



DEFENCE WEEK

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Contingency planning underway for Mulwala

Tom Muir

As previously reported in this column and in *ADM*, Defence has confirmed that the three shortlisted consortia – led by Thales Australia, Alliant Techsystems and BAE Systems Australia – were informed earlier this year that the Request for Tender for the Domestic Munitions Manufacturing Arrangements Project (DMMA) had been suspended.

The DMMA will establish successor arrangements to the existing contact which expires in June 2015 – the original timetable called for a decision on a successful tender to be made late this year.

A Defence spokesperson told the *Yarrawonga Chronicle* the suspension was pending consideration of the DMMA project by Government. "As part of due diligence required to close out the current arrangements, Thales Australia Limited and the Department of Defence are working collaboratively to address a number of aspects not clearly defined in the arrangements," the spokesperson said, denying that there was any kind of dispute between the Department of Defence and Thales Australia.

Australian Munitions, which is part of Thales Australia Limited, issued a statement concerning the DMMA delay.

"We understand the need for the DMO (Defence Materiel Organisation) to suspend the DMMA program based on normal due diligence, as the situation since launching DMMA in November 2010



has changed,” the company said.

“A key reason for the suspension is the delay to the final delivery of the nearly \$400 million modernisation of Mulwala under the **Mulwala Redevelopment Project (MRP)**.

“We are ready to assist the DMO and its contractors – Lend Lease and ATK – to deliver their contracted outputs, which are already more than three years behind the original schedule.”

According to Thales, the company was working closely with DMO on contingency planning for the continued safe operation of the Mulwala and Benalla facilities once the current contracts expire in June 2015.

“We want to reduce the uncertainty for our employees, customers and suppliers, so we are doing everything we can to quickly reach an agreement with the DMO on how the two sites will continue to be safely run from July next year.

“We are focused on the future and continuing to invest in the business both through research and development, and by the introduction of new product lines, to drive higher export and domestic sales.”

Defence has indicated that it was developing contingency plans to enable ongoing operation of the facilities beyond 2015. - *TMI/Yarrowonga Chronicle*



Destroyer-size hulls in Future Frigate mix

Tom Muir

Reports indicate that Defence has prepared a submission to build a \$40 billion super-frigate fleet to replace the Navy's FFH Anzac and FFG Adelaide class ships with a larger class of vessel using the same 6500t hull as the Air Warfare Destroyer (AWD).

The AWD platform is based on the **Navantia-designed F100 frigate**, which is in service with the Spanish Navy. The baseline design has been slightly modified for Australian use, including the displacement of the AWD being increased to 7000t, and the hangar modified to accommodate a range of helicopters.

The range now includes powerful diesel engines combined with improved fuel tank arrangements. The design also incorporates a bow thruster to provide better manoeuvrability.

The news caught some observers by surprise including those who felt that the major ASW role of the **Sea 5000 Future Frigate** could be better served by smaller, less noisy vessels.

Defence's argument is that using the destroyer hull is less risky given that three are already being built; however even these have their problems – an ANAO of 17/12/2013



report revealed that the AWD project was \$106m over its \$618m budget for 2012-13 - a wastage of more than \$2m a week due to poor productivity in inefficient shipyards and excess costs for labour and materials.

The construction of the AWDs involved 90 separate steel blocks being built at four shipyards: **ASC** in Adelaide, **Forgacs** in Newcastle, **BAE** in Melbourne and **Navantia** in Spain. ASC was critical of Navantia for providing Spanish design drawings for the destroyer that were not clear enough for Australian shipyard workers to follow.

Other than the F100, potential contenders for the design of the Australian future frigate include the **UK's BAE Systems' Type 26 Global Combat Ship** design, the Navantia 5000-tonne F2M2 trimaran guided-missile frigate (FFG) design, which has a length of 140 metres, beamwidth of 30 metres, draught of five metres, and a displacement of 4000 metric tonnes.

French shipbuilder **DCNS** has proposed its **ADVANSEA (ADVanced All-electric Networked ship for SEA dominance)** as a concept aimed at meeting the needs navies are likely to face in the 2025s. In terms of naval missions, the aim is to design a warship for use in regional conflicts with a risk of intense combat. DCNS says the first demonstrators may be available towards 2018.

