

HAECO Group joins Liebherr Aerospace network to improve availability of heat transfer equipment

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Saab and Boeing-Redefining trainer jet through digital engineering

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## Safran to provide wheel and carbon brakes for SIA's Boeing 777 fleet

Under the contract all heat-sink exchanges will be performed by Safran Landing Systems' facility in Sendayan, Malaysia.

Singapore Airlines (SIA) has chosen Safran Landing Systems to provide wheels and carbon brakes for its entire fleet of Boeing 777-9 through a tailored brake landing Service contract. 31 aircraft are currently on order. Under this contract, all heat-sink exchanges will be performed by Safran Landing Systems' facility in Sendayan, Malaysia.

Safran Landing Systems CEO Cedric Goubet said, "Our carbon brake is the ideal choice for the 777-9, in terms of cost, efficiency and performance. We are delighted to have once again earned this mark of trust from Singapore Airlines, one of the most renowned airlines in

the world and one of our longeststanding customers. SIA was able to directly evaluate our equipment reliability and service quality on its Airbus and Boeing fleet, and they can count on our technical excellence and efficient customer support for their upcoming 777-9 fleet. We would like to thank them for their continued confidence and loyalty."

Safran Landing Systems currently supports wheels and carbon brakes for 126 Airbus and Boeing aircraft at SIA and Scoot, the low-cost airline of the Singapore Airlines Group, including A320, A350, 737-800 NG, 737-8 MAX and 787.



Safran's carbon brake is the ideal choice for the 777-9, in terms of cost, efficiency and performance.





## Smartavia signs Lufthansa Technik for extensive component support for Airbus A320neo

With this Total Component Support (TCS) agreement Smartavia will benefits from an individual supply concept that enables short and fast transport routes



A pool of homebase stock for the Airbus A320neo fleet has been set up at Pulkovo Airport (LED) in St. Petersburg

Smartavia has signed a multi-year agreement with Lufthansa Technik covering extensive component services (Total Component Support). This new contract governs supply for Smartavia's latest fleet of Airbus A320neo aircraft over a period of six years. Service has started in May 2021, the contract includes up to ten aircraft that Smartavia currently plans to operate.

Sergey Savostin, General Director of Smartavia said, "We are happy to have secured the support of Lufthansa Technik for maintaining the components of our latest fleet of Airbus A320neo aircraft. In particular, Lufthansa Technik's cooperation with Woodward and FADEC as the main manufacturers of engine-related components for the LEAP-engines has convinced us that this contract will ensure the operational stability of the new aircraft."

Stanislav Mitin, Corporate Key Account Manager Russia & CIS of Lufthansa Technik said, "We are proud to continue our partnership with Smartavia by extending our

component support to their latest aircraft fleet. Lufthansa Technik has gained experience on maintaining the Airbus A32oneo aircraft right from the start of operations, and we are happy to share our knowledge with our Russian partner."

With this Total Component Support (TCS) agreement, the carrier benefits from an individual supply concept that enables short and fast transport routes. The services covered by the contract are customized to fulfill the requirements of Smartavia. A pool of homebase stock for the Airbus A320neo fleet has been set up at Pulkovo Airport (LED) in St. Petersburg. Comprehensive logistics support by Lufthansa Technik offers Smartavia different flexible options that are particularly useful as long as the coronaviruspandemic still affects air transport.

Lufthansa Technik already provides component support to Smartavia's fleet of Boeing 737NG aircraft. In 2020, Lufthansa Technik has also concluded an agreement for engine services with the Russian carrier.

## Air Manas signs Airbus FHS for component maintenance of their new A220 leased fleet

The maintenance-by-the-hour service contract includes A220 material services with access to Airbus' pool of parts and repair services

Air Manas, a low-cost operator based in Kyrgyzstan, has selected Airbus' Flight Hour Services (FHS) for component maintenance services in support of their new A220 leased fleet. As first A220 operator in the CIS Air Manas will also become the first Airbus customer for components Flight Hour Services in the region.

The maintenance-by-the-hour service contract includes A220 material services with access to Airbus' pool of parts and repair services. Air Manas will also benefit from Airbus' engineering expertise as the most experienced A220 component provider to enhance the aircraft's

reliability and ease the fulfillment of lease return conditions.

"We are pleased to welcome Air Manas as our first FHS customer in CIS. We are building on our strong A220 component warehouses set-up to provide our new customer with the highest level of support. We are looking forward to contributing to Air Manas' successful operation of its A220 fleet," said Julien Franiatte, Head of Airbus Russia & CIS.

"It is a historical moment and honour for the new updated Air Manas after a long quarantine to be part of the big aviation world with the Airbus A220. We truly believe the Airbus Flight Hour Services will bring the highest level of service of flights with the A220" said Alexandr Belovol, Shareholder of Air Manas.

This first FHS contract for Airbus in CIS added value of Airbus maintenance solutions to support seamless customer operations in most efficient ways while traffic is resuming. Through Airbus FHS solutions, the manufacturer helps airlines to preserve cash and reduce costs, guaranteeing parts availability and easing their maintenance organisation setup. Airbus has concluded eleven FHS contracts with operators worldwide over the last six months.





## Ethiopian signs multi-year component support agreement with OEM Services for A350 support

Signing of a 10-year contract with a leading service provider shows Ethiopian's commitment to deliver the best service to its customers and ensure the reliability of its A350 fleet

Ethiopian Airlines Group had signed a multi-year large component support agreement with OEMServices, for the airlines' A350 fleet. With the support of major Original Equipment Manufacturers (OEM), OEM Service's Original Integrated Services will cover the Pool Access, 24/7 from its Dubai facility, Engineering and Repair Services fleet of Airbus A350-900 aircraft.

Mr. Didier Granger, President of OEM Services, said: "Being chosen by Ethiopian Airlines is a great pride for OEM Services. We are happy to demonstrate the added value of our original approach, based on our services integration skills and our technical expertise in the A350 fleet. Ethiopian Airlines can rely on our team to support their operations."



Mr. Tewolde GebreMariam, Group Chief Executive Officer said: "Ethiopian Airlines Group is the leading aviation group in Africa. With its 75 years of excellence in the business, operating over 130 aircraft, the airline has demonstrated its resilience even through the challenges of Covid-19 pandemic. It gives me great pleasure to reach an agreement with OEM Services,

one of the leading part providers and OEM integrators, to support the Ethiopian A350-900 fleet on Component Maintenance and Spare Services. Signing of a 10-year contract with a leading service provider shows Ethiopian's commitment to deliver the best service to its customers and ensure the reliability of its A350 fleet."

Under the scope of this contract, OEM Services will be supporting Ethiopian Airlines' 24 Airbus A350-900, of which currently 16 are in service and 8 on-order to be delivered, backed by its unique long-term in-depth know-how of the aviation industry's supply chain. OEM Services will extend its existing pool in Dubai to cover A350 aircraft components and to service current and future Middle East and African customers.

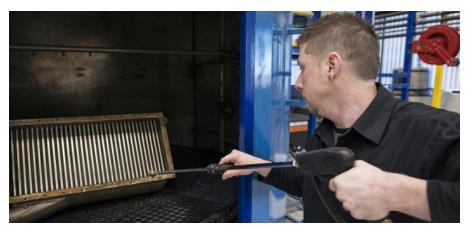






## HAECO Group joins Liebherr Aerospace network to improve availability of heat transfer equipment

Through this network Liebherr's technical experts have been able during the past months to assess the capacity of ramp-up as well as to verify the quality of service



■ Through the network Liebherr-Aerospace has established test and cleaning capabilities as close as possible to flight operations around the globe

Linternational service network of partners in order to improve the operational availability of heat transfer equipment.

The company has established test and cleaning capabilities as close as possible to flight operations around the globe.
Together with Liebherr-Aerospace, those

partners assure unique OEM quality with highest product reliability.

The HAECO Group is the latest company to join this network to support customers in the Asia Pacific Region. Established in Hong Kong in 1950, the company has developed its industrial capabilities to perform tests and cleaning of heat exchangers manufactured by Liebherr-Aerospace for the Airbus A320 aircraft family.

Despite limitations such as travel restrictions imposed due to the COVID-19 pandemic, Liebherr's technical experts have been able during the past months to assess the capacity of ramp-up as well as to verify the quality of service. A key element for this successful achievement was the extended usage of remote assist technologies, closely linking the teams located on various continents.





## Flair Airlines signs Wright International to cover line maintenance of 13 B737 MAX

This partnership secures a strategic expansion plan and ensures rapid development of operations in North America.

**7**right International has signed a partnership with Flair Airlines to cover line maintenance for their fleet of13 Boeing B737 MAX 8 aircraft at Toronto Pearson Airport and the Region of Waterloo International Airport. The services will include transit and overnight services as well as A checks in dedicated hangar space. This is an important milestone securing long-term partnership in a strategic expansion plan and ensuring rapid development of operations in North America. The contract represents the mutual approach and values of both companies, with a focus on efficiency and quality.

Flair currently operates in 20 Canadian cities and is expanding to the US market this fall. Such ambitious growth requires dependable and efficient line maintenance support and Wright International, the FL Technics subsidiary, is leveraging necessary own as well as group's expertise in servicing airline carriers worldwide.

Zilvinas Lapinskas, CEO of FL Technics, member of the Board of Directors of Avia Solutions Group said, "I believe that the success of Flair Airlines is embedded in the expertise and know-how of the management team. Their decisions led to unprecedented growth and I am glad that now our team has been chosen to maintain Flair Airlines operations. I am confident that our experience and resources in the largest independent line maintenance network will grant efficient and precise services in Toronto and Kitchener-Waterloo airports. Furthermore, FL Technics, being part of Avia range of opportunities to support Flair Airlines in their growth with extensive knowledge within interconnected aviation industry, from ground handling services, to financing and fleet manage-

While being an important achievement to Wright International, this contract also marks the successful stage of development of Flair Airlines business plan in North America.

