



# DEFENCE WEEK

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*A computer generated image of the Air Warfare Destroyer.*

## DMO lacks capacity to properly oversee AWD

Professional Engineers Australia has called for the Minister for Defence to urgently review and invest in Commonwealth engineering capacity on the Australian Warfare Destroyer (AWD) and the Future Submarine (SEA1000) projects, after a damning Australian National Audit Office (ANAO) report found systemic failures have already resulted in a \$300 million cost blowout on the \$8.455 billion AWD project.

PEA CEO **Chris Walton** said the ANAO report identified a range of problems that stemmed from the failure of the Government to invest in its own professional engineering capacity in the **Defence Material Organisation (DMO)**. He said the ANAO findings showed that the DMO, in its role as the government organisation charged with purchasing the AWD project, did not have sufficient capacity to oversee the project and as a result, the government had been rendered an "uninformed purchaser".

"Without enough professional engineers, DMO can't properly oversee AWD and SEA1000. In the end this means the Commonwealth pays a lot more, has to endure delays and wastes taxpayers' money in the process," Walton said. He explained that currently only 95 of the 1900-plus AWD workforce were Commonwealth employees.

"It is difficult to imagine how five per cent of the workforce can effectively safeguard the Commonwealth's interests on such a complex project. These cost blowouts show how expensive it can be



when governments fall short on investing in engineering capacity, but there are also increased risks, more waste, more delays and failures.

“The Minister needs to lift the government’s recruitment freeze and increase investment in engineering capacity so DMO can hire the engineers it needs to get the AWD and SEA1000 projects on track and avoid future cost blowouts or project delays.

“These projects need more engineers who know how to properly scope, design and deliver the ships and submarines that will serve our country for years to come”. - PEA

Post-script: Defence analyst **Andrew Davies**, from the **Australian Strategic Policy Institute**, is reported as saying that our poor performance - “a history of projects that underperform in terms of schedule and overperform in terms of cost” - would hurt South Australia. It’s a problem for the industry’s credibility, particularly looking to future major shipbuilding programs,” Davies said. - SA Media

## Taking wing: Time to decide on the F-35 Joint Strike Fighter



**Andrew Davies and Harry White**

**In the near future, the Australian Government will consider the second-pass approval of the acquisition of the bulk of the proposed F-35 Joint Strike Fighter (JSF) fleet.**

If approved, the acquisition will cement the JSF as the major part of Australia’s air combat capability for decades to come. And it’s not just an important security decision; it’ll have a significant impact on the defence budget as well. This tranche will have a sticker price around \$8–10 billion, and through-life costs will be well above that.

The ability to wield airpower effectively has been firmly established as a prerequisite for success at all levels of war fighting, especially the high-intensity end. And the capability to protect our air and maritime approaches is a core task for the ADF. The F-35 has been a part of that plan for over a decade and, after several false starts, we’re now reaching the main decision point.

This ASPI Strategic Insight is available for downloading in PDF form from [www.aspi.org.au](http://www.aspi.org.au)





## The 2014 rotation of US Marines through northern Australia commences

The 2014 rotation of approximately 1150 US Marines will arrive in northern Australia in coming days with equipment, vehicles and helicopters.

The Marines will undertake a variety of training activities at existing Defence facilities in the course of their rotation.

A continuing priority for the Marines will be to further develop a close and enduring relationship with the local Darwin community which provides mutual benefit.

The deployment follows rotations of Marines in 2012 and 2013. The deployments were agreed during **President Obama's** visit in November 2011.

The annual deployment provides tangible benefits for Australia by increasing the number, variety and complexity of training opportunities available to the Australian Defence Force.

It further develops Australian Defence Force interoperability and provides opportunities for engagement with regional partners including in response to humanitarian assistance and disaster relief.

### 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



## Armidale replacements from NSW?



**Tom Muir**

**According to the *Newcastle Herald*, the Australian Manufacturing Workers Union said this week that Newcastle NSW could help build new steel-hulled patrol boats to replace a reportedly troubled naval fleet of aluminium vessels, said this week.**

The *Herald* said the navy was reportedly pushing the federal government to replace its aluminium-hulled Armidale-class patrol boats, which have cracked hulls. It acknowledged some “operational limitations” with the fleet, but said this would have little effect on its border protection missions.

“Defence is considering the replacement to the Armidale class as highlighted in the 2013 Defence white paper,” a spokesperson said. “Any proposal put to Government will include options, rather than a definitive solution. These options are likely to include both steel and aluminium based hull designs.”

