

Emirates signs US\$ 52 billion wide-body jet order at Dubai Airshow 2023

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Alliance Airlines brings home its MRO capabilities with \$60 million facility in Queensland

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How Technology Can Help Airlines & MROs Retain Talent Pg **34** 

Nov 15th, 2023

# Honeywell Engine successfully tested 100% SAF on Embraer jet



oneywell and Embraer have achieved a significant milestone by successfully testing Honeywell's HTF7500 turbofan engine on the Praetor 600 aircraft using 100% sustainable aviation fuel (SAF). This test, conducted at the Embraer campus in Melbourne, Florida, involved one engine running on 100% SAF and another using traditional jet fuel.

The results of the test indicate that the HTF7500 engine operates flawlessly when using 100% SAF, demonstrating its compatibility with sustainable aviation fuel. This achievement is a crucial step in promoting the use of SAF in aviation, reducing carbon emissions, and making air travel more environmentally friendly.

Dave Marinick, president, Engines and

Honeywell used the Embraer Praetor 600 jet, powered entirely by SAF, to test its HTF7500 turbofan engine successfully representing a significant milestone.

Power Systems, Honeywell Aerospace said, "We are pleased to be creating a more sustainable future for aviation with industry leaders like Embraer. This testing milestone with our engine demonstrates the viability of SAF for Embraer and the overall aviation industry, as they work to meet carbon reduction commitments. Additionally, as we develop SAF solutions, we will be using these innovations in our own engines and APUs."

A Honeywell HTF7500 engine powers the Praetor 500 and Praetor 600 aircraft types manufactured by Embraer. The engine offers the finest dispatch reliability in its class, together with a constant focus on fuel efficiency and noise reduction.

Leading the industry in SAF, Honeywell provides a range of technologies to produce fuels with little or no emissions. More than 40 Honeywell EcofiningTM licenses have been granted to make SAF, and in 2022, Honeywell invested around 60% of its new product research and development budget towards ESG-oriented results.



### COMPONENTS



### Airbus Helicopters opens new 3D printing center for component production

The new Airbus Helicopters 3D printing center features a range of machines, including those for printing titanium components, plastic parts, and a new addition for aluminum components.

irbus Helicopters has reached a significant milestone with the inauguration of a new 3D printing center at its Donauwörth facility in Germany. This expansion of in-house 3D printing capabilities demonstrates Airbus Helicopters' commitment to adopting innovative manufacturing processes and reducing environmental impacts. The new 3D printing center features a range of machines, including those for printing titanium components, plastic parts, and a new addition for aluminum components. These machines employ additive manufacturing, a technique that offers multiple advantages over traditional manufacturing methods.

One key advantage is weight reduc-

tion. Additive manufacturing enables the creation of lighter aircraft components, leading to decreased fuel consumption. This, in turn, contributes to lower carbon emissions during aircraft operations, aligning with the aviation industry's ongoing efforts to reduce its environmental footprint.

Stefan Thomé, Managing Director, Airbus Helicopters in Germany said, "Our extensive capabilities in this process along the manufacturing chain are a real competitive advantage. Among other advantages, 3D printing can reduce the weight of aircraft components which leads to less fuel consumption. Such potential can bring financial benefits and contribute to reducing CO2 emissions

during operations"

In addition to weight savings, additive manufacturing enhances resource efficiency. Unlike traditional manufacturing, which can result in significant material waste, 3D printing is more resource-efficient. It typically uses 1.5 times as much raw material as the final product, compared to the ten times or more needed for conventional manufacturing.

Furthermore, the flexibility of additive manufacturing is a significant benefit. It allows for the production of components with unique configurations, whether for prototypes, small series production, or individual pieces. This flexibility streamlines the development of prototypes and the testing of new designs.

Airbus Helicopters is no stranger to the advantages of additive manufacturing. Since 2017, the company has employed this method for mass-producing locking shafts used in the doors of Airbus A350 aircraft. Over the years, the Donauwörth facility has used approximately eleven tonnes of titanium powder for 3D printing these locking shafts. This application of additive manufacturing showcases the company's commitment to sustainability and innovation.

The opening of the new 3D printing center highlights Airbus Helicopters' dedication to expanding its capabilities in additive manufacturing. This move aligns with the broader aviation industry's efforts to reduce its environmental impact while improving efficiency.

Airbus Helicopters' commitment to adopting innovative technologies and sustainable practices will likely continue to shape the future of aviation manufacturing, as the industry seeks to achieve greener, more efficient operations.

As the aviation sector continues to evolve, embracing advanced manufacturing techniques like 3D printing will play a crucial role in reducing environmental footprints, improving operational efficiency, and enhancing overall sustainability. Airbus Helicopters' investment in this technology is a testament to its commitment to a more sustainable and innovative aviation industry.

# Embraer and Marathon Airlines extend Pool Program for seven E-jets

The Embraer and Marathon Airlines amendment brings the total number of aircraft in the program to seven, including three E175s, one E190, and three E195s.

mbraer has expanded its Pool Program with Marathon Airlines, adding two additional E195 aircraft to the service. This amendment brings the total number of aircraft in the program to seven, including three E175s, one E190, and three E195s. Marathon Airlines began its Pool Program contract with Embraer in 2022, and this expansion reflects the airline's fleet growth.

Andreas Kaiafas, CEO of Marathon Airlines, said, "The Embraer Pool Program has been essential for our E-Jets reliable



operation, and we look forward to enhancing our partnership with Embraer"
With the help of technical expertise and wide component services, Embraer

supports airlines globally. Embraer started its pool program last year with the E175 and has been helping many other airlines worldwide grow their fleet. About 60 airlines are connected with Embraer through the pool program agreement.

Carlos Naufel, CEO and President, of Embraer Services & Support, said, "Marathon is expanding its businesses at a fast pace and we are very pleased to be part of this journey. Embraer offers the best-in-class support with the Pool Program, reducing costs while providing global reach. We will keep working every day with Marathon to maintain high performance and readiness for their fleet."

Marathon Airlines is an EASA-approved airline originating from Greece that provides customer-centric, safe, and reliable ACMI services to EU carriers and charter flights. With the help of Embraer's expertise and support, Marathon Airlines is stepping forward to excel in its services.

# Jet Parts Engineering secures FAA certification for 18 new PMA parts and DER repairs

Jet Parts Engineering has recently received FAA approval for 15 new PMA parts and 3 DER repairs for Boeing 777, 737NG, 737MAX, Airbus A320ceo and A320neo, CRJ700, CRJ900, etc.

Jet Parts Engineering (JPE), along with its subsidiaries Airline Components Parts and PG Aerotech, has recently received FAA approval for a total of 15 new PMA (Parts Manufacturer Approval) parts and 3 DER (Designated Engineering Representative) repairs. These approvals encompass a wide range of critical aircraft components and repairs, including parts for aircraft like the Boeing 777, 737NG, 737MAX, Airbus A320ceo and A320neo, CRJ700, CRJ900, GE90, CF34-3, and many others.

These newly approved parts and repairs play a significant role in the aviation industry, ensuring the continued safety and reliability of various aircraft. They are now available through JPE's convenient ecommerce website, providing easy access to pricing, availability, technical details, and seamless order placement and tracking. JPE is commit-

ted to delivering spare part solutions to its global network of airline and MRO (Maintenance, Repair, and Overhaul) partners.

### Some notable components and repairs that received FAA approval include:

- Link assemblies for Boeing 777 aircraft
- Poppets and torque motors for Boeing 737NG, 737MAX, and 777
- Feedback rods for Boeing 737NG, 737, and 757
- Cable assemblies for Airbus A320 and A320neo
- Diaphragms for Boeing 737, 737NG, and 757
- Seal assemblies for CFM56-5B and CFM56-7B engines
- Repairs for landing lights on Airbus A320 Series
- Strap assemblies for Boeing 747-8, 757, and 767

- Pressure sensors for ERJ 170 and ERJ 190 aircraft
- Insulation pads for CRJ-700 and CRJ-900

These approvals are a testament to JPE's dedication to the aviation industry, offering innovative solutions across more than 25 ATA (Air Transport Association) chapters and a wide spectrum of aircraft systems. JPE's team of experts ensures that every part and repair meets the highest standards of quality and safety, contributing to the efficiency and reliability of aviation worldwide.

At Jet Parts Engineering, our people are the driving force behind our success, and we remain committed to advancing the aviation industry through excellence in PMA parts and DER repairs. Learn more and explore our extensive range of solutions on our ecommerce portal.

### **FEATURE**



## **DEFENCE MRO**

alued at USD 40.17 billion this year (2023), this whopping figure for the Defence MRO sector will only move northwards. This is projected to reach USD 46.21 billion with a CAGR of 2.78% during the forecast period (2023 -2028)

### **Defence MRO Industry**

Defence hardware assets include Fighter jets, transport planes, helicopters, and trainers majorly. Drones and Remotely Piloted Aircraft are incorporated into the defence sector for their capabilities in Military operations. To ensure a high degree of efficiency and airworthiness, Defence MRO service providers have their tasks cut out. They

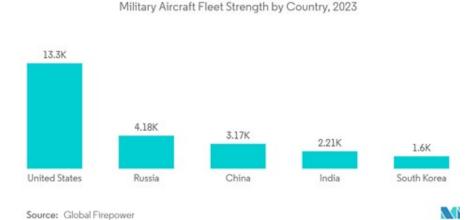
include overhaul services, inspection, replacement, defect rectification, and the embodiment of modifications in compliance with airworthiness directives and repair.

Given the stressed geopolitical environment, defence expenditure by governments across the globe is on the rise. Importantly, according to the Modor Intelligence study, the growth is attributed to an increase in procurement contracts for fighter jets, as well as substantial military modernization programs.

Given the above causes, consequently, the Defence MRO market is on a healthy trajectory, due to the rising demand for maintenance, repair, and overhaul requirements for military aircraft. Defence

MRO service providers are increasingly having to cope with expansion in defence aircraft fleet, as also catering to the lifecycle extension needs of existing aircraft to derive maximum value of assets for the owners. This requires reskilling and upgrading skills and knowledge because of the high level of sophistication incorporated in modern aircraft systems. Service providers must apply advanced diagnostics tools in their maintenance and repair practices of increasingly complex systems.

The Defence MRO services require structural repairs, and avionics upgrades, apart from engine overhauls, and system modifications. Furthermore, cutting-edge technology such as advanced materials, and mission systems,



are areas that are contributing to the growth of Defence MRO.

Fixed-wing aircraft will contribute majorly to the MRO growth story, in the forecast period, given the demand as mentioned earlier, in fighter jets and the increase in spend on the latest technology to improve capabilities.

Cross-border conflicts lead to galloping 'spends' on military prowess. As a result, massive budgets are allocated by superpowers who top the list in terms of owning the highest numbers of Military assets. The bar chart below gives a comparison. Here, the United States and Russia lead, with the acquisition of technically the latest fighter jets.

The United States has the highest military aircraft fleet of 13,232(2021 fig.) and is followed by Russia, with a fleet of 4,143 aircraft, given their need for quick deployment and readiness in mission-critical geo-political events. This calls for meticulous maintenance of aircraft, and upgradation where required.

For example, in April 2023, GE Aerospace signed a 4 – year agreement with Lockheed Martin Corporation to support avionics and electrical power systems on the F-35 military aircraft. This includes MRO services for GE Aerospace systems on the F-35 Lightning II aircraft.

Again, in April 2023: The Brazilian Air Force selected StandardAero to provide comprehensive maintenance, repair, and overhaul (MRO) services for the Rolls-Royce AE 3007 engines that power its fleet of Embraer ERJ-145 aircraft.

North America held the highest shares in the market and continued its domi-

nation during the forecast period. The major driving factor for the MRO in this region is the requirement to upgrade such a vast fleet with the latest technologies and systems.

The US Department of Defence (DoD) plans to spend USD 61.1 billion on aircraft and related systems in 2024.

MRO services expenditure in the US is in areas such as their large fleet of multi-role aircraft, transport aircraft, and surveillance aircraft that require high maintenance on engines and airframes, along with field and component maintenance services.

#### **Leading Military Aircraft MROs**

The major players in the military aviation MRO market are Lockheed Martin Corporation, Safran, The Boeing Company, Raytheon Technologies Corporation, and BAE Systems plc.

In India, Hindustan Aeronautics Limited (HAL), the Indian Air Force, and at times foreign OEMs have performed military MRO services. The Indian Army's Army Aviation wing, Indian Navy, and the Indian Coast Guard maintain aircraft and their MRO services too are conducted by HAL and or OEMs.

### **Growth Strategy in Defence MRO**

Strategic partnerships between the stakeholders, can bring in more business and help increase their footprint in the hitherto untapped markets. As most MRO contracts are for the long term, newer entities find it challenging to gain access to this critical but essential service sector. There is scope for civil and defence synergies, although both differ and needs and capabilities must

be clearly understood by the players.

#### Adoption of New Technology & Digitisation

MRO companies are having to invest further in new and advanced technology to align with the latest techniques required for MRO jobs. Technology and digitisation are being quickly adopted by the industry like artificial intelligence for ease and accuracy during diagnostics and predictive maintenance, fault detection, as well as data collection and analyses. Today's artificial intelligence (AI)-based predictive maintenance technologies are fast witnessing mass adoption during the forecast period. Potential investments would be required to enhance the IT capabilities of MRO operators for maintenance execution, supply chain management, enhancing mobility, and adopting esignatures. Advanced data analytics are also being used by MROs for inventory optimization to plan, stock, and optimize spares as and when required at minimal procurement costs. Such tools enable operators to function efficiently, derive maximum profits, and support the digitization of global aircraft MRO operations.

### Outsourcing MRO services by Defence in India

In recent years, a small number of companies have started performing MRO services for the Indian Air Force (IAF)- partially delegated or outsourced. These MRO service providers have developed a workforce competent enough and have the required calibre and experience to deliver jobs successfully. This opens the scope for more civil defence participation.

In general, line maintenance or regular maintenance is performed by the Indian Air Force and the aviation wings of the Army, Navy, and the Indian Coast Guard. On the other hand, complex MRO activities are outsourced to HAL and the rest is left to the Base Repair Depots (BRDs).

