



DEFENCE WEEK

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Australia links with Canada on joint fires support

Canada has been at the forefront of Joint Fire Support (JFS) system development, and the contribution of scientists of the Defence Research and Development Canada (DRDC) has already enabled Canada to forge an international reputation as a leader in the area of joint fire support.

Now well positioned on the world stage as a result of its experience and expertise in this area, Canada has developed a joint fires support partnership with Australia.

Australia has established its own Joint Fires Battlelab capability at Enoggera to support training, exercises and experimentation and which will enable the ADF to examine and test new socio-technical configurations for conducting Joint Fires enabled by digital systems. The Joint Fires Battlelab can be networked over various training and coalition experimentation networks enabling distributed activities with other battlelabs either within Australia or with Coalition partners.

As an example, the JFS test bed and the expertise of the **Canadian Forces Warfare Centre (CFWC)** will be incorporated into the **Coalition Attack Guidance Experiment II (CAGE II)**, an exercise organised by the AU/NZ/CAN/UK/US **Technical Cooperation Program (TTCP)** for November 2012. At Enoggera this experiment focusses on joint operations onboard the LHD and will examine:

- the utility of the digital joint fires systems in this environment; the development of a recognized land picture (in partnership with



LAND75 and the Australian Army Land Network Integration Centre (LNIC);

- the development of a tactical air picture; and
- the development of an end-to-end targeting capability from DTCS to AFATDS to JADOCs to the intelligence preparation of the battlespace, particularly for time sensitive targeting.

CAGE II objectives for the Canadian and other Coalition participants are to improve the tactical air picture, improve the sharing of the tactical air picture information digitally, improve digital messaging between coalition fire control systems, improve target development and cross-boundary target prosecution, and improve analysis tools—*Tom Muir*



LM2500 turbine for third AWD arrives

GE Marine has delivered two LM2500 marine aeroderivative gas turbines to ASC, in support of the Royal Australian Navy's third Hobart-class Air Warfare Destroyer (AWD), HMAS Sydney.

Based on GE's CF6-6 aircraft engines, the LM2500 high-performance unit features a gas generator, a power turbine, attached fuel and lube oil pumps, a fuel control and speed governing system, as well as controls and devices for starting

and monitoring engine operations. Each AWD will be equipped with a **combined diesel and gas** (CODAG) propulsion system, which consists of two GE LM 2500 gas turbines and two diesel engines.

The LM2500 gas turbine engines were designed and developed at GE's Evendale facility in Ohio, US, while the LM2500's base and enclosure assemblies were built at **Thales** facility in Bendigo.



Women in combat

In April 2011, the Government announced that Defence would open up all roles in the Australian Defence Force (ADF) to women, including combat roles, on the basis that determination for suitability for roles in the ADF is to be based on physical and intellectual ability, not gender.

In September 2011 the Government approved the Implementation Plan for the removal of gender restrictions on Australian

Defence Force combat role employment opportunities. The plan details the steps Defence will take to enable women to meet the demands of the role, to pursue careers



as Navy Clearance Divers and Mine Clearance Diver Officers; Air Force Airfield Defence Guards and Ground Defence Officers; and Army Infantry, Armoured Corps and some Artillery roles.

The plan will be implemented over five years to ensure appropriate levels of support are available for all people who choose to pursue a career in combat roles.

The implementation plan is well underway. In-service applicants will be entitled to apply for a career in a combat role from January 2013, provided they meet all requirements and subject to course availability and vacancies.

The opening of all roles within the ADF is a step closer with Army about to complete its **Physical Employment Standards** (PES) Project review of all employment categories.

DSTO scientist **Dan Billing**, who is the leader of the PES project, said the proposed new basic test, demonstrated at the defence headquarters in Canberra on Monday, gives a better indication of whether a soldier is actually able to perform a range of tasks likely to be encountered in service life.

The Minister for Defence Science and Personnel, **Warren Snowdon**, said it's a significant milestone in the ongoing project and means that very shortly Army will be prepared to open previously restricted roles to female applicants.

DSTO looking for IT support

Defence Science and Technology Organisation (DSTO) has issued a tender for a help desk contractor to support around 2,500 researchers spread over seven sites across Australia.

DSTO operates two help desks at Edinburgh in South Australia and Fishermans Bend in Port Melbourne. These are run as a one virtual help desks and field an average of 600 calls each week.