The union’s assistant secretary, **Glenn Thompson**, said any new patrol boats must be Australian made. “Without this commitment, thousands of shipbuilding jobs could be lost,” Mr Thompson said. **Forgacs** union delegate **Ben Horan** said the company’s workers were worried about not having enough work to keep the company’s Tomago yard going.

### **Background**

Some 12 years ago, in September 2001, Forgacs Dockyard approached Defence to build a model of their contender for the **Fremantle Class Patrol Boat Replacement** for the RAN. In October that year a contract was signed for a one-off model to be built to the design put forward by Forgacs and **Fincantieri** of Italy, who had built a similar design for the Italian Coast Guard.

The model was altered just prior to construction to include cut-a-ways in the hull and superstructure to show Officers’ and Sailors’ accommodation, which was a major feature of the design. It was a major step forward in accommodation standards for the crew.

The model was used as part of Forgacs’ bid for the contract and was delivered to Canberra for RAN approval in November 2001. Unfortunately the design was unsuccessful and the contract for the 14 new boats was awarded to **Austal Shipbuilding** in Western Australia.



## ASLAV-Surveillance – 10 years late but ‘amazing’

Tom Muir

The ASLAV-S is a specialised surveillance vehicle equipped with thermal imager, laser range finder, day television camera and battlefield surveillance radar RASIT or AMSTAR on a hydraulic mast. Armed with a single .50 BMG M2 machine gun.

The **Multi-Spectral Surveillance System (MSSS)** was to be introduced into service in October 2003 using the contractual requirements in the Prime Contract. The Surveillance prototype development, subsequently contracted outside of the Prime Contract, was progressing to contracted schedule and had completed a successful Critical Design Review. DMO then expected this capability to be delivered in July 2008! In fact the ASLAV -S was only introduced into service last year 2013!

Shying away from a more conventional testing environment, the ASLAV-S was thrust into the deep-end as part of the unit’s **Exercise Kosta River** at Shoalwater Bay Training Area, which tested the entire unit from the ground-up during March.

CO Lt-Col **Ash Collingburn** said, while the ASLAV-S was introduced to Army at the end of last year, it was great to be selected for the operational test and evaluation of the new platform.

Decked out with the Multispectral Surveillance Suite of equipment including a ground surveillance radar, thermal camera and day camera, the ASLAV-S is capable of laser designating targets and penetrates the tree canopy thanks to its raiseable mast. This equipment now allows the surveillance troop to screen over greater distances than they have previously been able to with traditional cavalry assets.

Crew Commander Cpl **Daniel Cameron** said the first time he saw the system in his training he thought it was amazing. “You could see everything,” he said. “It makes you think harder now as a crew commander on where to position the vehicle to get the full potential out of the system.”

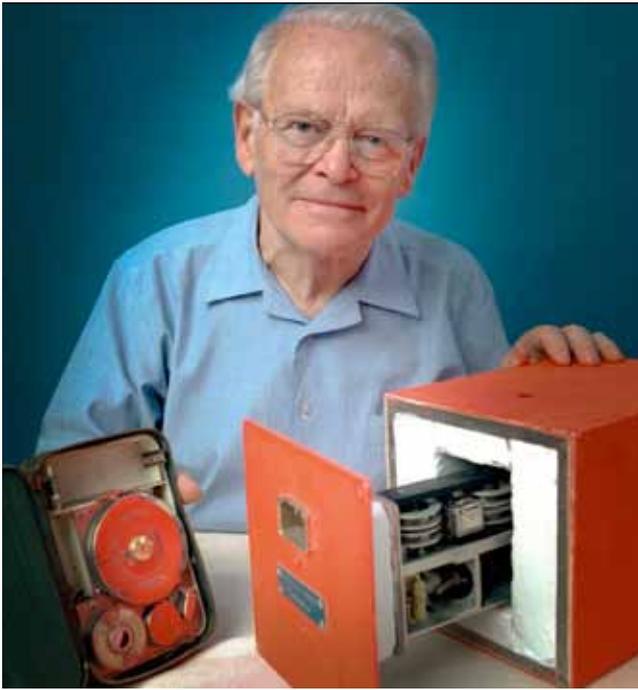
Cpl Cameron said the field trial had been going well. “Like anything there are always some teething issues with new equipment but the training we’re doing here is good in order to test it properly,” he said.

“The amount of information we can now pass back can be disseminated to the line troops quicker than other means, especially if we are on task directly supporting a cavalry troop or squadron.”

