



# DEFENCE WEEK

PREMIUM EDITION NEWS | INTELLIGENCE | BUSINESS OPPORTUNITIES | EVENTS

## IN THIS ISSUE

### CONTENTS

UK Type 26: model for RAN's Future Frigate? .....1

Defence Trade Controls Bill 2011: further consultations .....2

Senior US role for Australian General .....3

Australia bans use of cluster munitions .....3

ADF to attend US manned-unmanned systems demo? .....4

Kongsberg wins US Army's CROWS contract .....5

BAES wins HUMVEE gunner protection contract .....6

Indonesia seeks surplus C-130s and F-16s .....7

Minister Clare opens new BAE Canberra office .....7

Ken Henry's Asian Century .....8

How much is too little? Learning to live with a smaller force .....8

ADM Online: Weekly News Summary .....8

MALD-J decoy/jammer for E/F Super Hornets .....9

SAIC wins unmanned sub-hunter contract .....9

Cubic to provide digital data link for MQ-8C Fire Scout .....10

US Army invests \$120 million to exploit new materials .....10

FORTHCOMING EVENTS .....12

### DEFENCE BUSINESS

OPPORTUNITIES ..... See Separate PDF

### CONTACT DETAILS

**EDITOR** Katherine Ziesing, Tel: 02 6203 9535  
Email: katherineziesing@yaffa.com.au

**PUBLISHING ASSISTANT**

Erin Pittman, Tel: 02 6203 9535  
Email: erinpittman@yaffa.com.au

**MNG EDITOR** Judy Hinz, Tel: 07 3348 6966

Email: judyhinz@yaffa.com.au

**SUBSCRIPTIONS**

Martin Phillipott, Tel: 02 9213 8325  
Toll Free 1800 807 760

Email: martinphillpott@yaffa.com.au

Articles by Katherine Ziesing, Tom Muir

**DEFENCE WEEK PREMIUM** is a component of the ADM Premium Online subscription.



## UK Type 26: model for RAN's Future Frigate?

The UK Ministry of Defence (MOD) has unveiled its new multi-mission warship - the Type 26 Global Combat Ship (T26 GCS). Due to replace the 13 Type 23 frigates in Britain's Royal Navy when it enters service after 2020, the T26 GCS has been in development by the MOD and BAE Systems since 2010 and is intended for use in combat and counter-piracy operations as well as supporting humanitarian and disaster relief work around the world.

Images released by the MOD this week show the basic specification of the ship, which has a displacement of around 5,400 metric tonnes (5,314 l ton) and will be around 148 m (485.5 ft) long. These specifications were pared down from the original working baseline of a vessel length of 141 m (462.5 ft) and displacement of 6,850 metric tonnes (6,742 l-tonne) in an effort to reduce costs from £500 million (US\$786 million) to £250-350 million (\$393-550 million) per ship.

Designed to be one of the most advanced vessels in the Royal Navy fleet, the T26 GCS is expected to feature vertical missile silos capable of housing a range of different weapons, a medium-caliber gun, a hanger to accommodate a Merlin or Wildcat helicopter, a flexible mission space for unmanned air, surface and underwater vehicles or additional boats, and the most advanced sensors in the fleet.

"The Type 26 Global Combat Ship will be the backbone of the Royal Navy for decades to come," Peter Luff, the Minister for Defence Equipment, Support and Technology, said. "It is designed to be adaptable and easily upgraded, reacting to threats as they change."

Now that the ship's basic capabilities and baseline design



has been endorsed, the MOD says the program will progress to the next part of the assessment phase, which will involve the examination of detailed specifications of the vessel.

## Comment:

The Royal Navy's proposed Type 26 design is almost certainly a candidate for the RAN Future Frigate. While it will be 10 years or so before Sea 5000, the Future Frigate project, achieves first pass approval, work has already begun on aspects of the project including preparation for canvassing the market this year.

The \$10 billion Sea 5000 project will begin with funded studies to explore the ship platform, combat, and support system options in the quest for an affordable ANZAC Class replacement. And in acknowledgement of the need among smaller navies to share in ship design the RAN is showing interest in a number of new ship designs, including the UK's Type 26.

