

Issue

2

FLIGHT DAILY NEWS

Wednesday
26 March 2025

See page 4 for
pictures of the
flying display



AVALON
AUSTRALIAN INTERNATIONAL AIRSHOW



Seahawk surge

Australia is growing its fleet of Sikorsky MH-60R Seahawk naval helicopters under a recently announced deal to acquire 13 more aircraft.

Sikorsky plans to start delivering the new-build Seahawks in 2026, with the full complement turned over by year's end.

When the plus-up is complete, the Royal Australian Navy will have a total inventory

of 36 multi-role MH-60Rs, which can offer anti-submarine warfare and utility support to Australia's naval ships.

Canberra's current fleet of 23 Seahawks is based at HMAS Albatross on the New South Wales coast.

As part of the A\$313 (\$196) million agreement, Sikorsky plans to expand

its workforce in Australia to support the maintenance of the larger MH-60R fleet.

Royal Australian Navy air crew able seaman air crewman Joshua Williams and sub lieutenant aviation warfare officer Stephanie Hudson are pictured with the MH-60R Seahawk at the show.

See Headlines P10

BillyPix

Preparing for Peregrine

Canberra on path to receive 'first of its kind' Gulfstream-based ISR platform this year

Ryan Finnerty

Australia is set to receive the first aircraft in a new fleet of business jets converted for use as a long-range intelligence collection and electronic warfare platform.

US systems integrator L3Harris is modifying four Gulfstream G550s for service with the Royal Australian Air Force under the designation MC-55A Peregrine.

Speaking to *Flight Daily News* on the opening day of the show, L3Harris says it will deliver the "first of its kind aircraft" to Canberra before the end of this year.

"From an intelligence, surveillance and reconnaissance (ISR) capability, there's nothing else in the world that matches MC-55," says Jason Lambert, president of ISR programmes at L3Harris.

Australia plans to acquire four of the modified business jets, which boast a custom sensor package housed in a canoe-shaped compartment below the fuselage. That configuration required significant changes to the G550 outer mould line, along with a new airworthiness certification.

That certification process, along with the initial step of integrating Australia's unique sensor suite, pushed the first Peregrine delivery

into 2025 from an earlier projection of 2023.

Lambert says first-time development programmes like the MC-55 often encounter unforeseen challenges, in this case working with airframer Gulfstream to address changes to the G550's flight parameters created by the adding the ventral sensor housing.

L3Harris received the critical supplemental type certification for the new airframe shape from US regulators in late 2024. Since then, the company has completed mission systems integration on the inaugural Peregrine and notched the type's first functional check flight with those sensors installed.

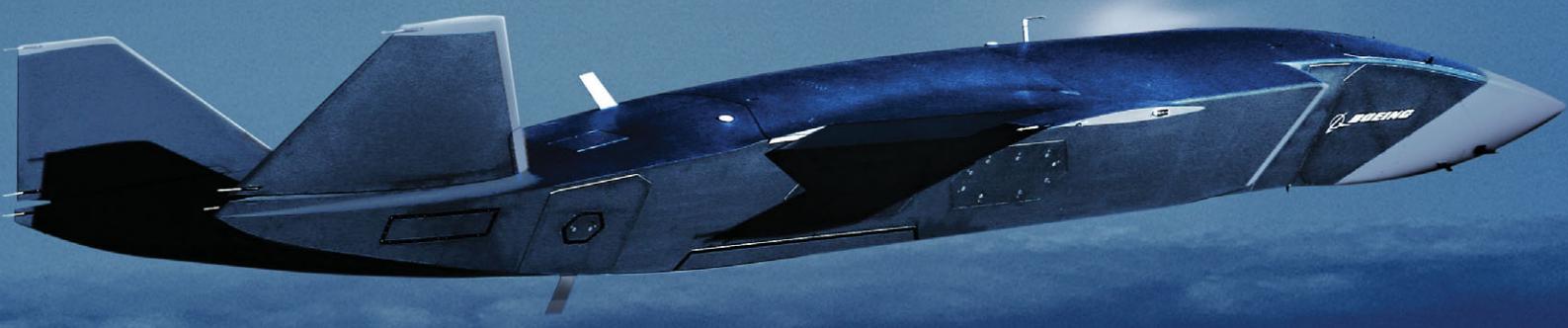
"Now we're on our path to delivery," Lambert says.

He notes the company is currently operating within the schedule and cost targets agreed upon by Canberra and Washington, which is managing the MC-55 programme via the US Foreign Military Sales (FMS) system.

For the first time, Lambert also reveals that L3Harris is preparing a similar G550-based aircraft for a different FMS customer.

While declining to name the buyer or provide specific details on the order, he confirms that configuration will use the same outer mould line shape as Australia's Peregrines and come equipped with a similar mission package.

Advanced capabilities. Unlimited potential.



Boeing and the Australian Defence Force share a deep history of innovation. Together, we're developing force multiplying collaborative combat technologies in Australia, for Australia and our allies.

boeing.com/defense/mq28

THE DECISIVE
EDGE

 BOEING

Parker: We've flown 100 times and have proven algorithms that are autonomous



Weapon ready

Boeing planning missile test from Ghost Bat CCA for first time this year or early next

BillyPix

Greg Waldron

Boeing Defence Australia is planning an air-to-air missile test from its MQ-28A Ghost Bat collaborative combat aircraft demonstrator.

Steve Parker, interim president and chief executive for Boeing Defense, Space & Security, revealed the planned test in a media roundtable at the show yesterday.

"We're going to accelerate

into a weapons shot with the MQ-28... later this year or early next year," says Parker.

He confirms that the shot will involve an air-to-air munition, marking the first attempt to introduce weapons to the uncrewed Ghost Bat.

Boeing has yet to decide if the test will use a Block 1 or improved Block 2 aircraft. With the pending arrival of the first Block 2 standard MQ-28s this year, the Ghost Bat test fleet will grow to 11 aircraft.

Parker also suggests that

the MQ-28 – which carries sensor payloads in its nose – will eventually gain a weapons bay.

"We've flown one hundred times, and we've proven algorithms that are autonomous, and we are adding [artificial intelligence]," he says.

Until now, the 100h hours of test work with the MQ-28 fleet have focused on handling characteristics, as well as non-kinetic missions such as electronic warfare and intelligence, surveillance and reconnaissance.

The MQ-28 is a joint development effort with the Royal Australian Air Force, but the type's future is not entirely clear as it has yet to secure a long-term production contract.

However, Parker feels the type has "a lot of runway ahead" with opportunities in Australia, internationally, and in the USA. In 2023, Boeing brought at least one Ghost Bat to North America for testing with the US Air Force at the company's US headquarters in St. Louis, Missouri.

Regarding MQ-28 test work, managing director of Boeing Defence Australia, Amy List, says that the aircraft has demonstrated an ability to adapt and make adjustments during flight to achieve its mission.

"The aircraft is doing incredible things, and when people start seeing what it's doing, the interest will continue to grow," she says. "We've got significant interest at the moment, and we've got the support of the government."

Australia gets all set for Apache



List: Five Australian companies in Apache supply chain

The Australian army is gearing up to operate the Boeing AH-64E Apache attack helicopter, with first deliveries expected by the end of 2025.

Four examples of the 29 Apaches on order will arrive by the end of this year, with four additional examples due in 2026, says army Brigadier General Andrew Thomas.

Speaking at the show yesterday, Thomas added that Australian army personnel are already embedded with US Army AH-64 units to come up to speed on the new platform.

Boeing says Australia's first Apache, AT001, has entered final assembly in Mesa, Arizona.

Amy List, managing director of Boeing Defence Australia, notes that five Australian companies are involved in the supply chain that supports the Apache effort.

Initially the rotorcraft's main armament will be the Lockheed Martin AGM-114 Hellfire missile.

They will also be equipped to operate unmanned air vehicles.

The army also envisages the AH-64E operating from Australia's two amphibious assault ships, the HMAS Canberra and HMAS Adelaide. US army Apaches have already performed some initial trial work for such shipboard operations.

The army's 22 Airbus

Helicopters Tigers suffered significant sustainment challenges over their career, ultimately leading to the selection of the AH-64E in 2021 under the Armed Reconnaissance Helicopter requirement.

Thomas says that options are open for the Tiger fleet, including potentially "gifting" the aircraft internationally.

Asked about how Australia aims to avoid the challenges it faced with the Tiger, Thomas observes that the Apache is a mature platform with a large installed base.

Moreover, Boeing will have a substantial support capability in Townsville, Queensland, where the Apache fleet will be based.