Science Corporate Information Services (SCIS) provides two separate networks (restricted and unrestricted) to DSTO staff who use more than 16,000 applications, 4,000 desktops, 1,100 laptops, 1,500 thin clients and 560 printers.

The agency has asked for an outsourced contractor to provide an end-to-end help desk service, including staff coaching and continuous process improvement activities under a 12-month agreement.

The contractor would need to resolve 50 per cent of help desk calls the first time, which is below industry standards.

However, the agency said it runs a heterogeneous IT architecture in a research environment without an standard operating environment (SOE) and the technical diversity of and complexity of help desk support should not be under estimated.

"The overall DSTO computing environment is diverse and challenge and reflects the needs of one of Australia's largest research and development organisations," DSTO said in a statement.

"As the reliance on SCIS within DSTO has increased, the provision of effective IT support has become more important, particularly the quality of help desk support." – *computerworld.com.au*





Defence's ICT upgrade

Defence has selected Cloud and datacentre hardware and software vendor, Oracle, to upgrade its ICT infrastructure.

The four-year agreement (which was signed on May 28) will see Oracle provide the DoD with department-wide, unlimited use of more than 200 software products from the vendor's database and middleware portfolios.

According to Oracle, the deployment will help DoD to migrate from a highly complex enterprise architecture, featuring more

than 3,000 applications, to an integrated, rationalised and standardised suite of infrastructure solutions.

"With just under 81,000 full-time personnel and active reservists, we needed a consolidated HR solution that would enable us to transform the way we deliver HR and talent management services across all arms of the Defence Force," CIO, Greg Farr, said.

"Oracle has provided us with this modern platform and has provided a partnership to ensure its success for the future," he said. "In particular, HR analytics will help us better understand our workforce, including identifying high quality applicants, improving employee retention, reducing absence costs and designing compensation that rewards performance."

The agreement is expected to yield a reduced total cost of ownership (TCO) as deduplication of applications and effort is reduced. Defence is looking at achieving \$1.9 billion in SRP savings under its ICT stream. – *arnnet.com.au*

DSD offers BYOD advice

The Defence Signals Directorate (DSD) has published two sets of guidelines for Australian government agencies contemplating a bring your own device (BYOD) regime.

The document poses common questions like:

- What are the legal implications?
- What are the financial implications?
- What are the security implications?
- Do I have a strong business case to justify the security trade-off?

It also makes the, to IT folks at least, non-startling observation that:

The guidelines states that, "BYOD can be the 'weak link' into a network. Using mobile devices for both personal and business purposes can create more opportunities for social engineering and the inadvertent installation of malicious software. Malicious software can provide an entry route into the associated corporate network and access to information communicated or stored on the device. Organisations are likely to have less visibility and control over the security configuration of, and user behaviour on, BYOD. Employees will often lack the IT knowledge and motivation to reduce security risks to their devices."

It is to be hoped it offers rather greater detail than the public document's exhortation



to “be consultative” when developing BYOD security, as “The most effective scenarios are jointly developed by business and legal representatives, IT security staff, system administrators and employees themselves. This helps ensure your organisation develops policy and processes which all stakeholders are willing to adhere to.” - *DSD*

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.

This week, we heard news that **HMAS Choules**, bought from the British last year, will be out of action until April 2013 following a mechanical breakdown June 2012.

Defence Minister Stephen Smith and Foreign Minister Bob Carr announced that Australia’s security operations in **Timor-Leste** have come to an end.

Australia celebrated 25 years of the first **PC-9/A trainer aircraft** delivered to the Royal Australian Air Force.

Australia and Papua New Guinea competed in **Exercise Paradise** in waters off Cairns.

And, two companies have collaborated to offer industry-specific training to companies wanting to work in the State’s **defence industry**.

International

USN’s second BAMS UAS



The US Navy and Northrop Grumman are jointly conducting ground testing of second MQ-4C broad area maritime surveillance unmanned aircraft system (BAMS UAS) in preparation for its first flight.

During ground trials, the new unmanned aircraft and the first UAS will demonstrate



their control software and subsystems to further reduce associated risks.

The company was awarded systems development and demonstration contract in 2008 to build and test two aircraft in preparation for operational deployment with the US Navy by late 2015.

Officially named Triton, the MQ-4C BAMS UAS will provide constant surveillance for the Maritime Patrol and Reconnaissance Force (MPRF) to carry out littoral missions. Developed as a naval version of the US Air Force's RQ-4 Global Hawk aircraft, the MQ-4C BAMS UAS has been designed to conduct maritime surveillance, gather enemy battle information, battle damage assessment and port surveillance missions.