To this end an exchange officer, based in the UK, will help to ensure that the RAN understands the RN requirements (and vice-versa if the RN sees this country as a possible export customer). As well, there has been considerable dialogue between Defence's Maritime Development Group and their opposite numbers in the UK — ADM



## Defence Trade Controls Bill 2011: further consultations

The Government last week announced the appointment of Ken Peacock AM and Chief Defence Scientist Dr Alex Zelinsky to conduct further consultations on the

Defence Trade Controls Bill 2011, including with the University and research sector. Peacock chaired the Defence Trade Cooperation Treaty Industry Advisory Panel that supported the development of the Bill. He is a former Member of Council at the Australian War Memorial and former Executive Chairman, Boeing Australia Limited.

Dr Zelinsky was previously Group Executive for Information Sciences at the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Professor of Systems Engineering at the Australian National University, academic at the University of Wollongong. He started his career as a Systems Engineer with BHP Steel International.

Tabled in the Senate on 15 August, the Preliminary Report by the Senate Foreign Affairs, Defence and Trade Legislation Committee recognises the importance of the legislation and the general support for the intention of the Bill. The Committee recommended Defence conduct further consultation with the University and research sector on the impact of intangible transfer reforms for scientific research.

The Government has asked Dr Zelinsky and Mr Peacock to conduct further consultations to help inform Government and Senate consideration of the implementation of strengthened export controls.

The Bill, currently before the Senate, gives effect to the Defence Trade Cooperation Treaty between Australia and the US and aims to strengthen Australia's export controls to align them with international best practice.

The Treaty removes the requirement for companies to seek individual licences



for each export from the US, allowing for the licence-free movement of eligible defence articles within an Approved Community. For companies that join the Approved Community, this will save time and money.

### Comment:

ADM readers will recall that Universities Australia felt that the impact of this Bill would be profound as it focuses on the movement of knowledge with respect to DSSL goods, stating that the acquisition and transmission of knowledge goes to the heart of the activities of universities. It warned that without changes the Bill would impact:

- what or who may be taught by Australian universities;
- to whom it may be taught by Australian universities;
- with whom Australian researcher may carry out specified research;
- with whom Australian researchers may communicate;
- what may be published by Australian researchers; and
- what research materials may be transferred by Australian universities to non-Australian collaborators within or outside Australia.

Boeing Australia also had concerns about the Bill's 'Approved Community' concept as it applied to a corporate body rather than to specific company facilities.



## Senior US role for Australian General

A former member of Perth's elite SAS Regiment will take a commanding role in a force comprising more than 60,000 US troops in the Asia-Pacific region. Major General Richard Maxwell Burr, who served as a troop and squadron commander in the SAS before going on to become the commanding officer of the Perth-based regiment between 2003 and 2005, was yesterday named Deputy Commanding General of US Army Pacific. From next month he will oversee a number of areas in the American military's Pacific contingent.

The veteran Australian commander, who is on secondment to the US army, held command of the SAS during some of the Australian Defence Force's most difficult operations in recent times including the invasion of Iraq during the second Gulf War.

He also commanded the Australian Special Forces Task Groups in Afghanistan in 2002 and was the commander of all special forces assigned to the International Security Assistance Force in Afghanistan - the biggest coalition of special forces in the world - in 2008.

US Secretary of the Army, John McHugh said MAJGEN Burr's appointment was an extension of the increasing co-operation between the Australian and American militaries.



## Australia bans use of cluster munitions

Australia's commitment to reducing the humanitarian impact of armed conflict was recently strengthened with the passage of a bill banning the use of cluster munitions. The passage of the Criminal Code Amendment (Cluster Munitions Prohibition) Bill 2010 includes legislative measures necessary to give effect to the Convention on Cluster Munitions.



“Cluster munitions are weapons that can have a tragic impact on communities,” Attorney-General Nicola Roxon said. “Australia was amongst the first group of countries to sign the convention in 2008 and this Bill is another step towards ratification.

“With this legislation, it will become an offence to use, stockpile or transfer cluster munitions and also to encourage others to engage with these dangerous weapons.”

**Minister for Foreign Affairs Bob Carr** welcomed the passage of the legislation. **Minister for Defence Stephen Smith** said the new legislation puts into law Australia’s policy to not use cluster munitions.

“The prohibitions in the Convention will apply to all Australian Defence Force Personnel, including while serving alongside Defence forces of non-signatory States,” Smith said.

Australia does not have operational stockpiles of cluster munitions and the Australian Government will not approve the stockpiling of cluster munitions in Australia by foreign governments. The legislation will strengthen Australia’s already robust legal framework regarding weapons and reflects Australia’s longstanding commitment to international efforts to reduce the humanitarian impact of armed conflict.