Lighting the skies

From vintage designs to fifth-generation fighters, a parade of aircraft are entertaining Avalon attendees this week as their pilots put them through their paces over the showground. Our photographer captured some of the most memorable moments



Trail blazers: RAAF aerobatic team the Roulettes in their Pilatus PC-21s



Sub hunter: RAAF Boeing P-8A Poseidon



Photography: BillyPix



uncrewed jet – the Boeing MQ-28 Ghost Bat – will initially be oriented towards an intelligence, surveillance and reconnaissance role.

That platform, a joint development effort between Boeing and the Australian government, made its debut at the 2023 Avalon air show. The aircraft is still in development with no plans around the integration of weapons. Whether or not local production of an Anduril aircraft in Australia is in the cards remains a matter of speculation.

The California-headquartered company recently announced plans to build its first large-scale production site in the US state of Ohio. That plant will deliver a range of the company's offerings, including Fury, the Roadrunner drone interceptor, and the Barracuda family of cruise missiles.

For now, Anduril declines to address the possibility of any local production agreement for the Fury, should Canberra show an inclination toward the single-engined design.

"Our focus has always been on working with the ADF on its specific needs to develop capability that serves Australia's needs and supports the government's strategy of denial," Anduril says.

The company offers a range of other products, including small uncrewed aerial systems and counter UAS air defence packages.

A full-scale model of the aircraft is on display at the show
BillyPix

Ryan Finnerty

One of the aircraft competing to be the US Air Force's first-ever uncrewed fighter jet is making its overseas debut at the show.

American defence start-up Anduril has brought a full-scale model of its Fury design to Australia, with an eye toward future business opportunities.

In North America, a missionised version of Fury dubbed the YFQ-44A is set to make its initial flight later this year, alongside a com-

peting offering from General Atomics Aeronautical Systems, under the USAF's Collaborative Combat Aircraft (CCA) programme.

That effort aims to deliver an autonomous jet that can be affordably produced in large quantities to support conventionally manned fighters in battle. Senior US military officials say such a capability will be crucial to offsetting China's numerical advantage in ships and aircraft in the Western Pacific.

Anduril hopes Australia, which has for decades sought to closely align its military capability with

Washington's, will follow suit.

"Autonomous air systems will be crucial for achieving air superiority in future conflict," says David Goodrich, chief executive of Anduril Australia. "Our adversaries are making major investments in this area and we need to move faster to develop autonomous systems for the defence of Australia and our allies."

Notably, Washington has left open the possibility of exporting the first generation of CCAs through the USA's Foreign Military Sales system. Anduril tells *Flight Daily News* it is open to in-

ternational interest across its product line, including both the base model Fury and the USAF's YFQ-44A variant, which is being positioned as a low-maintenance, reusable vehicle for supporting air superiority missions with extra firepower.

"If Fury fills a need for the Australian Defence Force, we will be ready to support the need," Goodrich says.

Subsequent iterations of the CCA concept could expand to offer other capabilities, such as air-to-ground strike capability or electronic warfare support. Australia's homegrown

Space trip

Four lucky Australian secondary school students are heading for Space Camp USA after winning the 2025 Endeavour Scholarship. The quartet, who will travel with a teacher, will be announced at a ceremony at Avalon this afternoon attended by NASA astronauts Charlie Duke and Mike Bloomfield, as well as the first Australian astronaut Katherine Bennell-Pegg.

The Mission #24 team, as they are known, will travel to Space Camp USA, held at the US Space & Rocket Center in Huntsville, Alabama in July, where they will join fellow students from around the world for astronaut training, engineering challenges, and a simulated space mission.

Executive director of the Endeavour Scholarship Foundation Tom Kallman says the scholarship was established to "design and equip the next generation of innovators and leaders in aerospace and STEM [science, technology, engineering and mathematics]".



Customer now has nation's largest law enforcement fleet of Bell helicopters

QPS rings again for Bell

Bell has announced a deal with the Queensland Police Service for three Bell 429s, taking the latter's fleet of the twin-engine light helicopter to six.

The US subsidiary of Textron says the agreement will make QPS Australia's largest law enforcement operator of its rotorcraft. The trio of 429s will be operated by Townsville-

based Meridian Helicopters, which has a 10-year contract to provide airborne law enforcement capabilities in the north of the state.

In 2022, Surf Life Saving Queensland signed for the initial three 429s. It has the contract for patrolling and supporting on-ground policing efforts in southeast Queensland.

Meanwhile, Bell says that Nautilus Aviation's Bell 407GX fleet has accumulated more than 6,300 flight hours, doubling its tally in 12 months.

The company, which operates five of the type, carries out parapublic and sightseeing flight in northern Queensland and the Barrier Reef region.



**Winning in the
21st century requires
the next breakthrough.**

**We're ready to deliver
for the world. Again.**



©2025 GENERAL ATOMICS AERONAUTICAL SYSTEMS, INC.

Avenger®, EagleEye®, Gray Eagle®, Lynx®, Predator®, Reaper®, SeaGuardian®, and SkyGuardian® are trademarks of General Atomics Aeronautical Systems, Inc., registered in the United States and/or other countries.

EBACE25

20-22 May 2025 • Geneva

EBAA

WHERE EUROPE DOES BUSINESS AVIATION

Here the whole ecosystem comes together to connect, share and shape the future of European Business Aviation. There's nowhere better for exhibitors to go to market or for visitors to gain knowledge and experience new products or services. And don't miss the plentiful opportunities to network with the community, hear insights from thought-leaders and reach new customers.

Tickets available at ebace.aero



L-R: Bombardier's Michael Ackner with Langrell and Gallagher



Bombardier breakthrough

Murdo Morrison

Bombardier has marked a breakthrough deal for its defence business in Australia with the sale of two Challenger 650s to be operated as intelligence, surveillance and reconnaissance (ISR) aircraft.

The customer is Australia-based lessor Principle Finance, which specialises in supplying aircraft into the special-mission market, including aero medical, maritime surveillance, and fire and emergency services. The companies announced the deal at the show yesterday. Delivery of both aircraft is planned for 2026.

Although Principle Finance will not disclose the end user, it is understood that the 4,000nm (7,400km)-range jets will be operated by the winner of an Australian Border Force tender to supply airborne ISR services, due to be announced later this year.

Jean-Christophe Gallagher, executive vice-president aircraft sales and Bombardier Defense, describes the purchase as a "major milestone"

for the division. He adds: "Our aircraft are the platform of choice not only due to their reach, persistence and performance, but also due to the large accessibility of our services and support ecosystem in the country."

Harrison Langrell, managing director of Principle Finance, says the large-cabin types will create "a new kind of opportunity" for the company, which was founded by his late father in 2013.

"We are excited to integrate the Bombardier Challenger 650 into our fleet, leveraging its exceptional performance and reliability, which will play a crucial role in our future operations," he says. "This platform allows us to enhance our surveillance reach and effectiveness, ensuring we stay ahead in the rapidly evolving defence landscape."

Principle Finance has a fleet of three other aircraft: two Pilatus PC-12s, one of which performs surveillance missions, and a Hawker 850XP, operating medical flights out of Singapore. It does not have its own air operator certificate and its business model is based on dry operating leases.

SRSL adds four H145s

New Zealand's Search and Rescue Services (SRSL) has ordered four Airbus H145 helicopters to bolster its emergency medical services (EMS) operations.

The Safran Arriel 2E-powered types (*pictured*) will join SRSL's existing fleet of Airbus Helicopters H145 and BK117 aircraft.

Airbus Helicopters says there are around 1,740 H145 family rotorcraft in service, 600 of them deployed for helicopter emergency medical service missions (HEMS) worldwide.

SRSL is the air operator certificate-holding entity of Central Air Ambulance Rescue (CAARL), which provides HEMS services to Health New Zealand and the Accident Compensation Corporation.



Christian Keller Airbus Helicopter



Billy Pix

Here is the news

Meet the team responsible for handing you your copy of *Flight Daily News*, FlightGlobal's long-running show daily brand, which is appearing at Avalon for the first time.

Flight Daily News has been bringing attendees at air shows around the world their fix of breaking stories, lively images, and background features since the 1980s, including at Paris, Farnborough, Singapore and Dubai.

"We are excited to be adding Avalon to the growing list of events at which we

publish *Flight Daily News*," says editor Murdo Morrison. "It's one of the industry's most important regional shows and the Australian defence and special mission market is expanding fast. The show attracts an international audience and big exhibitors so we hope this is the first of many Avalons *Flight Daily News* will be covering."