Guy Borowski, VP Maintenance of Flair Airlines said, "Toronto and Kitchener are very important cities for Flair, and we look forward to a high level of maintenance support from Wright International and FL Technics teams."

Mario Sturino, President and Director of Maintenance at Wright International, emphasizes the contract as the outcome of synergies and new capacity, after a merger with FL Technics in late 2020. "What we see now is the result of decisive business development for both companies. I am glad that the recent merger into the global group of FL Technics brought new opportunities and capabilities for Wright International to deliver extended scope of services to new clients, expanding the current pool of leading operators and carriers that Wright International provides services to in Canada. Our team is glad to see and support the successful development of our clients

The deal symbolizes the gradual recovery of the industry in North America and worldwide as Wright International, part of FL Technics, and Flair Airlines have established the grounds for strategic long-term operations, and found new ways to operate and partner under uncertain circumstances with COVID-19 related restrictions still in place.







# Embraer sign long-term Pool Program with CommutAir to support the ERJ fleet

CommutAir now maintains the largest ERJ 145 fleet in the world, recently becoming the sole regional partner to operate the ERJ145 for United Airlines



■ The new contract includes full repair coverage for components and parts as well as access to a large stock of components at Embraer's distribution center in Fort Lauderdale.

Embraer signed a long-term Pool
Program with CommutAir to support
the ERJ 145. The new contract includes
full repair coverage for components and
parts, as well as access to a large stock
of components at Embraer's distribution
center in Fort Lauderdale, Florida. Currently, the Pool Program supports more
than 50 airlines worldwide.

Joel Raymond, Executive Vice President and Chief Operating Officer said, "CommutAir's tremendous growth in fleet, coupled with a broader route network requires a sophisticated components strategy to maximize aircraft reliability. After a careful review of multiple programs, we believe this new partnership with Embraer will set up our front-line teams for long term success."

With a total of 168 aircraft under lease, CommutAir now maintains the largest ERJ 145 fleet in the world, recently becoming the sole regional partner to operate the ERJ145 for United Airlines. Under this agreement, CommutAir and United will consolidate their ERJ 145 spare component inventory with Embraer's Pool program to improve stock levels and reliability.

In April 2021, CommutAir selected

Embraer Aircraft Maintenance Services (EAMS) in Macon, Georgia, as one of its primary heavy maintenance providers for the airline's fleet of ERJ145 aircraft. The agreement includes airframe maintenance, modifications and repair services.

"We are pleased to expand and strengthen our support and relationship with CommutAir," said Johann Bordais, President & CEO, Embraer Services & Support. "This agreement demonstrates Embraer's success in maintaining competitiveness and superior product support of its Pool Program, nearly 25 years after the first ERJ 145, known as the 'runway legend', entered into service."

Embraer's Pool Program is designed to allow airlines to minimize their upfront investment on high-value repairable inventories and resources and to take advantage of Embraer's technical expertise and its vast component repair service provider network. 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.

#### Sunclass Airlines sign MTU Maintenance for MRO of their CFM56-5B engines

CFM56 services are carried out at MTU Maintenance Hannover and MTU Maintenance Zhuhai, and MTU Maintenance Berlin-Brandenburg is in the process of introducing this engine to its portfolio

TU Maintenance and Sunclass Airlines have signed an exclusive five-year contract for maintenance, repair and overhaul of their CFM56-5B engines. The agreement covers comprehensive MRO support, AOG and on-site services as well as spare engine leasing. Sunclass Airlines operates a fleet of sixteen CFM56-5B engines powering eight A321 aircraft.

Henrik Mørch Jensen, Technical Director, Sunclass Airlines said, "We selected MTU Maintenance as our exclusive service provider due to their intelligently customized and integrated service package. We look forward to receiving excellent care, innovative and cost-effective MRO solutions, including used LLP material supply, as well as individuallytailored technical support."

Sunclass Airlines is a Danish charter airline that operates flights in Denmark, Finland, Norway and Sweden.

Martin Friis-Petersen, SVP MRO Programs, MTU Aero Engines said, "MTU Maintenance is delighted to have signed an exclusive agreement with new customer Sunclass Airlines. We are extremely confident that our range of services and extensive engine expertise will enable us to provide Sunclass Airlines with highly reliable and cost-effective MRO as well as maximum performance and life from their engines."

MTU Maintenance introduced the CFM56 family into its portfolio in 2000. As the number one independent CFM56 service provider worldwide with over 10 percent market share, the MTU Maintenance network has serviced well over 2,000 engines in the past twenty years.





## Muirhead Avionics and Antavia sign three year component repair agreement with Avtrade

Muirhead Avionics and Antavia are business units of AMETEK MRO



Muirhead Avionics and Antavia, business units of AMETEK MRO have signed a three-year component repair support agreement with Avtrade. The contract includes test, repair, and overhaul assistance from Muirhead Avionics across a range of avionics, radio, and radar equipment. This is complemented with logistical backing in the provision of loan and exchange units for

HF/VHF and ADF Gables Engineering control panels.

Steve Wells, Managing Director & Division Vice President at AMETEK MRO Muirhead Avionics said, "AMETEK MRO prides itself on the quality of its service and is trusted by operators around the world. We look forward to providing the same standards of excellence for Avtrade, as we further cement the long-standing relationship between our two organizations."

In addition to Muirhead Avionics' capabilities, Antavia will also provide Avtrade with MRO support for aircraft lights, cabin, and mechanical components.



## Honeywell signs MTU Maintenance to carry out MRO of LRUs for LEAP parts

The agreement builds on MTU's broad portfolio of over 2,000 accessories and LRUs and complements the diverse engine portfolio

TU Maintenance has signed a ten-year license agreement with Honeywell for the maintenance and repair of accessories and line replaceable units (LRUs) for Honeywell's LEAP parts. These include pneumatic valves, actuators, regulators and starters across all LEAP engine programs. As part of the agreement, MTU Maintenance will have full access to all relevant technical

manuals and spare parts.

Uwe Zachau, Managing Director, MTU Maintenance Canada said, "This agreement builds on our broad portfolio of over 2,000 accessories and LRUs and complements our diverse engine portfolio. MTU Maintenance introduced LEAP engine MRO at its facility in China in 2019. That year 2019, we were also recognized as Honeywell's airline chan-

nel partner of the year and we have no doubt that our support of LEAP components will be just as exemplary."

MTU Maintenance will operate as an officially licensed Authorized Service Center for Honeywell Aerospace and perform repairs at its facility in Delta, British Columbia, Canada as well as provide global LRU pooling solutions to its customers.





## RED aircraft receives FATA approval for flagship RED A03 engine

This certification joins previous certifications from the EASA and FAA



The flagship engine of RED aircraft, RED Ao3 has been certified and approved by the Russian Federal Air Transport Agency (FATA). This certification represents a significant milestone in RED Aircraft's progress to become one of the world's leading producers of high-powered and fuel-efficient aero engines. This certification joins previous certifications from the European Aviation Safety Agency and United States Federal Aviation Authority. The

certification will allow the revolutionary RED Ao3 engine to be fitted and operated on Russian-registered aircraft. This important milestone is particularly important, as a new Russian-built twinengine aircraft designed by Pro-Avia has utilised the RED Ao3 Engine at the design phase.

The RED Ao3 offers unsurpassed efficiency and impressive power to weight ratio. It offers a reduced fuel burn, excellent high-altitude performance and

 $significant\ cost\ savings\ for\ operators.$ 

RED Aircraft's new Head of Sales, Enrico Evers said, "The RED Ao3 Engine, a lightweight, 12-cylinder, compressionignition engine from RED aircraft, has been approved by the Russian Aviation authorities, thus opening the way to a vast market for the use of the RED Ao3 in new Russian designed aircraft as well as in some existing Russian aircraft types. The FATA approval is the latest milestone of certification for the RED Ao3. EASA approved this engine in 2014, followed by the FAA in 2016."

The engine is deployed in several diverse roles and on several different types of aircraft. The benefits are being realized across the industry, from agricultural aircraft and advanced trainer aircraft, such as the Russian-built YAK-152, to new and innovative designs. Existing types have benefited, and new types, such as the Otto Celera 500L and Airlander Hybrid Air vehicle, have also utilised the superior performance and green efficiency provided by the RED

The certification by the Russian authorities is the latest in a list of approvals awarded to RED aircraft.

## **AEM** to become authorized repair center for Techtest products

Under the agreement, AEM will test, recode, and repair Techtest emergency locator transmitters, which are fitted to various manufacturers' life rafts.

AEM Limited, a division of AMETEK MRO, signed an agreement with Techtest Limited, an HR Smith Group company. The agreement will see AEM become an authorized repair center for Techtest products.

"We are excited to establish a successful relationship between Techtest and AEM. The approval underpins AEM's position as a leading MRO provider in safety equipment and means we can offer enhanced customer support," said Andy Wheeler, AEM's Divisional Vice President and Managing Director.

Jake Ford, Head of Global Sales and Marketing for Techtest said, "We are pleased to establish this repair and service agreement with AEM, who will provide excellent support to the growing user base of our market leading PLBs and ELTs."

Under the agreement, AEM will test, recode, and repair Techtest emergency locator transmitters, which are fitted to various manufacturers' life rafts. As an authorized repair center, AEM will have access to Techtest maintenance documentation, technical support, and spares purchasing.







## Honeywell marks start of new era of cockpit connectivity and aircraft operations with Aspire 400

Honeywell's Aspire 400 is a small, lightweight satcom system provides seamless worldwide communications from the cockpit

Honeywell recently received a technical standard order (TSO-C159) certification from Transport Canada Civil Aviation (TCCA) for its Aspire 400 Satellite Communications System. Honeywell's Aspire 400 is the first and only Honeywell satcom solution to offer connectivity via Inmarsat's SwiftBroadband-Safety (SB-S) service. Aspire 400 is a clean slate design that marks the start of a new era of cockpit connectivity and aircraft operation.

