

ADM

AUSTRALIAN DEFENCE MAGAZINE

SERVING THE BUSINESS OF DEFENCE

DEFENCE WEEK PREMIUM EDITION



AIC currently places an emphasis on capability over content.

GETTY

DEFENCE AIC THROUGH THE AGES

If you saw the following list of priorities in an Australian Industry Capability (AIC) context, when would you place them along the timeline of Defence industry policy?

KATHERINE ZIESING | CANBERRA

1. Significant investment in local facilities and plant
2. Significant employment of Australian citizens
3. Successful participation in major Defence contracts
4. Significant levels of R&D in Australia including developing indigenous intellectual property
5. Demonstrated independence of action from overseas parents, including through exports from Australia
6. Nurturing Australia's small to medium enterprises

IN THIS ISSUE

Defence AIC through the ages	1
Joint Adversarial Training & Testing Services contract – the facts	4
Triton program runs into trouble	6
UNSW Canberra and Northrop Grumman recognise female STEM students	9
Modified RAAF Hercules makes record flight to Antarctica	10
New firefighting vehicle arrives at East Sale	12
Penske rebrands	13
PC-9/As go to public auction	14
Forthcoming Events	16

If you guessed former Minister for Defence Industry, Science and Personnel Bronwyn Bishop in 1997, you have an excellent memory.

For the better part of two decades, government (and by extension the Department of Defence) have blown hot and cold on Australian Defence industry and how best to treat it. Over the years it has been treated with passing interest, barely concealed contempt, outright support, and almost cheerleader-like enthusiasm depending on the government of the day.

Right now there is an emphasis on capability (knowledge transfer) rather than content (stuff); but there is no coherent approach on how to measure this. When AIC is spoken of, what does the 'C' refer to; capability or content or, more ideally, both?

"BEST ENDEAVOURS' ON AIC ARE NOT A NUMBER THAT CAN BE TRACKED."

And to further muddy the waters, Defence Secretary Greg Moriarty said yesterday at Senate Estimates said he uses the terms "interchangeably".

The current iteration of thinking is somewhere in the middle of that spectrum. Working from the most recent suite of policy documents released in 2016 around the [Defence White Paper](#), the [Integrated Investment Program](#) and [Defence Industry Policy Statement](#) that were later joined by the [Defence Export Strategy](#) and the [Naval Shipbuilding Plan](#) there is a lot of policy guidance on what *should* be happening. But is it?

BIG DATA

A new resource from [Data Ventures](#) lets the public access a wide range of Austender data in a more user friendly way.

For example, in calendar year 2019 CASG executed 10,466 contracts worth \$12.32 billion. They also had 1,625 contract amendments with \$6.7 billion during that same period; a total of 19.02 billion taxpayer dollars out the door. If you assume 261 workdays in a year (conservative but standard), that's 40 contracts and six amendments every day. Not bad for an organisation that has gone from almost 7,000 to 5,000 people over the past few years, topped up by contractors. They have the task of delivering \$200 billion worth of programs with essentially a frozen, if not decreasing, APS workforce.

Figure 1 below shows the top 5 companies that received contracts and the relevant categories they sit under. The data at this point shows the total value of the contract awarded in the calendar year but not how long the contract runs for. For example, some contracts spread across 3-5 years (in some cases, much longer) and as such does not reflect year on year actual spending under said contract.

FIGURE 1

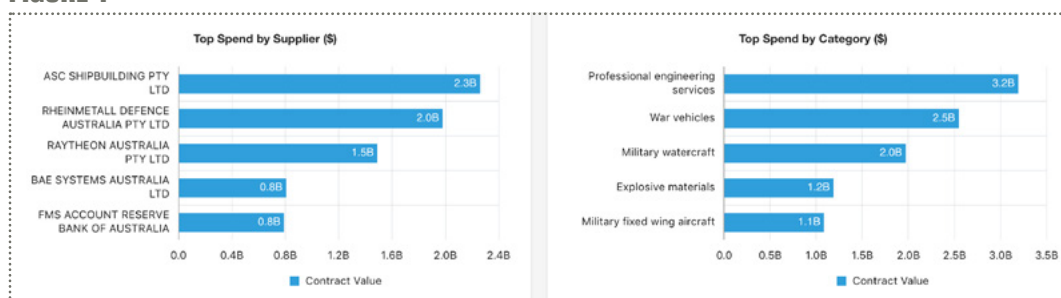


Figure 1: the top 5 companies that received contracts and the relevant categories.