This year, *Flight Daily News* will also appear at Aero Friedrichshafen, EBACE in Geneva, Paris, NBAA BACE in Las Vegas, and Dubai.

At the double

Sikorsky steps up shipments of both MH-60R and UH-60M military helicopters to Canberra

The Black Hawk and Seahawk have much in common, but require separate support bases



Ryan Finnerty

Sikorsky is ramping up deliveries to the Australian Defence Force, as Canberra expands its inventory of

military helicopters.

Over the coming year, the Lockheed Martin subsidiary plans to hand over newly-built examples of both the maritime MH-60R Seahawk to the Royal Australian Navy and the land-based UH-60M

Black Hawk to the army.

Under a A\$313 (\$196) million deal announced in February, Sikorsky will deliver 13 additional Seahawks to the Royal Australian Navy by the end of 2026, bringing the service's MH-60R fleet

to a total of 36 examples.

Cliff Kyle, general manager of Sikorsky Australia, says the expanded inventory will give the navy greater flexibility with "more platforms to put on more decks", but will also help Sikorsky improve

the maintenance support it can provide locally.

"An increased fleet size lends itself to bring more capability onshore, which then leads to increased readiness for the fleet," Kyle says. "We can reduce things like shipping time back to the US."

The RAN's current complement of 23 MH-60Rs are based at HMAS Albatross on the New South Wales coast. Sikorsky plans to expand its existing workforce in that area to support the maintenance of the larger Seahawk fleet.

On land, the rotorcraft manufacturer will continue delivering the Australian army's new UH-60Ms, an example of which is on display at Avalon.

Sikorsky delivered Australia's 13th Black Hawk just before the start of the air show, with at least six more UH-60Ms set to be turned over this year. The army's full order of 40 rotorcraft will be completed by 2030.

Upon achieving that milestone, there will be a total footprint of 76 H-60-family helicopters in the region, which Kyle notes will give Sikorsky a "much greater" ability to regionally support the Australian fleet.

The Black Hawk and Seahawk share a high degree of commonality, creating some efficiencies in sustaining the two distinct rotorcraft. However, the MH-60R requires a separate support base, owing to the specialised needs of operating in the corrosive maritime environment.

Billy Pix

All go for Gogo

Fresh from its merger with Satcom Direct, in-flight connectivity provider Gogo is at Avalon to talk up a development it believes will open a new market in Australia and the surrounding region.

Just ahead of the show, the US-based company secured US Federal Aviation Administration parts manufacturer approval (PMA) for its Galileo HDX antenna. This clears the way for its maintenance, repair and overhaul partners to secure supplemental type certificates to install the electronically steered antenna (ESA) on more than 30 aircraft types, says the company.

The ESA connects to Gogo's Avance cabin system as well as to the global Eutelsat OneWeb low Earth

orbit satellite constellation.

Galileo HDX is designed to fit on smaller aircraft than those that have traditionally offered their passengers high-speed connectivity.

"This opens up a whole new market for us," says Tom Phillips, Gogo's government regional director APAC, who is at the show. "There are many smaller aircraft in this region whose owners can now look forward to benefiting from rapid internet speeds on board."

He says the merger of Gogo and Satcom Direct, which completed in December, has "created the world's only multi-band, multi-orbit connectivity provider" with air-to-ground as well as satellite-based solutions.



Dovetail powers up

Sustainable aviation start-up Dovetail yesterday formally unveiled its DovePower proprietary electric propulsion system, designed to replace conventional turboprop engines on regional aircraft.

The Melbourne-based developer says the prototype, which features an electric motor, inverter and pitch control unit developed with Hartzell, offers a "game-changing, modular, scalable propulsion solution" for CS-23 category aircraft.

The company, founded by chief executive David Doral, aims to retrofit its first aircraft, a Cessna Caravan 208, in time for a flight later this year. It eventually hopes to apply for supplemental type certificates to install it on Beechcraft King Airs, De Havilland Twin Otters, and Pilatus PC-12s.

A feature on Australia's advanced air mobility and disruptive propulsion sector appeared in *Flight Daily News* yesterday.



THE LEADING SHOW FOR GENERAL AVIATION

April 9 – 12, 2025

Friedrichshafen | Germany



RNZAF in CAE sim deal

The Royal New Zealand Air Force has awarded CAE a contract to sustain its Lockheed Martin C-130J weapon systems trainer.

The Canadian training specialist will deliver maintenance support at RNZAF Auckland, where the simulator is based.

CAE says the contract "leverages [its] long experience in delivering training services and technology to support C-130 operators across the Indo-Pacific region".

FLIGHT DAILY NEWS

Produced by FlightGlobal, 1st Floor, Chancery House, St Nicholas Way, Sutton, Surrey SM1 1JB, UK

©2025 DVV Media International

HOW TO CONTACT US

We are located in the Show Daily Office in the Media Centre

Editor

Murdo Morrison
murdo.morrison@flightglobal.com

Reporting team

Ryan Finnerty, Greg Waldron

Additional reporting

Alfred Chua

Production

Louise Murrell

Designer

Sarah Eversfield

Picture editor

Ian Billinghamhurst

Photography

John Appleyard

Distribution

Grace Salter

Sales director, FlightGlobal

Andrew Walker

Divisional director,

FlightGlobal Sophie Wild

Printers

IVE Group, Australia

Tecnam targets FIFO

Greg Waldron

Italian general aviation aircraft manufacturer Tecnam sees an opportunity for its P2012 twin piston aircraft to replace legacy twin-engined types in Australia.

The company is promoting a range of aircraft at the Avalon air show. Michael Loccisano, chief executive of local distributor Hallmart Aviation, sees several potential missions for the type, which can accommodate nine passengers in addition to the pilot.

Loccisano believes that there is a big opportunity for the P2012 to replace aircraft in Australia that are, in some cases, up to 40 years old.

One mission is fly-in, fly-out (FIFO) which is key for supporting Australia's vast resources sector. While FIFO flights for active mining locations are operated with regional jets or even narrow-bodies, the P2012 is better optimised for flying small teams into new locations.

Other applications include



L-R: Walter Da Costa of Tecnam with Hallmart's Francesco and Michael Loccisano in front of the Tecnam P2012

sightseeing, cargo, and charters. So far, Tecnam has sold two P2012s in Australia, which operate in the Torres Straits region.

Tecnam is also promoting the P2012 as a special mission aircraft, especially

for intelligence, surveillance, and reconnaissance work.

Tecnam's Francesco Serra, an experimental test pilot, is responsible for special mission sales.

He notes that the P2012 can have a pair of hatch-

es on the bottom of the fuselage that can house equipment such as sensors. Moreover, the aircraft's large cargo compartment and door is well suited for deploying emergency gear such as life rafts.



Among the stars

Former NASA astronaut Col (ret) Mike Bloomfield was among a number of military and diplomatic dignitaries at the opening of the USA Partnership Pavilion yesterday.

Bloomfield flew several Space Shuttle missions and spent time on the International Space Station in the late 1990s and early 2000s.

Attendees were also treated to rousing renditions of respective national anthems, Advance Australia Fair and the Star Spangled Banner, by Royal Australian Air Force Corporal Chloe Bruer-Jones and US Air Force Senior Airman Mario Foreman-Powell.

