

Safran signs 4-year NacelleLife service contract to support Avianca Airbus A320neo nacelles fleet

Pg **03**

AEI awarded STC approval from Civil Aviation Authority of Malaysia for B737-800SF Freighter Conversions

Pg **10**

Lufthansa Technik AG delivers second Airbus A350 jet to the German Armed Forces

Pg **21**

Dec 01<sup>st</sup>, 2022



## Silk Way West Airlines selects GE Aerospace's GE9X and GE90 engines for Boeing 777 B2F fleet

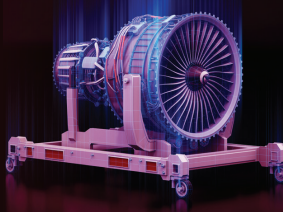
*Silk Way West also recently announced the purchase of GE9X-powered Boeing 777-8 Freighters and GE90-powered Boeing 777 Freighters to upgrade its cargo fleet.*

Silk Way West Airlines, an Azerbaijani cargo airline has announced it has signed an order for a combined total of 16 GE9X and GE90 engines with GE Aerospace to power its fleet of long-haul Boeing 777 aircraft. Silk Way West also recently

announced the purchase of GE9X-powered Boeing 777-8 Freighters and GE90-powered Boeing 777 Freighters to upgrade its cargo fleet. The latest engine order by Silk Way West Airlines includes five GE9X engines and 11 GE90 engines.

"We are delighted to continue a successful, long-lasting cooperation with GE Aerospace," said Mr. Zaur Akhundov, President, Silk Way Group. "This agreement marks the strengthening of our relationship. This is a step forward to a more sustainable future. We believe that this partnership extension will help us to deliver our long-term strategy of sustainable growth and environmental commitments, allowing us to continuously improve the services provided to our valuable customers," he further added.

The GE Aerospace GE9X is the most powerful aircraft engine currently and the quietest GE engine ever produced (pounds of thrust per decibel). The engine will bring up to 10% specific fuel consumption improvement compared to the GE90-115B. Like all GE commercial engines, both the GE9X and GE90 are



compatible with any approved sustainable aviation fuel.

“The GE9X engine offers a combination of power and fuel efficiency that is unmatched in its class,” said Kathy MacKenzie, President of Commercial Programs for GE Aerospace. “We are proud

to continue building our relationship with Silk Way West as they continue to modernize their fleet for cargo operations,” she further added.

GE Aerospace is a provider of jet engines, components and systems for commercial and military aircraft with a

global service network to support these offerings. GE Aerospace and its joint ventures have an installed base of more than 39,000 commercial and 26,000 military aircraft engines, and the business is playing a vital role in shaping the future of flight.

## GE to provide overhaul support for Virgin Australia CFM56-7B engines powering the CFM56 fleet

*The GE Aerospace TrueChoice suite of engine maintenance offerings incorporates an array of GE capabilities and customizations offered to Virgin Australia across an engine's lifecycle.*

GE Aerospace, a provider of jet and turboprop engines to customers around the globe, has signed a 10-year TrueChoice Overhaul Agreement with Virgin Australia the largest airline by fleet size to use the Virgin brand. According to the GE Aerospace trademark TrueChoice agreement signed with Virgin Australia, GE will provide support service for the airline's CFM56-7B engines which power its fleet of Boeing B737 Next Generation aircraft. Virgin Australia currently operates 78 B737 NG aircraft, and has plans to extend to 84 aircraft through 2023.

“We are pleased to have secured this agreement with GE Aerospace, a company that upholds the highest global standards in aircraft engine production and maintenance”, said Stuart Aggs Chief Operations Officer, Virgin Australia. “Not only will this agreement ensure Virgin Australia's access to world-class engine maintenance expertise, but it will deliver significant efficiencies to the airline. This agreement is another example of our ongoing commitment and focus on creating a simplified and efficient business,” he further added.

The GE Aerospace trademark TrueChoice suite of engine maintenance offerings incorporates an array of GE capabilities and customizations offered to the customer across an engine's lifecycle. All offerings under the TrueChoice agreement are underpinned by GE data and analytic capabilities and experience to help the customers in reducing maintenance burden and service disruptions. Accord-



■ The newly signed agreement between the two companies demonstrates the company's commitment to its Boeing B737 fleet for the long term.

ing to Virgin Australia's Stuart Aggs, the newly signed agreement between the two companies demonstrates the company's commitment to its Boeing B737 fleet for the long term.

“GE Aerospace is honored to provide maintenance, repair, and overhaul services for the Virgin Australia fleet, extending an important relationship that was established when the airline began operations 22 years ago,” said Russell Stokes, President and CEO Commercial Engines and Services, GE Aerospace. “This agreement ensures Virgin Australia's engines will receive the highest quality material and workmanship that

a trusted OEM can deliver, to help keep their aircraft engines in top performing condition.”

Virgin Australia Group is a major Australian airline headquartered in Brisbane, Australia. The company operates an extensive domestic network as well as short-haul international, charter and cargo services, and the award-winning loyalty program, Velocity Frequent Flyer. The Group employs more than 7,000 people and has been a competitor in the Australian aviation landscape for 22 years. GE Aerospace and its joint ventures have an installed base of more than 39,000 commercial and 26,000 military aircraft engines.

# Safran signs 4-year NacelleLife service contract to support Avianca Airbus A320neo nacelles fleet

*Avianca, according to the contract, will have access to Safran Nacelles' shared pool of nacelles end-items and will also benefit from the OEM-guaranteed MRO solutions at Safran Nacelles.*



■ 17 Avianca Airbus A320neo aircraft under the contract are already being serviced by Safran.

Safran Nacelle, an expert in the assembly of aerostructures such as thrust reversers, has signed a 4-year agreement with Avianca, the flag carrier of Colombia. According to the agreement, Safran Nacelle will provide support for the nacelles of Avianca's Airbus A320neo fleet powered by the CFM International LEAP-1A turbofan engines. 17 Avianca Airbus A320neo aircraft under the contract are already being serviced by Safran. The deal is the result of Avianca having plans to rapidly grow its fleet.

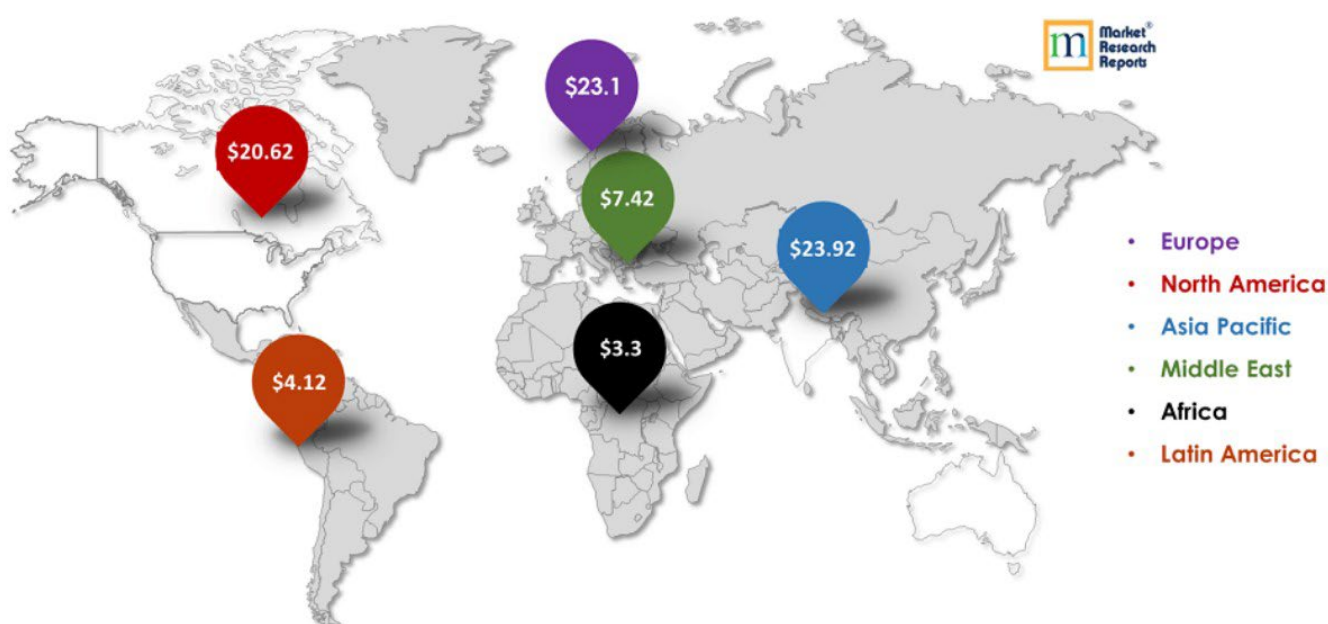
Alain Berger, Executive Vice President – Customer Support & Services, Safran Nacelles said, "I am delighted that Avianca is strengthening its trust in Safran Nacelles for their A320neo nacelle fleet, following their first contract announced in 2019. We are fully committed to delivering services that meet Avianca's needs for their new generation aircraft."