Another design of possible interest is the **Franco/Italian Frégate Multi Mission** or **FREMM program**. For French shipbuilder DCNS, the FREMM Program comprises twelve units, eleven for the French Navy and one for the Royal Moroccan Navy. Italian shipbuilder **Orizzonte Sistemi Navali** will deliver 10 frigates for the Italian navy. First of class FREMM frigates have now been commissioned into both navies.



But Anzacs far from finished

Over the next two years HMA Ships Anzac, Warramunga, Parramatta and Toowoomba will either enter or exit the Anti-Ship Missile Defence (ASMD) upgrade and refit.

The value of the ASMD upgrade was borne out last year by HMAS Perth with successful ESSM missile engagements against multiple sea skimming targets including, for the first time for the RAN, an engagement by an ESSM against

one of the world's most advanced supersonic targets. The firings took place at the Pacific Missile Range Facility in Hawaii.

The Anzac Class Block Upgrade Program is scheduled to commence in 2016. This incorporates the **Maritime Communications Modernisation project (Sea 1442 Phase 4)** and the proposed **Anzac Air Search Radar replacement** under **Sea 1448 Phase 2B**.





Defence seeks Tactical Data System info

Tom Muir

Defence has released an RFI seeking information from industry on Tactical Data Systems (TDS) that will eventually be acquired under Land 2072 Phase 3 (formerly JP2072/3).

The TDS is intended to provide a high capacity mobile data system to supplement capacity for key headquarters vehicles, supporting the operation of multiple Battle Management Systems (BMS), voice and video service operating in both line-of-sight (LOS) and Beyond LOS modes. Among others, TDS functionality requirements include:

- provision of integrated data communication and trunking between platoons to brigade;
- support BMS command and control application (Torch) with a future intent to support other BMS applications such as Fires, Air Defence (AD) and Armed Reconnaissance Helicopter (ARH);
- a wideband LOS radio link with single and multiple hops;
- supports the passage of data for the provision of a 'near real time' situational awareness display;
- ability to interface with the BTN, Combat Net Radios (CNR) and MCTDRS (EPLRS) through the BMS Middleware for data services;
- interface with Range Extension for extended range communications, and must interface with Local Service Equipment (LSE) to enable fitting to vehicle and Command Post (CP) nodes.

The TDS is to function from mobile platforms, and must have the ability to support continuous communications despite a dynamic network structure. Nodes must be able to frequently enter and leave the network or lose RF LOS without significant administrator/operator intervention to maintain connectivity. - *TM/Defence*

OUT NOW! ADM May 2014

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- DSTO MAV research takes flight
- Offensive cyber warfare
- ACSC to become one stop shop
- The emergence of 'cyber labs'
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Space agreement a milestone in international cooperation

Defence cooperation between Australia, Canada, the UK, and US has been further enhanced by the establishment of a formal partnership on combined space operations.

Minister for Defence **David Johnston** said the partnership marked a significant milestone in the context of space cooperation and underlined the close defence cooperation Australia enjoys with our partners in the UK, Canada and US.

“Assured access to space is increasingly important, not only for national security purposes, but also for many technologies that underpin modern economies and daily life, including stock exchange and credit card transactions, weather and climate monitoring, natural disaster warning, communications and navigation,” Senator Johnston said.

“At the same time, the increasing congestion in space from over 50 years of space activities and a significant rise in space debris present a rising threat to our assured access to space.”

He said the combined space operations partnership among our armed forces enabled sharing of space-related information and resources to synchronise space operations among the partners and to provide enhanced awareness of the space environment.

In particular, the partnership will allow for more effective and coordinated use of space capabilities through cooperation on activities such as identifying and understanding what objects are in space, ensuring uninterrupted satellite operations, and avoiding satellite collisions. Such activities will make a significant contribution towards a safer and more secure space environment while also enhancing mutual security.

Space is also crucial to our respective national securities with space-based capabilities providing our armed forces with the ability to operate and communicate around the globe and unparalleled understanding of the space environment.

The partnership demonstrates the continued dedication and strong commitment of the partners to encouraging the responsible and peaceful use of space for all.

REGISTER NOW!

ADM Cyber Security Summit

19-20 June 2014 | Canberra

This year's speaker faculty will feature presentations from renowned experts from government, industry institutions/agencies, academia and leading vendors. Some of the key topics to be addressed include:

- Cyber warfare
- Mitigating and preventing cyber offensives
- Protecting critical cyber infrastructure
- Intelligence and surveillance
- Cyber terrorism
- International Policy



Another OPV for New Zealand?



