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**PREMIUM EDITION**



A 38 Squadron King Air at Exercise Pitch Black.

NIGEL PITTAWAY

# King Air squadron to disband

**Nigel Pittaway | Melbourne**

**The RAAF will disband one of its two King Air squadrons in December as part of its fleet consolidation plan.**

Townsville-based 38 Squadron will formally disband on December 14 after 75 years of continuous service. The squadron has flown the King Air 350 since 2009, following the retirement of the Caribou.

Four of the unit's eight King Airs have already been transferred to 32 Sqn at East Sale and the remainder will follow after the official ceremony in December. The event will leave Townsville without an active RAAF flying squadron.

However, the Army continues to have a large presence at the base, represented by the CH-47F Chinooks and MRH-90 Taipan helicopters of 5th Aviation Regiment.

A Defence spokesperson said that from 2019, 32 Sqn will operate a fleet of 12 King Air 350s, all of which will be equipped with the latest Rockwell Collins Proline

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21 avionics suite. Of these 12 aircraft, eight will be the ex-38 Sqn examples and the balance are new aircraft, which are being leased from [Hawker Pacific](#). The four new King Airs are currently being reconfigured by Hawker Pacific prior to entering service.

**“Three of the King Airs previously operated by 38 Sqn have recently been modified for the ISTAR role”**

The eight aircraft previously operated by 32 Sqn all had the earlier Proline 2 flight deck and the fleet will therefore standardise on the latest configuration. Four of the earlier aircraft have already been returned to Hawker Pacific and sold to a new owner in the US.

“No. 32 Squadron will continue to conduct its existing roles in support of No.1 Flying Training School (training of Mission Aircrew and Aviation Warfare Officers), as well as Air Logistics Support,” the spokesperson said.

“The Squadron will also take over the following roles from No. 38 Squadron: Imagery Acquisition, Base Station Relay, and Intelligence Surveillance Targeting Acquisition Reconnaissance (ISTAR).”

Three of the King Airs previously operated by 38 Sqn have recently been modified for the ISTAR role by Hawker Pacific under Air Force Minor Project (AFM) 01037. The three aircraft are now permanently configured for the role and are tasked by the RAAF’s Air Mobility Control Centre on behalf of Army Special Operations Command.

A review of the King Air capability will be undertaken in 2024, according to the spokesperson.

#### MOST READ ONLINE AT [WWW.AUSTRALIANDEFENCE.COM.AU](http://WWW.AUSTRALIANDEFENCE.COM.AU)



1. [Construction begins on first Arafura class OPV](#)
2. [Reaper chosen as ADF’s first armed UAS](#)
3. [Construction starts on Rheinmetall regional HQ](#)
4. [Submarines and the art of the understatement](#)
5. [Ground broken on new turbine engine maintenance facility](#)

## Mixed messages in Canberra’s Pacific pivot

**Ewen Levick | Sydney**

**PM Scott Morrison, Foreign Affairs Minister Marise Payne, and Minister for Defence Christopher Pyne have outlined a plan to “step up” Australia’s presence in the Pacific despite significant cuts to that presence in recent years.**

The Coalition’s new plans for the Pacific include: a new Pacific faculty at the Australian Institute of Police Management; the establishment of a new ADF Pacific Mobile Training Team; an annual Joint-Heads of Pacific Security Forces event; \$1 billion in capital to Efic, Australia’s export financing agency; a new sports



A RAAF C-130J Hercules delivers humanitarian aid to Palu, Indonesia.

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grants program; a \$2 billion infrastructure initiative; and a 'large-hulled' dedicated humanitarian assistance and response naval vessel.

"[The vessel] could be assisting with preparations for natural disasters, resilience support, or it could respond to natural disasters as they occur," Minister Pyne said.

It is unclear what type of ship the government intends to build, or where the build would occur.

The announcement comes less than a week after Opposition Leader Bill Shorten spelt out Labor's plans for a regional infrastructure bank and other tools for increasing Australia's influence in the Pacific.

"We are not going to forfeit the Pacific because we didn't turn up," Minister Shorten said.

"We will encourage the private sector to drive development in the region. My vision is to actively facilitate concessional loans and financing for investment that is for vital national building projects through a government-backed infrastructure investment bank."

There is widespread concern that China is making strategic in-roads in the region. Beijing has used conditional loans to bring small Pacific states into financial debt. A similar scheme was used to take ownership of the Sri Lankan port of Hambantota, which lies close to major maritime trading routes between Asia and the Middle East.