Avianca, according to the contract, will have access to Safran Nacelles' shared pool of nacelles end-items. The airline will also benefit from the OEM guaranteed Maintenance, Repair

and Overhaul (MRO) solutions at Safran Nacelles repair station in Indianapolis, Indiana, United States of America.

Albert Pérez, Vice President Maintenance, Avianca said, "We know that punctuality is one of the most relevant attributes for our customers, and our priority at Avianca is to deliver on-time departures. In that sense, this agreement not only ensures the availability of our assets, but also enhances our ability to react through Safran Nacelles' strategic stocking locations. This agreement will also help us to keep our aircraft in flight, where they need to be and without disruptions, while at the same time being more efficient in terms of maintenance."

Safran Nacelles' repair services and spare resources are part of the company's trademark NacelleLife support program, which ensures responsive, cost-effective and high-quality services that keep airliners in operational condition while minimizing costs. CFM International is a 50/50 joint company between Safran Aircraft Engines and GE.



The Global Expanse of Commercial Aircraft MRO Market - Value in USD Bn (2020)

# MRO EXPANSIONS AND PARTNERSHIPS

## Size of aviation market & mro scope, opportunities

The Maintenance, Repair, and Overhaul (MRO) sector, which ensures the availability and airworthiness of aircrafts, is of critical importance to global aerospace and defence industries. MRO activities virtually form the backbone of the industry and is estimated to reach around \$61 billion in annual revenue.

According to verifiedmarketresearch.com aircraft MRO market was valued at USD 45.12 Billion in 2022, and with a growth rate of 3.65% CAGR (2023 -2030) the projected figures are pegged to reach USD 62.25 Billion by 2030.

Closer to home in India, based on industry reports, the country is hailed as the seventh-largest civil aviation market in the world. It will rank third by 2026, (only after the US and China markets), as

predicted. Now consider the immense demand, and the subsequent scope for expansion and opportunities for the MRO business in India!

With recovery in 2021 in the commercial aviation space, there has been an uptick in aircraft deliveries. For instance, both Airbus and Boeing together delivered 951 aircraft in 2021, vis-à-vis 723 in 2020. Furthermore, with increase in air travel to pre-pandemic levels expected by 2024, and with ongoing fleet upgrades and network planning by airlines, the mood remains upbeat. So do the order books of OEMs. End 2021, Airbus and Boeing reported aircraft delivery backlogs of 7082 and 5136 aircrafts respectively. Now with these deliveries starting to commence, various stages of maintenance would be required from MRO providers.

## The India Market

According to a Deloitte study, the Indian MRO industry size is expected to increase from US\$ 1.7 billion in 2021 to US\$ 4.0 billion by 2031, at a (CAGR) of 8.9 %. With more than 1000 aircraft on order, one can expect 200 to 300 comprehensive maintenance checks annually.

In comparison, the expected global CAGR is 5.6 percent.

## In-house mro activities giving way to third-party providers

Some airline struggling with cost of resources like tooling, labour and land, have done away with in-house maintenance activities, while some took to MRO servicing of aircraft of other carriers, as profit centres. Then again, with the entry of low-cost carriers there has been a heavy reliance on vendors to provide MRO

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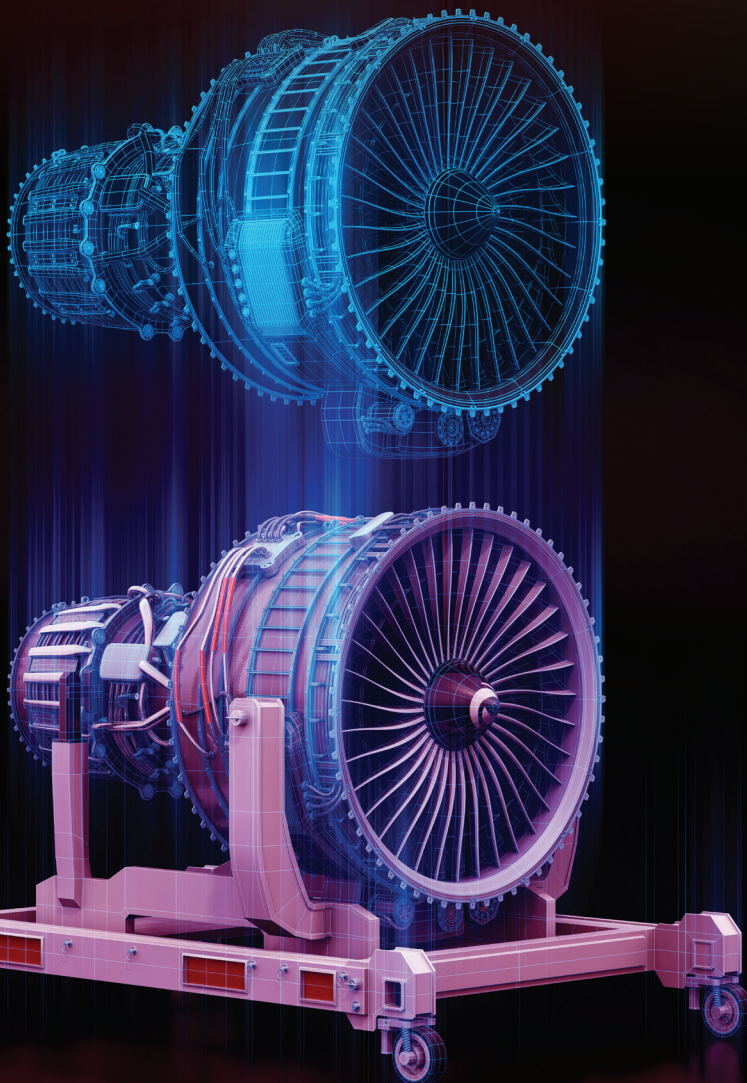
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Image Courtesy :- ynwct.com



services. This cost-saving method was adopted by several airlines just to remain afloat as also competitive.

With fleet expansion seeing some movement, demand too has arisen for maintenance services. To strike a healthy balance between capacity adjustment and meeting customer demand, MROs relied upon mergers, consolidations, partnerships and alliances, in order to expand. Thus, the MRO business too adopted a competitive stance, like carriers.

## Expansions & partnerships – way to go

The aircraft MRO business seems to be evolving, with more and more airlines seeing the benefits of outsourcing such critical services. Initiatives such as outsourcing by airlines, and MROs winning contracts with original equipment manufacturers (OEMs) have stood MRO providers in good stead. One must be mindful while running an MRO business that cost and service excellence are the driving factors for airlines to select their respective MRO providers.

Roland Berger research finding said about the post pandemic situation, 'recession as the most likely outcome' and predicts 'consolidation as the solution'. So be it. The MRO sector will continue to embrace consolidations and partnerships to accelerate their organic growth. Some fine examples of these developments are:

- United Technologies, Rockwell Collins and Raytheon all merging to form a formidable entity - Raytheon Technologies.
- Zodiac Aerospace's absorption into Safran is a reflection of strengthening positions through integration, as also capturing value-chain coverage.

Investment firms too have contributed to the MRO growth story:

- The Carlyle Group's strategy of 'Buy and Build' brings smaller and similar companies under their flagship umbrella brand 'StandardAero'.

Aircraft OEMs on the other hand have focussed on acquiring specific businesses like aftermarket parts sale, as an extension of their capabilities and competencies.

## Concentration of mros geographically & growth of service hubs

While most continents and regions around the globe offer MRO services, a higher concentration of the business remains in Asia, Europe, and the Americas.

According to forecasts, air transport MROs will set up an increasing number of MRO 'service hubs' spread internationally. This development comes on the heels of rising air travel and cargo transportation, and this alone can justify investing in these regional hubs. According to the above Mordor Intelligence infographic, MRO spend in the Asia Pacific region by airlines will be higher

and the industry is expected to bounce back to pre-pandemic levels the fastest. Late 2022 as forecasted.