Tom Muir

The New Zealand Defence Force (NZDF) is looking into the possibility of acquiring a third offshore patrol vessel (OPV) for the Royal New Zealand Navy (RNZN), which currently operates two 85 m Otago-class OPVs, HMNZS *Otago* and HMNZS *Wellington*, which were commissioned in February and May 2010, respectively.

The vessels have a range of 6000n miles and can carry a core crew of 35 and a flight crew of 10 for its helicopters. Both ships are deployed in long-range patrol missions around New Zealand, the Pacific, and Southern Oceans.

“We learned that offshore patrol vessels cost a lot less to run than frigates,” Lieutenant Commander **Owen Gee**, NZDF said on 14 May at the **MilSatCom Asia Pacific 2014 conference** in Singapore.

“If acquired, we plan to utilise it in a constabulary role and this releases our frigates for other operations.”

He cited fiscal challenges as a factor in the navy’s turn towards increasing the number of OPVs in its fleet. The NZDF needs to reconcile increasing operational demands with the government’s target of saving between NZD350 million (USD302 million) to NZD450 million in armed forces spending per annum by 2014/2015.

Lt Cdr Gee also revealed that the NZDF plans to equip all three OPVs with satellite communication systems. “We have an Exclusive Economic Zone 15 times the size of the New Zealand land mass. There is no way we can rely on terrestrial communications. We will have to equip our vessels with satellite communications,” he said. However no timeline of the possible OPV acquisition has been provided.

An earlier reported suggested that the RNZN was considering the possibility of upgrading its Otago-class OPVs with the capability to launch and recover unmanned aerial vehicles, although no concrete plans have yet been confirmed. - TM/IHS Janes





HMAS Darwin nets \$132 million of heroin in Indian Ocean

HMAS *Darwin* operating in the Indian Ocean in international waters, 40 nautical miles off the east coast of Somalia, intercepted a suspected drug smuggling dhow on May 13, 2014, seizing 449 kilograms of heroin with an estimated street value of \$132 million dollars.

Darwin's Commanding Officer, Commander **Terry Morrison**, said the

seizure removed a major source of funding for terrorist and criminal networks which included Al Qaeda, the Taliban and Al-Shabaab.

Darwin's boarding party discovered the hidden drugs contained in 20 bags each weighing between 20 to 25 kilograms.

As part of **Operation SLIPPER**, HMAS *Darwin* is deployed on patrol under tasking to the Combined Maritime Forces (CMF) and the UK led Combined Task Force (CTF) 150.



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, **Insitu Pacific** conducted a successful demonstration for the New South Wales Rural Fire Service using the ScanEagle unmanned aircraft system.

CAE announced that the UK Royal Air Force's two C-130J Dynamic Mission Simulators are ready-for-training following a major visual system upgrade.

And, Airbus Group delivered to the US Army the service's 300th **UH-72A Lakota helicopter**.



International

Lightweight ramp for JHSV may expand missions

Tom Muir

The US Office of Naval Research earlier this month successfully demonstrated a new lightweight ramp intended for use on the Navy's Joint High Speed Vessel (JHSV) that could potentially expand the mission sets of the vessel to include ship-to-ship and ship-to-shore transport.

The new ramp would improve on the vessel's existing ramp by enabling the loading and unloading of personnel and combat vehicles between a JHSV and another ship in rougher maritime conditions than are currently possible, according to a Navy statement released May 9.

The ramp can also be used to connect JHSV to a pier or a mobile landing platform.

The May 1 demonstration included a tank and Heavy Expanded Mobility Tactical Truck crossing in simulated high-wave conditions.

The current JHSV ramp is only good for "sea state one" - calm sea conditions, **James Strook**, director of the Marine Corps' seabasing integration division, told *ITN* in an April 23 interview at Marine Corps Base Quantico, VA. The new prototype ramp that ONR is testing is good for "sea state three - that's real heavy and beefy," he added.

The prototype will likely not be installed on an actual JHSV, Strook said, but will serve as the engineering basis for the Navy to design a future ramp for the fleet.

ONR Chief Rear Admiral **Matthew Klunder** emphasized the flexibility of the **Austal** designed and Austal-USA built JHSV during a Senate Armed Services Committee hearing last week.

