

VD Gulf's new Tail Dock for maintenance on aircraft vertical stabilizer

Airbus' Flightlab demonstator- A test bed for next step in technology

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'D328eco' Game-changer in sustainable aviation for recovering aviation market

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The 737 MAX has finally received its seal of approval for return of service in Europe from European Union Aviation Safety Agency (EASA). Months and months of testing, modifications and revival has finally led to the modified version of Boeing 737 MAX with software updates, electrical wiring rework, maintenance checks, operations manual updates and crew training.

EASA Executive Director Patrick Ky said, "We have reached a significant milestone on a long road. Following extensive analysis by EASA, we have determined that the 737 MAX can safely return to service. This assessment was carried out in full independence of Boeing or the Federal Aviation Administration and without any economic or political pressure – we asked difficult

questions until we got answers and pushed for solutions which satisfied our exacting safety requirements. We carried out our own flight tests and simulator sessions and did not rely on others to do this for us."

In the days after the grounding, EASA set four conditions for the return to service of the aircraft:

The two accidents (JT610 and ET302) are deemed sufficiently understood

Design changes proposed by Boeing to address the issues highlighted by the accidents are EASA approved and their embodiment is mandated

An independent extended design review has been completed by EASA

Boeing 737 MAX flight crews have been adequately trained

These four conditions have now all

been met, allowing us to go ahead with the return to service," Ky added.

EASA has also issued a closing report explaining its approach and reasons for giving a green signal to 737 MAX.

"Let me be quite clear that this journey does not end here. We have every confidence that the aircraft is safe, which is the precondition for giving our approval. But we will continue to monitor 737 MAX operations closely as the aircraft resumes service. In parallel, and at our insistence, Boeing has also committed to work to enhance the aircraft still further in the medium term, in order to reach an even higher level of safety." Ky further added. The Boeing 737 MAX was grounded worldwide in March 2019 following the second of two accidents within just six months, which together claimed 346 lives. The root cause of these tragic accidents was traced to software known as the MCAS (Maneuvering Characteristics Augmentation System), intended to make the plane easier to handle. However, the MCAS, guided by only one Angle of Attack (AoA) sensor, kicked in repeatedly if that sensor malfunctioned, pushing the nose of the aircraft downward multiple times. In both accidents, pilots finally lost control of their plane, resulting in a crash with total loss of aircraft.

While the investigations assessed that the behavior of the MCAS and related alerting systems were the clear main cause of the two crashes, EASA rapidly realized that a far wider review of the 737 MAX was needed. EASA therefore extended its analysis to the entire flight control system. With a particular focus on the human factors – the actual experience for a pilot of flying the plane.

This extended review, conducted in close cooperation with FAA as primary certification authority, and with Boeing as manufacturer, continued to evolve over the course of the 20-month exercise.



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"The mandated actions need to be seen as a complete package which together ensures the aircraft's safety," Ky said. "This is not just about changes to the design of the aircraft: every individual 737 MAX pilot needs to undergo a onceoff special training, including simulator training, to ensure that they are fully familiar with the redesigned 737 MAX and trained to handle specific scenarios

which may arise in flight. This will be reinforced by recurrent training to ensure the knowledge is kept fresh."

EASA has also agreed with Boeing that the manufacturer will work to even further increase the resilience of the aircraft systems to AoA sensor failures so as to further enhance the safety of the aircraft. Boeing will also conduct a complementary Human Factor assessment of its crew alerting system within the next 12 months, with the aim of identifying the need for longer term improvements.

EASA, and regulators in Canada and Brazil, worked closely with the FAA and Boeing throughout the last 20 months to return the plane safely to operations. These three authorities have already approved the aircraft for the return to service.

### Boost to 737 MAX as Air Canada resumes commercial operations from 1st February 2021

A ir Canada has recently made an important announcement to resume Boeing 737 MAX commercial operations from 1st February 2021. This announcement comes on the backdrop of Transport Canada's Airworthiness Directive of 20th January 2021 stating lifting of NOTAM for Boeing 737. Besides this many regulatory bodies worldwide have ungrounded the 737 MAX and Air Canada have carried out their own assessment by specialized safety and flight operations experts.

Captain Murray Strom, Vice President, Flight Operations at Air Canada said, "We are very confident the nearly two-year regulatory process undertaken by Transport Canada and other regulators worldwide ensures the utmost safety of the Boeing 737 MAX fleet from nose to tail, and from wing to wing. As part of Air Canada's multi-layered approach to reinforcing and enhancing safety, our internal experts have also worked with independent specialists to conduct assessments of the aircraft and our operating procedures."

"In addition to implementing all required updates and modifications to the aircraft,



Air Canada has gone beyond by equipping its fleet with additional safety-enhancing features that exceed required regulatory standards. These measures are backed by our industry-leading flight operations, the extensive, comprehensive training programs our pilots and maintenance engineers regularly undergo, and our industry-renowned flight data analysis. Customers can therefore be assured that every crew member operating our fleet and the many employee teams working behind the scenes have an unwavering commitment

to safety. We look forward to welcoming you onboard," concluded Captain Strom.

The 737 MAX will gradually return to Air Canada's North American route network as the airline continues to optimize its narrow body fleet. All flights are operated in accordance with Air Canada's biosafety protocols and centered around the Air Canada CleanCare+ program.

Air Canada has 24 Boeing 737 MAX 8s that have a seating capacity of 169 passengers, with 16 Business Class seats and 153 Economy Class seats.

#### Airbus plans to increase A320 production to meet market demands

Adapting to the changing market condition Airbus is planning to increase the production rate for its A320 family aircraft. There will be a gradual increase in production from current rate of 40 per month to 43 in the third quarter of 2021, gradually an increase of 45 in the last quarter of this year. This latest production plan represents a slower ramp up than the previously antic-

ipated 47 aircraft per month from July.

The A220 monthly production rate will increase from four to five aircraft per month from the end of first quarter 2021 as previously foreseen.

Widebody production is expected to remain stable at current levels, with monthly production rates of around five and two for the A350 and A330, respec-

tively. This decision postpones a potential rate increase for the A350 to a later stage.

Airbus continues to monitor the market closely. With these revised rates, Airbus preserves its ability to meet customer demand while protecting its ability to further adapt as the global market evolves. Airbus expects the commercial aircraft market to return to pre-COVID levels by 2023 to 2025.



### Air Peace expands their African operations with first E195- E2 delivery



Air Peace recently took delivery of its first Embraer E195-E2 aircraft. This is the first of 13 firm E195-E2 orders as per the March 2019 contract for USD 2.2 billion. The aircraft will fly down from Embraer's facility in São José dos Campos to join the Air Peace fleet in Nigeria. Air Peace is the launch customer in Africa for the E2, the newest, most efficient, and most comfortable aircraft in the segment with a dual class arrangement with 124 seats. Air Peace is also the global launch customer for Embraer's innovative premium staggered seating design.

Chairman and CEO of Air Peace, Mr Allen Onyema said, "The E195-E2 is the perfect aircraft to expand our domestic and regional operations. We are aware of the aircraft's impressive economic performance as well as its unique configuration, the major reasons we placed an order for this aircraft. It is also a historic feat as Air Peace will be the first to operate this aircraft model in the whole of Africa. The E195-E2 aircraft will further help us actualise our ambition of connecting not just the whole of Nigeria, but the entire African continent, while feeding long-haul flights from our Lagos hub. The acquisition will enable us to deliver on our 'no-city-left-behind' initiative, which is underpinned by our goal to reduce the air transportation burden of Africans."

The fuel consumption of E195-E2 is about1.4 percent lower that is 25.4 per cent less fuel per seat compared to the current-generation E195. Maintenance costs are 20 per cent lower. The E195-E2 is the most environmentally-friendly aircraft in its class, having the lowest levels of external noise and emissions. It has the longest maintenance intervals in the single-aisle jet category with 10,000 flight hours for basic checks and no calendar limit for typical E-Jet operations. This means an additional 15 days of aircraft utilization over a period of ten years compared to current generation E-Jets.

Cesar Pereira, vice president of Europe, Middle East and Africa, Embraer Commercial Aviation said, "Handing over beautiful new jets to our customers is a favorite activity for everyone at Embraer. Doing so in the current circumstances is a boost for us all as we adapt to the changing environment. This is a fabulous start to the year for everybody at Air Peace and Embraer. Air Peace already operates eight ERJ-145s, and will use the E195-E2s to enhance domestic and regional connectivity."

The E2 is able to achieve this both affordably for passengers and profitably for the airline, along with delivering a superior travel experience. This enhanced network will also help feed and sustain long haul operations at the Lagos Hub, such as the UAE route launched in 2019 and South Africa launched in December 2020. There are currently 206 Embraer aircraft operating in Africa with 56 airlines in 29 countries.

# Congo Airways expand their horizons with two E2 variants

Congo Airways has ambitious plans of venturing into newer markets by incorporating the latest and fuel efficient E2 variants in its fleet. Congo Airways signed a contract with Embraer in December 2019 for another two E195-E2 aircraft. Prior to this they had ordered another couple of E190-E2. The deliveries of these aircraft will commence in 2022. The biggest advantage of having E2 variants is low fuel burn and longer maintenance intervals which will lead to maximum saving for the airlines.

Balazire Bantu, CEO, Congo Airways said, "We intend to deploy the E2s to high-demand destinations such as Abidjan, Cotonou, Johannesburg and Cape Town. We see an opportunity in our market and the crisis we are all facing for Congo Airways to emerge stronger. With two E-Jet models we will have the flexibility and the right-sized, most efficient aircraft as the market returns."

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### ASL welcomes Belgium's first Cirrus Vision jet in the fleet

A SL Group recently welcomed a Cirrus SF50 Vision Jet G2 at the international airport of Antwerp-Deurne. This is the first Belgian-registered Cirrus Vision Jet to be delivered by Cirrus Aircraft and it is the first single engine jet ever operated in Belgium.

The Cirrus Vision Jet is one of the most revolutionary aircraft of the private aviation industry, and probably the very first "personal jet" aimed primarily at pilot-owners willing to fly on their own personal jet.

Philippe Bodson, CEO of ASL Group said, "I am thrilled to welcome Belgium's very first Cirrus Vision Jet in our fleet. Over the last couple of years, ASL Group has either been the launch customer or the first operator of several new aircraft types, thanks to the incredible work, commitment and dedication of our Teams and to the high level of trust that we have been able to establish with our customers and with our partners within the aviation industry. The arrival of this

brand new state-of-the-art jet proves once again that we are at the forefront of innovation and entrepreneurship, and it makes me really proud, especially in such a special and challenging context."