Powered by a **Rolls-Royce** AE3007H turbofan engine, the high-altitude, long-endurance UAS can cruise at a maximum speed of 357mph and reach a maximum altitude of 60,000ft—*naval-technology.com*



US Marine Corps 1st operational JSF squadron

The US Marine Corps has stood-up its first operational squadron of F-35B Lightning II aircraft at Marine Corps Air Station Yuma.

The new Marine Corps jets comprise the beginning of the first operational fleet for the F-35 program, and will be part of the newly re-designated **VMFA-121 aircraft squadron**

at MCAS Yuma in Arizona.

The F-35B aircraft, equipped with the **Rolls-Royce LiftSystem**, provide short take off and vertical landing, or STOVL, capability. Rolls-Royce will support VMFA-121 through technical assistance and Field Service Representatives at MCAS Yuma.

The LiftSystem is part of the F-35B propulsion system, powered by the **Pratt & Whitney F135** engine. The LiftSystem includes the Rolls-Royce LiftFan, shaft, gearbox, 3-Bearing Swivel Module, and roll posts. The propulsion system allows an F-35B to operate from aircraft carriers, short-deck amphibious ships, or austere, forward locations which lack lengthy runways. The **Lockheed Martin** F-35B is the only fifth-generation STOVL aircraft in the world.



Pity we didn't do that...

The Danish Ministry of Defence (MoD) has received proposals from eight European companies for a contract to replace the Royal Danish Army's ageing M113 armoured personnel carriers (APC) fleet.

A request for information was floated by the MoD in May 2011 to manufacturers for the procurement of approximately 360 vehicles



in six different configurations under a track versus wheel vehicles competition. The configurations included an infantry, command and control, ambulance, mortar, as well as engineering and mechanical variants. The winning manufacturer is expected to be under contract by the end of 2013.

Companies bidding for the contract include **BAE Systems Hagglunds**, which proposed Armadillo variant of its **CV90 tracked vehicle**, **FFG Flensburger**, **Rheinmetall Landsysteme** and the Santa Barbara subsidiary of **General Dynamics European Land Systems (GDELS)**, according to a statement by the procurement arm of the MoD.

The statement added that **ARTEC**, **Nexter**, **Patria** and the **Mowag** subsidiary of GDELS have proposed wheeled vehicles and provided no additional information on the type of vehicles.

The MoD is expected to down-select a number of contenders in the next few months, prior to the scheduled starting of vehicle trials in Denmark in March 2013. Undisclosed Danish industry officials were cited by *Defense News* as saying that they expected the winning manufacturer to be under contract by the end of next year.

Manufactured by BAE Systems, the M113 is a fully-tracked APC capable of conducting amphibious operation, extended cross-country travel over rough terrain and high-speed operation on improved roads and highways. The Danish Army operates 632 heavily-armoured M113s in different configurations, such as APC, command vehicles, repair vehicles, fitters vehicle, TOW carrier, ambulance, and combat engineers vehicle, as well as tactical air control party carrier and fire-fighting vehicle.



More Foxhounds for UK MoD

The UK Ministry of Defence (MoD) has signed a contract with General Dynamics Land Systems for delivery of additional Foxhound light protected patrol vehicles (LPPVs), defence equipment, support and technology.

Announced by Defence Minister **Philip Dunne** during his visit to GDLS spares facility in Telford, the contract is valued at £46 million, and covers production and delivery of 51 more Foxhounds for use by UK Army soldiers in Afghanistan. Dunne said the investment demonstrates the ministry's commitment to deliver growth and sustain jobs in the West Midlands industrial base.

The latest contract forms a part of an overall £340 million investment made by the MoD in Foxhound since November 2010, and brings the number of vehicles ordered to date to more than 370. The first batch of Foxhounds was shipped to Afghanistan in June 2012 and is currently being used by soldiers operating in mentoring and partnering roles with the Afghan National Security Forces (ANSF) in Helmand province.

