MRO BUSINESS TODAY

January 1st, 2021

Dear Readers,

The year 2020 went by in a blur; there were a lot more crosses than thumbs up for the aviation sector and MRO in particular. With the setting sun let us forget all the negatives of 2020 and focus only on the positives that are about to come. Let us all welcome the New Year '2021' with open arms and a smile on our face. I would also take this opportunity to thank each and every one of you for being with us and standing strong as a solid force behind us. A magazine is only recognised by its readers. And all our readers of MRO Business Today have been a part of our MRO Business Today family.

I once again thank all of you for supporting our content and we hope to provide you with good content in many more years to come...

This special new year's edition is based on Sustainability, as we move forward let's all take a pledge for a cleaner, greener and a safer aviation. I am attaching the New Year's editorial calendar with this issue for you to give your comments and remarks on the content that we are about to present before you in the coming year.

On this note, I would like to wish you all a very happy and a prosperous new year and happy reading.

From

The Editor's Desk

EDITORIAL CALENDAR

JANUARY

01 'MRO' inching towards a sustainable future

15 Pandemic & Aviation through the MRO lens

FEBRUARY

01 Passenger to Freighter Conversion

15 Changing MRO Trends for enhanced customer experience

MARCH

01 Managing downtime efficiently

15 AOG Challenges and how to overcome them

APRIL

01 Untapped world of Defence MRO

15 Defence MRO – Technologies & Innovations

MAY

01 Tearing down an aircraft

15 Inventory and Spares aftermarket

JUNE

01 Next-Gen Cabin Interiors

15 Charters- A cut above the rest

JULY

01 Aviation & Digitisation – Hand-in-Hand

15 Connectivity #Upinthesky

AUGUST

01 The world of Helicopters

15 Drones and More

SEPTEMBER

01 Changing trends in AME training

15 Aging aircraft maintenance

OCTOBER

01 Expanding MRO markets of the world

15 Hangars around the world

NOVEMBER

01 'MRO' Emerging Markets

15 Breakthroughs in MRO

DECEMBER

01 MRO Mergers and Acquisitions of 2021

15 Feet and MRO Market Forecast 2022

Etihad's New Year carbon offset program to neutralise carbon emission of Greenliner 787

Etihad Airways, in an attempt to reduce the CO_2 emission to 50 per cent of 2019 levels by 2035, has committed to purchasing carbon offsets to completely neutralise the CO_2 emissions of its flagship "Greenliner" 787-10 aircraft for a full year of operations in 2021. The Airline aims to achieve full net zero emissions by 2050. Apart from this Etihad will separately implement an additional voluntary offset programme for passengers via its website in 2021.

Tony Douglas, Etihad Aviation Group CEO, said: "It's encouraging to end a difficult year with such a positive move for the sustainable future of aviation. While the year brought many challenges, sustainability has remained at the top of our agenda, and the work hasn't stopped. Expect to see more ground-breaking initiatives in 2021 as we learn the environmental lessons from initiatives with our Greenliner fleet and other sustainability initiatives".

Etihad's Greenliner carbon offset programme has been sourced in partnership with Respira, an international carbon offset finance house specialising in tailored offset schemes across multiple sectors. Etihad's plan is centred on a Tanzanian forestry project and will initially purchase 80,000 tonnes of CO_2 offsets.

Ana Haurie, CEO of Respira, said: "Respira offers a fresh approach to the carbon market by aligning the interests of project developers, buyers and capital providers. In this way we create win-win outcomes for all stakeholders. It is a privilege to work with Etihad, which has shown real commitment to its sustainability goals through what is a challenging period for the airline industry."

The Makame Savannah REDD project is developed by Carbon Tanzania and employs a unique community-based model to curb deforestation and promote better management of local natural resources across over 100,000 hectares in the southern extension of the Tarangire-Manyara ecosystem.

The offset scheme is verified and certified by VERRA, an independent carbon offset quality assurance body, under its Verified Carbon Standard. This ensures carbon offsets are quantifiable, additional, and fully sustainable. In addition, the Tanzanian project conforms to Climate, Community and Biodiversity standards, which protect endangered species and local communities. The scheme's first offset vintages were certified in early November 2020.

Dr. Alejandro Rios-Galvan, Chairman of the Sustainable Bioenergy Research Consortium at Khalifa University of Science and Technology, who advises Etihad on a range of sustainability issues, said: "This is a great start for Etihad's zero carbon journey using a well-respected offset standard that is fully compliant with the best sustainability practices out there. We look forward to continue supporting Etihad on their long-term sustainability strategy".

The launch of the Greenliner carbon offset programme complements Etihad's ongoing work to develop and test Sustainable Aviation Fuels (SAFs), with the goal of making them commercially viable for widespread adoption by the industry. To support Etihad and Abu Dhabi's long-term sustainability objectives, Respira will establish operations in the Capital of the UAE at the Abu Dhabi Global Market (ADGM), the Emirate's international financial centre, to bring its offset expertise to the Middle East.

The initiative is the first for any airline in the Gulf and one of the first to set a target of this scale in the industry.

Pod configuration to scale up hydrogen technology to commercial aircraft

Airbus engineers are in the process of unveiling a new configuration as part of the ZEROe programme that could enable a passenger aircraft to fly farther than ever without emissions. The innovative approach consists of six, eight-bladed "pods" mounted beneath the aircraft wing. While the "podded" engine is not a new concept in aviation, these "pods" are not designed to be driven by any ordinary propulsion system: hydrogen fuel cells are among the key components.

Matthieu Thomas, ZEROe Aircraft Lead Architect said, "The 'pod' configuration is essentially a distributed fuel cell propulsion system that delivers thrust to the aircraft via six propulsors arranged along the wing. Hydrogen fuel cells have very different design considerations, so we knew we had to come up with a unique approach."

Indeed, hydrogen fuel cell technology has yet to be scaled up to a passenger-size large commercial aircraft. Smaller experimental hydrogen aircraft, comprising up to 20 seats, can rely on a traditional fixed-wing configuration with two propellers. But more passenger capacity and longer range require another solution. This is why Airbus is studying a variety of configurations, including "pods," to determine which option has the potential to scale up to larger aircraft.

"This 'pod' configuration is a great starting point to nurture further inquiry into how we can scale up hydrogen technology to commercial aircraft. This is one option, but many more will be conceptualised before we make a final selection, a decision that is expected by 2025,"said Glenn Llewellyn, VP of Zero-Emission Aircraft

A pod configuration for propeller propulsion

Each "pod" is essentially a stand-alone propeller propulsion system powered by hydrogen fuel cells. It consists of the following elements:

- A propeller
- Electric motors
- Fuel cells
- Power electronics
- LH2 tank
- A cooling system
- A set of auxiliary equipment

Hydrogen and air are supplied to the fuel cells to generate electric current. Power electronics convert the current to power the electric motors. Thanks to this energy, the motor shaft rotates, thereby turning the propeller.

Another striking feature of the "pod" configuration is its removable fixtures. This means each "pod" can be disassembled and reassembled in record time. This approach could provide a practical and rapid solution for maintenance and potentially hydrogen refueling at airports.

The pod's eight-bladed propellers, made of composite materials, are shaped to provide added thrust during the takeoff and climb-out phases of flight. The advanced airfoil design is expected to lead to improved efficiency and performance.

"This 'pod' configuration is a great starting point to nurture further inquiry into how we can scale up hydrogen technology to commercial aircraft," said Glenn Llewellyn, VP of Zero-Emission Aircraft, "This is one option, but many more will be conceptualized before we make a final selection, a decision that is expected by 2025."

Although advanced in its design, the "pod" configuration still requires a lot of work to determine whether it could be a suitable solution. To date, it remains one of many exciting technology options that Airbus engineers are considering as they work towards launching the ZEROe programme.

EcoPulse Demonstrator inches closer towards take off with passing of Preliminary Design Review

EcoPulse demonstrator has recently achieved its latest milestone with the passing of Preliminary Design Review, thereby paving a way towards the first flight scheduled for 2022. This has enabled the validation and freezing of the demonstrator's baseline configuration, as well as confirming the hybrid distributed propulsion system's level of safety and compatibility with the aircraft.

Based on a light aircraft platform supplied by Daher, EcoPulse Demonstator was first unveiled at the 2019 Paris Air Show. The commercial application of EcoPulse Demonstator will help in reducing carbon emissions and aid in achieving the air transport sector's 2050 decarbonisation objective.

Airbus, Safran and Daher have come together with the support of France COTAC civil aviation research council to develop EcoPulse distributed propulsion hybrid aircraft demonstrator. The project is now entering the assembly and integration phase at Daher, with systems supplied by Safran and Airbus.

Daher has adapted its demonstrator aircraft platform to ensure the integration and compatibility of a hybrid system with distributed propulsion at the necessary safety level while carrying out installing components and systems, flight testing, global analysis and airworthiness.

Pascal Laguerre, Daher's Chief Technology Officer said, "With this demonstrator, Daher intends to develop the key architectural principles for future hybrid aircraft. The project reaffirms our commitment, as a general aviation manufacturer with our Kodiak & TBM product lines, to more efficient and eco-responsible aviation. This is reflected by our company's active participation in numerous ambitious collaborative research projects aimed at decarbonizing air traffic."

The Preliminary Design Review's successful completion has enabled Daher to begin the demonstrator's assembly phase at its Tarbes, France site, where the initial components were designed and delivered. The start of final assembly is planned for late 2021, with the first flight scheduled to take place in 2022.

Safran is responsible for EcoPulse's distributed hybrid-electric propulsion system, has finalized the technical configuration of its six electric thrusters. They will be fitted with 50 kW ENGINeUS electric motors with integrated electronics and patented air cooling, as well as propellers supplied by DUC Hélices. The Safran ENGINeUS motor will be submitted for EASA certification the same type as granted for a turboshaft engine.

Safran has also validated the installation interfaces for the propulsion system's other components, along with the power management system, the turbogenerator and the high-voltage wiring that will supply electrical power to the thrusters. The turbogenerator, which performed its first test bench runs in 2018, will soon undergo additional tests.

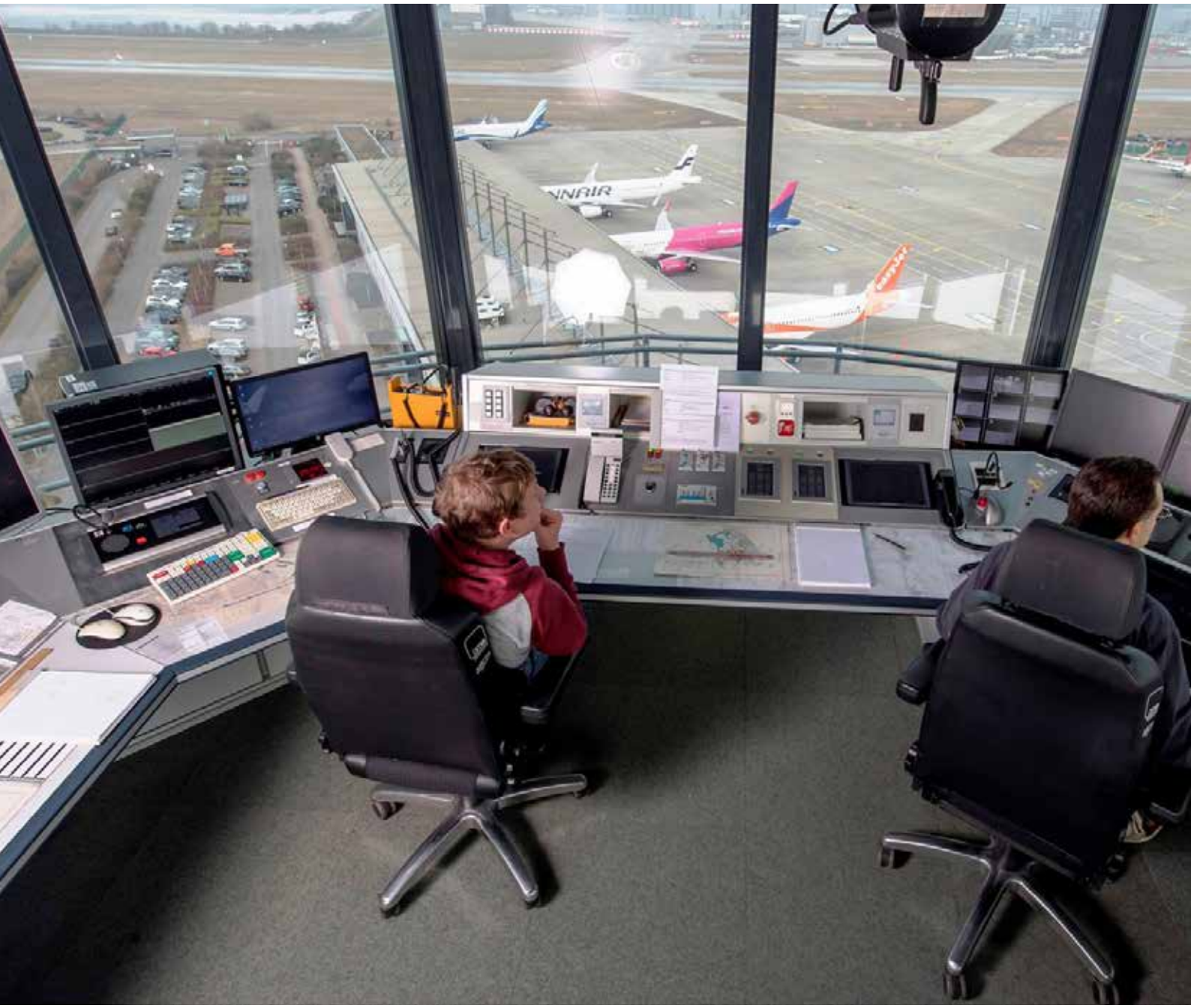
"EcoPulse is an ambitious project, and designing hybrid propulsion on this new aircraft architecture is a key skill that Safran is proud to master," said Stéphane Cueille, Senior Executive Vice President and Chief Technology Officer, Research & Technology and Innovation at Safran. "Mobility needs are changing, and the Group is responding to them by offering advanced and sustainable technologies that have taken shape with this important milestone reached today."