Canberra is also upgrading wharf and shore-based infrastructure at PNG's Lombrum Naval Base on Manus Island under the Pacific Maritime Security Program.

The Lombrum base controls the approaches to the Vitiaz Strait, between the PNG mainland and the island of New Britain. The [majority of shipping vessels](#)

**"If Canberra intends to signal to Pacific countries that it remains their partner of choice, it is sending very mixed messages"**

heading to or from Australia's east coast pass through the strait, which is only 47 kilometres wide at its narrowest point. Lombrum also sits roughly halfway between northern Queensland and major American military facilities on Guam.

Interestingly, the government said it intends to "work with our commercial media operators to ensure the Pacific can connect to quality Australian media content."

This statement stands in stark contrast to the ABC's decision to cut its shortwave radio broadcast service in 2017, which was run out of towers near Shepparton in Victoria. Numerous people throughout remote regions in the Pacific used Australian shortwave broadcasts as their primary means of connecting to the world.

The government's failure to save the service was criticised as a '[major diplomatic misstep](#)', particularly given that it was a crucial means of transmitting emergency information throughout the South Pacific. The ABC said that the broadcasts would be replaced by 'digital content', but only 10 per cent of PNG's population (as an example) have [internet access](#).

The national broadcaster made the decision to save \$2 million a year, a sum that pales in comparison to the \$2 billion the government has now allocated to fund regional infrastructure. If Canberra intends to signal to Pacific countries that it remains their partner of choice, it is sending very mixed messages.

Incidentally, Australia's former shortwave frequencies have since been [taken over](#) by China Radio International.

## PEOPLE ON THE MOVE

Aurecon has appointed William Cox as its new Global CEO, effective from 1 February 2019. Cox will be based in Sydney. His appointment marks the end of current Aurecon CEO Giam Swiegers' fixed four-year term. "My focus areas for the immediate future are to consolidate and continue the growth trajectory in Digital, Advisory, and in Asia where we see immense potential in transport infrastructure, the built environment and fast-growing data centre sector," Cox said.



# An army for the EU?

Jacky Westermann | Canberra

**Around the centennial commemorations remembering the end of World War I, French President Emmanuel Macron reiterated his calls for an EU army — an idea not new to the European defence and security debate.**

In 1950, France pushed for the creation of a European Defence Community, later known as the Pleven Plan, but the ambitions were put on ice when a different French government voted against the initiative four years later.

Multiple proponents have tried to revive the idea, including former German Chancellor Helmut Kohl, French Prime Minister Alan Juppé, EU Commission President Jean-Claude Juncker and others. The 1992 Maastricht treaty introduced



A German Boxer crossing a temporary bridge formed by several UK and German M3 Amphibious Rigs during a joint UK/German bridging operation.

MOD

a common security policy and the 2007 Lisbon treaty laid the foundation for a theoretical European defence architecture. That sees tools such as the Permanent Structured Cooperation (PESCO) working alongside institutions including the European Defence Agency and the European Defence Fund.

The EU and its member states have advanced their cooperation on common defence and security policy over the last two decades, motivated in part by White

**“The creation of an EU army any time soon is very unlikely”**

House rhetoric on common defence spending and capabilities within NATO. President Trump has taken [common American criticisms](#) of European defence spending to a new level by voicing the idea of pulling out of the organisation.

President Macron’s words were quickly endorsed by German Chancellor Angela Merkel in her speech to the European Parliament, raising the vision of ‘a real European army one day’. However, she refrained from proposing anything concrete other than a European security council that might make faster decisions.

As many have pointed out, certain measures and tools are already in place in terms of an ‘EU army’: EU battlegroups were formed 2007 but have never been deployed due to political unwillingness and a lack of unity. Like these battlegroups, an EU Army would need a majority in favour of deployment (if not a unanimous decision), leaving a big question mark over the concept’s viability.

Equally, Merkel’s proposition for a European intervention unit sound surprisingly similar to the European Intervention Initiative (also referred to as EI2) which Belgium, Denmark, Estonia, France, Germany, the Netherlands, Portugal, Spain and the UK agreed upon in June 2018. EI2 offers the potential for coordination between participating nations to respond and collaborate militarily in situations of crisis.

Missions and operations with civil-military or military mandates have been launched as part of the EU's common defence and security policy in the past.

Another positive development has been the increasing integration of some parts of the EU member states' defence forces and increasing multinational cooperation. There are a number of multilateral brigades between Germany, Denmark and Poland, and bilateral brigades between Germany and France, and Germany and the Dutch.

