



DEFENCE WEEK

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Defence White Paper 2013 wash up

Katherine Ziesing

For all that has been written about the new 2013 Defence White Paper since its release last week, there are some highlights to keep in mind on the capability front:

- 12 more **Growlers** on top of the 24 **Super Hornets** already in service;
- the confirmation of the narrowing of studies into the **Future Submarine** (see below for more) and that the **Collins** will be in service for longer than previously planned;
- the government is "committed to increasing Defence funding towards a target of 2 per cent of GDP. This is a long term objective that will be implemented in an economically responsible manner as and when fiscal circumstances allow.";
- the realisation that given the drawdown of operations, military numbers won't be cut by the organisation but will fall naturally;
- **Sea 1180** is evolving as the government plans to replace the **Armidade class patrol boats** sooner rather than later and focus on an upgrade program to the **Mine Hunters** and **Hydrographic** vessels;
- replacing *HMA Ships Success* and *Sirius* "at the first possible opportunity";
- a confirmation that the government is committed to three operational squadrons of **JSF** and;
- it's a pretty safe bet that if a program is listed in section 3.3 of the White Paper, funding will be found. The unofficial **core capabilities** list perhaps?



The most glaring observation from the above list is the lack of schedule or timing details provided. There will be a new **Defence Industry Policy Statement** this year (comment: in an election year? Really?) and the announcement of a formation of the **Priority Industry Capability Development Fund** aligned with the **PICs** healthchecks.

The document was a little short on financial details with Chapter 7 a mere page and half of vague promises but the **Budget** next week will hopefully give some more guidance in this area. There was no mention of regularly updating the **DCP or DPG** unfortunately.



Range and endurance needed for submarine deterrence

Chris J Skinner

Range and endurance are essential for Australia's submarines to meet the operational requirements dictated by Australia's geography, trade routes and alliance and regional responsibilities.

The **2013 Defence White Paper** makes this clear, and has been further emphasised by Defence Minister Stephen Smith as the reason for suspending further consideration of the **Military-off-the-shelf (MOTS)** options for the **Future Submarine Program (FSP)**.

The same might also be said of the new timeline for the FSP based as it now is on the service life extension program (SLEP) for the current Collins class by a further operational cycle of seven years beyond the current service life of 28 years from commissioning.

The Collins SLEP will require a major project all of its own, and has been estimated at up to \$1 billion for each submarine, but this is a small price to pay for an effective 25% increase in service life. The SLEP will make effective use of the **Submarine Propulsion Energy Support and Integration Facility (SPESIFy)** that was confirmed in the Defence White Paper and will be built up in South Australia to support the Collins SLEP and the FSP.

Most importantly this decision provides breathing space for the FSP to be specified, designed, planned, costed and produced in a thorough, deliberate and comprehensive manner without time pressure, and permitting all the lessons from Collins and from concurrent analyses of evolving technologies to be applied.

The Minister characterised the overall combination of Collins SLEP and FSP development as being over 'years and decades' rather than months and years. The submarine enterprise in Australia must be prepared for this scale of endurance and persistence.



This is just as well since this means that the cost of what will be Australia's largest ever capital project will be spread over a very long period making it affordable in yearly incremental expenditure.

What does require immediate attention is the continuity of the skilled workforce needed for complex naval shipbuilding and systems integration. The 'Future Submarine Industry Skills Plan. A plan for the naval shipbuilding industry', published in concert with the Defence White Paper, does a comprehensive job of analysis of this challenge. It provides a number of options to bring forward various programs to avoid the so-called 'valley of death' workforce reduction after the **Air Warfare Destroyer (AWD)** program. Once lost the skilled workforce can only be rebuilt over several years, with consequent delays in all shipbuilding programs, including the FSP.

The Minister announced that the replacement for ageing replenishment ships *Success* and *Sirius* will be one program to be advanced. Another is the future patrol boat program to replace the hard-working Armidale class.

