



DEFENCE WEEK

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JP2072 Phase 2B: Raytheon set aside

Katherine Ziesing

The field of contenders for JP2072 Phase 2B has slowly been whittled from four earlier this year (teams led by BAE Systems, Raytheon, Lockheed Martin and Boeing) to a field of only two **ADM** has learned.

The well-publicised departure of BAE Systems Australia earlier this year (click [here](#) and [here](#) to catch up on the details) left three in the race but it seems that Raytheon has been 'set aside' during the Offer Definition phase that the program office is currently conducting.

Since the RFT process is ongoing, commercial in confidence restrictions are abundant but **ADM** understands that Raytheon was set aside for failing on compliance grounds. The Raytheon bid was centred on their proven US technologies, a mix between **Maingate** and WIN-T.

For a good overview on the program and contenders, you can't go past Tom Muir's [article](#) from November 2011. While Boeing had not yet broken cover with its bid, it's a good read to get your head around the program.





R.M. Williams Chairman Ken Cowley AO, discusses the features of the new Army parade boot with Chief of Army Lieutenant General David Morrison, after the contract signing at Army Headquarters on August 8.

he is proud the Army has partnered with the Australian brand.

“With the Australian Army’s 112 year history, it is fitting that we will now also carry over 80 years of Australian tradition in our boots,” he said. “Over the next three years Army will replace the lace-up style patent leather boot with the new parade boot, which is a fully stitched, elastic-sided boot with a full grain leather design.”

R.M.Williams CEO **Hamish Turner** said the agreement would support Australian manufacturing and the company’s footwear production skills in Adelaide.

“We are proud to see our world-class Australian-made boots on the feet of those whose job, day in day out, it is to protect this great nation and the people who reside within it,” he said.

To be worn with general duty and ceremonial dress, the boots were trialed with Australia’s Federation Guard as part of the DMO selection process.

Next: khaki briefs by Tommy Hilfiger, Calvin Klein?

Tom Muir

R.M.Williams is to supply the new Army parade boot after a contract was signed in Canberra on August 8.

Soldiers will be issued the new footwear over the next three years to replace the current patent leather parade boots under a standing agreement with R.M.Williams.

Chief of Army Lieutenant General **David Morrison** says

AUGUST EDITION OUT NOW!

The August edition of *ADM* covers a wide range of topics surrounding the themes of simulation and training and undersea technology. Also *ADM* editor Katherine Ziesing interviews Michael Ward – Raytheon Australia managing director.





CAE wins RAAF Hawk simulators contract

CAE has been awarded a contract by BAE Systems to provide three Hawk Mk127 full-mission simulators for the Royal Australian Air Force (RAAF).

The Hawk Mk127 full-mission simulators are part of a comprehensive upgrade and training systems support package that BAE Systems will be providing to the RAAF under the **Project Air 5438** program.

"Upgrading the Hawk aircraft and support systems is key to assuring the ongoing effectiveness of the training capability to prepare our fast jet aircrews for future generations of fighter aircraft,"

Daniel Reid, Group Captain and Officer Commanding, Tactical Fighter Systems Program Office, RAAF said. "With increasing dependency on simulation in this environment, it is essential that students are exposed to state-of-the-art simulation from the time they commence flying fast jet aircraft.

"The new Hawk simulators will have the latest visual technology and will be qualified for use, lessening the reliance on airborne training events and providing additional training capacity for the Hawk fleet. We look forward to working with BAE Systems and CAE, utilising both companies' respective expertise to deliver a leading edge simulation capability."

CAE will design and manufacture three Hawk Mk127 full-mission simulators that will each include a high-fidelity replica of the Hawk cockpit surrounded by an 11-foot projection dome display featuring the **CAE Medallion-6000 image generator** and **Boeing's Constant Resolution Visual System**. The Hawk Mk127 full-mission simulators will also feature the **CAE-developed common database (CDB)**, an open database architecture that enhances the ability to correlate and rapidly update databases to support training and mission rehearsal requirements. The simulators will be delivered to RAAF Base Williamtown and RAAF Base Pearce in 2016 and 2017.