This efficient single engine jet offers seating for up to 5 passengers in an ultra-modern, spacious and comfortable cabin and flies up to a maximum range of 1275 nautical miles / 2360 km, at a cruising speed of 305 KTAS / 565 kmph.

But most importantly, the jet features unique state-of-the-art safety features such as the Cirrus Airframe Parachute System (CAPS) which allows the aircraft and its occupants to safely return to the ground in the event of a major and non-recoverable emergency; as well as the Safe Return autoland system, a revolutionary system which allows passengers to activate, with the simple touch of a button, a fully automated landing of the aircraft without any manual input required from the crew or from the passengers. The Cirrus Vision Jet is currently

the only jet aircraft to include these unique systems as standard equipment.

"Not only do we welcome this aircraft as the latest and newest member of our fleet, but along with it, we are also very excited to be launching our new Fractional Ownership model, through our exclusive "Blue Sky Club" aircraft membership – and now fractional ownership – model. This is yet another very important milestone in the development of our company and of our customer-centered services," Bodson further added.

The aircraft will be based in Antwerp, Belgium and will be operated by ASL Group, under its recently re-structured Blue Sky Club, launched in 2010 as an aircraft membership program. With the introduction of the Cirrus Vision Jet, ASL Group is now also introducing its new Fractional Ownership model and intends to further expand this new model with additional aircraft in the near future!

### HondaJet Elite received type certification from Russia's Federal Air Transport Agency

HondaJet Elite recently received Russian type certification from Federal Air Transport Agency (FATA). The first HondaJet with Russian registration began its operation in the region immediately after receiving the certification.

Honda Aircraft Company will continue to expand their type certifications with growing customer demands. They currently hold about 13 type certifications around the world like FAA, EASA, AFAC, ANAC, DGCA, CAAC, PCAA ,JCAB and others.

Michimasa Fujino, Honda Aircraft Company President and CEO said, "The HondaJet Elite is well suited to the needs of business travelers in Russia and the CIS, as it can provide safe, quick and efficient transport between cities in the region, or between Russia and the European Union. Our objective is to change the way we travel by growing the market for business aviation. We are excited to see that the first Honda-Jet in Russia is already in operation and look forward to further expanding our Russian fleet."

The HondaJet Elite showcases the aeronautical breakthroughs developed

by Honda Aircraft Company and is the most efficient, quietest, fastest, farthest and highest-flying aircraft in its class. The HondaJet fleet currently comprises over 170 aircraft worldwide with more than 63,000 flight hours and an industry-leading dispatch reliability.







### VD Gulf cleared to maintain aircraft registered in Saudi Arabia



VD Gulf recently received Kingdom of Saudi Arabia's General Authority of Civil Aviation (GACA) approval to maintain aircraft registered within the Kingdom.

VD Gulf, the leading independent MRO adjacent to Sharjah International Air-

port, met all requirements and colorfully passed a stringent audit by GACA auditors. VD Gulf is now approved and ready to serve all types of Airbus A320 family aircraft registered within the Kingdom of Saudi Arabia.

Ayrat Gilmutdinov, Director Commercial said, "We are very pleased to expand our services to operators within the GCC countries. Securing the official seal of approval from the Kingdom of Saudi Arabia's GACA is a significant and valuable milestone for us. This is a result of our continuous effort to meet and address the needs and interests of our ever-increasing number of Customers."

Following this approval, within the first week of January 2021, VD Gulf had already welcomed the first Saudi registered Customer's aircraft to perform scheduled heavy 'C" check maintenance.

### AvAir adds over 2000 rotable components for Airbus A320 from HAECO ITM

Avair has recently acquired Airbus A320 rotable pool from HAECO ITM Limited. With this transaction, Avair will add over 2,000 rotable components including IDG's, Starters and Avionics for Airbus A320.

Brandon Wesson, executive Vice President of Sales for AvAir said, "Last year was difficult for the industry and we were able to work closely with our clients to create solutions for them through multiple large acquisitions. We're pleased to continue our momentum into

the new year with this partnership and expand our offering for customers."

Graham Air, Head of Asset Management and Trading for HAECO ITM said, "HAECO ITM has been able to optimise and right size its rotable holding over the last few months with consolidation and improvements in our analytics and supply chain. We are happy to have found a partner in AvAir that is known for strategic solutions; and they delivered just that with our agreement. It was great to work with a team who focused on our needs and

how to meet them."

Fjalar Scott, AvAir's vice president of sales for Europe, the Middle East and Africa said, "Our facility in Dublin has been key to providing timely service to our clients in the Eastern hemisphere. This acquisition adds more in-stock inventory to our growing list of components to ensure immediate deliverability."

The entire stock will be added to AvAir's growing Dublin facility to support their A320 customers in the region.

### ST Engineering appointed as licensed MRO service provider for Honeywell components in Asia Pacific

Honeywell has awarded ST engineering with a decade long contract to provide MRO services for Honeywell components installed on LEAP series engines for Asia Pacific operators. This contract will help leverage ST Engineering's role as they plan to set up MRO capabilities for the LEAP-1A and LEAP-1B engine.

With the signing of this contract ST Engineering becomes the only licensed MRO service provider for Honeywell components installed on LEAP engines used in Airbus A320neo family, Boeing 737 MAX and COMAC C919.

Jeffrey Lam, President/Head, Commercial Aerospace of ST Engineering said, "ST Engineering takes pride in providing reliable and best-in-class MRO support, and we are able to do this by forming long-term and strategic cooperation with OEMs such as Honeywell. Being entrusted as Honeywell's licensed repair center for their LEAP-series engine components in Asia Pacific attests to our ability to deliver. We will continue to live up to our strong value proposition of en-

hanced fleet maintenance solutions by leveraging OEM support and resources."

ST Engineering and Honeywell will build on their existing working relationship through the new repair licensing agreement to deliver the highest possible levels of product support to Asia Pacific operators, who can now turn to ST Engineering's highly-customisable component repair and overhaul services or its hallmark Maintenance-By-the-Hour programmes to take care of their Honeywell LEAP-series engine component MRO needs.



#### Frontier Airlines sign major contract for fuelefficient GTF engine installation, spares & maintenance with Pratt & Whitney

Frontier Airlines have signed an agreement with Pratt & Whitney for ultra-efficient GTF engines to power 134 A320neo family aircraft scheduled for delivery beginning in 2022. The GTF engines offer maximum efficiency and significant noise reduction. These engines will power 49 A320neo, 67 A321neo and 18 A321XLR aircraft. The agreement includes 268 installed engines plus spares as well as an engine maintenance agreement with Pratt & Whitney that includes on-site technical support.

Barry Biffle, president and CEO of Frontier Airlines said, "Frontier Airlines is at the forefront of green innovation in the airline industry and this deal for advanced GTF engines from Pratt & Whitney is extremely significant in our continued action plan to reduce fuel consumption. Frontier is already the most fuel-efficient US airline and operating with this new engine technology will result in additional fuel savings which translates to operational cost reductions we can pass on to consumers in the form of low fares."

Rick Deurloo, Chief Commercial Officer, Pratt & Whitney said, "It is with immense pride and excitement that we welcome Frontier Airlines to the Pratt & Whitney family. With the GTF engine, Frontier will be getting more than fuel efficiency and environmental responsibility; Pratt & Whitney will be with Frontier every step of the way, supporting their operations for decades to come."

The Pratt & Whitney GTF (geared tur-

bofan) engine uses revolutionary geared fan technology, which allows each part of the engine to spin at its optimal speed, thereby delivering the highest level of fuel efficiency and economic benefit to airlines. Compared to previous-generation aircraft, the GTF engine reduces fuel burn and carbon emissions by 16 percent and noise footprint by 75 percent, while bringing nitrogen oxide emissions 50 percent below the regulatory standard.

Frontier has the largest A320neo fleet in the US, the use of these aircraft, Frontier's seating configuration, weight-saving tactics and baggage process have all contributed to the airline's average of 43 percent fuel savings compared to other US airlines which makes Frontier the most fuel-efficient US airline.

### Reliable and fuel-efficient six V2500 engines of Air Sial to be serviced by MTU Maintenance

TU Maintenance has signed an exclusive five year contract for maintenance, repair and overhaul of Air Sial's six V2500 engines. Apart from MRO the agreement includes engine trend monitoring, on-site services and lease engine support as well as technical training. One of the best engines in its class, the V2500 is technologically advanced cleaner, quieter, and more fuel efficient. It delivers a fuel advantage of about 3 per cent, resulting in significant savings and a payload-range advantage which makes the engine attractive for longer-haul passenger and cargo flights.

Mr. Fazal Jilani, Chairman Air Sial said, "We are delighted to rely on the technical support of MTU during our rampup of operations and beyond. We are confident that MTU's engine experts will minimize our costs and optimize our usage to gain the maximum benefit and performance from our engines."

Air Sial began operations in December, 2020. It currently flies to domestic locations within Pakistan and aims to boost



air travel and connectivity in the region. It plans to carry out cross-border flights from 2021.

Michael Schreyögg, Chief Program Officer, MTU Aero Engines said, "It was fantastic to see Air Sial entering into operations and joining the market at the end of a rather challenging 2020. It is a clear signal of better times to come. At MTU, we believe in the recovery and subsequent success of the aviation

industry and look forward to a long and fruitful relationship with newcomer Air Sial."

MTU Maintenance is the number one service provider for V2500 engines worldwide, and t largest independent service provider for the V2500. The highly reliable and fuel efficient V2500 engine is serviced at three MTU facilities in order to meet global and regional demand.



### VD Gulf's new Tail Dock for maintenance on aircraft vertical stabilizer

VD Gulf has introduced a versatile, unique and mobile in-house solution called the 'The Tail Dock'. It is designed and built by VD Gulf engineers and GSE professionals to transform the way VD Gulf conducts maintenance on aircraft vertical stabilizer.

The Tail Dock comes with a movable platform that can be positioned at any vertical location to access any surface of the vertical stabilizer of large or small aircraft, be it a Boeing 747 or Airbus A319

A special electrically operated mechanism positions the Tail Dock platform as required by the engineer/technician working on the tail. Using a handy remote control, the aircraft engineer/technician can adjust the height of the Tail Dock platform to any desired height, hence comfortably accessing any part of the tail.

The newly built universal Tail Dock reduces the time it takes to adjust platforms for different positions and also eliminates the need to keep two or three dedicated tail dock platforms for different aircraft types.

VD Gulf continuously work to improve the efficiency of its maintenance process by proactively introducing unique in-house solutions.



### Duncan Aviation creates installation package for ACA ionization system for Bombardier Global



Duncan Aviation has created an installation package for the Aviation Clean Air (ACA) ionization system for Bombardier Global aircraft. The packages include everything necessary for installing the ACA Ionizer system in Global aircraft, including the Supple-

mental Type Certificate (STC), the ionizers, and Parts Manufacturer Approval (PMA) parts kits. Apart from Global aircraft, the engineers have also developed an STC and installation package for Challenger 300 and Challenger 350 aircraft.