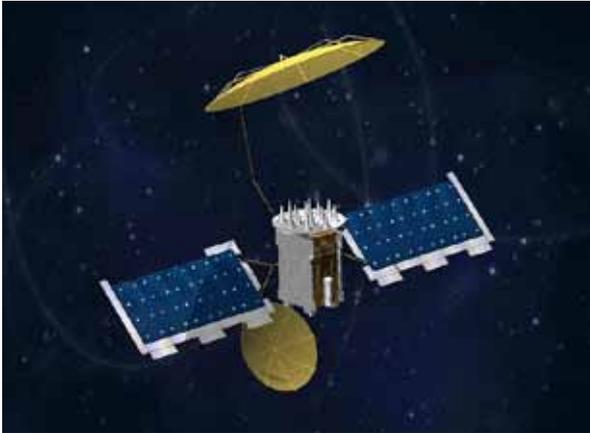
Powered by a Steyr M16-Monoblock diesel engine, the Foxhound is a 4x4 highly armoured vehicle, designed and built specifically to protect British troops against a wide range of **improvised explosive device** (IED) attacks in the battlefield.

The vehicle is lighter and smaller when compared with the Army's Mastiff and Ridgback protected patrol vehicles, and features V-hull blast-protection technology, a



modular demountable protected crew pod, as well as Formula One technology to offer speeds of up to 70mph.

NB: Foxhound (Ocelot) was excluded from **Land 121 Overlander Ph4 stage 2** in December 2011.



First MUOS satellite accepted for operational use

The US Strategic Command has accepted the first mobile user objective system (MUOS-1) satellite for initial operational deployment.

Launched February 24, the MUOS-1

is a next-generation narrowband tactical communications system that will provide enhanced communications capabilities for combatants on the move.

The MUOS operates as a global cellular service provider to support troops (including Australians) with modern cell phone-like capabilities, such as multimedia. There are four ground stations, each of which serves one of the four active satellites of the MUOS constellation, one of which is located at the Defence Satellite Communications Station in Western Australia. The satellite will enable the continuous flow of tactical communication to and among all branches of the US and Australia military, while ensuring coverage for national emergency assistance, disaster response and humanitarian relief.

Earlier this year **General Dynamics C4 Systems** conducted the first demonstration of secure voice and data communications using the AN/PRC-155 two-channel networking radio. During the demonstration, the AN/PRC-155 radio running the MUOS waveform software, was used to transmit encrypted voice through a MUOS-satellite simulator to the MUOS ground station equipment that is expected to be deployed in Sicily, Italy. With the two-channel radio, the soldier can use one channel for a line-of-sight single channel ground to air radio system (SINCGARS) and soldier radio waveform (SRW) and bridge it to the second channel using the MUOS system for unprecedented, global Satcom narrowband connectivity—*Tom Muir*

ADM Congress 2013

Date: 12-13 February 2013, Hyatt Hotel Canberra
Enquiries: Jamie Burrage, Tel: +61(2) 9080 4321;
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Better vision for AFV crews?

The introduction of Armoured Fighting Vehicles (AFVs) into the urban environment and the threats from asymmetric warfare, Improvised Explosive Devices (IEDs) and Rocket Propelled Grenades (RPGs) means that armoured vehicle crews need a superior peripheral vision capability.

The solutions currently on the market do not answer operational requirements efficiently. They tend to offer poor levels of performance or an exorbitant price.

At the recent Land Warfare Conference, **Thales Optronique** proposed its innovative Local Situation Awareness (LSA) system dubbed **Antares**. The company says that thanks to breakthroughs in the fields of detector technology, optical design, data links, real time processing and Human Machine Interfaces (HMIs), the Antares system provides an armoured vehicle crew with panoramic real time day and night vision and a range of potential new capabilities, adding that it gives the feeling of being inside transparent armour!

While conventional systems can currently provide all round vision to the vehicle commander through a series of fixed or mobile sensors but trials over the last few years with demonstrators or prototypes that rely on camera arrays have been disappointing. The first demonstrators relied on standard video cameras fitted with fish eye lenses or toroidal catadioptric lenses. They provided panoramic capability, but an inherent poor resolution remained one of the main drawbacks in users' minds.

The Antares innovation relies on several breakthroughs to deliver new capabilities. It is based on a unique smart sensor head linked to an image exploitation HMI, so has a single sensor mounted on the vehicle roof. The system integrates the following key features:

- purpose-built super-hemispheric lens;
- high resolution sensor;
- high rate data link and;
- efficient signal processing heart.



Land 400 take note...