## Growth of service hubs

### Asia-Pacific Region

The Asia-Pacific region will witness the fastest growth over the next decade, with good demand for narrow body aircraft. Again, with 1/3 of the world's commercial aircraft concentrated in this region and growing, this is an encouraging regional growth story, leading many reputed MRO players to set up service hubs. Some such entities are:

- In 2020 Pratt & Whitney GTF the global engine maintenance arm of the aircraft engine manufacturer spread their network by setting up two new MRO service providers in China.

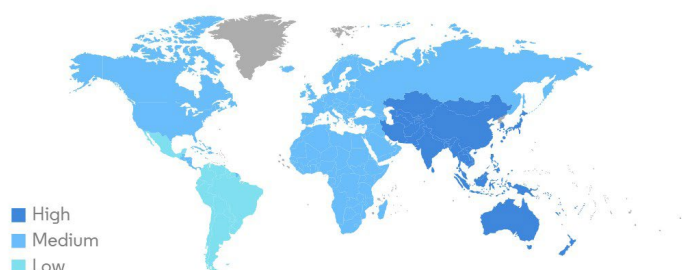
- Aircraft Maintenance and Engineering Corporation (AMECO) (a JV between Air China Limited and Lufthansa Airlines) and MTU Maintenance Zhuhai Co. Ltd (a JV between MTU Aero Engines and China Southern Airline Company Limited) established a new hub for GTF's MRO network for maintenance and servicing PW1100G engines for the Airbus A320 Neo aircraft family.

With low-cost labour availability in markets such as Vietnam and Thailand, opening up of MRO facilities as service hubs, become an attractive proposition. Optimism abounds this region.

### Middle East

At the 2019 Aircraft Interiors Middle East (AIME) and MRO Middle East event held at the Dubai World Trade Centre, and given consistent growth in the Middle East, partnerships were considered the big idea in innovation at these meets.

Commercial Aircraft Maintenance, Repair, and Overhaul (MRO) Market - Growth Rate by Region (2022 - 2027)



Source: Mordor Intelligence



Image credit- Mordor intelligence

## Latin America and Africa

In the Latin American and African markets, recovery remains slow with the effects of the corona virus pandemic lasting longer in those regions.

## Europe and North America

Another factor impacting the travel sector and in turn MRO services is the adoption of a hybrid work culture and remote working. Hence, business travel across Europe and North America is expected to be much slower. 2024 is when the European and in 2025 the North American markets will see an upward trend.

In the short term, MRO companies are resorting to the usual cost-cutting measures, cross-utilising workforce, cash conservation and postponement of investments. However, in order to recover fully, in the mid-to-long term, MROs need to wake up to realities like takeovers and industry consolidations.

## Top performers and their partnerships

### 1. AAR Corporation:

The U.S.-based AAR Corporation is the largest independent MRO provider in North America, serving a global consumer base. In February 2018, AAR Corporation announced a joint venture with Indamer Aviation – an MRO facility expansion to increase its footprint in India.

### 2. ST Engineering:

ST Engineering ranks among the largest

defence and engineering groups in Asia. In June 2019, ST Engineering announced a partnership with Honeywell through which ST Engineering will act as a licensed repair centre for Honeywell components.

### 3. Lufthansa Technik AG:

Lufthansa Technik AG — a part of Deutsche Lufthansa AG — is a leading provider of maintenance, repair, and overhaul services for aircraft, engines and components. In March 2020, Lufthansa Technik and Safran Landing Systems entered into an MRO partnership agreement for A380 landing gear.

### 4. HAECO, Hong Kong:

Hong Kong Aircraft Engineering Company Limited (HAECO) is an aircraft engineering and maintenance company specialising in providing airframe maintenance, structural modification, non-destructive testing, and cabin reconfiguration services. Working out of its 27 hangars in six locations in the United States, Hong Kong, and Mainland China, in November 2018, it became a fully-owned subsidiary of Swire Pacific.

In December 2019, HAECO announced its partnership with Ramco Systems the global software specialist for advanced aviation solutions in Hong Kong, Xiamen, and Jinjiang.

### 5. GE Aviation, USA:

GE Aviation — is a leading aircraft

engine supplier, offering engines for the majority of commercial, military, and business aviation jets and turboprop engines and components.

In November 2019, Sanad Aerotech — a leading engine Maintenance, Repair, and Overhaul (MRO) solutions provider, announced a partnership with GE Aviation for next-generation narrow and wide body aircraft. MRO services include work on the GENx-1B engine and overhauls on CFM International's LEAP engines for GE.

## Watchpoints for mro companies on an expansion mode:

While entering partnerships, MRO providers must assess which partnership will help achieve fruition leading to developing cutting edge capabilities and offerings. Also, for supply chain optimisation, choosing locations or stockists for stocking critical components around the world must result in achieving a quick TAT (turn-around time), without having to run up major capital expenditure while moving men and machinery, parts and components.

## Reference Credit:

1. Modorintelligence.com
2. Deloitte
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5. Reftek.com
6. Straits Research
7. Connected Aviation Today



# GKN Aerospace to open 100,000 sq.ft additive manufacturing center in Texas, U.S

*The new GKN Aerospace 100,000 sq. ft facility will initially house research and development of (LMD-w) additive manufacturing technology for large-scale titanium aerostructures.*



■ When at full new Fort Worth, Texas capacity, the center will support up to 100 personnel.

**G**KN Aerospace, a multi-technology tier 1 aerospace components production company has announced that it will relocate its North America additive manufacturing (AM) center of excellence to the Lone Star Commerce Center in Fort Worth, Texas, U.S. GKN Aerospace this relocation aims to strengthen its position as an additive technology leader with a larger facility and further plans for an additional larger AM cell, and for increased collaboration within the aerospace ecosystem.

The 100,000-square-foot facility will initially house research and development of laser metal deposition with wire (LMD-w) additive manufacturing technology for large-scale titanium aerostructures. Early in 2023, GKN Aerospace will transfer existing equipment and personnel from Oak Ridge National Laboratory's Manufacturing Demonstration Facility in Tennessee, U.S. to the new site in Texas.

Shawn Black, President of Defense, GKN Aerospace said: "We are very excited to bring our additive technology research to Fort Worth. With proximity to many of our major customers in Texas and across the US, this is the right place for GKN Aerospace. Along with partnership with local government, we look forward to expanding our titanium additive manufacturing capabilities and pushing the boundaries of this technology for our customers and the aerospace industry."

Over the next few years, GKN Aerospace aims to transform the in-construction facility into its fourth Global Technology Center to complement existing centers in Sweden, the Netherlands, and the UK. GKN Aerospace will renovate the facility with office space and equipment over the next two years, while the City of Fort Worth will provide grant funding based on qualified R&D investment. When at full capacity, the center will support up to 100 personnel.

Robert Sturns, Director of Economic Development, City of Fort Worth said: "Fort Worth is proud to welcome GKN Aerospace and excited by the cutting-edge R&D that it will bring to the region. This center of excellence builds on a strong cluster of Fort Worth-based firms who are innovating the future of aerospace and transportation manufacturing, and we look forward to the partnership that we are building with GKN Aerospace."

GKN Aerospace is a company in LMD-w technology, with decades of experience in advanced aero-engine component development and large aerostructure expertise, with AM components currently flying on platforms across the civil engines and space markets. It recently achieved a milestone by completing its largest titanium AM demonstration part to date, with the production of a component measuring 8 feet (2.5 meters) and processed from approximately 100 pounds of titanium wire.

# Thompson Aero Seating to open Dynamic Test Facility in Northern Ireland

*Thompson Aero Seating's new Dynamic Test Facility (DTF) in Northern Ireland will be built with an investment of £7.5 million for premium development and innovation of aircraft seating.*



■ The test equipment is to be installed in the new facility by the Summer of 2023 and testing is due to commence in the Autumn of 2023.

Thompson Aero Seating, a company that designs, engineers and manufactures premium, business-class and First Class aircraft seating, has announced the company's plans for the construction of a world-class Dynamic Test Facility (DTF) in Northern Ireland.

The new facility will be built with an investment of £7.5 million. The facility will catapult Thompson into a new era of premium development and innovation of aircraft seating.

Construction works have already begun to extend the premises for the

DTF at the Thompson brownfield site in Banbridge, County Down, Northern Ireland and are planned to complete in Spring 2023. The test equipment is to be installed in the Summer of 2023 and testing is due to commence in the Autumn of 2023.