Against all of this coordinated planning for the next few decades, the most strident objections raised are all about lack of funding visibility for the FSP and other programs. Measured against the scale and duration of the programs foreshadowed in the Defence White Paper, this concern over short term funding is misplaced. What does matter is that the full extent of funding requirements for Collins SLEP and FSP is defined sufficiently and the time-phasing worked out to permit a long-term strategic budgetary perspective – exhibiting long range and endurance like the submarines themselves.

Release of Group Maintenance contract



The Group Maintenance Contract Request for Tender for the Navy's Adelaide Class frigate (FFG) fleet has recently been released.

"This is the second of the grouped-asset, long-term, performance-based contracts for the repair and maintenance of the Navy's major surface ships," Minister for Defence Materiel **Dr Mike Kelly** said.

"The DMO has now received all the technical clearances necessary to release the tender documentation to the three 'short-listed' companies: **BAE Systems, Rolls Royce/KBR** and **Thales Australia**."

The contract will be for an initial five-year period, with the potential for rolling year-on-year contract extensions if contracted quality and service level requirements are met and efficiencies are achieved, up until the life-of-type of the Adelaide Class of ships.



The announcement follows the first Group Maintenance Contract, signed in May last year, for the repair and maintenance of the Navy's eight **ANZAC Class frigates**.

"Already under the first contract with **Naval Ship Management (Australia)**, a joint venture between **Babcock** and **United Group Infrastructure**, Defence is reporting savings on a like-for-like scope of work in the order of 20 per cent," Dr Kelly said.

"We have long recognised that the grouping or 'batching' of ship repair and maintenance events offers the potential for real savings by reducing the administrative burden of per-event tender contracting, providing greater certainty of revenue streams and work effort, and promoting better planning.

"This initiative will provide industry with the predictability and stability it needs to achieve efficiencies, to offer job security to its workforce and to invest in capital infrastructure."

The Group Maintenance Contract model also offers benefits to the Royal Australian Navy through improved forecasting and planning of maintenance localities and duration, and the opportunity to realise lower costs while achieving greater continuity in the repair and maintenance of its ships.

Expanding the ADF's tactical ISR capabilities

Tom Muir

ADF deployments in Afghanistan have highlighted the dangers and the difficulties of dealing with a seemingly fearless, but hidden enemy. Under overall Dutch and then US command, Australian soldiers undertake their mentoring and reconstruction and other activities in an increasingly insecure environment, attested to by the number of ADF personnel killed or wounded on operations.

If the **NCW Roadmap** is to be believed, the first networked battle group should emerge within a year or two, their capabilities being met from projects in the DMO pipeline, with situational awareness accorded very high priority. However networking the land force and the eventual achievement of the so-called **hardened and networked army (HNA)** will not of itself cover all the bases.

To the soldier on the ground situational awareness is a critical capability in the face of uncertainty as to the whereabouts of hostile insurgents, and the next incoming RPG or bullet, or the location of the next IED and how it might be triggered.

Aside from the **C-RAM radar**, warning of incoming missiles, tactical ISR capabilities include forward observers equipped with thermal cameras integrated with laser target markers and weapon locating radars. Outputs are reported over a voice network using the **PRC-117 multi-band single channel CNR**. Remote video receivers acquired under rapid acquisition arrangements, provide necessary eyes-on-the-target capability.

These have been distributed down to ADF company commanders with most video provided by Coalition targeting pods on fixed and rotary wing aircraft and unmanned airborne systems such as **Predator**. These are supplemented through the use of ADF systems such as the RAAF **AP-3C overland surveillance capabilities**, the RAAF **Heron UAS** which has now chalked up 16,000 hours of service.

While Army has some embedded ISR capabilities, such as **Scan Eagle UAS**, but these are for very localised support. It occurs to us that the Australian Army's tactical ISR might be significantly enhanced by adopting some of the capabilities of the



US EMARSS program for a battlefield surveillance capability that would suit neither the AP-3C (wrong mission) nor the **ARH** (wrong platform), but would certainly suit one of the ADF's **King Air 350s** the Army used to operate prior to RAAF control.

EMARSS is a multi-intelligence airborne ISR system dedicated specifically to direct support of the tactical commander. It enhances combat team effectiveness by defining and assessing the environment and providing surveillance, targeting support, and threat warning.