GRAPHS GENERATED VIA DATA VENTURES

Apart from an eyebrow lift at the Austender term 'war vehicles', the list makes perfect sense when you think about the capabilities/programs each of these companies provide to the ADF. ASC for Collins sustainment, Rheinmetall for Land 121 vehicles, both BAE and Raytheon for a range of programs across multiple domains, and the inevitable reliance on US technology under FMS. Unsurprisingly, both BAE and Raytheon also have a large number of contracts for professional engineering services.

What does concern me is the lack of correlation with what these companies reported as turnover in the ADM Top 40 list released in January this year. Figure 2 refreshes the figures below.

FIGURE 2

COMPANY*	TURNOVER \$M	RANK
ASC	731.7	5
Rheinmetall	650	6
Raytheon	Did not report	
BAE Systems Australia	1152	1

FIGURES GENERATED FROM AUSTRALIAN DEFENCE MAGAZINE'S TOP 40 DEFENCE CONTRACTORS SURVEY, RELEASED IN DECEMBER 2019/JANUARY 2020 EDITION. *THE FMS ACCOUNT IS NOT A REPORTABLE ENTITY

There is an element, as mentioned earlier, that year on year spending is harder to capture under long term contracts. ADM asked ASC and BAE Systems Australia where the major discrepancy could have come from and confirmed that despite separating the ASC submarine and shipbuilding businesses in December 2018 between the two companies, Austender has holes when it comes to the contract transfer (novation) process. Rheinmetall confirmed that their Top 40 data came from their audited 2019 financial statement. Companies also use a range of contracting entities under different Australian Business Numbers (ABNs), a key tracking measure on Austender. The task of lining up apples with apples is a tough one.

The ADM Top 40 for example asks for turnover in a calendar year while Austender does not account for year on year spending, only the initial contract award and variations after that point. It is also worth noting that contract amendment data available on Data Ventures is eye opening; there are amendments greater than the value of the original contract.

But, as with every data set, the devil is in the detail.

BIG NUMBERS

However, all these contracts were dwarfed by the Next Generation Health Services tender awarded last year, the biggest single contract let by government in that period: \$3.4 billion from Defence's Joint Health Command to Bupa. The six-year contract will be delivering "a range of primary and specialist health services at both on-base health facilities and through a comprehensive network of off-base service providers."

"Delivering health services to over 80,000 ADF members and reservists is a complex and important undertaking and after a rigorous procurement process, Bupa

**"WHEN AIC IS SPOKEN OF,
WHAT DOES THE 'C' REFER
TO; CAPABILITY OR CONTENT
OR, MORE IDEALLY, BOTH?"**

demonstrated it is able to deliver Defence's requirements," then Minister for Defence Pyne said in announcing the win.

Health services meet all of Bishop's rules without hesitation. It's the platform and technology side of the house where the friction points arise on AIC.

AIC TEST

Do the companies listed in Figure 1 meet Bishop's rules? Mostly, except for the Foreign Military Sales cases. Numbers 1-4 are a strong yes for the rest of the field. Points 5 and 6 are harder to quantify. There is little hard data available on culture and SME flow downs once a contract is awarded. 'Best endeavours' on AIC are not a number that can be tracked. ADM's Top 40 tries to capture part of this but the survey is voluntary, as are specific questions around these issue which are still relatively new. We're not getting the full picture, and the picture we do have is blurry.

