



# DEFENCE WEEK

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## Why BAE Systems pulled out of JP2072 Ph 2B

**Katherine Ziesing | Canberra**

**There have been reports recently in the mainstream media about the hows and whys of BAE Systems Australia pulling out JP2072 Ph 2B. The worst of which is that the corruption claims against the UK parent company over two decades are some how connected.**

ADM has learned that the two employees who were dismissed 'as a result of their actions' according to a statement from BAE Systems Australia CEO **David Allott**, were caught accessing project related documents on the Defence Restricted Network (DRN).

Many defence company employees have access to the DRN for project related work. The two employees accessed the program files without the proper permissions. Ironically, the documents would have been available to the company from the program office had they gone through the correct channels, though this process would have taken longer.

The Defence Security Agency (DSA) spotted the anomaly in a random scan of DRN usage. ADM understands the DSA has not passed any information to the Australian Federal Police for further action against the two former employees.



No doubt the decision by BAE Systems Australia to walk away from JP2072 Ph 2B was not an easy one. The company has already spent millions in their efforts on the program that was worth \$500 million if not more, and possible sustainment activities. The company was hoping to leverage off their work on the UK communications program known as **Falcon**, win Australia under JP2072 Ph 2B with an eye to the Indian market soon after. It's not just the loss of the Australian program the company has to consider.

Former BAE Systems partner on the program, **Thales Australia** was contacted for this story but had nothing further to add to their previous comment that they had been approached by new partners and had yet to make a decision on the future of the program.

ADM also understands that the DMO and government were happy with the way the BAE Systems handled the issue. But there was some confusion as to how the breach went unnoticed in the company for such a period. Senior DMO officials confirmed that had the company proceeded with the bid they would have had to set BAE aside in fairness to the other competition contenders.

There will no doubt be more checks from DSA into defence industry use of the DRN to make sure that all access is for contracted purposes only.

## Third Congress address for Minister Smith



**In his third address to the Australian Defence Magazine Congress, Defence Minister Stephen Smith noted the important role ADM plays in fostering commentary and analysis on defence policy, major projects and equipment acquisitions. The ADM Congress itself, he added, continues to provide an important forum for exchanging information and ideas about Defence and the Australian Defence Force, he added**

Among the challenges for Defence and the ADF in the year ahead are:

- Transition in Afghanistan and the Solomons – in other words, our troops coming home after more than a decade of overseas operations;
- Delivering the 2013 Defence White Paper in the second quarter of this year;
- Implementation of our ongoing reform program, including cultural reform and reform in procurement and capability; and
- Progression of a number of major new capabilities, including future submarines, air combat capability and a range of significant shipbuilding projects.



The following are excerpts from his keynote address.

**Transition infrastructure:** In regard to the transition of infrastructure in Afghanistan he said the ADF had developed an extensive infrastructure footprint within Afghanistan to support its mission over the last 10 years ranging from accommodation buildings to utilities such as water treatment plants.

Much of the ADF's infrastructure was relocatable with work underway to assess the options for return to Australia or remaining within Afghanistan to support the ANSF or Australia's post 2014 posture. He said all ADF sites are to be remediated to ensure the safety of the site for future Afghan use and its environmental cleanliness. A specialist environmental officer will be deployed to ensure all disposal and infrastructure remediation work does not create an environmental hazard for Afghanistan.

**2013 Defence White Paper:** The White Paper will address the significant developments internationally and domestically since the 2009 White Paper which are influencing Australia's Defence posture, future force structure and Defence budget, including:

- The ongoing strategic shift to our region, the Indo-Pacific and Asia Pacific, particularly the shift of economic weight to our region;
- The ADF's operational drawdown from Afghanistan, East Timor and Solomon Islands;
- The US' re-balance to the Asia Pacific and Australia's enhanced practical cooperation with the US pursuant to our Alliance relationship;
- Australia's own Force Posture Review – the first in a quarter of a century.

The White Paper will also address the ongoing need for reform in Defence, another great challenge for the Defence Organisation.