Neil Taggart, CEO, Thompson Aero Seating said, "Having our own Dynamic Test Facility will give us a huge opportunity to save on lead times in the development of our new seats and improve sustainability – which have to be positives for our airline customers."

In parallel with the building works, there will be recruitment for several test engineering roles representing an exciting opportunity to shape the formation of a new capability within the business and become an integral part of designing the next generation of world-class aircraft interior products.

The DTF will give Thompson enhanced capability to certify new products for airworthiness and to carry out research and development work, without even needing to leave the factory. Currently, there is no DTF on the island of Ireland and Thompson has had no choice but to send products and team members to test facilities in Europe and North America.

# ExecuJet MRO Services Malaysia to open New Purpose-Built MRO Facility at Subang Airport

*The new facility will have a gross floor area of around 149,500ft<sup>2</sup> and the ultra-large aircraft hangar will be able to accommodate 10 – 15 business jets of various sizes simultaneously.*



ExecuJet MRO Services Malaysia, a company that specializes in Airframe, Avionics and Engine maintenance, has commenced the construction of its new purpose-built maintenance, repair and overhaul (MRO) center at Malaysia's Subang Airport. With this new facility, the company aims at providing help to reinforce Malaysia's position as a regional hub for MRO. ExecuJet MRO Services Malaysia has appointed a team of experienced consultants to design the new Subang Airport facility.

The new facility will have a gross floor area of approximately 149,500ft<sup>2</sup> including corporate offices, customer areas

and back shops that further expand ExecuJet's MRO capabilities. The ultra-large aircraft hangar will be able to accommodate 10 to 15 business jets of various sizes simultaneously plus there will be a large dedicated apron area for use.

ExecuJet is already Malaysia's largest business aviation maintenance, repair and overhaul company. ExecuJet MRO Services has a facility at Subang Airport but has announced plans to relocate to the larger, purpose-built facility in 2023's fourth quarter when construction is completed. ExecuJet MRO Services Malaysia is a Dassault Aviation subsidiary.

"These consultants are well-known in the market, especially in Southeast Asia, and have been involved in the construction of aviation MRO facilities in Malaysia and the wider region," says Ivan Lim, Regional VP Asia, ExecuJet MRO Services.

"You need to have a team with experience and knowledge of aircraft MRO hangar operations, so they can advise on how the facility's design can complement the needs of your MRO operation with the aim to maximize operational efficiency. This is why it's so important to have a project team who is familiar with the work processes and needs of our industry," he further added.

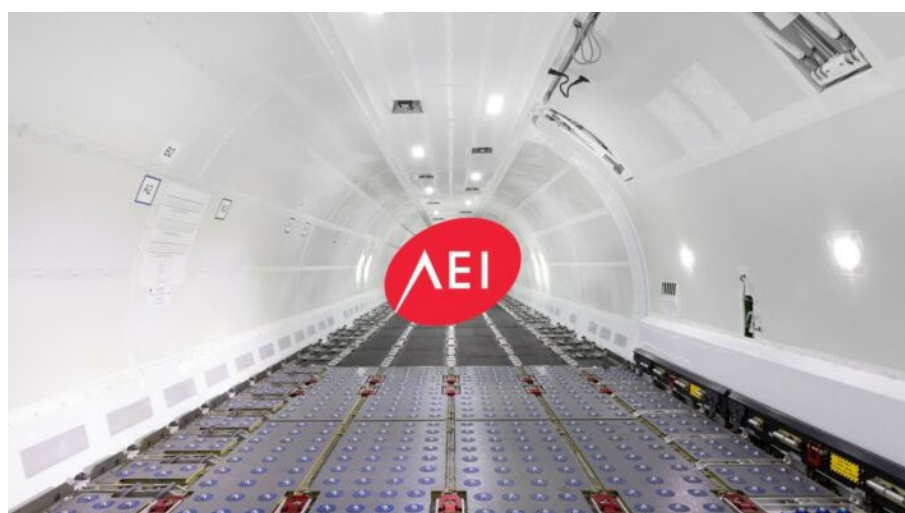
According to the company, a key objective behind the design of the MRO facility was to maximize hangar space as well as to have environmentally-friendly features as part of the Group's ongoing Corporate Social Responsibility commitment. The company aims to make use of natural sunlight, as much as possible, while the lighting inside will be energy-efficient LED lights. The facility will be partly powered by an 85kW rooftop solar

system and there will be water tanks for harvesting rainwater. The design of the hangar has also been future-proofed. For example, the reinforced concrete floor can accommodate the weight of business aircraft substantially heavier than those available today.

The hangar can accommodate almost all the largest business jets currently in development, such as the ultra-large cabin Dassault Falcon 10X which is due to enter into service in 2025 ExecuJet MRO Services serves Dassault, Bombardier and Gulfstream operators from across the Asia region and is certified by the CAA of Malaysia, US FAA, EASA and many other international airworthiness authorities. It can quickly dispatch mobile repair teams around the region, when needed, including to growing markets such as Vietnam.

## AEI awarded STC approval from Civil Aviation Authority of Malaysia for B737-800SF Freighter Conversions

*AEI is currently the only conversion company with ETOPS 180 approval for 737-800 freighter conversion including those with Flat Aft Pressure Bulkheads, and Split Scimitar winglets.*



**A**eronautical Engineers, Inc. (AEI), a global company in the aircraft passenger-to-freighter conversion business has announced that the company has been awarded STC (STO2690LA) approval for the 12-pallet position Boeing B737-800SF freighter conversion from the Civil Aviation Authority of Malaysia

(CAAM). Aeronautical Engineers, Inc. (AEI) has now gained approvals from FAA, CAAC, EASA, TCCA, UK CAA, CAACI (Cayman Islands) DCA (Guernsey), ANAC and the latest from CAAM for its B737-800SF Freighter Conversions.

AEI is currently the only conversion company to have ETOPS 180 approval

on the 737-800 freighter conversion. AEI can convert all 737-800 line number aircraft including those with Flat Aft Pressure Bulkheads, and Split Scimitar winglets. The AEI converted B737-800SF freighter offers a main deck payload of up to 52,700 lbs. (23,904 kg) and incorporates eleven full-height 88" x 125" container positions, plus an additional position for an AEP/AEH. The conversion also incorporates new floor beams aft of the wing box, and a large 86" x 137" Main Cargo Door with a single vent door system.

AEI's futuristic design allows for containers to be loaded into the aircraft a full 16.5" aft of the forward door jamb, which ensures ground operators have sufficient maneuvering room which minimizes potential door and aircraft strikes. Additionally, the AEI B737-800SF converted jet includes a flexible Ancra Cargo Loading System, a rigid 9g barrier, five supernumerary seats as standard, a galley, and a full lavatory.

## Lufthansa Technik secures extension of component support contract for China Cargo Airlines Boeing 777F fleet

*Under the 15-year contract, more than ten China Cargo Airlines Boeing 777-200 freighters will be covered with fully customized and extensive component services.*



■ MRO services for the Boeing 777-200 freighters will be performed at Lufthansa Technik's component centers in Hamburg, Germany and Shenzhen, China.

Lufthansa Technik has signed an extension agreement for its component support with China Cargo Airlines for its cargo fleet. Lufthansa Technik AG had already entered into a component support agreement with China Cargo Airlines in 2019 to provide the airline component support for their Boeing 747-400 freighter aircraft. The extension of the contract was a result of the new Boeing 777 freighters coming into service for the airline. Under the 15-year contract, more than ten China Cargo Airlines' Boeing 777-200 freighters will be covered with fully customized and extensive component services.

Mr. Liu Gang, Vice President, China Cargo Airlines said, "Our long-term cooperation with Lufthansa Technik has started already in 2000 and we have been great partners on the aviation journey for more than two decades. By given fully customized component service scope, we are very confident to continuously rely on Lufthansa Technik in servicing our new 777-200 freighters."

Lufthansa Technik will support China Cargo Airlines's main base in Shanghai with its component service offices in Shenzhen, Hong Kong and Hamburg to

coordinate customer support and ensure 24/7 worldwide AOG services at different locations which are vital for flight operations. Maintenance, repair and overhaul services for the Boeing 777-200 freighters will be performed at Lufthansa Technik's component centers in Hamburg, Germany and Shenzhen, China.