JOINT ADVERSARIAL TRAINING & TESTING SERVICES CONTRACT – THE FACTS

NIGEL PITTAWAY | MELBOURNE

Defence announced on February 29 that it had recently signed a \$330 million, eight-year contract with Raytheon Australia for the delivery of Joint Adversarial Training and Testing Services (JATTS).

In essence, the initiative consolidates three existing contracts – Jet Air Support, provided by Air Affairs Australia; Air Towed Targets/Services, with the incumbent being Air Target Services (ATS); and Electronic Warfare Training Services (EWTS), currently supplied by Raytheon.

However, the accompanying media release was vague in detail, saying basically that the new JATTS contract, "secures the ongoing employment of approximately 88 Raytheon Australia and sub-contractor personnel, predominantly based in the Nowra region."

Subsequent enquiries to Defence provided further information about the capabilities to be delivered under JATTS, which include: ATS towed targets and Phoenix Unmanned Aerial Targets (UATs) and/or target emulators; Live Opposing Force (OPFOR) Learjet aircraft; EWTS services, which also includes two Learjets specially configured for the role; ADF Identification Friend or Foe (IFF) Test Capability-Air (AIRC-A); and Future Advanced Threat Simulator (FATS), which has been developed to test and validate Navy's EW systems, including Nulka.

While the capability is based at Nowra, the actual training is conducted across Australia and overseas in support of ADF units.

The JATTS initiative has its origins in the transfer of the Jet Air Support activity

from Air Command to CASG's Tactical Fighter Systems Program Office (TFSPPO). The subsequent realisation that efficiencies could be achieved by consolidating training and support activities, resulted in consultation with industry in late 2017 regarding the future delivery of services.

Previous contracts were also of a shorter duration than ideal, due to the operational tempo of originating units, and tended to focus on flying hours rather than a capability for example. The consolidation of the funding sources and contracts under JATTS has enabled longer term contracts with more certainty and flexibility for industry to deliver efficiencies and enhanced capabilities.

**"WE WERE LOOKING FOR AN
INDUSTRY STEWARD AND RAYTHEON
WAS IN A GOOD POSITION"**

The amalgamation of the existing contracts under the JATTS banner essentially makes Raytheon Australia the capability steward, or Prime Contractor, with Air Affairs and ATS effectively performing as sub-contractors. While it was decided that maintaining the status quo for the time being, the contract is designed to evolve over time to ensure it delivers contemporary

training to the ADF.

"There was the realisation that CASG was best placed to manage this requirement, but not under small, disparate contracts, we were looking for an industry steward and Raytheon was in a good position to do that," explains Matt Hall, Director Air Combat Training Systems TFSPPO.

"The view going forward is that Raytheon is the prime contractor and Air Affairs and ATS are the sub-contractors, providing more or less the same services they were previously, we just now have a 'one-stop shop' from a CASG perspective.

Hall says the future challenge is to evolve capability with the evolving needs of the ADF, particularly with the introduction of 5th Generation capabilities like the F-35A Joint Strike Fighter, which will demand a more capable OPFOR platform to provide realistic training.



Raytheon Learjets provide EW training services to the ADF.

NIGEL PITTAWAY

"The evolving nature of the scope means we need to work with our industry partners to see how we can best meet the capability manager's requirements going forward, with a limited budget." Hall adds.

"I dare say that delivering the same service in Year Eight of this contract will not be the right answer but at this time it's business as usual, we've just changed the construct of the contracts."

TRITON PROGRAM RUNS INTO TROUBLE

Defence is facing tough decisions over the future of the Triton program after US Department of Defense budget papers heralded a two-year pause in production.

■
EWEN LEVICK | SYDNEY

Six Northrop Grumman Triton maritime ISR systems are being procured under Air 7000 Phase 1B to complement P8-A Poseidons. The Tritons are under development through a \$200 million cooperative program with the US Navy, which allows RAAF to take on a degree of risk in exchange for a limited ability to tailor the program towards unique Australian requirements. A seventh aircraft remains under consideration, with IOC currently scheduled for 2023-2024 and FOC for 2025.