Pat Mapes, Manager of Avionics Install Line at Duncan aviation said, "The necessary modification of the air ducts for the installation will be done at Duncan Aviation facility in Lincoln, Nebraska, while the main installation will be done at any of the facilities in Battle Creek, Provo, or Lincoln or any of the satellite shops in US."

Designed to be installed in an aircraft's existing environmental control system, the ACA ionizers operate in the aircraft's ductwork. The ionized hydrogen molecules neutralize pathogens and remove allergens and unpleasant odors, including those from pets, cigarette and cigar smoke, engine exhaust, cooking, lavatories, and VOCs (volatile organic compounds).

The ACA systems are in great demand in the industry since the pandemic outbreak. Aircraft operators are now looking at ACA installation packages for other aircraft models too. In a recent testing conducted by an independent lab the ACA ionizer was proven effective against the novel coronavirus.



### 'Jetex' makes a mark as one stop solution for private jet travel

Jetex recently signed an agreement with Falcon Aviation to manage its FBO and hangar at Al Maktoum International Airport, Dubai. With this agreement Jetex will operate the world's largest private terminal in terms of VIP lounge space, which spans more than 32,000 square feet.

The new passenger lounge will complement Jetex's existing facilities to meet the growing demand for private jet travel in the region. As the world's leading FBO brand, Jetex will lend its expertise to enhance the lounge to ensure that all customers enjoy consistent world-class service standards the company is known for. Travelers will enjoy priority access to a range of new elegant extras, including dedicated spaces for those seeking utmost

privacy, luxury en-suite bedrooms and a kids club.

This terminal is the first in the region open to all operators, corporates and private individuals to facilitate quick and convenient helicopter charters between Dubai and Abu Dhabi in just 30 minutes.

Adel Mardini, Founder and CEO of Jetex said, "I am pleased to sign the management agreement with Falcon Aviation which will cement our position as a one-stop solution in the world of private aviation. It will allow international travelers to benefit from the enhanced passenger facilities at the Jetex VIP Terminal. With the dedicated hangar in Dubai, we will also be able to provide world-class support to aircraft owners and operators. This is an

important milestone in the Jetex story, and we look forward to announcing more international locations soon."

Under the new agreement, Jetex will also manage Falcon Aviation's Code-F Plot hangar. The state-of-the-art facility is one of the largest in the Middle East, and it is perfectly designed and equipped to meet the growing demand for aircraft hangarage in Dubai. The air-conditioned hangar is located on a 258,000 square feet plot with an additional apron space of 140,000 square feet to handle and store aircraft safely, whether it is a long-term contract or a one night's stay. With robust growth in private jet travel over the past months, Dubai is set to welcome even more international travelers in 2021 when the city is set to host the World Expo.

### WENCOR to be the official global distributor of ATS PMA portfolio

ATS (Aviation Technical Services) recently appointed Wencor as the exclusive global distributor of Part Manufacturer Approval (PMA) portfolio. The agreement also includes distribution of ATS-patented EverLatch Cargo Door Latch, a cost-effective solution designed to enhance reliability of Boeing 737NG aircraft.

Brian Olsen, ATS President of Component and Engineering Solutions said, "Our PMA Program started through collaboration with one of our heavy maintenance customers and has been successful in identifying millions of dollars in savings for Boeing 737 operators. We are look-



ing forward to increasing the program's exposure to airlines and MROs through Wencor's established channels."

Wencor Chief Executive Officer Shawn Trogdon said, "We are excited to continue to build our relationship with ATS and add their PMAs to our industry leading portfolio which now includes greater than 11,000 alternative material solutions. As the aviation industry continues to bounce back, Wencor remains committed more than ever to providing innovative solutions to our customers that enable reliability, availability and cost efficiencies. Partnering with ATS to expand our offering enhances that objective."

Engineered utilizing data from airframe maintenance and component repair workscopes, ATS PMAs replace high cost, long lead time, and high failure parts.





### Duncan Aviation revamped Global Express XRS with unconventional colors and bold patterns



Duncan Aviation completely refurbished a Global Express XRS with a face lift and an eccentric metal design. The aircraft interior was remodeled with incredible use of non-conventional colours and bold patterns. The aircraft

entryway was customized with custom, dark, rich brown wood flooring.

The carpet features half leather and half wool, which is a rare and luxurious combination. The seat design is reminiscent of seats in an Aston Martin su-

percar, with details stitched throughout in brown leather. The headrest also has similar details, but in black leather.

In the lavatory, the sidewalls have bright striping in blue, white, and black, and the countertops feature a blue and white marble. In addition to the interior completion, the aircraft received a custom paint scheme that incorporated the owner's brand in a bold yet distinct way, a 120-month inspection, a Collins Aerospace Venue Cabin Management System upgrade, and new LED lighting.

The aircraft's galley was given a face lift as well with an eccentric metal design, beautiful black and white Quartz countertop, and a faucet that looks like a beer tap.

### Duncan Aviation delivered first Citation XLS with hydrodipped cabinetry and FMS upgrade

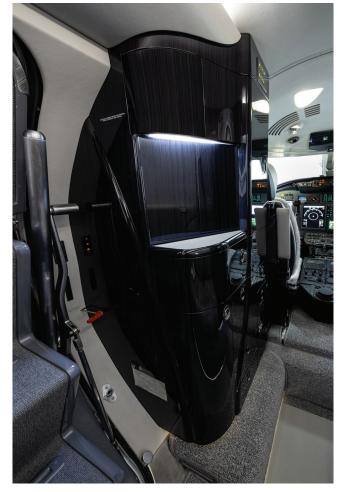
Duncan Aviation recently delivered a 2007 Citation XLS with hydrodipped cabinetry and an FMS upgrade. This was the first aircraft of its size to receive fully hydrodipped cabinetry from Duncan Aviation.

Duncan Aviation Completions & Modifications Sales Rep Angie Coleman said, "Being able to dip an entire cabinet of an XLS is truly an accomplishment. Although the design possibilities are endless and hydrodipping is a more cost-effective solution compared to a reveneer, the process still requires the same attention to detail, which is where the Duncan Aviation Finish Team excels."

Duncan Aviation Finish Shop Team Leader Chris Nelson said,"They can hydrodip nearly anything. We have hydrodipped larger components in the past, but this is the first galley we have hydrodipped using the arm," Nelson says. "The arm allows for our team to dip large objects with ease, and mitigate the possibility of imperfections. We are always looking for ways to stay innovative and deliver the best possible products of the highest quality to our customers."

Duncan Aviation Interior Manager Jared Stauffer said, "The creativity of the team and their passion for serving customers' needs is demonstrated by this project. As customer demand increased for larger monuments, Nelson and his team identified local talent to customize a tool that met our needs. I'm proud of this team's ability to adapt to our customers' needs and engineer solutions to meet their requests."

The most important part of success of Duncan Aviation team is the mechanization developed by them for the hydrodipping process. The mechanical arm, which is used to dip components, makes the process more consistent and manageable for larger components, such as a galley cabinet.





### SEA Metroliner undergoes a major cockpit avionics modernization for increased efficiency



Southeast Aerospace (SEA) recently completed a major cockpit avionics modernization program on a SA 227 Metroliner. As a part of this process, they removed equipment including an early generation EFIS, many electromechanical and pneumatic instruments, and older communication and navigation equipment. Through the use of five STCs and

FAA DER approved data, SEA installed a complete new Garmin avionics package in an SEA manufactured custom instrument panel. This upgrade brings major improvements to situational awareness and avionics relevance, allowing the aircraft to fly for many more years to come.

Dual Garmin G700 TXI EFIS Systems

Dual Garmin G700 TXi EFIS Systems with GDU 1060s

- Garmin TAWS-B
- Garmin GTN 750 Xi and GTN 650 Xi GPS/NAV/COMs
- Garmin GTS 855 TCAS I Active and ADS-B In Traffic System
- Garmin GWX 75 Weather Radar This new avionics suite has full integration with the existing autopilot, radar altimeter, FDR, and other retained avionics and aircraft systems.

For audio distribution, SEA utilized the new PS Engineering PAC 45A audio system bringing 12 place passenger intercom with cabin call functionality, CVR integration, 3D audio, and more.

SEA also installed the Mid-Continent Instruments MD 302 SAM, Electronic Standby Instrument to provide a reliable redundant flight instrumentation source if a major electrical failure happens during flight.





#### PASSENGER TO FREIGHTER CONVERSION

#### Why to opt for 737-800 **Boeing converted freighter?**



 $B^{\mathrm{BAM}}$  and Boeing have expanded their partnership with a firm order of 12 737-800 Boeing converted Freighters looking at the rising e-commerce and express cargo market.

Steve Zissis, CEO of BBAM said, "As we look ahead to expanding our cargo fleet, the 737-800 Boeing Converted Freighter provides the performance and efficiency our customers need. Adding these highly capable freighters to 276 Boeing airplanes in our managed fleet helps to further strengthen our leadership position in the marketplace."

"BBAM is one of the industry's leading fullservice leasing companies and has built their reputation on smart investments. We are honored

that BBAM has selected more 737-800BCFs, based on the success of our standard body freighters in their portfolio," said Ihssane Mounir, Boeing's senior vice president of Commercial Sales and Marketing. "The continued strong demand for the 737-800BCF demonstrates the critical role these converted freighters play in the growing express and e-commerce market."

The 737-800 converted freighter offers higher reliability and lower fuel consumption and operating costs per trip compared to other standard body freighters. It is mainly used to carry express cargo on domestic or short-haul routes making them operators favorite.



#### AirbusHeli Soaring new heights



Airbus Helicopters have logged gross order of 289 aircraft despite challenging market conditions. They have delivered 300 rotorcrafts worldwide despite the travel restrictions due to pandemic. This has resulted in a stable 48 per cent share of the civil and parapublic market allowing the Airbus Helicopters to maintain their market leading position in the civil and parapublic market.

Bruno Even, Airbus Helicopters CEO said, "I am proud of our teams all over the world who adapted their ways of working to be there for our customers when they needed us the most, striving to help them to maintain their essential missions across the globe by delivering helicopters and the associated support and services they required. I would like to thank our customers for their continued trust in Airbus Helicopters. We certified the five-bladed H145 and the H160 and laid solid foundations for our pursuit of zero-emission technologies with our CityAirbus demonstrator."