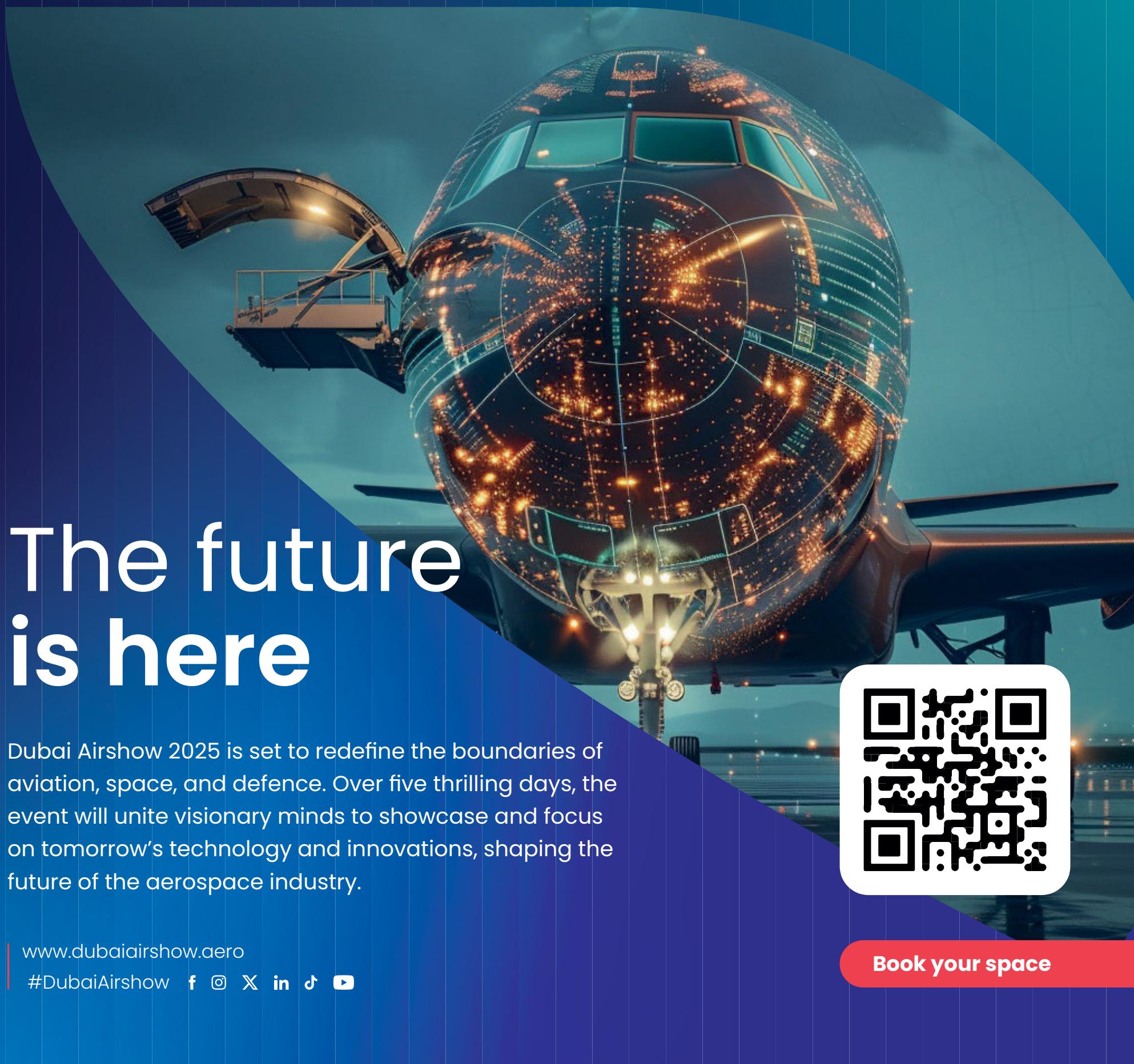
This year marks the 20th anniversary of the pavilion's presence at Avalon. The exhibit, which features 59 US companies including Boeing and Lockheed Martin, is organised by Kallman Worldwide.

RAPID IMAGING SOLUTIONS

info@rapidimagingolutions.com
www.rapidimagingolutions.com

RapidIR-Pod - Clamp on, power up, and you're ready to go.

DESIGNING SOLUTIONS FOR EVERY MISSION



The future is here

Dubai Airshow 2025 is set to redefine the boundaries of aviation, space, and defence. Over five thrilling days, the event will unite visionary minds to showcase and focus on tomorrow's technology and innovations, shaping the future of the aerospace industry.



www.dubaiairshow.aero

#DubaiAirshow      

Book your space

Strategic partners



UNITED ARAB EMIRATES
MINISTRY OF DEFENCE



دبي لـ
الطيران
المدني

DUBAI
AVIATION
ENGINEERING
PROJECTS

وكالة الإمارات للفضاء
UAE SPACE AGENCY



Supporting partners



The collapse of Rex last year put several rural communities at risk of losing their only air link, prompting the federal government to consider stepping in to nationalise the carrier

Regional rescue



Ryan Fletcher/Shutterstock

Rex entered administration in July last year

Alfred Chua

In recent months, the once-quiet regional aviation sector in Australia has been thrust into the spotlight amid the high-profile collapse of Regional Express (Rex).

Rex entered administration in July 2024, suspending its mainline jet operations. The airline, which began life in 2002 as a regional operator, ran into financial challenges after expanding into jet operations.

Rex's regional operations - operated by a fleet of Saab 340s - continued after the federal government stepped in to guarantee operations. Administrators EY Australia began a search for new buyers for the regional operations, but have so far not had any luck.

A first sale attempt was unsuccessful, though parts of Rex's business have been successfully sold off to private sector buyers.

With the airline's survivability thrown into question, the Australian government has stepped in - first in the form of funding to guarantee operations, then the purchase of A\$50 million (\$31.5 million) in debt from Rex's largest creditor, PAGAC Regulus Holdings, in a move "to prevent an adverse outcome for regional communities".

Then, Canberra floated the unprecedented prospect: Rex could

be nationalised if no suitable buyer was found.

On 12 February, it signalled that it was ready to acquire the airline - potentially making it the first government-owned carrier in 30 years - if the ongoing second sale attempt falls through. This, it said, provides certainty to regional communities that rely on air services.

Still, the government stressed that it "preferred the private sector to be successful" in acquiring Rex.

The prospect of a nationalised regional operator caused a stir in the sector. In a statement, the Regional Airlines Association of Australia (RAAA) - an industry body that represents 40 operators in the country - said that while it was "critical" to ensure regional air services remain unaffected, it warned of an "inequitable situation" should government ownership come to pass.

"We ask the Government to continue to consider all regional airline operators during the Rex sale process. Providing services to regional and remote communities continues to be challenging for all operators, and the potential government ownership of one regional airline could lead to an inequitable situation across the regional aviation industry," the RAAA said.

Separately, the Australian Airports

Association said it "remains hopeful" of a market-led sale of Rex, and welcomes government support in negotiations.

Still, it adds: "The potential for [government] acquisition should not be taken lightly, and further details are needed on how the airline would operate under government ownership."

Indeed, Canberra's foray into regional aviation underscores its recognition of "the important role that aviation plays in servicing the needs of regional and remote communities across Australia". To this end, it has rolled out programmes and pledged investments to support the sector.

State and territory governments across the country are also given autonomy to regulate regional aviation, since "it is largely an issue of intra-state trade", say the Australian transport authorities.

In late-February, the Australian government announced additional investments into regional airports in Queensland, Western Australia, and Victoria, spending over A\$11 million in upgrading works.

The investments, covering 24 airports and aerodromes in the three states, fall under the ambit of the Regional Airports Programme. The programme, now into its fourth round of grants, is intended to improve the safety of operations,

facilitate improved delivery of essential goods and services, and improve connectivity.

Transport minister Catherine King says these investments indicate her government's acknowledgement of "how vital regional airports are to the communities they service, ensuring access to other towns, to markets, and to vital services such as emergency health care".

Elsewhere in the sector, new fleet investments by other regional operators are also on the horizon.

Virgin Australia is expected to take delivery of its first Embraer E190 E2 aircraft in the second half of the year. The new aircraft will be operated by regional unit Virgin Australia Regional Airlines and be based in Perth, where they will replace Fokker 100s.

Qantas regional unit QantasLink has also invested in its regional operations: in June 2024 it announced the acquisition of 14 mid-life De Havilland Canada Dash 8-400s, which will replace its fleet of aging Q200s and Q300s.

Some of the new Dash-8s will be based in South Australia, providing a capacity uplift for regional operations in the state.

The new turboprops are on top of an existing stream of deliveries of new Airbus A220s, which will replace the QantasLink-operated Boeing 717s. ▶

Western Sydney Airport – designed to ease pressure on the city's main international gateway – is due to begin operations next year, as Australia's first new airport in over half a century

Alfred Chua

Western Sydney Airport – Australia's newest airport – is nearing completion, marking a new significant milestone for the country's air transport sector amid optimism about traffic growth.

The airport, named after famed Australian aviator Nancy Bird-Walton, is also the country's first greenfield airport in over 50 years – Melbourne Tullamarine, which was built in 1970, was the last such.

The airport remains on track for a late-2026 opening, says the Australian government, which is building and operating it after private operator Sydney Airport walked away from the project in 2017.

When operational, the single-runway airport, which is intended for round-the-clock operations with no curfew, will be able to handle up to 10 million passengers a year.

This will take a lot of pressure off Sydney Airport, the existing gateway into the country's largest city. In a 2016 factsheet for the new airport, the government estimates that Sydney Airport "cannot accommodate" a projected surge in travel demand into the 2030s.

Local media reports suggest the Western Sydney airport project is about 90% complete. In October 2024, the first aircraft – a Piper

Open all hours

PA-30 Twin Comanche – landed at the airport, completing a series of runway tests, and marking a significant milestone for the project.