Northrop Grumman has been advocating for the Commonwealth to approve the final four aircraft as a single block to gain cost savings and program certainty. Investment so far totals A\$1.7 billion on two Tritons, the aforementioned \$200 million and supporting physical and information infrastructure.



The US has paused the Triton program in FY 2021 and 2022.

USN

"We also hope that we get the next tranche of four remaining aircraft, a total of six approved, at the start of next year by Government, and by doing that we think there will be some advantages, including cost savings and industry opportunities, that we will be able to leverage by getting all of the aircraft agreed in that next tranche," CEO Chris Deeble recently said to ADM in a [From the Source interview](#). "We also think there's a good argument for a seventh."

Yet all that could now be in jeopardy after US [budget papers](#) announced a 'production pause' in FY 2021 and 2022 and "[deferred] further procurement of the Multi-

INT configuration until FY 2023." The funding could instead be directed towards the Trump administration's border wall, which tapped into the Pentagon's budget after neither Mexico nor Congress would pay the full cost.

According to ASPI Senior Analyst Marcus Hellyer, the decision could [forecast trouble](#) for the future of Australia's Triton program.

"The Triton has already suffered a 61 per cent increase in development cost and a 70 per cent

increase in acquisition schedule, so with a two-year production pause on top of that plus the cost of restarting production, it's looking more and more like an easy target for budget predators," Hellyer said. "There are no guarantees US Navy production will start up again."

In response to questions from ADM, a Defence spokesperson cited a statement provided to other outlets.

"Defence is aware of the US Administration's budget request to Congress, which includes a proposed pause on Triton production funding for two years until 2023. It is important to note that this request is not the final US Defense budget," the spokesperson said. "The Department is working closely with both the US Navy and Northrop Grumman to understand impacts on the Australia's Maritime Patrol Program.

"No decision has been made by the Australian Government to defer elements of the Triton Program."

Northrop Grumman Australia CEO Chris Deeble said the company is 'committed to working' towards a solution and highlighted the possibility of Australia stepping forward to fund the empty production slots.

"The Triton industry team recognizes that pausing production would have a negative impact on the timely delivery of this capability to the warfighter and we are committed to working with various stakeholders to sustain Triton production, and ensure our US and Australian customers receive this critical capability," Deeble said. "The proposed production pause may represent an opportunity for the Australian government to bring the Triton capability forward, while ensuring affordability.

"The option that is now available to Australia is to accelerate their purchase of the Triton capability by fielding some of the US Navy stocks, so we're working very closely with the US Navy and with the Australian customer to ensure that we can provide the best price for the Triton capability for the Australian Government and we remain within the spend spread that is currently included in the DIIP."

Doug Shaffer, vice president and program manager of the Triton program for Northrop

**"THE TRITON INDUSTRY TEAM
RECOGNIZES THAT PAUSING
PRODUCTION WOULD HAVE A
NEGATIVE IMPACT ON THE TIMELY
DELIVERY OF THIS CAPABILITY"**

Grumman, said the company is working with the US Navy to give Australia the option to buy the balance of the Triton fleet in LRIP 5.

"[President's Budget 2021] has created an incredible opportunity for Australia, we've been working with the US Navy to provide an option to buy the rest of their aircraft as part of the LRIP 5 contract.

"That provides a significant unit cost savings to Australia, so now's the time to buy more than ever. We are offering the lowest price that we ever have for an unmanned platform to Australia at this time."

"WE ARE OFFERING THE LOWEST PRICE THAT WE EVER HAVE FOR AN UNMANNED PLATFORM"

However, Hellyer warns this could be a financial pitfall for the Commonwealth should the US Navy decide to pull out altogether after the pause.

"This 'opportunity' may be a trap," Hellyer said. "If the US doesn't continue the acquisition program, Australia may be on the hook for one-third of the future spiral development costs of a total fleet of around 20 aircraft."