"This long-term agreement enhances Lufthansa Technik's position as a key MRO provider on the Boeing 777 freighter components," said Dr. Georg Fanta, Head of Commercial Aircraft Component Services, Lufthansa Technik. "We also bring a breadth of engineering expertise and extensive experience alongside with our global logistics network to provide seamless support to our customers," he further added.

China Cargo Airlines with the assistance from Lufthansa Technik can continuously provide smooth air cargo services to more than 200 destinations around the globe. China Cargo Airlines, established in 1998, is located in Shanghai, the most developed China metropolis at the center of the Yangtze River Delta. The airline currently possesses 14 cargo routes and operates belly space from China Eastern Airlines.

## Embraer signs agreement to provide pool support for TUI E-Jets E2 Fleet

*The Embraer E195-E2 aircraft, from AerCap's existing fleet, will be delivered to TUI Group in a comfortable 136-seat single-class configuration in the first half of 2023.*



Embraer has announced the signing of a contract for the Pool Program with the TUI Group to support TUI's fleet of Embraer E195-E2 aircraft fleet. The TUI Group has also announced that the company will take delivery of three E195-E2 jets from AerCap, on a long-term lease. The aircraft, from AerCap's existing fleet, will be delivered in a comfortable 136-seat single-class configuration in the first half of 2023. AerCap is an Irish aircraft leasing company.

"It's a pleasure for Embraer to have TUI on board the Pool Program. Beyond having access to all Embraer's spare parts inventory, TUI will count on the OEM's expertise to support its E2 fleet," said Danielle Vardaro, Vice-President of Worldwide Customer Support and Aftermarket Sales, Commercial Aviation, Embraer Services & Support.

The contract will provide TUI Group with access to component exchanges and repair services for more than 340 repairable parts, plus interchangeable parts for TUI's Embraer aircraft. Currently, Embraer's Pool Program supports more than 50 airlines worldwide. The TUI group owns the largest holiday airplane fleet in

Europe and holds multiple European tour operators.

"Signing this new agreement with Embraer for the E195-E2 Pool Program, ensures a high component availability and access to a comprehensive support and services package. This will allow us to operate our new E2 jets for our guests according to TUI's high opera-

tional standards", said Geert Somers, Engineering & Maintenance Director at TUI Airline.

Embraer's Pool Program is designed to allow airlines to minimize their upfront investment in high-value repairable inventories and resources while taking advantage of Embraer's technical expertise and vast repair

service provider network for components. The results are significant savings on repair and inventory carrying costs, reduction in required warehousing space, and the virtual elimination of the need for resources required for repair management, while ultimately providing guaranteed performance levels.

## ATR 72-600 set to make Uzbekistan debut as Silk Avia signs HOA for five new aircraft

*According to the Agreement Silk Avia will acquire five new ATR 72-600 aircraft, three of the five jets will be directly acquired from ATR and two from a lessor.*



ATR, a Franco-Italian aircraft manufacturer has signed a Heads of Agreement (HOA) with Silk Avia, a new regional airline of Uzbekistan. According to the Agreement Silk Avia will acquire five new ATR 72-600 aircraft. Three of the five jets will be directly acquired from ATR and two from a lessor. In addition to this agreement, Silk Avia will soon commence its operations with three used ATR 72-600 aircraft. Silk Avia is owned by Uzbekistan Airports which has invested heavily in establishing a wide network of upgraded and new airports to better serve the domestic and regional market.

The primary purpose of Silk Avia is to stimulate domestic tourism and business development in Uzbekistan. The airline will also increase regional connectivity to the capital of Tashkent and provide direct access between the Uzbek cities. These aircraft will open up new

point-to-point opportunities, serving around 40 routes in the country. They will connect 11 domestic airports, and 7 additional airports in the future, supporting the growth of the country and its thriving tourism industry.

Rano Dzhuraeva, Chair, Uzbekistan Airports said, We are excited to be soon launching our operations with an all-ATR fleet. As a new low-cost airline, we undertook an extensive review of which aircraft would provide the best solution. Our selection of the ATR 72-600 is the perfect choice for us as they will ensure we can offer our passengers the most modern, comfortable and reliable experience in the most affordable and sustainable way."

The ATR 72-600 aircraft burns 45% less fuel and emits 45% less CO<sub>2</sub> than a similar-sized regional jet, positioning ATR as the perfect fit for economical and sustainable expansion. The aircraft

will be equipped with the new PW127XT engines, offering a 20% reduction in maintenance costs and a 3% reduction in fuel consumption compared to the existing engine. Silk Avia's aircraft will be the first new ATRs to operate in the whole of Central Asia.

Nathalie Tarnaud Laude, Chief Executive Officer, ATR said, "There is no better solution to provide essential links than an ATR 72-600, the sustainable benchmark in regional aviation today. In a fast-growing country such as Uzbekistan, Silk Avia will play a key role by offering vital links for local communities and boosting the economy. Studies have shown that an increase of 10% in regional flights can lead to a 5% increase in local GDP and ATR contributes by providing the most responsible and affordable regional aircraft. We warmly welcome Silk Avia as one of our newest customers, opening a new market for ATR in Central Asia."

Silk Avia and ATR have also jointly announced the signature of a Global Maintenance Agreement (GMA). Through this five-year pay-by-the-hour contract, Silk Avia will take full advantage of manufacturer expertise to support its ATR aircraft, thereby reducing maintenance costs while boosting operations. The contract includes the repair, overhaul and Line Replaceable Unit Pool Exchange Service, an on-site stock of spare parts, a spare part agreement, along with propeller availability and maintenance services.

# Kuehne+Nagel delivered “Inspire”, the first Boeing 747-8 B2F by Atlas Air

*As a global company in air freight, Kuehne+Nagel aims to expand its air freight network by chartering the entire capacity of the very last two 747-8F aircraft from their delivery by Boeing.*



■ During the official handover ceremony at the Boeing Everett Delivery Center in Everett, WA, U.S., the Boeing 747-8F under the name “Inspire.” was handed over to Kuehne+Nagel.

Kuehne+Nagel commenced operation with its first Boeing 747-8 Freighter delivered by Atlas Air, Inc. Kuehne+Nagel received the aircraft as part of the long-term charter agreement with Atlas Air. As a global company in air freight, Kuehne+Nagel aims to expand its air freight network by chartering the entire capacity of the very last two 747-8F aircraft from their delivery by Boeing. Atlas Air, Inc is a major American cargo airline, passenger charter airline, and aircraft lessor and a subsidiary of Atlas Air Worldwide Holdings, Inc.

Yngve Ruud, Management Board Member responsible for Air Logistics, Kuehne+Nagel, said: “It is a very special moment for us to see Kuehne+Nagel 747-8F “Inspire.” taking off. Together with the very last 747-8F that we named “Empower.”, the aircraft will support our customers with reliable and flexible solutions globally, continuing the legacy of the most incredible aviation programs in history. We are delighted to celebrate this day with our partners Atlas Air and Boeing and looking forward to see our aircraft connecting the world.”

During the official handover ceremony at the Boeing Everett Delivery Center in Everett, WA, U.S., the Boeing 747-8F under the name “Inspire.” was handed over to Kuehne+Nagel. The most capable freighter aircraft in the world will provide support for Kuehne+Nagel for customers with highly reliable service, reduced transit times and minimized risks.

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"This 747-8 delivery underscores the importance of our long-term strategic partnership with Kuehne+Nagel and our commitment to support their continued growth and expansion," said John Dietrich, President and Chief Executive Officer, Atlas Air Worldwide. "We are very pleased to provide their first dedicated aircraft which will proudly fly in custom Kuehne+Nagel livery. The two 747-8Fs we will operate for Kuehne+Nagel will add more capacity and versatility for their network," he further added.

In addition to the Transpacific routings, the new service will be linked with the

Kuehne+Nagel Intra-Asia network to provide customers with better connectivity within the growing region of Asia Pacific. With its advanced design and engines, the 747-8F offers a 16% improvement in fuel use and CO<sub>2</sub> emissions per tonne and a 30% smaller noise footprint compared to the previous generation of aircraft.

"With Atlas Air taking delivery of the final 747s for its customer Kuehne+Nagel, this iconic Boeing airplane will continue to move cargo around the world for decades to come," said Kim Smith, Vice President and

General Manager of the Boeing 747/767 Program. "As we say goodbye to the 'Queen of the Skies,' we're proud of her legacy as an airplane that propelled aviation innovation and later laid the foundation for our family of freighters," he further added.