The Aspire 400 system provides a more secure data pipe to and from the aircraft, delivering safety services and high-speed voice and data communications for cockpits and cabins in a compact, lightweight and low-powered package. Using the Aspire 400 system, an aircraft can communicate more securely with Air Traffic Control and the Airlines Operation Center. The systems also offer broadband data rates that enable Electronic Flight Bags (EFB) and other applications.

Mark Goodman, director, product management, Honeywell Aerospace said, "The achievement of the TSO certifica-

tion for the Honeywell Aspire 400 system is a major milestone for the aviation industry as the system can significantly increase safety and efficiency of air travel. Aspire 400 provides pilots with improved voice communication with Air Traffic Control as compared with high-frequency radio. Additionally, Aspire 400 increases efficiency by enabling real-time data transfer between aircraft and the ground. This can help in situations where rerouting is necessary to avoid bad weather."

Aspire 400 enables all the functionality supported by previous satcom systems but in a much smaller, lighter package that uses less power. The Aspire 400 TSO certification facilitates installation and certification for Future Air Navigation System operation on multiple aircraft platforms, including line fit and aftermarket upgrades. Aspire 400 meets current industry standards related to communications safety and security requirements for aircraft products of this type, ensuring better protection of critical cockpit communications.

The Aspire 400 system enables more reliable and essential communication for pilots and crew on any aircraft type. Using segregated channels for secure operation, it provides safety voice and data services for the aircraft cockpit and non safety voice and data services for the aircraft cabin. The system can improve fleet management, mission effectiveness, maintenance and flight operations. With a small antenna and overall footprint, the Aspire 400 has the potential to replace legacy highfrequency radio systems to improve operational performance.

The successful development and certification of the Aspire 400 system was a global team effort involving countries such as Canada, Czech Republic, United Kingdom, India and the United States. One of the newest and most significant features of the Aspire 400 that was not available in Honeywell's legacy satcom products is the introduction of Internet Protocol-based safety and operational communications using Inmarsat SwiftBroadband-Safety (SB-S).







# Spirit AeroSystems chose Rusada's ENVISION software to manage expanding MRO activities

ENVISION's wide range of functionality and excellent track record made it the standout choice for our business.



Spirit AeroSystems have chosen Rusada's ENVISION software to manage the growing number of maintenance, repair, and overhaul activities. ENVISION will be used by Spirit AeroSystems (Spirit) to support its maintenance facilities in Wichita and Dallas where it offers component MRO, on-wing repair, and aftermarket engineering services across an array of aircraft.

Billy Ernst, MRO Senior Manager at Spirit AeroSystems said, "The expansion of our MRO Services over the last several years has resulted in us inheriting numerous disconnected software solutions. We realized pretty quickly that to achieve the necessary levels of efficiency required for this program's success, we would need an intelligent and modern software solution to back it up. ENVISION's wide range of functionality and excellent track record made it the standout choice for our business. We look forward to working with Rusada to get the software up and running in our facilities over the coming months."

Spirit has signed up for 8 of ENVISION's modules, as well as its recently released

maintenance execution app, ENVISION Tasks. The software will be deployed by Rusada's North America Client Services team, who will work closely with various stakeholders at Spirit to ensure a successful rollout.

Julian Stourton, CEO at Rusada said, "To be chosen by one of the most respected names in the industry is a great compliment to our software, and to our teams in the US and around the world. Spirit is in the midst of a rapid expansion of their MRO offerings, so now is absolutely the right time to upgrade their solution. We will provide them with everything they need to guarantee a smooth implementation, and ongoing success."

The agreement further expands Rusada's presence in North America, where it already supports a number of operators and maintenance providers, as well as several government entities.

# Pratt & Whitney GTF engines ride high on sustainability wave, save half a billion gallons of fuel

The engines power more than 1,000 aircraft across three aircraft families, Airbus A320neo, Airbus A220 and Embraer E-Jets E2

In a milestone achievement the Pratt & Whitney GTF engines have saved the operators over half a billion gallons of fuel and avoided more than five million metric tons of carbon emissions, accumulated over more than 2.5 million flights. The engines power more than 1,000 aircraft across three aircraft families, Airbus A320neo, Airbus A220 and Embraer E-Jets E2 and have accumulated nearly 10 million engine flight hours with 54 airlines carrying over 370 million passengers.

Geoff Hunt, senior vice president of engineering and technology at Pratt & Whitney said, "The GTF engine family has proven to be the most environmentally sustainable powerplant for the current generation of single-aisle aircraft. At Pratt & Whitney, we're working towards becoming the best aerospace company for the world and with the revolutionary GTF engine family, we're just getting started."

The unique geared fan architecture of the GTF engine is core to Pratt & Whitney's strategy to develop more sustainable propulsion systems, which will enable the industry to reach its ambitious environmental goals in the coming decades. Through higher bypass ratios, more advanced materials and hybrid-electric configurations, the company sees considerable potential to continue lowering fuel burn, carbon emissions and noise. The company is

also working in concert with industry regulatory authorities to develop technical standards that will enable to the use of 100% Sustainable Aviation Fuel (SAF).

Since entering service in early 2016, the GTF engine family has delivered on its promised ability to reduce fuel burn and carbon emissions by up to 20 percent, noise footprint by 75 per cent and regulated emissions by 50 percent to the CAEP/6 regulatory standard. The engine's unique geared fan is the right architecture for the future with a long runway for further development. Pratt & Whitney is committed to continuing to invest in evolving propulsion systems to power the next generation of commercial aircraft.





## Pratt & Whitney Canada advances hybrid electric propulsion for sustainable aviation

Developing hybrid-electric propulsion technology is a core element of Pratt & Whitney's strategy to make aviation more sustainable



In a milestone achievement Pratt & Whitney Canada will be advancing its hybrid-electric propulsion technology and flight demonstrator program as part of a USD 163M CAD investment with the support of Canada and Quebec governments. The new hybrid-electric propulsion technology will drive significant improvements in aircraft efficiency by optimizing performance across the different phases of flight, allowing the demonstrator to target a 30 per cent reduction in fuel burn and CO2 emissions, compared to a modern regional turboprop airliner.

Maria Della Posta, president, Pratt & Whitney Canada said, "Pratt & Whitney Canada is proud to be a leader toward ever more sustainable aircraft propulsion technologies and be an integral part of Canada's green recovery plan. With a long-time commitment to sustainability and as Canada's top aerospace investor in research & development, having invested USD 500M CAD annually, we are driving economic growth, innovation and workforce expertise to benefit the environment. Hybrid-electric technology has an important role to play in enabling the next step-change in efficiency for aircraft engines, and we are uniquely positioned to demonstrate this potential."

Developing hybrid-electric propulsion technology is a core element of Pratt & Whitney's strategy to make aviation more sustainable. They are committed to continually advancing the efficiency of gas turbine engines across its portfolio, while supporting the wider use of sustainable aviation fuels, and pursuing alternative fuels. All these elements will be critical for the aviation industry to meet its goals to significantly reduce CO2 emissions by

2050. The company will continue to work with industry partners globally on a wide variety of projects targeted at increasingly sustainable aviation to benefit our customers and the environment.

P&WC is working with De Havilland Aircraft of Canada Limited (De Havilland Canada) to integrate this hybrid-electric technology into a De Havilland Canada Dash 8-100 flight demonstrator. This demonstrator will include an advanced electric motor and controller from Collins Aerospace. P&WC will target ground testing in 2022, leading to flight testing of the Dash 8-100 demonstrator in 2024.

Dave Riggs, Chief Transformation Officer, De Havilland Canada said, "Canada has an opportunity to demonstrate environmental leadership in the aviation sector. De Havilland Canada has a legacy of innovation that has supported aviation in Canada and around the world for more than 90 years and we are immensely proud to be the first manufacturer of regional aircraft supporting the development of hybrid-electric propulsion technology. We look forward to collaborating with Pratt & Whitney Canada and governments in Canada to further the development of alternative, climate-friendly technology that holds much potential to contribute to more sustainable aviation."

As part of Canada's green recovery plan, the Government of Canada's Strategic Innovation Fund is backing the technology demonstrator, which will help put Canada's aerospace industry at the forefront of global efforts to make aviation more sustainable.

#### **WORLD OF HELICOPTERS**





The aircraft will complete its final assembly at the Bell Amarillo Assembly Center.

Bell Textron has restarted UH-1Y helicopter production for Crestview Aerospace as a part of the US Department of Defense contract signed in 2020. Accordingly Bell has completed manufacturing the first of eight cabins at Crestview Florida facility. The aircraft will complete its final assembly at the Bell Amarillo Assembly Center.

Paul Kohlmeier, senior vice president, Strategy and Business Development, Crestview Aerospace said, "Crestview Aerospace is honored and grateful for the opportunity to team with Bell on the continued production of the UH-1Y cabin for the first international customer. Crestview continues to build in the same high quality

and reliability into the international Venom helicopters that underpin the aircraft currently operated by the United States Marine Corps around the world."

Bell delivered the final UH-1Y for the United States Marine Corps program in April 2018 and has continued to produce and deliver the AH-1Z as part of the H-1 production contract for 349 H-1 aircraft, consisting of 160 UH-1Y and 189 AH-1Z.

The UH-1Y shares 85 percent commonality of parts with the AH-1Z. The commonality between the aircraft enabled critical component supply chains to remain active during AH-1Z production for the USMC.