**Performance - Defence projects:** Schedule performance remains an area where we can do more to improve performance. Major Defence projects continue to experience an average 32 month delay, as the recent Australian National Audit Office report into the top 29 projects found, including:

- Collins Class Collins Reliability and Sustainability (99 months);
- Tiger Helicopters (79 months);
- Collins Class Replacement Combat System (72 months);
- ANZAC Class antiship missile upgrade (72 months);
- Wedgetail (58 months)

Poor project management in the past has also seen the failure on a number of occasions to keep Government fully informed about changes to a project's approved scope, cost or schedule. It is not appropriate for Defence to vary from the approved scope, cost or schedule, without approval from the original decision maker or delegated approval authority. In 2012, at Government direction, Defence conducted an acquisition baseline review audit of all approved projects within the DMO to ensure they were being progressed within approved scope, cost and schedule. This audit identified a number of projects which had not met the reporting standards expected by Government, with substantial delays in reporting – or more advisedly not reporting – of schedule delays and scope variations.

Such projects included:

- Joint Project 1 – Harpoon Missile Capability, which experienced an unapproved change in the scope of the project;
- AIR 5418 Phase 1 – JASSM, which experienced an unapproved change in the scope of the project;
- Joint Project 2059 Phase 2 – Bulk Liquid Distribution, which was delayed but Government was not informed; and



- Land 40 Phase 2 – Direct Fire Support Weapon – Lightweight Automatic Grenade Launcher, which experienced an unapproved change in the scope of the project.

In response to this audit, the Government has directed that Defence implement a new regime of reporting on variations to original project approvals. Project approval submissions will include clear thresholds for reporting to Government and the original approval authority for variations to cost, scope and schedule. Variations that exceed these thresholds must be referred for consideration to the original decision maker, whether that is the Minister, the Minister and the Minister for Finance and Deregulation or the National Security Committee of the Cabinet. This important further reform will be made explicit in the White Paper so that it is embedded in Defence culture.

A full wrap up of conference coverage will be available in a dedicated ADM2013 newsletter. Keep your eyes peeled!



## Australian Industry Capability Plans

**Defence Materiel Minister Dr Mike Kelly this week announced the public release of the first Australian Industry Capability (AIC) Plans.**

“These plans will prove to be an important source of information for Australian industry, particularly small to medium enterprises,” Dr Kelly said. “I acknowledge

**BAE Systems Australia, CSC Australia and Ultra Electronics Avalon Systems** for providing the first Public AIC Plans detailing opportunities for Australian industry to compete for work.”

Public AIC Plans are released by contracted Defence suppliers and provide details of expected opportunities for Australian industry involvement in major Defence capability contracts. Plans will be progressively released for all eligible procurements, with a further three expected to be published by the end of February 2013. The level of detail incorporated into each Public AIC Plan will vary depending on the scope and complexity of the potential Australian industry involvement, and any security or commercial restrictions.

Dr Kelly said the implementation of this reform in Defence was consistent with the Government’s broader commitment to Australian Industry Participation Plans.

**Background:** Public Australian Industry Capability (AIC) Plans set out the plans and forecast opportunities that contracted Defence suppliers will provide for Australian industry involvement in major Defence capability projects and sustainment activities.

The level of detail incorporated into each Public AIC Plan is expected to vary with the content ranging from brief high-level summaries to more detailed statements depending upon the size, scope and complexity of the potential Australian industry component of the procurement. The level of detail published will also depend on the security or commercial restrictions or caveats that apply to the information and the likelihood of any requirement to amend contracts and their associated AIC Plans over their agreed term.

The implementation of this reform in Defence is consistent with the broader Australian Industry Participation initiative now in force to strengthen opportunities for Australian industry to compete for work across Government. The first of the public AIC Plans are available [here](#).



## Essington Lewis trophy winners announced



A range of SME and Primes were recognised for their work in 2012 at the **ADM2013 Awards Dinner** held in Canberra at Old Parliament House on **Tuesday, 12th February 2013**.

The ADM/DMO Industry Awards recognise excellence in the level of collaboration between DMO and Industry teams.

The awards are structured into four categories from which a major company/DMO team and an SME/DMO team are chosen to win the ultimate award - the Essington Lewis Trophy – one for the major company/DMO team and one for the SME/DMO team.



### Essington Lewis Trophy Winners

The prestigious Essington Lewis Trophies were this year awarded to **Thales Australia** and **AFVSP0** for the Prime company category while **11 industry teams** and the **Joint Project 154 Phase 3A** team narrowly beat the Mediaware entry for the SMEs.

Unfortunately, no nominations were received for the major program category, much to the disappointment of the audience.