In a meeting on Wednesday, Deeble said the company was confident the US Navy intends to continue with the program.

"It is a primary mission for the US Navy to sundown their EP-3E fleet. There is significant sunk cost for Navy, and when you look at the USN's need, there is no other alternative other than Triton equipped with Multi-INT capability," Deeble said. "The indications from our perspective are that they're committed and this [budget determination] was made purely on the availability of dollars."

Doug Shaffer, vice president and program manager of the Triton program for Northrop Grumman, said that the USN cited the need to invest in the IFC-4 configuration and 'larger Navy enterprise costs' as the reason for the pause.

Shaffer also indicated that the LRIP 5 contract would be drawn up with the USN at the end of the month and that Australia would need to make a decision on the five aircraft by the end of June.

MOST READ ONLINE AT WWW.AUSTRALIANDEFENCE.COM.AU



1. [Tiger in combat – the French Army experience](#)
2. [NUSHIP Sydney handed to Defence](#)
3. [Naval Group pledges 60 per cent of work to Australian industry](#)
4. [RAAF Tindal upgrades show increasing focus on the north](#)
5. [Rheinmetall launches Autonomous Combat Warrior program](#)

PEOPLE ON THE MOVE

Australian Military Bank Chairman John Brooks has welcomed new CEO Darlene Mattiske-Wood, replacing John Ford who exits the business after seven years in the role. "We are delighted to welcome Darlene to the bank and look forward to her leadership building on our substantial steps forward in digital innovation and member experience," Brook said.

The new Synthetic Environment Working Group co-chairs are as follows: Alisha Fisher – Asia Pacific Simulation Alliance – Representing Academic and Not for Profit Simulation Representation Organisations; Jawahar Bhalla – JB Engineering Systems – Representing Australia-based SMEs; and Frederick Hardtke – Raytheon – representing multi-national companies.

UNSW CANBERRA AND NORTHROP GRUMMAN RECOGNISE FEMALE STEM STUDENTS

Outstanding high school mathematicians were recognised yesterday with the presentation of the UNSW Canberra Prize for the Best Female Students in Mathematics. The prize, supported by Northrop Grumman Australia, is in its third year.

KATHERINE ZIESING | CANBERRA

The Year 8 and 9 recipients, who have been nominated by their schools, are the top female maths students in their year.

UNSW Canberra Rector Professor Michael Frater said the annual award aims to address the gender gap in science, technology, engineering and mathematics (STEM) subjects and encourage more young women to pursue STEM studies at a tertiary level.

Professor Frater, who is also an electrical engineer, said there are many opportunities for students who excel at maths.

"An often-asked question I hear is: 'How important is mathematics? When would I need to use this in real life?'" Professor Frater said. "But maths is at the centre of almost everything we do, and it is used to solve real-world problems. A good example of this is UNSW Canberra's Bushfire Dynamics Team who are developing mathematical models to predict the behaviour of bushfires.

"This could ultimately equip our emergency services with better information to plan their movements, saving property, wildlife and even lives – this is just one example of where maths can take you."



The annual award aims to address the gender gap in science, technology, engineering and mathematics.

ADFA

The Maths Prize is aligned with UNSW Canberra's goal of a 50 per cent female enrolment rate in undergraduate engineering degrees.

The prize winners will be presented with \$250, along with the award. These students will also be eligible for \$5,000 towards their degree should they choose to enrol in a Bachelor of Engineering degree as a civilian student at UNSW Canberra.

The award ceremony, held prior to International Women's Day, is supported by Northrop Grumman Australia. With their support, UNSW Canberra has been able to recognise the achievements of over 300 young women who are excelling in mathematics.

**"AT NORTHROP GRUMMAN WE
KNOW THAT HAVING A DIVERSE
TEAM IS FUNDAMENTAL"**

"Northrop Grumman has been a proud supporter of the UNSW Canberra Prize for the Best Female Students in Mathematics since 2018," Chris Deeble, Country Executive, Northrop Grumman Australia said to ADM. "This award is part of a range of activities Northrop Grumman is undertaking as part of International Women's Day aimed at promoting an inclusive, gender diverse workplace.