The next step for Safran will be its delivery of an initial electric thruster to Airbus for wind tunnel and endurance testing, in preparation for qualification of the thrusters' use on EcoPulse's first flight.

Airbus is currently involved in the demonstrator aircraft's aerodynamic modelling to schedule the start of wind tunnel testing for propeller/nacelle assembly during the first quarter of 2021. The electric engine, supplied by Safran, will be tested as well. The results of these tests will enable the identification of the propeller's performance characteristics when associated with an electric engine, and validate the engine cooling process.

"The EcoPulse demonstrator program, initiated by CORAC with the support of the French DGAC civil aviation agency, is an important step in our ambition to decarbonize the aeronautical industry. It will allow us to study how distributed hybrid propulsion could be integrated into the aircraft of tomorrow and significantly reduce their environmental impact," added Jean-Brice Dumont, Executive Vice President Engineering, Airbus.

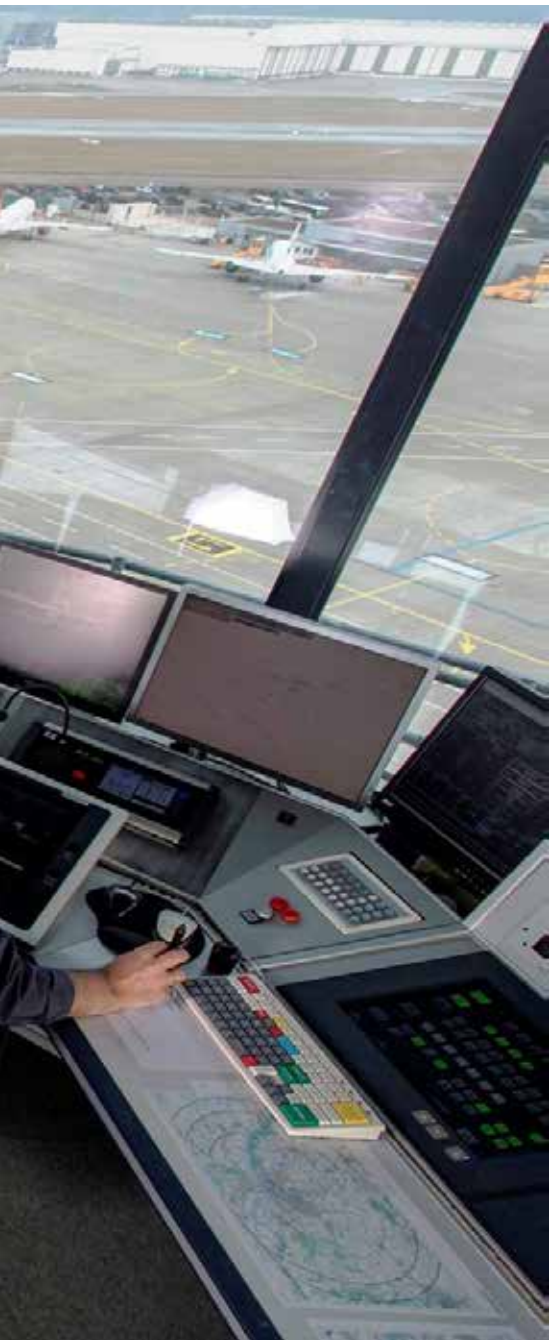
In addition to these wind tunnel tests, Airbus also is planning to simulate the nacelle's aerodynamic behavior.



Airbus' Trajectory Based Operations in 4 Dimensions project

Rising level of pollution and depleting ozone layer has convinced the world that environmental friendly clean aviation is the need of the hour. Realising this many aerospace companies have pledged to transform the aviation sector into completely carbon neutral space by 2050. A major chunk of this responsibility lies on major OEMs, aircraft manufacturers and MROs.

Airbus is already leading the way to achieve this mission. The latest experiment by Airbus is the Trajectory Based Operations in 4 Dimensions (4D-TBO) project. This project focuses on analyzing the real-time transmission of four-dimensional trajectory data (Latitude, Longitude, Altitude, Time) as a solution to better inform air traffic management (ATM) operations. Airbus carried out two years of experimental entry-into-service programmes. More than 20,000 flights carried out by about 90 A320 aircraft from six airlines – Air France, British Airways, EasyJet, Iberia, Novair and Wizzair. The project was led by Airbus



alongside more than 15 partners in the frame of the Single European Sky Air Traffic Management Research (SESAR) programme. The initial findings are very encouraging.

"High stakes are behind this project," said Jean-Brice Dumont, Airbus Executive Vice-President, Engineering. "Thanks to the transmission of four-dimensional trajectory data, ATM will be able to improve, optimize and better predict an aircraft's trajectory, thereby enabling us to immediately and concretely reduce our environmental footprint. It will also help us design the ATM system of the future, an endeavor that Airbus has undertaken alongside our other stakeholders in the SESAR programme."

"The real-time transmission of four-dimensional trajectory data has the incredible potential to greatly improve an aircraft's trajectory prediction. By reducing the inaccuracy of current air traffic management (ATM) prediction models by approximately 30-40 per cent, the Trajectory Based Operations in 4 Dimensions (4D-TBO) project is helping to pave the way to a more sustainable management of tomorrow's air traffic.

Two modern-day air traffic control scenarios illustrate how improved trajectory prediction could make a positive impact on an aircraft's environmental footprint. For example, during periods of heavy airport traffic, such as summer holidays, air traffic controllers often divert some aircraft to holding patterns (i.e. an oval course flown by aircraft awaiting further landing clearance) to better organize arrivals queuing in the terminal area. In another example, ground control often requests an aircraft begin its descent before its optimum Top of Descent (TOD)—or the point at which the planned descent to approach is initiated—due to a lack of accurate visibility of an aircraft's optimum trajectory.

Thanks to the transmission of four-dimensional trajectory data, ATM will be able to improve, optimize and better predict an aircraft's trajectory, thereby enabling us to immediately and concretely reduce our environmental footprint," continued Jean-Brice Dumont, Airbus Executive Vice-President, Engineering

In these scenarios, the aircraft must either fly additional time or must withdraw from its optimal trajectory, which requires more fuel consumption and consequently, increases CO_2 emissions. In fact, if flying in a holding pattern at 10,000 feet and at 220 knots, an A320 Neo consumes 25 kg of fuel per minute, or 100 kg for a four-minute holding. In addition, these scenarios could result in delayed arrivals, disrupt the departure flow, and increase workload for both controllers and pilots.

However, by transmitting complete, up-to-date information about its trajectory, an aircraft can send air traffic control invaluable data that is essential for better decision-making. The result is more efficient and better coordinated management of optimized aircraft trajectories, which will lead to increased safety of air traffic operations in general.

Assisted by a system fed with this knowledge, the controller in the previous two scenarios will thus be able to request a precise adjustment in the aircraft's cruise speed to avoid diversion to a holding pattern in the airport terminal area and to enable optimum TOD—an action that will lead to reduced CO_2 emissions. Specifically, fuel savings could be up to 10 kg, or the equivalent of approximately 32 kg of CO_2, if an aircraft descends from its optimum TOD. When calculated over an entire year for a European jet fleet of about 5,500 aircraft, the savings could be as high as 65,000 tons of fuel.

According to Jean-Brice, the main advantage of the 4D-TBO solution is its potential to drastically reduce the inaccuracy of the trajectory prediction models available in control centres until now. But thanks to improved calibration using accurate aircraft data, these new algorithms have proven their ability to reduce the inaccuracy of airspace prediction models by approximately 30-40%.

"Bottom line is improved accuracy of four-dimensional trajectory predictions reduces margins when detecting conflicting trajectories and results in fewer alerts to controllers," he further explained. "This reduces the need for controller intervention and means we can fly as close as possible to the initially identified optimum flight trajectory. As a result, we can reap all the rewards of improved aircraft performance in relation to environment, safety and capacity."

In 2021, the 4D-TBO function is expected to be gradually entered into service across several European countries (i.e. France, Switzerland, Hungary, Bulgaria, Poland, Spain) as part of the future SESAR PJ38 ADSCENSIO* project. This will involve the development of a centralized shared trajectory data platform.

ATM is a constituent part of the Airbus "Decarbonisation" programme, designed, in particular, to reduce CO_2 emissions by 50 per cent from now to 2050 and to develop the first zero-emission commercial aircraft by 2035.

Etihad's ambitious sustainability strategy achieves an important milestone

Etihad has officially inaugurated the latest aircraft in its journey towards sustainability; the pioneer2020 ecoDemonstrator entered the commercial service following a series of industry-leading test flights across the United States. The aircraft is the latest to arrival in Etihad's strong fleet of 39, 787-Dreamliners, making them one of world's largest operators of the technologically advanced aircraft type. Etihad's 787 Dreamliner was used as a flying testbed to accelerate technological developments with the goal of making commercial aviation safer and more sustainable in partnership with Boeing, NASA and Safran Landing Systems as a part of the 2020 ecoDemonstrator program. The aircraft with complex testing equipment, conducted extensive research flying above Montana and between Washington state and South Carolina.

Tony Douglas, Group Chief Executive Officer, Etihad Aviation Group, said: "As the first 787-10 to take part in the ecoDemonstrator programme, this very special aircraft stands testament to the innovation and drive for sustainable aviation that forms a core element of Etihad's values and long-term vision. This is in line with the tremendous strides being made by Abu Dhabi, and the UAE, in the research and development of viable solutions to combat climate change.

"Etihad's partnership with Boeing, and participation in the programme with NASA and Safran, is one the UAE's national airline is incredibly proud of. This

exciting and progressive programme will have a real-world impact on our industry as part of Etihad's Greenliner Programme and demonstrates Etihad's ambitious sustainability strategy. As a prime example of industry collaboration, this aircraft is a unique example of how the aviation industry can come together for a more sustainable future."

To celebrate its launch into regular service, the special aircraft has been fitted with a commemorative plaque highlighting its contribution to sustainability, while its fuselage still retains some of the original ecoDemonstrator flight-test branding, including the ecoDemonstrator and Boeing logos, in addition to the words 'From Abu Dhabi for the World', a reimagined version of the airline's famous tagline.