### CATEGORY WINNERS:

#### Sustainment and Logistic Support category winner:

#### Mediaware International Pty Ltd and UAS Management Unit

**Mediaware International Pty Ltd** and **UAS Management Unit** are being recognised for their work on the Shadow 200 UAS Processing, Exploitation and Dissemination (PED) carried out in 2012.

The work done clearly showed a strong collaborative relationship from first principles, allowing the project to be delivered on time and on budget.

#### Rapid Acquisition category winner:

#### 11 industry teams and Joint Project 154 Phase 3A

11 partner companies (JCB US and UK, Construction Equipment Australia, Selex Galileo UK, CSI, Dorbyl RSD, DCD Protected Mobility, FASCAN International US, Chemring Australia, NIITEK, Pearson Engineering UK and IDES) and the Joint Project 154 Phase 3A team were able to deliver a complex, high technology counter-IED solution to a serious frontline problem the ADF was facing using MOTS and COTS technology in a tightly compressed timeline. The teams are commended on their in-theatre introduction and support efforts in Afghanistan by both parties.

#### Minor project category winner:

#### Thales Australia and AFVSP0

AFVSP0 and Thales Australia under Army Minor 002.12 provided Crew Procedural Trainers for the ASLAV turret in the form of a simulator, doubling the capacity of the existing training capability. The program is to be commended for achieving their program a year ahead of schedule and under budget. The significant savings that the program provides are an asset to the Army.



## AIDN National Young Achiever Award



**Jessica White (pictured above) from MEMKO Pty Ltd (an AIDN-Vic member) was announced as the national winner of the 2013 Australian Industry & Defence Network (AIDN) Young Achiever Award (YAA) at the ADM2013 Congress awards dinner in Canberra.**

In introducing the national finalists the AIDN National President, **Graham Priestnall** said ‘that although the finalists worked in diverse backgrounds within the defence industry, each YAA displayed outstanding qualities in their profession and are a credit to themselves and their employers.’ Priestnall also remarked that, ‘this year’s AIDN National YAA competition had six finalists, which is the most numerous one of the strongest in the award’s history. Priestnall thanked the AIDN Chapters for ‘their excellent work in conducting their Chapter competition and providing such a talented group of individuals.’ He also expressed AIDN’s gratitude for the ongoing support provided by the DMO and the ADM.

In announcing the winner the DMO’s General Manager Joint Systems and Air, **Shireane McKinnie**, emphasised the importance of acknowledging and encouraging all talented young Australians involved in the defence industry. “These fine young Australians are the key to our future and initiatives, such as the AIDN Young Achiever Award, continue to nurture this talent,” McKinnie said.

The other national finalists were:

- Timothy Cervenjak, **Australian Aerospace** – AIDN-Qld Finalist
- Tammy Chau, **Babcock** – DTC Finalist
- Anthony Galea, **GHD** – AIDN-NSW Finalist
- Matthew Shelley, **Raytheon Australia** – AIDN-WA Finalist
- Joshua Zvargulis, **CEA Technologies** – AIDN-ACT Finalist

All finalists represented their State magnificently in the national finals.

The annual Young Achiever award was created to recognise the important contribution made by young people in Australia’s defence industry. The award is held at the State and Territory level with winners competing for the national award.



## DMMA: and then there were four

The DMMA program office in the space of less than six months has gone from a field of contenders of six teams to four. Spain's EXPAL has now combined their bid with BAE Systems Australia while the Raytheon led team of South Korea's Poonsang Corp and Chemring Australia has withdrawn from the competition amongst some controversy.

Claims have been made that Poonsang saw too much risk in the program given the Commonwealth history of dealings with Korean technology (the cancellation of the self propelled howitzer under Land 17 was a big blow for Samsung and Raytheon).

ADM has also heard on the rumour mill that the field may narrow even more before the contract progresses. Stay tuned readers.



## Testing the Bushmaster's anti-IED protection

The Defence Science and Technology Organisation (DSTO) recently completed a series of experiments to assess the effectiveness of the Bushmaster survivability upgrade kit (SUK). The SUK was installed on Army Bushmasters a year

and a half previously to provide better protection against improvised explosive device (IED) blasts.

The SUK modifications included changes internally to the seats and floor of the vehicles. DSTO's experimental program involved comparing the outcomes of identical IED blasts on two Bushmasters equipped with SUK and one without. The test vehicles were extensively fitted with sensors to measure blast loadings and damage to their structures. To study the effects of IED blasts on humans, three mannequins were seated inside each test vehicle, and one was placed outside in the blast field. These were fitted with accelerometers in their helmets and sensors around their bodies to detect damage to critical regions.