This daily collaboration increases interoperability and capabilities, and allows for better resource-application. All of those side-effects benefit the EU's security and defence capabilities and improve NATO's general abilities and preparedness.

In short, the creation of an EU army any time soon is very unlikely. National governments of EU member states are reluctant to give up on coordinating deployments and engagements of their defence forces, and there are differing national legal requirements.

Rather than attempting to revive old debates of visions without proper suggestions of design and organisation, EU members could try to eliminate current challenges that create hurdles in closer military cooperation across Europe, particularly the issue of troop and arms movement across EU territory. Diplomatic clearances also vary immensely between the member states.

Former US Army Europe Commander Ben Hodges has for years advocated for a 'military Schengen area', mirroring the agreement that has abolished almost all of the EU's internal borders.

*Note: Jacky Westermann is a researcher at the Australian Strategic Policy Institute.*

## CSIRO invests in space and AI frontier research

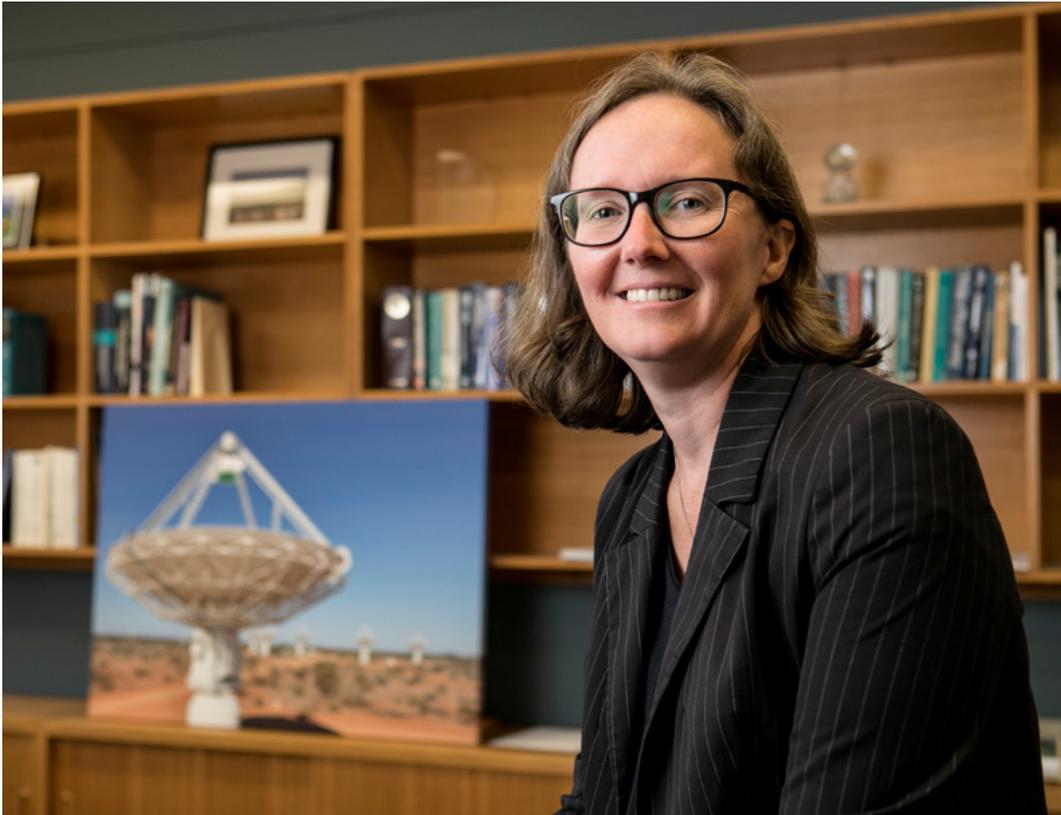
**CSIRO is investing \$35 million in frontier research in space technology and artificial intelligence.**

The investment will include the development of advanced imaging of Earth from satellites and data science to support the growth of AI technology.

The investment is part of CSIRO's Future Science Platforms (FSP) portfolio, aimed at dedicating research to [new and emerging opportunities](#) for Australia. They aim to help reinvent old and create new industries, as well as grow the capability of a new generation of researchers through specially-created student places in these 'future' fields.

Space technology will receive \$16 million to identify and develop the science to leapfrog traditional technologies and find new areas for Australian industry to work in.

"The new CSIRO Space Technology FSP will build on CSIRO's existing space-related activities, with a focus on cross-disciplinary opportunities and deep industry collaboration," Dr Sarah Pearce, Deputy Director, CSIRO Astronomy and Space Science, said.