"Time, logistics, and man-hours are all

strategic resources," said Mike Deslatte, vice president and H-1 program director, Bell. "Commonality helps ensure everything between the Viper and Venom, from manufacturing, maintenance, and upgrades, remains seamless while simultaneously providing lower program and life cycle costs. It's a real tactical advantage on multiple levels."

The UH-1Y and AH-1Z share the same engines, integrated mission system and dynamic components, such as the four-bladed rotor system. Both aircraft are specifically designed and produced for expeditionary operations. Together, they provide a full spectrum of military operations, unlike any other helicopter duo.





### StandardAero delivered upgraded and modified UH-1H helicopter to fly under extreme conditions

The upgraded UH-1H Tailboom and new 212 Tail Rotor and Hub Assemblies with 212 drivetrain components were completed at StandardAero's Helicopter Airframe MRO facility.



C tandardAero recently delivered the first UH-1H helicopter to fly in the hottest and highest altitudes of the world. The tailboom of the helicopter was modified to be the lightest with the most heavy-lift strengths accompanied by Supplemental Type Certificates. The refurbishments included addition of StandardAero 212 Vertical Fin, Tail Rotor and Push-Pull antitorque control system, StandardAero improved UH-1H tail boom longerons and tailboom skins for high torque and higher heat, BLR Aerospace LLC Fast Fin and Dual Strake and Trinity Aviation Services Ltd. Carbon Fiber Driveshaft Cover.

Upgrade modifications to the UH-1H tail boom and airframe provide a number of operational benefits including improved hover-hold tasks, yaw control, high density altitude capability, reduced torque, reduced tail rotor power requirements and reduced fuel consumption.

Theresa Peoble, Director of Maintenance of Pinal County Sheriff Office said, "As a public sector customer Pinal County Sheriff's Office has been pleased with the professionalism, quality, and patience from StandardAero. They have been there every step of the way from listening to our needs to providing an exceptional product on time and within the budget constraints. I look forward to our continued partnership."

The modifications are being provided in phases, from now through 2022. Additional airframe modifications are in the works to provide increased cargo hook capacity to 5,000 lbs, external cargo load capacity and improved external gross weight limits.

Julien Roy, General Manager of StandardAero's Langley Helicopter facility said, "At StandardAero we are constantly innovating to support new and legacy utility helicopters and to assist helicopter operators in accomplishing their critical and unique flying missions both efficiently and safely, even in the harshest conditions."

The upgraded UH-1H Tailboom and new 212 Tail Rotor and Hub Assemblies with 212 drivetrain components were completed at StandardAero's Helicopter Airframe MRO facility. Additional airframe upgrades will be completed this September at the customer's facility in Arizona.





## World of Helicopters

Helicopters have emerged as wonder vehicles during the COVID-19 pandemic. Right from emergency medical evacuation to air ambulances, helicopters have come in handy in all sorts of emergency operations. Of late there is a healthy demand for helicopters across all market segments, be it defense, medicine, emergency services, search & rescue, firefighting or tourism. There is increasing popularity due to their ease of operations, low cost maintenance and flight convenience. Today let us look at how helicopters emerged and ruled the market segment during and after the global pandemic. Operators are striving to meet the customer demands by bringing the most efficient helicopter solutions by introducing latest technology like AI, innovation, digitalization etc to serve, protect, save lives and safely carry passengers in demanding environments.

#### Helicopters and charter

COVID-19 pandemic completely changed the air travel equations across the globe. Increased hygiene and sanitization measures, mandatory PCR tests before every flight, social distancing has led to the passengers opting for charter flights. Ease-of-travel and comfort being the primary criteria, safe travel experience was one of the major reasons behind the rapid rise of VIP and charter aircraft

One such example is the success of the Agustawestland169 helicopter in

Latin America. With the rapidly evolving market trends the AW169 is soon to enter the Mexican Corporate market. A Mexican private operator is all set to introduce an AW169 into service this year.

The Mexican AW16 will feature a highly customized configuration combining the highest standards of quality and comfort and leveraging the outstanding cabin space. The AW169 is also the first helicopter in its category entering the market with an electric retractable landing gear which reduces complexity and maintenance requirements. This solution adds to fixed landing gear and skid landing gear as options.

Airbus continues to rule the roost when it comes to civilian helicopter demand with helicopters range from the



#### **WORLD OF HELICOPTERS**

light single-engine H125 to the 11-tonne twin-turbine H225 rotorcraft. Military versions are mission-proven in the most demanding front-line conditions, and are trusted by more than 100 armed forces worldwide.

#### **Helicopter and Defense**

When it comes to defense, the H145M, the H225M and the NH90, Airbus Helicopters offers a comprehensive and complementary range of rotorcraft tailored for special operations. Already in service, the H145M and the H225M have proven their worth, while the NH90 is evolving to adapt to the specific needs of the Special Forces with the upcoming Standard 2.

Sikorsky is all set to build nine CH-53K heavy lift helicopters under an extended contract for the US Navy. The CH-53K will further support the US Marine Corps in its mission to conduct expeditionary heavy-lift assault transport of armored vehicles, equipment and personnel to support distributed operations deep inland from a sea-based center of operations, critical in the Indo-Pacific region.

Italian Air Force recently received HH-139B, a dedicated Air Force variant of the AW139 type from Leonardo. The aircraft will be used for a wide range of missions including SAR – Search and Rescue, fire-fighting, Slow Mover Inter-

ceptor. This helicopter model has advanced digital technology solutions for flight and missions as well as training (pilots and maintenance technicians) and support. The AW139 also features modern predictive maintenance and diagnostics solutions allowing accurate, rapid assessment and data processing on the health and usage of aircraft components.

Flexible, versatile, fast, and discreet, helicopters have been used for decades by Special Forces operators across the world to swiftly deliver and recover commandos regardless of the terrain constraints thereby keeping an edge over the adversary.

#### Booming Markets and rising demands of Helicopters

Looking at the rising demand of the helicopter services market in South Asia, Airbus and FlyBlade (BLADE) have signed a MoU to create awareness about on-demand helicopter services, among helicopter operators, customers and other stakeholders. Apart from this, they will also identify ways to increase BLADE's fleet size in South Asia by supporting BLADE to gain access to the Airbus fleet of helicopters available with its operators in the region. Whereas in the UK, Milestone Aviation signed a PLB agreement for AW169 with NHV Group to support Italian oil and gas company,

ENI. Besides these below are some of the important helicopter deals signed in last few months which highlight the rising demand of helicopters

#### Increasing demand of Helicopters

- 1. SAF group ordered three H145s for EMS missions in France
- Henley Air recently launched its own Helicopter Emergency Medical Service in South Africa utilizing six Bell products
- The Norwegian Air Ambulance
   Foundation took delivery of their first five-bladed, light twin engine heli copter H145 from Airbus
- 4. Japan's Shin-Nihon Helicopters recently took delivery of two Bell 407GXi helicopters and became the first Japanese company to purchase and operate the 407GXi aircraft.
- Derazona Helicopters of Indonesia placed a firm order with Airbus Helicopters for H160 to launch their new rotorcraft for the oil and gas sector
- 6. LCI placed two new Leonardo AW109SP helicopters on long term operating leases to undertake emergency medical services with its newest customer Sloane Helicopters
- 7. StandardAero recently delivered upgraded and modified UH-1H helicopter to fly under extreme conditions





## Russian Helicopter to deliver three 'Ka-62' to Gazprombank Leasing post testing and certification

Ka-62 can carry 2 tons of cargo inside the cabin and up to 2.5 tons on the external sling.

Russian Helicopters will deliver three Ka-62 helicopters to Gazprombank Leasing. Currently, the Ka-62 helicopter is finalizing a flight test program and certification is expected by the end of 2021, which will allow starting aircraft serial production.

Andrey Boginsky, CEO of 'Russian Helicopters said, "Since 2017, from Ka-62 first flight, we have done a lot of work, completed over 250 flights, introduced several design changes to make this helicopter even more comfortable, reliable and safe. This aircraft meets the latest requirements for helicopters, and I am sure that with the support of Gazprombank Leasing, Ka-62 will soon take a worthy place in the fleet of Russian airlines. Aviation market analysis shows that helicopters in this segment today are in demand in our country on air passenger routes, in air ambulance aviation, for other transport and social tasks."

Ka-62 is a multipurpose helicopter, which incorporates the latest technolo-



gies and materials in aircraft building. It meets Russian and international flight standards of reliability and safety for cargo and passenger transportation. The helicopter has a single-rotor design with a multiblade tail rotor in the annular channel of the vertical tail. Polymer composite materials are actively used in Ka-62 design. This reduced fuel consumption increased speed and payload.

Maxim Kalinkin, General Director of Gazprombank Leasing Group said, "Continuing our successful cooperation with Russian Helicopters Holding Company, today we signed a contract that provides for the possibility of supplying

multi-purpose Ka-62 helicopters, which production is unfolding in Primorsky region. This equipment deserves close attention because of its multi-purpose: passengers and cargo transportation to hard-to-reach places, medical, environmental implementation, rescue and other social tasks. Participation in social and economic projects and transport infrastructure development in the Far East is one of Gazprombank Leasing Group priorities in the coming years. Because of leasing, Russian operators will be able to upgrade their air fleet with comfortable terms and improve efficiency and safety for flights in a variety of geographical and climatic conditions".

Ka-62 flight range is 700 km, maximum speed is 310 km/h. Maximum takeoff helicopter weight is 6 800 kg, seating capacity – 15 passengers. Ka-62 can also carry 2 tons of cargo inside the cabin and up to 2.5 tons on the external sling. A rescue winch and a medical module can be installed, depending on customer requirements.