Six high-speed cameras were installed inside each vehicle along with several placed outside to make a visual record of the blast impacts. After analysing the data gathered from the trials, DSTO gave advice to Army about the level of survivability provided by the SUK enhancements. It also offered direct advice on operational procedures to Australia's force deployment in Afghanistan.

## A better ESM system for the RAN

The purpose of electronic support systems (ESM) is to give shipboard command an awareness of any electromagnetic emissions coming from other ships or aircraft at ranges beyond the capabilities of radar to detect the other asset.



The situational awareness information that can be obtained in this way includes the direction of emitted energy, the type of ship or aircraft involved and whether the other asset is seeking to launch an attack. This capability provides more time to assess a potential threat and to formulate a response than would be possible using radar detection alone.

A problem for ESM systems currently in use is that they're designed to detect pulsed radar transmissions. When operating in environments where radio transmissions are continuous – as emitted by ultra-high frequency television stations, microwave data links and cellular telephone transmissions – this continuous signal input tends to swamp the detection capabilities of the electronic support system.

A solution to the problem, proposed by Sydney-based SME **Jenkins Engineering Defence Systems** and developed through the **CTD program**, has taken the form of an apparatus known as the **Low Band Direction Finding Sub System** (LBDFS) aimed at providing an ESM that can operate without interference in challenging environments.

The LBDFS was then installed on a vessel and tested at sea in the waters off Jervis Bay. These field trials demonstrated the capabilities of the new system to provide high sensitivity and direction finding functions with greater accuracy than standard electronic support systems.

The next round of CTD winner will be announced shortly. *ADM* will keep you informed Round 17 comes together.



## DSTO Scramjet data sought from flight trials

A hypersonic flight trial was recently undertaken by the Defence Science and Technology Organisation (DSTO) and the US Air Force Research Laboratory at the

**Andøya Rocket Range in Norway. The fifth in a series of nine flight trials being conducted in the Hypersonic International Flight Research Experimentation (HIFiRE) program, its purpose was to obtain flight data from a scramjet engine – a type of air-breathing engine being developed to facilitate flight at hypersonic speeds.**

The trial involved launching an engine and its support module with a two-stage rocket booster to an altitude of 350 kilometres. After leaving the atmosphere, the test vehicle was readied by removal of protective shielding, and the spent second stage rocket motor and test vehicle were then turned to align the test vehicle to the atmosphere at a specific angle of attack before re-entry.

This crucial and difficult manoeuvre was carried out over the course of three minutes using an autonomous cold gas thruster system developed by DSTO, with some newly developed technology being tested in flight for the first time. During descent through the atmosphere, the vehicle reached speeds in excess of eight times the speed of sound (about 9,000 kilometres per hour) under conditions of ballistic flight.

At a height of 32 kilometres, fuel was fed into the scramjet engine and combustion initiated. Over the next seven kilometres of descent, measurements were made of pressure and temperature at various points on the engine, and the test vehicle's speed



and altitude were also recorded. High quality readings of these were successfully transmitted to four ground stations.

With all aspects of this trial being successfully accomplished, the extent of flight experiment success will become known when data analysis is completed early next year. The outcomes will be used to inform investigations into scramjet engine operations via wind tunnel experimentation and computational fluid mechanics modelling work.



## Lockheed Martin launches Skyline Enterprise

**Lockheed Martin has launched in Canberra - SkyLine Enterprise – a platform to enhance the safety and efficiency of international air traffic management.**

Lockheed Martin will offer SkyLine Enterprise as its solution for Australia's Airservices/ Department of Defence 'oneSky Australia' procurement to combine civil and military air traffic control.

"After more than 50 years of air traffic management experience, Lockheed Martin begins the next chapter by making SkyLine Enterprise available to the Australian and international air traffic management communities," **Sandy Samuel**, vice president, Lockheed Martin Transportation Solutions said.

SkyLine Enterprise is field proven with military and civilian operators. Its components provide a flexible array of air traffic management capabilities that were developed in part with **Adacel Technologies Limited**, an Australian corporation. The platform's airspace management tools are supported by a flight data processing system. This enables airlines and other users to fly their preferred routes, enhancing on-time performance and fuel efficiency. Skyline Enterprise also includes a sophisticated tool that searches for situations in an aircraft's flight path that could cause a delay or pose a danger, even in areas where there is no coverage from surveillance systems, such as radar and automatic dependent surveillance-broadcast systems.