This airborne ISR system provides the capability to detect, locate, classify/identify, and track surface targets in day/night, near-all-weather conditions with a high degree of timeliness and accuracy. The modified King Air 350ER is equipped with electro-optical/infrared sensor, communications-intelligence payload, precision geolocation system, airborne Distributed Common Ground System workstations, data links and satellite communications.

We see an Australianised EMARSS operating as a single platform in support of tactical missions-with operations by Beersheba's multi-role combat brigades in mind-but also through connectivity to the ADF's tactical and national networks, contributing also to Joint ISR at HQJOC.

According to the **Defence White Paper 2013**, when fully implemented towards the end of the decade, **Plan Beersheba** will have delivered a modern, adaptable and modular land combat force. The Australian soldiers that make up this force along with their various platforms will be networked by modern digital communications and battle management systems and be among the best equipped in the world. Perhaps they would also welcome an EMARSS-like airborne ISR capability when in action!



JORN as evolving ISR capability

While the most common application of Jindalee OTHR's capabilities is in the general detection of air and maritime traffic, the radar also provides other services to the ADF.

For example, JORN could establish a surveillance 'bubble' around an **Amphibious Task Group** to detect any potential air or surface threats. JORN can alert the Task Group to a threat well before the Task Group's organic surveillance and tracking systems could detect it.

Additionally, JORN can monitor specific airfields and ports to establish a normal pattern of movement profile that can then be used to identify abnormal activity in a given area. The specifications that JORN was designed and accepted against were established in the early 1990s. Since that time, the Alice Springs radar has been in operational service with the RAAF and has evolved significantly, though continual R&D efforts by **DSTO** and operational requirements derived from service use. This has enabled Defence to identify technical and operational areas in JORN that could readily be enhanced. **Phase 5 of Project JP2025 (JORN)** will introduce these developments to the QLD and WA radars, as well as further progress integration of the three radars into one national OTHR radar network, improve the distribution of surveillance information from the Network to national agencies and undertake further research and development of OTHR technology.



Thales celebrates 25 years of munitions



Thales has celebrated 25 years of US propellant exports under Australian Munitions and US distributor Hodgdon Powder Company has celebrated a highly successful 25-year partnership at an event at the propellant manufacturing facility in Mulwala, NSW.

Australian Munitions' civil propellants have built up a sizeable following in the US sporting shooter market following many years of effective promotion and support by Kansas-based Hodgdon. The clean-burning propellants from Australian Munitions account for a significant share of the US reloading market and are favoured by consumers for their Ballistic Temperature Independence, a characteristic achieved through a unique formulation that delivers performance consistency across a wide range of temperatures.

A significant proportion of Mulwala's 450-strong workforce is engaged in supplying propellant to the US, a valuable contribution to long-term employment in regional NSW.

Kevin Wall, vice president of Thales Australia's Armaments business and head of Australian Munitions, confirmed that 70 per cent of the propellants made at Mulwala are for the commercial market. The propellant side of the business is running at full tilt.

After an initial agreement in 1985, the first shipment of propellant was sent from Mulwala to Hodgdon in 1988. Since then, around seven million kilograms of propellant have been exported to the US market, with exports increasing significantly over the past five years.

"For a quarter of a century we have been building an export business that is an Australian manufacturing success story," Wall said. "Our propellants have attracted widespread recognition among US sporting shooters and, working with Hodgdon, we will continue to introduce new products and grow in this very competitive market." "These excellent powders from Mulwala have been a big hit in the US, and we continue to sell increasing amounts,"

ADM Cyber Security Conference

Date: 12-13 June 2013, Hotel Realm, Canberra

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New White Paper: No plan, no schedule, no money - Johnston



Shadow Defence Minister David Johnston has said that in spite of the impressive photo opportunities on hand at the 2013 Defence White Paper launch, the document itself is less inspiring.

"The **2013 White Paper** has no plan, no schedule, and no money," Senator Johnston said.

"It is nothing less than an exercise in smoke and mirrors that has characterised the Gillard Government's history in Defence since the 2009 White Paper."