"At Northrop Grumman we know that having a diverse team is fundamental for producing innovative solutions for our customers. To have diverse teams you need gender diversity, that's why we encourage smart and committed young women to make the exciting choice to pursue a career in a STEM-related field.

"We know that subject choices made early in Year 10 can have a lasting impact on a young woman's career trajectory and we want to encourage them to take math courses that are so often prerequisites to a successful STEM career.

"This prize supports that objective by saying to Year 8 and Year 9 students that their performance is recognised and valued. That there's a need for talented women with mathematics skills across a range of important STEM careers at companies like Northrop Grumman; and that we want to encourage their journey along the STEM career path."

MODIFIED RAAF HERCULES MAKES RECORD FLIGHT TO ANTARCTICA

A newly modified Hercules aircraft has landed at Australia's glacial runway, Wilkins Aerodrome, marking one of its longest ever flights.

The RAAF C-130J was able to complete the 6,900 kilometre return flight from Hobart using two additional external fuel tanks fitted beneath the wings.

Director of the Australian Antarctic Division, Kim Ellis, said the flight south to the 3.5 kilometre ice runway took about 6.5 hours.

"The Hercules delivered 780 kilograms of cargo to Australia's expeditioners at nearby Casey research station," Ellis said.

"This is another great capability the Australian Antarctic Program now has to reach our stations, deliver cargo and provide medical support to our people working in Antarctica."

Wing Commander Dion Wright, Commander Australian Contingent for Operation Southern Discovery, said the flight was one of the longest-range missions undertaken by an Australian C-130J Hercules.

"The additional tanks increased the Hercules' fuel capacity from 19 to 27 tonnes, giving us the flying range to support missions such as this," WGCMDR Wright said.

The plane carried extra fuel with it and the crew refuelled once on the ground at Wilkins.

"Using the C-130J provides additional capacity for the RAAF to support the Australian Antarctic Division than by relying on the C-17A Globemaster alone."

The Australian Antarctic Program already uses Defence's C-17A Globemaster for cargo operations, with six flights scheduled over this summer season.

The RAAF has been supporting the Australian Antarctic Program through Operation Southern Discovery since 2016.

More on RAAF's Antarctic operations will be available in the April edition of ADM.

**"THE HERCULES DELIVERED
780 KILOGRAMS OF CARGO"**



The Hercules C-130J on Wilkins Runway.

CHRISTOPHER BURNS

NEW FIREFIGHTING VEHICLE ARRIVES AT EAST SALE

Personnel at RAAF Base East Sale have welcomed the arrival of a new Broadspectrum Panther-S firefighting vehicle and the increased capability it will bring.

Minister for Defence Personnel Darren Chester welcomed the addition of the Panther-S and applauded the efforts of Broadspectrum employees during the recent bushfire emergency.

"The new Panther-S model is being introduced by as part of Broadspectrum's investment and commitment to firefighting and airfield safety," Minister Chester said.

"This investment is an example of the continued commitment of Broadspectrum to provide our ADF personnel with high-quality, state-of-the-art products and services.

"I also thank Broadspectrum and the support they provided during the bushfires, where they provided extensive services to Defence personnel and evacuees, as well as being involved in the firefighting."

Minister Chester, representatives from Defence, Broadspectrum and the vehicle manufacturer, Rosenbauer Australia attended the launch at the RAAF East Sale Fire Station to see demonstrations of the new vehicle's capability.

Defence has had a partnership with Broadspectrum to deliver base services products at a large number of bases for more than 15 years.

RAAF Base East Sale provides a training environment for novice pilots and operational capabilities for Defence. The firefighting service is an important component of the ground support that enables the safe operation of aircraft.



A file photo of a RAAF Panther firefighting vehicle.