Key deliveries in 2020 included

- 1. First five-bladed H145 to launch customer Norsk Luftambulanse, at the end of September.
- 2. Followed by deliveries to DRF Luftrettung at the end of the year.
  - 3. The first H225Ms were handed over

to the Kuwait Air Force.

- 4. The first NH90s delivered to the Spanish Air Force.
- 5. 463rd delivery, on time, on cost, and on quality, of an UH-72A Lakota from the Airbus Helicopters factory in Columbus, Mississippi in September.

Order highlights for 2020 consist of 84 helicopters for the best-selling H145, including 17 UH-72B for the US Army, the first Fenestron and Helionix-equipped versions to be ordered. The H135 achieved solid sales with 33 units and also received the EASA certification of an alternate gross weight as well as a new single pilot IFR cockpit layout at the end of 2020. Milestone Aviation and Heli-Union both became new customers for the multi-mission H160, ordered to address a wide range of missions including offshore transportation.

The NH90 had a successful 2020 with the Bundeswehr placing an order for 31 naval helicopters to replace the ageing Sea Lynx fleet due to be retired. The French Armament General Directorate (DGA) confirmed the development of a new Standard 2 version to equip the French Special Forces and the first NH90 for Qatar performed its maiden flight at the end of the year.

On the customer support and service side, once again there was a strong

showing for HCare support contracts, with new customers joining the ranks such as the National Aeronautics and Space Administration (NASA) and Air Methods Corporation. Facing the global pandemic, the company mobilised to keep its military and civil customers flying thanks to elevated levels of technical and logistics support, new distance learning solutions, and direct assistance from Airbus Helicopters in making protective equipment available to pilots and crews. A new AirbusWorld collaborative customer platform was launched based on feedback from customers, offering a streamlined user experience and new functionalities aimed at fostering open dialogue among operators and with the company.

Airbus Helicopters' resilient business model allows the company to continue investing and preparing the future. In 2020, innovation milestones included the first fully automatic flight of CityAirbus, a demonstrator that will play an important role in developing zero-emission flight and in preparing the future urban air mobility market. The VSR700, the company's rotary-wing unmanned aerial system, performed its first free flight in July and autonomous deck-landing trials at the end of the year



### Airbus' Flightlab demonstator- A test bed for next step in technology



Airbus Helicopters recently introduced Flightlab, an agile and efficient test bed to test technologies that could equip Airbus current helicopter range. The Flightlab demonstrator will be used to test the hybrid and electric propulsion technologies and similar such technologies which will reduce helicopter sound levels, improve main-

tenance and flight safety.

Bruno Even, Airbus Helicopters CEO said, "Investing in the future remains essential, even in times of crisis, especially when those innovations bring added value to our customers by targeting increased safety, reduced pilot workload, and reduced sound levels. Having a dedicated platform to test these new

technologies brings the future of flight a step closer and is a clear reflection of our priorities at Airbus Helicopters."

The initial testing began in April 2020 to measure the helicopter sound levels in urban areas to study how the building affects people's perception. Later in December tests were conducted to evaluate the Rotor Strike Alerting System (RSAS) aimed at alerting crews about the imminent risk of collision with the main and tail rotors.

This year the tests will include an image-detection solution with cameras to enable low altitude navigation, the viability of a dedicated Health and Usage Monitoring System (HUMS) for light helicopters, and an Engine Backup System, which will provide emergency electric power in the event of a turbine failure.

Airbus already has several well-known Flightlabs such as the A340 MSN1, used to assess the feasibility of introducing laminar flow wing technology on a large airliner, and the A350 Airs

### Maintenance friendly H145- aircraft of choice for civil and military missions



Milestone Aviation and NHV have partnered to supply two Airbus five-blazed H145 helicopters to support Germany's Federal Armed Forces' training program at Laupheim. The new H145 helicopters are the first five-bladed ver-

sions to be acquired by Milestone and the first to be operated by NHV. Apart from this, Milestone has also delivered a four-bladed H145 to NHV in 2020.

The H145 is a maintenance friendly helicopter as the maintenance proce-

dures optimise the intervals between periodic inspections, ensuring increased availability and reduced operating costs. The optional health monitoring system with usage monitoring system (HUMS) keeps track of the engine's health in accordance with usage conditions, resulting in further availability and enhanced, cost-effective maintenance.

Sebastien Moulin, Milestone head of Europe and the Americas, said, "The helicopters leased to NHV cover a wide range of missions ranging from oil and gas transportation, emergency services, windfarm maintenance, and now military training. The ability to provide such tailor-made solutions is a key differentiator for Milestone and illustrates the depth of service capability we offer."

Milestone and NHV have a strong partnership of over eight years and Milestone has leased eight helicopters into NHV fleet.



Four decades of reliable performance in extreme climate by Bell 412

Bell 412 has crossed an important milestone of crossing the 40 years mark of customer service since its introduction in 1981. In the last four decades Bell has delivered over 1,100 deliveries of Bell 412 logging over 6.5 million flight hours. It has evolved over the years with 11 different variants, the latest is recently unveiled most advanced version, Subaru Bell 412 EPX.

Developed from a joint partnership between Bell and Subaru to support the Japan Ground Self Defence Force, the Subaru Bell 423 EPX has a more robust main rotor gearbox with 11 per cent more horsepower capability. It has an increased maximum internal weight of 12,200 pounds, and an external weight of 13,000 pounds and can carry up to 5,000 pounds of goods with a cargo hook. Having the widest loading door in its class enables quick unloading and loading into a spacious cabin that seats 14 passengers. Besides this the aircraft



has been certified to run without oil (run dry) for up to 30 minutes for improved safety along with other evolutionary features.

Bell 412 has sizable overhaul intervals, 5,000 hour drive system TBO – 4,000 hour engine overhaul interval oncondition composite main rotor blades. It is equipped with a rugged fuselage with rollover bulkhead protection and

rupture resistant fuel cells.

Bell 412 serves operations like offshore, emergency medical and VIP missions. From moving employees to oil rig sites off the coast of Africa, to fighting fires in Australia, to presidential duties in Asia, the platform brings exceptional performance, impressive cargo-carrying abilities and power to each job.

### **Evolving Mexican market for AW169 VIP** helicopters

OVID-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 rapid rise of VIP and charter aircraft.

One such example is the success of Augusta Westland169 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.

Since last few years AW109 light twin series and the AW139 intermediate twin have also proven extremely successful in Latin America and Mexico for various applications. Now AW169 is one more option to meet evolving regional market requirements.

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. A performance increase package is under development to provide even greater capabilities to customers in all conditions, including Hot&High, for which the AW169 will have the best in class power-to-weight ratio making the AW169 the perfect fit for operations in Mexico.

The best-in-class technology in rotor

system, engines, avionics, transmission and electric power generation and distribution of AW169 makes it the preferred choice for VIP operators. The AW169 can comfortably accommodate up to ten passengers in its large, unobstructed cabin, fitted with a range of customised equipment and entertainment systems.

The aircraft is powered by a pair of Pratt & Whitney PW210A turbo shafts which also have an auxiliary power unit (APU) mode, ensuring the continued operation of the environmental control system and radios, among others, when the rotors are stopped. The AW169's avionic suite introduces state-of-the-art technology including a fully digital NVG compatible cockpit with three large area displays and touch screen technology with enhanced 3D graphics capability for maximum situational awareness.



#### **NEW FACILITIES ACROSS THE GLOBE**

#### MTU Maintenance expansion plans in Serbia

MTU Aero Engines will be expanding its global network of locations with a new engine parts repair shop in Stara Pazova, Serbia. Last year, MTU and the government of the Republic of Serbia signed a declaration of cooperation to establish close collaboration on the dual-track training of skilled workers as practiced in Germany. This guarantees the technical foundations required for aviation. On-job training will be conducted exclusively in the new facility from 2024. In the initial stages this training will be given at MTU locations in Germany and Canada. By 2027, the new repair location is expected to grow to around 440 employees.

Managing Director and Project Manager of MRT Maintenance, Serbia said, "We plan to create a working environment in which they can perform at their best. We make targeted investments in the training and development of our talented employees, helping them expand their know-how and develop their potential. MTU Maintenance Serbia will provide many people in the Stara Pazova region with career opportunities."

Serbia's President Aleksandar Vu i praised MTU's commitment. He said,



"MTU is playing a pioneering role, and the conditions here are excellent. The industrial park in Stara Pazova is located only 25 kilometers from Nikola Tesla Belgrade international airport and boasts good transport connections."

Holger Sindemann, head of MRO operations, Serbia said, "In the first phase, we plan to have capacity for 470,000 repair hours per year. We were able to incorporate know-how from our maintenance locations worldwide into the planning for the new site."

MTU Maintenance's worldwide loca-

tions perform about 1.9 million repair hours annually. The new shop in Serbia is a further reinforcement.

A team of about 30 MTU specialists in repair technologies, quality, logistics, finance and human resources is already working to establish the new maintenance location. The MTU office in Belgrade is now up and the project team has defined the plant and process technologies. This means it will be possible to place early orders for particularly complex machinery with long delivery times

#### Evolving Mex AeroTEC opens new wide-body MRO hangar facility at Moses Lake ican market for AW169 VIP helicopters

AeroTEC is going strong with their ambitious expansion plans in Washington State by opening of a brand new world class 85,000 square foot wide-body MRO hangar facility at the Grant County International Airport in Moses Lake. The inaugural aircraft in this hangar is the Global SuperTanker Boeing 747.

This new world class hangar joins AeroTEC's existing modern campus which already includes 2 large hangars increasing AeroTEC's capability to house a mix of up to 9 regional, single aisle and dual aisle commercial aircraft. In addition, AeroTEC has received FAA approval for additional ratings of its Part 145 Repair Station Certificate.

Commissioner of Public Lands Hilary Franz said, "As the leader of our state's

wildfire fighting force, I have seen first-hand the increasing devastation that wildfire brings to communities across Washington. Moses Lake is a strategic location for our firefighting aircraft, so the expansion of this kind of support on the ground is absolutely critical to ensuring we are equipped and ready to fight fires effectively and efficiently. I am pleased that AeroTEC has secured FAA approval of this MRO facility in Moses Lake and look forward to expanded aviation resources to help protect our lands and communities."

Lee Human, AeroTEC's founder and chief executive officer said, "These announcements are huge milestones for our Moses Lake team and are the result of years of strategic capability building. AeroTEC has established itself as a specialist in the

design, modification and now maintenance of special use Boeing 747s and other aircraft. We would have not been successful without the partnerships with our Congressional Delegation, the Washington State Department of Commerce, our local State Legislators and the Port of Moses Lake. AeroTEC's new MRO in Moses Lake joins the Flight Test Center on the Moses Lake campus, the Engineering Center in Seattle, and the AS9100 certified Manufacturing Center in Arlington, WA."