"This document, in line with the standing joke in public policy that is the 2009 Defence White Paper, is headed the same way unless there are some firm financial commitments from the Government."

Senator Johnston said just like the 2009 version, out of 150-odd pages there is, once again, just a page and a half of discussion about funding.

"This is important because after 2009 Labor pulled \$25 billion out of the Defence Budget leaving us facing the lowest level of funding, as a percentage of GDP, since 1938. Chapter 7 is titled "Defence Budget and Finances" yet there is not one dollar figure listed, for a document that boldly talks of new ships, new submarines and new aircraft.

"There are no dates or schedules for when these are going to commence. Seriously, what sort of White Paper is it that has absolutely no commitment?"

Senator Johnston said the promise from the Defence Minister to quarantine the next Defence Budget, after slashing it by 10 per cent in the last year alone, was akin to putting a plug in the bath tub after all the water has gone.

"This will do nothing to repair the funding crisis within the Defence Budget, which has become an unsustainable mess under this Defence Minister."

Senator Johnston said the White Paper blatantly ignores the valley of death identified by the Australian defence industry and its piecemeal approach to projects.

"What the Defence Minister has announced will guarantee job losses in the Hunter, South Australia and Victoria from 2015 – this will be Stephen Smith's unfortunate legacy.

"The Coalition understands Defence needs more than photo opportunities and empty rhetoric to properly plan and fund Defence, and that's what a Tony Abbott-led Government will deliver," Senator Johnston said.





ASC invests in skills for the future

ASC has recently welcomed 43 new apprentices to its submarine maintenance and shipbuilding business, making its apprenticeship program one of the largest in South Australia. ASC managing

director and chief executive officer, Steve Ludlam, said the new intake brings **ASC's total number of apprentices to 130.**

"ASC is committed to developing skill and talent in our workforce and our apprentice program represents a significant investment in ASC's future," Ludlam said.

"These apprentices will have the unique opportunity to work on two of the most complex defence programs in Australia – the maintenance of the **Collins Class submarines** and the construction of the **air warfare destroyers.**"

Most of the apprentices are based in South Australia, with four apprentices based at ASC's Western Australia facility. The 43 new apprentices include 18 electrical, 15 fabrication and 10 mechanical apprentices. This year's intake of apprentices is the third intake recruited directly by ASC through its **Apprentice Development Program.**

"Our program enables us to identify the future trade and technological skills we need, especially in areas where there is a shortage of trades expertise," Ludlam said.

Ludlam also announced Chris Brodie, a graduating electrical apprentice, as the winner of **ASC's 2012 Alan Saunders Award** - presented annually to the apprentice who has demonstrated an outstanding level of initiative while applying a high level of safety awareness and a commitment to ASC values.



South Pacific nations agree to new exercise series

Chief of the Defence Force, General David Hurley has met with senior military leaders from the South Pacific for the second iteration of the South

Pacific Defence Chiefs of Defence Force meeting in Nuku'alofa in Tonga. The meeting was held in the margins of the inaugural South Pacific Defence Ministers' Meeting.

General Hurley attended the meetings with NZ Chief of the Defence Force Lieutenant General Rhys Jones; Commander Tonga Defence Services Brigadier General Tau'aika Uta'atu; Commander PNG Defence Force Brigadier General Francis Agwi; Commander French Armed Forces in New Caledonia Brigadier General Jean-Francois Parlanti; and Chilean Director Strategic Plans and Operations Air Vice Marshal Rolando Mercado.

Representatives discussed a range of current and future security challenges facing the region and examined avenues where respective defence forces can work



cooperatively to ensure the security of the Pacific.

They also discussed regional maritime security challenges, noting Australia's continued contribution to maritime security, including through the **Pacific Patrol Boat Program**.

A key outcome of the meeting was the announcement that the Australian Defence Force and other South Pacific militaries will establish a new cooperative framework to coordinate regional exercises. The framework will be known as **POVAI ENDEAVOUR**.