DEFENCE

PENSKE REBRANDS

Penske Transportation Group International has rebranded its Australian operations at an enterprise level, combining the Penske Commercial Vehicles and Penske Power Systems operations under Penske Australia, effective March 1st, 2020.

Aligning Penske's internal systems and departments will drive operational efficiencies and enhance the product and service offering to Western Star Trucks, MAN Truck & Bus, Dennis Eagle, MTU, Detroit, and Allison Transmission customers, according to the company.

"Since Penske first entered the Australian market in 2013 with Penske Commercial Vehicles, and then with Penske Power Systems, our focus has been on serving a broad range of customers," Randall Seymore, president of Penske Transportation Group International said.

"The first step in improving our service offering was the appointment in recent years of Penske Power Systems as an authorised dealer of Penske Commercial Vehicles' Western Star, MAN and Dennis Eagle truck brands across select locations. We believe rebranding articulates the breadth of Penske's capabilities and positions the company for future development."

As part of this rebranding, managing director of Penske Power Systems, Hamish Christie-Johnston, has been appointed as managing director of Penske Australia.

The rebranding to Penske Australia follows the rebranding of Penske Power Systems and Penske Commercial Vehicles in NZ late last year to Penske NZ.



Minister for Defence Linda Reynolds, Minister for Indigenous Australians Ken Wyatt, and the Maritime Cross Platform Systems Program Office Director Captain Nigel Trump on a tour of the Penske Power Systems' Perth Facility with Leigh Henderson and Hamish Christie-Johnston.

DEFENCE

PC-9/AS GO TO PUBLIC AUCTION

Former RAAF Pilatus PC-9/A 'Roulettes' are set to go under the hammer at a public auction, with bids started at \$1.

With stock sourced from Australian Frontline Machinery, which sells assets sourced from the ADF, interested buyers can bid online through auctioneers Pickles. Pickles will host the auction from Friday, 6 March to Wednesday, 18 March.

Also on sale are four Schleicher ASK 21 Mi Gliders and a Black Hawk helicopter. Over 100,000 spare parts and equipment will also go under the hammer.

"We're really excited to be able to present people with the opportunity to own a piece of Australia's military history," Luke Parker, Managing Director at Australian Frontline Machinery, said. "These unreserved aircrafts are built-to-last pieces for not only collectors, but also for beginner pilots, and aviation businesses looking to expand their assets.

"THE PC-9/AS HAVE BEEN REPLACED BY PILATUS PC-21 TURBOPROPS"

"In addition, we have a large selection of spare parts on offer during this auction, which means that restoration enthusiasts and professionals are likely to find the perfect puzzle piece for their project."

All stock is currently based in Avalon Airport, with open inspections scheduled from next week.

The PC-9/As have been replaced by Pilatus PC-21 turboprop trainers acquired under Phase 1 of Air 5428 Pilot Training System, representing the 'Live' element of a new and holistic Live, Virtual and Constructive



Interested buyers can bid online.

AFA

(LVC) training system.

"We were flying a really good aeroplane in the PC-9/A, performance and reliability-wise, and it had done a fantastic job training our pilots, but probably for Mirages, C-130H (Hercules) and P-3B (Orions). And it was that sort of training paradigm, we had no simulation, no mission rehearsal and we had no way to modernise within that construct," former RAAF chief Air Marshal Leo Davies said.

"The PC-9/A began to age and, although it has been a successful aircraft, it is at the end of its useful life (and) it was time to change."