Since then, the airport operator has released a series of tenders for retail and other services, paving the way for eventual operations.

The decision to build a second airport – to alleviate the operating pressure at Sydney Airport – was several decades in the making.

Traffic data for 2024 shows the airport to have handled over 41 million passengers in 2024, up 7% year on year, but 6.8% below 2019 levels.

Since the 1960s, there have been plans to build a second airport for Sydney, amid concern that the existing Kingsford Smith airport – Australia's main international gateway and wedged between Sydney's southern central suburbs at Botany Bay with little room to grow – would soon start running out of capacity.

While a new site was identified and subsequently purchased, the plan to establish the new airport beyond the

western suburbs of the metropolis not far from the Blue Mountains was briefly abandoned in the 1990s, when lawmakers favoured the construction of an additional runway at the existing Sydney Airport.

Still, it did not go very far in alleviating the concerns, which only intensified in the mid-1990s after the federal government introduced strict night-flying laws. That meant that Sydney Airport had to have a curfew in place, limiting its ability to be a 24h airport.

In 2014, the government confirmed that a new airport would be built at the present-day site of Western Sydney, and work began in 2018.

The new airport already has its first international operator: Singapore Airlines in August 2024 firmed up a commercial arrangement for future operations.

SIA currently operates five daily flights to Sydney, and said in August it will "begin developing its future operations" at the new airport, following the confirmation.

National carrier Qantas was the first to confirm operations at the

new airport. In 2023, the airline and its low-cost unit Jetstar announced plans to base up to 15 aircraft at Western Sydney within its first year of operations.

The initial network announced by the Oneworld carrier will be focused on domestic flights to key cities like Melbourne and Brisbane.

So far, no other carriers have declared their interest in operating at the new airport.

One key difference at Western Sydney airport is its ability to have 24h operations, without the curfews that are currently imposed on Sydney Airport.

What this means is that airlines can tap into "unique scheduling opportunities", says the airport.

The airport will also boast its own "aerotropolis", a purpose-built town that will be the economic centre of Western Sydney.

According to the government of New South Wales, the aerotropolis will benefit from the proximity to the new airport, and will contribute towards 200,000 new jobs across sectors such as aerospace and defence, healthcare and freight and logistics. ▶



Western Sydney Airport, seen here under construction, remains on track for a late-2026 opening

Philip Witte/Shutterstock

An Australian company is developing geolocation and spatial intelligence services that do not rely on imperfect GPS

Navigating change

Ryan Finnerty

Satellite-based navigation has so thoroughly transformed the world that it is easy to forget the technology has only been usefully available to private operators for 25 years.

In 2000, then-US President Bill Clinton ended a Pentagon policy of intentionally degrading the accuracy of America's Global Positioning System for commercial applications, ushering in the era of precision navigation in the air, at sea and on the ground.

However, just as the US military developed the original GPS concept, the defence industry is now forging ahead with successor technologies that can enable long-range navigation without relying on GPS.

One firm in Australia's small but expanding defence sector is at the forefront of that effort. Sydney-based Advanced Navigation is developing novel approaches to deliver both geolocation and what co-founder Chris Shaw calls spatial intelligence.

"Our technology helps people know where their objects are, and also information like where it is pointing and how fast it is moving," Shaw says.

That has obvious defence applications for aircraft or long-range missiles, but also commercial sectors such as mining, seafloor exploration and space, for which GPS is an imperfect solution for navigation. GPS alternatives could also be useful to commercial aviation safety, particularly with the wide proliferation of GPS spoofing and jamming capabilities.

However, unlike the GPS revolution at the start of the 21st century, Shaw thinks the next wave of spatial intelligence tools will not be based around a single concept or technology.

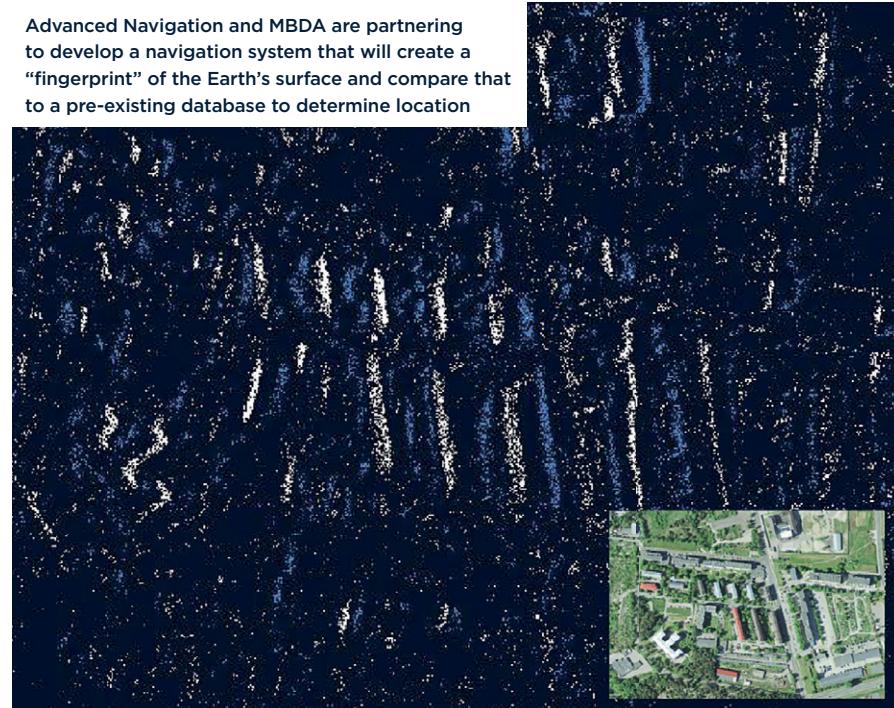
"When it did get kind of released, everyone saw GPS as a one-size-fits-all solution," he notes. "Our view is that there is probably never again going to be a one-size-fits-all technology."

In the wonky parlance of the Pentagon, this category of technologies is known as assured positioning, navigation and timing or APNT.

"Potential adversaries are aware of our reliance on GPS, however, so the army has to be prepared to operate in environments where the technology has been degraded or denied by enemy action," the US Army said in 2020.

Advanced Navigation's approach to APNT is to use proprietary fusion

Advanced Navigation and MBDA are partnering to develop a navigation system that will create a "fingerprint" of the Earth's surface and compare that to a pre-existing database to determine location



photos. Shaw describes this a "really important piece of the puzzle".

However, while visual navigation can provide a high degree of accuracy, it falls short when a craft is travelling over water or other relatively featureless terrain like deserts.

Yet another approach being pursued by Advanced Navigation is a laser guidance system that will tie into the company's existing inertial navigation solutions. Shaw says this is already being trialled by a customer.

"That particular technology is very suitable for aircraft applications, flying long distances without GPS," he notes. "It helps correct a lot of the errors that you typically get in that scenario but doesn't have a reliance on external infrastructure like satellites."

"I think that's what customers are looking more and more towards," Shaw adds. "If I have GPS as one piece, all my other pieces can't rely on anything else external. It's got to be kind of self-contained and maintained by that operator."

Should that assessment prove correct, Advanced Navigation will be well positioned to take advantage of the boom in defence spending in North America, Europe and closer to home in Asia.

That could put the company at the forefront of a revival of high-tech, domestic manufacturing in Australia, a sector which, by Shaw's estimate, Canberra inadvisably allowed to be moved offshore in favour of commodity mining.

"We're almost starting from scratch again," he notes.

However, one upside to that sorry state of affairs is this new generation of Australian start-ups can secure government export licences much faster than competitors in North America or Europe, where regulators receive a far higher volume of export requests.

"There's a lot of work to do to help build a really thriving manufacturing industry in Australia," Shaw says. "I think that's one of the key things that Australia really needs to keep focusing on." ▶



US Air Force

Militaries are reliant on GPS for navigation, precision strike capabilities and encrypted communications. But the satellite signals are susceptible to jamming, which has compelled the industry to seek out alternatives



FlightJobs

FlightJobs will take your career to the next level. We have hundreds of the best aviation roles to choose from.



Set up job alerts.

Receive relevant jobs in your inbox as soon as they appear.



Get headhunted.

Create a profile and upload your CV so potential employers can get in touch.



Careers news.

Get the latest news and advice from experts.