#### Military MRO

Defence MRO companies or on contract with defence departments need to deal with materials that are battle-hardy like withstanding extreme temperatures, stealth, and damage from the

### **FEATURE**



battle. Onboard systems are different from those in civilian aircraft, like fire control radar, electronic warfare (EW) systems, weapon control systems, and oxygen generators (OBOGS), to name some. Items like radars, communication systems, surface-to-air guided weapons (SAGW), specialised vehicles, specialised test equipment, ground equipment, and survival gear like parachutes and boats, all set them apart from commercial or civilian aircraft and therefore MRO practices. Adherence to written down OEM technology in manuals must be done without fail.

A long-term repair or annual maintenance contract with a foreign OEM may be in place. However, it makes business sense only if there are instances of technology transfer and sharing proprietary clauses. The high cost of spares and keeping a check on their usage are controlled by foreign OEMs. Nonavailability of parts causes delays, and the resultant job delivery is less than satisfactory. This then does not bode well for the Indian MRO. Thus 'Make in India' is the right mantra to follow, as policies of the Government of India's defence sector. Matching raw materials, and the processes the foreign OEMs follow may pose to be challenging for a local service provider.

#### **Opportunities**

The 'Atmanirbhar Bharat' call for self-reliance will see more military assets made in India, entering all three defence services, allowing MROs to

has commenced with the indigenisation

grow in tandem. While these would include Light Combat Aircraft (LCA "Tejas"), the Advanced Light Helicopter (ALH "Dhruv"), and the Light Combat Helicopter (LCH "Tejas"), on the anvil is the Advanced Medium Combat Aircraft (AMCA). There are also plans to roll out similar defence equipment for all three services.

#### **Skilled Workforce**

Executing these deliverables from the MRO side would require enough skilled workers. Drawing from highly skilled and experienced ex-servicemen, could stand an MRO in good stead. The Directorate General of Resettlement or the Directorate of Air Veterans can partly help fill the gaps and provide some of the necessary workforce. Again, the Government of India's 'Agniveer' scheme, allows skilled technicians from the private sector whose services could be made available to fill up positions in defence/defence MRO roles, with sufficient and appropriate upskilling/ re-skilling. MROs themselves train and provide skilled technicians through their in-house academies.

MRO companies will also get a chance to grow organically and can set up businesses like fabricating spares and selling consumables. These can then become profit centres. Other services they can additionally provide are service and repair and testing of ground equipment.

Self-sufficiency in defence manufacturing, MRO and allied activities has commenced no doubt, however, India's security needs call for acquiring foreign assets to remain on par as much as applicable. However, the dependency on foreign supplies will hopefully see a decline going forward, thus cutting down precious expenditure. MRO planning happens in tandem with during foreign purchases, and during the contracting stage, and the OEM must be aware of the MRO capabilities of both private and defence companies. Most importantly, the OEMs must have implicit faith in the MROs that will service and maintain their assets and spares before work is forked out to indigenous entities.



Reference Credit: www.iadb.in modorintelligence.com





# Emirates signs US\$ 52 billion wide-body jet order at Dubai Airshow 2023

mirates, one of the world's largest and most prominent airlines, has made a significant announcement at the Dubai Airshow 2023, revealing its plan to acquire 95 additional Boeing wide-body aircraft. This development expands Emirates' total order book to an impressive 295 aircraft, reaffirming its position as a global aviation leader.

The announcement was made in the presence of high-profile dignitaries, including HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai, HH Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum, UAE Deputy Prime Minister and Minister of Finance, and Deputy Ruler of Dubai, as well as HH Sheikh Mansour bin Mohammed bin Rashid Al Maktoum, Chairman

of the Dubai Sports Council.

The deal, valued at US\$ 52 billion, focuses on additional Boeing aircraft, including the 777-9s, 777-8s, and 787s. Emirates, which already holds the distinction of being the world's largest operator of wide-body passenger aircraft, aims to use these new acquisitions to power its growth plans, maintain a modern and efficient fleet, and enhance the overall flying experience for its customers.

HH Sheikh Ahmed, Crown Prince, Dubai said, "From day 1, Emirates' business model has been to operate modern and efficient wide-body aircraft capable of carrying large numbers of travellers comfortably and safely, over long distances to and via Dubai. Today's aircraft orders reflect that strategy. These

Emirates, has signed a US\$ 52 billion contract at the Dubai Airshow 2023 to acquire 95 additional Boeing widebody jets expanding total order book to 295 aircraft.

additional aircraft will enable Emirates to connect even more cities, supporting the Dubai economic agenda D33 set out by HH Sheikh Mohammed bin Rashid Al Maktoum, to add 400 cities to Dubai's foreign trade map over the next decade. By the early 2030s, we expect the Emirates fleet to be around 350-strong, connecting Dubai to even more cities around the world."

With the first 777-9 expected to join Emirates' fleet in 2025 from a previous order of 115 units, the additional orders extend the induction of new 777-9s until 2035. Notably, Emirates is set to become one of the launch customers for the 777-8 passenger variant, with the first deliveries anticipated in 2030.

HH Sheikh Ahmed, Crown Prince,

Dubai said, "Emirates is the biggest operator of Boeing 777 aircraft, and today's order cements that position. We've been closely involved in the 777 program since its start up until this latest generation of 777X aircraft. The 777 has been central to Emirates' fleet and network strategy of connecting cities on all continents non-stop to Dubai. We are pleased to extend our relationship with Boeing and look forward to the first 777-9 joining our fleet in 2025."

The Boeing 777 has been a cornerstone of Emirates' operations, capable of conducting missions of up to 18 hours, connecting Dubai non-stop to cities on six continents. The new 777-9s and 777-8s are slated to replace Emirates' retiring 777 aircraft, accommodating the airline's future growth plans.

In addition to the Boeing order, Emirates updated its previous commitment for 30 Boeing 787-9s, increasing its total commitment to 35 Dreamliners. This comprises 15 Boeing 787-10s and 20 Boeing 787-8s, reflecting the airline's diversified fleet strategy.

"This order is an incredible vote of confidence in the efficiency and versatility of the 777X family to meet Emirates' needs for global long-haul travel," said Stan Deal, President and CEO, Boeing Commercial Airplanes. "The 777-9 and 777-8 are the perfect airplanes to support Emirates' growth plans, improving environmental performance and unmatched payload capability," he further added.

Emirates' substantial order at the Dubai Airshow underscores its commitment to remaining at the forefront of the aviation industry. As the airline charts its path toward the future, these acquisitions not only position Emirates as a key player in the global aviation landscape but also contribute to the broader vision of connecting the world through Dubai.

This strategic move aligns with Emirates' ambitious growth plans, emphasizing its role as a driver of economic development in Dubai and beyond. The airline's commitment to a modern, efficient, and diversified fleet reflects its dedication to delivering unparalleled travel experiences and maintaining its status as a symbol of excellence in the aviation industry.



### flydubai orders 30 Boeing 787 Dreamliners worth USD 11 billion at Dubai Air Show 2023

flydubai has signed a contract to acquire 30 Boeing 787-9 Dreamliners in a move reflecting its strategic vision to diversify its fleet and embrace wider operational capabilities.

Dubai-based airline flydubai is set to make a significant stride in its aviation journey with a commitment to acquire 30 Boeing 787-9 Dreamliners. This strategic decision was unveiled at a noteworthy signing ceremony attended by distinguished personalities, including His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai, and Chairman of The Executive Council of Dubai, along with other key figures. The move reflects flydubai's strategic vision to diversify its fleet and embrace wider operational capabilities.

Flydubai's foray into wide-body aircraft is marked by the evaluation of engine options for its first Dreamliner order. The choice of engines will play a pivotal role in the airline's operational efficiency and overall performance. The consideration of different engine options underscores flydubai's meticulous approach to fleet management, ensuring that each component aligns with the airline's strategic objectives

and enhances its competitive position in the industry.

Sheikh Ahmed bin Saeed Al Maktoum, Chairman, flydubai said, "in 2008 when we placed our first ever order for 50 Boeing 737 aircraft, we were confident of the vital role flydubai would play in supporting Dubai's aviation hub. I am proud today to see flydubai evolve further, surpassing labels and challenging the traditional conventions around travel. Today's order reaffirms flydubai's commitment to enabling more people to travel across its expanding network. The highly fuel-efficient Boeing 787 Dreamliner will allow flydubai to expand its horizon and cater to the growing demand on existing routes."

This order represents a landmark moment for flydubai as it signifies the airline's entry into the wide-body aircraft segment. The Boeing 787-9, known for its advanced technology, fuel efficiency, and passenger comfort, provides flydubai with a platform for



strategic expansion. With a seating capacity exceeding 290 passengers and a remarkable range of 14,010 km, the Dreamliner equips flydubai to explore new horizons and serve existing routes more efficiently. The added cargo capacity further enhances the airline's operational flexibility.

Ghaith Al Ghaith, Chief Executive officer, flydubai said, "innovation is at the heart of everything we do at flydubai. We are committed to offering the right product at the right time to cater to the changing market and customer needs. The Boeing 787 Dreamliner offers a perfect combination of operational excellence, fuel efficiency as well as passenger appeal."

Since its introduction into revenue service in 2011, the Boeing 787 family has been a game-changer in global aviation. Facilitating over 380 new nonstop routes around the world, the Dreamliner has demonstrated its versatility and efficiency across different network segments. Half of all scheduled 787 Dreamliner flights operate in short- and medium-haul markets, showcasing its adaptability to various route structures.

Flydubai currently operates a streamlined fleet of 80 Boeing 737 aircraft, including Next-Generation Boeing 737-800, Boeing 737 MAX 8, and Boeing 737 MAX 9 aircraft. The airline's commitment to modernization and growth is evident in its order backlog, which includes more than 130 Boeing 737 MAX aircraft scheduled for delivery by 2035. This reflects flydubai's strategic vision to stay ahead of industry trends and continually enhance its operational capabilities.

Stan Deal, president and CEO, Boeing Commercial Airplanes said, "The 787-9 is perfectly suited for the needs of flydubai as it looks to open up new, longer-range routes and add capacity across its network. flydubai passengers will enjoy the Dreamliner effect, an experience like no other in the air, flying with more comfort and arriving to their destinations feeling more refreshed. We are proud of the confidence that flydubai continues to place in our products with an all-Boeing fleet. We look forward to further strengthening this partnership and to seeing our 787-9 Dreamliners play a central role in flydubai's strategic expansion plans."

The broader aviation landscape in the Middle East is undergoing substantial growth, with Boeing's Commercial Market Outlook projecting a doubling of the region's fleet over the next two decades. Wide-body aircraft deliveries are expected to play a crucial role in this growth, driven by the Middle East's evolving position as a global aviation hub. Flydubai's decision to introduce wide-body aircraft aligns with the region's aviation ambitions and positions the airline as a key player in the industry's future.

In conclusion, flydubai's commitment to acquiring Boeing 787-9 Dreamliners is a strategic move that goes beyond fleet expansion. It underscores the airline's commitment to innovation, operational excellence, and customercentricity. As flydubai ventures into the wide-body segment, it positions itself for sustained growth, operational flexibility, and a superior passenger experience. This partnership between flydubai and Boeing symbolizes a shared vision for the future of aviation, characterized by efficiency, innovation, and responsiveness to evolving market dynamics.

# Boeing shines at Dubai Air Show 2023

Boeing signed multiple contracts at the Dubai Airshow 2023 highlighting the Middle Eastern Airlines' commitment towards growth in the region.



■ (left to right) Brian Moran, Boeing vice president of Global Sustainability Policy & Partnerships, Paddy Lowe, CEO of Zero, Sheila Remes, Boeing vice president of Environmental Sustainability, Dr. Brendan Nelson, president of Boeing Global, and Oliver Christian, British Consul General to Dubai and HM Trade Commissioner for the Middle East and Pakistan.

In a series of strategic moves at the Dubai Airshow 2023, Boeing has solidified its presence in the Middle East, signing multiple contracts that underscore the commitment of regional airlines to sustainable growth and innovation.

★ Zero Petroleum and Boeing have embarked on a collaboration to advance the development of sustainable aviation fuels (SAF), contributing to the aviation industry's target of achieving net-zero emissions by 2050. The collaboration involves Boeing and Zero Petroleum jointly establishing a testing program for Zero's SAF at the University of Sheffield's Energy Innovation Centre (EIC) and its SAF research facility. Boe-

ing's role as a founding member of the Centre underscores its dedication to fostering research and innovation in the field of sustainable aviation.

Zero Petroleum's innovative technology focuses on producing SAF by extracting carbon from the air and obtaining hydrogen from water through a process known as Power-to-Liquid. This hydrocarbon fuel creation method has the potential to substantially reduce emissions throughout its lifecycle, contingent upon the availability of abundant renewable electricity.

★ SunExpress and Boeing, a joint venture between Turkish Airlines and Lufthansa, have revealed a significant agreement at the Dubai Airshow 2023.



SunExpress has opted for the 737 MAX, affirming its commitment to sustainable growth by placing an order for up to 90 fuel-efficient single-aisle Boeing jets. The newly announced agreement encompasses 28 B737-8 and 17 B737-10 models, demonstrating SunExpress's strategic move to expand its operations with modern and fuel-efficient aircraft.

Moreover, the deal allows for the potential addition of up to 45 more 737 MAX airplanes, offering flexibility for future fleet expansion in response to market demands. This decision reflects the airline's ambitious plans to more than double its current fleet in the coming decade.

★ Royal Jordanian and Boeing have jointly announced a significant aircraft order at the Dubai Airshow, further solidifying their longstanding partnership. Royal Jordanian, the flag carrier of Jordan, has placed an order for four 787-9 Dreamliner jets, signifying a strategic move by the airline to expand and modernize its widebody fleet. Additionally, the airline has reaffirmed its commitment to a previous order for two 787-9s, bringing its total 787-9 backlog to six aircraft. With the ability to accommodate 296 passengers and cover distances of up to 14,010 km (7,565 nautical miles), the 787-9 is well-suited for long-haul routes.

★ Royal Air Maroc and Boeing have unveiled a significant development at the Dubai Airshow, where the North African carrier has confirmed a repeat order for the Boeing 787 Dreamliner. The new order comprises two 787-9 aircraft. Royal Air Maroc, already operating nine Dreamliners, has experienced firsthand the efficiency gains and operational benefits of these advanced aircraft. The 787 family's track record for fuel efficiency, long-range capabilities, and passenger comfort aligns with Royal Air Maroc's strategic goals of expanding its long-haul network.



### **MRO NEWS**

### EFW begins services at new Turkish freighter conversion site with first A330P2F

Elbe Flugzeugwerke GmbH has initiated operations at its new third-party freighter conversion facility in Istanbul, Turkey with the first Airbus A330P2F in collaboration with Turkish Technic.