2nd annual ADM Defence Support Services Summit

Date: 19 September 2013, Hyatt Hotel, Canberra

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Chief Defence Scientist Dr Alex Zelinsky (right) with Dr Rob Vertessy, Director of Meteorology at the Bureau

DSTO signs strategic alliance with Bureau of Meteorology

Chief Defence Scientist Dr Alex Zelinsky has signed a strategic alliance to explore mutual interests in defence and meteorological sciences with the Australian Bureau of Meteorology.

The purpose of the strategic alliance is to establish a national framework for co-operation

between the Bureau and DSTO in relation to the provision of meteorological services by the Bureau to DSTO. It enables both parties to combine skills and experience, and work together to undertake a long-term program of collaborative activities in meteorological research.

The alliance sits beneath the broader Strategic Partnering agreement between the Bureau and the Department of Defence.



Hammerhead Crane to go from Garden Island

The Hammerhead Crane will be removed from the Garden Island Naval Base in Sydney.

Parliamentary Secretary for Defence Senator **David Feeney** said the Department of Sustainability, Environment, Water, Population and Communities had approved the removal of the crane.

"Removing this crane will eliminate the safety risk it currently poses to Royal Australian Navy personnel, it will allow Navy to use Garden Island to its best possible



advantage," Senator Feeney said.

The conditions of approval require the heritage value components of the crane to be identified and salvaged. An archival record will be made of the crane and its history will be documented in a Heritage Interpretation Plan.

"Garden Island has a rich heritage spanning over 100 years," Senator Feeney said. "This heritage is carefully maintained by Defence to ensure a balance between the protection of historic heritage values, and maintaining the operational effectiveness of Garden Island in supporting the fleet. The removal of the crane heralds a new era for Garden Island as it becomes home to the Navy's new large amphibious ships, the first of which is due to arrive in late 2013."

Defence intends to proceed swiftly to address the conditions of approval. Information will be published on the Defence website as this activity progresses.

The decision to remove the crane comes after a thorough environmental impact assessment which considered heritage impacts and included public consultation.

Built in 1951, the Hammerhead Crane was capable of lifting 250 tonnes at its peak. It has not been used since 1996.



Chief Defence Scientist Dr Alex Zelinsky after receiving the Pearcey Medal, with Senator Kate Lundy

Pearcey Medal awarded to Chief Defence Scientist

Chief Defence Scientist Dr Alex Zelinsky has been awarded the 2013 Pearcey Medal, Australia's most prestigious Information and Communications Technology (ICT) industry award.

The award is presented annually for lifetime achievement and contribution to the development of the information technology professions, research and industry.

On receiving the award, Dr Zelinsky said he was immensely moved and touched by the recognition.

"Throughout my career I have had the privilege of working with hundreds of brilliant Australian ICT professionals and without their fabulous support I would not be receiving this award," Dr Zelinsky said.

ADM Defence Supply Chains Conference

Date: 4-5 December 2013, Adelaide

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New e-portal for ADF community

A new e-portal that provides the ADF community with access to information anytime, anywhere, is on track for delivery later this year. ForceNet, being developed under Project Suakin, will have blogs, live forums, bulletin boards, webcasts and community events.

It will also house a password-protected private zone providing access to Defence systems. It will

provide access to administration features so members can edit their personal details and enter and view their pay through the portal.

Project Suakin director General Brig **Iain Spence** said ForceNet would help reduce the physical and structural impediments associated with working outside core hours, such as a lack of physical access to Defence IT equipment.

“ForceNet will be protected much like internet banking, a pretty simple secure system, but it will really enable many more members of Defence to stay connected with the organisation,”

Brig Spence said. “It will enable members to search for internal jobs, access unrestricted Campus training and connect with colleagues and groups in a secure environment.-ARMY

Good reads from ASPI

SPECIAL REPORT

July 2013

The emerging agenda for cybersecurity

by Peter Jennings and Tobias Feakin

Introduction

Cybersecurity is rapidly emerging as a high-priority policy challenge for the Australian Government. The National Security Strategy released in January 2013 listed malicious cyber activity as the third of seven key national security risks and called for closer partnerships with the business community to develop a more effective response. Former Prime Minister Julia Gillard visited the Defence Signals Directorate (DSD) headquarters in Canberra following the release of the strategy to announce the creation of the Australian Cyber Security Centre (ACSC), which will co-locate cyber operational capabilities from a number of agencies. DSD noted that in 2012 there were more than 100 cyber incidents against government systems, requiring a significant response by the Cyber Security Operations Centre, and that 5.4 million Australians were victims of cybercrime in 2012 at an estimated cost to the economy of \$1.65 billion.