AeroTEC's expanded FAA Part 145
Repair Station Certificate now includes
the Boeing 737 MAX, Boeing 747-400
and the Cessna Caravan, thus allowing
AeroTEC to perform MRO services on
those aircraft. Additional aircraft and
powerplant ratings will be added as the
MRO continues to expand.



#### NEW FACILITIES ACROSS THE GLOBE

### Honda Aircraft' commences operations at newly opened 83,100 sq foot wing production facility

Honda Aircraft Company recently began operations at its newly opened 83,100 square foot Wing Production and Service Parts Facility, located at the company's world headquarters at the Piedmont Triad International Airport in Greensboro, North Carolina. This facility is the latest addition to the 133-acre Honda Aircraft Company campus with a main wing assembly hangar, service parts warehouse for parts storage and distribution, paint booth, and office

Michimasa Fujino, president and CEO of Honda Aircraft Company said, "Honda is a mobility technology company, and our newest facility further increases efficiency of assembly. It also will house more service parts to support the rapidly growing HondaJet fleet. Since entering the market five years ago, the HondaJet has received a tremendous response from customers. This facility will enable us to continue to provide our growing global customer base with the highest



level of customer support."

This facility will house a new wing assembly process for the fastest, farthest and highest-flying aircraft in class, the HondaJet Elite. HondaJet wings are composed of an exterior skin made of machined one-piece aluminum alloys backed by alloy ribs to achieve a very smooth surface designed to reduce aero-

dynamic drag and structural rigidity. The new facility will enable the concurrent assembly of more wings, resulting in a major increase in production efficiency. It represents an additional investment of USD 24.3 million, bringing the total capital investment in its North Carolina facilities to more than USD245 million.

### Mesa's first complete cabin modification in newly opened Portugal hangar



Mesa recently completed its first maintenance work in the recently opened Hangar at Beja's Civil Terminal, Portugal. This first work consisted in a cabin modification of a Hi Fly's Airbus A321.

The complete process of cabin modification took six days and the work was handled by strictly following certified instructions and drawings to guarantee the continuous airworthiness of the aircraft in post-configuration.

This work implied several changes, including seats replacement, class dividers removal, PSU (passenger service unit) adaptation, floor covering replacement, placard installation, emergency equip-

ment adaptation, cabin assignment module (CAM) replacement and crew rest removal.

Mesa's new hangar covers an area of about 9,500 m2 and includes workshops, warehouse, offices, training facilities and other support premises. It operates around the clock 24/7 and is ready to receive and service Airbus A319, A320, A321, A330, A340 and A350, having the capacity to perform maintenance works on up to three aircraft at a time.

Mesa is the engineering and maintenance company part of the Hi Fly group, a leading wet lease specialist and charter airline operating worldwide. They have changed the cabin configuration of its Airbus A321 CS-TRJ, replacing the 153 seats (4 first, 12 business and 137 economy) for a full economy version of 220 brand new seats, to meet the demands of a new operation.



#### **NEW FACILITIES ACROSS THE GLOBE**

#### I JetSupport expands their portfolio in Germany



The JetSupport team based in Amsterdam has opened a new line station and hangar facility in Oberpfaffenhofen Airport in the Southern region of Germany. This facility will carry full EASA/FAA Line Station approvals.

JetSupport has specifically chosen this strategic location as it is a historic airport closer to Munich to extend support to customers across Europe. The new facility has a size of 2250 sq m and is manned by a dedicated local team of expert

engineers and support staff.

As another milestone, JetSupport has designed a new customer service offering which provides an all-in care package. This package includes parking, servicing, cleaning and maintenance services in order to enhance ease of use for the customer and to facilitate maximum availability of their assets.

Mesa opens new hangar at Portugal's Beja Civil Terminal

Mesa has officially opened its 9, 5000 square meter brand new Hangar at Beja's Civil Terminal for maintenance of Airbus aircraft. The facility includes workshops, warehouse, offices, training facilities and other support premises. The hangar will be operational round the clock and will serve as the base maintenance unit for Hi Fly's Airbus fleet, as well as for other airlines which have maintenance contracts with MESA. Mesa is the engineering and maintenance company part of the Hi Fly group.

The Hangar is ready to receive and service Airbus A319, A320, A321, A330, A340 and A350, and has the capacity to perform maintenance works on up to three aircraft at a time.

Paulo Mirpuri, Hi Fly and Mesa's President said, "Beja is a prime location for aircraft maintenance, and with this additional capacity we hope not only to keep up with the strong growth of Hi Fly's fleet but also to acquire new customers mainly from Europe and Africa. It's a big project for the Group and we're



looking forward to welcoming our fleet to this fantastic facility."

A comprehensive range of maintenance works related to line/base maintenance like "A Checks", "C Checks", cabin interior upgrades and modifications, engine replacement, landing gear replacement, hydraulics tests, defects correction and troubleshooting, SB's, AD's, MPD and

Out Phase Tasks Modifications, engine Boroscope inspections and workshop works such as: batteries, IFE, oxygen, cabin interiors, electrical equipment, torque wrenches and measurements will be done here.

Mesa, invested 30million in the project, which will create about 150 jobs in its first three years of activity.





### GKN to develop 'Hydrogen Propulsion System' – master-stoke in green aviation



GKN Aerospace is all set to put the next step forward towards clean and green aviation by developing the very first hydrogen propulsion system called the H2GEAR for sub-regional aircraft. This technology will put GKN Aerospace at the heart of the technology developments needed for future of more sustainable aviation. It will significantly improve the hydrogen powered performance of sub-regional aircraft, in turn enabling applications on larger aircraft and longer journeys.

Hydrogen is expected to play a key role in the decarbonisation strategy of aviation as it can power aircraft efficiently, leaving water as the only by-product. In this process, liquid hydrogen is being converted to electricity within a fuel cell system. This electricity efficiently powers the aircraft, eliminating CO2 emissions. This would create a new generation of clean air travel, eliminating harmful CO2 emissions

Russ Dunn, Chief Technology Officer for GKN Aerospace, said: "Hydrogen-powered aircraft offer a clear route to keep the world connected, with dramatically cleaner skies. The UK is at the forefront of this technology, and the

H2GEAR project is an example of industry, academia and Government collaboration at its best. Working with our partners, and made possible by Government investment, GKN Aerospace will develop and industrialize the breakthrough technology to fly aircraft with zero CO2 emissions by the mid-2020s. This will not only create thousands of jobs, but it will keep the UK at the forefront of the next generation of cleaner air travel for decades to come."

GKN Aerospace has built a EURO 32 million brand new collaborative space for R & D especially for this project. The programme plans to generate an impressive 3,000 jobs in the next decade and also reinforce the UK's position at the forefront of aerospace technology research and development.

David Woolhouse, CEO at Intelligent Energy said, "We have a very exciting programme of work over the next few years, including developing leading lightweight fuel cell modules for aerospace. This programme will see us develop the next generation of fuel cell technology and supports the growth of manufacturing right here in the East Midlands. We are planning to increase

our manufacturing capability with a new state-of-the-art Gigafactory facility in the region, positioning the East Midlands as a centre of hydrogen fuel cell manufacturing in the UK. The entry-into-service of the first hydrogen-powered aircraft could be as early as 2026."

GKN Aerospace will collaborate with Intelligent Energy, Aeristech, Newcastle University, The University of Manchester and University of Birmingham, throughout the programme.

Duncan Kerr, CEO of Aeristech said, "This is a truly ground-breaking programme for hydrogen technology, bringing together some of the UK's most established organisations for a cutting edge clean aviation solution. Aeristech's world leading power dense and efficient compressor technology will play a vital role in powering GKN Aerospace' first hydrogen propulsion system, helping to bring hydrogen-powered air travel closer to reality."

GKN Aerospace will use its long term experience and in-depth knowledge of electrical power systems and propulsion technology to accelerate the development of technology. The entry-intoservice of the first hydrogen-powered aircraft could be as early as 2026.







Deutsche Aircraft has ambitious plans of leading the way in new era of clean aviation through the development of D328eco platform. The D32eco will be a game-changer to provide more efficient, cost-effective and environmentally friendly air travel to provide an eco-friendly solution for operators.

Features of the D328eco -

State-of-the-art flight deck design and capabilities offered by the latest avionics suite

single pilot operation for greater operational efficiency

Pratt & Whitney PW127S engines and a SAF (Sustainable Aviation Fuel) compatible airframe

In line with Deutsche Aircraft's sustainability objectives, REACH compliant manufacturing processes will be adopted in a new state-of-the-art, Industry 4.0, paperless Final Assembly Line (FAL) in Leipzig, Germany. The project is anticipated to boost local economies

throughout its supply chain, in addition to generating indirect jobs in supporting industries.

Thomas Jarzombek. Federal Government Coordinator of German Aerospace Policy said, "The coronavirus pandemic has had an immediate and very serious impact on aviation and the aviation industry. It is therefore an excellent sign that – despite the crisis – work is going on full steam ahead on the D328eco. The federal government has supported the project right from the start and will continue to do so. A few weeks ago, the second tranche of our development cost loan was disbursed. The federal government is also funding the D328 via its 'LuFo' aviation research programme in order to turn the zero-carbon vision for aircraft into reality."

Deutsche Aircraft anticipates that travelling habits and demands on airlines will change. Traditional large-scale hub and spoke operations will be restructured as the demand for short-haul, point-topoint, low-emission transport grows. Airlines will resize their fleets to accommodate smaller, more efficient and more eco-friendly aircraft, and seek to open underserved routes with direct services through "right sizing" operations.

Dave Jackson, Managing Director of Deutsche Aircraft commented, "As we mark the UN's International Civil Aviation Day we look to the future of aviation and the need to innovate today. The COVID crisis has dramatically impacted the industry forever and our planet faces major challenges of which we are already starting to experience the impact. But as we plan to rebuild the sector, we can recalibrate and refocus on developing new products and processes that are much more environmentally friendly."

The D328eco provides the perfect solution for the aviation industry evolution, providing both economic and environmental benefits.





### Boeing aims to achieve zero carbon emission flights by 2030



Climate change, depleting ozone layer, rising levels of CO2 in the atmosphere have alerted us to the dangers of pollution and its hazardous effects in times to come. Aviation industry has already taken a responsible step towards a cleaner and greener aviation by striving to achieve clean aviation by 2050. All the major aerospace industries, OEMs, MROs, engine manufactures and others are striving to achieve air travel with zero carbon emission. Forefront in this mission stands Boeing. They have set an ambitious target for themselves of achieving

100 per cent sustainability by 2030.

We will soon see Boeing flights flying on 100 per cent sustainable aviation fuel as they have successfully conducted many test flights by replacing petroleum jet fuel.