SkyLine Enterprise has adaptable parameters and can be tailored to the needs of a broad range of customers. Its capabilities align with International Civil Aviation Organisation's Aviation System Block Upgrades, ensuring customers adhere to the latest standards.

Lockheed Martin will be providing demonstrations of SkyLine Enterprise at the Australian International Airshow and Aerospace & Defence Exposition (Avalon 2013) near Geelong, Australia from February 26 through March 1.

## 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, the Royal Australian Air Force marked 10 continuous years of **Hercules** deployments to the Middle East.

The University of South Australia and Australian Defence Force signed a Memorandum of Understanding to provide support for students and staff from the University who serve as **Reservists**.

The Chief of Navy announced how Navy will deliver its culture change program. Read the message [here](#).

Airbus Military delivered the first of three new generation **A330 MRTT** multi-role tanker transport aircraft ordered by the United Arab Emirates (UAE).

## International



### Afghanistan drawdown strains US Army budget

Pertinent to Defence Minister Smith's comments at the **ADM Congress on Australia's transition of infrastructure and equipment from Afghanistan**, the US Army reportedly continues to struggle with the higher-than-anticipated cost of withdrawing equipment from Afghanistan as key shipping routes through Pakistan have remained effectively unusable for

**the enormous undertaking, according to sources and documents.**

Service leaders have told lawmakers that one of the reasons the Army would be unable to absorb looming cuts resulting from sequestration - or even to make due with last year's funding levels under a yearlong continuing resolution - is "increased transportation costs," according to a widely circulated briefing summarising the effects of fiscal year 2013 "uncertainty" on Army operation and maintenance accounts.

In particular, shipping \$20 billion worth of equipment out of Afghanistan - part of the Obama administration's plans to dial back the US military engagement effort there - will be slowed and cost more, according to the Army. According to US sources, the Pakistani government has yet to allow a bilateral agreement from last summer to commence in earnest. The agreement is supposed to allow the US military to send equipment on the so-called Pakistan **Ground Lines of Communication (GLOCs)** directly to the port city Karachi-*Inside Defense*

### US Army wants wide area EO/IR sensors

The US Army is said to be watching industry to see who will be the first to fit an electro-optical sensor and an infrared sensor with wide area surveillance capability into a 15-inch turret for manned and unmanned surveillance



aircraft, according to an Army official. While the service has a 15-inch turret that contains EO and IR sensors fused to function simultaneously, it is looking to integrate wide area surveillance capability into that package, Lieutenant Colonel Dean Hoffman, the Army's program manager for the Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS), told *Inside the Army*.

Hoffman's team and Boeing are integrating a variety of sensors onto **Hawker Beechcraft King Air 350s** - the platform for EMARSS - that include tactical common data link sensors, a multitude of antennas, as well as an **L-3 Wescam EO/IR MX-15HDi** full-motion video camera in a 15-inch ball positioned on the nose of the aircraft. The aircraft also has separate wide area surveillance sensors.



## Taxi tests for Boeing's Phantom Eye UAS

Boeing's liquid hydrogen-powered Phantom Eye unmanned aircraft system has completed taxi testing at Edwards Air Force Base in California as it progresses

toward its second flight. During the testing, which occurred recently, the Phantom Eye demonstrator aircraft sitting atop its launch cart reached speeds up to 40 knots, or approximately 46 miles per hour. The Phantom Eye team also completed software and hardware upgrades to prepare for flying at higher altitudes.

"We upgraded the autonomous flight systems and have achieved all the required test points in preparation for the next flight," **Drew Mallow**, Phantom Eye program manager said. Additionally, the team improved the aircraft's landing system following Phantom Eye's first flight, when the landing gear dug into the Edwards lakebed and broke.

Phantom Eye's innovative and environmentally responsible liquid-hydrogen propulsion system will allow the aircraft to stay on station for up to four days while providing persistent monitoring over large areas at a ceiling of up to 65,000 feet, creating only water as a byproduct. The demonstrator, with its 150-foot wingspan, is capable of carrying a 450-pound payload. Its first flight, in coordination with NASA's Dryden Flight Research Centre at Edwards, was in June 2012.