Once the new legislation commences, it will be an offence to: use, develop, produce, otherwise acquire, stockpile, retain or transfer cluster munitions; and assist, encourage or induce anyone to undertake these activities. The offences will carry tough penalties of up to 10 years’ imprisonment for individuals or a \$330,000 fine for bodies corporate.

The Government will now move as quickly as possible to lodge Australia’s instrument of ratification for the Convention.



## ADF to attend US manned-unmanned systems demo?

The US Army is evaluating how it could include the other services in its next demonstration of a capability to integrate drones and manned aircraft, according to Army officials leading the effort. Lieutenant Colonel James Kennedy, the product manager for Army common systems integration, said in an interview that the services have “responded enthusiastically” to a request to contribute to the next manned-unmanned systems integration capability (MUSIC) event.

The Army met with the services in mid-June and requested they submit proposals within the month, Kennedy told *InsideDefense* in a follow-up email provided by a spokesman. The Army intends to make a determination by October for the MUSIC II demo, which is scheduled for April 2014.

Here in Australia presumably those concerned with the two manned and unmanned systems phases of **AIR 7000**, will be interested in attending the demonstration as will the ADF’s Heron and Shadow operators.

Last year’s demonstration (MUSIC II) at the Dugway Proving Ground, Utah, in September, was aimed at analysing the progress of evolving manned-unmanned teaming technologies including showcasing level-4 UAS interoperability, wherein Apache Attack helicopter pilots controlled the payload of a nearby UAS from the cockpit and directed their mission. ►

The Apache pilots were also able to view feeds from the other UAS systems in real-time.

The MUSIC exercise tested the moving of UAS and helicopter sensor video and proved component interoperability between manned and unmanned systems. The OH-58 Kiowa Warrior demonstrated its capability to receive sensor video from a variety of the Army's large Unmanned Aircraft Systems (UAS), such as Shadow, Hunter, Gray Eagle and legacy Raven and Puma.

The OH-58 Kiowa demonstrated its range of capabilities by; receiving UAS sensor payload video and telemetry; receiving and re-transmitting UAS sensor payload video and telemetry to a UAS ground control station; transmitting Kiowa sensor payload video and telemetry to a UAS ground control station for target verification; and engaging a target with a live weapons firing.

The MUSIC exercise also tested the Army's universal ground control station (UGCS), which provides the ability to command numerous types of unmanned aircraft systems from a single ground control station. During the demonstration, soldiers utilised the One System® Remote Video Terminal (RVT) enhanced with bi-directional capabilities to control sensors on the miniature UAS.



## Kongsberg wins US Army's CROWS contract

Kongsberg has been awarded a new framework agreement from the US Army for production, system support and technical engineering support of the M153 CROWS Remote Weapon Stations (RWS) which the company says was won in a full and open competition.

The framework agreement has a value up to US\$970 million and extends over a five-year period and Kongsberg has received the first order under the contract worth some \$9.1 million. The total scope of the agreement will depend on future demand and annual ▶

allocations. Kongsberg has delivered RWSs to the US Army's CROWS program since 2007.

M153 CROWS is the primary remote weapon station being used by US forces. Working under the previous CROWS contract, Kongsberg has delivered more than 10,000 M153 CROWS units to the US military to date. Kongsberg has customers for remote weapon stations in 16 other countries (including Australia).

## EOS to pursue other RWS programs

**In May 2010 Electro Optic Systems (EOS) announced it had teamed with Northrop Grumman Corporation to jointly pursue the market for remote weapon systems (RWS) in the US through programs such as the US Army's Common Remotely Operated Weapon Station 3 [CROWS 3] program. In response to an Army call for tenders, a team bid was submitted for this program in March 2012.**

Informed that his company's tender for participation in the US Army's CROWS 3 program was not successful, Dr Ben Greene, CEO of EOS this week said: "The CROWS 3 decision is disappointing but is a contingency always addressed in EOS plans and has no impact on EOS financial performance over the next six quarters. It will not reduce our pursuit of other remote weapon system programs in the US market, especially where the requirements include performance or advanced features not compatible with CROWS.

"The current transformation of EOS to meet volatile global business conditions is equally required for this outcome from CROWS and will be completed. This includes changes to EOS production which have achieved more scalable output at low cost, reducing the impact of CROWS on the cost base for all other RWS programs," Greene concluded.