The rise of cybersecurity as an Australian policy priority reflects growing international concerns about the impact of malicious cyber activity. In February 2013, US President Obama issued an executive order on improving critical infrastructure cybersecurity, referring to cyber as ‘one of the most serious national security challenges we must confront’. The order sets out a detailed plan to rapidly create a strengthened government and private sector approach to protecting critical infrastructure from cyberattacks.¹ Recent detailed accounts in the New York Times and from private sector analysts of Chinese cyberattacks point to unprecedented public concern about malicious cyber activity.² This has impacts on

Australia too, as cybersecurity finds its way onto agendas for discussions with our allies and regional partners. Notwithstanding recent government policy announcements, this paper argues that significantly more needs to be done to ensure that Australia has the right policies in place to manage cyber security risk. The paper discusses the organisational problems that have slowed Australia’s work to develop a simple but effective cyber policy, and contrasts our experience with steps taken by our closest allies, the US and UK. It then details ASPI’s perspective on the emerging agenda for cybersecurity in Australia, recommending steps that the government should take to develop a clear policy framework. Much of this work will need to be done quickly after the 2013 federal election so that Australia can play an influential role in shaping a global approach to cybersecurity.

The Australian organisational framework

One of the problems inherent in cybersecurity is the sheer number of government and private sector entities that have a legitimate interest in the field. This adds enormously to the complexity of cyber policy development. The Australian Government’s 2009 Cyber Security Strategy lists nine agencies, units or committees with critical cybersecurity responsibilities, but the number is really much larger and growing.³ The Intelligence Services Act 2005, which governs DSD’s operations, gives the agency responsibility for information security across all government

The emerging agenda for cybersecurity

This paper by **Peter Jennings** and **Tobias Feakin** argues that significantly more needs to be done to ensure that Australia has the right policies in place to manage cybersecurity risk. It discusses the organisational problems that have slowed Australia’s work to develop a simple but effective cyber policy. It contrasts our experience with steps taken by our closest allies, the US and UK.

This paper recommends things the government should do to develop a clear policy framework. Much of this work will need to occur quickly after the 2013 federal election so that Australia can play an influential role in shaping a global approach to cybersecurity. It can be downloaded by clicking [here](#)



FEATURE

DEFENCE CHALLENGES AFTER THE 2013 WHITE PAPER

Defence policy will need a re-think after this year's federal election, writes Peter Jennings

Launched in early May in a Canberra atmosphere filled with expensive military equipment, the government's Defence White Paper 2013 has received mixed reviews. The document sets out a sensible response to strategic changes taking place in the Asia-Pacific, but it miscalculates on defence funding, claiming that the ambitious equipment plans in the Defence White Paper 2009 can still be delivered at much lower long-term levels of defence spending. The release of the white paper is close to an election means it will be inevitably left to future governments to tackle the unpleasant job of scaling back equipment acquisition plans or looking for additional resources to fund Defence at a time when government revenue is not growing as fast as expected.

Developing a new agenda for defence policy reform will be an essential task for whichever government is elected in 2013. The need is not contingent on whether the opposition will be elected or the government is returned. Whichever party forms government, the need for sweeping change in Defence will impose a policy rethink. The gap between fiscal reality and current policy settings has simply become so stark, and the interests of ministerial speeches and media statements so discordant, that a reconciliation must happen.