"This is a very affordable, high-speed vessel that has lots of modular space in it. Why do I emphasise that? Because that vessel can now be used for multiple, multiple missions," Klunder said on May 14. "We could use it to connect Marines to go inland. We could use it potentially to put other kinds of systems on there to meet new threats as they come about."

The new ramp, Klunder said, will enable the JHSV to reach its multi-mission potential. Navy officials will receive the results of the analysis on the ramp this summer, according to the statement. This information will enable officials to decide whether to conduct a review of existing ramps to see if they could be made stronger, or to pursue a completely new ramp for the JHSV fleet. - *TM/Lara Seligman/Inside Defense*

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ADM Northern Australia Defence Summit

15-16 October 2014 | Darwin

Bringing together key figures from the NT Government, senior military figures, and senior industry representatives, this conference is all about the continuing development and support of Defence in the Top End.





Multi-directional airborne hyperspectral sensor

Defense and information systems specialist Exelis has announced the successful test of a new airborne long-wave infrared (LWIR), hyperspectral (HSI) sensor that can be aimed in multiple directions and is capable

of detecting explosives, gases and dangerous chemicals.

Hyperspectral imaging is an extremely helpful tool for both commercial and military applications, but current equipment has its limitations. One of the big challenges is that the equipment needs to be cooled many degrees below freezing to work with any degree of accuracy across a broad range of the electromagnetic spectrum.

“We were able to overcome significant cooling requirements to ensure the sensor could collect usable data,” **Dr Minda Suchan**, director of material identification at Exelis said.

“This opens up new uses for LWIR HSI systems, such as looking into denied areas, from high-altitude aircraft. The LWIR HSI sensor development, along with real-time analytical processing, solves customer-identified hard problems and is a key part of the company’s strategic focus on intelligence, surveillance, reconnaissance and analytics.”

Conventional HSI sensors need to be mounted on aircraft, so they can fly directly over the target to get a proper image. According to Exelis, the new system can operate at multiple angles, so it can be mounted on gimbals and fly to one side of the target from high up to near the horizon, which is a clear asset for surveillance and watching a target that can shoot back.

The system’s onboard computers can fit in any medium to large manned or unmanned aircraft, so the integrated sensor and processing system can provide real-time information about the composition of gases and solids. This is especially important for detecting gases leaked by improvised explosives or from gas lines or containers, as well as any number of other applications in the military, and in the nuclear and chemical industries.

Exelis says that the test of its new sensor system involved placing various substances and minerals in the vicinity of Rochester, New York, with data being collected for later processing on the ground. In a real situation, however, the data would be processed in real time as the aircraft flew over the area. The company says that further tests are planned.- *Exelis*



Improved capability through modular armour packs

Engineering technology consultancy Frazer-Nash has won a research contract with the UK's Centre for Defence Enterprise (CDE), part of the Defence Science and Technology Laboratory, following a submission to the themed competition on protecting military vehicles.

Frazer-Nash secured the contract with its armour-attachment system which will enable the rapid fixing and removal of armour modules onto any military vehicle. It will be highly configurable to apply different levels of protection to a wide range of different service vehicles to meet continually changing threats in theatre.

The modular armour system concept will demonstrate the potential to deliver cost savings while increasing capability for the armed forces. The concept is based on application and maintenance – armour packs will be much easier to attach and detach than current protection systems. This will increase the flexibility and speed with which service personnel can react to different threat levels in theatre.

The Frazer-Nash system will also focus on commonality across the fleet. It will be modular by design, many of the same packs will be applicable for use on multiple vehicles, significantly reducing the logistics burden and through life costs.

Tony Marsh, defence land business manager at Frazer-Nash, said: "We are delighted to have won this work through the CDE as it is recognition of the innovative nature in the way we respond to these challenges. Our concept has the potential to deliver a cost-effective capability advantage for UK armed forces."

Frazer-Nash employs more than 500 people in the UK and Australia. Its key markets are defence, nuclear, power and energy, civil aerospace, rail, marine, petrochemical and industrial.

GDLS Canada to upgrade US Marines' LAVs

Tom Muir

The US Army has awarded a USD52.3 million contract modification to General Dynamics Land Systems-Canada to develop upgrades in support of the USMC Light Armored Vehicle (LAV) Mobility and Obsolescence (MOB) Upgrade and Integration Program.

The contract was signed through the Canadian Commercial Corporation, a Crown Agency of the Canadian Government. Under this contract, General Dynamics will develop a fully integrated replacement power pack, suspension, driveline, steering system and upgraded electrical components. The work scope includes the development and delivery of engineering and logistics data, as well as test support and delivery of prototypes. Work under this contract will continue until May 2017.