## BAES wins HUMVEE gunner protection contract

**Next best thing to RWS would appear to be the Gunner Protective Kits and Shield Kits for which US-based BAE Systems has won a contract valued at US\$11.4 million to provide 3,602 protective kits and 799 shield kits for the US Army's M1151 and M1114 (HMMV) military vehicles.**

"Providing products that keep our men and women in uniform safe while in combat is a key priority," Robert Houston, vice president of Support and Technical Services at BAE Systems, said.

"The Gunner Protection Kit and Shield allows the soldier to maintain a protected posture while performing mission objectives with full visibility through the vehicle's armored turret."

The Gunner Protective Kits improve the protection of the gunner with taller armoring and transparent shields, offering enhanced visibility of the surrounding area.

The system includes a combination of steel, transparent armor windows and rear-view mirrors configured to provide protection against rifle fire and roadside bomb blasts. The weapon systems are mounted to the Gunner Shield Kit which provides the gunner with protection while firing the weapon.

The first delivery of the kits is expected in November 2012. Work for this contract will be performed at BAE Systems' facility in Ohio.





## Indonesia seeks surplus C-130s and F-16s

Indonesia is seeking to procure additional Lockheed Martin C-130 Hercules transport aircraft and F-16C/D fighters. Discussions with Australia are continuing over the potential acquisition of surplus C-130s while the US has offered additional squadrons of refurbished F-16s.

In early July it was reported that Australia was handing over two refurbished C-130 Hercules aircraft to Indonesia, boosting Jakarta's ability to patrol for asylum boats and assist in maritime emergencies. The C-130H models are the first of four surplus Hercules planes to be given to the Indonesian Air Force in ready-to-fly condition, Defence Minister Stephen Smith said in Darwin.

More recently a spokeswoman from the Australian Department of Defence (DoD) told IHS Jane's on 15 August that negotiations with Indonesia over the sale of six Royal Australian Air Force (RAAF) C-130H aircraft are continuing. — *JDW*



## Minister Clare opens new BAE Canberra office

BAE Systems Australia has celebrated the opening of its new facility in Canberra. Officially opened by Minister for Defence Materiel Jason Clare, the facility will consolidate the company's Canberra staff into a single building.

Clare congratulated BAE Systems on the key role they play in the Australian defence industry.

"BAE are Australia's largest Defence contractor and play an important role in helping to deliver and maintain equipment for the Australian Defence Force," Clare said. "From Williamstown to Williamstown, the work BAE does is very important to the Australian Defence Force," Clare added.

One of the largest non-government employers in Canberra the new office will act as a portal to BAE's 5,500 employees at some 60 sites across Australia.

"We have included in this building, a high security work area and a communications suite that allow us to work directly on defence network," **BAE Systems Chief Executive David Allott** said.

The new facility will also house a cyber training facility which will allow the company to train current and future generations of cyber analysts in computer network defence.



## Ken Henry's Asian Century

Former Treasury Secretary Dr Ken Henry and his team are finalising the *Australia in the Asian Century White Paper*, which is planned for release in a few weeks.

In this ASPI Policy Analysis, **Peter Jennings** asks and explores four hard questions:

- Will the White Paper focus on the right region in the right way?
- How will it address strategic risks?
- How will it treat defence and security?
- What place will it accord to other parts of the world?

This Policy Analysis can be downloaded at [www.aspi.org.au](http://www.aspi.org.au)



### How much is too little? Learning to live with a smaller force

Many commentators have expressed dismay at the recent cuts to defence spending. The fear is that the government's long-term commitment to strengthen Australia's defence has evaporated. To add to their concerns, there are few signs that the opposition is any more willing to do so should it win power.

But how much does it really matter? Would Australia's security be compromised if we settled on a less ambitious plan for our defence force than that set out in the 2009 Defence White Paper?

In this ASPI Policy Analysis, **Mark Thomson** argues that Australia can get by with less.

This Policy Analysis can be downloaded at [www.aspi.org.au](http://www.aspi.org.au)

## ADM Online: Weekly News 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.

In the news headlines this week the **hull of the first Landing Helicopter Dock (LHD) has recently left Spain** and is expected to arrive in Australia in approximately seven weeks.

**Exercise Pitch Black drew to a close** after three weeks of offensive counter air and offensive air support operations that included large formations of multi-national aircraft.

