

ADM

AUSTRALIAN DEFENCE MAGAZINE

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DEFENCE WEEK PREMIUM EDITION



The flight test campaign involved 45 flight test hours and 120 dry contacts.

AIRBUS

AIRBUS ACHIEVES AUTOMATIC REFUELLING MILESTONE

Airbus Defence and Space announced this week that it has achieved the first automatic air to air refuelling (A3R) operation using the Advanced Aerial Refuelling Boom System (ARBS), fitted to its A310 multi role tanker transport (MRTT) testbed.

NIGEL PITTAWAY | MELBOURNE

The flight test campaign, conducted earlier this year between the A310 and a Portuguese Air Force F-16A fighter, involved 45 flight test hours and 120 dry contacts, covering the entire refuelling envelope. The milestone clears the way for the certification of the A3R system, which will take place through 2021.

Airbus announced at the Singapore Air Show in February that the Republic of Singapore Air Force will become the launch customer for the system, for its fleet of six A330 MRTT aircraft, with deliveries beginning immediately after the conclusion of certification in 2021.

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Australia is also watching the program closely and has previously contributed one of the RAAF's KC-30A MRTTs to the earlier flight test campaign, representing a large aircraft receiver during at least seven automatic contacts with the A310's ARBS.

Airbus DS head of business development & program portfolio of Military Derivatives Antonio Moya says that fuel transfer ('wet' contacts) were not part of the recently completed test campaign because the current MRTT fuel management is already fully automatic.

"ALL MRTT CUSTOMERS HAVE SHOWN THEIR INTEREST IN THIS FUNCTIONALITY, AS IT IS A CLEAR STEP FORWARD IN BOOM OPERATIONS"

"The operator only sets receiver and fuel amount into the MRTT's computers and, once the contact is confirmed, the system starts transferring fuel. It is stopped after the receiver has taken the selected amount of fuel or if there is an abnormal event," he said.

"In the latest flight test scope, we are developing the rest of the automatic functionality, to automate the full operation. This consists of automating the ARBS flight control system to align it with the receptacle on the receiver aircraft, to monitor receiver stability in real time

to determine the optimum moment to extend the telescopic boom and perform connection with the receiver; and then to separate the boom from the receiver at the end of fuel transfer by retracting the telescopic beam and flying the boom away."

The earlier trials, conducted in 2017 and 2018, were part of a feasibility phase to demonstrate that Airbus' technology was mature enough to develop an A3R system.

"In that phase we focussed just on the contact itself, because the contact is the most difficult task to automate. We had to demonstrate that the system was able to align a flying boom with the receptacle of a moving receiver with an accuracy of just a few centimetres. If you cannot do it, then you are far off an A3R solution," Moya added.

"In this milestone, we are not just talking about one contact in optimal conditions for a photo. We have performed more than 120 contacts and disconnections during this phase, covering the whole AAR envelope of the MRTT and F-16A as receiver."

The A3R system involves both hardware and software upgrades to the MRTT but requires no modification to the receiving platform. After certification, new MRTTs will be delivered with the modifications should the customer request it and Airbus DS is now working on developing a retrofit package for existing aircraft, with the intention that work will be done at an approved maintenance and repair organisation (MRO) facility.

"All MRTT customers have shown their interest in this functionality, as it is a clear step forward in boom operations and will shape the future of AAR," Moya said. "Up to now, only Australia and Singapore have been actively working on A3R with us, but we expect that several customers will sign up for it very soon."

MOST READ ONLINE AT WWW.AUSTRALIANDEFENCE.COM.AU



1. [Submarines and manned-unmanned teaming](#)
2. [EOS fires multiple weapons from remote weapons station](#)
3. [Exercise Pitch Black cancelled](#)
4. [Latest SICP grants announced](#)
5. [Nuclear and conventional submarines are not mutually exclusive](#)

DEFENCE-FUNDED STUDY OUTLINES CLIMATE RISK TO NATIONAL SECURITY

Australia's recent bushfires and our current healthcare crisis have tested the resilience of our governments and communities and demanded coordinated responses at national, state and local levels. In an age of climate change and other global environmental hazards, the need for whole-of-government coordination is likely to become even greater.