Create your free FlightJobs account at Jobs.flightglobal.com/register

Boeing's unmanned MQ-28 Ghost Bat loyal wingman is a domestically-developed product the manufacturer believes could succeed elsewhere



Made in Australia

Greg Waldron

The Boeing MQ-28 Ghost Bat is a crucial part of the airframer's collaborative combat aircraft (CCA) strategy and stands to enhance Australia's position in the global defence aerospace industry.

The developmental unmanned loyal wingman aircraft is a joint effort between Boeing and the Royal Australian Air Force (RAAF). Four years on from its first flight in February 2021, an improved Block 2 version is in the works, as Boeing Defence Australia invests in the industrial capacity that will be needed should the new jet gain a customer.

The MQ-28 created a stir in 2019 when a full-sized mock-up of what was then called the Airpower Teaming System was unveiled at the Avalon air show. Today, it is a maturing platform in a crowded field of aspiring CCAs. The MQ-28 is coming of age during a decade that will see the operational concept of the CCA clarified, with automated combat aircraft moving closer to working seamlessly with their manned counterparts.

Glen Ferguson is the director of Boeing's global MQ-28 programme. Ferguson is well versed in air warfare: before joining Boeing, he spent 17 years in the RAAF, most of it as a navigator in the now-retired General Dynamics F-111 fighter-bomber.

In a call with reporters, Ferguson

says the programme has proceeded well.

"Once we got through the teething issues of getting the aircraft flying and all the elements with that, we proved out the airframe, and we're largely done with airframe testing," he says.

Over the last 12-18 months the focus has been on testing mission systems, with an emphasis on electronic warfare (EW) and intelligence, surveillance and reconnaissance (ISR).

This entails integrating and operating payloads and exploring the aircraft's behaviour in a mission environment. Ferguson stresses, however, that the mission system – and not the MQ-28 platform as such – is the real priority.

"The mission system is probably more important than the airframe," he says. "In many ways, the airframe becomes the vehicle within which we get the mission system to the fight."

In other words, the know-how that applies to the MQ-28 can be applied to other CCAs. This includes the aircraft's ability to generate contacts and then automatically fuse that information with input from other aircraft and sensors.

So far, the small MQ-28 test fleet has flown 100h, but has undergone over 20,000h of testing in a digital environment.

"Our mission system is maturing at a rate that I don't think anyone really understands or has comprehended in the past, because we are now flying multiple aircraft at a time,

including virtual hybrid-live aircraft," says Ferguson.

"We're running a virtual aircraft so that we can do sensor and data fusion to track operational targets at operationally relevant ranges to deliver the outcome to the air force."

Operational tests have taken place at Australia's Woomera test range approximately one out of every three months, with the aircraft flying one to three sorties daily, including some flights at night.

The RAAF is heavily involved in the programme. It is providing funds for ongoing development work and has personnel embedded across MQ-28 operations. Also involved are personnel from the US Air Force (USAF) and US Navy (USN). The first USN MQ-28 "pilot" was graduated last year. The involvement of US personnel on what is fundamentally an Australian programme is part of a larger collaboration between the two governments on CCAs.

"This gives us the ability to coordinate with the US government on where they are going, and the most important part of that is that we get access to their architectures and their plans," says Ferguson.

"It's all about interoperability and interchangeability. We are developing MQ-28 to be well aligned with US government architectures of the future, so that we are compatible, and an [MQ-28] can turn up at any place in the sky and jump on board with western aircraft."

Boeing has given the MQ-28's

range as 2,000nm (3,700km). Australia's vast geography and the sheer size of the Asia-Pacific make long-range an essential attribute for a CCA operating with the RAAF or other air forces in the region. Another emphasis is collaboration between the MQ-28 and Australia's two fighter types, the Boeing F/A-18F Super Hornet and Lockheed Martin F-35A.

Although an MQ-28 was sent to the USA in 2023, ostensibly for work related to the USAF's CCA programme, in July 2024 a USAF downselect effectively focused the USAF's increment one CCA efforts with two California companies: Anduril and General Atomics Aeronautical Systems.

This will see the companies receive funding to design, manufacture and test "production-representative test articles", according to the USAF. This includes flight testing the prototype aircraft.

Boeing, for its part, says that the MQ-28 was not part of its offering for increment one, nor was a variant of the MQ-25 Stingray, which is being developed as an air-to-air refueller for the USN.

"We did not propose the MQ-28 or an MQ-25 derivative for increment one of this programme," says Boeing. "We proposed another proprietary solution tailored to the US Air Force's unique CCA phase one requirements."

Alongside the USAF's CCA effort, MQ-28 work in Australia has continued. The fleet comprises eight Block 1 MQ-28s that Boeing views

as developmental test assets. These will be retired as the MQ-28 Block 2 is produced. Unlike the Block 1 aircraft, the Block 2 is an operational test asset.

"All of the things that you need to be operational are embedded in the Block 2 design, and we'll move across all the technology that we'll have tested in the Block 1 airframe," says Ferguson.

The first Block 2 example is already in production at Boeing's Melbourne facility. Ground tests and a first flight will come later this year. Following an A\$399 million (\$248 million) Australian government contract in February 2024, Boeing is building three Block 2 aircraft.

The Block 2 will not have major airframe changes from the Block 1. Perhaps the main external change will be the removal of the Block 1's dogtooth wing. Internally, the aircraft will see wiring modifications and other changes that will improve maintainability.

Block 2 will also get a new global positioning system (GPS)/inertial navigation system to replace the Block 1's commercially available GPS – Ferguson quips that the Block 1's GPS "wouldn't last three seconds in a denied environment".

Flight is highly automated, with the "pilot" mainly serving as a supervisor during take-off and landing. Once the aircraft is airborne it is handed off to another platform, such as a Boeing E-7 Wedgetail airborne early warning and control aircraft.

Boeing has never disclosed the MQ-28's engine, but there is speculation that it is powered by the Williams International FJ44 or Pratt & Whitney PW300. Ferguson declines to comment on the MQ-28's engine but says the powerplant will not change in the Block 2. The MQ-28 may be armed in the future, but for now the focus is EW and ISR applications.

By the end of September Boeing aims to conduct a demonstration



Boeing

Boeing has tapped dozens of Australian suppliers for MQ-28 work

of an operational CCA capability, which will see the MQ-28 teamed up with in-service RAAF types. Prior to mounting such a complicated undertaking, Boeing will conduct a series of associated demonstrations that address specific missions.

Ferguson also sees potential for interesting operational concepts between its CCA architecture and the E-7, another product from the Boeing portfolio. Early visions of CCAs tended to focus on supporting combat types such as the F-35A, but another concept could see a "stack of CCAs sitting somewhere" that an E-7 can allocate for specific missions.

Another element of the MQ-28 – and one that could swing the balance for RAAF sales – is its broad local supply chain. Boeing says that over 74 Australian companies contribute "critical and important products and services" to the programme in areas such as manufacturing, machining, electrical

systems, landing gear, and others. In all, over 200 local suppliers have contributed to the MQ-28 programme, including 50 small and medium-sized enterprises.

Saab is one of the more recent companies to join the programme. Its involvement includes communications systems, avionics, as well as electromechanical actuators and controllers for the MQ-28's primary flight control system.

"The Ghost Bat is an exciting programme for the Australian defence sector and demonstrates what can be achieved through collaboration between global defence organisations, local businesses, and the defence force," says Saab Australia managing director Andy Keough.

The big question facing the MQ-28 and other CCAs is, of course, orders.

In the absence of orders, Boeing is still moving forward with an investment in an MQ-28 production location in the Wellcamp Aerospace

and Defence Precinct to the west of Brisbane.

Ferguson admits that there is somewhat of a "chicken and egg" paradox.

"If we don't build it, we can't contract with Defence, and if we don't contract with Defence, we can't build a building. So, we're going out with Boeing funds to build the building, trusting in the heritage of the product and its future success."

On the broader market opportunity, Ferguson believes that the MQ-28 will deliver an operational capability in the coming years, and that the jet's cost will be competitive. Low cost is seen as an imperative for CCAs, which are envisaged as bringing "affordable mass" to air forces suffering from a dearth of manned combat platforms.