Boeing Commercial Airplanes President and CEO Stan Deal said, "Our industry and customers are committed to addressing climate change, and sustainable aviation fuels are the safest and most measurable solution to reduce aviation carbon emissions in the coming decades. We're committed to working with regulators, engine companies and other key

stakeholders to ensure our airplanes and eventually our industry can fly entirely on sustainable jet fuels."

Chief Sustainability Officer at Boeing, Chris Raymond said, "Sustainable aviation fuels are proven, used every day, and have the most immediate and greatest potential to reduce carbon emissions in the near and long term when we work together as an industry."

Recent studies have proved that sustainable aviation fuel can reduce carbon emission by 80 per cent. Today, sustainable aviation fuels are mixed directly with conventional jet fuel up to a 50/50 blend.

Since 2008, Boeing has worked with numerous airlines, engine manufacturers and others to conduct biofuel test flights. In 2011, Boeing gained approval for using sustainable fuels. In 2018, the Boeing eco-Demonstrator flight-test program made the world's first commercial airplane flight using 100 per cent sustainable fuels with a 777 Freighter, in collaboration with FedEx Express.

### Rolls Royce – Walking on the 'Testbed' of sustainable aviation future

Rolls-Royce recently completed a milestone for the successful first Trent XWB engine run on the state-of-art Testbed-80 at the test facility in Derby, UK. The testbed has an internal area of 7,500 sq meters, larger than a Premiership football pitch with an investment of Euro 90 million.

Chris Cholerton, President Rolls-Royce Civil Aerospace, said, "Today is an important landmark in our journey towards a more sustainable future for aerospace and aviation. Testbed 80 will not only test engines such as the Trent XWB – the world's most efficient aero-engine in service – but also the engines and propulsion systems of the future, which will see us take another step towards decarbonisation. It's great that the first engine test has been a success and we are looking forward to the official opening of the facility in the coming months."

Testbed 80 has been designed to test a range of today's engines, including the Trent XWB and the Trent 1000, but will have the capability to test the UltraFan demonstrator as well as the next generation of even more efficient engines, as well as the hybrid or all-electric flight systems of the future. The versatility of the testbed means it is able to accommodate engines of all sizes up to 155klbf thrust. That is enough power to launch a Boeing 747 with one (huge) engine.

The data systems inside Testbed 80 are more capable and complex than any of the existing testbeds, delivering data in the fastest time directly to secure storage, linked for the first time to our analytical models and engineers. The data can be collected from more than 10,000 different parameters on an engine, using an intricate web of sensors that detect even the tiniest vibrations at a rate of up to

200,000 samples per second. The data helps us understand our engines better, monitoring how every single component behaves in a range of conditions, and consequently providing crucial insights to inform future engine improvements for availability and efficiency.

As a part of decarbonisation strategy and promoting the scaling up of Sustainable Aviation Fuel, Testbed-80 is equipped with 140,000 litre fuel tank for different fuel types, including Sustainable Aviation Fuel.

The testbed is also home to a powerful x-ray machine that is able to capture 30 images per second and beam them directly to a secure cloud, where engineers around the world can analyse them along with the 10,000 other data parameters we can measure. This unique test allows us to inspect engines to minute levels of detail and obtain precise levels of data.



### Airbus to provide digital services for maintenance of Air Refueling system on Australia's A330 MRTT fleet

Airbus has recently signed a contract to provide a digital services focus for the maintenance of the Air Refueling Boom System (ARBS) on the Royal Australian Air Force (RAAF) KC-30A Multi-Role Tanker Transport (A330 MRTT) fleet. This service is intended to support the operator in reducing maintenance costs and improving fleet availability by optimizing the fault diagnosis and troubleshooting tasks for the ARBS of the tanker aircraft, based on data analytics applications. The service is based on the Airbus suite of digital services called the SmartForce.

The Mission Recording System records the data and provides information inputs about issues registered during the flight and also recommends maintenance actions to fix them. The Central Data System allows the operators to draw this stored flight data. The Central Data System is a joint venture between Airbus, the Commonwealth of Australia (CoA) and the Australian KC-

30A Through Life Support (TLS) provider Northrop Grumman Australia for data sharing and defining the architecture of the system.

Stephan Miegel, Head of Military Aircraft Services at Airbus Defence and Space, said, "Since the launch of SmartForce in 2018, Airbus is fully committed to support the digital initiatives of our customers. Working collaboratively with them, we have signed five agreements for the co-development of new services and technologies. We are proud to see that military operators are increasingly joining us on our digital journey."

Jake Adams, Northrop Grumman
Australia KC-30A Program Manager said,
"The introduction of the Central Data
System has provided significant benefits
in terms of increased availability of the
ARBS. The recent agreement between
Airbus and Northrop Grumman Australia ensures that the RAAF continues to
benefit from this capability as well as

providing the opportunity for ongoing collaboration and sharing of data and analytics to enhance the ARBS capability."

Group Captain Scott Parry, Officer Commanding Heavy Air Lift Systems Program Office, commented, "The Central Data System delivers a significant capability benefit for the KC-30A aircraft and demonstrates the strong commitment within the KC-30A enterprise to innovation and improvement."

In future operators will be able to apply the Air Refueling Boom System to the entire aircraft level diagnostics.

SmartForce is a suite of services enabling military operators to exploit aircraft data to improve troubleshooting, optimize maintenance effort, predict maintenance actions and plan smartly for material demand and improving the fleet availability. SmartForce capitalizes on the new power of big data analytics coupled to secured connectivity to maximize mission readiness.

#### Strengthening relationships – Greece and France

Greece Ministry of Defense signed a historic contract with Dassault Aviation for the acquisition of 18 Rafale aircraft for the Hellenic Air Force and logistic support contract. The order for 18 Rafale includes 12 Rafale recently in service with the French Air Force and 6 new Rafale produced at Dassault Aviation plants. The deliveries of the aircraft will start from the summer of 2021 and continue for next two years.

The contract was signed by Theodoros Lagios, General Director of Armament and Investments of the Greek Ministry of Defense, and Eric Trappier, Chairman and CEO of Dassault Aviation in presence of Mrs. Florence Parly, Minister of the Armed Forces of France, and Mr. Nikolaos Panagiotopoulos, Minister of National Defense of Greece.

Eric Trappier, Chairman and CEO of Dassault Aviation said, "Greece is a leading European partner, a major member of NATO and a special partner of France,



with which Dassault Aviation has stood steadfastly by its side for more than 45 years. The continuity of our presence in Greece, even in the most difficult times, is a token of the quality of this relationship. That is why I am proud and happy to sign today this contract, which symbolizes the extension of the commitment of Dassault Aviation towards Greece since 1974. I would like to thank the Greek authorities for their renewed confidence in us. I assure them of our total mobilization to achieve the objectives that are defined."

Greece is a major strategic partner of France and the arrival of Rafale in Greece highlights the quality of the strategic relationship between Greece and France and the continuation of more than forty-five years of solid partnership with Dassault Aviation and its industrial partners Thales and Safran.

The logistic support contract will support the Hellenic Air Force Rafale's air activity over four and a half years, maintaining the availability of equipment and systems at the highest level.





Spirit AeroSystems have been selected to lead the team MOSQUITO in a EURO 30 million contract to design and manufacture a prototype of the UK's first unmanned combat aircraft in a three-year deal supporting more than 100 jobs in Belfast for the next phase of the Project. Popularly known as the Loyal Wingman, the aircraft will be designed to fly at high-speed alongside fighter jets, armed with missiles, surveillance and electronic warfare technology to provide a battle-winning advantage over hostile forces.

Northern Ireland Secretary, Brandon Lewis said, "This is fantastic news and underlines the distinct strengths in Northern Ireland's economy, through its advanced engineering and manufacturing capabilities. This ground-breaking project will involve significant investment which will not only support local employment, but also reinforce Northern Ireland's contribution to the security of our nation."

The Spirit AeroSystems team will be utilizing ground-breaking engineering techniques to further develop theRAF's Lightweight Affordable Novel Combat Aircraft (LANCA) concept, with a full-scale vehicle flight-test programme expected by the end of 2023.

Defence Minister, Jeremy Quin said, "This is a great win for the Northern Ireland defence industry and will showcase some of the most pioneering engineering work currently being undertaken in the UK.The EURO 30 million project will

accelerate the development of the UK's future air power by delivering cuttingedge uncrewed aircraft, maintaining our position as a world leader in emerging technologies. Working with innovative partners from across the UK, Project Mosquito is transforming traditional approaches to combat air to enable the rapid development of technology. By utilising the latest software development techniques and civilian aerospace engineering and manufacturing expertise, the project will deliver dramatic reductions in costs and development timelines, so their innovations can reach the front-line quicker than ever before."

Team MOSQUITO, which also includes Northrop Grumman UK, will mature the designs and manufacture a technology demonstrator to generate evidence for a follow-on LANCA programme. If successful, Project Mosquito's findings could lead to this revolutionary capability being deployed alongside the Typhoon and F-35 Lightning jets by the end of the decade.

Air Chief Marshal Mike Wigston, Chief of the Air Staff said, "We're taking a revolutionary approach, looking at a game-changing mix of swarming drones and uncrewed fighter aircraft like Mosquito, alongside piloted fighters like Tempest, that will transform the combat battlespace in a way not seen since the advent of the jet age.

This game changing research and development project will ensure the final aircraft design will be capable of being easily and affordably updated with the

latest technology so we remain one step ahead of our adversaries. The aircraft's flexibility will provide the optimum protection, survivability and information as it flies alongside Typhoon, F-35 Lightning, and later, Tempest as part of our future combat air system.

Director Future Combat Air, Richard Berthon said, "Project Mosquito is a vital element of our approach to Future Combat Air, rapidly bringing to life design, build and test skills for next generation combat air capabilities. Autonomous 'loyal wingman' aircraft create the opportunity to expand, diversify and rapidly upgrade Combat Air Forces in a cost-effective way, now and in the future. As announced by the Prime Minister in November 2020, the UK's Future Combat Air System (FCAS) programme is set to benefit from a portion of the extra EURO 1.5 billion investment into military research and development, which will help ensure our Armed Forces are prepared to meet the threats of tomorrow."

LANCA originated in 2015 in Dstl to understand innovative Combat Air technologies and concepts that offer radical reductions in cost and development time and is a RAF Rapid Capabilities Office led project under the Future Combat Air System Technology Initiative (FCAS TI). The UK MOD's Defence Science and Technology Laboratory (Dstl) provides the project management and is the MOD's technical authority for LANCA and Project Mosquito on behalf of the RCO.