PETER TANGNEY, CASSANDRA STAR, CLAIRE NETTLE,
JOSHUA NEWMAN, BEVERLEY CLARKE | ADELAIDE

Although it has not yet been a principal focus of climate change planning in Australia, 'climate security' is fast becoming an important area of study. As part of a project funded by the Department of Defence, we have just completed a review of climate resilience issues in the Indo-Pacific region.

A central conclusion from our study is that Australia will struggle to maintain its national security in the face of climate change unless government departments and agencies are well coordinated and can work collaboratively with neighbouring countries in the Indo-Pacific region. Effective coordination and collaboration will be needed to respond to the kind of threats climate change poses to Australia's sovereign borders and territories, and to our existing national security provisions.

With increasing climate extremes, we can expect communities in vulnerable places, particularly in poorer countries, to become displaced from their homes. As a result, we expect a



A soldier looks for deceased wildlife on Kangaroo Island.

DEFENCE

greater number of migrants seeking both documented and irregular refuge across the Indo-Pacific region. 'Climate refugees' will likely increase tensions within and between neighbouring communities, and place increasing pressure on Australia's Defence and Border Forces.

Extreme climate hazards (including the increased prevalence of vector-borne diseases) can weaken government authority, particularly in countries with already fragile governance systems or high levels of corruption. Governments lacking public legitimacy become vulnerable when extreme events intensify socioeconomic inequalities, or compromise food and water security or access to health services. These pressures can increase the potential for conflict within and between countries. Following climate disasters, we also expect organised crime and terrorist organisations to take advantage of civil unrest, often at the expense of vulnerable communities.

"OUR RESEARCH HIGHLIGHTS THE IMPORTANCE OF THE ADF AS A KEY AGENCY FOR MAINTAINING CLIMATE SECURITY"

The impacts on national security will not only come from abroad. We know from the recent bushfires and the COVID-19 crisis that extreme events can stretch Australia's health and emergency services beyond their limits. Our defence forces are often called to assist with the provision of equipment and personnel to help respond to these emergency situations. Our defence forces, however, have limited resources and operational remit. When we call on the Department of Defence to respond to domestic emergencies, this limits its capacity to protect sovereign borders and limits its role in assisting and collaborating with our international neighbours.

Why is collaboration important for climate security?

Climate change is caused by, and will impact upon, many areas of human life. Effective adaptation will therefore demand the concerted efforts of many government departments. Currently, climate adaptation-related federal responsibilities fall mainly between the Department of Home Affairs and the Department of Agriculture, Water and Environment, with support from the Department of Defence in times of emergency. Much of the planning that is done, and the resources needed to prepare for and respond to extreme events, however, arise at state and local government levels. Yet, climate change adaptation is such a wide-ranging issue that other areas of government will need to consider climate risks and take coordinated action.

Collaboration between government departments and agencies with overlapping areas of policy interest can be challenging, which means that a central coordinating body could be useful. When working with international partners too, coordination and collaboration can be hindered by contrasting perspectives on the problems to be addressed. In developing countries, for instance, managing long-term risks may be constrained in favour of emergency response, or they may be considered secondary to more immediate concerns for developing public health and education services.

Considering the relative stability of our governance structures, we argue that Australia can and should play a leading role in ensuring the peace and security of the Indo-Pacific region. Our research highlights the importance of the ADF as a key agency for maintaining climate security and enhancing domestic climate adaptation. Managing climate security in a strategically coordinated way will demand partnership across

many government departments; with our international neighbours like NZ, Indonesia and Papua New Guinea; and with indigenous communities. Governments should also cooperate with the private sector, especially the insurance industry, and with non-government organisations that assist developing countries in South Asia and the Pacific.

The current absence of government coordination on climate change adaptation and security issues increasingly makes Australian governments exceptional when compared with our neighbours and with similarly developed countries around the world. Thinking about climate impacts and their effects in a strategic way is the best means of ensuring the safety and security of the Australian public and of the Indo-Pacific region.

Note: Dr Peter Tangney, Associate Professor Cassandra Star, Dr Claire Nettle, Associate Professor Joshua Newman and Associate Professor Beverley Clarke are researchers in the Climate and Sustainability Policy Research (CASPR) Group at Flinders University.

LHD CAPABILITY EXPANDED THROUGH FIRST OF CLASS FLIGHT TRIALS

First of Class Flight Trials on HMAS *Adelaide* are providing the ship's Aviation Support team with vital training and the RAN with increased operational capability.