2013 White Paper: Fitted for hot spots with money
Defence white papers have an iconic significance for Canberra planners. They are intended to be definitive statements of policy, setting out plans for military spending that look 20 or more years into the future. The 2013 white paper has had a difficult gestation. It was commissioned in May 2012 just days before the budget implemented a massive \$5 billion cut in defence spending. At the new

white paper's launch, then Prime Minister Julia Gillard and Minister for Defence Stephen Smith continued to maintain that all key defence equipment acquisitions proposed in the 2009 white paper would be delivered, notwithstanding that the 2009 statement was built around a major spending growth plan lasting two decades. Things are changing fast in the current policy environment. Mark Thomson from the Australian Strategic Policy Institute (see interview on p. 53) estimates that since 2009, far from growing, Defence has had more than \$24 billion cut or deferred into the distant future. The 2013 white paper could have addressed this problem by writing out a more modest, knee-curt strategy, but the government has been captured by its own rhetoric and cannot or will not walk away from the big talk of the 2009 expansion plan even though the budget has been pared. No one with even a passing acquaintance of defence issues believes it is possible to deliver the 2009 plan on 2013 funding.

On strategy, the 2013 white paper joins the ADM back to closer engagement in our region. Defence is going through a massive transition from focusing on a major operation in Afghanistan and two smaller long-term



Peter Jennings is Executive Director of the Australian Strategic Policy Institute and a former Deputy Secretary in Defence. He writes frequently on defence and security at www.aspinstrategic.org.au.

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Defence challenges after the 2013 White Paper

Peter Jennings addresses the **2013 White Paper's** sensible response to strategic changes taking place in the Asia-Pacific, and looks at its 'misleading' views on defence funding.

'Developing a new agenda for defence policy reform will be an essential task for whichever government is elected in 2013,' writes Jennings.

This article was published in the Centre for Independent Studies magazine *Policy*. You can read the full article [here](#)

STRATEGIC

INSIGHTS

A S P I

Non-strategic nuclear weapons

The next step in multilateral arms control

Crispin Rovere and Kalman A. Robertson

This policy paper is derived from a longer study—A strategy for non-strategic disarmament: the multilateral prohibition of low-yield nuclear weapons—available for [download](#) from the ASPi website.

Introduction

Since the achievements of the 1990s and the New Strategic Arms Reduction Treaty (START), nuclear arms control has stalled. The inclusion of non-strategic nuclear weapons (NSNWs), or tactical nuclear weapons in future arms control negotiations is critical if progress on nonproliferation and disarmament is to be sustained.

As Dr Henry Kissinger testified before the US Senate Foreign Relations Committee in May 2010:

'New START is probably the last agreement on strategic arms that can be made without taking tactical nuclear weapons into account. It is also representing the end of an era as far as serious bilateral negotiations between the United States and Russia. Growing existing demands and proliferation will soon require a multilateral context.'

Figure: Countries with nuclear weapons



August 2013

Non-strategic nuclear weapons: the next step in multilateral arms control

This paper by **Crispin Rovere** and **Kalman A Robertson** addresses the many barriers to including tactical nuclear weapons in disarmament talks. It considers the difficulty of bringing other emerging powers such as China into the nuclear arms control equation.

The study proposes a new arms control treaty that would ban outright the development and possession of a special kind of tactical nuclear weapon called 'low-yield nuclear weapons' that the authors argue carries an increasingly grave risk of starting a nuclear war.

The paper says that Australia should take the lead in promoting a new treaty banning low-yield nuclear weapons. Download the PDF [here](#)

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 **construction of facilities** for the new Landing Helicopter Dock ships and Air Warfare Destroyers commenced in Sydney.

Elbit Systems will begin designing the Australian Federal Police's new core operational system within the fortnight, marking the first steps in a \$145 million modernisation of the force's capability.

And, Boeing and the US Air Force continue to expand the advanced **WGS communications network** that serves the US Department of Defense and its international partners, including the Australian Defence Force.



International

US Directed-energy roadmap due soon

The US Naval Directed Energy Steering Group will have its near-term roadmap ready this fall to begin informing decisions to address drone and small boat swarm threats with directed-energy weapons rather than kinetic weapons, with mid- and long-term roadmaps to follow next year.