#### Sikorsky presents US Army with latest weapon system 'DEFIANT X'



 $oldsymbol{\mathsf{C}}$  ikorsky's has unveiled their latest defence system – The DEFIANT X for US Army's Future Long-Range Assault Aircraft competition - FLRAA. The DEFI-ANT X is the fastest, most maneuverable and most survivable assault helicopter in history which will revolutionize US Army's mission strategies in many years to come

Some of the salient features of DEFIANT X are as follows -

- It flies twice as far and fast as the Black Hawk helicopter
- It is a complete weapons system that builds on the handling qualities and transformational capabilities proven by the team's technology demonstrator, SB>1
- It has unmatched range and surviv-
- It will enable the crew to fly low and fast through complex terrain, land quickly, deliver Soldiers and equipment to the objective area and move out.

Presently, DEFIANT X is undergoing tests in a digital combat environment. It has proved as the most survivable platform for mission requirements

"We are ready to deliver unparalleled capabilities backed by proven technologies that will truly transform the Army's mission today, with room to grow and adapt to the missions of tomorrow," said Andy Adams, Sikorsky vice president of Future Vertical Lift. "DEFIANT X not only includes the transformational aircraft - a maneuverable, survivable, lethal weapon system – it also leverages Sikorsky's

and Boeing's advanced manufacturing capabilities."

With its rigid coaxial rotor system and pusher propeller, DEFIANT X incorporates Sikorsky X2 Technology to operate at high speeds while maintaining low-speed handling qualities. This critical capability provides Soldiers with increased maneuverability and survivability in high-threat air defense environments, allowing them to penetrate enemy defenses while reducing exposure to enemy fire. Compared to SB>1 DEFIANT, the DEFIANT X airframe has enhancements to improve aerodynamics and reduce the thermal signature.

"DEFIANT X is purpose-built for a modernized Army that requires expanded reach, survivability and lethality," said Steve Parker, vice president and general manager of Boeing Vertical Lift. "This weapon system will give Soldiers unequaled technological advantage and connectivity over adversaries in a multidomain battle space."

DEFIANT X will revolutionize the Army's air assault capability with limited changes in tactics, techniques, procedures, training and infrastructure while maintaining the Black Hawk helicopter footprint and tight formation capability flown today.

The Army is expected to release a request for proposal on FLRAA later this year, with a contract award expected in 2022. The Army is expected to release a request for proposal on FLRAA later this year, with a contract award expected in

#### **Northrop** Grumman inducts its first P-3 **Orion for** depot level maintenance

Northrop Grumman Corporation recently inducted the first US Customs and Border Protection (CBP) P-3 Orion aircraft for depot level maintenance at its Aircraft Maintenance and Fabrication Center in Lake Charles.

Northrop Grumman was awarded a contract in June for aircraft maintenance and logistics services for the P-3 fleet. In addition to depot level maintenance they will support daily operations of the 14 aircraft fleet operating primarily out of Jacksonville, Texas, as well as domestic and international deployment locations. All 14 aircraft in the fleet will undergo depot inductions over the course of the

"Northrop Grumman's expertise in aircraft maintenance, logistics and sustainment have kept aircraft fleets mission ready for decades," said Michelle Scarpella, sector vice president and general manager, global sustainment and modernization, Northrop Grumman. "We support operations of aircraft around the world and have delivered depot maintenance from our Aircraft Maintenance and Fabrication Center in Lake Charles for over 20 years."

Northrop Grumman's growing Aircraft Maintenance and Fabrication Center is home to 700 professionals who have performed over 15 million hours of direct maintenance work on numerous aircraft including t,e P-3 Orion, E-8C, E2-C Hawkeye, C-2A Greyhound, and the United Kingdom Royal Air Force's E-3D.



#### HAL's Project Parivartan gets a boost from IFS and Tech Mahindra

TFS and Tech Mahindra have signed a contract to enable Project Parivartan Program by Hindustan Aeronautics Limited (HAL). This is a USD 54 million business transformation project to involve large-sclae implementation of technological enhancements to establish new work processes based on best practices.

The role of IFS will be to replace a large number of disparate business systems in HAL with a central, consolidated platform that will empower staff with easy access to accurate data. Apart from this, the project will also provide enhanced inventory visibility and purchasing power, powerful financial capabilities and group-level consolidation.

Mr. R Madhavan, CMD, Hindustan Aeronautics Limited said, "As a leading digital transformation company, Tech Mahindra will implement the new platform from IFS and help HAL meet the dynamic

needs of this hyper-digitalized world using ERP. This will further enhance mission-critical processes, such as MRO, and will facilitate HAL in ushering in a new era of centralized operations based on industry best practices."

Sujit Baksi, President Corporate Affairs and Business Head Emerging Markets, Tech Mahindra, said, "Tech Mahindra's selection by HAL extends our vision of supporting government's 'Atmanirbhar' (self-reliant) initiative to enhance our indigenous capabilities. The project will transform HAL's ERP system through the implementation of a new platform from IFS, thus enabling us to serve the Armed Forces in an efficient and effective manner. This is in line with our TechMNxt charter that focuses on leveraging new generation technologies with original equipment manufacturers and aims to deliver an enhanced experience to our

customers."

Michael Ouissi, Chief Customer Officer, IFS, added, "The need for HAL to manage and orchestrate the many intricate elements of its operation cannot be underrated from an effectiveness, financial and service perspective. We are honored to continue our relationship with HAL as they work with our trusted partner Tech Mahindra to implement the latest IFS solution as part of 'Project Parivartan'. Our platform is engineered to help international, multi-site companies in heavily regulated industries, such as aerospace and defense, digitalize and positively transform their value chains."

The ERP solution from IFS will support business-critical processes, including maintenance, repair, overhaul (MRO), manufacturing, supply chain management, human capital management (HCM), and finance.

### BAE Systems to act as on-site lead to enhance maintenance for F-35 lighting fleet

Lockheed Martin has signed a two-year contractual agreement worth USD 101 million with F-35 Joint Program Office to support operations at RAF Marham. BAE Systems will work as on-site lead for a workforce of over 170 AMEs to enhance the maintenance, mission planning and training services for F-35 lightning fleet in Norfolk.Edward Sheldon, Head of UK F-35 Sustainment & RAF Marham Site Lead, BAE Systems Air, said, "As part of Lightning Team UK, our priority is to ensure our support solution at RAF Marham remains world-class to enable the deployment of UK jets whenever and wherever they're needed. The collaboration between Defence Equipment & Support (DE&S), Royal Navy, Royal Air Force and industry is critical in achieving this and through the next phase of support at RAF Marham, we're able to strengthen our UK sovereign capabilities by enhancing the services we provide. Through this continued investment and by working together, we can ensure the F-35 Lightning is available for the UK's carrier strike operations and is ready to support

allied operations anywhere in the world."

The contract extends on the existing sustainment service at RAF Marham and will provide aircraft upgrades, maintenance, synthetic and maintainer training on-base, along with the ability to customise specialist pilot equipment at one of the first Pilot Fit Facilities outside of the United States.

Mark Perreault, Sustainment Sr. Program Manager, Lockheed Martin Aeronautics said, "The industry team worked closely with the Lightning Delivery Team and the JPO to provide a contract which will support the Lightning Force operations and the increasing inventory of jets. The services and expertise being provided via the Lightning Air System National Availability Enterprise (LANCE) effort will be integral to the daily operations and readiness of the Lightning squadrons of the Royal Navy and Royal Air Force."

The training and maintenance support at RAF Marham is crucial in ensuring the UK F-35 jets are ready and available, as they prepare for their first operational deployment aboard HMS QUEEN ELIZABETH this year as part of the UK Carrier Strike Group. Combining advanced destroyers, frigates, helicopters, submarines and fifth generation fighter jets, the Carrier Strike Group will be capable of conducting a range of important missions, from maritime security to disaster relief.

Air Commodore Phil Brooker, Lightning Delivery Team Head, DE&S, said, "This contract will ensure the continued support of the UK F-35 Lightning fleet, as the number of UK aircraft continues to grow and we look forward to the first operational deployment of the aircraft onboard HMS QUEEN ELIZABETH this year. As well as providing world class maintenance and training capabilities, alongside deployable global support, this contract also introduces new capabilities such as a Pilot Fit Facility to equip our aircrew and a new ejection seat maintenance bay. These new capabilities offer value for money for the UK taxpayer and increase the UK's sovereign ability to operate the F-35 Lightning at a time and place of its choosing."



#### **Major Leadership Appointments at Barfield**

Barfield, a subsidiary of Air France Industries KLM Engineering & Maintenance (AFI KLM E&M) in the Americas, has appointed Anthony Imparato as their Senior Vice President, Operations and Quality for its Miami, Doral, Louisville and Phoenix facilities. Anthony previously held the same position for Barfield's Miami, Louisville and Phoenix.

Thrilled at the new prospect Anthony Imparato, SVP of Operations and Quality said, "My vision for the department starts with the employees. We have very knowledgeable employees that will help take us to the next level of customer satisfaction and efficiency. Introducing new capabilities to support new aircraft platforms brings challenges that I'm confident our team will be able to handle and support. As we move forward, automation will play an important part

in our daily activities. Utilizing these new tools will continue our path as a leading third-party MRO."

The next important appointment came in the form of Gilles Mercier who was appointed as the Senior Vice President of Customer Care and Business Development. His main responsibility is to put the customer at the center of the company's decisions, improve customer satisfaction and loyalty. He was previously SVP of Operations of Barfield's facilities in Doral.

Gilles Mercier SVP Customer Care and Business Development said, "I am thrilled to continue my journey at Barfield with a great team building a spirit of teamwork and creativity."

Sebastien Losy is appointed to the position of Vice President of Transformation and Innovation wherein his primary

responsibility will be to lead the industrial reorganization of the company, to optimize repair capability throughout US and identify and capitalize on Cost Saving opportunities while defining a robust sanitary process to keep our staff safe in all facilities during these difficult and challenging times.

Lastly, Romain Valente is appointed as the Chief Financial Officer at Barfield. Commenting on his new role, he said, "I am honored to have been selected as Barfield's CFO and to be part of a company with such a long history of perseverance, resiliency and ability to deliver consistent results to customers raising the bar in the aviation industry."

Romain joins Barfield from Air France-KLM Group in New York City where he served as Area Controller – North America for about three years.

Lynne Doughtie joins Board of Directors at Boeing

Lynne Doughtie, with an impressive track record of advancing organizational goals through culture and innovation has been elected to the Board of Directors at Boeing. She will be replacing Caroline Kennedy who has resigned following three years of dedicated service.