Dr Sarah Pearce, Deputy Director CSIRO Astronomy and Space Science.

KARL SCHWERDTFEGGER

## “Our initial focus will be on technologies for observing Earth from space and dealing with this data”

“Our initial focus will be on technologies for observing Earth from space and dealing with this data. We’re also going to look at areas such as development of space object tracking, in-situ resource utilisation, manufacturing and life support systems for Moon and Mars missions.”

AI and machine learning will receive \$19 million to target AI-driven solutions for areas including food security and quality, health and well-being, sustainable energy and resources, resilient and valuable environments, and Australian and regional security. The primary research areas include platforms to improve prediction and understanding of complex data; platforms to enable trustworthy inferences and risk-based decisions; and data systems to enable ethical, robust and scalable AI.

CSIRO Chief Executive Dr Larry Marshall said the CSIRO Future Science Platforms have an [important role to play](#) in inventing and securing Australian prosperity.

“Our Future Science Platforms aim to turn Australia’s challenges into opportunities where new science can break through seemingly impossible roadblocks to give Australia an unfair advantage on the world stage,” Dr Marshall said.

“Innovation needs deep collaboration, so our FSPs bring together this nation’s world-class expertise across all fields of science, technology, engineering and maths to deliver real solutions to real world problems.”



The Cornwall-based station is capable of communicating with satellites over the US and Asia.

GOONHILLY

## UK satellite station joins Australian research program

**British satellite communications station Goonhilly Earth Station (GES) has joined the consortium backing the SmartSat CRC (co-operative research centre), an Australian space research initiative with plans to drive domestic space industry through satellite technologies and analytics.**

Goonhilly is a satellite station on Goonhilly Downs in Cornwall. Built in 1962, the station was involved in broadcasts of the Apollo 11 moon landings through its heritage-listed 26-metre Antenna 1 dish, nicknamed 'Arthur'.

The site was run by BT until 2008 before it was taken over by GES in 2011. Customers now include SES, Intelsat, Eutelsat and Inmarsat, as well as space agencies, governments, and broadcasters.

The 67-member [Australian SmartSat CRC consortium](#), developed earlier this year, is led by the University of South Australia (UniSA), Airbus, and Nova Systems, and also includes Harris Corporation, Thales Australia, BAE Systems, Dassault Systems, and other companies. The consortium also has agreed partnerships with NASA, Japanese space agency JAXA, UK Catapult, and University College London (UCL).

The CRC's goal is to "catapult Australia's space industry into a leadership position in several areas including intelligent satellite systems, advanced communications, and earth observation driven data analytics."

**"Goonhilly is well poised to support Australian organisations as they look to extend their reach"**

The research consortium aims to co-develop intellectual property and specialist industry expertise that will apply space technologies and space-related data to areas ranging from agriculture and the environment to healthcare and disaster detection and management.

In a statement, the consortium said it is now preparing the final stage application for submission to the government, outlining the organisation's parameters, and discussing funding.

"With its technological and commercial expertise, as well as its expanding capabilities and resources, we are confident that Goonhilly will make a significant contribution to the SmartSat CRC," Professor Andy Koronios, Dean of Industry and Enterprise at UniSA, said.

"The space industry is a global one and Goonhilly is well poised to support Australian organisations as they look to extend their reach," Dr Bob Gough, head of Business Development Australia and Asia-Pacific at Goonhilly, said.

"At our UK site we offer world-class satellite capacity with visibility spanning 145° west to 135° east. This is complemented by our connectivity with bundles of subsea cables and fibre, and our new multi-million-dollar datacentre."

## TOP COMMENTS

### Construction begins on first Arafura class OPV

The sub project is getting seriously scary. It is pretty easy to guess what is happening. Everything upstream of the Combat System is being managed via the US which going to reduce the French to simply the platform supplier. No wonder the partnering agreement is lagging. **-Johnno**

That is not a problem. The hull material, which should be similar to the German subs, should be a given. The new GS Yuasa submarine batteries should be a given, and propeller or pump jet shouldn't matter to a huge extent. The rest is easy as American weapons will probably be mandated. It's really not rocket science – it's just a matter of combining it all. **-Mark Maxwell**

In some things, the French gear is actually better. Most notably sonar. The advantage we had with the Collins is that the CMS was retrofitted, so the superior gear we already had fitted remained. **-DJ**

## CDIC launches SME funding program

**A dedicated annual grants program has been announced that will provide up to \$17 million to Australian SMEs to grow a deeper and broader Australian defence industrial base.**

The Sovereign Industrial Capability Priority Grants program supports the ten Sovereign Industrial Capability Priorities critical to the ADF's operational requirements, identified in the 2018 [Defence Industrial Capability Plan](#).