During the ecoDemonstrator programme, A6-BMI was decked out with special equipment for eight days of specialised testing on seven initiatives to enhance safety and reduce CO_2 emissions and noise. Flights took place in Glasgow, Montana, and during two transcontinental trips between Seattle, Washington, and Charleston South Carolina. During testing, a series of flights gathered the most detailed NASA aircraft noise information to date from approximately 1,200 microphones attached to the outside of the 787 and also positioned on the ground.

The information will improve NASA's aircraft noise prediction capabilities, advance ways for pilots to reduce noise and inform future quiet aircraft designs. Two cross-country flights across the United States demonstrated a new way for pilots, air traffic controllers and airline operations centres to communicate simultaneously, resulting in optimised routing, arrival times and reduced CO_2 emissions.

"Boeing's partnership with Etihad Airways on this year's ecoDemonstrator program elevated the strategic sustainability alliance we formed last year to a whole new level," said Stan Deal, Boeing Commercial Airplanes president and CEO. "Collaborations like these are invaluable to accelerate innovation that further enhances the safety and sustainability of flying. The testing we conducted, in partnership with NASA and Safran Landing Systems, will benefit aviation and the world for years to come."

As part of the programme, Etihad and Boeing tested two innovative 'wellness' technologies that will help airlines combat the treatment of COVID-19, by safely and quickly cleaning high-touch surfaces. These were a handheld ultraviolet light disinfecting system and an antimicrobial coating that helps prevent the growth of bacteria on tray tables, arm rests and other surfaces.

The highest permissible blend of Sustainable Aviation Fuel (SAF) was used throughout the programme, as well as on the delivery flight from Charleston to Abu Dhabi. As a result, over 60 tonnes of emissions were avoided on the delivery flight alone.

The aircraft's delivery flight to Abu Dhabi saw Etihad collaborate with multiple Airspace Navigation Service Providers (ANSPs) including the FAA, UK NATS and EUROCONTROL to optimise the flight path, cutting fuel burn by more than one tonne and CO_2 emissions by approximately four tonnes. Following Etihad's special flights to Brussels and Dublin in January and March 2020 respectively, this initiative continues to demonstrate Etihad's strong track record in collaboration with ANSPs to optimise airspace utilisation to deliver lower fuel consumption, noise and carbon emissions.

Etihad and Boeing also collaborated on testing new route planning technology on A6-BMI's delivery flight. Boeing's in-development capability forecasts a range of potential weather scenarios and suggests best available route options.

Etihad and Boeing's partnership on the ecoDemonstrator programme delivers on the airline's commitment for its Boeing 787 Dreamliners to be a testbed for technology acceleration as part of the Etihad Greenliner programme, and has demonstrated Etihad's relentless commitment to sustainability in spite of the current COVID-19 crisis. Etihad continues to be comitted to a minimum target of zero net carbon emissions by 2050 and halving of the airline's 2019 net emission levels by 2035.

In line with Abu Dhabi's vision and commitment to the reduction of Carbon Emissions to meet the goals of the Paris Agreement, sustainability and environmental protection is in Etihad's DNA. Playing its part as the United Arab Emirates (UAE)'s flag carrier, Etihad's focus on sustainable developments in aviation aligns with many other initiatives of both the Emirate of Abu Dhabi, and the whole of the UAE.

As an active member of the International Civil Aviation Organization, the UAE was among the first countries to voluntarily sign the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). Today, the UAE is working closely with the ICAO international fuel group on Sustainable Aviation Fuels (SAF) as well Low Carbon Aviation Fuel (LCAF), both of which can play a critical role in enabling the safe and sustainable growth of the aviation sector while reducing its carbon intensity.

British Airways on a path to achieve carbon neutrality by 2050

British Airways has teamed up with ZeroAvia, a leading innovator in decarbonising commercial aviation, in a project to explore how hydrogen-powered aircraft can play a leading role in the future of sustainable flying.

The collaboration, which reflects the importance of sustainability at British Airways, will see ZeroAvia embedded in the heart of the airline. The team will work remotely alongside mentors and experts to explore the transformational possibilities of moving from fossil fuels to zero-emission hydrogen to power the airline's future fleet.

In September 2020, ZeroAvia received global acclaim when it achieved a major technological breakthrough by completing the world's first hydrogen fuel cell powered flight of a commercial-size aircraft, which took off from Cranfield Airport. The Piper M-class six-seat plane completed taxi, take-off, a full pattern circuit, and landing.

Sean Doyle, CEO of British Airways said, "British Airways is committed to a sustainable future and achieving nets zero carbon emissions by 2050. In short-term this means improving our operational efficiency and introducing carbon offset and removal projects, while in the medium to longer term we're investing in the development of sustainable aviation fuel and looking at how we can help accelerate the growth of new technologies such as zero emissions hydrogen-powered aircraft."

The partnership forms part of IAG's industry leading Hangar 51 accelerator programme, which works with start-ups and scale-ups from around the

world, providing them with an opportunity to develop and test their products on real world business challenges on a global scale. At the end of the programme, research and learnings from the process will be shared and the ZeroAvia and Hangar 51 teams will consider how the partnership will progress longer term.

Louise Evans, Director of External Communications & Sustainability said, "We are very excited to partner with ZeroAvia and get a glimpse of a zero-emissions future using hydrogen powered aircraft. During the partnership, as well as assessing the environmental advantages of the technology, we will also be exploring the operational, commercial and customer experience improvements that can be achieved."

Sergey Kiselev, ZeroAvia's Head of Europe said, "ZeroAvia's mission is to accelerate the world's transition to truly zero emissions flight and we believe hydrogen is the best way to quickly and practically achieve this. Earlier this year, we proved that passengers will soon be able to board an emissions free, hydrogen-powered aircraft for commercial services. In the years to come, we will scale that technology up to power larger aircraft over longer distances.

In 2021, ZeroAvia expects to further demonstrate the credibility of its technology at longer ranges and using larger aircraft. The company expects to achieve the commercialisation of hydrogen-electric power for aircraft as early as 2023 with flights of up to 500-miles in up to 20-seater aircraft. By 2027, it plans to have powerplants in service capable of powering commercial flights of over 500-miles in aircraft with up to 100 seats and by 2030 more than 1,000-miles in aircraft with 100+ seats.

"We have found that in addition to improving the sustainability of flight, which is vital, hydrogen-electric technology has the potential to lower operating costs and improve the in-flight passenger experience. We are delighted to be working with British Airways, one of the world's iconic airlines, and the Hangar 51 programme to explore how hydrogen-electric aircraft can power the fleet of the future. That promising future is closer than ever," added Sergey.

Both British Airways and ZeroAvia are part of the Jet Zero Council, a partnership between government and industry to drive forward the UK Government's net zero-emission ambitions for the aviation and aerospace sector.

Northrop Grumman climbing the sustainability graph all the way

Northrop Grumman has reduced 35.5 percent in greenhouse gas emissions since 2010, exceeding the year-end 2020 goal of 30 percent

22 December 2020: Northrop Grumman have been acknowledged as a leader in sustainability on the 2020 Dow Jones Sustainability Indices for a fifth consecutive year based on an annual evaluation on the parameters of environmental, social and governance practices.

"We congratulate Northrop Grumman for being included in the DJSI North America," said Manjit Jus, Global Head of ESG Research and Data, S&P Global. "A DJSI distinction is a reflection of being a sustainability leader in your industry. With a record number of companies participating in the 2020 Corporate Sustainability Assessment and more stringent rules for inclusion this year, this sets your company apart and rewards your continued commitment to people and the planet."

Northrop Grumman achieved year-over-year improvements in both social and environmental categories. Improvements in the social category were driven by the company's continued commitment to employee training and development, and human rights governance. In 2020, Northrop Grumman enhanced its human rights policy, including the establishment of a Human Rights Working Group.

"This recognition demonstrates that Northrop Grumman is making positive progress on our sustainability goals," said Sandra Evers-Many, vice president of global corporate responsibility, Northrop Grumman. "As our company continues to address the pressing challenges of today and tomorrow, it's important for us to continue our focus on sustainability."

Contributing to the company's recognition for its environmental efforts was its management of climate change topics such as its reduction of greenhouse gas emissions. The company has reduced 35.5 percent in greenhouse gas emissions since 2010, exceeding the year-end 2020 goal of 30 percent. Northrop Grumman's strong performance within climate change was also recognized with an "A-" leadership band rating on CDP's Climate Change disclosure.

Bell receives recognition from Transport Canada for 'Safety Management System'

Bell received recognition from Transport Canada (TC) for completing the requirements of the presence and suitability assessment as a first step in the process of the Voluntary Safety Management System program. As pioneers in the aerospace industry, Bell is the first Original Equipment Manufacturer (OEM) to achieve this Design and Manufacturing (D&M) Safety Management System (SMS) recognition from Canadian authorities. This significant milestone follows prior approval of the D&M SMS by the FAA authorities of the US based sites.

Bell Textron Canada have gone over and beyond to create a Design & Manufacturing Safety Management System based on an industry standard to ensures quick resolutions to any aircraft build challenges, which are clearly communicated across engineering, manufacturing and business teams. It is a cohesive effort to strengthen the commercial products, resulting from team innovation and collaboration with external partners, including the Aerospace Industries Association of Canada.

"The Design & Manufacturing Safety Management System showcases Bell's commitment to the exceptional safety and quality of our dynamic platforms," said Benoit Albert, flight safety officer, Bell.

With a diverse range of global commercial operators that leave lasting impacts through their missions, Bell always strives to enhance aircraft build operations and pilot and passenger experience. After all, recognition from government partners serves as a bold testament to our extensive capabilities and continued pursuit to change the way the world flies.

Signature Aviation leads the way in tackling climate change

Global environment non-profit Carbon Disclosure Project (CDP) has selected Signature Aviation for leadership in corporate sustainability. With this award, Signature Aviation has secured a place on the prestigious 'A List' for tackling climate change.

CDP's annual environmental disclosure and scoring process is widely recognised as the gold standard of corporate environmental transparency.

Signature was recognised for its demonstrable actions to cut emissions, mitigate climate risks and develop the low-carbon economy, based on the data reported through CDP's 2020 climate change questionnaire.

Signature is one of only 270 high-performing companies that were scored A out of 5,800+ company scores.

A detailed and independent methodology is used by CDP to assess companies, allocating a score of A to D- based on the comprehensiveness of disclosure, awareness and management of environmental risks, and demonstration of best practices associated with environmental leadership, such as setting ambitious and meaningful targets.

Boeing to grow MRO operations at Cecil Field airport

Boeing has entered into a 25-year lease agreement with the Jacksonville Aviation Authority (JAA) to grow its maintenance, repair and overhaul (MRO) operations at its Cecil Field site, located at Cecil Airport.

Under the agreement, the Jacksonville Aviation Authority will construct and lease to Boeing new facilities on approximately 30 acres located on the northeast side of Cecil Airport, near Boeing's existing MRO site. The new construction will eventually house Boeing's on-site operations and include nearly 270,000 square feet of hangar space and more than 100,000 square feet of office and support shop space. Construction work by JAA will begin in fall 2021 with a planned commencement of operations date in January 2024.

"Florida is attracting the biggest names in aerospace and this announcement with Boeing marks another milestone for the industry's expansion in our state," said Florida Gov. Ron DeSantis. "We congratulate Boeing and the City of Jacksonville for this important achievement, which will help sustain economic recovery in Northeast Florida at a critical time."

"Since taking ownership from the Navy, the Authority developed Cecil into one of the preeminent airports for aviation maintenance, repair and overhaul in the United States," Jacksonville Aviation Authority CEO Mark VanLoh said. "This announcement is one of the most significant in the JAA's history and a testament to what an economic powerhouse Cecil Airport is for Northeast Florida."

"This investment in facility improvements supports our ability to deliver on current and future defence services work at the Cecil Field site and aligns with Boeing's infrastructure optimization efforts," said Warren Helm, Boeing Cecil Field site leader. "We collaborate continuously with our U.S. defence customers to ensure our modification capabilities can support their readiness objectives in strategic locations around the globe. This new agreement builds upon that commitment."