Libe Flugzeugwerke GmbH (EFW), a renowned expert in Airbus Passenger-to-Freighter (P2F) conversions, has initiated operations at its new third-party freighter conversion facility in Istanbul, Turkey. This expansion, in collaboration with Turkish Technic, a globally certified MRO company (Part 145 and Part 21 J&G organization), marks EFW's ninth modification site worldwide. The partnership with Turkish Technic is strategically valuable, given their extensive experience in Airbus aircraft maintenance. The collaboration leverages partners with robust structural expertise and operational excellence to meet customer commitments effectively.

The inaugural induction of an A330P2F at this Istanbul site took place as scheduled in October 2023. EFW, in conjunction with ST Engineering and Airbus, is actively advancing the A330P2F program, with EFW leading in the overall program, holding the Supplemental Type Certificate, and managing marketing and sales efforts.

"We are glad to get Turkish Technic on board, which has deep experience in maintaining Airbus aircraft," says Jordi Boto, CEO, EFW. "By working with partners which have strong structural skills and operational excellence, we will ensure meeting our customer commitments in a robust manner," he further added.

EFW's A330P2F program offers two variants: the A330-200P2F and A330-300P2F, both equipped with advanced technology that delivers operational and economic benefits to airlines. The A330-200P2F has a gross payload capacity of up to 61 tons and can fly over 7,700 km, while the larger A330-300P2F accommodates a gross payload of up to 63 tons and offers a containerized volume of approximately 18,581 ft<sup>3</sup> (~526 m³).

This expansion underscores EFW's commitment to meeting the rising demand for Airbus freighter conversions. In collaboration with ST Engineering, it has set up conversion facilities across Asia, the United States, and Europe to enhance conversion capacity for all Airbus P2F programs, including the A330P2F, A321P2F, and A320P2F. These programs are vital in enhancing cargo transport capabilities for airlines and supporting the global airfreight industry's growth.

# AviaAM Leasing handovers solo Boeing 777-200 jet to Aves Aero Technic Inc

AviaAM Leasing has successfully delivered a Boeing 777-200 aircraft equipped with Rolls Royce Trent 884 engines to Aves Aero Technic Aviation.

A viaAM Leasing, a global aviation holding company that specializes in tailored aircraft leasing and trading services, has successfully delivered a Boeing 777-200 aircraft equipped with Rolls Royce Trent 884 engines to Aves Aero Technic Aviation. This aircraft, with the MSN 33371 identifier, had spent an extended period parked and stored in Teruel, Spain, before being delivered to Aves Aero Technic Aviation Inc. in Turkey.

AviaAM Leasing is a subsidiary of Avia Solutions Group, the world's largest ACMI (Aircraft, Crew, Maintenance, and Insurance) provider, operating a fleet of 192 aircraft and overseeing over 100 subsidiary companies. Over the past 15 years, AviaAM Leasing has achieved recognition in the aircraft finance and commercial lease sectors, ranking among the top 50 leasing companies globally.

In 2020, the company expanded its operations into the cargo aviation market by acquiring cargo aircraft and commencing passenger-to-freighter conversions. AviaAM Leasing also holds the distinction of being the launch customer for the new 777-300ERMF freighter conversion.

As a part of the Avia Solutions Group, AviaAM Leasing collaborates with various aircraft operators, including SmartLynx Airlines, Avion Express, Bluebird Nordic, BBN Indonesia Airlines, KlasJet, and Magma Aviation. The group provides a wide range of aviation services, encompassing Maintenance, Repair, and Overhaul (MRO), pilot and crew training, ground handling, and other associated services. With a workforce of over 11,500 highly skilled aviation professionals, the group operates in 68 countries worldwide.

## Asia Digital Engineering secures EASA Part 145 Maintenance Organization approval

With the EASA Part 145 Maintenance Organisation ADE is actively working on the construction of a state-of-the-art hangar in KLIA Aeropolis, scheduled for completion in the first half of 2024.



A sia Digital Engineering (ADE), the maintenance, repair, and overhaul (MRO) division of Capital A, has achieved a significant milestone by obtaining approval from the European Union Aviation Safety Agency (EASA) as a Part 145 Maintenance Organisation. This recognition represents a gold standard in aviation maintenance, signifying the highest levels of safety and quality in its operations.

In addition to this milestone, ADE is actively working on the construction of a state-of-the-art hangar in KLIA Aeropolis, scheduled for completion in the first half of 2024. This facility will enhance ADE's MRO capabilities and further establish its presence in the region's aviation maintenance sector. The company is also in the process of

setting up new component workshops to support its growing operations.

YB Anthony Loke Siew Fook, Minister of Transport, Malaysia said: "Congratulations to ADE on obtaining the highly acclaimed EASA Maintenance Organisation approval. This accomplishment not only underscores the nation's commitment to adhering the highest global standards but also positions Malaysia as a hub for excellence in the aviation and aerospace industry. ADE's dedication to high quality of service and safety serves as an inspiration to other homegrown MRO players, and we look forward to the positive impact this milestone will have on our country's aviation and aerospace landscape."

To accommodate its expansion, ADE has set an ambitious hiring target for

2024, planning to recruit 500 to 600 aviation professionals, including aircraft technicians and engineers. This move aligns with ADE's commitment to driving growth and innovation in Malaysia's aviation and aerospace sector, bolstered by its new EASA Part 145 Maintenance Organisation approval.

Mahesh Kumar, CEO, ADE said, "We are very proud to add EASA Part 145 approval to our long list of maintenance certifications and authorisations. This is a significant achievement, and is a result of all the hard work and commitment from the team at ADE. Thanks to their dedication and service excellence, ADE is now able to provide industry leading aircraft maintenance support in Asia Pacific and beyond. ADE will continue to bring the highest work ethics and business standards to Asia Pacific's aviation market and become a significant force in MRO services in the region."

ADE's achievement not only enhances its reputation in the industry but also reflects its dedication to providing toptier aviation maintenance services to airlines, operators, and aircraft owners worldwide. As it continues to expand, ADE looks forward to serving a broader global audience and contributing to the growth of Malaysia's aviation and aerospace sector.



# Elevating Aviation Efficiency With Next-Level Asset and Equipment Procurement

ithin the Maintenance, Repair, and Overhaul (MRO) landscape of the aviation industry, the quest for efficient and cost-effective aircraft maintenance and part procurement has never been more crucial and continues to be a paramount concern for operators, maintenance teams, and businesses worldwide.

This need is largely spurred by the extreme demand for post-pandemic travel. In Spring 2023, total passenger air traffic rose nearly 46% compared with a year earlier. However, airlines are struggling to meet the demand due to issues created by the increased time aircraft spend on the ground during the pandemic. Add to this the fact that airlines are scrambling for capacity as PW1100 engine issues continue to unfold impacting the

MRO marketplace and shop visits

increase. "While newer engine models are unaffected, certain airlines operating older Airbus A320neo or Airbus A321neo aircraft may need to adjust their immediate expansion strategies as heavier inspections will take place in 2024 and shop visits, estimated between 600 and 700, will increase as the affected PW-

the MRO facilities between 2023 and 2026," says Toma

Matutyte.

CEO of Locatory.com, a leading aircraft parts locator in the aviation aftermarket with a worldwide aircraft parts database on its marketplace.

Beyond the immediate need to access spare parts, efficient and cost-effective solutions for addressing maintenance issues are at the forefront. "We saw that a more holistic and integrated approach is needed, especially for aircraft parts and supplies," Matutyte pointed out. "Companies using the MRO marketplace for these items should have ease of mind when selling their assets and equipment. There is not only a desire to optimise transactions, but to have unlimited listings, searches, and RFQs that would allow certain advantages of aircraft maintenance to ensue from expertise to maintenance agreements, reduced downtime, access to spare parts, cost predictability, and compliance with regulations," she further explains.

To address this need, aircraft parts locator companies that provide databases need to offer a solution that is simple and effective not adding a new layer to the process of aircraft parts procurement.

"We are launching a new and enhanced feature on our marketplace, designed to sell companies Assets and Equipment," says Matutyte. "Our new service provides comprehensive and informative listings, transparent pricing to help streamline the procurement process, along with the ability to upload documents and images that help speed up deal closures."

As part of the Avia Solutions Group family, the world's largest ACMI (Aircraft, Crew, Maintenance, and Insurance) provider, Locatory.com will continue to search for and deliver solutions in the competitive aviation aftermarket landscape while driving innovation and excellence.



### **AIRLINE NEWS**

### BOC Aviation handovers solo Boeing 737-800 jet to Ethiopian Airlines

BOC Aviation Limited has delivered to Ethiopian Airlines Group, a used Boeing 737-800 jet for lease equipped with the CFM International CFM56 engines

**B** OC Aviation Limited has announced the delivery of a used Boeing 737-800 aircraft for lease to Ethiopian Airlines Group, Africa's largest carrier. The aircraft is equipped with the CFM International CFM56 engines. Ethiopian Airlines' focus on maintaining a modern and environmentally friendly fleet aligns with global efforts to reduce aviation's impact on the environment while delivering exceptional service to passengers. This commitment to sustainability and passenger satisfaction has contributed to Ethiopian Airlines' success and reputation in the aviation industry.

"We are delighted to add Ethiopian, Africa's largest carrier, as a new customer," said Robert Martin, Managing Director and Chief Executive Officer, BOC Aviation. "This transaction builds on our position in the African market and supports Ethiopian's expansion plans," he further added.

BOC Aviation is a prominent global aircraft operating leasing company with a fleet of 681 aircraft owned, managed, and on order. Its fleet is leased to 93 airlines in 44 countries and regions worldwide. The airline boasts the continent's youngest and most modern fleet, serving over 150 domestic and international destinations for both passengers and cargo across five continents. This commitment to a modern and efficient fleet reflects Ethiopian Airlines' dedication to providing quality service while minimizing its environmental impact.

Mesfin Tasew, CEO, Ethiopian Airlines Group said, "Ethiopian Airlines is pleased to establish a new partnership with BOC Aviation and receive the Boeing 737-800 aircraft on lease. We will be deploying the new arrival to our strategic partner ASKY Airlines to enable it to expand its operation across and beyond its extensive West and Central Africa network. As a global airline, Ethiopian will eye further partnerships with BOC Aviation and other industry players."

Ethiopian Airlines Group is known for its modern and environmentally friendly fleet, consisting of aircraft like Boeing 737s, 777s, 787s, Airbus A350-900, and Bombardier Dash 8-400, with an average fleet age of seven years.

# AerCap handovers first solo Airbus A321 P2F converted jet to Indigo

The AerCap A321conversion was successfully completed by Elbe Flugzeugwerke GmbH before being officially handed over to IndiGo at ST Engineering Aerospace in Singapore.

AerCap Holdings N.V. ("AerCap"), a global leader in aviation leasing, has announced the delivery of its first Airbus A321 Passenger-to-Freighter ("P2F") aircraft to its valued customer, IndiGo. The aircraft conversion was successfully completed by Elbe Flugzeugwerke GmbH ("EFW") before being officially handed over to IndiGo at ST Engineering Aerospace in Singapore. IndiGo, as the recipient of this aircraft, will undoubtedly benefit from the enhanced capabilities of the A321P2F as they strive to meet the evolving requirements of their cargo operations.

This milestone marks a significant achievement and underscores the strong partnership between AerCap and IndiGo, one of India's prominent airlines. The A321P2F, a passenger-to-freighter conversion, is considered a best-in-class narrowbody freighter solution, offering exceptional economics in terms of fuel-efficiency and operational flexibility to cater to the growing demands of cargo operators.

Rich Greener, Head, AerCap Cargo said, "We are delighted to celebrate the delivery of AerCap's first A321 Passenger-to-Freighter aircraft with our longstanding customer, IndiGo. The A321P2F is a best-in-class narrowbody freighter solution, offering superior economics in terms of fuel-efficiency and flexibility to meet the growing demand of cargo operators. We wish IndiGo every success as they expand their fleet to meet their customers' freighter needs, and we thank the EFW and ST Engineering Aerospace teams for their support with this conversion program."

In a strategic move in 2022, AerCap placed a firm order for 15 Airbus A321-200 P2F aircraft conversions and secured an option for an additional 15 A321P2F conversions with EFW. This forward-looking investment has positioned AerCap at the forefront of aviation leasing, ensuring they remain at the forefront of the industry.

Jordi Boto, CEO, EFW said, "We are pleased that our customer, AerCap, the world's largest aviation lessor, has taken delivery of their very first Airbus freighter for its customer IndiGo. We look forward to supporting AerCap's commitment to expanding its A321P2F fleet over the next two years with numerous deliveries of our freighter conversions."

AerCap continues to lead as the global aviation leasing power-house, providing comprehensive fleet solutions to around 300 customers worldwide. Based in Dublin and listed on the New York Stock Exchange, AerCap operates offices in multiple key locations worldwide, further enhancing its global reach and influence within the industry. As they look to the future, AerCap's commitment to innovation and excellence remains unwavering.





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### **AIRLINE NEWS**

## Brussels Airlines adds first factory-fresh Airbus A320neo jet to its fleet

Brussels Airlines' acquisition of factory-fresh Airbus A320neo jet represents a significant step toward sustainability and operational efficiency and opens up new MRO opportunities.



For passengers, the A320neo offers a quieter and more comfortable flying experience, with a 50% reduction in noise

**B**russels Airlines welcomed a significant addition to its fleet, marking a new era with a focus on sustainability. The airline received a factory-fresh Airbus A320neo, directly from Airbus in Toulouse. It's the first time in the airline's history that it has acquired brand-new aircraft from the manufacturer. This milestone reflects Brussels Airlines' commitment to reducing its environmental impact while enhancing passenger comfort and experience with state-of-the-art aircraft. Brussels Airlines' acquisition of factory-fresh Airbus A320neo aircraft not only represents a significant step toward sustainability and operational efficiency but also opens up new MRO opportunities.

The aircraft is powered by the LEAP-1A engine from CFM International, which significantly reduces fuel consumption and emissions, saving approximately 3,700 tons of carbon equivalents per aircraft per year. Additionally, the A320neo has a longer range and features sharklets on the wings, which contribute to further carbon savings. For passengers, the

A320neo offers a quieter and more comfortable flying experience, with a 50% reduction in noise. The larger baggage compartments can hold 60% more suitcases and the flexible lighting system adapts to passengers' biorhythms during the flight.