CONTACT DETAILS

MANAGING EDITOR

Katherine Ziesing
T: 0419 014 308
katherineziesing@yaffa.com.au

ONLINE EDITOR

Ewen Levick
T: 02 9213 8249
ewenlevick@yaffa.com.au

ASSOCIATE PUBLISHER

Kylie Leonard
T: 07 3087 5101
kylieleonard@yaffa.com.au

DESIGNER

Lauren Esdaile

SUBSCRIPTIONS

Martin Phillpott
Toll Free 1800 807 760
martinphillpott@yaffa.com.au

CONTRIBUTORS

Julian Kerr
T: 0418 635 823
jhrhkerr@bigpond.net.au

Nigel Pittaway
M: 0418596131
cnpittaway@bigpond.com

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Yaffa Media Pty Ltd
17-21 Bellevue St,
Surry Hills NSW 2010
T: 02 9281 2333
greatmagazines.com.au

ADM CANBERRA OFFICE
PO Box 4783, Kingston ACT 2604
T: 02 6203 9535

ADM BRISBANE OFFICE

PO Box 9165,
Wynnum Plaza Qld 4178
T: 07 3348 6966
australiandefence.com.au

SUBSCRIPTIONS GREATMAGAZINES.COM.AU CALL 1800 807 760 EMAIL SUBSCRIPTIONS@YAFFA.COM.AU

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FORTHCOMING EVENTS

ADM EVENTS

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

- [ADM Space Summit](#) – 28 April 2020, Hyatt Hotel | Canberra
- [ADM STEM and Defence Summit](#) – 19 August 2020, Novotel | Brisbane
- [ADM Defence Estate and Base Services Summit](#) – 15 September 2020 | Canberra
- [Defence in the North](#) – 28 October 2020 | Darwin Convention Centre

RAAF AIR POWER CONFERENCE

DATE 24-25 March, 2020
LOCATION National Convention Centre, Canberra
WEBSITE raaf.eventsair.com/2020-Air-Power-Conference

The RAAF will be conducting its biennial Air Power Conference on the theme of Air Power and Indo-Pacific Security over the period 24-25 March 2020 at the National Convention Centre in Canberra. The Conference attracts more than 1000 delegates drawn from national and international Air Forces and other military Services, Government, Defence Industry, academia and think tanks. The biennial Air Power Conference has grown into a regionally and internationally respected forum which has engaged a number of important and relevant air power themes in its discussions.

CYBER DEFENCE NEXT GENERATION TECHNOLOGY & SCIENCE CONFERENCE

DATE: 24-25 March
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 24-26 March, 2020
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 26 March 2020
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.

NSW INDIA ADVANCED MANUFACTURING TRADE MISSION 2020

DATE April 2020
LOCATION India
WEBSITE launchpadlive.com.au/trade-mission

In collaboration with the NSW Government, Western Sydney University's Launch Pad Technology Business Incubator is launching the NSW-India Advanced Manufacturing Trade Mission, taking up to eight advanced manufacturing SMEs and start-ups from NSW to India in April 2020. Successful participants will take part in a curated and intensive program designed to give them an introduction to the Indian advanced manufacturing sector. Participants will meet with potential clients, partners and gain valuable experience and immersion into the Indian advanced manufacturing market.

ASIA-PACIFIC SECURITY INNOVATION SUMMIT

DATE 16-17 April, 2020
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.

AUSCERT 2020

DATE: 02-05 June 2020
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.

QUANTUM TECHX

DATE 08 June, 2020
LOCATION TBC
WEBSITE www.quantumtx.com.au/qtx-program

TechX is powered by leading innovation providers, Atomic Sky, and its team of experienced business scale-up facilitators. It's supported by a range of financiers, corporate and government partners who provide access to sites, specialist sector expertise, technical mentors and networks. Through the program each company will be provided condensed capability building, tailored site visits and direct mentoring to build capability, capital and connections.

ROTORTECH 2020

DATE 16-18 June 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.

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.

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

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.

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 Various
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 DEFENCE READINESS SEMINAR SERIES

DATE Various
LOCATION Various
WEBSITE www.hunterdefence.org.au/defence-readiness-seminar-series

This series is designed to educate, prepare, grow and mature NSW businesses who are either active in or considering Defence as a business opportunity. Hunter Defence will be rolling out the series of seminars over the next nine months to assist SMEs: develop organisational capabilities to meet national and international defence prime requirements; overcome any identified shortcomings in their competencies; or participate competitively Defence tender process.

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.