Boeing Cecil Field, located at Cecil Airport, is one of the company's longstanding facilities. Since opening in 1999, its employees have maintained, modified and upgraded nearly 1,000 aircraft for the U.S. Navy and Marine Corps, including the F/A-18 A-D Hornet, F/A-18 E/F Super Hornet and EA-18G Growler. It is home to a Flight Control Repair Centre that provides structural repairs to F/A-18 A-F and EA-18G flight control surfaces, and where the Boeing team converts F/A-18 Super Hornets into flight demonstration aircraft for the U.S. Navy's Blue Angel squadron.

Boeing's support for the US Air Force QF-16 program, which converts retired F-16s into the next generation of combat training and testing for autonomous aerial targets, is also based at Boeing Cecil Field.

Utility Air appointed as the exclusive Parts Distributor for Diamond Aircraft in Australia and New Zealand

Utility Air has been appointed as the exclusive Parts Distributor for Diamond Aircraft in Australia and New Zealand. The appointment comes as the regional market for GA aircraft strengthens post Covid and Flying Frequency increases.

Scott McFadzean, Chief Executive Officer of Diamond Aircraft Industries Inc said, "We are excited about Utility Air taking on the responsibility for aircraft parts distribution in their region. This will surely improve the service network in the area, cut down lead times on parts, and ultimately support sales in Australia and New Zealand."

"Diamond Aircraft are the best GA Aircraft in the world" said Utility Air managing director, Stephen Pembro. "Now, with the introduction of our facility in Sydney, we will be able to provide our owner base with faster access to parts and a large stock holding in the country. This should be a game changer in the region for Diamond and our customers."

Working alongside Stephen to secure the appointment, Utility Air Director John Oppenheim continued, "The decision to invest in Sydney made sense as it is central in our region, providing fast support from Perth to New Zealand. We have worked hard with Diamond to identify the perfect initial stock to support the region. We have over 18,000 items on the shelf, ranging from individual rivets to large components. We have also ensured that every aircraft in the range is covered, irrespective of how many are in service at the moment."

The remainder of this year Utility Air will spend reaching out to their customers and service partners and engaging regarding their needs.

Canada and Qatar – Strengthening relationships

Qatar Airways recently welcomed Air Canada's inaugural flight from Toronto to Doha establishing Hamad International Airport as the only airport in the Middle East to be operated with a scheduled service by a North American carrier. The flight was welcomed with a water cannon salute at Hamad International Airport and a ribbon cutting ceremony attended by Her Excellency Ambassador Stefanie McCollum, Ambassador of Canada to Qatar along with Qatar Airways Group Chief Executive His Excellency Mr. Akbar Al Baker and Hamad International Airport Chief Operating Officer Engr. Badr Mohammed Al Meer.

This inaugural flight marks the first ever Air Canada flight to Doha and signifies the further strengthening of relations between Canada and the State of Qatar. Qatar Airways and Air Canada recently signed a codeshare agreement applicable for travel between Doha and Toronto. The agreement will enable both airline's passengers to enjoy seamless, one stop connections to and from Toronto via the Best Airport in the Middle East, Hamad International Airport and onwards to more than 75 destinations in Africa, Asia and the Middle East.

Ambassador of Canada to Qatar, Her Excellency Ambassador Stefanie McCollum, said: "It is wonderful to be here to witness, and to welcome, Air Canada's inaugural flight to Doha. It is another tangible example of the growing commercial and social ties between our two countries. Qatar is an important partner for Canada, and the connectivity these flights provide is another positive evolution in our strong bilateral relations."

Qatar Airways Group Chief Executive, His Excellency Mr. Akbar Al Baker, said: "I am extremely delighted with this strong relationship that Qatar Airways has with Air Canada under the pioneering leadership of my friend, Calin Rovinescu who has put Air Canada's strong brand on the world aviation map. Air Canada, one of the most successful airlines in North America, will add huge value to Qatar Airways' expanding network. Canada is a strategically important market for Qatar Airways, and this service will complement our existing four weekly service to Montreal and provide our travelers with additional options when planning travel to and from Canada. We look forward to harnessing our complementary strengths to increase choices for our thousands of passengers and enable smooth connectivity to a significant number of new destinations – particularly throughout Africa, Asia and the Middle East.."

Air Canada President and Chief Executive Officer, Mr. Calin Rovinescu, said: "I am delighted to strengthen our relationship with Qatar Airways, one of the world's best airlines, which will allow Air Canada to better respond to shifting demand trends. As Air Canada rebuilds its global network, we are strategically developing new routes and pivoting towards markets that cater to Canada's growing multicultural population. As more of our customers resume international travel next year, this enhanced agreement will allow Canadians more convenient options to visit family and friends, as well as open-up exciting new destinations. I am especially grateful to my good friend, H.E. Akbar Al Baker, for the warm welcome he has extended Air Canada in Doha."

Engr. Badr Mohammed Al Meer, Chief Operating Officer at Hamad International Airport said: "Hamad International Airport has been successful in continuing to render its award-winning services to the world to ensure global connectivity. With focus on ensuring passenger choice, flexibility, and emotional well-being, we are delighted to extend our offerings of convenience and accessibility to Air Canada passengers".

Hamad International Airport benefits from its strategic location, as 80 per cent of the world's population is within a six-hour flight of HIA, which offers more

CONTINUE ON **PG 18**

airBaltic continues to expand operations, receives two A220-300 from Airbus

Chorus Aviation recently delivered two new Airbus A220-300 aircraft to airBaltic of Latvia. These two aircraft are the last two of the long-term lease order of five aircraft announced on 20th November 2019.

Vitolds Jakovļevs, Chief Financial Officer, airBaltic said, "airBaltic continues to safely expand its services following the pandemic crisis and is offering flights to more than 65 destinations from all three Baltic countries. The aircraft has performed beyond the airline's expectations, delivering better overall performance and fuel efficiency while offering an excellent flying experience."

Joe Randell, President and Chief Executive Officer at Chorus said, "We applaud airBaltic's successful resumption and expansion of services across Europe. The state-of-the-art, Canadian-built A220 aircraft is leading the charge in helping airlines around the world resume operations as travel demand increases with the implementation of rapid testing and distribution of vaccines to limit the spread of COVID-19."

In December 2013, airBaltic became the first operator of the A220-300 aircraft and in May2020, they re-launched as an all Airbus A220 airline.

Aircalin took delivery of first A320neo as a part of their expansion strategy

As a part of fleet modernization strategy, Aircalin recently took delivery of its first Airbus A320neo powered by Pratt & Whitney PW1000 engines and configured in a single class layout with 168 seats. With this delivery Aircalin will be able to increase capacity on its flights and open new routes across the Pacific region.

With its new fleet the airline benefits from the lowest operating costs in the respective size categories, as well as the unique commonality between variants of the Airbus Family.

The A320neo Family offers the widest single-aisle cabin in the sky and incorporates the latest technologies, including new generation engines and Sharklets, delivering a 20 per cent reduction in fuel consumption, as well as 50 per cent less noise compared to previous generation aircraft.

Myanmar Airways International expands operations with Embraer E190

Myanmar Airways International (MAI) commenced their first E190 operations from Yangon recently with four operational flights per day. With Embraer delivering the second E190 aircraft in next few days, MAI will expand their E190 routes to nine additional destinations across the nation.

On receiving the E190 aircraft from Embraer, Saravanan Ramasamy, Chief Executive Officer of MAI said, "Our pilots, cabin crew, maintenance crew and our staff are proud to take MAI's E190 to the skies and to serve our passengers with an enhanced flying experience. We look forward to a productive partnership with Embraer. The operation of the E190 marks yet another important milestone in MAI's fleet expansion strategy and domestic jet network growth. As the demand grows, we plan to scale up the frequency of our E190 operations to eight flights a day."

In preparation for the E190 operations, eight MAI pilots underwent the month-long Initial Pilot Training in September 2020 in Zhuhai, China. Separately, Embraer conducted the license-engineer type course for MAI's engineers. Embraer's Pool Program, which MAI has enrolled in offers full repair coverage for components and parts, airframe maintenance, and unlimited access to a large stock of components at the company's distribution centres.

"The commencement of Myanmar Airways International's E190 flights will enhance connectivity in Myanmar," said Raul Villaron, Asia Pacific Vice President for Embraer Commercial Aviation. "The airline will benefit from the performance and efficiency of the aircraft and generous cargo capacity. Passengers will appreciate the comfort in the cabin. Myanmar Airways International can operate with full confidence that our excellent service and support team are here to support them."

Operators benefit from significant savings on repair and inventory costs, reduction in required warehousing space and resources required for repair management, while ultimately providing guaranteed performance levels. Singapore is the base for Embraer's warehouse in the Asia Pacific region.

Alaska Airlines places fresh 737-9 orders as a part of fleet modernization

Alaska Airlines have placed order of 23 additional 737-9 airplanes from Boeing, building on their original order and an agreement last month to acquire new 737-9s through lease as a part of their fleet modernization program. With this new order, Alaska Airlines will operate a total of 120 737 MAX airplanes. This makes them fifth largest US carrier on parameters of scale, efficiency and flexibility to expand as air travel recovers.

Brad Tilden, CEO of Alaska Air Group, "We are extremely proud to be announcing this transformative agreement with Boeing. We believe in this airplane, we believe in our strong partnership with Boeing, and we believe in the future of Alaska Airlines and the incredible opportunities ahead as we climb our way out of this pandemic."

The 737-9 is a member of the 737 MAX family is designed to offer more fuel efficiency, reliability and flexibility in the single-aisle airplane market. Last month, Alaska Airlines announced it is expanding its commitment to the 737 MAX program by leasing 13 new 737-9s while selling some A320 jets it had taken on through its acquisition of Virgin America.

The new agreement will add 23 firm orders for the 737-9 and more options for future purchases. In all, Alaska will have 52 options which, if fully exercised, would take the carrier to as many as 120 737 MAX airplanes. The airline said the deal moves it toward a more efficient, all-Boeing mainline fleet that will "enhance the guest experience, improve operational performance and support the company's growth."

"We could not ask for a better partner than Boeing and we are delighted to be standing side by side with them as we work together to get our economy back on its feet," said Tilden.

Alaska Airlines and Boeing leaders announced the agreement during a signing ceremony at Boeing's delivery facility in Seattle, flanked by a new 737-9 that will be among the first such jets to be operated by Alaska Airlines. In observance of COVID-19 restrictions, both companies limited attendance at the event and addressed the pandemic that has severely affected air travel, expressing confidence in the fundamental strength of the industry and long-term passenger demand.

"Alaska Airlines has done a tremendous job of weathering the impacts from the COVID-19 pandemic, and is well positioned to return to its growth trajectory and strengthen its standing as one of the top US airlines. With Alaska's industry-leading reputation for safety, sustainability and customer service, we are honoured they have chosen to invest in their future with a significant purchase of additional Boeing 737 airplanes," said Stan Deal, president and CEO of Boeing Commercial Airplanes. "We are grateful for Alaska's trust and partnership. Our team is focused on delivering their first 737 MAX jets and helping ensure a safe and seamless entry into service."

The 737 – equipped with new, more fuel-efficient engines and improved aerodynamics – will use 20 per cent less fuel and reduce emissions by 20 per cent per seat compared to airplanes it replaces. The airline will configure the jet with 178 seats in a three-class configuration. The plane can fly 3,550 nautical miles, about 600 miles more than its predecessor. This additional capability will allow airlines to offer new and more direct routes to passengers. Every airplane will feature the new Boeing Sky Interior, highlighted by modern sculpted sidewalls and window reveals, LED lighting that enhances the sense of spaciousness and larger pivoting overhead storage bins.

Air Greenland orders new Airbus A330neo wide body to replace their aging A330ceo

Air Greenland has placed order for the latest airbus A330 neo wide-body aircraft to secure operations linking the Arctic island with Denmark from end of 2022 onwards and beyond. The new A330-800 will replace their ageing Airbus A330-200ceo.

Air Greenland's CEO's Jacob Nitter Sørensen said, "The A330neo is a fundamental part of Air Greenland's fleet strategy. The new aircraft will, for years to come, offer travellers to and from Greenland a unique inflight experience while leaving the lowest carbon footprint possible. The A330neo is a perfect fit for the very challenging task of providing safe and efficient all year passenger, cargo and freight services to and from Greenland."

