

# Chief of Navy Address to ASPI

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QT Hotel, Canberra

## *Integration design requirements for Navy's future systems and ships*

Distinguished Guests, Friends and Partners from industry, fellow Service personnel and Defence colleagues, ladies and gentlemen.

I have been asked to speak briefly about the integration requirements of our future platforms and systems. Navy's perspective of an ADF requirement.

I'm not going to talk about the Naval Shipbuilding Plan. Enough has been said on that. I'm not even going to shamelessly promote my own book *The Navy and the Nation*.

My aim today in the time available is to help you understand how Navy, as part of a Joint Task Group or Combined force, must evolve if we are to build the 2016 Defence White Paper force – the right force that's fit for the right purpose.

By this, I mean how the future Navy fleet—which is actually a complex system—will work systematically as a Joint Force—alongside our Air Force,

Army, Defence and other government entities to achieve, or contribute to, the dominance we require in the future maritime domain.

Two and a-bit years ago I launched *Plan Pelorus*, which is Navy's strategy to prepare for a very complex future strategic environment. *Pelorus* acknowledges the changing character of global affairs, and recognises the need for us to set a heading for a fifth generation Navy and beyond. It recognises the need for a force capable of generating and deploying self-supporting and sustainable maritime and joint task groups.

Like Air Force's Plan Jericho, *Pelorus* demands innovation at all levels of our organisation and recognises the need for technologically advanced naval systems to combine in the modern fleet system and integrate *seamlessly* across the joint and networked environment.

But I hesitate to add. That is not the endstate. It is what you do with this network that is important.

Importantly, *Pelorus* is not focused on individual ships, submarines or airframes. It recognises that our platforms need to operate as a system—indeed as a system of systems.

So why are we transitioning to a task-group oriented Navy, and what will it look like?

While individual ships can meet many of the Australian Government's requirements, a task-group oriented Navy provides Government with options: *significant* and necessary options to meet the full spectrum of threats that may challenge us in the maritime environment and to enable government to implement Australia's strategic policies.

But in reality, the Navy is—as it has always been—task-group oriented.

As recently as 2003, we were deploying two and three-ship task groups to the Middle East as part of Operations SLIPPER, FALCONER and DAMASK. We were linked and a task group mentality dominated our operational and doctrinal culture.

However, we must look forward and now recognise that the nature of 21<sup>st</sup> Century task group operations has changed markedly from what they were a little over a decade ago. This new reality has been mostly brought about because of the changing threats and the change in Navy capabilities and operational concepts.

Importantly, it enables us to embed concepts such as “distributed lethality” into our design which enables interoperability with key Allies.

Distributed lethality is about maximising the adversary's vulnerability, while reducing ours. It's no longer about concentrating effort as a close-knit force. Its now about complicating the adversary's picture by distributing our capability across a much broader medium.

The upshot is that our ability to deliver lethal effect is distributed across the platforms, which operate together in a system. This also means, since one platform can defend another, that our risk is managed and distributed across the task group—ultimately providing greater resilience.

The recent public release of information regarding the USN's development of Naval Integrated Fire Control – Counter Air (NIFC-CA) system gave an insight to what may be possible when a specific system is successfully integrated within a Task Group.

Using existing sensors, networks and combat management systems, together with a new generation of more capable weapons, NIFC-CA rebalances the battlespace between our maritime force and the adversary's aircraft and weapon systems.

While we are not likely to achieve distributed lethality in exactly the same manner as the USN, it serves as an example of what can be achieved—particularly when we consider the commonality of systems and operational objectives we share with the USN and USAF.

But we do need to know how we will fit into ADF joint and allied operational constructs, and to incorporate these requirements into our force design at the drawing board.

If we are to maintain our technological edge and capability superiority—as was well defined in the White Paper—then we need to ensure we are not just thinking and theorising about multi-domain operations.

We need to turn it into reality by enabling our technological edge at the capability planning, operational and doctrinal levels.

The complexity of modern C4ISR systems and maritime weapons means we must acknowledge our interoperability requirements at the drawing board. We must, therefore, acknowledge the interdependent nature of our force from the outset.

The key to military effectiveness will rely as much on our skills at the drawing board as on the battlefield.

This means that Navy's ability to integrate the fleet with Wedgetail, JSF, P-8 Poseidon, Triton, Growler and land based air defence mission systems will be essential to realising the force supremacy potential of these platforms.

We must design our forces to be capable of coherent, independent ADF operations—what I describe as decisive lethality— while also being capable of contributing individual ships, submarines, aircraft or task groups to coalition operations at both the regional and global levels—delivering distributed lethality.

It means that Navy is just as committed to Plans *Jericho* and *Bersheeba* as we are to Plan *Pelorus*. As I have said before — success for me is when there are more Army than Navy embarked in the LHD.

Fortunately, Government—through the White Paper—has given us the chance to redesign the way that we do business in delivering the defence capabilities the nation needs.

We have the opportunity to ensure our future fleet's combat and weapons systems are *designed* to work together as one, and that our people are trained to realise the potential of this fighting system.

The next generation of air, ground and naval forces will be characterised by technologies that enhance our situational awareness and tactical reach.

Each individual platform will have significant enhancements over the capabilities of today. But it will be at the system level that significant force multiplier effects will become apparent.

So what will be possible for the future ADF?

Hopefully by now you can see that we aren't just a Joint force. The aim is to be an integrated force, joined at the hip as we move to deliver what the government has mandated.

It is implied in the phrase "the whole is greater the sum of the parts".

The end result of this collaboration means that the variety of technological developments—when batched together as a warfighting system—brings a substantial advance in fighting power and consequent lethality.

Perhaps this discussion is best described through the example of *cooperative engagement capability*, or CEC.

While we have had significant exposure to systems that expand situational awareness, Navy is looking to exploit the potential for remote cueing of weapons with the introduction of the Cooperative Engagement Capability in the *Hobart* Class.

CEC is about a systemic approach to collective defence and offence. CEC makes us more lethal and more effective.

But achieving the level of systems integration necessary will not be easy. We will need to clearly define the capability requirements for the integrated Force, and ensure we are prepared to exploit and leverage new technologies and systems.

For Navy, the Continuous Ship Building Strategy is the necessary means – the *only means* – by which we will achieve the level of systems integration and maintain the technological edge required for Navy to function as task groups.

And to achieve this successfully, our design philosophy must be *thinking ahead*. It must be *interoperability by design and in design*.

This is particularly the case in the C4I and weapon systems we select and then *evolve*. We now need to be thinking and designing ahead – and we need

to see Navy, Army, Air Force, broader Defence and Industry at the planning table.

A One Defence enterprise will allow us to do this with much more gusto than previously. And my observation of the workings of the Investment Committee is just that. A more contested but equally collegiate commitment to joint force design and development.

**In conclusion, let me say:**

We can become a highly integrated, networked and capable multi-domain force.

Our responsibility now is to ensure that we understand and drive these integration requirements at the drawing board.

This means that we need to understand the importance of Force Design.

We must also develop the necessary information to continually challenge and validate our requirements at every stage of the capability and materiel acquisition process.

And above all, we must do this together. My view is, we are.