The US Army is waiting for budget directions from Pentagon leaders regarding changes in store for the Ground Combat Vehicle (GCV) acquisition strategy. At issue is whether the Army, at the

direction of the Office of the Secretary of Defense, will keep two contractors through the engineering and manufacturing development phase, or whether it will down-select to one at the end of the technology-development phase next year. Awarding only one contract would save money, but increase acquisition risk.

And while this is happening *Inside Defense* reports that **BAE Systems** has launched a robust public relations effort for its hybrid-electric Ground Combat Vehicle design in the wake of a recent Congressional Budget Office (CBO) report that said the Army's



GCV program faced an array of challenges driving vehicle weight and cost.

The CBO report says the GCV, given current Army force-protection requirements, will likely weigh between 64 and 84 tons—twice as much as the Bradley Fighting Vehicle it is intended to replace, and approximately as much as an **Abrams** tank.

But **Mark Signorelli**, general manager of BAE's GCV team, doesn't think the estimated weight is all that unreasonable given the requirement to protect 12 passengers - a squad of nine and a crew of three.

"There's been a lot of speculation around weight in the CBO report," he said in a November 20 interview. "I would say it's in the same weight class as an Abrams, but you've got a 70-ton vehicle that's protecting four people in an Abrams. In a GCV, you've got a 70-ton vehicle protecting 12 occupants and I don't think that's an unreasonable expectation. You want these vehicles to operate in the same environment as the Abrams and you can't protect 12 people for half the weight."



US Navy's 'Superior Suppliers' program

The US Navy will begin a pilot program in the next few months to identify "superior suppliers" who are outperforming other companies and reward them in future competitions, a Navy official said last week.

Department of Defense (DOD) acquisition chief **Frank Kendall** said this month at the Pentagon that the department had attempted to pursue a superior supplier program two years ago but "we didn't get there," so officials decided to give the Navy the lead for the time being. **Elliott Branch**, deputy assistant secretary of the Navy for acquisition and procurement, said the effort began with the Navy under **Better Buying Power** an earlier DOD effort to identify efficiencies.

Branch said the idea is to look at our suppliers in detail, pick those who really were excellent suppliers, and provide those excellent suppliers some rewards, commensurate with that excellence.

ADM Comment: Perhaps the US DOD could learn from the Australian DMO's **Company ScoreCard Policy**, a contractor performance measurement tool issued by the Defence Materiel Organisation (DMO) to Defence companies with contracts meeting the thresholds listed at Paragraph 5 of this policy.

Company ScoreCards are issued for the purposes of communicating contractor strengths and weaknesses to DMO source selection staff, and to ensure currency of contractor performance data.

According to a September 2012 statement, the DMO Company ScoreCard aims to:

- formalise the corporate knowledge of a contractor's performance;
- encourage better performance through active dialogue between the contractor and Defence; and
- enable Defence to make informed source selection decisions during the tender process.

Company ScoreCards will be used by Project or Tender Evaluation Boards during tender evaluations and source selections. The Company ScoreCard will provide Defence with a perspective of tenderers' performance in the delivery of DMO contracts, past and present.





Speeding up ship design

Paramarine software, developed by QinetiQ GRC, has been selected by Rolls-Royce who are broadening their ship design capabilities. Paramarine will be Rolls-Royce's marine design software tool of choice in support of their newly

formed team dedicated to the development of naval ship designs. Rolls-Royce has been at the forefront of innovative ship design for nearly 40 years, designing over 800 vessels, used mainly in the commercial sector.

This new ship design team will create innovative designs for customers such as Navies, Coastguards and other maritime agencies. The primary focus will be on **offshore patrol vessels (OPVs)** and naval auxiliary opportunities, rather than large combatant ships such as frigates and destroyers.

Paramarine is based on over 20 years' experience in marine design. Thousands of concept vessels have been modelled and their stability analysed using Paramarine. Paramarine is used by many of the world's leading commercial and naval shipbuilders and ship designers, as well as some of the leading universities including the Massachusetts Institute of Technology and University College London.

Vittorio Vagliani, managing director, QinetiQ GRC said, "Rolls-Royce were looking for a software tool that would be able to speed up the whole process of early stage ship design whilst mitigating risk as their intention is to develop new projects from scratch in short timeframes. Paramarine is ideally suited to meet this challenge. We are very pleased to have been selected by Rolls-Royce and look forward to supporting them in this new venture."

Rheinmetall transfers MANTIS air defence system to the German Air Force

The German Air Force has taken delivery of the Rheinmetall-made MANTIS air defence system.