The POVAI ENDEAVOUR framework aims to develop and maintain regional skills in humanitarian assistance and disaster relief, amphibious operations, and peacekeeping and stabilisation. General Hurley said the six nations had a common interest in working together to promote security and stability in the Pacific.

"The exercise series will compliment our existing education and joint training programs," General Hurley said.



Women in defence forces urged to participate Telstra awards

The Commanding Officer of the Multi National Base Command at Tarin Kowt in Afghanistan is urging women in the Australian Defence Forces to celebrate their

achievements by entering the 2013 Telstra Business Women's Awards.

Lee de Winton, the 2012 Telstra NSW Community & Government Award winner and former Commanding Officer of Number 381 Expeditionary Combat Support Squadron, at the RAAF's Williamstown base, said the personal benefits from the awards will be "forever enduring."

"I have encouraged many ADF women to enter since my experience with the Telstra Business Women's Awards. I found the whole process personally and professionally rewarding. It allowed me to reflect on my work and experiences, then relay this to others. Defence has many talented women that would excel in the TBWAs. They only have to give it a go.

"I regard my success as one of the highlights of my career. I have taken great pride in the fact that my work in the RAAF is recognised for its importance alongside so many other talented and successful women. Completion of the in-depth submission allowed me to review my accomplishments with pride and satisfaction, that alone was reward in itself," she said.

Nominations for the awards can be made at www.telstrabusinesswomensawards.com. Entries are now open and can be submitted until Tuesday 25 June.

Other Defence Forces leaders whose achievements have been celebrated in the Awards recently include in 2011 winners from the ACT and NT respectively, **Dr Robyn Walker** and **Lieutenant Kylie Beumer** both (RAN), and two ACT awards finalists from the RAN **Jennifer Heymans** and **Allison Norris**.





ADM Online: Weekly Summary

A summary of the latest news and views in the defence industry, locally and overseas. Check out our webpage for daily news updates on the *ADM* home page and make sure you bookmark/RSS this for a regular visit.

This week, Prime Minister Julia Gillard and Defence Minister Stephen Smith released the **2013 Defence White Paper**.

Marand demonstrated their work on the F-35 Lightning II Joint Strike Fighter (JSF) component manufacturing to Federal Minister for Defence Materiel, Dr Mike Kelly MP, during a visit to its production facility in Moorabbin.

The opening of the first of two **funding** rounds for the 2013-14 financial year was announced.

And, **John Holland** was awarded the contract to deliver the \$112m Robertson Barracks Defence Logistics Transformation Program (DLTP), Works Package 4 for the Department of Defence in the Northern Territory.

International

US concerned over 'space threats'

Further to the above articles on space, US Defense officials have embarked on a systematic review of threats to US military spacecraft while at the same time investing in capabilities to "deny" adversaries the use space, according to Deputy Defense Secretary Ashton Carter.

"We have established for the first time an integrated effort to bring together our space programs, all of them, with those folks who understand best the anti-satellite threat, and also how we can operate, if we have to, without spacecraft," Carter told reporters during a recent press conference at the National Press Club in Washington.

Calling the review "long overdue," Carter said officials would study potential vulnerabilities constellation by constellation. "That is a new effort and one that we are devoting resources to," Carter said. *-Inside Defense*



More on that GCV stoush

Tom Muir

Defence Week readers will recall our previous reports on criticism of the US Army's proposed Ground Combat Vehicle Project when first the Congressional Budget Office (CBO) reported that buying off-the-shelf vehicles from foreign allies, upgrading Bradley infantry carriers and killing the GCV altogether was less risky and more affordable than the Army's current path. ▶▶▶

The authors of the report also write that a new, notional GCV would not offer a quantum leap in soldier protection. In fact, all three alternatives to a new GCV - the Israeli-made **Namer**, the German-made **Puma**, and an upgraded Bradley Infantry Fighting Vehicle - offered the same, if not more soldier protection, according to the report. Naturally, officials from **BAE Systems** and **General Dynamics Land Systems**, the two competing contractors involved in developing the GCV, came out swinging and savaged the report, labelling the CBO's findings invalid as they were based on outdated information.