"We're pleased to see Air Greenland renew its confidence in the A330 Family and join the growing number of operators who are selecting the A330neo as a logical replacement for their ageing fleets," said Christian Scherer, Airbus Chief Commercial Officer. "To imagine the airline's distinctive red livery set against the Arctic's environment provides some Christmas cheer at the end of a year that has been harsh for our entire industry."

The Airbus A330neo is a true new-generation aircraft, building on features popular for the A330ceo and developed for the latest technology A350. Equipped with a compelling Airspace cabin, the A330neo offers a unique passenger experience with the latest-generation, in-flight entertainment systems and connectivity.

Powered by the latest Rolls-Royce Trent 7000 engines, and featuring a new wing with increased span and A350-inspired 'Sharklets', the A330neo also provides an unprecedented level of efficiency – with 25 per cent lower fuel-burn per seat than previous-generation competitors. Thanks to its tailored mid-sized capacity and its excellent range versatility, the A330neo is considered the ideal aircraft to support operators in their post-COVID-19 recovery.

FedEx Express receives their first ATR 72-600F

FedEx Express received its first ATR 72-600F in Toulouse on December 15, 2020. It is the first of a confirmed order for 30 aircraft, with the option for 20 more. ATR, world leader in regional aircraft, is a joint venture between Leonardo and Airbus and confirms with this new aircraft its position on the airborne freight market, where it already accounts for one third of the fleet in service, with its converted aircraft.

While the new ATR 72-600F shares the same latest technologies and state-of-the-art cockpit of the passenger variant, the fuselage which is manufactured in the Leonardo site of Pomigliano d'Arco (Naples) includes specific features. It is windowless and boasts a large front cargo door that allows to load standard LD3 containers, a rear upper hinged door to optimize operations, a strengthened floor, new panels and an internal configuration that can accommodate 9 tonnes of cargo.

The ATR72-600F offers customers the solutions they need in the ever increasing market of air freight and cargo transportation.

The ATR's success is built on its people – the women and men whose hard work and forward-looking vision have enabled the Company to spread its wings and soar to ever-greater heights.

Established nearly 40 years ago, ATR has sold 1,700 aircraft to 200 operators worldwide, serving 1,300 airports. As the undisputed leader in the regional aircraft market, ATR continues to embrace new challenges and provide cutting-edge solutions designed to connect people, even in the most remote parts of the globe, in a sustainable and responsible manner.

CONTINUE FROM PG 14

convenient connection options for global travellers. With its multi-dimensional lifestyle offerings in retails, hospitality, and culture alongside its passenger-empowering technologies, HIA is the preferred gateway to the world for global travellers.

Qatar Airways began flying to Canada in June 2011 with three weekly flights to Montreal that expanded to four weekly in December 2018. The airline has worked closely with the Government of Canada and its embassies around the world throughout the pandemic, temporarily operating three weekly services to Toronto in addition to charter flights to Vancouver to help bring more than 40,000 passengers home to Canada.

Qatar Airways' strategic investment in a variety of fuel-efficient, twin-engine aircraft, including the largest fleet of Airbus A350 aircraft, has enabled it to continue flying throughout this crisis and perfectly positions it to lead the sustainable recovery of international travel. The airline recently took delivery of three new state-of-the-art Airbus A350-1000 aircraft, increasing its total A350 fleet to 52 with an average age of just 2.6 years. Due to COVID-19's impact on travel demand, the airline has grounded its fleet of Airbus A380s as it is not environmentally justifiable to operate such a large, four-engine aircraft in the current market. Qatar Airways has also recently launched a new programme that enables passengers to voluntarily offset the carbon emissions associated with their journey at the point of booking.

By the end of the IATA Winter Season, Qatar Airways plans to rebuild its network to 126 destinations including 20 in Africa, 11 in the Americas, 42 in Asia-Pacific, 38 in Europe and 15 in the Middle East. Many cities will be served with a strong schedule with daily or more frequencies.

Airlines transforming travel experience for passengers

With the approaching holiday season, many airlines have re-started their services to major holiday destinations. Delta will be re-starting their service in Argentina, Chile and Ecuador in time for customers seeking warm weather for the holidays.

Flights between Atlanta's Hartsfield International Airport and Santiago's Arturo Merino International Airport in Chile, and between Atlanta and Quito's Mariscal Sucre International Airport in Ecuador will resume on 18th December 2020, while service from Atlanta to Buenos Aires' Ezeiza International Airport in Argentina will resume on 19th December. The flights to Santiago and Buenos Aires will operate with Boeing 767-400 aircraft and the flights to Quito will operate with Boeing 767-300 aircraft. All three routes will offer Delta One, Delta Comfort+ and Main Cabin service.

With the return of flights to each of the South American countries Delta served prior to the COVID-19 pandemic, Delta is now operating in 35 cities throughout the Caribbean, Mexico, Central and South America.

"We're ready to welcome our customers back on board and are eager to show them how we've transformed the travel experience with enhancements in safety that do not sacrifice comfort or service," said Delta's Luciano Macagno, Managing Director – Latin America, the Caribbean and South Florida. "As we restore service to our extensive network, our customers will discover that once they're ready, they can book their travel with confidence and rest assured that we are putting their safety and that of our employees first."

Delta customers throughout Latin America and the Caribbean will benefit from the more than 100 safety and cleanliness initiatives Delta has put in place through its Delta CareStandard, featuring multiple layers of protection from curbside to baggage claim that are meant to ensure safer travel throughout the journey.

Meanwhile, Delta will become the first US airline to partner with the US Centers for Disease Control and Prevention to keep international customers informed of potential COVID-19 exposure through contact tracing. Under the new voluntary process, customers can directly and securely transmit five requested customer data points to the CDC via US Customs and Border Protection. This will give the CDC access to the data in moments, dramatically decreasing the time it takes to notify affected customers via local health departments.

As part of its customer-first approach, Delta is the only US airline blocking middle seats and limiting onboard capacity for flights departing now through March 30, 2021.

BAA Training Vietnam and Vietravel Airlines sign a long-term agreement

BAA Training Vietnam and Vietravel Airlines have signed a long-term agreement. As a part of the deal BAA Training will provide the wet and dry Airbus A320 full-flight simulator lease services to Vietravel Airlines. Apart from this, Vietravel has expressed interest in the firefighting training which will be arranged by BAA Training Vietnam. The brand new training device V9000 Commander will be used for these purposes upon request.

The startup airline Vietravel is controlled by Vietnam's leading tour operator Vietravel and gearing up to penetrate a fiercely competitive aviation market. Despite the country's restrictions, the carrier will make its first commercial flight in mid-January 2021, well before the previously set date for 2021. The newcomer plans to order a fleet of three to four aircraft in the first year and add another one or two by the end of next year.

Vytautas Jankauskas, Managing Director at BAA Training Vietnam said, "We have been investing in state-of-the-art devices to take the lead in flexible, innovative and cost-saving aviation training for commercial airlines. We are ready to connect and combine our strategic efforts with the new and ambitious player Vietravel Airlines, capable of shaking the aviation market. From BAA Training Vietnam side, ensuring our FFS availability and keeping an open discussion regarding cabin crew and other types of training opportunities for both Vietravel and Kent International College, supervised by the airline, will be the primary objective."

BAA Training Vietnam has been responding to the need for wet and dry lease services of many airlines like Bamboo Airways, VietJet, and others. The academy has also prepared over 30 independent pilots for Airbus A320 aircraft type, coming from Japan, South Korea, Australia, and other countries. BAA Training Vietnam is the first training academy certified to provide the Upset Prevention and Recovery Training (UPRT), which will become mandatory for all Vietnamese pilots in February 2021.

Bombardier bags a firm order for 10 Challenger 350 from undisclosed customer

Bombardier has announced a firm order for 10 Challenger 350 aircraft in a transaction valued at USD 267 million from an undisclosed customer.

Eric Martel, President and Chief Executive Officer, Bombardier Inc said, "This order highlights the tremendous value customers place on the unmatched capabilities of our aircraft. Bombardier's newly refreshed portfolio and growing service network position the company well to respond to growing interest in private aviation and the enhanced safety it provides."

The Bombardier Challenger 350 aircraft holds the coveted title of best-selling super midsize business jet since entering service six years ago, and continues to strengthen its position with performance enhancements and cabin upgrades. Discerning passengers seek out the Challenger 350 business jet thanks to its spacious and sleek design, productive environment, quiet cabin and smooth ride. It is a winning combination of proven performance and cabin experience hat is unrivalled in its class.

FLYINGGROUP signs FBO agreement with Jet Aviation to support growing fleet

Jet Aviation has signed a Fixed Based Operation (FBO) with FLYINGGROUP for handling services through their network of FBOs in EMEA and Asia. This includes providing executive VIP terminals, conference rooms, business services, passenger and crew lounges, snooze rooms, crew showers and weather and flight planning services. Apart from this it also includes, domestic and international flight handling, fuelling, aircraft cleaning, de-icing, immigration and customs services, and passenger and crew services, such as catering, hotel accommodations and local transport arrangements.

Joao Martins, VP Regional FBO Operations Europe and General Manager Zurich, "Our goal is to ensure the comfort and safety of aircraft owners and operators as they fly around the world. This agreement is a testament to the quality of Jet Aviation's handling services. We have supported FLYINGGROUP since 1998 and, like them, our team of handling professionals is wholly committed to upholding the highest industry standards. We are very pleased to continue welcoming FLYINGGROUP passengers and aircraft throughout our network."

Jurgen Van Campenhout, Chief Operating Officer at FLYINGGROUP said, "We were seeking a partner with a wide FBO network to help support our growing fleet, and with similar values to those at FLYINGGROUP. Jet Aviation has a long and demonstrable record in safety, security, and quality of service, which we are pleased to extend to our customers. FLYINGGROUP looks to establish long-term relationships with our service providers, and we look forward to a long and productive partnership with Jet Aviation."

FLYINGGROUP operates a fleet of 40 diverse aircraft from Antwerp, Belgium. Jet Aviation is the leading IS-BAH-registered FBO network worldwide — an industry-lauded acknowledgment of its rigorous safety and security standards.

NOAA receives second Beechcraft King Air for aerial surveys and critical missions

Textron Aviation recently delivered a missionized Beechcraft King Air 350CER turboprop aircraft to the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) Office of Marine & Aviation Operations (OMAO). The aircraft joins a King Air 350CER aircraft delivered to NOAA in May 2009. The agency's first King Air 350CER aircraft has flown coastal mapping and aerial survey missions and critical emergency response missions including photographic survey after earthquakes, oil spills, and numerous blizzards, tornados, floods and named hurricanes. The Beechcraft King Air is designed and manufactured by Textron Aviation.

"We are honoured the King Air 350CER aircraft continues to be the aircraft of choice to fill a variety of critical mission needs for NOAA," said Bob Gibbs, vice president, Special Mission Sales. "The aircraft's custom sensor port modification, combined with its extended range performance features, makes it a powerful and reliable platform to carry out the agency's unique missions during critical times."

The King Air 350CER aircraft has extended capabilities and it can collect critical information while remaining airborne for up to eight hours. The dual-sensor port modification allows simultaneous data collection from multiple on-board sensors. Optical grade glass plates in the sensor ports allow the cabin to remain pressurized or the optical plates can be removed, and the aircraft operated unpressurized.

NOAA's fleet of manned aircraft is operated, managed and maintained by the Aircraft Operations Center (AOC), part of the agency's Office of Marine and Aviation Operations, located at Lakeland Linder Regional Airport in Lakeland, Florida.

Passenger to Freighter conversions on a roll

The conversion of a younger aircraft variant will ensure that operators are flying with newer technologies and as the aircraft is still in production

22 December 2020: Vallair is now pioneering the first passenger to freighter conversions to be undertaken in China. The work is being undertaken for Vallair by EFW at the ST Engineering facility in Guangzhou and the aircraft is planned for delivery in Q3 2021 to cargo-operator, SmartLynx

Gregoire Lebigot, CEO of Vallair said, "We are excited to be embarking on the next phase of our A321 passenger to freighter conversion activity. MSN 1017 will be the first of nine aircraft scheduled to be converted in China, this is an important milestone."