## Milestone signs a PLB agreement with NHV Group for AW169 helicopter

The AW169 helicopter delivered earlier this month will support missions in the UK for Italian oil and gas company, ENI

Ilestone Aviation has signed a Purchase/Leaseback (PLB) arrangement for AW169 helicopter with Belgian-based operator, NHV Group, a leading provider of B2B helicopter services. The AW169 helicopter delivered earlier this month will support missions in the UK for Italian oil and gas company, ENI. It will be based in Blackpool, United Kingdom.

Thomas Hütsch, Chief Operating Officer at NHV, said, "We are delighted to expand our fleet with the delivery of this AW169 helicopter from Milestone. Our diverse offshore fleet has an average age of just nine years, one of the youngest in the industry, and this

aircraft will enable us to continue delivering flexible and customer-friendly, but above all safe operations, using the latest technology helicopter. We have worked with Milestone for more than eight years and the team has been an important part of our journey, supporting us with their extensive expertise and guidance along the way."

François Arnaud, SVP Commercial Europe and Latin America at Milestone, said, "This is an exciting deal for Milestone as it marks our ninth aircraft with NHV and our first AW169 delivery to NHV. It is also our second deal announcement with them this year. We are proud to



continue building our strong partnership with NHV as a trusted leasing advisor."

Milestone already leases eight aircraft to NHV, deployed across a variety of missions including oil and gas, EMS, windfarm operations, and military training, including two each of AW139, EC145C2, H145T2, and H145D3 helicopters.



## Bell Textron continues to expand in Africa and Middle East with W.A Oil as latest customer



The Bell 505 is an exceptional aircraft for corporate transportation, exceeding customers' expectations with a large, customizable cabin and fully integrated high-tech features

With this latest acquisition, there are almost 30 Bell 505s in operation across six countries in Africa and the Middle East Bell Textron recently delivered a Bell 505 helicopter to W.A. Oil Factory and Distribution in Addis Ababa, Ethiopia, its first corporate customer in the country. With this latest acquisition, there are almost 30 Bell 505s in operation across six countries in Africa and the Middle East.

"The Bell 505 is an exceptional aircraft for corporate transportation, exceeding customers' expectations with a large, customizable cabin and fully integrated high-tech features," said Lynette Loosen, regional sales manager, Africa and the Middle East, Bell.

W.A. Oil Factory and Distribution PLC was established in 2016 by CEO Worku Aytenew. The company's portfolio of businesses includes mining, real estate and transportation, as well as the W.A. Oil Factory project.

"We are proud to accept the delivery of the first Bell 505 in Ethiopia," said Aytenew. "Given the rugged terrain and limited road infrastructure in parts of the country, the Bell 505 will save us hours and sometimes days of travel time."

The aircraft was delivered to one of Bell's independent representatives for Africa, Africair's Bell Customer Service Facility (CSF) in Nairobi, Kenya, where it was re-assembled and hangered until it's ferry flight to Addis Ababa.

"With this latest delivery, the Bell fleet in Africa continues to grow, building on its reputation for safety, reliability and cost-effectiveness," said Jim Evans, CEO, Africair. "In particular, over recent years the Bell 505 has grown in popularity, with operators on the continent appreciating the flexibility and versatility of this light helicopter. We are looking forward to building this new relationship with W.A. Oil."

With a speed of 125 knots (232 kilometers per hour) and a useful load of 1,500 pounds (680 kilograms), the Bell 505 is designed to be safe and easy to fly while providing unmatched value to the operator.



#### AGREEMENTS, PARTNERSHIPS AND MOUS

## Tamarack Aerospace expands its network of service centers with addition of ACI Jets

Tamarack continues to grow, with concrete plans for long-term expansion involving many different kinds of airframes, from business jets, to commercial single aisle aircraft, military planes, and large freight carriers

Tamarack Aerospace Group recently added ACI Jets to its network of Authorized service centers. This MRO center will offersales and service of the Tamarack Active Winglet System for the Citation Jet 525, 525A, and 525B series in all eight variants. Tamarack has modified over 140 Cessna Citation Jets during the last five years, and both owners and operators alike are thrilled with Active Winglet technology. The system provides multiple performance benefits, including smoother rides and the ability to reach altitude in less than 30 minutes.

Tamarack Founder and CEO, Nick Guida said, "Tamarack continues to grow, with concrete plans for long-term expansion involving many different kinds of airframes, from business jets, to commercial single aisle aircraft, military planes, and large freight carriers. Adding ACI Jet to our Authorized Service Center Network fits perfectly with our plans, and we are thrilled to welcome them to the Tamarack family. We are a global operation, helping customers from the California coast to the UK, and we are just getting started."

In addition, Active Winglets allow aircraft to land at slower speeds for safer landings on shorter runways. Unlike the outdated passive winglet offerings on other platforms, which only offer about 4 percent fuel savings, Active Winglets instantly and automatically adjust to turbulence, leveraging patented load alleviation and

sustainability technology to reduce fuel usage up to 33 per cent.

This new Authorized Service Center joins 11 others in the United States, and seven in countries.

John W. Tucker, ACI Jet's Director of Marketing said, "It became apparent very quickly as we began exploring an expanded partnership with Tamarack Aerospace, their singular focus, their passion, was customer experience. That's when we knew there was symmetry here, and that by becoming part of their support network we could not only reinforce that reputation, but expand upon it."

David Jensen, ACI Jet's Senior Vice President of Aircraft Maintenance said, "there's a word that we use in the shop almost daily: Agility. Tamarack Aerospace has proven their agility in creating a groundbreaking product that significantly tips the scales in favor of sustainability, all while greatly reducing downtime for the aircraft owner and installation and operational costs. Owners can get equipped and get back to flying in record time, which is a goal we've upheld in our Repair Station from day one."

ACI Jet is a recognized leader in private aviation services. In addition to nose-to-tail aircraft maintenance and avionics sales, installation and support, ACI Jet's aviation ecosystem includes aircraft ground support services at its three full-service FBOs and aircraft management and charter services.





#### AGREEMENTS, PARTNERSHIPS AND MOUS

## VSE Corporation acquired Global Parts Group for USD 38 million

With this acquisition business jet customers will have access to a more comprehensive on-demand repair and distribution solution unique to the market

**7**SE Corporation has acquired privately held Global Parts Group in an all-cash transaction valued at approximately USD 38 million, subject to customary working capital adjustments. Global Parts is a fully integrated aftermarket distribution and MRO services provider supporting the global business and general aviation (B&GA) market. Global Parts' distribution business focuses on supporting airframe components, while its repair capabilities extend to hydraulics and pneumatics. Global Parts' experienced workforce operates from its distribution and MRO center of excellence in Augusta (Wichita), Kansas.

John Cuomo, President and CEO of VSE Corporation said, "We are pleased to welcome the Global Parts team to the VSE family. This transaction represents an important strategic investment for our Aviation segment, which significantly expands product distribution offerings and repair capabilities across a diverse base of global business and general

aviation customers. Global Parts' customer service-focused culture, long-term customer relationships, OEM supplier partnerships, consistent financial performance, and proven technical expertise are highly complementary to our existing business, providing the opportunity for both revenue and margin enhancement opportunities over a multi-year period."

By combining VSE Aviation's existing B&GA part distribution and engine component accessories MRO services with Global Parts' airframe-centric product distribution and MRO capabilities, business jet customers will have access to a more comprehensive on-demand repair and distribution solution unique to the market. Also, this transaction provides VSE access to Global Parts' more than 3,000 smalland medium-sized business jet customers, representing more than 100 platforms. VSE Aviation expects to generate meaningful revenue opportunities as both new and existing business jet customers leverage the full breadth of combined repair

and distribution capabilities.

"We view the B&GA market as a significant long-term opportunity for our business," said Ben Thomas, President of VSE Aviation. "By bringing together Global Parts with our recently announced Pratt and Whitney Canada engine accessory distribution agreement and existing B&GA distribution and MRO offerings, we've laid a solid foundation to build a sustainable and profitable business of scale in this market. Business jet customers want a single end-to-end solution capable of providing them with replacement parts and MRO services on a 24/7 AOG basis. With the addition of Global Parts, VSE is well-equipped to meet the stringent, real-time demands of business jet owner-operators, positioning us to take share and drive growth into the ongoing aviation recovery."

It will further positions VSE as a well-capitalized market consolidator focused on achieving efficiencies of scale through both organic and inorganic growth.

## Magnetic MRO integrates line maintenance capabilities with Direct Maintenance

After the integration, the group's line maintenance capabilities extends to providing services in 20+ stations globally, it covers an impressive 70+ aircraft and engine combinations

agnetic MRO has integrated their IVI line maintenance capabilities with Direct Maintenance. In January 2021, Magnetic MRO started the movement of its Tallinn based line maintenance, together with respective outstations, under Direct Maintenance. After the integration, the group's line maintenance capabilities extends to providing services in 20+ stations globally, it covers an impressive 70+ aircraft and engine combinations, including A320NEO, A350-900/1000, A380. B787, B747-8, as well as progress into new generation of aircraft, covering Airbus A330NEO and Boeing B777-X, and gearing up for further expansion on stations internationally.

Jacco Klerk, CEO at Direct Maintenance

said, "Our divisions have combined a solid reputation in the market ranging from regional- to narrow- and wide-body aircraft line-maintenance, including home-based and heavy line-maintenance with a wide range of services for AOG, ad-hoc, modifications, parking/storage and lease transitions. By aligning these excellent capabilities for our customers, we provide a wealth of services to the industry with a single buy-in. We are on the move to becoming a preferred customer choice as a leading independent line maintenance organization enhanced by passioned and motivated team."