Since the group's creation in December 2011, it formalised a "Directed Energy Vision for US Naval Forces," as well as a strategy for how to implement the vision. The set of roadmaps will prioritize warfighter gaps, tie specific directed energy solutions to those gaps and then make recommendations for how to move forward with maturing technologies and forming programs of record for those directed-energy solutions,

With uncertainty surrounding future funding levels, the steering group needs to make clear comparisons of what a directed-energy weapon system would provide to the warfighter, as well as its total ownership cost and cost-per-engagement, which in many cases is much more favourable than traditional weapons-*Inside Defense*



New role for ScanEagle

For five days in July, the Office of Naval Research's (ONR) Research Vessel (R/V) Knorr made a survey in the waters off Virginia Beach, Virginia using ScanEagle UAVs to study the effects of oceanic and atmospheric changes on radar and

radio waves with the aim of producing more secure military communications and improving the ability of radar to detect hostile craft.

Radio propagation varies according to the nature of the atmosphere and how it interacts with the surface of the Earth over land or sea. It's a complex phenomenon that involves many interacting factors to produce the reflection and refraction, which are called "ducting."

"We need to understand where we are in relation to this ducting environment and understand the energy we're emitting and the energy an adversary is emitting," **Dr. Dan Eleuterio**, program officer for ONR's Ocean Battlespace Sensing Department said. "If we don't know these things, it's like rolling the dice. If we do know them, it can give us a tactical advantage."

The study of radio propagation requires real-time data telemetry to collect the needed data. Previously, this would be done from the ground or using balloons. Ground observations are limited and balloons can't be steered and are difficult to use at low altitudes. The ONR survey was carried out by ScanEagles and unmanned submersibles and surface craft, which can be placed in a specific area and remain there for long periods collecting data, especially at low altitudes.





LCS Sonar upgrades

Tom Muir

An at-sea test in March 2014 will demonstrate whether massive efforts by the US Navy to improve its mine hunting sonar and the unmanned vehicle that tows it were successful in helping the Littoral Combat Ship's mine countermeasures mission module reach its performance goals after

reliability and accuracy problems earlier in the program, two officials told *Inside the Navy* last week.

The Government Accountability Office (GAO) released a report on LCS on July 25 with a slew of technical concerns about the MCM mission module, including reliability issues on the RMMV and accuracy concerns on the **AN/AQS-20A sonar** it tows.

Lockheed Martin developed the **Remote Multi-Mission Vehicle (RMMV)**, an unmanned, autonomous, remotely operated, semi-submersible vehicle that is a crucial component of the LCS's mine countermeasures mission package. The RMMV tows an advanced variable depth sensor designed to detect, localise and identify moored and bottom mines in littoral regions.

The RMMV comprises: Unmanned, off-board systems keep sailors and ships out of the mine field, operates at great distances and over the horizon, 24-hour endurance provides persistent surveillance, high mine reconnaissance search rate significantly enhances coastal surveillance, can be employed, on a contingency basis, from shore-based or a variety of platforms.

For the RMMV, which began its reliability growth program about three years ago, the GAO wrote that, "While recent efforts have improved reliability, the system still falls short of what is required. . . . The most recent Navy developmental tests of an MCM module operated from an LCS were completed in December 2012. These vehicles experienced higher than predicted failure rates, requiring considerable corrective maintenance by support personnel."

Steve Lose, the LCS remote mine hunting system program manager, told *ITN* that the RMMVs used in that December test were not platforms that had gone through the reliability growth program, leading to the failures. -*TM/Inside Defense*

ADM Northern Australia Defence Summit

Date: 29-30 October 2013, Darwin

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US Army's M113 replacement program

The US Army announced last week that Armored Multi-Purpose Vehicle program officials are expected to release a formal request for proposals in mid-September.

The AMPV program, which is intended to replace nearly 3,000 Vietnam-era **M113 infantry carriers** with a non-developmental vehicle, was originally scheduled for an RFP in June, but that date slipped to late July, then August, and now is set for September. While delays are not unusual for major Defense Department acquisition programs, Army officials close to the matter said an August 9 **AMPV Defense Acquisition Board review** had been stalled because of DOD civilian leave arrangements. The **Pentagon** announced last week that arrangements would come to an end after six weeks as opposed to the previously planned.