Vallair has previously partnered with EFW in Asia on the conversion of its inaugural A321F. This was undertaken at its Singapore facility and delivered to launch operator Qantas Freight in October. Recently, the Company signed a MoU (Memorandum of Understanding) with US operator GlobalX for ten conversions, and it has leased a further two to SmartLynx Malta.

Lebigot goes on to say that the conversion of a younger aircraft variant will ensure that operators are flying with newer technologies and as the aircraft is still in production, few supply chain issues are anticipated.

"Vallair is keen to introduce the A321F to the Chinese market as we see strong potential for the freighter in its active e-commerce sector. Our decision to

commission the conversion process for a significant number of our lease portfolio 'in-country' demonstrates not only our confidence in the future implementation of this type, but also our commitment to local technical and engineering resources," Lebigot added.

Vallair's data confirms that the A321 freighter variant is better for the environment due to its 20 per cent reduction in fuel burn, and the aircraft offers exceptional range, payload, and cost benefits. The innovative design benefits from a lower cargo hold allowing it to offer shipping of containerized cargo in addition to its normal cargo positions. From an air logistics point of view, this then makes the A321F an attractive, and cost-effective proposition as the ability to offer containerization of cargo reduces turn-around times and therefore increases load efficiency.

Lufthansa Group and Sabre Corporation sign agreement for New Distribution Capability solutions

Lufthansa Group and Sabre Corporation signed a mutually flexible distribution agreement to distribute Lufthansa Group airlines' content through traditional connectivity to travel agents and corporations through global distribution system (GDS). Apart from this the agreement enables the distribution of Lufthansa Group airlines' content via the New Distribution Capability (NDC) standard in the Sabre travel marketplace. It covers the carriers Austrian Airlines, Lufthansa, SWISS, Air Dolomiti and Brussels Airlines.

Tamur Goudarzi Pour,Senior Vice President Revenue Management and Distribution Lufthansa Group Network Airlines and Chief Commercial Officer SWISS said, ""Our agreement with Sabre is a landmark deal for airline distribution. I am very excited to shape our joint path towards modern airline retailing and innovate by introducing a diversified NDC program with associated commercial models, – enabling agencies to agree bilaterally on NDC with Lufthansa Group airlines. Sabre and Lufthansa Group airlines share an ambition to innovate at the forefront of our industry. Through this new level of flexibility, we jointly enable a diverse distribution ecosystem, extend the reach of NDC and allow for differentiated commercial models. With this customer-oriented agreement, Sabre and the Lufthansa Group airlines team up to put the interests of our travel agency partners and our joint clients at center stage."

After the planned launch next year, the diversified NDC program will give Sabre-connected travel agencies globally the ability to access Lufthansa Group airlines' content through the Sabre marketplace and by signing up to one of the two available commercial models for NDC.

The agreement supports Lufthansa Group airlines' strategy to implement NDC technology and deliver personalized price offers through the newly launched Continuous Pricing. The continuation of this partnership equally supports Sabre's vision to provide flexibility and evolve its global travel marketplace, as well as enable personalized retailing for Lufthansa Group airlines utilizing Sabre's industry-leading technology solutions.

"Today maybe more than ever, we are looking to engage creatively with our airline and agency partners to deliver outcomes that provide added value to all players in the travel ecosystem," said Dave Shirk, President, Sabre Travel Solutions. "Sabre is committed to finding flexible, sustainable solutions that address traveler expectations, deliver against airlines' strategies, ensure scalability, and safeguard efficient agency workflows. I'm proud that we have signed a sustainable agreement with our partners at Lufthansa Group and one that provides both companies a new level of flexibility to drive a new generation of retailing."

The agreement between Lufthansa Group airlines and Sabre marks a key milestone in the travel industry. It is the expression of the shared vision of interactive retailing, which enables both companies to jointly stay at the very forefront of innovation. Lufthansa Group airlines and Sabre are working together intensely to bring Lufthansa Group airlines' offer live on NDC solutions. The go-live plan for NDC will be communicated during the first half of 2021.

Emirates'A30 state-of-art premium economy cabin experience is luxury at next level

Emirates is taking its signature A380 experience to the next level with the unveil of a brand new Premium Economy cabin product, together with enhancements and a refreshed look across all cabins onboard its newest A380 aircraft.

Sir Tim Clark, President Emirates Airline said: "The Emirates A380 is already one of the most sought-after travel experiences in the skies, and now we've made it even better. While others cut back, Emirates is working hard to restore the products and services that we've had to suspend or adjust due to pandemic precautions, and introduce new offerings and enhancements. True to our fly better promise, Emirates continues to invest to offer our customers the best possible experience."

The airline received its newest A380 aircraft from Airbus' Hamburg facility last week, and its remaining order of 5 A380s will also be delivered with premium economy cabins over 2021 and 2022. Emirates' premium economy seats will also be installed on some of its Boeing 777X aircraft which are only due to join the fleet in 2023. Emirates is considering plans to retrofit its existing A380 fleet. The dates of deployment will be announced in coming weeks.

Commenting on Emirates' premium economy cabins, Sir Tim said: "Our Premium Economy product was carefully developed in keeping with Emirates' brand positioning as a full-service airline of the highest quality. Our First, Business and Economy experiences reset industry standards when they were introduced, and we are confident that our Premium Economy will also make its mark as a distinct premium offering. Until we have a viable number of seats in our inventory to bring to market, we plan to offer the Emirates Premium Economy experience as a complimentary upgrade to valued customers. We'll also deploy our newest A380 aircraft on various routes so that our customers can experience our latest offering in all classes."

The highly anticipated premium economy cabin offers 56 seats in a 2-4-2 cabin layout. With a generous pitch of up to 40-inches, the premium economy seat is 19.5 inches wide, and reclines 8 inches into a comfortable cradle position with ample room to stretch out. Covered in cream-coloured anti-stain leather with stitching details and a wood panel finishing similar to Business Class, each seat is designed to provide optimal comfort and support with 6-way adjustable headrests, calf rests and footrests.

Each seat has a 13.3" screen, one of the largest in its class, to enjoy the unmatched array of music, movies, TV, news and other content on Emirates' award-winning ice. Customers will also find thoughtful touches including easily accessible in-seat charging points, a wide dining table and side cocktail table.

The cabin is located at the front of the main deck, with 2 lavatories dedicated to customers. On this latest Emirates A380, the airline's 14 First Class private suites have been enhanced from the original suites, being slightly wider with taller doors, for even more privacy and comfort. Cabin detail and finishes have also been refreshed with new motifs and colours, from the sweeping stairs that lead from the main deck to the upper deck, to refreshed design trims and modern fittings in the Shower Spa.

Emirates has retained its popular A380 Business Class seats which offer direct aisle access for every passenger, reclines to a fully-flat position, and offers personal mini bars, ample personal storage and a high degree of privacy.

All 76 seats have been refreshed to feature champagne-coloured leather covers and wood finishing, inspired by executive jets, similar to the Business Class on Emirates' Boeing 777 Gamechanger aircraft. The same classic colour scheme has also been applied to the Onboard Lounge at the back of the upper deck, for the exclusive use of First and Business Class passengers.

Emirates has replaced all 338 Economy seats onboard its newest A380 with ergonomically designed seats that come with full leather headrests and flexible side panels which can be adjusted vertically for optimum support.

This latest seat model is a step up from the version currently installed on Emirates' Boeing 777 Gamechanger aircraft. It is lighter, without compromising on comfort or function. Each seat features a classy wood grain finish on tray tables, as well as a 13.3" personal screen to enjoy Emirates' award-winning ice.

Throughout the Emirates A380 interior, customers will see new finishes and design touches featuring the Ghaf (prosopis cineraria) tree motif, as well as the clean and airy champagne colour scheme with wood paneling and bronze accents from Emirates' latest Boeing 777 Gamechanger interiors. An indigenous evergreen plant, the Ghaf is considered the national tree of the United Arab Emirates, and has deep cultural and ecological significance.

All cabin classes are equipped with the latest generation of Emirates' award-winning ice inflight entertainment system offering improved and superior image quality. Each in-seat screen will feature ultra-wide viewing angles, a capacitive touch screen, LED backlight and full HD display.

Adding a little colour to life...

We all have seen the Blue Macaw in animated movies. Here's a chance to see the vivacious bird in the form of a livery on an Embraer 195 E2. Azul Airlines and Embraer, have come together to create the most colourful commercial airplane in South America.

Brazilian artist Pardal created a design that pays tribute to the blue macaw and the protection of biodiversity. Of its incredible 58 colors, half are custom and had to be mixed in only two weeks. The Embraer paint team in São Paulo then applied AkzoNobel's Aerodur 3001/3002 basecoat clearcoat system to bring the artwork to life.

The new Azul Airlines livery features the little blue macaw (Spix's macaw), a national symbol in Brazil. Although considered extinct in the wild, a program is underway to reintroduce the bird to its natural habitat.

"This colorful project had a lot of moving parts bringing together all the elements of our 'People. Planet. Paint.' approach to sustainability," says Daniel Geiger Campos, President of AkzoNobel South America. "While working with our partners to share the story of the blue macaw, we were also able to showcase AkzoNobel's incredible range: the same brand that manufactures high-tech solutions for aircraft also offers innovative and high-quality Coral products to transform your homes and communities."

It's not the first time AkzoNobel has gone wild with Embraer. Previous wildlife collaborations include life-like tiger, eagle, snow leopard and shark airplanes.

WIKING Helikopter receives AW139 helicopter from Leonardo

WIKING Helikopter Service recently took delivery of a brand new AW139 7-tonne intermediate twin engine helicopter from Leonardo's Vergiate facility. With this the total fleet capacity of WIKING grew to four helicopters. The helicopter will be used to carry out offshore transport missions supporting energy industry operations in Northern Europe.

WIKING has been an offshore transport specialist in the North and Baltic Sea areas for over 45 years. It has three bases in Germany and two in the UK. The Company also performs sea pilot transfer, a windmill engineer hoisting service, and emergency medical service operations with its fleet of seven helicopters of various types.

"Our fleet standardisation and modernisation programme launched a few years ago is helping to meet the evolving requirements of our customers and the growth of our AW139 fleet is providing a valuable support for this goal. Our decision to leverage the unrivalled mission capabilities, operational efficiency and reliability in its category of the popular AW139 are testament to our commitment to delivering the best level of safety, quality, and service across the region," said Ernst Nassl, CEO Wiking Helikopter Service GmbH.

The AW139 has proven extremely popular in the region for offshore, search and rescue, passenger transport and law enforcement duties. The type set new standards

in terms of flight and mission technology, cabin space and comfort, performance, safety and reliability as well as introducing advanced support, maintenance and training services. The AW139 is even exceeding the evolving energy market's stringent requirements with unique features including a 60+ minutes run dry capable main gear box and full or limited ice protection system as an option to fly in known icing conditions for true all-weather operations. Nearly 1,200 AW139s have been ordered by more than 280 customers in over 70 nations to date for any kind of mission. The global fleet of nearly 1,100 units has amassed over 2.9 million flight hours to date.

Successful first flights of Qatar Emiri Air Force's NH90 helicopter programme

In a major milestone for the Qatar Emiri Air Force's NH90 helicopter programmefirst of 12 NH90 NFH naval helicopters and the first of 16 NH90 TTH over-land variant took to the air from Leonardo's Venice Tessera facility and Airbus Helicopters' Marignane site respectively. The flights allowed crews to evaluate general handling and basic systems and the helicopters performed as expected. Leonardo is responsible for the final assembly and delivery of the 12 NH90 NFH helicopters from its Venice Tessera facility and will also act as the prime contractor for the overall programme. They will also be providing a simulators, support and training services package for crews and maintenance technicians.

Gian Piero Cutillo, Leonardo Helicopters MD, said "We're extremely pleased to celebrate this important achievement as we continue to work to deliver this programme. The NH90 is set to provide the Qatar Ministry of Defense, an important and longstanding customer, with outstanding operational capabilities suitable for a range of missions. Together with our industrial partners, we're committed to completing and introducing this essential defense and security enabler for our customer."