It is understood that this mobility and protection upgrade is similar to that proposed by GDLS-A for the ADF's ASLAVs in 2012 and 2013. - *GDLS-C*



Third Astute-class sub launched

BAE Systems has launched *Artful*, the latest state-of-the-art submarine into the dock at its site in Barrow-in-Furness, Cumbria.

The 97m long, 7,400 tonne nuclear-powered attack submarine - officially named at a ceremony in September last year - began edging out of BAE Systems' giant construction hall on

Friday 16 May and was carefully lowered into the water on Saturday 17 May.

Artful, the third of seven highly complex Astute class submarines being designed and built for the UK Royal Navy, will now begin the next phase of its test and commissioning process ahead of sea trials next year.

UK's new maritime security strategy

The UK government has published for the first time a cross-department maritime security strategy, designed to advance and protect national interests at home and overseas in the maritime environment.

Releasing the **UK National Strategy for Maritime Security (NSMS)** on 13 May, Foreign Secretary **William Hague**, Transport Secretary **Patrick McLoughlin**, Home Secretary **Theresa May**, and Defence Secretary **Philip Hammond** said that the UK depend on the sea for its prosperity and security.

The strategy details how the UK will organise and use its current national capabilities to identify, assess, and address maritime security issues at home and overseas, and how the UK intends to improve its ability to do so in the future through the most efficient use of available resource".

The strategy was designed around an ambitious but pragmatic approach to the opportunities the UK could exploit - so as well as having the capabilities to respond to security incidents, the UK will also undertake overseas capacity building, deterrence, and diplomacy to disrupt potential future threats before they appear.

Speaking at the public release of the NSMS at the Chamber of Shipping in London on 13 May, Shipping Minister Stephen Hammond said: "While we need to maintain security, and that need is permanent, the nature of the threats we face changes."

Alongside the ability to protect UK trade, he outlined a number of potential risk areas (including for cyber-attack), such as: cargo and passenger ships; infrastructure at sea and ashore, including offshore assets and ports; and the transportation of other risks directly into the UK, for example through various forms of trafficking. - *TM/HS Janes*

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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

ADM Cyber Security Summit

DATE: 19 - 20 June, 2014, Canberra

ENQUIRIES: ADM Events - Adam Wiltshire, Ph: 02 9080 4342;

Email: adam.wiltshire@informa.com.au

Web: www.admevents.com.au

Over the last 2 years, the summit has gathered 150+ senior Defence, National Security and Industry executives to address current and emerging cyber threats to Australia's security.



Defence and Industry (D+I) conference 2014

DATE: 29 - 30 July, 2014, Adelaide

ENQUIRIES: Defence Materiel Organisation

Email: DMO.Communication@defence.gov.au

The Conference is an opportunity for Industry to discuss with Defence officials acquisition and sustainment investment opportunities.



Old Crows conference

DATE: 18-19 August, 2014, Adelaide

ENQUIRIES: Web: <http://www.oldcrows.org.au/>

The Australian Chapter of the AOC will host its 2014 biennial AOC Australasia Convention. The conference will focus on the changing face of warfare in the 21st century.

SimTect 2014

DATE: 25 August, 2014, Adelaide

ENQUIRIES: Web: <http://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.



Northern Australia Defence Summit

DATE: 15-16 October 2014, Darwin Convention Centre

ENQUIRIES: ADM Events - Adam Wiltshire, Ph: 02 9080 4342;

Email: adam.wiltshire@informa.com.au

Web: www.admevents.com.au

Bringing together key figures from the NT Government, senior military figures, and senior industry representatives, this conference is all about the continuing development and support of Defence in the Top End. Hear about the current and new initiatives offered by Government and what industry can bring to support Defence's strategic objectives

ADM will
be in
attendance

New Zealand Defence Industry Association Forum (NZDIA Forum)

DATE: 21-22 October 2014, New Zealand

In association with New Zealand Industry, Ministry of Defence and NZ Defence Forces. More details to come.

Land Forces 2014

DATE: 22 - 25 September, 2014, Brisbane

The Land Forces 2014 conference is a major event for users, providers, academics, designers and manufacturers to meet, present, share and exchange new and visionary ideas on Land Systems. More details to come.

ADM will
be in
attendance