"Our business strategy here is to deliver it, make it work, make it cool, make it cheap, and they will come." ▶



Early concepts for the MQ-28 saw it mainly as accompanying fighters, but visions of how it could be employed are evolving

Boeing

Qantas is moving closer to inaugurating the world's longest non-stop service, and is finalising the unique configuration of the A350-1000 cabins it will use

Approaching Sunrise



Airbus

Qantas selected the A350-1000 over the 777X for its Project Sunrise fleet

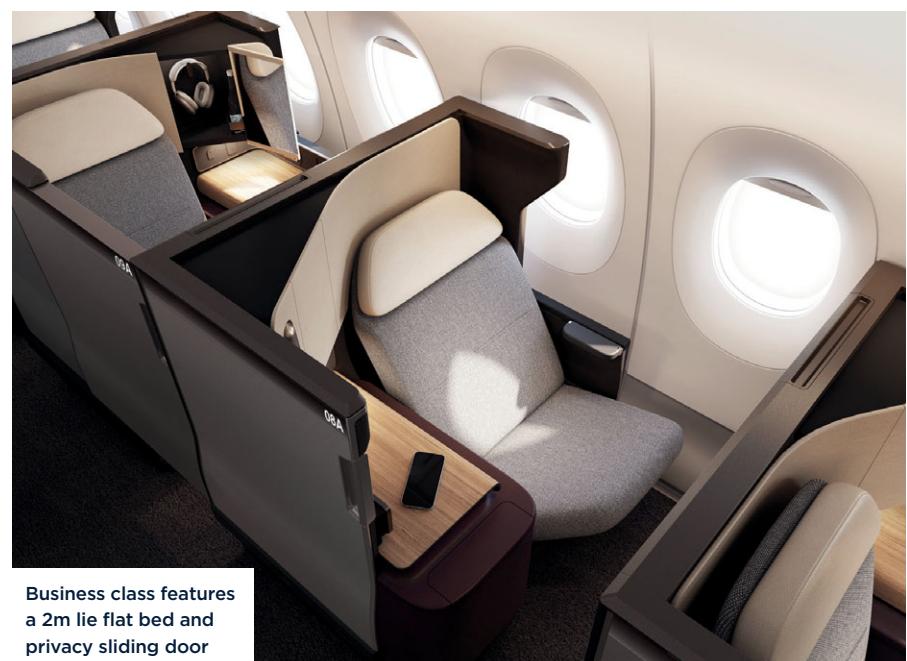
Alfred Chua

Nearly a decade after it first floated the idea, Qantas is finally on the cusp of what it calls "a new dawn of travel", albeit with slight delays expected.

The airline believes its long-awaited Project Sunrise – ultra-long-haul, non-stop flights from Australia to Europe and New York – will "significantly" cut down on travel time, with a saving of up to 4h over one-stop flights.

However, the launch date for the project appears to be pushed back, according to Qantas' latest fleet delivery forecast announced at its half-year briefing.

Deliveries for the 12 Airbus A350-1000s that will eventually operate the flights are now scheduled for the second half of 2026, instead of mid-2026 as stated in earlier forecasts.



Business class features a 2m lie flat bed and privacy sliding door

This points to a launch date of late-2026 or early 2027.

Yet, even amid the "minor delay" – in the words of airline chief Vanessa Hudson – Qantas has remained fixated on its goal to launch the flagship programme. It notes that the first A350-1000ULR (for ultra-long-range) will enter final assembly in September, a significant development for the programme.

Even the Covid-19 pandemic – and the subsequent supply chain fallout that happened – only delayed, but never entirely derailed plans.

For one, Qantas believes the programme will "provide a unique competitive advantage" to the airline. On previous occasions, the airline said the Project Sunrise flights allow it to connect large markets with "unrivalled point-to-point premium offering".

The story of the game-changing Project Sunrise started in 2017, with ▶



FlightGlobal Newsletters

Stay up-to-date with the latest news and developments from across the sector with FlightGlobal Newsletters.

You can subscribe to any of our 8 newsletters for free.

- Aerospace Briefing
- Airline Business Briefing
- Defence Briefing
- Events Focus
- Flight International Briefing
- Jobseeker Update
- Supplier Update
- Sustainable Aviation Focus

Get alerted by email when we publish the stories you need to read.

SCAN THE QR CODE TO SUBSCRIBE FOR FREE



the intention of “conquering the final frontiers of aviation”.

Amid the excitement that followed, Qantas asked Boeing and Airbus to develop an aircraft suitable for ultra-long-haul flying, ultimately settling for Airbus A350s over Boeing’s 777X programme.

In 2019 the airline conducted a series of research flights on its 787s, operating the widebody non-stop from London to Sydney, but only carrying 50 passengers and crew. These were important in determining how the airline would address the issue of passenger experience and wellbeing.

Project Sunrise was put on hold in 2020, as the Covid-19 pandemic turned the aviation sector on its head. At the time, then-airline chief Alan Joyce said that while “there is a huge potential” for ultra-long-haul flying, the airline would only resume looking into it “when the market has recovered”.

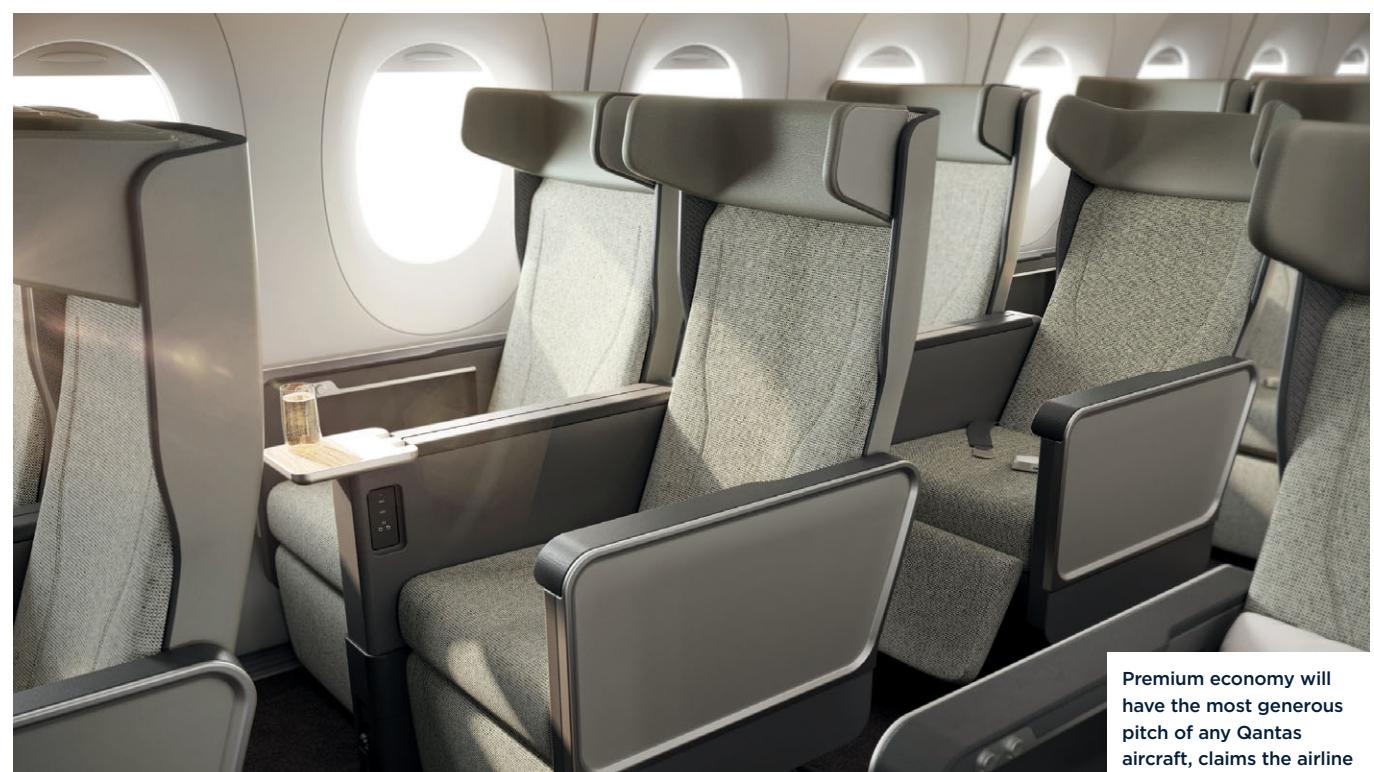
In 2022, the airline finally locked in its orders with Airbus for the A350-1000, effectively kick-starting the project again and setting off the countdown clock for an eventual launch.

The A350s have one of the lowest densities around: a four-class configuration with just 238 seats. A typical A350-1000 will be configured for 350 to 410 passengers in three classes. Indeed, Qantas has placed plenty of emphasis on passenger experience in the lead-up to the eventual roll-out of the ultra-long-haul flights.

It has worked with several partners, including Australian design firm Caon Design, chef Neil Perry, as well as the University of Sydney’s Charles Perkins Centre – a medical research institute – on designing the ultra-long-haul flying experience.