Now the US Army is pushing back against the CBO report saying the CBO based its analysis on previously released programmatic documentation that did not reflect the current status of the program. While the CBO report questioned the Army's overall need for a GCV to replace the Bradley Infantry Fighting Vehicle, the most potentially damaging findings asserted that the service would be better served by purchasing the German-made Puma IFV or the Israeli-made Namer. The report also suggested that upgraded Bradleys would be suitable alternatives.

The service says it has reviewed the same alternative vehicles and, using its up-to-date requirements, found that none fit the bill and the Army expects to provide this analysis upon approval. - *Inside Defense*

Delivery of 1st NH90 TTH for Italian Army



AgustaWestland, a Finmeccanica company, has delivered the first NH90 TTH in FOC (Final Operational Capability) configuration to the Italian Army.

This delivery brings to 21 the number of NH90 TTHs delivered to the Italian Army from an order for 60.

This latest delivery marks another major milestone for the Italian Army NH90 program. Five aircraft currently deployed in Afghanistan have now flown 470 flight hours with outstanding performance, reliability and mission effectiveness in the extreme and demanding environmental, weather and operational conditions there.

The Italian Army also operates the NH90 program fleet leader which has now flown approximately 900 flight hours.



Movement at the station

ViaSat has named Ken Peterman as general manager of its Government Systems segment. Before joining ViaSat, Peterman was president and CEO of SpyGlass Group, a provider of executive strategic advisory services to the defence, aerospace, and associated communities.

He has over 30 years of experience in systems engineering, strategic planning, portfolio management, and business leadership in the defence and aerospace market. Prior to founding the SpyGlass Group in July 2012, he was president of ITT Communications and Force Protection Systems where his tenure began in 2007 and included the spin-off of the defence business out of ITT Corporation into Exelis in 2011. Before joining ITT, he was vice president and general manager of Rockwell Collins Government System's Integrated C3 Systems business and, prior to that Rockwell Collins Displays and Awareness Systems business.

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FORTHCOMING EVENTS

For a full list of defence and industry events, head to **ADM's** online events page at www.australiandefence.com.au

Land Environment Working Group

DATE: 21 June 2013, National Convention Centre, Canberra
ENQUIRIES: Erin Frazier: erin.frazier@defence.gov.au, Ph: 6265 4820
Web: www.govdex.gov.au

This meeting is an opportunity for Industry representatives to discuss projects in the DCP with project managers. The way ahead for Land Development Branch in Capability Development Group will also be discussed. Interested participants can register and RSVP for the event through the Govdex website. Access to this website can be granted by sending an email to Erin Frazier..

2013 Hunter Defence Conference

DATE: 22-23 May 2013, Fort Scratchley
ENQUIRIES: **Web:** www.sticktickets.com.au/10869

The 2013 Hunter Defence Conference, supported by NSW Trade & Investment, HunterNet and Hunter Business Chamber, is an excellent opportunity for SMEs to hear about current Defence opportunities, diversification, innovation and skilling in supporting Defence.

ADM Cyber Security Conference

DATE: 12-13 June, 2013, Hotel Realm, Canberra
ENQUIRIES: ADM Events - Jamie Burrage, Ph: 02 9080 4321;
Email: Jamie.burrage@informa.com.au **Web:** www.admevents.com.au

ADM's 3rd Cyber Security Summit will see stakeholders from Australia's Defence and National Security agencies address the current and emerging cyber threats to Australia's security. More details to be released closer to the date.

DSEI

DATE: 10-13 September, 2013, ExCel, London
ENQUIRIES: **Web:** www.dsei.co.uk

DSEI is the largest fully integrated defence and security show in the world, featuring Air, Naval, Land and Security show content. Based in ExCeL, London every two years, the event provides unrivalled access to key markets across the globe.

SimTecT

DATE: 16 Sep - 19 Sep, 2013, Brisbane Convention and Exhibition Centre, Queensland
ENQUIRIES: **Web:** www.simtect.com.au

SimTecT is the annual Simulation Technology and Training Conference held by Simulation Australia. Since its inception in 1996, SimTecT has grown to become Australasia's premier simulation conference for industry, government and academia.