LCDR CHRISTOPHER THORNTON | DEFENCE

The trials off the Queensland coast determine the safe operating limits of the MH-60R 'Romeo' helicopter on the ship in a range of sea states and wind speeds, by day and by night.

Lieutenant Commander Chris Broadbent of the Aircraft Maintenance and Flight Trials Unit (AMAFU) said the trials increase *Adelaide's* operational capability and provide a war-fighting edge, particularly surface and underwater warfare.

"WE HAVE A THREE-WEEK PERIOD WHERE WE FLY THE HELICOPTERS DAY AND NIGHT"

"We have a three-week period where we fly the helicopters day and night, in different sea states and approaching different locations on the flight deck under varying environmental conditions and aircraft configurations," LTCMDR Broadbent said

"Even the aircraft's behaviour in different ambient air temperature will provide us with important information."

The AMAFU is not the only unit to benefit from conducting flight trials on board.

Adelaide's Aviation Support team is also conducting deck handling and crash-on-deck exercises to improve their familiarity with the MH-60R helicopter.



Petty Officer Aviation Technician Avionics Nicholas Simmons enters test flight data from an MH-60R helicopter into the computer. DEFENCE

Chief Petty Officer Aviation Justin Penrose said the flight trials provided vital training to the ship's aviation support sailors.

"By taking part in the flight trials my team has been able to complete a number of evolutions such as ground taxiing and running take-offs," Chief Petty Officer Penrose said.

"This has been a great opportunity for them to develop their understanding of the roles and responsibilities required of an Aviation Support Sailor at sea."

Aviation Support sailors manage the movements and deck systems of the Navy's fleet of advanced military helicopters both on shore and at sea. The trials ensure Navy maintains its readiness to conduct Humanitarian Assistance and Disaster Relief operations.

Note: this article first appeared in the Navy Daily.

TAE AEROSPACE APPROVED FOR WOODWARD FUEL CONTROL REPAIRS

TAE Aerospace is now Woodward approved as a Licensed Repair Service Facility (LRSF) for the Woodward FCU range for the high power PT6A engine.

TAE Aerospace will operate the line of business from Adelaide in combination with the company's long-standing FCU work for the smaller range PT6A engines, as a Honeywell-approved Authorized Warranty and Repair Station (AWARS).

"The new capability completes our one-stop service offering to PT6A operators around the globe, just like we have for the TPE331 engine. For operators of high power



Pilatus PC-12 operators have a new maintenance venue choice.

TAE AEROSPACE

PT6A engines in Asia-Pacific, it will also mean faster, more cost-effective turnaround on FCUs,” TAE Aerospace CEO Andrew Sanderson said.

“The significance of this approval from a customer perspective is the reduction in down time with faster, local turn-around; lower freight costs; and over-the-phone customer support in a similar time zone. Operators can also access our after-sales and AOG support,” he said.

“THE SIGNIFICANCE OF THIS APPROVAL FROM A CUSTOMER PERSPECTIVE IS THE REDUCTION IN DOWN TIME WITH FASTER, LOCAL TURN-AROUND”

“We currently support hundreds of fixed and rotary wing customers around the world with fuel controls, power turbine governors and propeller governors for a range of engine types,” TAE Aerospace Global Sales Manager Josh Holmes said.

“We can now extend this to Asia-Pacific’s operators of the Beech 1900, Pilatus PC12, King Air 350 or Air Tractor AT-802 aircraft who previously only had limited maintenance venue choices outside of the region and we now look forward to providing this new capability for our customers.”

Through the Woodward and Honeywell approvals, the company’s fuel control and governor services now cover Pratt & Whitney Canada PT6A and PT6T, Honeywell TPE331 and LTS101, Rolls-Royce M250 and RR300.

PEOPLE ON THE MOVE

Genetec has appointed Cameron Watton as Regional Sales Manager for NZ. In this newly created position, Cameron will work with Genetec channel partners to drive new business and continue to expand Genetec marketing penetration and revenue across Auckland, Wellington and Christchurch.

PANDEMIC-RELATED CYBERCRIME ON THE RISE

The ongoing COVID-19 pandemic has seen a rise in cyber-attacks using the crisis as a cover to target small businesses and the health sector in Australia.

The Australian Cyber Security Centre (ACSC) is now increasing its fight against malicious cyber activity. Minister for Defence Linda Reynolds said the Australian Signals Directorate, through the ACSC, is engaging with hospitals and health service providers.