As part of the exercise, all the squadrons cycled through the different stages of live-fire, with one scenario testing the system’s ability to support adjusting artillery fire from 1 Regt RAA. Working in partnership with the ASLAV-S for the first time, the gunners learnt a valuable lesson about the new system on their first fire mission. The system automatically calculates the required adjustment from the perspective of the gun line, a task which in the past would have been done by the gunners, costing valuable seconds.

- Cpl Nick Wiseman/Army





*Dr David Warren with BlackBox Prototype*

## Black box inventor honoured with building name

The Australian inventor of the black box flight recorder has been honoured with the naming of a Defence building in Canberra.

The Assistant Minister for Defence, **Stuart Robert**, announced that the Canberra headquarters of the **Defence Science and Technology Organisation (DSTO)** is being named after the late **Dr David Warren** who developed the 'black box' to help in the investigation of aircraft accidents.

"Dr Warren was a visionary and

his invention has made an extraordinary contribution to aviation safety around the world," Robert said.

"The naming of the DSTO building is a fitting tribute to a great Aussie inventor."

Dr Warren invented the black box flight recorder in the mid-1950s when employed at one of DSTO's predecessor organisations, the Aeronautical Research Laboratory at Fishermans Bend in Melbourne.

Chief Defence Scientist **Dr Alex Zelinsky** said the value of Dr Warren's work continues to endure not only in aviation but in other forms of transport such as trains, trucks and ships, which have also adopted the black box recorder.

"Over the years DSTO has developed deep expertise in the forensic examination of Defence aircraft accidents and strategies to prevent their recurrence. This is the legacy of David Warren's work," Dr Zelinsky said.

### NEXT MONTH STAY TUNED FOR ADM April 2014

#### Land Warfare 2014

- The challenges for Land 400
- Milestones ahead for battlefield helicopters
- DMMA & ATK follow-up
- Hawkei nearing RFT
- President of Boeing Australia and South Pacific Ian Thomas speaks to ADM



## Multi-role mine clearance machines now in service

**Soldiers on deployment will be safer when clearing areas of landmines and unexploded ordnance with the formal introduction into service of eight remote-controlled countermine machines.**

Land 144 Phase 1 project manager **Murray Ellwood** said the **Protected Hazard Reduction Capability** machines, also known as **MV-10s**, could clear an area for forward operating base construction or return landmine affected areas to local populations for safe use. The system can clear all types of antipersonnel mines and anti-tank mines with an operator using the machine via remote control and a camera that shows multiple angles of view.

"This reduces the risk to operators who can now work from the relative safety of a protected mobility vehicle a safe distance away," he said.

The MV-10s are the last of the three countermine capabilities delivered by the Land 144 Phase 1 project. The other two capabilities comprise improved handheld detectors and the **Personnel Explosive Lane Clearance Charge**, which uses a small rocket to launch an explosive line charge over terrain to clear an area of anti-personnel minefields and wire obstacles. It reduces the need for manual clearance.

The MV-10s, which weigh 19 tonnes, have been delivered to 1CER in Darwin, 2CER in Brisbane and 3CER in Townsville. The design was accepted last November, providing Army with a fully deployable capability. A variety of tools can be used with the MV-10s including rollers, flail/tiller, and a blade/gripper tool which can move obstacles such as motor vehicles suspected of concealing IEDs.

The machine can penetrate soil up to 60cm and anti-personnel and antitank mines are destroyed by the force of the tools. The MV-10 is manufactured by **DOK-ING** of Zagreb in Croatia. - *Aurora Daniels/Army*



## 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, teams from Magdalene Catholic High School and Newington College in New South Wales were

crowned national champions in the prestigious **F1 in Schools competition**.

Minister for Defence, Senator David Johnston praised the Indonesian Government for hosting a "very successful" international defence **summit** in Jakarta.

And, **SecureDrive Australasia** managing director Admond Shlimon cautioned industry and government agencies to be aware of the changes to the Australian Privacy Act which became effective on 12 March 2014 and to consider steps that need to be taken to comply with the new requirements.



## International



### Triton initial flight testing complete

**According to Northrop Grumman the first stage of flight testing for the MQ-4C Triton has been completed.**

This involved envelope expansion and validating work, and was conducted out of Northrop Grumman's Palmdale

facility in California. A second aircraft is due to fly soon, and both aircraft will soon ferry to NAS Patuxent River on the east coast to continue the test work.