"The government anticipates releasing the final AMPV Solicitation by mid-September 2013," reads an Aug. 8 notice to industry. "The proposal due date will be specified in the final released solicitation."

The Army's draft RFP, released in March, states that one industry bidder will be awarded a 42-month engineering and manufacturing development contract for AMPV worth \$US1.46 billion - \$US388 million for 29 EMD prototypes between 2014 and 2017, and \$US1.08 billion for 289 low-rate initial production models between 2018 and 2020. An EMD award has been slated for May 2014.-*Inside Defense*



QinetiQ submarine design tool for ROK

QinetiQ GRC'S Paramarine ship and submersible design software has been selected by Republic of Korea's Agency for Defense Development (ADD) for submarine concept design.

The ADD was established in 1970 as the corner stone for the goal of making Korea self-reliant in terms of defence. Today the ADD holds core technology development capabilities for a wide range of advanced weapon systems and has established itself as a world class agency for defence science and technology development.

"We selected Paramarine because of its proven track record and extensive use by submarine designers and builders around the world in the design of submarines," **Dr Shin**, principal researcher, ADD said. "Of particular interest to us are not only its



powerful early stage design capabilities but also the support services that QinetiQ GRC can offer us in terms of training and naval architecture design.”

Paramarine is approved for use by the UK MoD and has just been upgraded to version 8.



Laser weapons at Falklands

Despite recent US Navy demonstrations, many still think of laser weapons as being things of the future. However, previously-classified British documents prove that not only were the major

powers working on laser weapons in the 1970s and 80s, but that they were already being deployed with combat units in war zones.

A letter from the UK Ministry of Defence released under the 30-year rule reveals that laser weapons were deployed on Royal Navy ships during the **Falklands War** in 1982, and that the British government was concerned about similar weapons being developed behind the Iron Curtain.

Declassified documents show that the April 2 invasion of Port Stanley, which triggered the Falklands War, came close to seeing them used in combat for the first time. A letter from then Defence Secretary **Michael Heseltine**, dated 17 January 1983, states that a medium-power laser weapon was deployed with the task force.

The letter states, “You may recall, however, that we developed and deployed with great urgency a naval laser weapon, designed to dazzle low flying Argentine pilots attacking ships, to the Task Force in the South Atlantic. This weapon was not used in action and knowledge of it has been kept to a very restricted circle.”

The letter is also a fascinating capsule history of laser weapons development up to that time. According to Heseltine, Britain had been looking into laser weapons since the laser’s invention in the early 1960s, but interest really peaked after a major US breakthrough in 1972. This isn’t spelled out, but it’s most likely the development of high-energy gas dynamic lasers, which had the potential of generating enough power to take out aircraft and missiles. Heseltine pointed out that Britain and America were constantly exchanging information on the topic, and in 1974 a British program was set up to assess laser damage and propagation effects.

The outcome of these studies in 1979 was that Britain’s interests were better served by medium-range lasers against soft targets, such as eyes, optics and electro-optic sensors. Furthermore, the letter points out that by the mid-1980s the Soviets could be fielding similar laser weapons, may have already installed one on the Cruiser Kirov, and that such weapons could give the Warsaw Pact an advantage if used in an armoured attack on NATO forces.



This wasn't far off the mark. The Soviets were developing such laser weapons and even built the experimental 1K17 Szhatie, which mounted a battery of ruby lasers on a tank chassis to knock out NATO sensors, though it proved too expensive to produce. With the Soviet threat in mind, Britain concentrated on medium-powered lasers and countermeasures against them. However, since lasers don't work very well in poor weather, they were not regarded as a substitute for conventional weapons.

There aren't many details on the laser deployed during the Falklands War, but it's likely to be the Laser Dazzle System (LDS), specifically designed for use against aircraft sensors and pilots. According to defense expert Norman Friedman writing in *The Naval Institute Guide to World Naval Weapons Systems, 1997-1998*, this was very likely a manual device relying on binoculars for aiming, though by the 1990s there were reports of ones on fixed motorized mounts and operating in the near-IR wavelengths to counter lens coatings and anti-laser goggles. Exactly which ships carried the lasers isn't certain, but they may have been on frigates, amphibious assault ships, or the two aircraft carriers in the task force-Gizmag/UK National Archives.