Qatar's NH90 programme includes 16 NH90 TTHs for land operations, 12 NH90 NFHs for naval missions, a comprehensive support, maintenance & training services package and associated infrastructure. The programme has the potential to be extended in the future with the addition of 6 + 6 units in a mixture of TTH and NFH variants. Leonardo is providing, contributing to or supporting the integration of various avionics and sensor payloads, including the Leonardo LEOSS-T HD electro-optical system, HD Mission Video Recorder, Automatic Identification System, Tactical video link and Full HD display for cabin consoles. Airbus Helicopters is responsible for carrying out the final assembly of the 16 NH90 TTH aircraft. Acceptance of the first batch of NH90s by the Qatar Emiri Air Force is scheduled to start before the end of 2021, with the last helicopter planned to be delivered in 2025.

The NH90 is the largest military helicopter programme in Europe and managed through the NHIndustries joint venture. Around 430 units are in service worldwide and the platform has logged over 270,000 flight hours in a wide range of weather and environmental conditions, over land and sea.

Strengthening bonds-'AirHub Aviation and Diamond Aircraft'

AirHub Aviation Lithuania recently took delivery of three Diamond Aircraft and one Convertible MCC Simulator. Diamond's simulator is fully modelled after the DA40 and the DA42 aircraft and is the only training device for the DA40/DA42 fleet available on the market that is based on an officially approved Diamond data package with MCC training option.

"Simply there is no other one-stop shop platform which is made for the single and multi-engine aircraft and the corresponding high-quality simulator training for both professional and private pilots than Diamond. They are providing the best high-end option in the industry today," said Ruta Kulvinskaite, CEO of Airhub Lithuania.

Airhub benefits tremendously from its brand-new Diamond Convertible DA40/42 Simulator including MCC. It provides an all-in-one training on just one device (DA40, DA42, MCC) increasing cost-efficiency, reduced transition time from simulator to aircraft (cockpit environment is identical) and increased training efficiency as students can fully concentrate on their Multi Crew Coordination tasks without readjusting to different instrumentation (MCC is usually offered just in simulators for larger aircraft types).

"We are very happy to support the growth of AirHub Aviation and to welcome them to our ever-growing Diamond Aircraft Family," said Liqun (Frank) Zhang, CEO of Diamond Aircraft Austria. "The cooperation with AirHub Aviation has been a great pleasure and we're looking forward to continuing to support them with the industry's safest and most efficient training platforms as they continue to grow."

Since 2017 AirHub provides professional flight training, well established charter and wet lease Airline – GetJet Airlines operating a total fleet of 13 aircraft which includes Airbus A320, A319, and widebody Airbus A330. Airhub's training centre is now extending its training capabilities to ATPL Integrated training program (Ab Initio Training), starting with two new groups of students in April 2021. This program will allow the students to become pilots in two years either in classroom or distance learning profile guaranteeing fast track employment to a First Officer position at GetJet Airlines upon successful completion of the training.

Additionally, AirHub is successfully offering premium private pilot training services for individuals willing to either purchase a single engine or multi engine airplane and start traveling on their own or use Airhub aircraft lease services with its brand-new Austro Engine jet-fuel powered Diamond aircraft.

Diamond Aircraft announced 500th single-engine DA40 NG

Diamond Aircraft Industries recently announced their 500th single-engine DA40 NG aircraft built at the Austrian headquarters in Wiener Neustadt. The DA40 NG powered with the 168hp AUSTRO AE300 jet-fuel engine received EASA certification in April 2010. The piston single is an all-round practical and versatile multiuse four seat airplane for the 21st century. The DA40 NG offers a unique combination of modern and safe composite structure, advanced Garmin G1000 NXi glass cockpit, sophisticated EECU controlled jet-fuel engine, remarkable fuel-efficiency, excellent flight characteristics and a panoramic canopy with excellent views.

Reinhard Schwaiger, Team Leader Civil Aircraft Sales at Diamond Aircraft Austria said, "This is a very exciting milestone for Diamond Aircraft. The DA40 NG is the ideal aircraft for both private pilots and flight training operators globally. She offers a superb balance of performance and efficiency while being very reliable and durable. Congratulations to the proud new customer of this jubilee DA40 NG."

With over 2,200 DA40's (all versions) in worldwide service, a big number of those in high utilization commercial fleet operations, the DA40 fleet is providing its durability and safety, day in and day out. Diamond Aircraft is proud of a long DA40 NG customer list of renowned fleet operators, airlines, aero clubs and loyal private owners in its Diamond Aircraft Family.

ÖAMTC Air Rescue sign up for 5 Airbus H135s for critical missions

Airbus Helicopters and ÖAMTC Air Rescue have signed a firm contract for the purchase of five H135s. The delivery of the first helicopter of this contract is scheduled for early 2022.

Reinhard Kraxner, CEO at ÖAMTC Air Rescue said, "Our demanding missions require the most modern helicopters available for enhancing our capability for critical missions, e.g. during the night. We have been operating the H135 for more than 20 years, and we look forward to benefiting from the advantages that the Helionix version brings. The reduced pilot workload combined with the 4-axis autopilot will be a valuable asset onboard for our crews that rescue patients often in challenging environments."

"We thank ÖAMTC Air Rescue for their continued trust in Airbus Helicopters and particularly in the H135," said Bruno Even, CEO of Airbus Helicopters. "The H135 continues to demonstrate that it is the reference in air medical rescue all over the world."

ÖAMTC Air Rescue operates 28 H135 helicopters from 17 permanent bases and 4 additional bases during the wintertime in Austria. Last year, the operator performed more than 20,000 missions, with on average 52 missions per day.

The H135 is the helicopter of reference for helicopter emergency medical service operators worldwide. It combines a wide, unobstructed cabin with excellent performance, range and payload capacity – along with low sound levels. The oversized sliding side doors and rear clamshell doors enable fast loading/unloading of patients, with additional safety during ground operations provided by Airbus' signature shrouded Fenestron tail rotor.

On top of the 4-axis autopilot, Helionix offers an innovative cockpit layout which helps to increase situational awareness. Designed with three large electronic displays on the H135, the cockpit is Night Vision Goggle compatible and includes a First Limit Indicator which highlights the appropriate engine instrument data for the pilot in one indicator.

To date, more than 1,400 helicopters of the H135 family have been delivered around the globe with more than 5,6 million flight hours.

EASA certifies the Alternate Gross Weight of the latest version of H135

Airbus Helicopter H135 has achieved an important milestone by achieving the EASA certification for Alternate Gross Weight or AGW. This will enable operators to benefit from an increased maximum take-off weight of up to 120 kg (265 lb) and useful load. This increase can also be used to extend the range by up to 75 nm or the endurance by up to 40 minutes under standard conditions. The new AGW is available as an option and can be applied retroactively to all H135s equipped with Helionix.

Additionally, Airbus has recently certified a new single pilot IFR Helionix cockpit for its H135 helicopters. The modified cockpit enables customers to choose between removing the copilot side of the instrument panel to increase the field of view or to keep it in order to install specific STC equipment. The single pilot IFR cockpit of the H135 will further boost the capabilities of the H135 in several missions, including aerial work, utility and law enforcement.

To date, more than 1,400 helicopters of the H135 family have been delivered around the globe with more than 5.6 million flight hours. More than 300 customers in 60 countries use helicopters from the H135 family for a wide range of missions including Helicopter Emergency Medical Services (HEMS), law enforcement, private and business aviation, offshore wind, and military training.

Airbus and Heli-Union sign contract for two multi-mission H160s

Airbus Helicopters and its historical partner Héli-Union have signed a contract for the purchase of two multi-mission H160s to address a wide range of operations.

"We are excited to be one of the first customers to on board the H160 which will expand our fleet of 40 helicopters. We believe this program will have a great future in both civil and defence sectors and are delighted to be an actor of its growth" said Patrick Molis, Héli-Union CEO

"We are proud that Héli-Union, with its vast experience across the globe, especially in offshore transportation, has selected the H160 to bolster its fleet of Airbus helicopters," said Bruno Even, Airbus Helicopters CEO. "The H160 not only raises the bar in terms of safety, thanks to its numerous pilot assistance features, but its reduced fuel consumption brings much needed operational competitiveness, as well as a lower carbon footprint, to the market," he added.

With 68 patents, the H160 integrates Airbus Helicopters' latest technological innovations aimed at increasing safety and comfort. The Blue Edge blades and the largest shrouded Fenestron tail rotor ensure low sounds levels and deliver high end performance at the same time. The aircraft's compact size will be an added advantage to landing on oil platforms. Designed as a multi-mission helicopter aimed at addressing all major missions from offshore transportation, emergency medical services, search and rescue as well as other public service missions, the inherent flexibility of the H160 will suit all kinds of operations around the world.

Héli-Union currently operates a fleet of approximately 20 Airbus helicopters from the Dauphin, the H225, and the H145 families and maintains a wide range of Airbus Helicopters products for third parties such as civil or defense operators.

Héli-Union is a French operator and service provider with 60 years of experience in technical and logistical support to various civil and military organizations around the world. They are active in several markets: support of civil and state aircraft activities in France and abroad, operation of helicopters in various countries, as well as training of pilots and technicians. This experience allows Héli-Union to offer its customers a turnkey solution for the acquisition of new air assets and the deployment of air operations. Héli-Union is therefore positioned as a global partner, offering a wide range of services in order to support its customers in the implementation of air services.

Project XCelerate-UK's first commercial drone corridor in open & unrestricted airspace

BT and Altitude Angel have been selected along with a number of UK tech start-ups by UK Research and Innovation to deliver "Project XCelerate" – a key Future Flight Challenge project which will establish the UK's first commercial drone corridor in open and unrestricted airspace, located south of Reading, Berkshire.

Gerry McQuade, CEO of BT's Enterprise unit, said: "As drone numbers continue to rise, there is an urgent need to safely integrate commercial drones into global airspace alongside manned aviation. In showing how drones can deliver improved, potentially life-saving services to the public, we're aiming to accelerate the adoption of fully automated drones in unrestricted UK airspace in a safe and responsible way."

The project will start conducting test flights from the summer of 2021 along 8km long corridor to demonstrate how drones can operate safely in the same airspace as manned aviation. The consortium will demonstrate key industry use cases across healthcare, emergency services and infrastructure to illustrate how drone deliveries and inspection can bring countless benefits to businesses, the public sector and UK citizens.

"From improved mobility, connectivity, healthcare and manufacturing output, to reduced road congestion and pollution, automated drone technology will transform the quality of our lives. BT's role in the consortium is to bring world-leading drone expertise together and to provide the secure and resilient mobile network connectivity, as well as our drone detection services. The power of EE's 4G and 5G networks will ensure commercial drones remain connected for greater situational awareness, accurate positioning and to avoid collisions – ensuring that they can be operated safely and responsibly across UK skies," Gerry added.

Richard Parker, Altitude Angel, CEO and founder said: "Project XCelerate is bringing together experts and world leaders in their respective fields, something we're very proud and excited to be a part of. Our Arrow technology is truly groundbreaking and the key enabler to the project and we're pleased to be deploying it for maximum benefit in the UK first."

Drone technology experts from Dronecloud, HeroTech8 and Skyports, cyber security provider Angoka, and end user experts SkyBound Rescuer and DroneStream are a part of the consortium along with BT and Altitude Angel.

The key use cases which will be explored by the consortium include using drones to assist the emergency services, for example during road traffic collisions and search and rescue missions. Using 3D mapping techniques, drones can be used for forensics purposes to aid the police when responding to road traffic collisions and can also help to locate missing persons during search and rescue missions. Project XCelerate will prove how drone technology can be used to speed up response times for such incidents, helping the emergency services to improve the chances of survival, whilst also reducing costs.

The project will also demonstrate how automated drones can reduce the lead times for urgently needed medical deliveries, helping the healthcare and pharmaceutical sectors to improve standards of patient care. A further use case is key infrastructure inspection, where drones can be used to help assess damage or maintenance required for critical national infrastructure for the utilities, telecoms and transport sectors.

BT's strengths in reliable, secure, high bandwidth, low-latency radio and fixed connectivity mean it is ideally placed to lead the consortium. BT will combine its experience with Altitude Angel's leading experience in Unmanned Traffic Management (UTM) platforms, together with its operation of the Arrow Drone Zone commercial drone corridor.