"Following Triton's first flight in May, we've seen a steady increase in the number of test flights and test points being accomplished," Captain **James Hoke**, Triton program manager with NAVAIR said in a statement. "We're now working to fly the second test aircraft and then prepare to ferry both aircraft to Naval Air Station Patuxent River." After the aircraft arrive at Pax River, they will be fitted with their sensor suites before they commence work validating the capabilities of their comprehensive payloads.

The US Navy has a requirement for 68 Tritons, and the Australian government has signalled it will order an unspecified number of Tritons once the 2015 Defence White Paper has been published. - [australianaviation.com.au](http://australianaviation.com.au)

## Trusted Thin Client recognised

**Raytheon Company's Trusted Thin Client (TTC) product was selected as the gold winner in the category "Security Products and Solutions for Government" at the 2014 Info Security Products Guide Global Excellence Awards.**

The security industry celebrated the 10th annual awards in San Francisco, Calif. during the RSA Conference US 2014 by honouring excellence in every facet of the cyber security industry including products, people behind the successes, and best companies.

With more than 95,000 applications worldwide, Raytheon Trusted Thin Client was recognized as an innovative, commercial off-the-shelf product. Hosted on the back end of a customer's network system, TTC uses virtualization technologies to provide users access to multiple networks of varying classifications via one wire to the desktop rather than multiple desktop machines accessing each network. This approach eliminates unnecessary hardware, enhances user productivity and simplifies IT administration across the enterprise.





## Cyber Security: US launches updated Cybersecurity Framework

The Obama Administration recently launched the Cybersecurity Framework, which is the result of a year-long private-sector led effort to develop

a voluntary 'how-to' guide for organisations in the critical infrastructure community to enhance their cybersecurity. The Framework is a key deliverable from the Executive Order on "Improving Critical Infrastructure Cybersecurity" that President Obama announced in the 2013 State of the Union.

Through the development of this Framework, industry and government are strengthening the security and resiliency of critical infrastructure in a model of public-private cooperation. Over the past year, individuals and organizations throughout the country and across the globe have provided their thoughts on the kinds of standards, best practices, and guidelines that would meaningfully improve critical infrastructure cybersecurity. The Department of Commerce's **National Institute of Standards and Technology (NIST)** consolidated that input into the voluntary **Cybersecurity Framework**.

The Framework gathers existing global standards and practices to help organisations understand, communicate, and manage their cyber risks. For organisations that don't know where to start, the Framework provides a road map. For organisations with more advanced cybersecurity, the Framework offers a way to better communicate with their CEOs and with suppliers about management of cyber risks. Organisations outside the US are invited to use the Framework to support their own cybersecurity efforts.

Each of the Framework components (the Framework Core, Profiles, and Tiers) reinforces the connection between business drivers and cybersecurity activities. The Framework also offers guidance regarding privacy and civil liberties considerations that may result from cybersecurity activities.

The Framework Core is a set of cybersecurity activities and informative references that are common across critical infrastructure sectors. The cybersecurity activities are grouped by five functions - **Identify, Protect, Detect, Respond, Recover** - that provide a high-level view of an organisation's management of cyber risks.

Federal executive branch civilian agencies are evaluating how they will use the Framework to enhance the protection of their systems, and State and local governments are also looking at how they can leverage capabilities found in the Framework to assist managing their cybersecurity risk. DHS is developing the voluntary program to respond to state and local government needs, and it is examining incentives tailored to these stakeholders.

The Cybersecurity Framework document can be downloaded from this link <http://www.nist.gov/cyberframework/> as a pdf. - *Judy Hinz*





## Stealthy missile patrol boat for Indonesian Navy

The Indonesian Navy (TNI-AL) is to order a new 63m trimaran-hulled, stealthy missile patrol craft to replace KRI Klewang, which was destroyed in a 2012 fire. TNI-AL Chief of Staff Admiral Marsetio was quoted by local media as

**saying that the new trimaran will be ordered from Indonesian shipbuilder North Sea Boats (PT Lundin).**

FOC Klewang was gutted by fire at the naval port in Banyuwangi, East Java, only weeks after its official launch on 31 August 2012 and before the USD12 million stealth craft had completed sea trials. There were no casualties, but the vessel was damaged beyond repair. The government temporarily suspended the stealth trimaran program pending a full investigation.

It is unclear if the investigation findings have been made public, but IHS Jane's understands that the Indonesian government remains fully committed to operating a class of four vessels.