Record maritime flotilla at DSEI

A record number of ships (subject to operational requirements) have confirmed their presence at Defence & Security Equipment International (DSEI) between September 10 and 13. The vessels will dock alongside the ExCeL arena and form a significant element of the strongest maritime proposition the event has ever offered.

DSEI organiser, **Clarion Events**, has been working closely with its international partners across the globe to secure a diverse and extensive flotilla within the Greenwich Docks complex.

The impressive roster of vessels include: the German Braunschweig Class Corvette, FGS Magdeburg; the Dutch Holland Class Corvette, *HNMLS Groningen*; *HSwMS Vinga* and *Ulvon* - two Swedish MCMVs which have been recently updated; and the Republic of Korea Navy Ship *Dae-Jo-Young*, which is a KDX-2 class Destroyer and the Logistic Support Ship, *Whacheon*. Meanwhile the Royal Navy plans to despatch a Type 23 Frigate and a River Class OPV.

In order for visitors to get the most out of this unique fleet, specially conducted tours, organised through the show's Ships Visits Bureau, will be staged, offering arranged government, military and industry representatives a valuable opportunity to view the latest developments in naval ship design and equipment.

The international nature of DSEI's naval proposition is also evident from the breadth of nationalities to be found in the shipyards exhibiting this year. For the first time the likes of **Cammell Laird, Lurssen, ThyssenKrupp, Damen, Daewoo** and **Hyundai Heavy Industries** will be present, in addition to **Asmar, Mazagon Dock, Babcock** and **BAE** among others. An enlarged US Maritime Pavilion will also feature, in conjunction with an inclusive showcase of prime contractors and niche suppliers displaying the latest technological developments, following its inaugural success in 2011.

The event will also offer an extended program of live waterborne demonstrations to demonstrate the cutting-edge maritime equipment on display. The program will include the first public demonstrations of several RIBs, Force Protection Craft, Blue Force Tracking Systems and unmanned MCM surface and subsurface vessels.

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FORTHCOMING EVENTS

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

DSEI

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

ENQUIRIES: Web: 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.

ADM will
be in
attendance

SimTecT

DATE: 16 - 19 September, 2013, Brisbane Convention and Exhibition Centre, Queensland

ENQUIRIES: Web: www.simtect.com.au

SimTecT is the annual Simulation Technology and Training Conference held by Simulation Australia.

ADM will
be in
attendance

2nd annual ADM Defence Support Services Summit

DATE: 19 September, 2013, Hyatt Hotel, Canberra

ENQUIRIES: ADM Events - Keith Barks, Ph: 02 9080 4342;

Email: keith.barks@informa.com

Web: www.admevents.com.au

A must-attend for any organisation currently doing business with Defence, or for those wanting to gain a foothold in the service delivery of defence support.

ADM will
be in
attendance

Pacific 2013 - International Maritime Exposition

DATE: 7 - 9 October, 2013, Sydney Convention & Exhibition Centre, Darling Harbour

ENQUIRIES: Penny Haines, Ph: 03 5282 0500, Email: phaines@amda.com.au;

Bob Wouda, Email: bwouda@amda.com.au

Web: www.pacific2013imc.com

Since its inception in 2000, the biennial Pacific International Maritime Exposition has continued to expand. The number of commercial maritime and naval defence industry participants from around the world has grown substantially.

ADM will
be in
attendance

As the only comprehensive international exhibition of its kind in the Asia Pacific region, PACIFIC2013 will again provide the ideal showcase for commercial maritime and naval defence industries to promote their capabilities to decision makers from around the world.

PACIFIC2013 will be held in conjunction with the 'International Fleet Review' which will be commemorating the centenary of the first entry of the Royal Australian Navy Fleet into Sydney.