**Boeing celebrated their 50th anniversary of delivering the first H-47 Chinook** military helicopter. They also announced that their **US\$130 million renovation of the Chinook** helicopter production line in Pennsylvania is nearing completion.



## International News



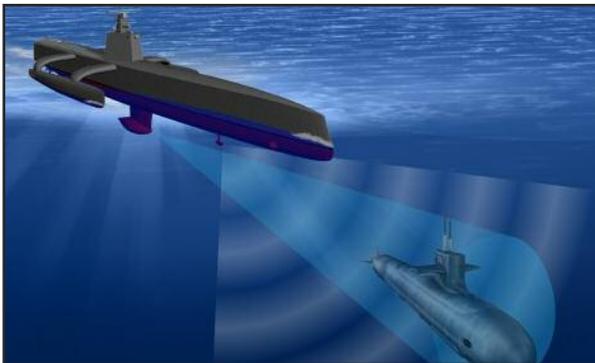
### MALD-J decoy/jammer for E/F Super Hornets

The US Navy and Raytheon have begun integrating the Miniature Air Launched Decoy (MALD) Jammer variant into the USN's fleet of F/A-18 E/F Super Hornets. The integration process will include a series of risk reduction activities and technology demonstrations.

MALD is an air-launched, programmable, low-cost flight vehicle that protects aircraft and their crews by duplicating the combat flight profiles and signatures of US and allied aircraft. The MALD-J adds radar-jamming capability to the basic MALD platform. It weighs around 130 kg and has a range of approximately 500 nautical miles (about 575 statute miles).

To ensure that MALD is suitable for shipboard operations, Raytheon is working with the USN to make sure the weapon is capable of withstanding the rigours of taking off and landing on aircraft carriers. Raytheon is also leveraging MALD's modularity, enabling sailors to rapidly change the weapon's electronic warfare payload in response to threats.

MALD confuses enemy air defenses by duplicating friendly aircraft flight profiles, radar signatures. MALD-J retains all the capabilities of MALD and adds jamming capabilities. Raytheon is scheduled to begin delivering MALD-Js later this year.



### SAIC wins unmanned sub-hunter contract

The Defense Advanced Research Projects Agency (DARPA) has awarded a contract to Science Applications International Corporation (SAIC) of McLean, Virginia to develop unmanned submarine hunters capable of operating for months on end without human intervention.

Diesel-electric submarines are a growing worry for the maritime nations of the world. For one thing, they are extremely quiet when running under battery power because they don't need to run the pumps and other gear needed for a nuclear boat. Unlike older versions, modern diesels can remain submerged for days. Though they have short ranges, they can operate in shallow coastal areas where nuclear submarines can't go. And they are much cheaper than nuclear boats.

DARPA's Anti-Submarine Warfare (ASW) Continuous Trail Unmanned Vessel (ACTUV) program aims to develop a robot ship that can acquire and track submarines for thousands of miles over a period of months without supervision. Not only that, but it can do so operating safely and in accordance with maritime laws.

Requiring new sensors and advanced autonomous systems as well as propulsion systems capable of outrunning a diesel sub, the ACTUV poses challenges, but also ▶

provides new opportunities. Not needing a crew, the robot ship will be much cheaper to build and operate – perhaps a tenth of the cost of a conventional sub hunter. It also means that since it has no crew, it can operate in seas that would be too dangerous for sailors, and it doesn't need a conventional ship's dynamic stability and reserve buoyancy.

The ACTUV program is in four phases. Phase 1, already completed, evaluated the concept and performed a risk assessment. Phases 2-4, which SAIC has been contracted to complete, cover the design, construction and demonstration of the vessel. DARPA also hopes that the technology will be applicable to other unmanned ship operations.—*DARPA, GizMag*



## Cubic to provide digital data link for MQ-8C Fire Scout

Cubic Defense Applications has received a contract from Northrop Grumman to produce a new multi-band digital data link system for the MQ-8C Fire Scout unmanned heli-

copter. The contract is worth US\$3.7 million.

According to Cubic, the data link uses smaller and lighter components to do the mission-critical job of transferring full-motion video and data from the aircraft to ground forces and surface ships.

Cubic's ISR data link systems use radio frequency (RF) technology with open standard waveforms to transfer data and stream video to provide situational awareness before, during and after combat operations; enabling the high-speed transfer of information.