Dorothea von Boxberg, CEO, Brussels Airlines said, "It is crucial for us to modernize our fleet to be able to reduce our carbon footprint. The A320neo reduces both noise and CO2 footprint significantly compared to the current generation of A320s. We are happy to get the first brand-new aircraft directly from Airbus in Toulouse, to be followed by 4 more by the end of next year. This is a milestone in our history, so today is really a moment of pride."

This fleet renewal is part of Brussels Airlines' broader sustainability goals. The airline, along with the Lufthansa Group, aims to reduce its net carbon emissions by half by 2030 compared to 2019, with a plan to achieve carbon neutrality by 2050. Renewing the fleet with more fuel-efficient and eco-friend-

ly aircraft is a key component of these sustainability efforts.

### Key points about the A320neo:

- 1. Neo: The A320neo stands for "New Engine Option."
- 2. Fuel Efficiency: It consumes up to 20% less fuel compared to previousgeneration aircraft.
- 3. Emissions Reduction: The A320neo produces fewer CO2 emissions, contributing to sustainability goals.
- 4. Noise Reduction: It offers a 50% reduction in noise compared to previousgeneration planes.
- 5. Fleet Renewal: The A320neo will replace smaller A319 aircraft in the Brussels Airlines fleet, carrying more passengers with less fuel. Fuel consumption per seat will be reduced by 30%.
- 6. Seat Capacity: The aircraft is equipped with 180 seats.
- 7. Fleet Expansion: Five A320neo aircraft will join the Brussels Airlines fleet by the end of 2024.

"Brussels Airlines has worked hard on becoming profitable. The first brandnew aircraft for our airline shows the continued support and trust of Lufthansa Group in our team. I would like to thank all our team members working on making Brussels Airlines successful—whether they offer excellent customer service or help in making us more effective. We've come a long way at Brussels Airlines, and we are happy that we start picking the fruit of our work," said Dorothea von Boxberg, CEO, Brussels Airlines.

As Brussels Airlines expands its fleet with the A320neo, MRO providers have the opportunity to collaborate closely with the airline to ensure the airworthiness, safety, and reliability of these advanced aircraft. By offering tailored MRO services and embracing sustainability initiatives, MRO companies can position themselves as valuable partners in Brussels Airlines' journey toward a more efficient and eco-friendly fleet.





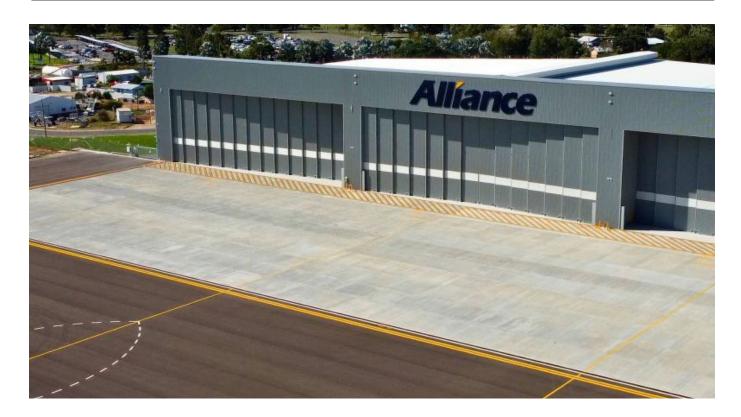








### AIRLINE OF THE MONTH



# Alliance Airlines brings home its MRO capabilities with \$60 million facility in Queensland

Australia's Alliance Airlines has opened a brand-new \$60 million maintenance, repair and overhaul (MRO) facility at Rockhampton Airport, Queensland, Australia in an attempt to bring the MRO capabilities inhouse. Earlier, Alliance Airlines used to offshore the maintenance of its fleet relying on Jet Aviation's maintenance facility in Cairns, northern Queensland, apart from sending maintenance work overseas to Fokker Services Asia in Singapore, Austrian Airlines Technik in Slovakia and COOPESA in Costa Rica.

milestone, Alliance Airlines Managing Director, Scott McMillan said "The new Maintenance and Repair facility means we have been able to bring our maintenance activities from overseas back to our home soil in Queensland," said Scott McMillan, Managing Director, Alliance Airlines. "Alliance Airlines sees Rockhampton as a key hub for our operations, and this facility solidifies our long-term commitment to the region. We are absolutely confident that this significant investment in aviation will attract other industry participants to invest here in Rockhampton."

The maintenance hangar is designed to have a low carbon footprint because it has a 100kW solar system and 500kl water tanks for storing water collected from the rooftop.

### MRO Employment opportunities in Queensland

The opening of this three-bay hangar MRO facility has thrown open a raft of employment opportunities in Queensland, with about 100 highly skilled aviation jobs especially engineering and maintenance along with 16 openings of new traineeships and apprenticeships creating new career paths for young job seekers across Central Queensland, by 2024. The construction of this facility supported around 115 construction workers.

According to Madeleine King, minister for resources and minister for Northern Australia, Alliance Airlines' maintenance facility will provide valuable jobs and investment for the Rockhampton economy.

"The project has already created jobs during its construction phase and is set to support an additional 100 ongoing jobs in the region. "This will be game-changing for Rockhampton, and is yet another example of how the NAIF is working to advance Queensland's economy," minister King added.

### **AIRLINE OF THE MONTH**

Assistant Minister for Regional Development, Senator Anthony Chisholm added that the project has played a pivotal role in bolstering the confidence of businesses in the region to expand their capabilities and services.

"As well as delivering local jobs and bringing millions of dollars of investment to the Rocky economy, this new facility will make a real difference for the local aviation industry and the critical services and businesses it supports," Senator Chisholm said.

Queensland Treasurer and Minister for Trade and Investment Cameron Dick said this is a great day for Queensland, landing aviation jobs, skills and development on home soil.

Apart from new recruitments the facility will also aid in building a strong MRO ecosystem in Queensland by supporting many third-party suppliers for services like for avionics, aerospace technologies, wheels, tyres, brakes and landing gear, engine maintenance, interiors and upholstery, cabin accessories and much more.

Mayor of Rockhampton Regional Council, Tony Williams summed up saying this is a significant milestone for our region and one that will help drive future jobs and opportunities.

"They are currently on a recruiting drive, looking to fill a further 11 positions and five of those are apprentices. This is a great result for Rocky as the company plans to employ about 100 highly skilled operations workers including at least 16 trainees and apprentices when it is fully operational in 2024. We know that we need to secure new jobs and industries going forward and this initiative does exactly that," Mayor Williams added.

"Locals will now have that opportunity to train and work in the aviation maintenance industry and to see the benefit of those jobs. This not only delivers for residents today but sets us up for the future," Mayor Williams concluded.

#### Investments -

The MRO facility is backed by investments from government as well as private players in Australia. The facility is supported through a \$21 million Northern Australia Infrastructure Facility loan. A further \$25 million contribution was made by the Australian Government, along with \$2 million from the council, to fund upgrades to the existing airport infrastructure in order to support the Alliance facility, taking the total precinct investment figure to around \$87 million.

Construction of the new MRO facility was also backed by the Queensland Government's \$175 million Jobs and Regional Growth Fund to ensure Alliance can maintain its growing aircraft fleet in Queensland.

Madeleine King said that the new facility is anticipated to inject \$30 million into the local Rockhampton economy each year, with the three-bay hangar servicing the airline's fleet of over 70 aircraft.

"Investing in this type of project is essential to help our regions grow by attracting investment and creating employment opportunities. Economic modelling shows that this facility is expected to directly boost the Queensland economy by almost \$195 million over the next 10 years," Treasurer Dick added.

"Facilities such as these are a catalyst for further regional development by attracting specialty high value freight and logistics suppliers and a range of aeronautical support companies to the region. The commitment of Alliance to Rockhampton shows that Queensland has the capabilities to enhance their operations and further consolidates our growing reputation in the multibillion-dollar global aviation industry," concluded Treasurer Dick.

This project serves a fine example of all three levels of government and the private sector working together to deliver for regional Queensland.

### Queensland MRO industry forecast

According to the Department of treasury, Queensland, the MRO industry valued at \$565 million and supports approximately 4,200 jobs. Over the next decade it is predicted global aircraft engine MRO will become a US \$474 billion growth area.

#### **Alliance Airlines MRO capabilities**

Alliance Airlines has two maintenance facilities in Brisbane, one of which is Unity Aviation Maintenance (UAM), that it acquired in late 2020 from Australian



logistics and transportation conglomerate Toll Holdings. The two facilities are adjacent to each other at the airport, so Alliance says it has merged the two organisations.

Alliance Airlines AMO is approved by the Civil Aviation Safety Authority (CASA) to provide maintenance services under the CASR Part 145 regulatory framework and valid Part 145 approval under PNG CASA. The AMO also has approved Workshop capability focusing on Fokker specific avionics and air frame components that ensure Alliance Airline's ability to respond effectively to meeting the requirements of the aircraft operator.

Whether it's operating in South East Asia or the harsh Australian outback, the Alliance Airlines AMO prides itself on safety, reliability and operational performance.

#### Airline fleet

The Alliance Airlines fleet is composed of three different Fokker aircraft, Fokker 70 LR jet and Fokker 100 jet and Embraer 190. The airline claims that its fleet has a strong reputation for being reliable and efficient aircraft with an extensive history of operating in remote and hot regions throughout Australia.

Headquartered in Brisbane, Alliance Airlines provides dedicated contract, charter and aviation services to support mining, energy, tourism and government sectors with its fleet of Fokker and Embraer aircraft.

The company also operates flights on behalf of most of Australia's largest airlines across all mainland Australian states and territories, Papua New Guinea and New Zealand.

The state government has identified MRO services as a key growth opportunity for Queensland as outlined in the Queensland Aerospace 10-Year Roadmap and Action Plan. The government of Australia has committed itself to continue to maximise opportunities to support the MRO industry.

### UPCOMING FACILITY



# Adani Ports APSEZ opens new aircraft leasing unit in India's GIFT City

APSEZL, operating from the IFSC hub located within the GIFT-City in Gujarat, India, will get specific exemptions and benefits, creating an environment for the growth of the aviation sector.

Adani Ports and Special Economic Zone Ltd (APSEZL) has expanded its portfolio by incorporating a whollyowned aircraft leasing unit, Udanvat Leasing IFSC Ltd, signaling the group's foray into the aviation industry. Udanvat Leasing IFSC Ltd, the newly established subsidiary, has an authorised and paidup share capital of Rs 2.5 crore. The primary objective of this venture is to engage in aircraft ownership and leasing activities, adding a new dimension to the Adani Group's diverse business operations.

This strategic move follows a broader trend in the aviation sector, with several prominent players venturing into aircraft leasing, often utilizing International Financial Services Centre



(IFSC) locations for their operations. The establishment of this aircraft leasing unit in Gujarat's International Financial Services Centre (IFSC) offers notable advantages. Aircraft leasing firms operating from this IFSC hub, located within Gujarat International Finance Tec-City (GIFT-City), are entitled to specific exemptions and benefits, creating a

conducive environment for the growth of such businesses.

### Given the specialized nature of MRO services, this venture into the MRO sector could lead to various developments:

- 1. MRO Facilities: Udanvat Leasing IFSC Ltd might consider establishing dedicated MRO facilities or partnerships to maintain the aircraft in their leasing portfolio.
- 2. Cost-efficiency: By having in-house MRO capabilities, Udanvat can optimize costs, ensure quicker turnaround times, and have better control over the maintenance process.
- 3. Synergies: This integration could lead to synergies where MRO services are offered alongside leasing, creating a comprehensive one-stop solution for airline customers.
- 4. Safety and Compliance: With a vested interest in the airworthiness of their leased aircraft, Udanvat Leasing IFSC Ltd would have a strong incentive to maintain the highest safety and complance standards.

APSEZL's entry into aircraft leasing could potentially open doors to a more holistic approach to aviation services, where leasing and MRO are closely interconnected, serving the needs of airlines and lessees more comprehensively. This evolution could contribute to the growth and innovation within the aviation MRO sector.

The expansion into aircraft leasing aligns with APSEZL's overarching strategy, broadening its economic activities to encompass the aviation sector. This diversification, similar to recent moves by other industry players, demonstrates the ongoing evolution and innovation within the aviation industry. As aviation companies explore different avenues, this could potentially open the door for future collaborations and synergies within the industry.

While APSEZL's initial focus appears to be on aircraft leasing, this venture might also lead to further developments. Aircraft leasing often entails maintenance, repair, and overhaul (MRO) activities to ensure the airworthiness of leased aircraft. Hence, there's potential for the creation of MRO facilities or partnerships as part of this broader aviation endeavor.

### Gulfstream inaugurates expanded next-gen manufacturing facility

Gulfstream Aerospace Corp. has completed its strategic expansion of its precision production facility in Savannah, adding 14,2,000 square feet to its capacity.

ulfstream Aerospace Corp. has declared the completion of its most recent strategic expansion: the precision production facility for the Gulfstream G400, G500, and G600, located in Savannah. The addition adds 14,2,000 square feet/13,192 square metres, to the facility's capacity.

The research and development team of Gulfstream, located in Savannah, collaborated to establish the production procedures for the G400, G500, and G600. These methods involve sophisticated automation, 3D model designs, robotics, and bonding techniques that yield unparalleled quality and accuracy. Mark Burns, president, Gulfstream

said, "Gulfstream continues to invest across all our facilities, including in Savannah, our headquarters for more than 50 years. We designed the G400, G500 and G600 to have a number of commonalities that increase both operational and manufacturing efficiencies. Those commonalities mean that we have the flexibility to easily expand production lines to meet the growing demand for these aircraft, which also increases job growth across the region. The technological advancements in our state-of-art manufacturing facilities help us deliver the highest quality product in the industry, built by the industry's most talented workforce."

The expansion of the Customer Support service centre and the fabrication of wings and empennage in Savannah are also part of Gulfstream's broader strategic plan, which also includes this increase in manufacturing. With these most recent investments, which come to a total of \$150 million, 1,600 new employment should be created in the area.

Apart from the developments in Savannah, Gulfstream has also expanded its customer support operations in the Dallas-Fort Worth region and Mesa, Arizona, and has enhanced its aircraft outfitting capabilities in Appleton, Wisconsin, and at St. Louis Downtown Airport in Illinois.