The Klewang class employs a wave-piercing trimaran design that allows the vessel to cut through waves rather than rise over them, enabling it to attain a top speed of 35 kt. As well as eliminating reverse-angle bow overhangs to deflect radar signals, the vessel incorporates other stealth features in its design to reduce its acoustic, infrared, and magnetic signatures



## Ship protection systems turn to asymmetric threats

Tom Muir

Rheinmetall's Multi Ammunition Softkill System (MASS) and ELTA's NavGuard ship protection system

**successfully completed trials held under the aegis of the German Navy in the Baltic Sea at the end of October 2013. Also taking part in the trials was a German Army unit.**

The trials were based on an asymmetric warfare scenario. The objective was to protect naval units from the threat posed by land-based forces armed with passive guided missiles. As part of their gunnery training, the mechanized infantrymen played

the part of the aggressors, firing MILAN anti-tank missiles at the German Navy mine warfare ship **HL 352 Auerbach**.

In order to defend itself from this type of threat, the *Auerbach* was equipped with Rheinmetall's MASS ISS naval countermeasure system. The MASS ISS version features various sensors for detecting radar, laser and electro-optical threats. The latest additional component is the innovative **ELTA NavGuard radar detection system**, which actively warns the crew of incoming rockets and guided missiles.

In this scenario the mission entailed detecting the passive MILAN guided missile with NavGuard immediately after launch, and engaging it with MASS. The countermeasures initiated by MASS were then supposed to cause the incoming missile to crash. The challenge was two-fold: assuring reliable detection of the passively guided, very small missile, and accomplishing this in an extremely short period of time. A mere 14 seconds were available for detecting the incoming missile, sounding the alarm, triggering the MASS countermeasures and bringing down the MILAN.

The NavGuard flawlessly detected the incoming projectiles in extremely short order, which were then successfully engaged by MASS. These excellent results are a further milestone in the use of modern technology to combat asymmetric threats. Rheinmetall intends to have the MASS\_ISS with integrated NavGuard ready for full-scale production by 2015.

Kongsberg has also developed a scalable Ship Self-Protection System to counter such threats. The system comprises concept is scalable from stand-alone Sea Protector systems to SSP Systems fully integrated with the vessel's Combat Management System. The main purpose is protection of own vessel and other assets against asymmetric threats from above and below the sea surface at closer range than usually supported by the vessel's standard sensors and weapons.

**SSPS Sub-systems include:** Sea Protector Remote Weapon Station combining a sensor package capable of surveillance and tracking with a flexible weapon mount; Long Range Acoustic Device capable of issuing warnings and providing a non-lethal response; LASAR and SM2000 Diver Detection Sonars deployable from the ship; C'Inspector remotely operated vehicle for surveillance; and mine detection and classification; and Minesniper for mine clearance of the mooring area after detection by the C'Inspector.



## Rapid reporting of cyber penetrations

**The Pentagon needs more time to develop highly anticipated draft regulations that would require defence contractors with security clearances to rapidly report penetrations of their networks and information systems.**

An ad hoc committee, tasked in January 2013 by the Defence Acquisition Regulations Council director with developing the statutorily required procedures, was due to report back to the director on Wednesday.

But the interim Defence Federal Acquisition Regulation System rule, known as DFARS case 2013-D018, remains under development and was not submitted to the director on Wednesday, meaning the deadline will be extended, a defence official told Inside Cybersecurity. - *InsideDefense*





## Thales radar proved in Danish missile firings

Tom Muir

Late last year, equipped with Thales's Active Phased Array Radar (APAR), the Royal Danish Navy's patrol frigate HDMS *Peter Willemoes* performed live firing trials to demonstrate its air defence capabilities. The trial, executed on

**21 November 2013, consisted of four Evolved Sea Sparrow Missiles being directed by APAR to four targets. The trial was successful: all launched missiles performed a successful intercept.**

In the first part of the trial, a **Banshee drone** was eliminated by a missile launched by the HDMS *Peter Willemoes*. With pinpoint accuracy APAR guided the missile to the target, resulting in a successful threat elimination.

Subsequently, three Banshee drones were launched simultaneously, necessitating the launch and guidance of three missiles. Thanks to APAR's unique Interrupted Continuous Wave Illumination technology, enabling the simultaneous guidance of multiple missiles to various targets; this part of the trial was also successful. The **Meggit Banshee drone** has a claimed speed in excess of 200 knots.