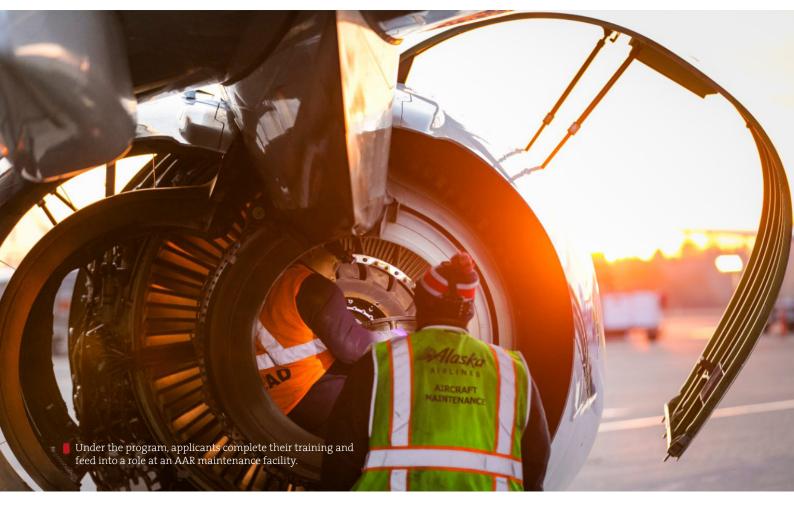
Risto Mäeots, CEO at Magnetic MRO said, "We noticed that an airline is often

stranded with numerous service providers, each with its own 'handwriting'. And we had to admit that market was offering what is convenient for service providers, not what customers actually need. From consolidating our existing line maintenance under one leadership to the future global growth in network, we will absolutely praise the challenge to be pioneer and to offer comfort in every aspect – thus we praise this next step we are taking together with Direct Maintenance."

Together with the integration, both the companies have strengthened and expanded their station capabilities and our commercial and operations organization to drive our business success forward.



#### AGREEMENTS, PARTNERSHIPS AND MOUS



## Alaska and AAR team up to create 'Flow through program' for future AMEs

This partnership is an example of how airlines and service providers are working to meet diversity, equity and inclusion goals to diversify our talent pool A laska Airlines has teamed up with AAR Corp to create a Flow through Program for aviation maintenance technicians in the future. The program is the first of its kind between an airline and an aviation services provider to focus on education and career training and recruit new workers from diverse backgrounds.

Nathan Engel, interim vice president of Maintenance & Engineering at Alaska Airlines said, "We are in a unique position to strengthen the talent pipeline through recruitment of groups historically underrepresented in aviation. AAR has made incredible strides with its focus on recruiting diverse candidates, and this partnership is an example of how we're working to meet our diversity, equity and inclusion goals to diversify our talent pool. We're eager to see these skilled technicians wearing an Alaska Airlines uniform as the next step in their career."

Stan Mayer, general manager

at AAR Airframe Maintenance in Oklahoma City, OK said, "The Aviation Maintenance Technician shortage continues to grow as so many are retiring or leaving the business. We believe the Alaska Airlines Flow through Agreement will help to attract new and upcoming technicians, and with our 19-year relationship, it only makes sense to help each other."

Under the program, applicants complete their training and feed into a role at an AAR maintenance facility. If the applicant is in good standing and has completed three years with AAR as an aircraft technician, they qualify to apply to a career opening at Alaska and are guaranteed an interview. Alaska has 14 maintenance-staffed bases across its network.

Through its diversity, equity and inclusion goals, Alaska has committed to help create career pathways for at least 175,000 young people by 2025.



#### Airbus delivered first A350 from Tianjin center in China to China Eastern Airlines

China Eastern Airlines is the largest Airbus operator in Asia and second largest in the world

irbus has delivered the first A350 from its widebody  $oldsymbol{1}$ completion & delivery centre in Tianjin (C&DC), China, taking additional steps in the expansion of its global footprint and long-term strategic partnership with China. The A350-900 aircraft was delivered to China Eastern Airlines, the largest Airbus operator in Asia and second largest in the world. At the end of June 2021, China Eastern Airlines operated an Airbus fleet of 413 aircraft, including 349 A320 Family aircraft, 55 A330 Family aircraft and nine A350 aircraft.

"I'm proud that Airbus successfully extended the capability of the widebody C&DC in Tianjin to the A350, the latest new generation aircraft, at such a difficult time of global aviation," said George Xu, Airbus Executive Vice President and Airbus China CEO. "This is a new milestone in the long-term cooperation between China and Airbus, which further demonstrates Airbus' commitment to the country. Congratulations to China Eastern Airlines, our long-term strategic partner, for receiving the first A350 delivered from China, and I appreciate their trust in Airbus and in our products as always."

Located at the same site as the Airbus Tianjin A320 Family Final Assembly Line and the Airbus Tianjin Delivery Centre, the widebody C&DC covers the aircraft completion activities, including cabin installation, aircraft painting and production flight test, as well as customer flight acceptance and aircraft delivery.

■ The Airbus Tianjin center covers the aircraft completion activities, including cabin installation, aircraft painting and production flight test.

The centre was inaugurated in September 2017 with its capability on A330s. The A350 features the latest aerodynamic design, a carbon-fibre fuselage and wings, plus new fuel-efficient Rolls-Royce engines. Together, these features translate into unrivalled levels of operational efficiency with a 25 per cent reduction in fuel burn and CO2 emissions. The A350's 'Airspace by Airbus' cabin is the quietest of any widebody aircraft and offers passengers and crews the most modern in-flight products for the most comfortable flying experience.

At the end of June 2021, the A350 Family had received 915 firm orders from 49 customers worldwide, making it one of the most successful.

#### DASSAULT AVIATION delivers its first Rafale to Greece

The Rafale will provide the HAF with a latest-generation multirole fighter, enabling the Hellenic Republic to ensure its geostrategic stance in full sovereignty

assault Aviation recently delivered its first Rafale to Hellenic Air Force. This first delivery comes successfully only after six months following the signature of the Contract for the acquisition of 18 Rafale. The Rafale will provide the HAF with a latest-generation multirole fighter, enabling the Hellenic Republic to ensure its geostrategic stance in full sovereignty.

Eric Trappier, Chairman and CEO of Dassault Aviation said, "Following the Mirage F1 in 1974, the Mirage 2000 in 1985 and the Mirage 2000-5 in 2000, the Rafale is now proudly flying with the Hellenic Air Force colors. The Rafale is a Strategic Game Changer for the HAF. It will play an active role by securing Greece's leadership as a major regional power. I would like to reaffirm our total commitment to the success of the Rafale in Greece."



The delivery of the first Rafale is a clear demonstration of France's determination to meet the government of the Hellenic Republic expectations and to participate actively to the sovereignty of the country. It also illustrates Dassault Aviation's outstanding quality of the cooperation with the Hellenic Air Force, through more than 45 years of uninterrupted and strong partnership.



## flyadeal expands the domestic and regional network with latest fuel efficient A320neo

The A320neo is powered by CFM LEAP-1A engines and will offer outstanding operational, economic and environmental performance.

Lyadeal recently took delivery of a brand new A320neo, the first out of 30 to be delivered in the next 3 years. The aircraft is the first out of 65 A320neo family aircraft ordered by Saudi Arabian Airline and will join flyadeal's all Airbus fleet. Flyadeal is the low-cost Jeddahbased airline owned by Saudi Arabian Airlines. The A320neo is powered by CFM LEAP-1A engines and will offer flyadeal outstanding operational, economic and environmental performance.

flyadeal's A320neo is configured with 186 seats in a comfortable all economy class layout. Passengers onboard the aircraft will benefit from the widest cabin of any single-aisle aircraft in the sky, as well as the latest cabin feature offering optimum passenger comfort.



The A320neo is the ideal aircraft for flyadeal to grow and expand its domestic and regional network. Demonstrating the operational flexibility of the A320neo, the aircraft will allow the airline to efficiently enhance its operations to additional networks and foster closer links with countries across the region and beyond.

The A320neo Family incorporates the very latest technologies including new generation engines, Sharklets and aerodynamics, which together deliver 20per cent in fuel savings and CO2 reduction compared to previous generation Airbus aircraft. The A320neo Family has received more than 7,400 orders from over 120 customers.

## Bombardier delivers brand-new Challenger 350 to Sundt Air for charter operations

Sundt Air, Norway's largest business jet operator, will offer its newest Challenger 350 business jet for charter out of Oslo, Norway



From Western Europe, the Challenger 350 business jet can take eight (8) passengers nonstop all the way to North America or fly from Oslo to Dubai

Bombardier recently delivered a brandnew Challenger 350 business jet to Sundt Air, an executive charter, aircraft management, and special mission company based in Norway. The aircraft will be available for charter starting in July 2021. From Western Europe, the Challenger 350 business jet can take eight (8) passengers nonstop all the way to North America or fly from Oslo to Dubai.

Peter Likoray, Senior Vice President, Sales, New Aircraft, Bombardier said, "The Challenger 350 business jet allows passengers to remain comfortable, productive and well-rested as more people seek out safe and flexible alternative ways to travel. The iconic, market-leading Challenger 350 aircraft continues to be a top choice among the most discerning travellers."

Tor Bratli, CEO, Sundt Air said, "As the largest operator of business jets in Norway, we are thrilled to add another Challenger 350 aircraft to our fleet. Our customers appreciate the Challenger 350 jet's ideal combination of optimal performance and superior cabin comfort."

The Challenger 350 aircraft strengthens its position year after year with enhancements and upgrades to its winning combination of performance and cabin experience. Among pilots, the Challenger 350 aircraft is recognized as being agile, reliable and a pleasure to fly. The Challenger 350 aircraft was the most-delivered business jet in the Medium category in 2020, making it the category leader for a seventh consecutive year. Paired with impressive high-performance attributes, the Challenger 350 aircraft is designed to access challenging airfields, climb faster and cruise efficiently while providing a smooth ride.



## Pratt & Whitney to open 60,000 square foot ceramic matrix composites facility in California

CMC materials are lightweight and can be used to manufacture engine parts that are one-third the weight of traditional metallic parts.