"Hospitals and other health care providers are on the frontline in our fight against COVID-19 and that is why we are working directly with them to reduce their risk of cyber compromise during an already very challenging period," Minister Reynolds said.

"The ACSC is also providing a second layer of defence in detecting malicious cyber activity on critical Federal Government department networks, including the Department of Health."

ACSC Head Abigail Bradshaw said the Centre sees first-hand the devastating impact of cybercrime.

"THIS IS A PHISHING ATTACK USING OUR BRAND WITHOUT PERMISSION"

"At the ACSC, we are absolutely committed to making sure Australians remain safe online and our vital services are protected," Ms Bradshaw said.

"We are arming Australians, businesses and key sectors, like health and medical services, with information on the threats and practical assistance to enable them to better protect themselves against these global cyber criminals."

ADM Comment: ADM has itself become a target for this kind of cybercrime. We are aware of a fraudulent email in circulation purporting to represent our Events team and claiming that our events have been cancelled. This is a phishing attack using our brand without permission to make money over uncertainty around COVID-19. We will never ask for your details like this: updates to our event schedule will come through www.admevents.com.au or our social media accounts.



Cyber criminals are ramping up activities during the COVID-19 epidemic.

PIXABAY

AQUATERRO OPENS NEW HIGH-SECURITY FACILITY

Aquaterro has opened and commissioned an ultra-high-security facility in Melbourne.

Aquaterro is the prime contractor for Land 125 Phase 3B (Tiered Combat Helmet) and Prime System Integrator/Design Authority for the Modular Combat Weapon System. The company is one of Australia's largest providers of small arms and protective equipment.

The new facility will also be the new and compartmented home to Broad Arrow Forge, another member of the Bulte Group of Companies.

Group CEO and founder Graeme Bulte conveyed his thanks to Prime Minister Scott Morrison, who was to officially open the facility on Saturday but could not due to COVID-19 restrictions.

"THIS IS A SIGNIFICANT INVESTMENT OF MANY MILLIONS OF DOLLARS OF OUR OWN MONEY"

"This is a significant investment of many millions of dollars of our own money in specialist infrastructure and technology capability," Bulte said. "It shows our belief in Defence and law enforcement opportunities going forward.

"This new Capability Hub for all technologies centred on the soldier and law enforcement officer represents a significant change in Australia, and Melbourne, as a centre of excellence in the field of Human-as-a-Platform capability." "Being based in Victoria is critically important, being the location for CASG Soldier Systems programs nationally, and home to such an advanced university and research community and high technology industry skills. The employment opportunities into the future look bright."



Aquaterro's new ultra-high-security facility in Melbourne.

SUPPLIED

REMEMBERING VETERANS: OFFICE OF AUSTRALIAN WAR GRAVES

The Office of Australian War Graves (OAWG) cares for the official commemorations of more than 321,000 Australians who died during war (or after a war or conflict) and whose deaths have been determined to be related to their war service. Commemorations are located in more than 2,300 cemeteries, crematoriums and Gardens of Remembrance around Australia. The number of official commemorations grows by 2,500 – 3,000 each year.

DANIELLE CHERVATIN | CANBERRA

The Office also cares for 13,000 of Australia's war dead of the world wars who are at rest in 75 war cemeteries and plots in Australia, Papua New Guinea and the Solomon and Norfolk Islands.

Commemoration for a veteran can take the form of an ashes placement in a crematorium, or at a burial in a general or lawn cemetery. Some eligible veterans and their families choose to have a private memorial, but take up the option for OAWG to place a plaque in one of 10 Gardens of Remembrance around Australia. All official commemorations are maintained in perpetuity by the OAWG.

"THE RECENT CENTENARY OF THE FIRST WORLD WAR HAS RESULTED IN MANY AUSTRALIANS EXAMINING FAMILY AND COMMUNITY MILITARY HISTORY"

Not all ex-service men and women are eligible for official commemoration. Many who return after service in the two world wars, and died in the decades that followed it, are at rest and commemorated in places organised and cared for by family.

Of the 270,000 service men and women who returned to Australia at the end of WWI, many were laid to rest in unmarked graves. While there are no available statistics, the Office of Australian War Graves believes that this is likely due to the war and its impact on physical and mental health, productivity and lifestyles, as well as prevailing economic conditions like the Great Depression.