The system's robust, modular architecture includes simple open-standard interfaces and a software-defined transceiver, using a data link with a smaller size and weight and reduced power consumption than is now used on the MQ-8B variant.

An integral component of the new system is Cubic's Multiband Miniature Transceiver, or MMT. The MMT enables simultaneous Ku band and C band transmissions using dual data streams. The MMTs included in the Dual Channel Modem subassembly are small enough for Soldiers and Marines to carry in the webbing of their tactical vests, allowing for easier transport for ground troops.



## US Army invests \$120 million to exploit new materials

Further to our story last week on the research efforts by the US Army, it's materials science research effort has expanded to include a new US\$120 million investment

in basic research over 10 years that includes more than 12 university partners that want to change the way scientists look at designing advanced materials.



Developments in high performance computing and power, experimental techniques, materials characterization and processing have all led to the Enterprise for Multiscale Research of Materials.

The US Army Research Laboratory, or ARL, Enterprise for Multiscale Research of Materials kick-off meeting held from July 31 to Aug. 2, at Aberdeen Proving Ground, Md., brought together partners and colleagues for this monumental basic research collaboration with ARL's researchers, academia and industry to pave the way forward.

"The vision for the Enterprise for Multiscale Research of Materials is to achieve a materials-by-design capability that will give us revolutionary devices and materials for the Army. We have that capability only in part now to give the soldier the incredible equipment they have today, but we have to think about the demands of the future," **John Pellegrino, acting director of ARL** said.

The Army shares the problem of slow implementation of new materials, said Scott Fish, the Army's chief scientist. He talked about a portfolio of Army research projects, many of which deal with advanced materials design. The two collaborative agreements that are part of the enterprise are at the heart of where the Army is going, Fish said.

"Over 60 percent of the Army's research budget is related directly to new materials," Fish said. "It's not an understatement to say materials are at the foundation of almost everything we do."

A Johns Hopkins University-led group will develop new materials designed to protect Soldiers in extreme dynamic environments. This effort launched on April 16, with an award of up to US\$90 million. The program is planned for a five-year initial study that could be renewed for an additional five years.

ARL also awarded a University of Utah-led alliance a cooperative agreement with an award up to \$20.9 million to develop multiscale modeling techniques needed to design new materials for lighter-weight, more energy efficient electronic devices and batteries for the Soldier.

The in-house component for Multiscale Research of Materials, which has been ongoing since 2010, is a collaboration of leading ARL scientists and engineers in materials research, electron devices research, and computational approaches in models that can span the materials space.

As ARL looks at ways to study materials that will enable Soldiers by limiting the weight of the materials used in their protective armour, devices and batteries are several of many goals that the enterprise addresses.

The kick-off introduced partners from Johns Hopkins University, California Institute of Technology, University of Delaware and Rutgers University working on materials in extreme environments.

It also brought together partners from the University of Utah, Boston University, Rensselaer Polytechnic Institute, Pennsylvania State University, Harvard University, Brown University, the University of California, Davis, and the Polytechnic University of Turin, Italy that will work on modelling of electronic materials and the in-house enterprise staff of researchers and senior leaders. ▲

## Forthcoming Events:

### ADM's Defence Workforce Participation Summit

**27 – 28 September 2012, Hyatt Hotel, Canberra**

ADM's annual Defence Skilling Summit is an important event examining the issues of training and maintaining a skilled workforce for Australia's defence industry. It's an event not to be missed!

**Further Information:** ADM Events - Jamie Burrage, Ph: 02 9080 4321;  
Email: jamie.burrage@informa.com.au Web: www.admevents.com.au

### UAV Challenge

**1-3 October 2012, Kingaroy, Qld**

The UAV Challenge - Outback Rescue has been developed to promote UAV's significance to Australia. The UAV Challenge is a joint initiative between the Queensland Government, the Australian Research Centre for Aerospace Automation (ARCAA, a partnership between QUT and CSIRO), Aviation Development Australia Limited and AUVS-Australia - a prime example of government, industry and research organisations working together.

**Further Information:** [www.uavoutbackchallenge.com.au](http://www.uavoutbackchallenge.com.au)

### New Zealand Defence Industry Association Forum

**16-17 October 2012, Wellington New Zealand**

At the forum you can join with other defence industry companies from New Zealand and overseas, and with key members of the New Zealand Defence Force and Ministry of Defence to gain greater understanding of the defence procurement processes and hear about future defence procurement plans.