Pratt & Whitney recently announced the opening of a 60,000 square-foot ceramic matrix composites (CMCs) engineering & development facility in Carlsbad, California. This facility is an integrated engineering, development and low-rate production facility solely dedicated to CMCs for aerospace applications.

Frank Preli, vice president of Propulsion & Materials Technology at Pratt & Whitney said, "Pratt & Whitney has been leading the industry with the world's quietest, greenest, most efficient and highest performance engines in the world. We've achieved this by pioneering new materials, aerodynamics and engine architectures. Some of our best and brightest minds are innovating within this facility and they will ensure



#### **GO BEYOND**

that we continue to operate on the cutting edge of aviation technology for decades to come."

Ceramic matrix composites are a class of material made of ceramic fibers embedded within a ceramic matrix. CMC materials are lightweight and can be used to manufacture engine parts that are one-third the weight of traditional metallic parts. The temperature capability of CMC parts is several hundred degrees higher than state-of-the-art

superalloy parts. This translates into a significant improvement in fuel efficiency as well as weight savings, with the added benefit of reduced emissions and carbon footprint.

"Our revolutionary Pratt & Whitney GTF engines already deliver up to 20 percent better fuel efficiency, 50 percent lower regulated emissions and a 75 percent reduction in noise footprint for our customers. CMC parts will allow us to do even more, by building upon the industry-leading benefits in efficiency and sustainability that the GTF engine already delivers." Preli further added.

Pratt & Whitney has a long history of innovation and engineering excellence, starting with the world's first air-cooled Wasp engine in 1925.

## Direct Maintenance opens 4th line maintenance station in Germany

Together with Magnetic MRO Line Maintenance, Direct Maintenance now covers over 70 aircraft and engine combinations

irect Maintenance recently opened the latest line maintenance station inCologne-Bonn Airport, Germany. This is the 4th Direct Maintenance station in Germany alongside stations in Dusseldorf (DUS), Berlin (BER) and Hamburg (HAM) Airport, will be covering line maintenance services for B747, B757, B<sub>7</sub>67 and MD-11 type aircraft, including bespoke home-base line maintenance concept in supporting a logistic turnkey fleet operation. In the coming period Direct Maintenance will also provide In CGN line maintenance for the wide range of Airbus (A320/A330/A350/A380), Boeing (737/B787) and Embraer (Embraer 170/190) Aircraft types.

Mandeep Rana, Head of Sales at Direct Maintenance said, "The recent launch of the new station in Cologne-Bonn Airport is indeed a great milestone for us especially during turbulent times. Our approach hasn't changed during the pandemic, as always we try to partner up



■ In the coming period Direct Maintenance will also provide In CGN line maintenance for the wide range of Airbus, Boeing and Embraer aircraft types.

for the long-term and to invest in the customers' needs and we continue looking into the new expansion opportunities."

Together with Magnetic MRO Line Maintenance, Direct Maintenance now covers over 70 aircraft and engine combinations, including A320NEO, A350-900/1000, A380, B737 MAX, B747-8 and B787 in 17 different locations in Europe and Africa.



## TAE Aerospace achieves Initial Depot Capability for repair of Pratt's F135 engine fan and power modules

With this TAE Aerospace's F135 MRO facility in Australia becomes the first operational F135 engine depot in the Asia-Pacific region



■ The activation of the Australia depot will bring increased capacity to the global F135 MRO network in support of the growing fleet

TAE Aerospace recently achieved Initial Depot Capability (IDC) requirements for the repair of the Pratt & Whitney F135 engine fan and power modules, which power all three variants of the 5th Generation F-35 Lightning II fighter aircraft. With this achievement, TAE Aerospace's F135 MRO facility in Australia becomes the first operational F135 engine depot in the Asia-Pacific region and has begun supporting the repair of fan and power modules for the fleet.

The module IDC milestone was reached with the completion of a full rebuild of an F135 power module at TAE Aerospace's Queensland facility. This achievement follows the company's successful fan module repair qualification in 2020.

TAE Aerospace's CEO, Andrew Sanderson said, "Achieving module IDC marks a critical point in the development of a regional F135 engine MRO&U capability. As an operational F135 engine depot outside of the US, TAE Aerospace will support engines for all F-35 operators in the Asia-Pacific region under the F-35's Global Support System. The investment made by the Commonwealth of Australia and TAE Aerospace over the past five years will result in benefits for both Australia, with an important sovereign industrial capability now available in country, as well as at the local level, with the creation of many jobs over the coming years,"

"We congratulate the TAE Aerospace team on reaching this critical sustainment milestone for the F135 engine," said O Sung Kwon, Vice President, Pratt & Whitney Military Engines Sustainment Operations. "The activation of the Australia depot will bring increased capacity to the global F135 MRO&U network in support of the growing fleet. Standing up the regional MRO&U depots is an integral part of the enterprise's strategy to accelerate capacity growth across the F135 MRO&U network to exceed program requirements."

Since being assigned the Asia-Pacific region's F135 engine MRO&U responsibility in 2015, TAE Aerospace, Pratt & Whitney and the Australian Government worked closely over the past six years and delivered a broad range of initiatives to stand up this regional capability.



## Saab and Boeing- Redefining trainer jet through digital engineering

The T-7A Red Hawk is an all-new, advanced pilot training system designed for the US Air Force to train the next generation of combat pilots for decades to come.



In the latest milestone in Saab's contribution to the design and development of the T-7A Red Hawk trainer for the US Air Force, Saab has shipped its second airframe section from its Sweden facility to Missouri in USA. The T-7A Red Hawk is an all-new, advanced pilot training system designed for the US Air Force to train the next generation of combat pilots for decades to come.

Boeing will splice together Saab's aft

section with the front section, wings, fins and tail assembly to become a complete test aircraft for use in the EMD's flight test program. The aft section with installed subsystems – hydraulics, fuel and secondary power system – forms the center structure of the aircraft from behind the cockpit to the end of the aircraft

Jonas Hjelm, Senior Vice President and head of Saab business area Aeronautics

said, "T-7A demonstrates Saab's approach to international growth and underpins our position as a world-class aircraft company and unique business partner. Together with Boeing, we are achieving our ambitious vision: to redefine what a trainer jet is, and to do so through digital engineering. This represents yet another milestone in delivering on our commitments."

In April 2021, Saab delivered its first T-7A Red Hawk aft airframe section for assembly as a ground-based structural testing aircraft. Upon arrival at Boeing in St. Louis, Saab's aft section was joined perfectly with the front fuselage in less than 30 minutes. That achievement is a testament to the use of digital design and engineering, which delivers accuracy, efficiency and improved quality throughout the design and delivery of T-7A Red Hawk.

The T-7A Red Hawk aircraft has benefited from Saab and Boeing's "breaking the norm" approach to military aircraft design, engineering and production, which saw the preceding T-X aircraft go from concept to first flight in just 36 months.

## BAE Systems to produce nextGen missile seeker for Long Range anti-ship missile

The seeker systems produced by BAE Systems are easier to build and test without compromising on performance.

BAE Systems has received a USD 117 million contract from Lockheed Martin to produce next-generation missile seeker for Long Range Anti-Ship Missile (LRASM). The seeker technology enables LRASM to detect and engage specific maritime targets in contested environments with less dependence on traditional navigation systems. The next-generation seeker design reduces overall missile costs.

Bruce Konigsberg, Radio Frequency Sensors product area director at BAE Systems said, "We're committed to providing affordable systems that deliver unmatched capabilities to the US and its allies. We've designed efficient seeker systems that are easier to build and test without compromising on performance."

Following design improvements conducted under a Diminishing Sources/Affordability contract, BAE Systems is producing next-generation seekers for Lots 4 and 5 that are more capable and easier to produce, with less-complicated manufacturing

processes. The next-generation seekers have replaced obsolescent and limited-availability parts, dramatically reducing the system cost.

The LRASM contract will support missiles for the US Navy, US Air Force, and US allies through Foreign Military Sales, as well as research, development, test, and evaluation services.





## Textron Aviation introduces state-of-art interiors to Beechcraft King Air 260

The King Air 260's cabinetry offers beautiful wood-grain finishes along with a modernized refreshment center that is easily accessible for passengers throughout their flight.

Textron Aviation has introduced new interiors to its Beechcraft King Air 260 turboprop. The new interiors feature a stunning new look with craftsmanbuilt cabinetry and a selection of opulent fabrics and color schemes, the luxurious, redesigned cabin interior will be available on all new King Air 260 aircraft in early 2022.

Christi Tannahill, senior vice president, Customer Experience said, "The Beechcraft King Air is an iconic aircraft, and we place a great emphasis on continually improving these products. In addition to the latest technology we recently introduced in the cockpit, these new features we are bringing to the cabin of the King Air 260 will create an elevated flying experience for passengers."

The King Air 260's cabinetry offers beautiful wood-grain finishes along with a modernized refreshment center that is easily accessible for passengers throughout their flight. The cabin interior also offers a selection of four standard color palates Alpaca, Buttercream, New Pewter, and Latte. The premium interior

Lava Saddle is also available. Throughout the cabin, LED lighting provides a warm, inviting atmosphere with lit cupholders and pinhole lighting along the lower sidewalls.

Multiple USB charging ports have been added throughout the cabin, making it easier for greater productivity on your mobile device throughout the flight. Other amenities that come standard on the entire King Air lineup include pleated pull-down shades, pull-out work tables, and a private aft lavatory.

The King Air 260 cabin, which seats seven passengers, is configured to maximize passenger comfort. The cabin has been designed to create a spacious environment that offers ample legroom at every seating station.

"The interiors and amenities provided on this aircraft will make every journey a relaxing and comfortable experience for our customers," said Tannahill. "Cabin amenities play a critical role in the selection of an aircraft, but they are also vitally important to how much our customers will enjoy every flight they take."