With over 80,000 employees at almost 1,300 locations in over 100 countries, the Kuehne+Nagel Group is one of the world's leading logistics companies. Its strong market position lies in air logistics and contract logistics, with a clear focus on integrated logistics solutions.

## Lufthansa selects EPCOR APUs for first Boeing 787 fleet

*EPCOR will provide Lufthansa's first Boeing 787-9 aircraft fleet with APS5000 APUs and will handle all warranty repairs concerned which will also include an availability solution.*



Lufthansa has entered into an exclusive Agreement with EPCOR, a provider of maintenance, repair and overhaul (MRO) services for operators and lessors around the globe. According to the agreement, EPCOR will provide the German airline's first Boeing 787-9 aircraft fleet with APS5000 Auxiliary Power Units (APUs). Lufthansa took the delivery of its first Dreamliner in August 2022, with four more aircraft expected in the future.

"More and more 787 operators choose EPCOR for our APS5000 service. This motivates us even more to keep investing in the best customer experience, performance, and engineering expertise," said Rob van de Graaf Commercial Director, EPCOR.

Lufthansa has placed a total order for more than 30 Dreamliners to strengthen the airline's wide-body fleet. As a subsidiary of Air France Industries-KLM Engineering & Maintenance (AFI KLM E&M) and as the center for specialized APU maintenance, EPCOR will handle all warranty repairs on the APS5000s concerned which will also include an available solution.

"As we introduce this new widebody aircraft to our fleet, we were looking for a proven quality APU support solution to maximize the availability of our 787s: EPCOR's track record on this product is very impressive, and we have every confidence in their ability to deliver the high level of service we expect," said

Binoj Sebastian, Senior Director, Lufthansa Airlines.

Pratt & Whitney Canada's APS5000 was designed and developed for Boeing 787 jet and it is the quietest APU in its class, with the lowest emissions in the industry. EPCOR currently is one of only three workshops in the world which are licensed to overhaul and repair the APS5000 Auxiliary Power Units (APU). Approximately around 40% of the 787 APUs around the globe are supported at EPCOR's shop at Amsterdam International Airport in Schiphol.

"It is always a great honor to welcome a major airline among our customers. We hope that this first collaboration will convince Lufthansa of the excellence and relevance of our APU services, and open the door to a long-term partnership around the APUs of its young and growing 787 fleet," said Dominik Wiener-Silva, Managing Director, EPCOR.

Lufthansa Airlines is the largest airline in Germany and one of the largest airlines in the world. Lufthansa Airlines carries more than 70M passengers on over 500,000 flights per year to more than 200 destinations in over 80 via the primary hubs at Frankfurt and Munich airports. Lufthansa Airlines operates a fleet of about 370 planes and is a founding member of the Star Alliance.



## Airbus to deliver three A330neo to Azul Linhas Aéreas

*The agreement will also complement the existing Airbus A330neo operations run by Azul and will bring the airline's total fleet of A330neo aircraft to eight.*

Airbus, a designer, and manufacturer of civil and military aircraft have signed a firm order with Azul Linhas Aéreas Brasileiras, a Brazilian carrier for the delivery of three A330-900 jets. The

latest deal will allow Azul to further expand its international network across the region. The agreement will also complement the existing Airbus A330 operations run by the airline and bring

the airline's total fleet of A330neo aircraft to eight.

The A330neo aircraft is a member of Airbus' leading Widebody Family that provides lower operating costs and comparatively less environmental footprint by combining enhanced technologies from the A350 powered by the Rolls-Royce Trent 7000 engines. Featured with the Airspace cabin, the A330neo offers an unmatched passenger experience and operational efficiency. Due to a redesigned welcome area, enhanced mood lighting, larger and modern overhead compartments and new window and lavatory designs.

"We are delighted to have secured three more next-gen Airbus widebody aircraft for the upcoming years. This reaffirms our position as the airline with the most modern fleet in the region, with 70 percent of our capacity coming from fuel-efficient and environmentally friendly aircraft," said John Rodgerston, Chief Executive Officer, Azul.

Azul Linhas Aereas launched operations in 2008 and has since grown to service more than 150 destinations with-

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in Brazil, and flies non-stop to the United States, Europe and South America. Azul received the Americas' first A330neo in 2019 and operates 12 A330 Family aircraft. Azul has announced the commencement of flight operations for the newly ordered four A350-900 aircraft with an aim to further expand its route offering and benefit from the Airbus commonality concept.

"We applaud Azul's decision that shows their forward looking strategy and proves the economics and performance of the A330neo are most compelling. The A330neo is the perfect tool to support Azul in expanding its fleet with the right-sized, modern widebody, leveraging the latest technology and efficiency and contributing to reducing CO<sub>2</sub>," said Christian Scherer, Chief Commercial

Officer and Head, Airbus International.

In Latin America and the Caribbean, Airbus has sold over 1,150 aircraft and has a backlog of over 500, with more than 700 in operation throughout the region, representing almost 60 percent market share of the in-service fleet. Since 1994, Airbus has secured approximately 70 percent of net orders in the region.

## AERO Vodochody and LOM PRAHA signed an agreement to supply the new L-39NG jet

*The new L-39NG aircraft will be used for basic, advanced and basic combat training, during which the pilot learns the principles of using jet aircraft in the performance of combat tasks.*



**A**ERO Vodochody AEROSPACE and LOM PRAHA have signed a contract for the delivery of four new L-39NG jets for the basic and advanced training of Czech Air Force pilots to the Ministry of Defense of the Czech Republic. The contract also includes post-warranty support or equipment. Under the contract, the first aircraft will be delivered no later than 28 months after its entry into force.

Viktor Sotona, President of Aero Vodochody said, "Excellent experience and positive feedback from domestic users are always the best references for any manufacturer, therefore the state enterprise LOM PRAHA is a very important customer for us. We greatly appreciate the fact that the pilots of the Czech Army will continue training on our L-39NG aircraft at the Flight Training Centre operated by LOM PRAHA."

The contract was signed for the delivery of four L-39NG aircraft, and also includes after-sales support or equipment.

In addition to the aircraft, the state enterprise will receive special and high-altitude equipment, survival equipment, initial training for pilots and ground personnel, ground equipment, initial sets of spare parts and consumables, flight planning and analysis systems and a ground training system. The contract also includes an option for the delivery of 4 additional aircraft.

"The reason for the acquisition of the L-39NG is to ensure the continuity of the training of tactical air force pilots on subsonic machines in the training center of the state enterprise. The existing L-39C Albatros, which have been operated by the LOM PRAHA Air Training Centre for eighteen years, are reaching the end of their technical life. The acquisition of new aircraft is also an expression of support and cooperation within the Czech defense industry," says Jiří Protiva, director of the state enterprise LOM PRAHA.

The new L-39NG aircraft will be used

for basic, advanced and basic combat training, during which the pilot learns the principles of using jet aircraft in the performance of combat tasks. The acquired aircraft will primarily serve pilots of the Czech Air Force, however, it is also planned to train pilots of other countries in the NATO Flight Training Europe (NFTE) program, under which the Pardubice Flight Training Centre has already been certified as one of the first two approved campuses in Europe.

The founder of the state enterprise LOM PRAHA is the Ministry of Defence of the Czech Republic. František Ulc, First Deputy Minister of Defence said, "I am glad that the contract for the acquisition of new L-39NG jet aircraft has been signed, which will ensure full-scale continuation of the tactical training of pilots of the Czech Army, by this step we are also supporting the Czech defence industry."

The latest developed subsonic jet aircraft, the L-39NG, a new generation of the legendary Albatros trainer, received type certification this year without restrictions. Czech manufacturer AERO Vodochody can now sell it worldwide. It has already concluded several contracts and further agreements are under negotiation. Among the most important customers is the Czech state enterprise LOM PRAHA, which provides training for pilots of the Czech Army. The L-39NG enables the training of pilots for the most advanced air forces and is the most cost-effective training and reconnaissance platform in its class.



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# GKN Aerospace delivers milestone first achieves major its ground-based liquid hydrogen fuel system demonstrator

*The first-of-its-kind demonstrator was designed, built and tested by GKN Aerospace in partnership with Filton Systems Engineering, under the Innovate UK-funded Safe Flight project.*



■ The highly ambitious project has enabled GKN to understand and address a high number of the safety concerns raised by the introduction of such a novel fuel.