Private Leslie Thomas Simpson (originally known as Thomas Leslie Simpson) was born on 15 August 1882 in Port Pirie, SA. Before enlisting in the Australian Imperial Force he worked as a labourer at Morphettville. Private Simpson embarked from Hobart on 20 October 1914 on the transport ship, Geelong, and served with the 12th Infantry Battalion in France and Belgium for the duration of the war. During the second Battle of Bullecourt in May 1917, while on stretcher-bearer duties, he and another soldier were awarded the Military Medal for bravery in the field.

Private Simpson was discharged on 31 January 1919 in Australia. He never married and died on 27 June 1928, aged 45 years.

The recent centenary of WWI has resulted in many Australians examining family and community military history. Around Australia, they, along with historical, ex-service and cemetery groups, often passionate volunteers, have been discovering men like Leslie Simpson.

In 2018 the Minister for Veterans' Affairs and Defence Personnel Darren Chester announced a 2-year pilot program that provides financial support for work of these individuals and groups. The program offers up to \$450 per application to assist with the costs of a grave marker to identify the grave of WW1 veterans interred in unmarked graves.

To date 133 applications have been submitted to the Office of Australian War Graves (OAWG), who administer the program. Amongst them is one for Leslie Simpson. His resting place, unmarked since his death, will shortly be/is now identifiable with a headstone and bronze plaque that attests his war service.

All Australian veterans are entitled to have the relevant service emblem on a privately arranged memorial, the cost of which is borne by the family, estate or interested party. The OAWG under Section 83 of the Defence Regulations, provides the permission to incorporate the relevant service emblem for individual Australian service men and women only.

OAWG can help veterans and their families to access information about using the service emblem, and direct any enquiries about entitlements to the appropriate team within the Department of Veterans' Affairs. For further information please contact OAWG by using the toll-free number 1800VETERAN or via email at wargraves@dva.gov.au.



The Office of Australian War Graves administers a program providing financial support for grave markers. SUPPLIED

Note: Danielle Chervatin is an Information and Administrative Officer for the Office of Australian War Graves.

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FORTHCOMING EVENTS

ADM EVENTS

More detail on ADM Events can be found on our [dedicated website](#).

- [ADM STEM and Defence Summit](#) – Cancelled
- [ADM Defence Estate and Base Services Summit](#) – 15 September 2020 | Canberra
- [ADM Women in Defence Awards](#) – 23 October 2020
- [Defence in the North](#) – 28 October 2020 | Darwin Convention Centre
- [ADM Space Summit](#) – 3 December 2020, Hyatt Hotel | Canberra

AIRBUS DEFENCE AND SPACE INDUSTRY ENGAGEMENT ROADSHOW

DATE postponed until further notice

LOCATION Various

WEBSITE www.airbus.com/space.html

The purpose of the briefings is to engage Australian industry and identify potential roles in the pursuit, delivery and support of projects of interest to Airbus Defence and Space such as but not limited to satellite and terrestrial communication networks, processing of imagery and data and surveillance sensors. Airbus are particularly interested in companies with the following capabilities, but not exclusive to: Advanced manufacturing; Electronics/Electrical engineering; Antenna design and manufacturing; Mobile Terminals; Electrical harness; Software development; Payload development; Infrastructure.

CYBER DEFENCE NEXT GENERATION TECHNOLOGY & SCIENCE CONFERENCE

DATE: postponed until further notice

LOCATION: Brisbane

WEBSITE: wp.csiro.au/cdng

The Cyber Defence Next Generation Technology and Science Conference, is a first of its kind scientific and technology focused Cyber Defence Conference. The aim is to have the community of cyber-security under the “Next Generation Defence Technologies | Cyber Research” program in collaboration with DST-Data61 and partner universities meet together, expose relevant research activities and discuss future collaborations.

CERTIFICATE IV IN RESPONDING TO ORGANISATIONAL COMPLEXITY | CANBERRA

DATE postponed until further notice
LOCATION to be confirmed
WEBSITE iccpm.com/events/certificate-iv-canberra-2020

Developed and offered exclusively by ICCPM (RTO number 41394), the Certificate IV in Responding to Organisational Complexity helps project leaders develop the skills and attributes they need to respond to complexity, as defined in the Complex Project Manager Competency Standards. This is a highly interactive course which introduces project leaders to useful tools and methodologies with a strong focus on the practical application of concepts to real-world situations.