### UPCOMING FACILITY



# Dassault Aviation to open latest MRO facility at Sao Paulo Catarina Executive Airport

Dassault Aviation is set to establish a new company-owned service center at Sao Paulo's Catarina International Executive Airport, with plans to open the facility in early 2024. This new center will replace the current facility at Sorocaba and will provide enhanced services for Falcon aircraft owners in the region. The Catarina facility will offer nearly 40,000 square feet (3600 square meters) of floor and office space. It will have the capacity to accommodate up to five Falcon aircraft simultaneously, including the forthcoming ultra-longrange Falcon 10X model.

Dassault Falcon Jet Catarina will offer line maintenance services up to 'B' level checks for Brazilian-registered Falcon aircraft in the Falcon 7X and Falcon 2000 family. The center will also provide a Pre-Purchase Evaluation (PPE) program for customers considering the purchase of pre-owned Falcon aircraft.

The facility will hold Repair Station certification from various aviation authorities, including Brazil's Agência Nacional de Aviação Civil (ANAC), the FAA, EASA, and airworthiness authorities in Argentina, Bermuda, and Uruguay. This allows the center to perform line maintenance and major inspections on various Falcon aircraft models.

Dassault Falcon Jet Catarina will be qualified to conduct engine line maintenance on multiple engine models, such as the CFE-738, Honeywell TFE731, and Pratt & Whitney Canada PW307A, PW307D, and PW308C models.

The facility will offer specialized nondestructive testing (NDT) procedures, including penetrant and eddy current tests. It will also have a full-service The Dassault Aviation
Catarina facility will offer
nearly 40,000 sq.ft. of floor
and office space with capacity
for up to five Falcon jets
including the latest ultra-longrange Falcon 10X model.

battery shop for repairing, replacing, or charging main and emergency batteries on Falcon and other aircraft models. The service center will continue to support an Aircraft on Ground (AOG) 'Go Team' capable of providing rapid mobile response directly to aircraft locations throughout South America, ensuring minimal downtime for Falcon aircraft owners.

The establishment of this new service center reinforces Dassault Aviation's commitment to providing world-class support and maintenance for Falcon aircraft in the region. The strategic location at Catarina International Executive Airport, Brazil's first international airport dedicated to business aviation, enhances the convenience and accessibility of these services for Falcon operators in South America.

# HAL and Airbus locate new MRO facility in Nashik for A320 aircraft family

After receiving the necessary DGCA permission, the MRO facility will be operational and prepared for aircraft induction by November 2024 in Nashik, India.

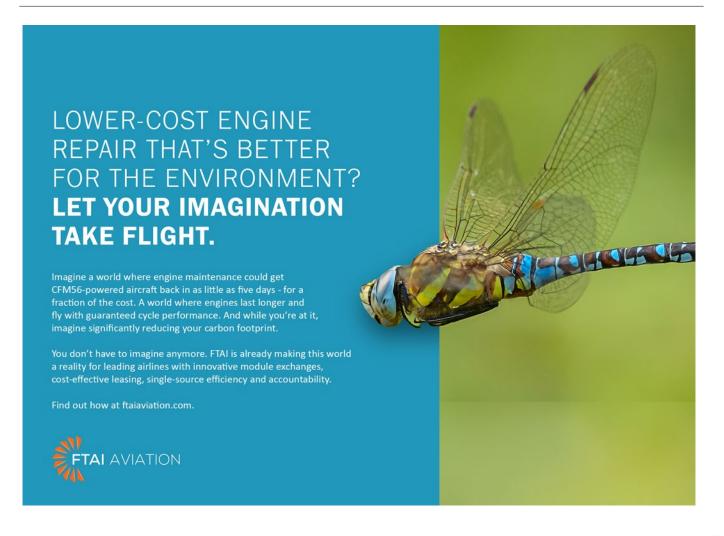


■ The deal was carried with the presence of (from left to right) Dr. D. K. Sunil Director (Engg and R&D) Shri Saket Chaturvedi, Chief Executive Officer (MiG Complex) HAL Rémi Maillard, President and Managing Director, Airbus India and South Asia and Mihir Mishra, CEO, HAL amongst other personnels.

industan Aeronautics Limited (HAL) and Airbus signed a deal to develop maintenance, repair, and overhaul (MRO) facilities for the A-320 family of aircraft in Nashik, Maharashtra, India, on November 9th. By establishing self-reliance in the aviation maintenance, repair, and overhaul (MRO) industry in India, this partnership with the biggest European aircraft manufacturing company would bolster the Made-in-India objective, according to a statement from HAL.

Nashik is now home to HAL and the Airbus MRO facility for A320 aircraft. By November 2024, the MRO facility will be operational and ready for aircraft induction, having obtained the required DGCA authorization. Airbus and Hindustan Aeronautics Limited (HAL) signed an agreement on November 9 to establish maintenance, repair, and overhaul (MRO) facilities for the A-320 family of aircraft in Nashik, Maharashtra.

India has been host to HAL and Airbus in recent MRO-related events, MRO South Asia and MRO XPO India, creating a platform for MRO businesses to explore what India has to offer and venture into the credibility of the Indian aviation industry and Indian MRO industry. MRO Business Today was pleased to be a part of the event as a media partner.



### SPECIAL STORY



Potential for €2.55 billion Sustainable Aviation Fuel (SAF) Industry in Ireland by 2050

reland has the potential to develop a sustainable aviation fuel (SAF) industry generating revenue of €2.55 billion by 2050 and providing up to 1,000 high-skilled jobs. These are the findings of a feasibility study into the production of SAF in Ireland produced by SkyNRG and SFS Ireland, in a partnership supported by Avolon, Boeing and ORIX Aviation.

The study – Ireland's Sustainable Aviation Fuel Opportunity – was launched today by the Minister for Enterprise,

### SPECIAL STORY



Trade and Employment, Simon Coveney TD, and looks at the key role SAF will play in helping the aviation industry achieve its net zero goal by 2050. IATA estimates that SAF, which can be used to replace traditional jet fuel, will deliver over 60% of the contribution needed to reduce aviation emissions to reach net zero by 2050. The European Union's ReFuelEU initiative obligates fuel suppliers to blend SAF into the fuel available at all EU airports, rising from 6% SAF by 2030, to 70% by 2050.

To meet EU mandated SAF volumes alone, Ireland will require approximately 10 SAF plants of 80 kilo tonnes production capacity each. This would create an Irish SAF sector generating revenue of €2.55 billion per annum and could provide up to 1,000 high-skilled jobs in direct and indirect employment. Further export opportunities could significantly increase these numbers.

The research finds that the biggest opportunity for Ireland lies in Power to Liquid (PtL) production of eSAF, a

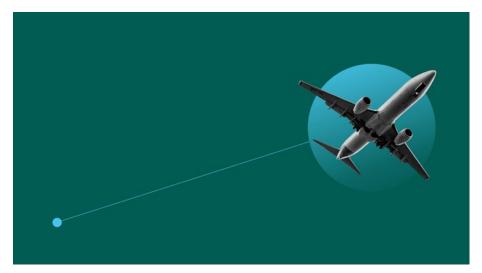
synthetic fuel produced by combining green hydrogen (extracted through electrolysis from water using renewable energy) with biogenic CO2. SAF derived from bio-based intermediates like renewable natural gas has potential to scale up more rapidly to fulfill the advanced biofuels portion of the ReFuelEU mandate.

Significant progress is required for Ireland to be able to develop eSAF at scale, particularly to ensure there is enough excess renewable power available to produce hydrogen in the required quantities. The increased levels of offshore wind power generation that Government initiatives are targeting by 2030 will put the country in a stronger position to develop a domestic SAF industry.

Minister for Enterprise, Trade and Employment, Simon Coveney, TD said: "The Government is committed to supporting EU and international action to reduce aviation emissions. The European Green Deal has set ambitious targets for reducing net emissions by at least 55 per cent by 2030, when compared to 1990 levels, and to be the first climate neutral continent by 2050. The agreement of the global long-term aspirational goal (LTAG) for international aviation at the International Civil Aviation Organisation (ICAO), which includes a collective global goal of netzero carbon emissions by 2050 further demonstrates the level of ambition of States and Industry alike. We welcome the proactive approach from the aviation sector to progress its own net zero commitments. This research presented today shows that there are clear future economic benefits from the green economy, which can create new jobs and exciting new business ventures. We look forward to engaging further with industry to explore Ireland's Sustainable Aviation Fuel (SAF) potential."

Andy Cronin, CEO, Avolon, said: "Our support for this partnership reflects our ambition to be at the forefront of sustainable innovation that will reshape the future of aviation. Large-scale deployment of SAF and the transition of the global fleet to new technology aircraft are the two biggest near-term drivers that can progress the sector's net zero by 2050 goal. It is going to require large levels of investment and close

### SPECIAL STORY



collaboration across many stakeholders, and we value the Minister's engagement to explore Ireland's sustainable aviation fuel opportunity."

Sheila Remes, Vice President, Environmental Engagement and Business Development, Boeing, said: "Significant progress is required for Ireland to be able to develop eSAF at scale, particularly to ensure renewable power is available in the scale required production of hydrogen in the required quantities. The increased levels of offshore wind power generation that Government initiatives are targeting by 2030 will put the country in a much stronger position to develop a domestic SAF industry."

Marie-Louise Kelly, CFO, ORIX Aviation, and Chair, Aircraft Leasing Ireland, said: "ORIX Aviation joined with its partners Avolon, Boeing, SkyNRG and SFS Ireland on this ambitious project because we want to be part of the innovations and as crucially, the collaborations, that will define aviation's journey to Net Zero 2050. Along with our sectoral experience we were also able to add the wider ORIX Group's extensive expertise in renewable power generation to this study. This report has identified multiple opportunities for Ireland on this journey. We welcome the Minister's commitment to engage on SAF production and look forward to exploring ways to position Ireland at the heart of the global drive to Net Zero 2050."

Darren Carty, Partner, SFS Ireland commented: "We welcome the Minister's support and take pride in collaborating with industry leaders like SkyNRG, Avolon, Boeing, and ORIX Aviation as

an SME. This feasibility study is the foundation for establishing a lowcarbon SAF industry in Ireland. We look forward to advancing collaboration and essential public-private partnerships. SFS Ireland is firmly dedicated to spearheading the production of SAF in Ireland and actively participating in the overarching mission to reduce carbon emissions within the aviation industry."

Philippe Lacamp, CEO, SkyNRG, said: "Ireland has an opportunity to combine its renewable resources, skilled workforce, and the right policy environment to create a thriving Sustainable Aviation Fuel (SAF) industry. SAF is essential for the aviation industry to achieve its net-zero target by 2050 and we need to build up SAF production capacity to cater to the rapidly rising demand. While there is still work to be done, we are convinced that Ireland can play a significant role in creating this SAF production capacity. We look forward to working with the Irish Government and other stakeholders to

Key policy initiatives the research recommends to be prioritised by the Government and other stakeholders include:

tant Irish aviation sector."

•Targets: Include sustainable aviation in climate action plans to

strengthen Ireland's position as a renewable fuel aviation hub.

•Incentivise: Incentivising mechanisms are crucial for a viable PtL business case to stimulate the development of both SAF and hydrogen: capital allowances, tax credits, guaranteed minimum pricing, investment incentives (e.g. via EII or SCI schemes).

•Research and Development: Funding and promotion of SAF technologies leveraging Ireland's third-level institutions and Government entities such as Enterprise Ireland, Science Foundation Ireland and SEAI.

•Reforming planning process: Implement a comprehensive and systematic approach in the planning process for SAF production plants, taking into account the potential for future energy parks and circular economy development in Ireland.

 Storage and transport: Invest in hydrogen storage and transport, and solving the electricity congestion issues through more flexible use / development of the grid.

•Collaboration: Collaboration between public and private sector is critical to mobilise the required investment. Cross-departmental Government relationships are also essential (DECC, DOT, DAFM) to ensure comprehensive policy framework.



# HAECO signs contract with and Safran Aerosystems to develop C919 evacuation slide

HAECO's Component Repair and Overhaul division will develop the capability to service the C919 evacuation slide and Safran Aerosystems will develop HAECO's own repair capabilities.

AECO Group has announced a significant agreement with Safran Aerosystems, a global leader in aviation systems specializing in aircraft and helicopter safety, fluid management, and fuel management. This agreement pertains to the maintenance of the evacuation slide on the C919 aircraft. HAECO Group's comprehensive airframe maintenance capabilities are underpinned by their robust engineering expertise and longstanding partnerships with key Original Equipment Manufacturers (OEMs). Their services encompass nose-to-tail base maintenance, which includes a wide range of essential tasks.

Under this groundbreaking collaboration, HAECO's Component Repair and Overhaul (CRO) division has received authorization to develop the capability to service the C919 evacuation slide. As

part of this partnership, Safran Aerosystems will provide support to HAECO by assisting in the development of HAECO's own repair capability related to this product.

This assistance includes the supply of spare parts, sale of necessary tooling and test equipment, as well as training and technical documentation for performing maintenance services on the C919 evacuation slides. The license agreement covers the Asia Pacific region, including China, where the C919 aircraft has generated significant attention and demand.

Sandra Nieuwenhuijzen, Group Director of Component and Engine Services, HAE-CO said, "We are very pleased to partner with Safran Aerosystems and secure this license agreement for the C919 evacuation slide. This collaboration signifies

a significant milestone for HAECO and showcases our dedication to expanding our capabilities in line with the evolving needs of the aviation market. We are proud to be at the forefront of innovation and look forward to delivering exceptional services to our customers."

This collaboration comes after HAECO entered into a licensing agreement with Safran Aerosystems for the A350 evacuation slide in 2022. The development for this project was completed in early 2023 and is currently in full operation. With this latest partnership with Safran Aerosystems, HAECO will further solidify its position as a leading MRO (Maintenance, Repair, and Overhaul) provider in the region. It underscores HAECO's ongoing dedication to delivering exceptional support and solutions to the aviation industry.



### How it was in 2023







### **KEY TOPICS**

- The Region Air Transport Transformation
- Aviation Technical Strategy Development
- Latest General Trends in Aircraft MRO
- Dialogue with Airline Leaders. Transformation of Business Models, Fleet Renewal, Recovery from the COVID Crisis
- MRO Digitalization

Discover the latest changes on the aircraft MRO, promote your products and services and benefit from outstanding opportunities to build new business relations and to expand your presence on the regional marketplace of the Southern Eurasia region!