RAN Seapower Conference 2013

DATE: 7 - 9 October, 2013, Sydney Convention & Exhibition Centre, Darling Harbour

ENQUIRIES: Sea Power Conference Team
Email: seapower.conference@defence.gov.au
Web: www.seapowerconference2013.com.au

The Sea Power Conference will be an integral part of the International Fleet Review 2013, Pacific Maritime Congress and Pacific 2013 International Maritime Exposition. This year will mark the eighth conference in the series.

The Sea Power Conference will explore the broad theme of Naval Diplomacy and Maritime Power Projection: The Utility of Navies in the Maritime Century, which is designed to capitalise on the presence of many foreign navies in Sydney for the International Fleet Review.

ADM will
be in
attendance

Pacific 2013 - International Maritime Conference

DATE: 7 - 9 October, 2013, Sydney Convention & Exhibition Centre, Darling Harbour

ENQUIRIES: Pacific 2013 IMC Conference Managers
Ph: 02 9265 0700
Email: pacific2013imc@arinex.com.au
Web: www.pacific2013imc.com

The Pacific 2013 International Maritime Conference will be held in association with the Pacific 2013 International Maritime Exposition and the Royal Australian Navy's Sea Power Conference.

Normally held every two years, the Pacific International Maritime Exposition and the associated conferences have been brought forward to October 2013 to coincide with the Royal Australian Navy's centenary celebrations of the first arrival of the RAN's fleet unit in Sydney on 4 October 1913.

Pacific 2013 IMC provides a unique opportunity for people involved in maritime and naval affairs around the world to discuss the latest maritime developments in design, naval architecture, engineering, science and technology.

ADM will
be in
attendance



2013 Maritime Environment Working Group Conference

DATE: 10 October, 2013, Sydney

ENQUIRIES: Web: www.govdex.gov.au

This meeting will provide another opportunity for defence and industry representatives to discuss the latest updates with regard to DCP projects. RSVP no later than 30 September 2013 on the MEWG Govdex site.

SIA 2nd Submarine science, technology and engineering conference

DATE: 15 - 17 October, 2013, Adelaide

ENQUIRIES: Web: www.submarineinstitute.com/sia-conferences/

The peak event in Australia for engineering of what is one of the most complex Defence assets - conventional submarines. In addition the conference covers the full range of underwater technologies, many of which are relevant and in use for under-sea resources exploration and exploitation.

ADM will
be in
attendance

Safeskies

DATE: 16 - 17 October, 2013, Hotel Realm Canberra

ENQUIRIES: Web: www.safeskiesaustralia.org

Safeskies Conferences is an Australian based not-for-profit organisation which holds a biennial aviation safety conference in Canberra. The 2013 conference has as its theme 'People and Technology', and speakers will probe some of the issues surrounding this theme.

ADM Northern Australia Defence Summit

DATE: 29 - 30 October, 2013, Darwin Convention Centre

ENQUIRIES: ADM Events - Keith Barks, Ph: 02 9080 4342;

Email: keith.barks@informa.com

Web: www.admevents.com.au

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

ADM will
be in
attendance



ADM Defence Supply Chains Conference

DATE: 4 - 5 December, 2013, Hotel Grand Chancellor, Adelaide

ENQUIRIES: ADM Events - Keith Barks, Ph: 02 9080 4342;

Email: keith.barks@informa.com

Web: www.admevents.com.au

ADM will
be in
attendance

It is recognised that it can be difficult for SMEs to find the right entry portal to an entity as large and diverse as defence primes. SMEs are a vital element in major defence acquisition contracts through the supply of sub-systems and components, as well as the establishment and sustainment of Australia's defence capability. SMEs are the links in the supply chains supporting the operation and maintenance of these capabilities. SMEs can also be the birthplace of many of the innovative technologies that contribute to Australia's defence capability edge.

Defence projects and initiatives can facilitate access to opportunities for Australian industry to access supply chains of major sub-suppliers, there are also barriers that sometimes prevent SMEs from accessing lucrative supply chains. The effective utilisation of Defence supply chains helps make Australian industry globally competitive.

By attending the ADM Defence Supply Chains Summit, you will hear about supply chain perspectives from Defence primes, leaders within the DMO, case studies from SMEs, risk and cost mitigation strategies, preparation strategies, and network with an array of Defence stakeholders.