Praising Lynne, Boeing Chairman Larry Kellner said, "Lynne Doughtie is a highly-accomplished executive with a demonstrated track record of leading a world-class organization. She will provide perspective reflecting her global leadership roles and experience advising clients on complex matters as well as significant risk management expertise. We look forward to working with her." David Calhoun, Boeing President and CEO, and member of the board of directors said, "We welcome Lynne Doughtie's impressive track record of advancing organizational goals through culture and innovation. Lynne's values-based leadership will further strengthen our board."

"Boeing is a remarkable American company serving a critical role in the global economy," said Doughtie. "I look forward to joining this distinguished board."

Prior to joining Boeing, Doughtie worked with KPMG as US Chairman and CEO since 2015. She joined KPMG's Audit practice in 1985, before serving as the lead partner for several strategic clients across industries and holding leadership roles including Vice Chair of the firm's US Advisory business. During her tenure, KPMG experienced strong growth and made significant investments in quality and advanced the firm's culture and values.





#### Monte Ford appointed as Independent Director at JetBlue

Monte Ford is appointed as the independent director at JetBlue effective immediately, following approval of the board of directors. Ford joins JetBlue from American Airlines where he was the VP and chief information officer. He has technology expertise with a career spanning for over 4 years. He is also the principal partner at the CIO Strategy Exchange, an organization of the top 50 sitting Chief Information Officers in business.

Peter Boneparth, chair of the JetBlue board said, "Monte's impressive achievements throughout his career are a testament to his skills as an innovator and thought-leader, and we look forward to benefiting from his knowledge. As we emerge from the impact of coronavirus, Monte's technology background will be invaluable as we build an even stronger JetBlue for our customers, crewmembers, and shareholders."



"Since our first flight, JetBlue has set out to redefine air travel by adopting a unique approach to customer service, product, and technology," said Robin Hayes, chief executive officer, JetBlue. "Innovation is in our DNA, and I'm so pleased to welcome Monte to the board

where his tech expertise and airline knowledge will help us as we continue our mission to inspire humanity and bring our low fares and high value to all."

The appointment of Ford brings Jet-Blue's board of directors to 11 members, 10 of whom are independent.



















#### Daniel Elwell appointed to the board of directors at Alaska Air Group

Daniel Elwell is appointed to the board of directors at Alaska Air Group, effective immediately. Elwell will also join the boards of directors of the company's airline subsidiaries Alaska Airlines and Horizon Air Industries.

Elwell is a former military and commercial pilot and has served as Deputy and Acting Administrator of the Federal Aviation Administration from June 2017 to November 2020. There he was responsible for the safety and efficiency of the largest aerospace system in the world, which operates more than 50,000 flights a day. Elwell also had oversight of the FAA's multibillion-dollar NextGen air traffic control modernization program to accelerate the shift from ground-based radar to state-of-the-art satellite technology with operational, community and environmental benefits.

Thrilled to have Daniel Elwell on board, Brad Tilden, Alaska Air Group Chair and CEO said, "Dan has been a pilot, public servant and innovator to advance aviation safety in our country a value we hold dear. At a both critical and exciting time in our industry, Dan clearly understands the challenges and opportunities ahead, and we welcome his trusted perspective and ideas."

Elwell will have a seat on the board's

audit and innovation committees. His appointment increases the number of independent directors from 11 to 12. The total board has 14 members, with the other two positions filled by Tilden and Alaska Airlines President Ben Minicucci.

Prior to his appointment as Deputy and Acting Director of the FAA, Elwell was Senior Advisor on Aviation to former US Secretary of Transportation Elaine L. Chao. Elwell also previously served at the FAA as the Assistant Administrator for Policy, Planning and Environment from 2006-2008. Earlier in his career, he served as a legislative fellow for the late Sen. Ted Stevens (R-Alaska).

From 2013-2015, as Senior Vice President for Safety, Security and Operations at Airlines for America (A4A), Elwell was responsible for leading the advancement of commercial aviation safety and security excellence for major US air carriers. Prior to A4A, Elwell was Vice President of the Aerospace Industries Association (AIA) from 2008-2013 where he represented civil aerospace manufacturers and led policy development and advocacy for the civil aerospace manufacturing interests.

Elwell was a commercial pilot for 16 years with American Airlines, flying



DC-10, MD-80, and Boeing 757 and 767 aircraft. While maintaining his proficiency as an MD-80 captain, he served as Managing Director for International and Government Affairs at American Airlines. Elwell earned his pilot wings at Williams Air Force Base in Arizona after graduating from the US Air Force Academy with a Bachelor of Science degree in International Affairs. As a lieutenant colonel, he retired from military service as a Command Pilot with more than 6,000 hours combined civilian and military flight time in the US Air Force and US Air Force Reserve, including combat service during Operation Desert Storm.

#### Patrick Biebel appointed as the M.D of MTU Maintenance Lease Services B.V

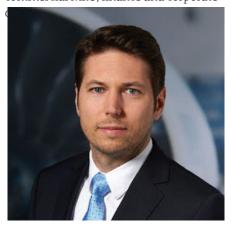
Patrick Biebel is appointed as the Managing Director at MTU Maintenance Lease Services B.V. since 1st January 2021. He will be responsible for MTU's leasing business, asset management activities and driving the company forward. MTU Maintenance Lease Services B.V. is a joint venture between MTU Aero Engines and Sumitomo Corporatation headquartered in Amsterdam.

Martin Friis-Petersen, SVP MRO Programs, MTU Aero Engines said, "We are delighted that Patrick will be managing MTU Maintenance Lease Services. We are confident he will build on the strong reputation MTU has developed in the engine leasing and trading community

and continue to develop our service portfolio to anticipate and meet market and customer needs."

Biebel will be taking the reins from Andrea Lübke who will move back to MTU Aero Engines' headquarters and take on the role of Senior Vice President Corporate Development reporting to group CEO Reiner Winkler. In her new position, she will head up the strategy, business development, mergers and acquisitions and innovation teams for the entire MTU group.

Prior to this position, Biebel was Vice President Corporate Development and in charge of all of MTU's mergers and acquisitions and business development activities ensuring the future growth and success of MTU's aftermarket division. Biebel joined MTU in 2012 and has assumed various positions with increasing responsibilities within MTU's commercial MRO, finance and corporate





### Neil Matthews granted Order of Australia for outstanding achievement in aerospace component repair

Neil Matthews, with over 25 years of experience working for RUAG Australia was recently bestowed upon with the Order of Australia, recognizing his outstanding efforts for significant service to aerospace component repair technologies.

Congratulating Neil on this outstanding achievement, Terry Miles, General Manager RUAG Australia said, "Leading the way in component repair and coating technologies and making them accessible on behalf of our Defense Industry customers, is a mission Neil Matthews and RUAG have followed consistently and continue to share. We are pleased to have Neil Matthews' work recognized for the valuable contribution it creates for our customers."

Neil holds an Aeronautical Engineering degree and a Master of Science in Aircraft Design. He has been involved in Military Aircraft Engineering support for over 45 years both as a serving Air Force Officer and then in the commercial and military aviation industry. Neil has pioneered the use of additive manufacture in the form of Additive Metal Technologies, including Supersonic Particle Deposition (SPD) since 2004. He has worked closely with the Australian Department of Defense, local and international research and academic institutions to have SPD technology adopted for a range of aerospace, aviation and commercial applications. The repair applications include corrosion and wear protection and restoration of damaged aircraft components, resulting in significant cost savings for customers. Neil was awarded a Defense Industry Service Commendation in 2019 for his contribution

Neil is a member of the Defense Technology Transition working group, a member of the RMIT University Centre of Additive Manufacture Advisory Board and is the principal Industry participant in a number of Metal Additive programs.

#### Anoop Kang appointed as the CFO of Ontic

Ontic has appointed Anoop Kang as their Chief Financial Officer. In this role Annop will support the growth of the business, whilst ensuring a robust control environment is in place. He will be responsible for all aspects of financial management and will play a central role in the leadership and strategic development of the business.

Gareth Hall, CEO, Ontic said, "Anoop joins us most recently from Eddie Stobart Plc where he has previously held the role of Chief Financial Officer and has held various financial positions in Cambian Group Plc, Kier Group Plc and Balfour Beatty Plc before which he spent over ten years with Arthur Andersen, now Deloitte. He has a wealth of expertise in corporate transactions as well as all aspects of financial management, reporting and governance."

In another important appointment, Mark Millar is appointed as the General Counsel and Company Secretary. He will assume the responsibility for the functions of Legal and Compliance, creating the appropriate support for the business like regulatory, licensing; acquisitions; commercial contracts; compliance with regulatory bodies, management of litigation and IP protection.

"Mark joins Ontic at a crucial time as we accelerate our growth plans into 2021. He comes to us with extensive corporate law experience across multiple markets gained throughout his time in-house and in practice which will be advantageous to Ontic as we execute upon our strategic objectives," Hall added

Prior to Ontic, Mark was a Partner at Foot Anstey, a private legal practice, he has worked in-house as General Counsel and Company Secretary for a number of UK household names such as the AA (Automobile Association Plc), where he acquired first-hand experience of partnering with a private equity firm; Domino's Pizza Group Plc and Future Plc, an international publishing company.

# Geraud De Riberolles appointed as the new CFO at Sabena Technics



Geraud De Riberolles is appointed as the new Chief Financial Officer at Sabena Technics. He will be part of the Group's Executive Committee. Prior to joining Sabena technics, he served as the Chief Financial Officer at Safran Aerosafety Systems where he contributed to the company's development for four years.

Philippe Rochet, Group's Chief Operating Officer said, "It is a pleasure to officially welcome Géraud in our executive team. We can count on his strong track record of supporting companies in their growth, both organically and through acquisition, in domestic as well as international markets. We believe he fully understands Sabena technics' vision and is aware of the strong potential we have."

Géraud de Riberolles began his career at PwC auditing firm where he spent twelve years during which he took part in numerous merger & acquisition projects. He then joined the industrial sector where he held a number of executive positions in various international companies such as Braas Monier and Consolis.



# International CALENDAR

#### 2021

**09-10** FEB Saudi Drones Summit and Expo Riyadh, KSA

**03-05** JUN

France Air Expo
Lyon Bron Airport – LFLY

**08-10** JUN Cabin Ops Safety Conference

The Parisian Macao, Macao, SAR, China

**08-10** JUN Safety and Flight Ops Conference The Parisian Macao, Macao, SAR, China

**22-23** JUN **Aviation Festival Asia 2020**Suntec Convention Centre, Singapore

**15-16** SEP

16th annual MRO Russia & CIS 2021
Moscow World Trade Center

**12-14** OCT

World Cargo Symposium Hilton Bomonti, Istanbul, Turkey

**15-18** NOV

33rd IATA Ground Handling Conference Prague, Czech Republic

**15-18** NOV

Global Airport & Passenger Symposium Prague, Czech Republic

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