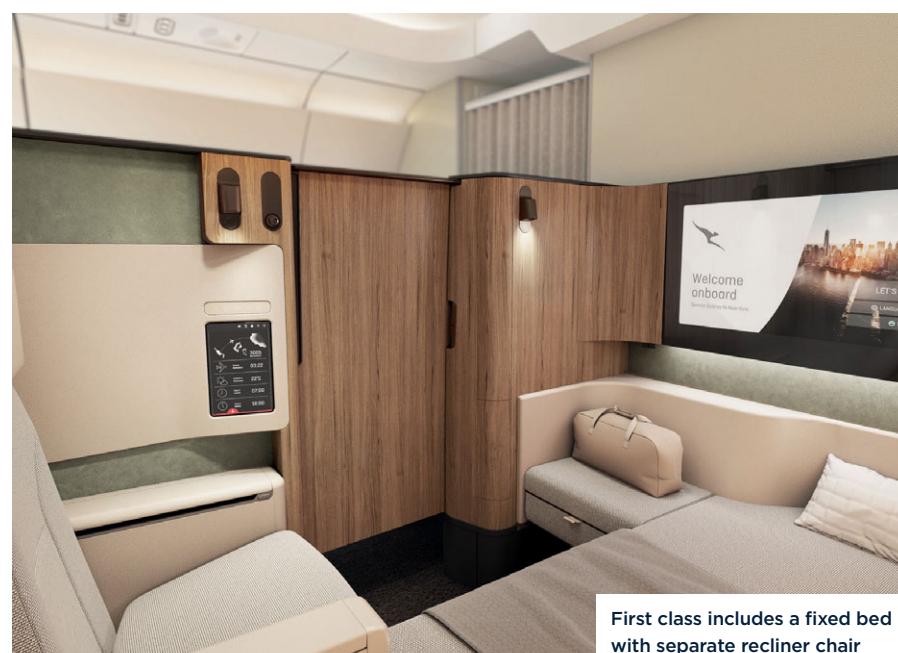
In 2023, the airline revealed a “wellbeing zone” – located between economy and premium economy – which will include stretch handles and a video display of a recommended exercise programme, as well as snacks and beverages.

It also gave a first look at the cabin products on board: its first class ‘suite’ product features a fixed bed with a separate recliner chair, while the business class product includes a 2m lie flat bed and – for the first time – a privacy sliding door. Qantas added that the economy and premium economy seats will offer the “most generous seat pitches of any Qantas aircraft”. Seats will also feature footrests and personal storage.



Qantas

Premium economy will have the most generous pitch of any Qantas aircraft, claims the airline



Qantas

First class includes a fixed bed with separate recliner chair

At Airbus’s end, in late-October 2023, the airframer said it was raising the maximum take-off weight of the A350-1000 to 322t – an increase of 3t – adding that this will stretch the aircraft’s range to some 8,900nm (16,500km) at maximum passenger payload.

At the IATA annual general meeting in June 2024, airline

executives also confirmed that certification has been achieved for the third centre fuel tank in the ultra-long-haul A350-1000s.

They also disclosed that the initial network under consideration will be Sydney-London and Sydney-New York.

The airline would later float the idea of similar ultra-long-haul flights

from Perth, following a multi-million dollar upgrading project at Perth Airport.

Qantas is also building up experience for ultra-long-haul flying: it operates non-stop flights from Perth to London and Rome – the only airline to offer direct connections between Europe and Australia – with flights from other parts of the country connecting through the Western Australia city. These flights have been popular, the airline notes. Part of the intention is that it will smooth the path to Project Sunrise’s eventual launch.

Although Qantas has not released fares, the airline is not likely to be seeking the price-conscious traveller on its Project Sunrise flights, given the spacious cabin layout of its A350s. It is banking on sufficient numbers of passengers being willing to pay a premium for the time saving and convenience of a point-to-point flight halfway round the world.

While many might prefer the option of a leg-stretch in Dubai or Singapore before completing the second leg of their journey, there will be some who prefer not to touch the ground between New York or London and Sydney or Melbourne. Whether there will be enough of them to make Project Sunrise a lucrative venture remains to be seen. ▶



A wellbeing area between economy and premium economy will be available to all passengers



Qantas

The news, analysis, and data solution for the airline industry



Empowering your strategic decisions with award-winning insights and data-driven analysis.



Daily industry analysis articles



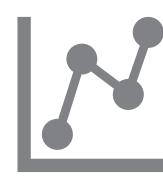
Weekly bespoke newsletters



Award-winning news coverage



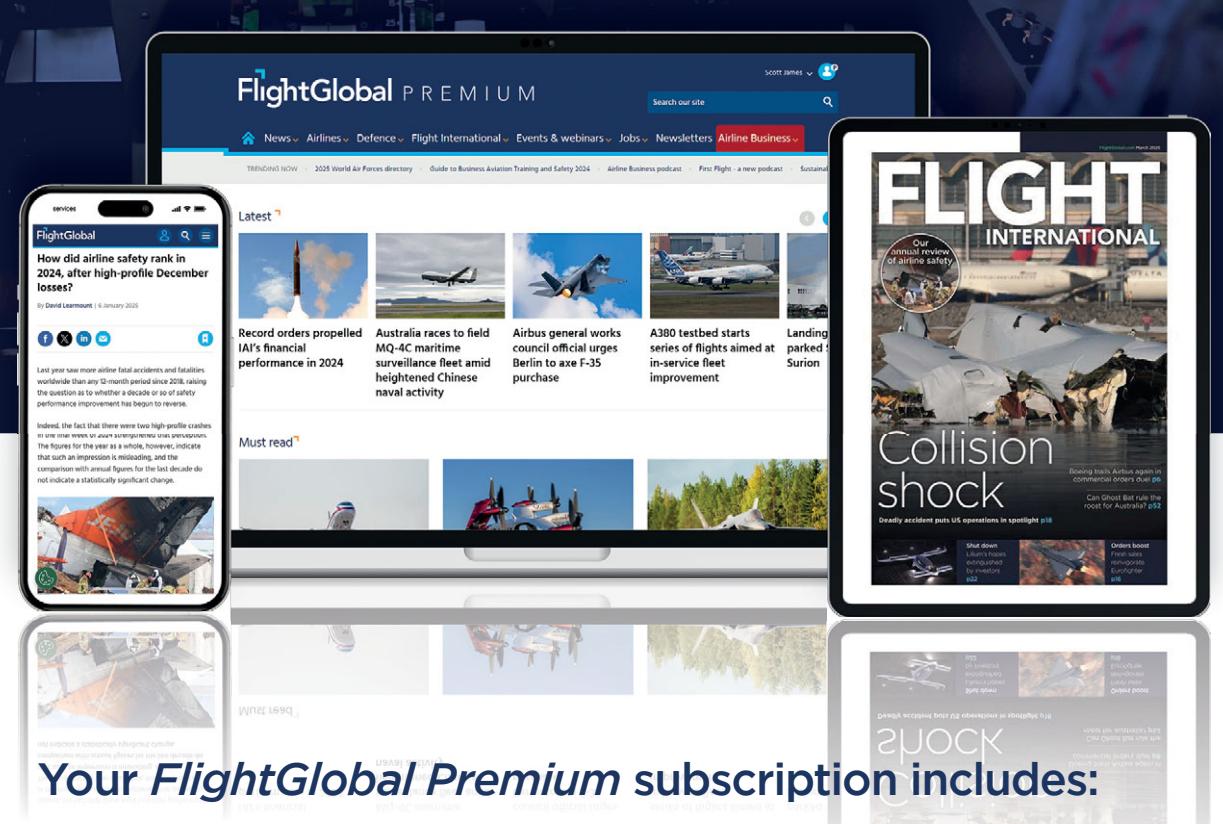
Interviews with industry leaders



Financial, fleet, and traffic data

Arrange a free product demonstration at
flightglobal.com/airline-business/subscriptions

Save 25% when you join FlightGlobal Premium, the leading source of news and analysis for the aviation industry



Your FlightGlobal Premium subscription includes:

- Unlimited access to FlightGlobal.com articles providing breaking news, industry analysis, and expert opinion
- In-depth articles and exclusive interviews with industry leaders from award-winning journalists
- Subscriber-only Daily Briefing email with the latest news
- Quarterly digital copies of *Flight International* magazine

FlightGlobal
P R E M I U M

Bespoke corporate subscriptions packages available for 5 or more users.
Please contact corporatesubscriptions@flightglobal.com for more information.

Subscribe today at:
flightglobal.com/save25