### **AUDIENCE**

- MRO providers
- Aircraft & engine manufacturers
- Lessors
- Airlines
- Spare parts suppliers
- Consulting companies
- Media



Free for airlines





Embraer is strengthening its partner-ship with SkyWest, Inc. by selling 19 new E175 jets for operation in the United Airlines network. This addition complements the 90 E175 jets already operated by SkyWest for United. The aircraft will be exclusively flown under a Capacity Purchase Agreement (CPA) with United Airlines. The contract, with a value of \$1.1 billion based on list prices, has been included in Embraer's Q3 backlog. Since its establishment in 1969, Embraer has delivered over 8,000 aircraft. On average, an aircraft manufactured by Embraer takes off somewhere in the world approximately every 10 seconds, contributing to the transportation of over 145 million passengers annually.

**Airlines** 

These 70-seat E175 jets will be delivered in a three-class configuration, with

deliveries commencing in the fourth quarter of 2024. SkyWest, already the world's largest E175 operator, is excited to further enhance the passenger flying experience with these new aircraft, offering improved comfort and reliability.

Chip Childs, President and CEO, SkyWest said, "SkyWest is already the largest E175 operator in the world, and when this order is delivered we will have over 250 E175s. We look forward to continuing to improve the passenger flying experience with enhanced comfort and reliability."

Embraer, headquartered in Brazil, is a global aerospace company with interests in Commercial and Executive aviation, Defense & Security, and Agricultural Aviation. The company is involved in designing, developing, manufacturing, and marketing aircraft and systems while

providing comprehensive services and support to customers after the sale.

Martyn Holmes, CCO, Embraer Commercial Aviation, said, "We are pleased to build upon our superb partnership with SkyWest. The E175 is truly a versatile aircraft, the backbone of North American regional aviation."

Embraer holds the distinction of being the leading manufacturer of commercial jets with up to 150 seats, making it a vital contributor to Brazil's export of high-value goods. The company maintains a global presence with industrial units, offices, service centers, parts distribution facilities, and more across the Americas, Africa, Asia, and Europe. This expansion and the new E175 jet deal demonstrate Embraer's commitment to strengthening its global presence and partnerships.

# Airbus to deliver six A220 jet to Air Niugini

Air Niugini has secured a definite order with Airbus for six of the newest generation single-aisle A220-100s and will also purchase two additional A220-100s and three A220-300s from outside lessors.



Coinciding with the airline's 50th Anniversary, Air Niugini secures six new regional jets that will revolutionise travel for the citizens of Papua New Guinea.

ir Niugini, the national airline of A Papua New Guinea, As part of its fleet modernization project, has secured a definite order with Airbus for six of the newest generation singleaisle A220-100s. The carrier will also purchase two additional A220-100s and three A220-300s from outside lessors. At a special event held in Port Moresby, Hon. James Marape, Prime Minister of Papua New Guinea, and Hon. William Duma, Minister for State Enterprises, were present when Gary Seddon, Acting Chief Executive Officer Air Niugini, and Anand Stanley, President Airbus Asia-Pacific, announced the order.

With the biggest cabin, lowest fuel consumption, and greatest range in the 100–150 seat class, Air Niugini will fly the A220 on its domestic and regional network. The airline will be able to fly from Port Moresby, the country's capital, to new locations around the Asia-Pacific region thanks to the new fleet, which will also increase capacity and reliabil-

ity across the local network.

Gary Seddon, Acting Chief Executive Officer of Air Niugini said, "This is a milestone in the history of our national airline that will support the growth of trade and tourism in Papua New Guinea. The new aircraft will offer the highest levels of comfort for our passengers, while also ensuring a significant reduction in fuel consumption and emissions when compared to the aircraft they will replace."

Additionally, Air Niugini declared that it has decided to equip its fleet with a flight planning support system from Airbus subsidiary NAVBLUE. The tool, known as N-Flight Planning (N-FP), will assist the airline in meeting operational needs while optimising fuel, time, and cost while maintaining overall safety and compliance.

Minister Duma said, "This is a momentous occasion for Air Niugini. Coinciding with the airline's 50th Anniversary, Air Niugini secures six new regional jets

that will revolutionise travel for the citizens of Papua New Guinea. I am looking forward to welcoming the 'People's Balus' (the people's plane) to our skies".

Flying up to 3,450 nautical miles (6,390 km) on flights with up to 150 passengers, the A220 is the most advanced aircraft in its size class. The bigger A220-300 is ideal for the 120-150 seat market, while the A220-100 serves the 100-135 seat market depending on cabin arrangement. The newest GTFTM engines from Pratt & Whitney power the aircraft. The A220 boasts the largest cabin, seats, and windows in its class, providing the best possible comfort while still having 25% less fuel consumption and CO2 emissions per seat when compared to earlier models.

Christian Scherer, Airbus Chief Commercial Officer and Head of International, said, "Air Niugini has seen how much more the A220 brings to their airline than the competing product in this space, so much more efficiency, range, comfort and growth potential. We thank Air Niugini for its confidence in Airbus and are committed to offering our full support to the airline as it transitions to its new fleet."

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The A220 can already fly with up to 50% Sustainable Aviation Fuel (SAF), much like every other Airbus model. By 2030, Airbus wants every one of its airplanes to be able to operate with 100% SAF. By the end of September, Airbus had received over 800 orders for the A220 from over thirty clients, more than 280 of which had been fulfilled. Currently, 17 airlines worldwide are successfully using the A220 in service.



## TECNAM delivers 5 P2008JC MkII aircraft to SPANISH ONE AIR PILOT SCHOOL

Grupo One Air will now own eight Tecnam P2008JC MkII and one P2006T MkII as a result of this acquisition.

TECNAM Spanish Flight School and Spanish Flight School have announced the latter's acquisition of five more Tecnam P2008JC MkII Premium aircraft. The P2008JC with premium equipment was originally introduced and made available to students by ONE AIR, the first flying school in Spain to do so.

The adaptability and user-friendliness of the single-engine Tecnam P2008 have solidified its position as the preferred aircraft among flight training organizations across the globe.

Grupo One Air will now own eight Tecnam P2008JC MkII and one P2006T MkII as a result of this acquisition.

Grupo One Air's General Manager, Agustín Cabanillas, said, "We are very happy to collaborate with Tecnam again and expand our fleet so that our students can enjoy and carry out their training on new generation aircraft."

With its metal wings, stabilizer, and carbon fiber fuselage, the Tecnam P2008JC offers a host of benefits over conventional aircraft. An aircraft with this combination of metal and composite material is significantly quieter and more fuel-efficient.

Tecnam's Chief Sales Director, Walter Da Costa, said, "We are honored that One Air is expanding its fleet with our aircraft. We are also proud to partner with One Air and be a part of their growth and excellence."

The Tecnam P2008JC MkII version features a number of significant enhancements. Among these is a new avionics suite, including a new design of both the dashboard and glare shield, thereby enabling the introduction of Garmin's innovative G3X Touch display with an MD302 attitude instrument, also available as VFR Night.

Tradition, creativity, and foresight Tecnam is expanding its boundaries due to these considerations. Tecnam provides the world's greenest training fleet, according to current data and industry standards. Every student who receives a Commercial Pilot License from a flight school employing Tecanm's single- and twin-engine fleet can save CO2 emissions by up to 10 tons, or 60% less than if the fleet used 100LL fuel for 155 flying hours, 30 of which were spent on twin engines.

### SUSTAINABLE AVIATION

# Archer successfully conducts flight test on Midnight aircraft

The flight test will pave the way for Archer to initiate "for credit" testing of its Midnight aircraft with the FAA in 2024 as it works towards its goal of entering into service in 2025.

Archer Aviation Inc., a prominent player in the electric vertical takeoff and landing (eVTOL) aircraft industry, has announced a significant milestone in its flight test program with the successful flight of its Midnight aircraft. This achievement comes after four years of intensive flight testing, including two years of full-scale testing with the Maker aircraft.

As the flight test program progresses, Midnight's flight envelope is expected to advance rapidly, moving from hovering to full wing-borne transition flight in the coming months. This will pave the way for Archer to initiate "for credit" testing of its Midnight aircraft with the FAA in 2024 as it works towards its goal of entering into service in 2025.

Adam Goldstein, CEO, Archer said, "This next phase of Archer's flight test program is only possible because of the four years of flight testing we've done. Midnight is building on the successes of its predecessor aircraft and represents another significant step forward in Archer's path to commercialization. The next year and a half will be focused on continuing to rapidly advance our flight test program and Archer's electric air

taxi operations as we prepare to bring Midnight to market in 2025."

In parallel with the Midnight flight test program, Archer intends to continue the Maker's flight test program and conduct simulated commercial routes to enhance the company's operational readiness.

"Having taken seven full-size eVTOL aircraft from design to flight test during my career in the eVTOL industry, today's milestone with Midnight marks the most significant flight to date bringing Archer and the eVTOL industry another step closer to bringing a scalable and commercially viable aircraft to market," said Tom Muniz, COO, Archer.

Archer's ultimate objective is to transform urban travel by offering short, electric air taxi flights that can replace 60- to 90-minute car commutes with estimated flight durations of 10-20 minutes. The company's Midnight eVTOL is designed to carry four passengers and perform rapid back-to-back flights with minimal charge time between each flight.



### How Technology Can Help Airlines & MROs Retain Talent

Author: Sinikka Marten, SkySelect's Head of Sales for North America

here's been a lot of discourse about how technology such as AI will take away jobs. But, what if it can actually have the opposite effect?

Airlines and MROs are having a difficult time retaining talent because of industry demands and supply chain challenges. The jobs of material buyers and procurement specialists are becoming increasingly difficult, with more work coming and less staff to manage it all. Therefore many talented professionals are flocking to other opportunities in other industries.

However, technology could be leveraged to not replace these employees, but augment their abilities and improve overall job satisfaction. Here's how airlines and MROs can lean into technology to improve employee retention.

### Leave the Monotonous Work to the Machines, Focus on High Value Tasks

Specifically, there is a supreme opportunity to utilize the automation technology of Al. Algorithms can be trained to automate the procurement process of routine parts purchases.

For example, low-value and non-critical orders can autonomously be managed by procurement AI, freeing up the bandwidth of employees. Not only does this reduce cognitive overload, it also frees up valuable time, so employees can focus on exceptional tasks that most require human ingenuity.

This creates two benefits. In addition to reducing workload and the amount of open tasks at once, it also leads to more rewarding work since employees can drive real value by working on lever moving initiatives.

This leads to an increase in overall job satisfaction because employees feel useful and valued instead of just sitting around clicking buttons, they can make a tangible difference to the business, develop relationships and use their brains

This also affords employees the opportunity to develop additional skills such as project management, problem solving and contract negotiation, which gives them the opportunity to advance their careers within the company.

Best of all, procurement AI isn't just for routine and/or basic tasks, it also acts as a helpful aid when managing exceptions and hard to solve problems. Specifically procurement AI can help in three core areas:

- ★ Validating purchase orders (POs).
- ★ Managing exceptions on requests for quotes (RFQs).
- ★ Managing exceptions on POs.

In total, by properly leveraging technology, airlines and MROs can reduce the manual efforts of their procurement teams by up to 90%. And not only does AI do the work, it does it well. On average procurement teams experience a 20% reduction in costs, a 15% increase in on-time for performance and 100 times faster cycles from the time of part requirement to a PO.

### Better Manage Travel Demand Ebbs & Flows

Another challenging facet of the aviation industry is managing the constraint fluctuations of traveler demand, which greatly impacts operations. We experienced the extreme versions of this during and after the peak of the Covid pandemic.

After the entire industry came to a

screeching halt, most airlines, airports and supporting companies were illequipped to manage the sudden surge in demand.

After laying off significant portions of the workforce, while seeing a number of other valuable employees leave on their own accord, it was impossible to scale back up in time with new/more employees.

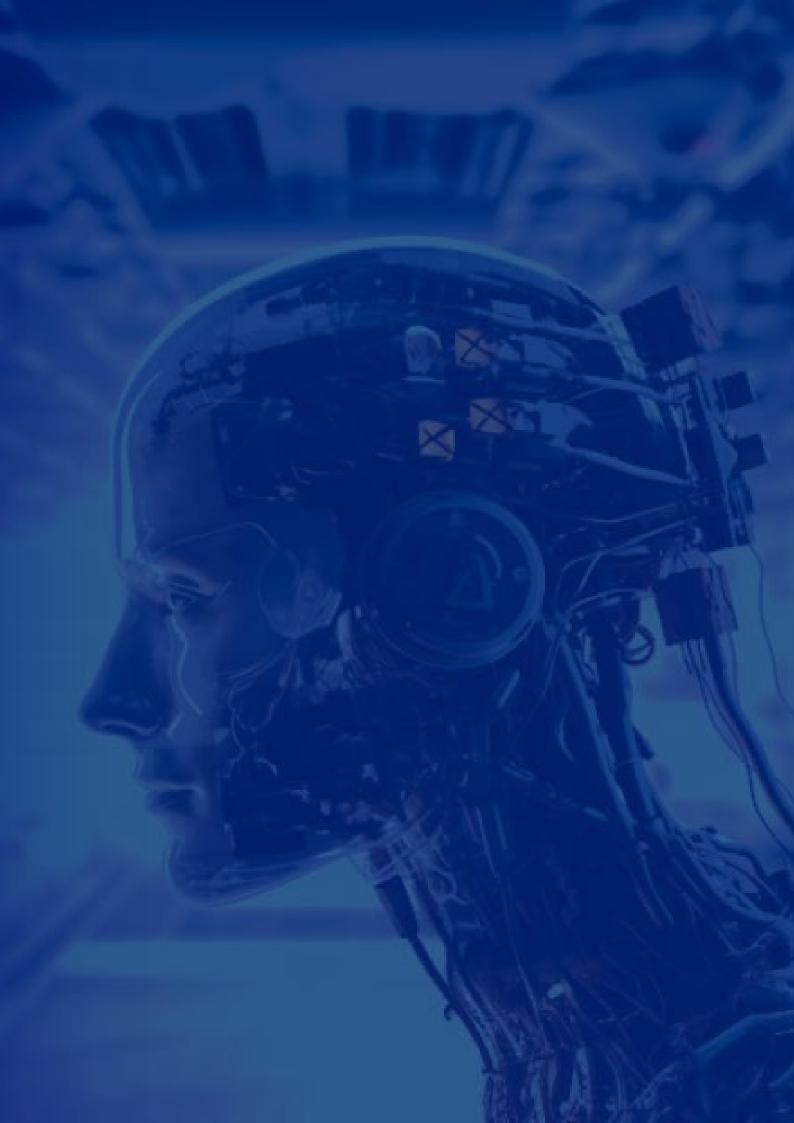
Even during more typical demand patterns it can be challenging to balance a workforce and resources against seasonal peaks and dips in demand.