## Bundeswehr fields new Gladius soldier system

Moves by the German Bundeswehr to equip its infantry forces with the state-of-the-art Gladius soldier system are



**gathering pace. In January 2013, the Düsseldorf, Germany-based Rheinmetall Group was awarded an order to supply a further sixty systems. The procurement program began in 2012 with an initial order of thirty systems, enough to equip 300 troops.**

This follow-up order is worth €84 million, and encompasses equipment for 60 infantry sections with a total of 600 soldiers.

Delivery of the new systems will take place in two lots consisting of thirty systems each, the first one in the middle of 2013, another at the end of the year. This will ensure that the next two contingents of Bundeswehr troops due to deploy to Afghanistan will receive the new equipment well in advance.

As planned, the Bundeswehr is currently taking delivery of the thirty Gladius systems it ordered in 2012. The troops will have until June 2013 to train with the new system before going to Afghanistan.

Developed by Rheinmetall, Gladius will significantly improve the overall operational effectiveness of German infantry units while simultaneously enhancing the survivability of individual soldiers.



## New waterjets to increase LCS speed

**The US Navy's fifth littoral combat ship (LCS), Milwaukee, from the Lockheed Martin led team will be the first to benefit from new high-power density waterjets aimed at staving off rudder and propeller damage experienced on high-speed ships.**

**The product of a USN research program, the waterjets arrived last month at the Marinette Marine shipyard in Wisconsin, where Milwaukee (LCS 5) is under construction.**

Developed by **Rolls-Royce Naval Marine** the new Axial-Flow Waterjet Mk-1 can move nearly half a million gallons of seawater per minute, providing more thrust per unit than current commercial waterjets. Four of the new waterjets will propel the LCS to speeds greater than 40 knots.

Researchers believe the smaller, more efficient waterjets will help the LCS avoid excessive maintenance costs associated with cavitation - a phenomenon that occurs when changes in pressure create air bubbles on rotating machinery, such as marine propellers. Repeated occurrences can cause whole chunks of metal to wear away, leading to frequent repairs and replacements.

## Countering the risk of surprise threats

**The risk that US adversaries will develop surprising weapons capable of challenging American military dominance - perhaps by taking out US military satellites or aircraft carriers - calls for a new framework to guard against unexpected threats, according to a new study commissioned by the US Navy.**

In a recent interim report on capability surprise for US naval forces, the **National**



**Academy of Sciences' Naval Studies Board** warns there is no simple way to guard against surprise. The study argues a number of explicit actions are needed, including new steps to spot potential threats and respond as needed with shifts in resources, tactics, capabilities and forces. Final recommendations are expected later this year.

The report discusses two classes of surprise: intelligence-inferred surprise, and disruptive technology and tactical surprise. The former are looming, long-anticipated events or capabilities that arrive before US naval forces have adequately prepared. These might be “programmable logic computer worms” that threaten cyberspace; medium-range ballistic missiles; semisubmersibles with attack capabilities; international security issues such as nuclear weapons proliferation, economic instability and cultural/tribal/religious conflicts; and weapons or jammers that deny access to satellites in orbit, the report states-*Inside Defense*

**Correction:** Please note that last week's story titled, “UK's Defence Equipment Plan” had incorrect foreign exchange rates used. We apologise for any misunderstanding

## 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](http://www.australiandefence.com.au)

## 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](mailto: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.

## International Maritime Security Conference

**DATE:** 14-16 May 2013, Changi, Singapore

**ENQUIRIES:** More details to be released closer to the date.

**IMDEX Asia Web:** <http://www.imdexasia.com/index.aspx>

IMSC 2013 will bring together Navy Chiefs, Coast Guard Directors-General and academia around the world to discuss threats to maritime security and safety, as well as develop frameworks and solutions to deal with the security challenges that threaten and disrupt sea lines of communication.

## ADM Cyber Security Conference

**DATE:** 12-13 June, 2013, Hotel Realm, Canberra

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

**Email:** [Jamie.burrage@informa.com.au](mailto:Jamie.burrage@informa.com.au) **Web:** [www.admevents.com.au](http://www.admevents.com.au)

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

## DSEI

**DATE:** 10-13 September, 2013, ExCel, London

**ENQUIRIES:** **Web:** [www.dsei.co.uk](http://www.dsei.co.uk)

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