WILLIAMS FOUNDATION SEMINAR: NEXT-GEN AUTONOMOUS SYSTEMS

DATE postponed until further notice
LOCATION: National Gallery of Australia
WEBSITE www.williamsfoundation.org.au

Building upon the existing foundations of ADF capability, the aim of the March seminar is to explore the force multiplying capability and increasingly complex requirements associated with unmanned systems. From its origins at the platform level, the opportunities and potential of increased autonomy across the enterprise are now expected to fundamentally transform Joint and Coalition operations.

ASIA-PACIFIC SECURITY INNOVATION SUMMIT

DATE postponed until next year
LOCATION Queenstown, NZ
WEBSITE www.apsisummit.com/page/apsi-summit-2020

The theme of this year's APSI summit, to be held in Queenstown on the South Island, is Strengthening Security Resiliency Through Partnerships and Alliances.

2020 VERNON PARKER ORATION AND DINNER

DATE 17 June 2020
LOCATION Hotel Realm, Canberra
WEBSITE navalinstitute.com.au/2020-vernon-parker-oration-and-dinner

Sir Peter Cosgrove has kindly agreed to deliver the 2020 Vernon Parker Oration on 17 June. Sir Peter was Governor-General from 2014-2019 and former Chief of the Defence Force. In January 2020 Sir Peter accepted the voluntary role as chairman of the Business Council of Australia's Community Rebuilding Initiative in response to the 2019/20 bushfires.

43RD COSPAR SCIENTIFIC ASSEMBLY

DATE 15 – 22 August 2020
LOCATION International Convention Centre Sydney
WEBSITE www.cospar2020.org

The Australian space research community enthusiastically extends the invitation to you, to meet with us for COSPAR 2020, and in so doing to forge the friendships and opportunities that will connect space research for global impact. The 2020 Assembly will combine the latest in space research findings with activities designed to enrich the global space research community – including helping equip our future leaders, and workshoping with space industry – and inspire the next generation of scientists and engineers.

PROJECT AND PROGRAM MANAGEMENT SYMPOSIUM 2020

DATE 25-26 August 2020
LOCATION Canberra Rex Hotel
WEBSITE www.pgcsymposium.org.au

PGCS 2020 is designed to help project and program managers, and their sponsors and senior managers, develop the skills and understanding needed to deliver projects success in the next decade. Now in its 8th year, PGCS 2020 will focus on ways to build the foundations needed to create project and program success.

2020 INTERNATIONAL ROUNDTABLE WORKSHOP – BRISBANE

DATE 27 August 2020
LOCATION QUT Brisbane, Gardens Point Campus, Brisbane City
WEBSITE <https://iccpm.com/events/2020-rts-brisbane/>

The International Centre for Complex Project Management (ICCPM) invites project leaders to participate in the 2020 International Roundtable Series. Workshops will be held in key Australian locations and internationally.

LAND FORCES 2020

DATE 01-03 September 2020
LOCATION Brisbane Convention Centre
WEBSITE www.landforces.com.au

The biennial LAND FORCES exposition is an international industry event to showcase equipment, technology and services for the armies of Australia and the Indo-Asia-Pacific. The Land Forces 2020 team is now setting about ensuring the event will achieve its goals of providing an effective platform for the exchange of ideas on key land forces issues and of taking Australian industry to the world.

AUSCERT 2020

DATE: 15-18 September
LOCATION: The Star, Gold Coast
WEBSITE: www.auscert.org.au/giveaway

The AusCERT Conference is the oldest information security conference in Australia. Each year, we attract in the vicinity of 800 participants and approximately 50 sponsors. AusCERT is hosting more than 50 speakers at AusCERT2020, as well as an array of tutorials, workshops, networking events & much more.

ROTORTECH 2020

DATE 14-16 October 2020
LOCATION Royal International Convention Centre, Brisbane
WEBSITE www.rotortech.com.au

RotorTech 2020 is the region's premier helicopter and unmanned flight systems showcase and forum, bringing together operators, manufacturers, suppliers, regulators and government across the Indo-Asia-Pacific. With a comprehensive three-day free industry conference program, RotorTech 2020 will also feature manufacturers technical workshops and an industry exhibition showcasing more than 100 helicopter and unmanned flight related companies.