This is another area where procurement AI can be an advantage to improving operations. This is because it is much easier to scale up and down with technology as opposed to managing to have the right amount of employees on the roster. It's much easier to hit pause on a piece of software than it is to make personnel adjustments.

Procurement AI can simultaneously manage hundreds of requests in minutes. And if you're going through a down time, you don't have to worry about spending money on a resource you're not using much because you'll typically only have to pay a small percentage fee on each transaction you do carry out with your technology.

The way forward isn't a matter of choosing humans or machines, but a symbiotic approach where each element is integrated into your operations to achieve optimal

results. Therefore, technology won't replace your employees, but will improve their overall job satisfaction and lead to an increase in employee productivity and retention.



### TECHNOLOGY



# Honda advances ownership experience through AMS

onda Aircraft Company announced Aircraft Management Services (AMS), a user-friendly service that is made to keep HondaJet ownership uncomplicated, providing the owners with greater control and an analogy about necessary maintenance. The HondaJet owners engaged in the Flight Ready Services Plans, AMS would be available to participate in the National Business Aviation Convention and Exhibition (NBAA-BACE), starting with U.S.-based N-registered HondaJets.

The HondaJet AMS program presents an up-to-date understanding of managing the aircraft's maintenance, under the control of the Honda Aircraft Company Customer Service Division. OEM's aircraft management specialists have to monitor and prepare for maintenance,

engage safety, dependability, and necessary preservations. The owners who have participated will receive customized maintenance management support according to the aircraft and operational necessities.

Luis Jimenez, Division Director of Customer Service, Honda Aircraft Company said, "The AMS program elevates joy, confidence, and convenience for the HondaJet owners. At Honda Aircraft Company, our top priority remains customer satisfaction, a value that starts with your HondaJet purchase and extends throughout the life of the aircraft. The AMS program further solidifies this commitment as the HondaJet fleet continues to grow."

The maintenance procedures will be undertaken by professionals at the

The HondaJet AMS program presents an up-to-date understanding of managing the aircraft's maintenance, under the control of the Honda Aircraft Company Customer Service Division.

HondaJet Authorized Service Center Network, ensuring accessibility. Undertaken by the expert technicians trained by Honda, precise Honda quality parts, and expedited scheduling, the HondaJet AMS program focuses on guaranteeing steady aircraft performance and optimized flight hours.

The AMS program offers support in forms including AOG support, upgrades and modifications, value retention, scheduled and unscheduled maintenance support and tracking, Pilot Service support, SB/AD compliance, and consolidated billing.

Honda Aircraft companies continue their commitment to improve customer satisfaction. The company is approaching a global fleet of 200,00 flight hours and has grown to 230 aircraft worldwide.

### **TECHNOLOGY**

### ACJ to offer Connect Link with Eutelsat OneWeb

ACJ has signed a MoU with Eutelsat OneWeb to improve connectivity in the Airbus Corporate Jets for elite passenger experience and utmost satisfaction while flying.

Airbus Corporate Jets (ACJ) and Eutelsat OneWeb have inked a Memorandum of Understanding to provide ACJ customers with cutting-edge in-flight connectivity. OneWeb's Low Earth Orbit (LEO) satellite constellation and a specialized electronic flat antenna will make this feasible. Through their partnership with Eutelsat OneWeb, ACJ offers its passengers onboard ACJ Connect Link the best possible satellite connectivity experience.

The NBAA Business Aviation Convention & Exhibition (NBAA-BACE) in Las Vegas was the location of the signature. Regis Broutee, VP of ACJ Services &



Customer Support said, "Through this ground-breaking agreement, ACJ is ensuring that current and future discerning owners and passengers will experience unrivaled high-speed internet in the air, no matter where they are flying."

The unique connectivity solution for

the satellite in the airplane focuses on enhancing the passenger experience. The objective is to make passengers feel at home with the bandwidth connectivity and latency that is ten times faster than the current bandwidth Ka/Ku solutions allowing multiple device connectivity with video conferences, high quality, and live TV streaming. The flat antenna will also allow drag reduction

Jason Sperry, Head of Business Aviation at Eutelsat OneWeb said, "The low latency and higher speed that is inherent in OneWeb's latest generation Low Earth Orbit network, will facilitate a broad range of applications for passenger productivity and entertainment that to date have been out of reach while inflight."

ACJ Connect Link will be available on every Airbus Corporate Jets screening platform from November onwards. Many operators have started showing interest in the platform to become early adopters.



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### **TECHNOLOGY**



### AerSale Achieves 50% Visual Advantage with AerAware

AerSale Corporation has made a huge advancement in efficiency and safety with AerAware Enhanced Flight Vision System on a Boeing B737NG jet by achieving a 50% visual advantage over the human eye in low-visibility operations.

AerSale Corporation, a prominent supplier of aviation services and equipment, is pleased to announce a significant advancement in aviation efficiency and safety. For the first time in commercial aviation, the company's AerAware Enhanced Flight Vision System (EFVS) on a Boeing B737NG aircraft has successfully achieved a 50% visual advantage over the human eye in low-visibility operations. AerSale created AerAware under a license from The Boeing Company, providing access to engineering data, maintenance, and technical assistance as needed.

The gap between what a pilot can see with an EFVS and what is visible to the unaided eye is known as a visual advantage. The 50% visual advantage breakthrough was made possible by working together on AerSale's AerAware STC with Universal Avionics and Elbit Systems. Years of painstaking study,

development, and intensive testing went into the system, which includes the Elbit Systems/Universal Avionics ClearVisionTM EVS-5000 multispectral camera. This highlights AerSale and Universal Avionics' persistent dedication to enhancing aviation safety and reliability.

Utilizing cutting-edge sensor technology and complex image processing algorithms, the EVS-5000 multispectral camera in the AerAware EFVS system provides a clear, enhanced view of the outside world, including runways, terrain, and other aircraft, in all weather conditions and throughout all flight phases.

AerAware offers a number of important advantages, but safety is the system's main strength. It offers total situational awareness in all situations and during all flight phases, going above and beyond the difficulties of

poor visibility operations. The main improvement of the system is that it can be used to improve situational awareness and safety on a regular basis instead of just in bad weather.

Nicolas Finazzo, AerSale's Chief Executive Officer, said, "We are pleased to announce this significant achievement in aviation technology and safety. Our AerAware EFVS represents a gamechanger for the industry, redefining what's possible in terms of flight safety and operational efficiency. This milestone could not have been achieved without the support and commitment of the talented teams at Elbit Systems and Universal Avionics and reflects our combined dedication and commitment to innovation and providing the most advanced solutions to our customers."

### Some of the key advantages of Aer-

Enhanced Safety: With a 50% visual advantage, the EFVS significantly raises pilot situational awareness, lowers the dispatch minimums by 50%, and lowers the risk of accidents in all flight conditions (not just those with poor visibility).

Efficiency: Pilots are able to land and take off in challenging weather with confidence, which reduces delays and cancellations and ultimately saves time and money.

Cost savings: When flights are affected by bad weather, AerAware reduces the likelihood of delays or diversions, which eliminates the need for pricey alternative transportation or lodging arrangements. In the end, this helps both airlines and passengers.

Environmental Impact: In line with the aviation industry's commitment to sustainability and ESG, improved route efficiency during inclement weather helps to reduce fuel usage and carbon emissions.

While final approval by the U.S. Federal Aviation Administration (FAA) of the AerAware STC for the Boeing B737NG is pending, the 50% visual advantage milestone for the EFVS is poised to revolutionize aviation and set new standards for safety and efficiency. This is the first system approved by the FAA for a 50% visual advantage and the only system approved at 50%.

# Cathay Pacific switches to the Global Aviation Cloud for mission-critical systems.

The Global Aviation Cloud (GAC) was utilized by Lufthansa Systems to effectively transfer Cathay Pacific's mission-critical NetLine/Ops++, NetLine/Schedule, and NetLine/Plan systems. A calculated step towards maximizing operational efficiency is the move to the GAC. The safe and expandable infrastructure of the GAC guarantees dependable operation and smooth product integration for Lufthansa Systems, giving the airline a competitive advantage in the ever-changing aviation sector.

The GAC from Lufthansa Systems was created especially to meet aviation security requirements. It provides all services from one source and comes with hosting and the required infrastructure. Cathay Pacific will benefit from a future-proof deployment approach by moving to the GAC, which will let the airline concentrate on its core business and quickly adjust to changing business requirements.

Lawrence Fong, Director of Digital and IT at Cathay Pacific, said, "We are pleased to have these operational and business-critical systems in Lufthansa Systems' Global Aviation Cloud. Having been working with NetLine/Plan, NetLine/Sched and NetLine/Ops ++ we have experienced Lufthansa Systems as a reliable partner. This new infrastructure set up has enabled us to deliver enhanced value to customers faster and with improved performance."

Lufthansa Systems' operation control system is called NetLine/Ops++. The solutions' capacity to maximize daily flight utilization, boost user productivity, and enhance airline management when there are variations from the regular schedule all benefit Cathay Pacific

David Parrish, Vice President of Sales, Southeast Asia, China, and Indochina at Lufthansa Systems, said, "We would like to thank Cathay Pacific, for their trust placed in our Global Aviation Cloud and their support during the migration project." NetLine/Ops++ can notify Cathay Pacific of potentially catastrophic situations so they may

The safe and expandable infrastructure of the GAC allows dependable operation and smooth product integration for Lufthansa Systems, giving Cathay Pacific a competitive advantage in the ever-changing aviation sector.

promptly take action to prevent and resolve interruptions by gathering and analyzing a wide range of data, such as crucial weather conditions or technical aircraft restrictions.

Charlotte Seitel, Sales Director, Hong Kong and Macau, said, "This milestone would not have been achievable without Cathay Pacific's collaboration and valuable feedback, which continues to drive our pursuit of excellence."

Cathay Pacific is assisted by Lufthansa Systems' NetLine/Sched scheduling

solution in all facets of creating and overseeing flight schedules. A versatile and reliable aircraft schedule is provided by NetLine/Sched by analyzing the profitability effects of various scheduling situations. Lufthansa Systems' industry-leading NetLine/Plan is a network planning tool that was created in partnership with top global network airlines. With its remarkable speed, accuracy, and openness, it enables airlines to optimize their profitability throughout their whole schedule.



### Bell takes delivery of the upgraded T901 Turbine Engine from GE Aerospace

Bell Textron announced its partnership with the US Army to deliver the T901 improved turbine engine for the FARA program.

Bell Textron Inc., a subsidiary of Textron Inc., declared that the US Army has formally given Bell the order for the T901 Improved Turbine Engine from GE Aerospace for the U.S. Army's Future Attack Reconnaissance Aircraft (FARA) program. Bell is now ready to finish building the Bell 360 Invictus competitive prototype and advance to the next round of the FARA competition. The engine has arrived.

Jayme Gonzalez, program manager at FARA, said, "The ITEP delivery is a major milestone for FARA and the Bell 360 Invictus competitive prototype. Now that we have received the engine, we are ready to begin working toward ground runs and other necessary preparations before the first flight later next year."

As we advance toward the first flight, Bell and Team Invictus have been concentrating on setting up our supply chain, manufacturing hub, and FARA support infrastructure to guarantee alignment. Now that they have the T901, the Bell team is ready to equip the aircraft, install the engine, and get it ready for ground testing.

Following functional testing of the aircraft with the T901 installed, the Bell 360 must complete the Test Readiness Review and a restrained ground run. The safe, quick, and effective completion of the flight test program depends on these tests.

Chris Gehler, senior vice president and program director, FARA said, "Our team has been hard at work to drive down risk in preparation for ground and flight tests. We are excited to receive the T901 engine and look forward to demonstrating the transformative capabilities of the Bell 360 Invictus. As well, we continue to advance and meet Army requirements for an open weapons system design that provides the next level of lethality and survivability into our warfighters' arsenal."

The Global 8000 aircraft project is still under development by Bombardier, and it is going according to schedule. Furthermore, when the aircraft goes into service in 2025, the amazing performance improvements on the Global 8000 will be retrofittable for current Global 7500 operators.





## Lockheed Martin to provide six Sikorsky MH-60R Helicopters for the Norwegian government

Lockheed Martin has secured a contract from the U.S. Navy for six multi-mission MH-60R Seahawk helicopters for the Norwegian government enhancing Norway's maritime capabilities.

ockheed Martin has secured a contract from the U.S. Navy to produce six multi-mission MH-60R Seahawk helicopters for the Norwegian government. Designed and built by Sikorsky, a Lockheed Martin company, these MH-60R aircraft will enhance Norway's maritime capabilities, enabling it to perform various missions, including search and rescue, coastal patrol, and offshore operations. Norway's order marks the second contract awarded for MH-60R aircraft in less than a month. Lockheed Martin recently secured a contract for eight Spanish Navy MH-60R aircraft.

Brigadier General Jarle Nergård, head of the Air Systems Division, the Norwegian Defence Materiel Agency said, "This platform has a long and proven track record of reliability and flexibility in operational environments similar to those faced by the Norwegian Air Force and Coast Guard. This is why we believe the MH-60R is the solution that best meets Norway's current requirements, and why we are very pleased to see this contract moving forward."

The MH-60R Seahawk, a part of Lockheed Martin's long-standing partnership with the U.S. Navy, offers the following benefits to Norway and other nations:

- 1. High Reliability: These helicopters are known for their reliability in extreme maritime environments.
- 2. Advanced Mission Systems: Equipped with advanced mission systems and sensors, the MH-60R Seahawk ensures effective mission execution.
- 3. Cost Efficiency: The aircraft offers low flight hour costs, making it economically feasible for operations.
- 4. Low Maintenance Costs: Its maintenance and sustainment costs are also low, reducing the overall cost of ownership.

Capt. William Hargreaves, Program Manager at the H-60 Multi-mission Helicopter Program Office, U.S. Navy said, "The MH-60R is designed for all aspects of land and maritime operations from the vast majority of air-capable ships. We are confident in Norway's selection of this unmatched, multi-mission helicopter to support their coast guard."

Sikorsky, with a track record of delivering 330 MH-60R aircraft to five countries, has another 64 in various stages of production or on order for India, Greece, South Korea, Australia, Spain, and Norway.