**G**KN Aerospace, a British multinational automotive and aerospace components business has announced the successful milestone delivery of the first ground-based demonstrator of a liquid hydrogen aircraft fuel system. The first-of-its-kind demonstrator was designed, built and tested by GKN Aerospace in collaboration with Filton Systems Engineering, under the Innovate UK-funded Safe Flight project. The company's aim with the project was to investigate the feasibility of using a liquid hydrogen fuel source to increase the endurance of a search and rescue uncrewed aerial system (UAS) concept.

The highly ambitious project has enabled GKN to understand and address a high number of safety concerns raised by the introduction of such a novel fuel. Integrated fuel tank design and distribution solutions were developed, including vaporization and conditioning of the

liquid hydrogen. The performance of the fuel system was verified by coupling it with a proton exchange membrane (PEM) fuel cell stack, representative of the type that could be installed on a future zero-emission aircraft.

The project demonstrated successful storage and management of liquid hydrogen, supplying the fuel cell power system with hydrogen at the required temperature and pressure over a range of electrical loads typical of a UAS search and rescue mission. Key outcomes of the project include the development of safe system design, manufacturing knowledge, operational knowledge for liquid hydrogen fuel systems, hydrogen fuel system test data, and an adaptable test rig suited to further study of hydrogen components and subsystems.

Max Brown VP Technology GKN Aerospace said: "We are delighted with

the outcome of this project and believe we are very much at the forefront of exploring the challenges in this area. In a single end – end test environment the team have demonstrated fuelling and storage of liquid hydrogen, conditioning and distribution of cryogenic gas, and the use of PEM fuel cells to generate electrical power. While the focus of this work was on a small scale platform, the achievement is highly aligned with other work we are conducting in programmes such as H2GEAR, where we are delivering propulsion technologies focussed on enabling zero emissions flight."

The Safe Flight project has positioned GKN Aerospace globally for larger and more complex demonstrations of hydrogen-powered aircraft in the future, as the company continues to pursue its mission to become "the most trusted and sustainable partner in the sky".



## Airbus conducts first test flight of A330MRTT jet with 100 percent SAF on both engines

*The SAF-powered flight test is a joint endeavor between the RAF, Airbus, the UK Defence Equipment and Support agency, and AirTanker Rolls-Royce, with the fuel supplied by Air bp.*

Airbus, the designer, manufacturer and seller of civil and military aerospace products worldwide, in collaboration with The Royal Air Force and other industry partners has successfully carried out the world's first 100% Sustainable Aviation Fuel (SAF) flight of an Airbus using an in-service military aircraft. The test flight is also the first 100% SAF flight of any aircraft type carried out in UK airspace.

The flight test was conducted on an RAF Voyager – the military variant aircraft of the Airbus A330 commercial jetliner. The aircraft took to the skies above RAF Brize Norton in Oxfordshire, England, on 16th November 2022. This milestone flight will open a path for a range of possibilities for the future of flying military aircraft.

Michael Schoellhorn, CEO, Airbus Defence and Space said: "True to our purpose of 'pioneering aerospace', we have gladly supported the Royal Air Force on this landmark sustainable-fuel test flight. I commend our UK customer for this achievement which helps pave the way for a sustainable reduction of

carbon emissions of our military aircraft fleets. Airbus engineers have made a significant contribution to this RAF mission by providing on-the-ground expertise in recent weeks and securing the necessary MoD military flight permits."

The SAF-powered flight test was a joint endeavor between the RAF, aircraft manufacturer Airbus, the UK Ministry of Defence's Defence Equipment and Support agency, British aircraft leasing company AirTanker and engine manufacturer Rolls-Royce, with the fuel supplied by Air bp.

Sustainable Aviation Fuel is made from waste-based sustainable feedstocks, in this case used cooking oil – which reduces lifecycle carbon emissions by up to 80% compared to conventional fuel. The SAF will replace and lessen the RAF's reliance on global supply chains and helps in improving operational resilience by reducing the necessity for fuel resupplying.

Jesus Ruiz, Experimental test pilot and Captain of the flight, Airbus Military said: "From the crew perspective, the SAF operation was 'transparent',

meaning that no differences were observed operationally. The Test Plan was exhaustive and robust and has allowed us to compare SAF with JET1 culminating in a flight without a single drop of fossil fuel. Teamwork was a key contributor, harmonising experience from Airbus, Rolls-Royce and the RAF. We feel very proud to be a small part of this huge step for sustainable aviation."

As different approaches will suit different platforms and environments, a range of alternative fuel options is being looked at by the UK to ensure the nation is at the forefront of this developing technology.

The 90-minute return flight from RAF Brize Norton, flown by a combined Airbus, RAF and Rolls-Royce flight-test crew, replicated an air-to-air refueling sortie and was witnessed by senior RAF and industry representatives. The RAF has announced that it demonstrated the potential for its future operational capability, ensuring the ability to contribute to UK defence wherever and whenever it was required.



## Collins Aerospace to be a part of seven EU Clean Aviation projects

*Being a part of the initiative, Collins Aerospace will collaborate with European airframers, engine makers, suppliers and academia to develop disruptive sustainable aviation technologies.*

Collins Aerospace, a supplier of aerospace and defense products, has announced the company's selection to participate in seven projects under the European Union's Clean Aviation Joint Undertaking. Being a part of the initiative, Collins Aerospace will collaborate with European airframers, engine makers, suppliers and academia to develop disruptive sustainable aviation technologies. Collins Aerospace has estimated that the funding it receives from Clean Aviation combined with the company's own R&D investments will reach 85 million.

The following is a list of the project categories and projects in which Collins will participate. Collins will serve as project coordinator for HECATE.

### Hybrid-Electric Powered Aircraft

- HE-ART (Hybrid-Electric propulsion system for regional Aircraft)
- TheMa4HERA (Thermal Management for Hybrid-Electric Regional Aircraft)
- HECATE (Hybrid-Electric regional Aircraft distribution Technologies)
- HERWINGT (Hybrid-Electric Regional Wing Integration Novel Green Technologies)
- Ultra-Efficient Short & Medium Range Aircraft
- SWITCH (Sustainable Water-Injecting Turbofan Comprising Hybrid-electrics)

### Transversal Areas

- HERA (aircraft concepts for Hybrid-Electric Regional Aircraft)
  - CONCERTO (Construction Of Novel CERTification methOds and means of compliance for disruptive technologies)
- "With our expertise in a broad range of aircraft systems and a strong research and engineering presence in Europe led by our Applied Research and Technology (ART) organization, Collins is well-positioned to support the EU's ambitious Clean Aviation goals," said Mauro Atalla, senior vice president, Engineering & Technology, Collins Aerospace. "Together with our industry partners, we will advance our shared commitment to net-zero flight by breaking new ground on a range of solutions critical to the next generation of sustainable aircraft—from hybrid-electric propulsion, to thermal management, to systems for novel wing designs," he further added.

With an aim to pull together the best talent and capabilities of the private and public sectors, the Clean Aviation Joint Undertaking is the European Union's leading research and innovation program for transforming aviation towards a sustainable and climate neutral future. The EU backed projects that involve UK sites will be supported by funding from UK Research and Innovation, working in concert with Clean Aviation.



## Lufthansa Technik AG delivers second Airbus A350 jet to the German Armed Forces

*The newly delivered Airbus A350-900 jet, bearing the tactical registration 10+01, will soon join the fleet of the Federal Ministry of Defense's (BMVg) Special Air Mission Wing of Germany.*

Lufthansa Technik AG, the provider of aircraft maintenance, repair, overhaul and modification services has formally announced the handing over of the second Airbus A350-900 government aircraft to the German Armed Forces. The newly delivered aircraft, bearing the tactical registration 10+01, will soon join the fleet of the Federal Ministry of Defense's (BMVg) Special Air Mission Wing of Germany for long-haul political-parliamentary flight operations. The jet, for the first time, is equipped with a full government cabin.

Siemtje Moeller (SPD), Parliamentary State Secretary at the German Ministry of Defense, ceremoniously christened the aircraft in the name of former Federal Chancellor "Konrad Adenauer", in the presence of his grandson of the same name.

The Airbus A350 christened by the armed forces arrived factory-fresh at Lufthansa Technik at the end of March 2023. The aircraft has since undergone an extensive modification program at Lufthansa Technik AG's competence center for Special Aircraft Services in Hamburg. The main focus of the com-

pany for the jet was on the fitting of the full government cabin, which differs significantly from the transitional cabin of the 10+03 "Kurt Schumacher" which was the world's first VIP and government aircraft based on an Airbus A350, already delivered in 2020.