King Air 260 brings state-of-the art technology to the cockpit and offers greater ease of flight. The cockpit features the Innovative Solutions & Support (IS&S) ThrustSense Autothrottle system, which supports pilots in their critical mission of delivering people or cargo by automatically managing engine power from the take-off roll through the climb, cruise, descent, landing, and go-around phases of flight. This enhancement reduces pilot workload and is designed to prevent over-speed or under-speed, over-temp and over-torque conditions.

The King Air 260 cockpit also features a digital pressurization controller, which automatically schedules cabin pressurization during both climb and descent, reducing pilot workload and increasing overall passenger comfort. The pressurization gauges have been integrated with the powerful Collins Aerospace Pro Line Fusion flight deck. The aircraft includes the Collins Multi-Scan RTA-4112 weather radar, providing pilots with a fully automatic system that is optimized to detect short, mid and long-range weather.

## Duncan Aviation modified a CMS for Gulfstream 550 by adding entertainment options

This modification gives the customer custom entertainment options such as streaming video, HDMI Ports, and touchscreens, as well as control of the cabin through iPad's remote application.

Duncan Aviation recently modified a Cabin Management System (CMS) for a Gulfstream G550, resolving an issue with obsolete parts without the need to replace all the switch panels or provide major alterations to all of the drink rails.

Senior Avionics Sales Rep Dennis Kruse said, "This modification gives the customer custom entertainment options such as streaming video, HDMI Ports, and touchscreens, as well as control of the cabin through iPad's remote application. It's an ideal solution for customers who aren't ready to replace veneer/woodwork and drink rails but want access to high-definition entertainment content with the look and feel of a new CMS. Not only do customers get a customizable In-Flight Entertainment system, but they'll also get new equipment that is fully supported and has a warranty."

Using a new distribution system for the entertainment portion of the CMS allowed the customer to upgrade to newer more advanced High-Definition (HD) monitors, High Definition Multimedia Interface (HDMI) panels and touchscreen controllers.





## Jeff Shockey joins Raytheon Technologies as Senior VP, Global Government Relations

Jeff is a proven leader who brings expertise in defense, intelligence and tax policy to the team

Jeff Shockey is appointed as the senior vice president of Global Government Relations at Raytheon Technologies. He will be succeeding Timothy McBride and will report to the Chairman and Chief Executive Officer Gregory Hayes. He will also serve as a member of the executive leadership team, working at the international, federal and state levels to oversee the company's business interests with policymakers and other government organizations.

Gregory Hayes said, "Jeff is a proven leader who brings expertise in defense, intelligence and tax policy to the team. With a career in government and the private sector, Jeff will leverage his commercial and defense and industry relationships to drive government relations as a key enabler of our business."

Shockey joins Raytheon Technologies from Boeing, where he served as vice president, Federal Affairs and International Policy for Government Operations; and most recently as vice president, Global Sales and Marketing for Defense, Space & Security and Global Services' Government Services portfolio. During his time with Boeing, he was responsible for implementing and overseeing all Boeing strategic and tactical interactions with the United States Congress and related federal agencies. His international duties included coordinating with embassies and overseeing foreign military sales.



## Richard Averitt joins Contrail Aviation as Director of Financial Planning and Analysis

Averitt has extensive experience in analyzing large and complex transactions in aviation leasing and asset management

Contrail Aviation Support announced the appointment of Richard Averitt as
Director of Financial Planning and Analysis. In his role, Mr. Averitt will focus
on assessing, establishing and enhancing CAS's financial and technical modeling
processes, leveraging both his comprehensive leasing and finance experience
and his extensive knowledge of the commercial aviation industry.

Kevin Milligan, Senior Vice President – Strategy, Finance & Investors at CAS
said, "We are excited to have Richard Averitt join the growing team at Contrail.
With his experience analyzing large and complex transactions in aviation
leasing and asset management, Richard has an impressive record for elevating
firms and driving their success. We look forward to his insight, his innovation
and are confident that his addition will further position Contrail as a leader in

On his appointment Richard Averitt said, "I am honored to join Contrail at this exciting stage as their Director of Financial Planning and Analysis," said Richard Averitt. "They have a great crew and I'm proud to be a part of it. Full speed ahead."

Prior to joining Contrail, Mr Averitt served as Director of Lease Finance at True-Aero. There he led a team of analysts responsible for the acquisition and analysis of all lease and part-out assets. Prior to that, he was the Manager of Asset

Acquisitions and Valuations for TrueAero, and from 2014-2016, he was a Senior Product Line Representative at AeroTurbine, previously an AerCap subsidiary. Mr. Averitt holds a Bachelor of Business Administration in Finance from Baylor University's Hankamer School of Business.





## Musdalifa Abdullah promoted a Singapore MD by dnata

A Singapore national, Musdalifa joined dnata in 2017 as Chief Financial Officer for dnata's Asia Pacific Region

nata has appointed Musdalifa
Abdullah as the Managing Director for Singapore. In his role, Musdalifa will oversee dnata's ground handling, cargo and catering operations at Changi Airport in Singapore. He will manage a team of 1,800 employees, ensuring world-class services and safety for over 40 airline customers.

Stewart Angus, dnata's Divisional Senior Vice President for Airport Operationssaid, "I'm pleased to announce that Musdalifa will lead our Singapore team. I'm confident that our partners and colleagues will all benefit from Musdalifa's customer-ori-



ented approach and extensive experience in the aviation industry. Our Singapore business will be in good hands."

A Singapore national, Musdalifa joined dnata in 2017 as Chief Financial Officer for dnata's Asia Pacific Region; he has played an important role in the transformation and innovative development of dnata Singapore in the last few years. Before joining dnata, Musdalifa held several senior positions within the aviation industry in Singapore and the United Arab Emirates. Musdalifa's appointment is effective immediately.

# Anthony Brennan joins Atlantic Aviation Group as Chief People Officer

He will focus on optimising people centred activities for the organisation such as talent acquisition, learning & development, performance management, reward & recognition and cultural development

tlantic Aviation Group (AAG) re-Acently appointed Anthony Brennan as its Chief People Officer. In his new role he will lead the Group's people strategy to support growth plans. He will be responsible for the development of a high performing organisation ensuring that people, culture and organisational plans are continuously developed and aligned to the organisations core values. Besides he will focus on optimising people centred activities for the organisation such as talent acquisition, learning & development, performance management, reward & recognition and cultural development.

Anthony joins Atlantic Aviation Group from his previous role as HR Director of CityJet; where he dedicated 10 years to developing the company's people strategy, leading the companies HR teams and 1,200 staff across the airline's European bases.

CEO of Atlantic Aviation Group, Shane O'Neill said, "I would like to wholeheartedly welcome Anthony to the Atlantic Aviation Group team. Anthony has an impeccable track record in Human Resources at a senior level and we all look forward to working with him to help create and implement plans that support our people. Collectively as a company we have a major focus on people through talent acquisition, learning and development, employee retention, reward and recognition and cultural development. Anthony's addition to our team and his experience is a huge boost to us as we continue to implement our plans to achieve our objectives in these areas and continually support our people and our customers."

Commenting on his appointment, Anthony added, "I am delighted to have been appointed as Atlantic Aviation Group's Chief People Officer. Atlantic Aviation Group is an ambitious business with a highly skilled & committed workforce, an impressive Board and Senior Leadership Team. I am looking forward to joining and working with the entire Atlantic Aviation Group team. It's clear the company is genuinely committed to engaging with and developing all those in the organisation and to be given the chance to lead on these initiatives is

a privilege. I wish to acknowledge and thank everyone at Atlantic Aviation Group for the enthusiastic welcome I have received to date as part on my onboarding experience and I am looking forward to the exciting times ahead."

Anthony joins Atlantic Aviation Group during an exciting period of growth for the company, hav-





# International CALENDAR

## 2021

Date	Event	Venue
31 Aug 01 sept	ISTAT Asia	Millenia, Singapore
14- 16 Sept	Aircraft Interiors Expo	Virtual
11-14 Sept	ACPC Conference	Atlanta, GA
15-16 Sept	MRO Russia	Moscow
20-24 Sept	MRO Asia pacific	Virtual
22-23Sept	17th Maintenance Cost Conference (MCC)	Montreal, Canada
03- 05 Oct	ISTAT EMEA 2021	Edinburgh, Scotland
05-06 Oct	Helitech World Expo	London
12-14 Oct	NBAA Business Aviation Convention & Exhibition	Las Vegas, NV
19-21 Oct	MRO Europe	RAI Amsterdam, The Netherlands
01-04 Nov	Aerospace Incubator	Miami, FL
14-16 Nov	ISTAT Americas 2021	Austin, TX
14-18 Nov	Dubai Air Show	DBC, Dubai

## 2022

Date	Event	Venue
27-28 Jan	Aero-Engines Americas	Miami, FL
09-10 Feb	MRO Latin America	Cancun, Mexico
15-20 Feb	Singapore Airshow	Singapore
22-23 Feb	AIME 2022	Dubai, UAE
22-23 Feb	MRO Middle East	Dubai, UAE
03-04 Mar	РВЕхро	Miami, FL
06-09 Mar	World Defense show	Riyadh, Saudi Arabia
07-10 Mar	HAI Heli Expo	Dallas, TX
28-31 Mar	AEA International Convention & Trade Show	New Orleans, USA
26-28 Apr	MRO America	Dallas, TX, USA
03-05 May	NBAA Maintenance Conference	San Antonia, TX
23-25 May	EBACE	Geneva, Switzerland
07-08 Jun	Engine Leasing, Trading & Finance	London, UK
22 Jul	AERO South Africa	South Africa
06-08 Oct	Istanbul Airshow	Istanbul Atatürk Airport, Istanbul

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