An acronym standing for "Modular, Automatic and Network-capable Targeting and Interception System", MANTIS provides the Bundeswehr with a high performance, automated air defence system for asset protection that is second to none. Full integration into existing command and information systems has already been achieved, with plans in place to ensure that it meets future requirements as well. Thanks to its programmable 35mm Ahead ammunition, this cutting edge system is capable of bringing down even the smallest targets.

MANTIS is based on tried-and-tested **Oerlikon Skyshield** air defence technology.

It is designed to protect military installations and critical civilian infrastructure from aerial threats coming in at low altitude, including manned and unmanned aircraft. First and foremost, however, what sets MANTIS apart is its ability to neutralize incoming rockets, artillery and mortar rounds – the so-called RAM threat. Moreover, MANTIS



can be deployed to defend national territory and allied nations or in military operations other than war (MOOTW). In conflict and post-conflict situations, it can be used to protect Bundeswehr forward operating bases and other facilities from attacks of the kind directed against ISAF installations in Afghanistan, for instance.

The system's modular design gives MANTIS excellent growth potential. If an asset has to be protected at short notice, the radar and gun components can be transported to the area of operations on quickly deployable platforms. In addition to its current 35mm **Revolver cannons**, it will be possible in future to augment MANTIS with other effectors such as anti-aircraft missiles or high-energy lasers, integrating them directly into the system.

MANTIS is set to serve as the mainstay of modern, ground-based area and air defence of assets, and thus makes a major contribution to safeguarding soldiers deployed in harm's way.



FIBROTEX to provide Israel MoD with next-gen combat uniforms

FIBROTEX Technologies has announced an add-on order for hundreds of its FIGHTEX combat uniforms for an Elite Unit of the Israel Defense Forces (IDF).

The uniforms were ordered by one of the primary commando units of the IDF, which purchases advanced combat uniforms as part of the new soldier's survivability pack. These smart, next generation, two-sided uniforms were selected over various international competitors following extensive rigorous tests that were conducted under extreme environmental, climatic, and combat conditions.

This new generation of uniforms was developed in cooperation with special units of the IDF, based on conclusions drawn from an in-depth study of recent conflicts. Combining knowledge from the extreme sports domain - together with their expertise in the area of smart textile and camouflage fabrics - the company has developed advanced materials that are extremely breathable and ergonomic. These qualities have proven critical during intense operations in extreme weather conditions.

Exceptionally durable, the combat-proven uniforms are lightweight and provide visual and near infra-red concealment. The reversible fabrics are printed with a different camouflage pattern on each side, enabling the adjustment of uniforms to any type of environment – thus enhancing the soldiers' survivability. For example, one side of the fabric can provide camouflage for green areas such as forests, while the other side camouflages soldiers in desert or urban environments. Patterns and properties can be fully customized to precisely match any other requirements.

FORTHCOMING EVENTS.....next page



FORTHCOMING EVENTS

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

ADM's Social Media in the Defence Environment

DATE: 5-6 December 2012, Hotel Realm, Canberra

ENQUIRIES: ADM Events - Jamie Burrage, Ph: 02 9080 4321;

Email: jamie.burrage@informa.com.au **Web:** www.admevents.com.au

Social media in the private sector has been a bumpy journey, where companies tread a fine line between credibility and ridicule whilst getting their policies right. In the public sector, and Defence in particular, the evolution of social media has created opportunities, whilst also highlighting the need for social media policies. This inaugural conference will examine the opportunities that social media can bring to the Australian Defence Force and the Department of Defence. By mitigating the dangers of misuse, social media can be an excellent tool for announcements, for recruitment, for connecting and for selling. There is no denying the place of social media in the modern workforce. Hear speakers discuss what tools and policies can help harness social media into an essential part of the Defence workplace.

ADM2013: 10th Annual ADM Defence/Industry Congress

DATE: 12 – 13 February 2013, Hyatt Hotel, Canberra

ENQUIRIES: ADM Events - Jamie Burrage, Ph: 02 9080 4321;

Email: Jamie.burrage@informa.com.au **Web:** www.admevents.com.au

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

Avalon 2013: Australian International Airshow and Aerospace & Defence Exposition

DATE: 26 February - 03 March 2013, Avalon Airport, Geelong

ENQUIRIES: Aerospace Maritime Defence Association Ph 03 5282 0500;

Email: airshow@amda.com.au; **Web:** <http://www.airshow.net.au>

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.