### **DEFENCE**



### Leonardo handovers first AW149 helicopters to Polish Land Forces

The new Leonardo AW149 helicopters are tailored to meet the specific requirements of the Polish Armed Forces equipped with observation systems, small arms, and self-defense systems.

Leonardo and The Polish Land Forces
have reached a significant milestone
with the delivery of their first two
AW149 helicopters. These helicopters,
designed for combat support missions,
are now entering service just 15 months
after the contract signing. This quick
turnaround highlights the efficiency of
the procurement process and the commitment to enhancing the capabilities
of the Polish Armed Forces.

The configuration of the new Polish military helicopters is tailored to meet the specific requirements of the Polish Armed Forces. These helicopters will be equipped with observation systems, small arms, guided and unguided rockets and missiles, and self-defense systems. Depending on the helicopter variant and configuration, the armament can be installed in the cabin or on the helicopter's external hard points. This flexibility ensures that the AW149 can adapt to a range of mission profiles and perform various tasks efficiently.

The contract for these helicopters was announced on July 1, 2022, and it includes not only the delivery of the aircraft but also comprehensive logistics, training, and simulator packages. The logistics package comprises a stock of spare parts and consumables, as well as equipment for the ground handling of the helicopters. The training and simulator package ensures that Polish pilots and technical personnel are well-prepared to operate these advanced helicopters.

Gian Piero Cutillo, Managing Director, Leonardo Helicopters said, "The stateof-the-art AW149 helicopter represents a quantum leap forward in true multirole mission and growth capability, efficient fleet management and emergency responsiveness for modern armed forces. The localisation of industrial and logistical capabilities for these new helicopters to meet Poland's needs, leverage the long established and unique capabilities of PZL-Świdnik and its professional skills combined with the outstanding operational capabilities of the AW149 will deliver unparalleled advantages to the country."

What makes this delivery even more significant is the localized production through PZL-Świdnik, the prime contractor responsible for integrating the helicopter's systems and dedicated armament. This approach not only provides Poland with cutting-edge helicopters but also establishes a domestic logistics base and technical facilities close to the Polish Land Forces. This local production is crucial for maintaining and supporting the helicopters effectively over their operational lifetimes.

Jacek Libucha, President, PZL-Świdnik said, "With complete capabilities in helicopter design, development, customisation and servicing, PZL-Świdnik confirmed again its leadership and the continuation of its over 70-year heritage through the setting of key milestones for Polish aviation industry. As a former military officer with experience in country and through international missions, I have an even greater sense of fulfillment of my duties leading PZL-Świdnik now. I am convinced that the AW149 will meet the Armed Forces' high-end needs and those helicopters will provide them the best in class combat support. This is what the platform has been designed for."

The AW149 is already in service with international operators for various applications and is under evaluation by several countries. It is ideally suited to modernize defense helicopter fleets and replace aging helicopters in the medium-weight category. The AW149 offers advanced equipment, weapon systems, and technology. It excels in terms of agility, range, endurance, safety, and survivability, making it a cost-effective solution for modern armed forces.

In summary, the delivery of the first two AW149 helicopters to the Polish Land Forces marks a significant step forward in enhancing the capabilities of the Polish Armed Forces. The localization of production and the aircraft's adaptability to various missions ensure that Poland is well-equipped for its defense needs, contributing to the country's security and operational readiness.



### Airbus H135 completes 100,000 hours of Swiss military pilot Training

In order for future missions in troop service, the ground organization of the militia receives instruction on the Airbus H135 for work on the flight line during recruit training in Payerne.

The Airbus helicopters, H135, are kept throughout the year at various places in Alpnach, Bern-Belp, Dübendorf, Locarno, and Payerne regions. VIP transport is available for the two H135s at Bern-Belp. In order for future missions to be completed in troop service, the ground organization of the militia receives instruction on the H135 for work on the flight line during recruit training in Payerne.

Michael Wirz, Chief Pilot at the Swiss Armed Forces said, "One of our main tasks is to train helicopter pilots. We train around five students per year on the H135, before they move on to large aircraft, such as the Cougar or the Super Puma. We also use it for a wide range of other missions, including border surveillance, ensuring our air safety, and patient transport."

### A flexible and quick-moving helicopter

Numerous accessories, like a rescue winch, rope down device, weight beams, and ski pads, can be quickly installed on the H135 and it can be utilised for a variety of tasks. This gives the aircraft a great deal of versatility. Furthermore, the helicopter can be operated by a single pilot in instrument flight conditions, allowing it to go to locations across Switzerland even in inclement weather.

"A few weeks ago I was called away from another mission to help a glider pilot who had problems with his radio. I intercepted the glider and the problem was resolved. The glider pilot was able to return safely to his airfield." recalls Michael Wirz.

#### Never a dull moment

Michael Wirz, Swiss Armed Forces' chief pilot, said, "Due to the versatility of the H135 helicopters, we are fortunate to have a varied daily routine - which also means that you have to master many different procedures. In the morning you might be searching for a missing aircraft, and in the afternoon you might be flying a surveillance mission with the Border Guard Corps. The Alps are located in our area of operations, thus good flight preparation and weather forecasting is very important. It's a reliable helicopter that can carry out a wide range of missions thanks to its compact size and great maneuverability."

As the 20 HI35s became operational, the Swiss Air Force has hit 100,000 long flight hours on one type of multi-mission helicopter.

### DEFENCE



### L3Harris to support U.S. Navy F/A-18 jets modernization

Under this contract, L3Harris will work on a next-generation EW system for the Navy's F/A-18 fleet to enhance pilot protection against current and emerging threats.

Jamarris Technologies has secured an \$80 million contract from the U.S. Navy to further develop advanced systems for modernizing electronic warfare (EW) capabilities on F/A-18 aircraft. This effort aims to enhance pilot protection against current and emerging threats. Under this contract, L3Harris will work on a next-generation EW system for the Navy's F/A-18 fleet. This development is a part of the Navy's strategy to keep its aircraft and aviators safe in the face of evolving and future threats.

L3Harris will create an advanced EW system that encompasses electronic support measures and electronic attack capabilities. This will enable rapid threat detection across various radio frequency bands. The EW system will be designed with a modular open systems

approach. This approach simplifies the integration of new and upgraded technologies, making it more efficient and cost-effective.

"L3Harris is developing the advanced EW system to drive mission success and ensure naval aviators are protected for years to come," said Ed Zoiss, President, Space and Airborne Systems, L3Harris. "This award builds upon decades of delivering EW systems to the Navy, and we are excited that our technology is protecting pilots in dangerous situations while allowing them to dominate potential adversaries," he further added.

L3Harris brings extensive experience to this project, having provided EW capabilities for F/A-18s for over two decades. The company's track record extends to more than 60 years, offering similar capabilities to the U.S. Air Force and allied air services worldwide.

In the ever-evolving landscape of electronic warfare, this contract signifies the commitment of L3Harris to equip naval aviators with state-of-the-art EW systems. The company's focus on advanced technology and mission success aims to safeguard pilots and maintain their competitive edge against potential adversaries.

L3Harris is a prominent name in the aerospace and defense industry, known for its innovative solutions and commitment to meeting mission-critical requirements across various domains, including space, air, land, sea, and cyber. This contract reinforces the company's position as a key player in advancing electronic warfare capabilities for military applications.

### Unilode appoints Janis Balkens as the new COO

Janis Balkens as the new COO of Unilode Aviation Services will play an instrumental role in advancing the company's progress with this vast experience in the aviation field.

Unilode Aviation Services, a market leader in outsourced unit load device (ULD) management for repair and digital services, expressed their delight to announce the Janis Balkens as the new Chief Operating Officer.

The new appointed COO, Janis Balkin has over 20 years of experience in senior leadership, operational and commercial roles in the aviation industry. His hardwork in managing the airports, airlines, ground handlers and logistics companies has been highly appreciated amongst the aviation professionals.

Ross Marino, Chief Executive Officer, Unilode said, "I am delighted that Janis has joined Unilode's Executive Leadership Team. He is extremely well placed to continue to deliver operational excellence at Unilode, and his operational and commercial expertise with a strong focus on quality and safety will

strengthen Unilode's market leader position in the ULD and galley cart sector. Janis will play a pivotal role in leading Unilode's operations to new heights and contributing to the continued growth and success of our company. Janis is a highly valued addition to our team, and I am excited to work with him to continue to deliver optimal results for Unilode."

Unilode Aviation Services hopes to advance their progress with the help of Janis Balkens experience in the aviation field. Janis Balkens served as Regional Chief Executive Officer at New & Emerging Markets at dnata most recently.

Janis Balkens, Chief Operating Officer, Unilode said, "I am thrilled to join Unilode and lead the company's global operations. Unilode's dedication to driving operational efficiencies aligns with my passion for delivering

the highest level of performance to all our customers. I strongly believe that successful leadership of both local and global teams requires trust, empowerment, and respect, and I look forward to working with the talented Unilode team to build on the company's successes and continue to elevate our services and partnerships globally. Together, we will provide our customers and partners with mutually beneficial solutions and drive our businesses forward."

Unilode Aviation Solutions, headquartered in Zurich, Switzerland, is a major player in aviation logistics. They manage the world's most extensive outsourced fleet of Unit Load Devices (ULDs), such as containers and pallets, and operate a vast global network for maintaining and repairing these ULDs, alongside inflight food service equipment.

# Textron Aviation announces Chad Archer as new Senior Vice President and CFO

Chad Archer in his new role will be in charge of all financial operations of Textron Aviation Inc. in his new position, including economics, strategy, and integration as well as financial planning and analysis.

extron Aviation, the general aviation business unit of the conglomerate Textron, announced Chad Archer as the new Senior Vice President and CFO. Prior to this, Chad held the position of vice president for strategy, financial planning, and analysis. Chad has had a number of executive roles in corporate management, financial planning, and analysis during his time with Textron Aviation. He has consistently shown leadership in mergers and acquisitions, as evidenced by the most recent successful integration of AeroMotion last year, and he has met major sales

growth targets in the Asia-Pacific area

Chad Archer, senior vice president and Chief Financial Officer (CFO), Textron Aviation, said, "I grew up in Hutchinson, Kansas, where I met my wife. We've been married for almost 20 years and love to travel with our two daughters."

He will be in charge of all financial operations of Textron Aviation Inc. in his new position, including economics, strategy, and integration as well as financial planning and analysis. He takes over for Dave Rosenberg, who was elevated to Textron's vice president of investor relations.



### **EXECUTIVE IN FOCUS**



Embraer has announced leadership changes in its Defence & Security division. The company has appointed Jake Williams as the new Vice President of Business Development & Sales for Embraer Defence & Security (EDS) in North America, effective from November 2023. This change comes as Bruce Bunin, who has had a distinguished aerospace career, prepares for retirement. He will assist in the transition to Jake Williams and support special projects.

"We are delighted to have Jake Williams join the Embraer team in this strategic position," said Frederico Lemos, Chief Commercial Officer of Embraer Defence & Security. "North America is a key defence market for Embraer, and we see solid opportunities to continue the growth path for Embraer Defence in the region, with solutions such as the C-390 Millennium. This is an important time for us in North America, and we are confident Jake will build on the

successes of Bruce and the team," he further added.

Jake Williams brings two decades of experience in the aerospace industry to his new role. Prior to joining Embraer, he worked at the L3Harris Corporation as the Director of Business Development, Strategy, and Partnerships for JADC2 and C4ISR Programs. Throughout his career, Williams has taken on various roles in business development and program management, working on modernization and upgrades of both fixed-wing and rotary-wing aircraft. He also has international experience and has even founded a successful aerospace consulting company. He will be based in Melbourne, Florida.

"I speak on behalf of entire Embraer team in expressing my sincere gratitude and appreciation to Bruce Bunin for his tireless dedication and numerous accomplishments during his time at Embraer," said Frederico Lemos, CCO Embraer Defence & Security. "Bruce has successfully positioned Embraer as a recognized and respected defence and security company in North America. And through his knowledge, experience, and teamwork, he has made significant contributions to successful sales campaigns of Embraer products and services worldwide. We wish him all the best in his retirement," he further added.

Bruce Bunin, who joined Embraer in 2016, came from McDonnell Douglas and Boeing, where he held executive leadership positions in Program Management, Business Development, and Engineering on military and commercial programs. During his time at Embraer, he played a pivotal role in business development and sales for Embraer products to government and military customers in North America. He also contributed significantly to the formation and execution of industrial partnerships with U.S. companies.

# International CALENDAR

Date	Event	Venue
13-17 Nov 2023	Dubai Airshow 2023	DWC, Dubai
14-15 Nov 2023	Aerospace Tech Week Americas	Atlanta, USA
06 - 08 Dec 2023	Air Expo India	Indira Gandhi Intl Airport-New Delhi
14 – 15 Feb 2024	MRO Latin America	San José, Costa Rica
20-24 Feb 2024	Singapore Airshow	Changi Exb Centre,Singapore
27-29 Feb 2024	MRO XPO INDIA	New Delhi, India
27-29 Feb 2024	Aircraft Interiors INDIA	New Delhi, India
28-29 Feb 2024	Aerospace & Defence MRO South Asia 2024	New Delhi, India
28 Feb – 01 Mar 2024	Aero-Engines Americas	Miami, FL, USA
29 Feb – 01 Mar 2024	Engine Leasing, Trading & Finance Americas	FL, USA
05 –0 6 Mar 2024	Aircraft Interiors Middle East 2024	Dubai, United Arab Emirates
05 –0 6 Mar 2024	MRO Middle East	Dubai, UAE
7 – 8 Mar 2024	PBExpo 2024	Miami, FL, USA
9 – 11 April 2024	MRO Americas	Chicago, USA
17 – 18 April 2024	Aerospace Tech Week Europe	Munich, Germany
24 – 25 Apr 2024	Aero-Engines Asia-Pacific	Hong Kong
28 – 30 May 2024	Aircraft Interiors EXPO	Hamburg, Germany
28 – 30 May 2024	EBACE 2024	Geneva, Switzerland
30 Apr – 2 May 2024	Global Aerospace Summit 2024	Abu Dhabi, UAE
02 –04 June 2024	IATA AGM & World Air Transport Summit	Dubai, UAE
05 –06 Jun 2024	Engine Leasing, Trading & Finance Europe	London, UK
06 – 08 Jun 2024	France Air Expo Lyon 2024	Lyon, France
12 – 14 June 2024	Aircraft Cabin Innovation Summit USA 2024	Dallas Fort Worth, Texas

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