"Ceremonial handovers of new aircraft to the German Armed Forces have already become a fine tradition for us in recent years. Nevertheless, today is again something special," explained Soeren Stark, CEO, Lufthansa Technik. "The aircraft christened today is not the first Airbus A350 handed over by us to the German Armed Forces, yet it bears all the insignia of a new flagship with the registration number 10+01 and the history-steeped name Konrad Adenauer. This great honor is also reflected in the new government cabin we installed, which sets new standards with state-of-the-art technology and high functionality as well as cost efficiency," he further added.

In contrast to the latest Airbus A350-900's open cabin design, the various functional areas for political-parliamentary flight operations are now structur-

ally separated from one another, as was already the case with its two predecessors based on the Airbus A340. The remaining space in the cabin of the jet is available for the delegations traveling with the aircraft. It features seating with generous spacing, an appropriate number of washrooms and modern galley equipment.

Visible to the public is the discreetly revised livery of the 10+01, which also differs in detail from its sister aircraft 10+03. It includes new lettering in the "Bundes Sans" font as well as wingtips whose outside is now fully painted in black, red and gold, the German national colors.

Following the formal handover, the 10+01 will soon be transferred to Cologne for subsequent entry into service with the German Air Force. The third Airbus A350 with the registration 10+02 and the future name "Theodor Heuss" is also at Lufthansa Technik's Hamburg base and in an advanced stage of full cabin modification. The 10+03, which is already in service, will also soon return to Lufthansa Technik to be converted from the transitional to the full government cabin.



The CH-47F Chinook is an advanced multirole helicopter with a fully integrated digital cockpit management system compatible with the Common Avionics Architecture System.

## Boeing completes delivery of 20th CH-47F Chinook to the Royal Netherlands Air Force

*The delivery completes the upgrade of the Netherlands' Chinook fleet and enhances the country's defense and humanitarian capabilities.*

Boeing has delivered its 20th CH-47F Chinook to the Royal Netherlands Air Force (RNLAf), completing the country's latest fleet upgrade. The CH-47F Chinook is an advanced multi-mission helicopter containing a fully integrated, digital cockpit management system compatible with Common Avionics Architecture System. Its advanced cargo-handling capabilities further complement the aircraft's mission performance and handling characteristics.

Ken Eland, vice president and H-47 program manager said, "Our continuing partnership with the Royal Netherlands Air Force exemplifies the value of a modern and versatile Chinook fleet. These state-of-the-art aircraft will significantly improve their defense and humanitarian assistance capabilities."

The Netherlands is one of eight NATO countries to operate the Chinook and has fielded the aircraft continuously since receiving its first CH-47D models in 1995. In 2016, the RNLAf purchased 14 new CH-47F Chinooks through the U.S. Department of Defense's Foreign Military Sales program.

"This is a milestone for us. We have newer radios and newer equipment which help our pilots operate better in different environments than we do already," said LTC Wil van Rijn, senior system integrator of the Chinook, Dutch Ministry of Defence.

In 2017, the RNLAf signed an agreement to upgrade their remaining six D-model Chinook helicopters to the latest F-model configuration, ensuring commonality of systems for their entire 20-aircraft fleet.

## Dominik Wiener-Silva delegated as new VP Component Services for EPCOR in Amsterdam

*Dominik Wiener-Silva will take up his new position as VP of Component Services in Amsterdam as for the 2nd of January 2023.*

EPCOR, a provider of maintenance, repair and overhaul (MRO) services for operators and lessors around the globe have announced the appointment of Dominik Wiener-Silva as the company's Vice- President of Component Services in Amsterdam, Netherlands. EPCOR is a 100% subsidiary of AFI KLM E&M based in Amsterdam that specializes in APU and component support for aircraft all over the world.

"Over the past year Dominik has worked on supporting business recovery in the wake of the pandemic and pursuing EPCOR's growth strategy. Component Services and its customers can rely on Dominik's expertise and knowledge of the E&M business and his 20 years of experience in the MRO industry." Ton Dortmans, EVP, KLM Engineering & Maintenance.

Dominik Wiener-Silva will take up his new position as VP of Component Services in Amsterdam on for the 2nd of January 2023. Dominik will take over the responsibility from Maarten Koopmans, who will take over as the newly appointed Managing Director of KLM Cityhopper.

"I am honoured to be appointed to this new position within Component Services in Amsterdam. I'm looking forward to fulfilling this role and contributing to the future of our component solutions, to ensure that our strategy is executed." Dominik Wiener-Silva Vice- President Component Services, EPCOR.

EPCOR offers a variety of services for operators and lessors worldwide. EPCOR's services are all about keeping your aircraft in the air. EPCOR offers adaptive MRO services and flexible payment solutions based on Time & Material or Power by the Hour (PBH). EPCOR has developed a large repair capability for many components from various OEMs, such as Honeywell, Pratt & Whitney and Collins Aerospace. With over 20 years of airline MRO expertise in APUs and Pneumatic Components.



## Textron Aviation appoints Brett Pierson as Senior Vice-President

*Brett Pierson in his new role will oversee all aspects of the Textron Aviation Defense business from aircraft sales to training and aftermarket support.*

Textron Aviation, a company that provides airborne solutions for government, military and commercial customers has announced the appointment of Brett Pierson to the role of senior vice president, Defense & Special Missions. Brett's responsibility also includes serving as the president & CEO of Textron Aviation Defense LLC. Pierson has previously served as the vice president, Defense Strategy & Sales, of the company. Brett Pierson as the new CEO will succeed Tom Hammor who is retiring after serving in this leadership role for the past seven years.

"As I enter my new role, one of the people I'd like to thank is Tom Hammor who, as the leader of this organization,

really set us up to succeed," said Brett Pierson vice president, Defense & Special Missions Textron Aviation. "I'm excited to see where we can take the company on the next leg of its legendary journey," he further added.

Brett Pierson in his new role will oversee all aspects of the Textron Aviation Defense business from aircraft sales to training and aftermarket support. Brett brings more than three decades of Department of Defense leadership, defense acquisition and test flight experience to his new role at Textron Aviation., Brett has been a decorated former Naval officer and pilot. He joined Textron Aviation Defense in 2017 as a senior test pilot where he served for the past two years.



**01** MRO Opportunities in 2023

**15** Optimizing Landing Gear Maintenance

January

February

**01** Hangars and Hangar Doors

**15** MRO Inching Towards a Sustainable Future



**01** Technical Training Developments in MRO

**15** Women in MRO Sector

March

April

**01** Aircraft Interiors

**15** Importance of MRO Inventory Planning



**01** Aircraft Spares and Inventory Market Insights

**15** Digitisation in MRO

May

June

**01** MRO at Airports and upcoming facilities

**15** Predictive Engine Maintenance Management



July

**01** Aircraft Freighter Conversion

**15** MRO in Helicopters



**01** Drones and More....

**15** New Trends in Aerospace industry

August

September

**01** Inflight Connectivity and more...

**15** Changing Aircraft Engine technologies



**01** Aircraft Leasing and Finance

**15** Tearing Down an Aircraft

October

November

**01** Aerospace Logistics

**15** Defence MRO



**01** Engine Aftermarket Analysis and Trends

**15** MRO Market Forecast 2024

December

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06-08 Dec	MEBAA	DWC, Dubai

## 2023

Date	Event	Venue
07-09 Feb 2023	AERO-ENGINES & ELTF AMERICAS	Dallas, TX, USA
22-23 Feb 2023	MRO LATIN AMERICA	Buenos Aires, Argentina
28 Feb to 01 March 2023	MRO SouthAsia 2023	New Delhi, India
01-02 March 2023	MRO MIDDLE EAST	Dubai, UAE
01-03 March 2023	IASEA 2023	Marina Bay Sands, Singapore
18-20 April 2023	MRO AMERICAS	Atlanta, GA, USA
17-18 May 2023	MRO AUSTRALASIA	Brisbane, Australia
07-08 June 2023	ELTF EUROPE	London, UK
Sept 2023	AERO-ENGINES EUROPE	Madrid, Spain
26-28 Sept 2023	MRO ASIA-PACIFIC	Singapore

For Editorial : [editorial@mrobusinesstoday.com](mailto:editorial@mrobusinesstoday.com)  
For Advertisement : [jennifer@mrobusinesstoday.com](mailto:jennifer@mrobusinesstoday.com)  
Contact Us : [info@mrobusinesstoday.com](mailto:info@mrobusinesstoday.com)