The plan concluded Australia's defence industrial base is mostly composed of SMEs. This grants program aims to ensure Australian SMEs have the capacity and resilience to support Defence capabilities.



The grants will help SMEs meet eligible costs including capital equipment.

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**“The grants will help SMEs meet up to 50 per cent of eligible project costs”**

The grants program will provide support to eligible SMEs with fewer than 200 employees. A business can receive an unlimited number of grants over the life of the program, with a minimum value of \$50,000 and the maximum value of \$1 million and up to a total of \$3 million over a three-year period.

The grants will help SMEs meet up to 50 per cent of eligible project costs including capital equipment, specialist software and security infrastructure, non-recurring engineering costs, design activities or enhancing workforce training and accreditation.

The program will be delivered through the Centre for Defence Industry Capability. More details are available [here](#).

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# Forthcoming Events

## ADM EVENTS

More detail on **ADM** Events can be found on our dedicated website: [admevents.com.au](http://admevents.com.au)

- [ADM Congress 2019](#) – 13 February 2019

### HPRnet Symposium 2018

**Date** 28 November

**Location** Curtin University

**Website** <https://www.dst.defence.gov.au/event/hprnet-symposium-2018>

The 2018 HPRnet Symposium will be held on 28 November at Curtin University in Perth, in conjunction with the Defence Human Sciences Symposium. The annual HPRnet Symposium provides an opportunity for members of the network, and those with an interest in human performance, to hear the latest developments in human performance research for the military.

### Defence Human Sciences Symposium 2018

**Date** 29-30 November

**Location** Perth

**Website** <https://www.dst.defence.gov.au/event/defence-human-sciences-symposium-2018>

The Defence Human Sciences Symposium (DHSS) is the principal Australian forum for those interested in the application of human sciences research to enhance Defence capability. The symposium is run annually, and this year being jointly hosted by DST and Curtin University. The theme for this year's symposium is "Minder, Mentor, Minion, Mate: Warfighter roles in Future Complex Systems".

### ASOR DORS 2018 Conference

**Date** 04-06 December

**Location** Melbourne

**Website** <https://www.confer.nz/asor-dors2018/>

The 26th Annual Conference ASOR/DORS 2018 brings together research in optimisation, operations planning, informatics, operations research, defence, simulation and modelling of industrial operations, statistics and big data analytics.

### BMT's Submarine Design & Engineering Course

**Date** 10 Dec – 14 Dec, 2018

**Location** University of South Australia

**Website** <http://www.bmtdesigntechnology.com.au/training-courses/submarine-design-engineering>

BMT's Submarine Design and Engineering Course presents attendees with the latest thinking and innovations in submarine design and operations. The course provides students with a complete understanding of conventional submarine

technology, and our experienced presenters explain how capability requirements and new technologies can impact overall submarine design and management. The course is also accredited by the Royal Institution of Naval Architects.

## Avalon Airshow 2019

**Date:** 26 February – 3 March 2019

**Location:** Avalon Airport

**Website:** <https://www.airshow.com.au/airshow2019/index.asp>

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.

## IMDEX Asia 2019

**Date** 14-16 May

**Location** Changi Exhibition Centre, Singapore

**Website** [www.imdexasia.com](http://www.imdexasia.com)

Coming to its 12th edition, the biennial IMDEX Asia is Asia Pacific's premier international maritime defence show and a must-attend event in the global naval and maritime security calendar. With established conferences and real-time discussions on maritime security, IMDEX Asia draws a plethora of global leaders and distinguished guests.

## Paris Air Show

**Date** 17-23 June 2019

**Location** Le Bourget

**Website** <https://www.siae.fr/en/>

The 53rd Paris Air Show will once again bring together all the players in this global industry around the latest technological innovations. The first four days of the Show will be reserved for trade visitors, followed by three days open to the general public.

## Pacific 2019

**Date** 8-10 October 2019

**Location** Sydney Convention Centre

**Website** [www.pacific2019.com.au](http://www.pacific2019.com.au)

As the only comprehensive international exhibition of its kind in the Indo-Asia-Pacific region, PACIFIC 2019 will again provide the essential showcase for commercial maritime and naval defence industries to promote their capabilities to decision-makers from around the world.

## MilCIS 2019

**Date** 12-14 November 2019

**Location** Canberra Convention Centre

**Website** [www.milcis.com.au](http://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.