**Further Information:** Sue Peck Email: [sue@spconferences.co.nz](mailto:sue@spconferences.co.nz) [www.nzdia.co.nz](http://www.nzdia.co.nz)

### Land Warfare Conference 2012

**29 October – 2 November 2012, Melbourne Convention and Exhibition Centre, Melbourne**

The Land Warfare 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. Academics, commercial organisations, defence research institutions, and military are encouraged to attend and/or offer papers in the field of Land Warfare and related disciplines. An Exhibitor Booth Registration Form and Floor Plan are now available online.

**Further Information:** Land Warfare Conference Admin Support Office,  
Phone: 08 7389 5455; Fax: 08 7389 5196; Email: [lwcc@dsto.defence.gov.au](mailto:lwcc@dsto.defence.gov.au)  
Web: <http://www.dsto.defence.gov.au/lwc2012/>

### MilCIS 2012

**6 – 8 November 2012, National Convention Centre, Canberra**

MilCIS is an annual conference aimed at attendees from military and government organisations, academia, and defence industry, who contribute to key decisions in investments in communications and information systems. In addition to keynote presentations, technical presentations, panel discussions and tutorials, MilCIS features an exposition that provides an opportunity for exhibitors to demonstrate new technologies and promote their products and services to attendees. MilCIS is the only Australian conference focussing directly on the crucial technologies, products, systems and services associated with military communications and information systems.

**Further Information:** Consec – Conference Management, Phone: 02 6251 0675; Fax: 02 6251 0672; Email: [milcis2012@consec.com.au](mailto:milcis2012@consec.com.au); Web: <http://www.milcis.com.au/>

## **6th Submarine Institute of Australia (SIA) Biennial Conference 2012** **14-15 November 2012, The Shine Dome, Canberra**

2012 will be a pivotal year for decisions concerning submarines. With the recent announcement of \$214m in funding for the Future Submarine Program and a significant boost in Sustainment funding for the Collins class, the SIA is grasping the opportunity to present powerful arguments to contribute to the development of the 2013 Defence White Paper against the most challenging budgetary circumstances for Defence since 1938. Delegates to the 6th Biennial Conference will hear from a range of influential speakers from Government, overseas and both the Public and Private sectors as they discuss the pivotal considerations for Australia's submarine capability.

**Further Information:** Mr David Nicholls (Executive Manager),  
Email [execmgr@submarineinstitute.com](mailto:execmgr@submarineinstitute.com) Phone: +61 413 133 391 Fax: +61 2 6260 5416

## **ADM's Social Media in the Defence Environment** **5-6 December 2012, Hotel Realm, Canberra**

Inaugural event! More details soon.

**Further Information:** ADM Events - Jamie Burrage, Ph: 02 9080 4321;  
Email: [jamie.burrage@informa.com.au](mailto:jamie.burrage@informa.com.au) Web: [www.admevents.com.au](http://www.admevents.com.au)

## **ADM2013: 10th Annual ADM Defence/Industry Congress** **12 – 13 February 2013, Hyatt Hotel, Canberra**

The annual ADM Congress has evolved into a pivotal event in the Defence calendar, attracting senior officials from all areas of the Defence Force and Defence Industry.

It is a critical forum for any organisation operating within the defence business sector.

Also do not miss the ADM Awards Dinner. The dinner is the perfect opportunity for you to continue networking with colleagues and new contacts made at the Congress.

More details to be released closer to the date

**Further Information:** ADM Events - Jamie Burrage, Ph: 02 9080 4321;  
Email: [Jamie.burrage@informa.com.au](mailto:Jamie.burrage@informa.com.au) Web: [www.admevents.com.au](http://www.admevents.com.au)

## **Avalon 2013: Australian International Airshow and Aerospace & Defence Exposition**

### **26 February - 03 March 2013, Avalon Airport, Geelong**

The Australian International Airshow and Aerospace & Defence Exposition is the essential aviation, aerospace and defence event for the Asia Pacific.

Industry-only trade sessions will be held Tuesday to Thursday (all day) and Friday will be both a trade and public day. The exposition will open each day from 9am until 5pm. Associated industry and technology conferences, seminars and symposia will be held at Avalon and in Melbourne and Geelong during show week.

Further Information: Aerospace Maritime Defence Association Ph 03 5282 0500; Email: [airshow@amda.com.au](mailto:airshow@amda.com.au); Web: <http://www.airshow.net.au>

---oOo---