MILCIS 2020

DATE 10 – 12 November 2020
LOCATION National Convention Centre, Canberra
WEBSITE <https://www.milcis.com.au>

In November each year, the Defence Chief Information Officer Group (CIOG) partners with the UNSW Canberra and the Institute of Electronic and Electrical Engineers (IEEE) to present MilCIS. The annual Military Communications and Information Systems (MilCIS) Conference welcomes military and government organisations, academia, and defence industries to contribute to the future direction of military communications and information systems.

2021**AVALON 2021**

DATE 23 – 28 February 2021
LOCATION Avalon Airport

The Australian International Airshow and Aerospace & Defence Exposition is one of Asia-Pacific's most prestigious aviation and aerospace events and the most comprehensive aviation, aerospace and defence exposition in the southern hemisphere. Avalon hosts multiple concurrent conferences and expo streams, across the spectrum of Defence, Airlines, Business and General Aviation, Sport and Recreational Aviation, Airports, MRO, Space, Unmanned Systems, Air Safety and Ground Equipment.

LOCATE21

DATE 30 March – 1 April 2021 (rescheduled dates)
LOCATION Brisbane Convention and Exhibition Centre
WEBSITE <https://www.locateconference.com/2021/>

Due to COVID-19, Locate20 has been rescheduled for Locate21 happening in Brisbane March 30 – 1 April 2021. The event will focus on how geospatial technologies are intersecting with business, Government and defence to address national challenges. It's Australia's premier spatial conference with the inclusion of over 50 inspiring thought-leaders including speakers from government, academia, the defence force, technology, mining, natural resources and more. We believe this conference is of interest to defence personnel.

PROJECT AND PROGRAM MANAGEMENT SYMPOSIUM

DATE 10 – 12 August 2021 (rescheduled dates)
LOCATION Canberra Rex Hotel
WEBSITE <https://www.pgcsymposium.org.au>

Foresight is more valuable than hindsight! PGCS 2020 is designed to help project and program managers, and their sponsors and senior managers, develop the skills and understanding needed to deliver projects success in the next decade. Creating the organisational capability needed to underpin the consistent delivery of successful projects in the 2020's starts at the top. Now in its 8th year, PGCS 2020 will focus on ways to build the foundations needed to create project and program success

VARIOUS DATES

NSW DEFENCE INNOVATION NETWORK'S REGIONAL ROAD SHOW

DATE: Various
LOCATION: Various
WEBSITE: defenceinnovationnetwork.com/din-regional-road-show-2019-20

NSW Defence Innovation Network and AIDN will be undertaking a series of small business focused regional forums across NSW. Register to attend and hear about the programs, grants, opportunities and services the NSW Defence Innovation Network (DIN) provides to the small business community across NSW. We encourage small businesses to engage with us and participate in opportunities across our networks, including DIN's seven partner universities, as well as with other state and federal agencies.

DEFENCE READINESS SEMINAR SERIES

DATE postponed until further notice
LOCATION Various
WEBSITE bit.ly/37fipjH

The Defence Readiness Seminar Series kicked off in November last year. If you are considering entering the Defence market, or have staff you consider require orientation to the Defence market, you are strongly encouraged to consider this invaluable series, shaped and developed by people in the Hunter that have worked closely in the Defence Industry over many years. Please see the website for more information on how to get involved.

2020 ICCPM INTERNATIONAL ROUNDTABLE SERIES

DATE Various (April, August)
LOCATION Various
WEBSITE iccpm.com/2020-rs

One of the characteristics of complex projects is that they emerge over time. This creates uncertainty for project leaders. To support project success, project leaders need to understand how to manage risk in uncertainty and identify new opportunities. The International Roundtable Series is a Thought Leadership initiative that brings together senior project leaders and leading academics from different industries to share their experience and international perspectives. The outcomes report will share these insights to improve project success.

ICCPM ONLINE WORKSHOPS

DATE Various
LOCATION Online
WEBSITE www.iccpm.com/online-workshop-webinars

Designed to support project teams who are experiencing new challenges due to COVID-19 concerns – Learn how to mitigate new risk levels, effectively deploy virtual teams, manage messy problems and more. ICCPM Online Workshops and Webinars provide you with an easily accessible and engaging option to continue your training from anywhere in the world. These options provide you and your team with a conducive learning environment to support your complex project success.