Earlier that year **HMAS Perth** executed a number of successful **ESSM firings** to prove the **Anzac Ship Missile Defence** system comprising CEA's phased array radar and illuminator and the **Saab 9LV combat management system (CMS)**. The demanding firing scenarios included successful missile engagements against multiple sea-skimming targets including, for the first time in the RAN, successful engagements by ESSM against two of the world's most advanced supersonic targets, the **GQM-163 Coyote**.

The rocket-boosted, ramjet-powered **GQM-163A** was developed to simulate supersonic cruise missiles like the SS-N-22 and the Indo-Russian PJ-10 Brahmos, etc., which are proliferating throughout the world. Their speed and evasive manoeuvres compress the amount of time a defence system has to deal with them to under a minute. A training target that can simulate their performance is critical to both proper preparedness and pursuant performance. The Coyote achieves cruise speeds of over Mach 2.5, with a range of approximately 60 nautical miles at altitudes of less than 20 feet above the sea surface.

## USN seeks LCS alternatives

In a memo that the US Navy provided to *IHS Jane's* on 18 March, Chief of Naval Operations Admiral **Jonathan Greenert** and Assistant Secretary of the Navy **Sean Stackley**, who oversees the navy's research, development, and acquisition efforts, directed the establishment of a Small Surface Combatant Task Force (SSCTF) to develop alternative proposals for a vessel to succeed the USN's LCS program.

The task force has been established in accordance with Secretary of Defense **Chuck Hagel's** directive to the navy to re-examine its acquisition efforts for **LCS** - a new



shallow-water capable vessel - following the lead ship's troubled maiden deployment to Southeast Asia and continued criticism of the program by the Government Accountability Office.

USN officials had planned to acquire a 52-ship class of LCSs, currently being built in two configurations: a steel monohull variant designed and constructed by a team led by Lockheed Martin, and an aluminium trimaran constructed by a team led by Austal USA.

Three ships - **USS Freedom (LCS 1)**, **USS Independence (LCS 2)**, and **USS Fort Worth (LCS 3)** - have been delivered to the navy, with a fourth, pre-commissioning unit **Coronado (LCS 4)**, to be commissioned in April. Twenty more LCS, 10 of each variant, are being procured under a block-buy contract through fiscal year 2015 (FY 2015).

It had been anticipated that the navy would issue a second block buy contract beginning in FY 2016, with a possible downselect to a single variant. However, the navy's recent FY 2015 budget proposal indicated otherwise, with acquisition of LCS continuing at a rate of three ships per year through FY 2018, bringing the total number of LCSs to 32 ships in the class.

Concerns over LCS survivability and lethality - especially in the Asia-Pacific region where the ships are to be forward deployed and stationed - and affordability challenges prompted the Office of the Secretary of Defense to intervene and demand that the navy consider alternative proposals for a "capable and lethal small surface combatant generally consistent with the capabilities of a frigate".

The task force has been directed to consider design concepts for a small surface combatant and compare them to alternatives, including the existing LCS design, a modified LCS design, and a new ship design. - *IHS Janes*

## FORTHCOMING EVENTS.....page 14



# FORTHCOMING EVENTS

For a full list of defence and industry events, head to **ADM's online events page at [www.australiandefence.com.au](http://www.australiandefence.com.au)**

## The Submarine Choice: ASPI's International Conference

**DATE:** 8 - 10 April, 2014, Canberra  
**ENQUIRIES:** Lynne Gozzard, Ph: 02 6270 5109;  
 Email: [lynnegozzard@aspi.org.au](mailto:lynnegozzard@aspi.org.au)

Join distinguished international and Australian speakers for two days of debate on Australia's Future Submarine choice. Topics include: The Strategic Context; the Navy's Perspective; Regional Perspectives; Design Options; Industry and Economics; Project Management; Lessons from Abroad.

ADM will  
be in  
attendance

## 3rd annual 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](mailto:adam.wiltshire@informa.com.au)  
 Web: [www.admevents.com.au](http://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.

ADM will  
be in  
attendance

## Defence and Industry (D+I) conference 2014

**DATE:** 29 - 30 July, 2014, Adelaide  
**ENQUIRIES:** Defence Materiel Organisation  
 Email: [DMO.Communication@defence.gov.au](mailto:DMO.Communication@defence.gov.au)

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

ADM will  
be in  
attendance

## 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.

ADM will  
be in  
attendance

## 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 Conference 2014

**DATE:** 22 - 26 September, 2014, Brisbane

The Land Forces 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

