lynchpin in network management. It's not about the platform, it's about the system it works within.

Contemporary modelling reflects effects based planning methodologies and has been considered already in SEA 5000 work, but it requires constant iteration as technologies change and alternative paths are explored. Future force design seeks the liberal use of innovation and promotes vertical and horizontal integration across the services and with our allies and partners.

The third issue I want to talk about is **ship availability**. This is not just a gripe about contemporary maintenance practise. In my view, ship availability is as much a capability as a smart weapon system. It is an inherent part of effects based planning and should be one of those factors considered before the number of platforms is settled. I raised this at the Submarine Institute of Australia conference in Fremantle in November last year. There I spoke about the effect of deterrence and the role of our submarine force. I opined that deterrence is a concept which is created and not a physical object that is bought. The operational effectiveness of the force is as much about platform availability as it is about weapons systems. I also contend that in large part availability stems from the proper management of sustainment. I believe strongly that the sustainment methodology for the ship (throughout its life and to the point of disposal) should be derived during concept design of the platform.

My interest in this is twofold. Firstly, as the immediate past Commander of the Australian Fleet, I saw first-hand each day the successes and failures of maintenance practise across a variety of platforms and the effect of this on ship availability. It dictated the operational outcomes each day. It caused me to think about asset management as much as the certification of warfighting skills.

Secondly, as the Service Chief, I have a role to ensure Navy has raised, trained and sustained the Fleet to allow the Commander Joint Operations Command to successfully employ forces on operations. I am responsible for all elements that deliver that force: if ships are not available to train crews, then I fail. Equally, if sustainment of an ageing ship demands the lion's share of my available resources (financial, infrastructure or workforce), then other parts of the system will suffer. In simple terms I am wholly accountable for the 2nd and 3rd order effects of the non-availability of platforms and thus clearly have an interest in how these aspects are considered in the force design stage.

There are some useful examples of asset management from other industries that I believe would be valuable models for the ship building industry. Here I offer an example – not to present a solution but to prompt a different way of thinking about the problem (and it is very much context driven).

Consider an airline where in one centre, say in Sydney, we find all of its international flights being monitored in real time by a small team of technical and operational experts. The centre houses training simulators, the logistic management centre and a publications office. When the temperature rises in one of the engines on a London bound aircraft the team instantly analyses the issue, checks it against all other engines across the fleet, contacts the engine manufacturer to see if any technical bulletin is relevant, tests the conditions in the maintenance simulator, solves it, changes technical procedures by e-copy, prepares parts to be available on arrival in London and then alerts the crew – true asset management. In this scenario all this is done to maximise aircraft availability and therefore profit. Profit is measured in revenue per air mile for the company.

In Navy's case profit could be 'deterrence'. But in managing this scenario for a fleet of surface combatants, the benefits would also accrue in the 2nd and 3rd order where reduced workforce

demands (less technical staff required to be trained, stability in posting etc), and better aligned infrastructure needs would result (reduced training infrastructure, common use facilities etc). For Navy, we must appreciate that our ability to upgrade systems over time is just as important in contributing to the 'effect' when selecting a system, than just the system's performance on delivery. Indeed, the basis of future force being fit for purpose, credible and affordable is our ability to evolve our systems rather than simply replacing them.

I have laboured this example only to reiterate my point that Navy requirements must go beyond the traditional platform capability considerations and should include fleet-wide sustainment systems requirements as a matter of course. Equally, the maritime industry could be alive to, and invest more in these methodologies. These measures would likely place industry closer to Navy in a management arrangement that matches operational needs with performance outcomes for industry. I believe this would be no bad thing.

Lastly, I need to talk briefly about affordability. In the future, we can expect the Navy's major surface combatants to be capable of coherent, independent operations, while also being capable of contributing individual ships or task groups to coalition operations at both the regional and global levels. But the fleet needs to be affordable and within our reach. In reconciling this conundrum I would paraphrase Vice Admiral Rowden who in speaking of the USN said:

the current fiscal environment certainly impacts on the design and delivery of the future fleet, but we minimize those impacts by favouring capability over capacity. To my mind, innovation, culture and people resonate as being an integral part of this capability discussion.

In essence, the pressure is on me to make sure that our requirements planning processes are both disciplined and strategic. 'How' we deliver our strategic goals must be determined by 'what' those goals are, not the other way round.

Now, I started this presentation indicating that we have a confluence of timing around major shipbuilding programs and highlighted the aggregated cost. That will not be news to anyone. What I have attempted to do in this presentation is show how Navy requirements will be considered in light of this bow wave of activity and spend. We will need to retain a focus on lethality as the core requirement for any future force. But within current financial constraints I look to reconcile the requirements through effects based planning rather than slavish adherence to a platform replacement model. Lastly, I would like to see Navy, Defence and industry move to a better asset management model to maximise availability. Navy supports a strong and viable shipbuilding industry. With proper consideration of these three issues, I see a balanced and effective future surface combatant force.