Project XCelerate aims to widen the use of UTM systems by providing a framework which towns, cities, organisations and networks can follow in order to 'open up' portions of the sky. The project consortium is powerfully placed to realise the world's first live commercial automated BVLOS flight zone in which any compatible vehicle can connect into and fly within safely.

Super Hornet's launch from ski-jump shows compatibility with Indian carriers

US Navy and Boeing recently conducted a successful test to check the F/A-18 Super Hornet operations from a "ski jump" ramp. These demonstrations were held at Naval Air Station Patuxent River, Maryland. The successful operation of F/A Super Hornet showed that the aircraft can do well with the Indian Navy's Short Takeoff but Arrested Recovery (STOBAR) system.

Ankur Kanaglekar, India Fighter Sales lead for Boeing said, "The first successful and safe launch of the F/A-18 Super Hornet from a ski jump begins the validation process to operate effectively from Indian Navy aircraft carriers. The F/A-18 Block III Super Hornet will not only provide superior war fighting capability to the Indian Navy but also create opportunities for cooperation in naval aviation between the United States and India."

The Indian Navy is evaluating its fighter options. If it selects the Super Hornet, it would benefit from billions of dollars invested in new technologies by the US Navy and others. Those technologies include advanced networking, longer range through conformal fuel tanks, infrared search and track, and a new advanced cockpit system.

"This milestone further positions the Block III Super Hornet as a versatile next-generation frontline fighter for decades to come," said Thom Breckenridge, vice president of International Sales for Strike, Surveillance and Mobility with Boeing Defense, Space & Security. "With its proven capabilities, affordable acquisition price, known low documented life-cycle costs and guaranteed delivery schedule, the Block III Super Hornet is ideally suited to meet fighter aircraft requirements of customers in India, North America and Europe."

The ski jump demonstrations follow the delivery of two Block III flight-test aircraft to the US Navy in June. Boeing is on contract to deliver next-generation Block III capabilities to the US Navy beginning in 2021. The Super Hornet provides the most weapons at range in the US Navy's fighter inventory, including five times more air-to-ground and twice the air-to-air weapons capacity.

Boeing Australia completed the first high-speed taxi test of Loyal Wingman

Boeing Australia completed the first high-speed taxi test of Loyal Wingman21 December 2020: Boeing Australia and Royal Australian Air Force (RAAF) recently completed the first high-speed taxi test of the Loyal Wingman in preparation for first flight. Boeing test personnel monitored the aircraft's performance and instrumentation from a ground control station to verify the functionality while the vehicle reached accelerated speeds. The uncrewed aircraft has been undergoing low-, medium-, and high-speed taxi testing at a remote test location in Australia.

Paul Ryder, Boeing Flight Test manager said, "Our test program is progressing well, and we are happy with the ground test data we have collected to date. We are working with the Air Warfare Centre to complete final test verifications to prepare for flight testing in the new year."

Boeing and the Royal Australian Air Force will resume final taxi tests and preparations for flight in early 2021 when the range reopens.

RAAF Head of Air Force Capability Air Vice-Marshal Cath Roberts said, " Seeing the aircraft in person during the December trials had been extraordinary. There is something very special about testing an aircraft that takes technology to the next level. It is iconic in its own way. Experiencing the enthusiasm of the Boeing and Air Force team reminded me of my early career testing aircraft. This is what innovation is all about – working together to achieve many firsts."

"In the past year alone, we have made amazing strides on this aircraft, taking it from a fuselage to a finished aircraft that has undergone rigorous testing," said Dr. Shane Arnott, program director of the Boeing Airpower Teaming System. "Our focus now is on conducting a safe and secure flight-test regimen for the Loyal Wingman program."

More than 35 Australian suppliers on the Australian industry team have contributed to the aircraft development, including investment partner BAE Systems Australia, which has been embedded with the Boeing test team on-site.

Brazilian Air Force receives fourth C-390 millennium from Embraer

Brazilian Air Force (FAB) recently received the delivery of its fourth C-390 Millennium multi-mission medium airlifter from Embraer. A total of 24 units are yet to be delivered to FAB. All the units are equipped to perform aerial refueling missions, with the designation KC-390 Millennium. The fourth airlifter will be operated by the First Troop Transport Group (1st GTT) just like the first three.

"It is with great satisfaction that we are receiving another KC-390 Millennium aircraft, which is being incorporated into our fleet. Soon, it will be operational in the most diverse missions, in different regions of Brazil and even abroad, similar to our first three aircraft. This platform has already demonstrated great capacity, mainly in the transport of supplies and materials during Operation COVID-19," said the Brazilian Air Force Commander, Lieutenant-Brigadier Antonio Carlos Moretti Bermudez.

"We are very pleased with the delivery of the fourth C-390 Millennium to the Brazilian Air Force, as the airlifter has played an extremely important role in a series of humanitarian missions within the Brazilian territory and even abroad," said Jackson Schneider, President and CEO of Embraer Defense & Security. "The C-390 is establishing itself as the tactical transport aircraft of this century, opening new markets, which is immensely important for Embraer's strategy in the coming years."

Since the beginning of the COVID-19 outbreak, FAB has operated the KC-390 Millennium aircraft in logistical aerial transport missions, carrying tons of essential supplies to fight the pandemic in Brazil. Additionally, FAB operated one of the airlifters in a humanitarian mission to the Republic of Lebanon, in support of the population of Beirut, in August of this year.

M-345 trainer aircraft delivered to Italian Air Force to meet advanced training requirements

Leonardo recently delivered the first two M-345 jet trainer aircraft to the Italian Air Force. The delivery of this new aircraft is considered as a significant milestone and a success for the country. This new type designated as T-345A by the Italian Air Force, will gradually replace the 137 MB-339s which have been in service since 1982. They have till-date ordered 18 units from a total requirement for up to 45 aircraft.

Marco Zoff, Leonardo Aircraft Managing Director, said: "Building on our heritage and expertise in jet trainers, the M-345 will allow our customers to achieve a significant improvement in training effectiveness while at the same time reducing operating costs. This first delivery to the Italian Air Force is a key milestone, the result of a longstanding and productive team working closely together with the operator."

The new M-345 is designed to meet basic and basic-advanced training requirements and will complement the in-service M-346, which is used for advanced pilot training. Leonardo's integrated training system developed around the M-345 platform is representative of the company's technological leadership in training pilots to fly current and future generation aircraft. The system benefits from experience with, and technology developed for, the M-346, which includes a "Live Virtual Constructive" capability. This allows aircraft which are flying live training missions to incorporate simulated "friend" or "foe" elements into scenarios, allowing the pilot to be exposed to the full range of possible operational situations.

The M-345 is a high-performance aircraft which supports a pilot's transition from basic trainers to latest-generation fighters. The Italian Air Force's acquisition of the new aircraft is an important step forward in the modernization of its fleet, with the M-345 replacing the MB-339A in Air Force's second and third military pilot training phases. The M-345 has also been chosen as the new aircraft of the Italian Air Force's acrobatic team, the "Frecce Tricolori".

Belgian Air Force receives first of seven Airbus A400M military aircraft

The Belgian Air Force has taken the delivery of its first of seven Airbus A400M military transport aircraft. The aircraft was handed over to them at the A400M Final Assembly Line in Seville (Spain) and subsequently performed its ferry flight to the 15th Wing Air Transport in Melsbroek (Belgium), where the aircraft will be based.

Alberto Gutierrez, Head of Military Aircraft at Airbus Defence and Space said, "With the delivery of this aircraft all launch customers are now equipped with the A400M. MSN106 will join Luxemburg's aircraft in the binational unit operated jointly with Belgium. Despite challenges due to Covid-19, our teams have achieved all 10 aircraft deliveries scheduled this year, bringing the global fleet in operation to 98 aircraft."

The A400M, known as MSN106, will be operated within a binational unit composed of a total of eight aircraft, seven from the Belgian Air Force and one from the Luxembourg Armed Forces. The second A400M for Belgium will be delivered in early 2021.

Lockheed's successful flight test mission on U-2 Dragon lady to adapt to threats real time

Lockheed Martin successfully conducted a flight test mission featuring distributed processing onboard the U-2 Dragon Lady via Kubernetes containerization technology. The demonstration is a critical steppingstone toward creating a DevSecOps environment to enable the delivery of enhanced software capability to airborne assets in real-time.

"The U-2 Kubernetes demonstration from mid-November not only advances the deployment pipeline for in-flight software upgrades but also operationally extends the computational resources for mission execution," said Jeff Babione, vice president and general manager, Lockheed Martin Skunk Works. "This additional capability makes it possible for the warfighter to quickly adapt to changing threat environments without costly or time-consuming system upgrades.

To accelerate software delivery from months to hours, the Lockheed Martin team leveraged a Kubernetes cloud configuration. This configuration, which was previously demonstrated during the OpenAirKube demo in late August, was flown on the U-2 via an Enterprise Open System Architecture Mission Computer (EMC2). The EMC2 is representative of the Open Mission Systems (OMS) mission computer currently being developed for the U-2 program of record.

The U-2 flew a Kubernetes cloud that connected in-flight to a ground node, extending the U-2's network-of-networks connectivity. Air Force OMS-compliant datalink gateway software services onboard the U-2 and in the ground node within the Kubernetes cloud disseminated sensor data, dynamically bridging datalinks across assets. This distributed processing approach allows the cloud computing technology to scale up for advanced mission processing based on the unique needs of the battlespace.

A combat proven platform that's supporting important missions today, the U-2S continues to provide new capabilities to transform the future battlespace by enabling rapid development, testing, demonstration, and fielding to the warfighter.

Northrop Grumman BACN Gateway System – 15,500 missions, 200,000 combat flight hours

Northrop Grumman BACN Gateway System reached a significant milestone of 200,000 combat operational flight hours since its first deployment with the US Air Force in 2008.

"This significant milestone further demonstrates the BACN system's proven ability to enhance situational awareness, improve warfighter safety and deliver open communications capabilities for a wide range of missions," said Roshan Roeder, vice president, communications, airborne sensors and networks division, Northrop Grumman. "BACN is one of the first battle-tested gateway systems to enable warfighters and platforms to effectively communicate and securely share data across all branches of the Department of Defence."

Northrop Grumman's BACN system is a high-altitude, airborne communications gateway that translates and distributes imagery, voice and tactical data from disparate elements—enhancing situational awareness communications and coordination for joint warfighters operating across space, air, land and sea. BACN has been used for missions such as airdrop, convoy, humanitarian assistance, close air support, and theater air control systems operations.

In response to a joint urgent operational need, Northrop Grumman accelerated development of the company's BACN gateway system onto both manned and unmanned aircraft and delivered the first article of this critical capability to the US Air Force in only nine months. Northrop Grumman has demonstrated agility through the continuous introduction of incremental performance improvements that have been demonstrated and deployed to the fleet over the 12 years of the BACN program. Improvements to the BACN system include enhancing data rates by 10 times, integrating new automation software to streamline communications and improve situational awareness, and implementing new military standard communications protocols.

The BACN system achieved its 200,000 combat flight hours milestone by flying more than 15,500 missions since the system was first deployed in October 2008. The BACN system currently flies on four EQ-4B Block 20 Global Hawk unmanned aircraft systems and three E-11A modified business jet aircraft to provide persistent connectivity and operational support 24 hours a day, seven days a week in multiple countries. The BACN system has delivered a mission availability rate above 98 percent over the last 12 years.

Northrop Grumman is investing in developing low size, weight and power gateway systems which are designed to enable communications and cross domain translations between multiple beyond line-of-sight and line-of-sight networks and datalinks—inclusive of 5th to 4th, generation capabilities. The development of these systems includes a focus on multi-level secure and integrated functions such as cloud computing, machine learning, artificial intelligence, next generation data links and the use of third-party software and sensor solutions.

US Navy awards Boeing USD 109 million FMS contract

The US Navy recently awarded Boeing a Foreign Military Sales (FMS) contract, valued at USD 109 million, to provide P-8A Poseidon training for the Royal New Zealand Air Force (RNZAF). A suite of training systems and courseware will prepare RNZAF aircrew and maintainers to safely and effectively operate and maintain the world's premier maritime patrol and reconnaissance aircraft for decades to come.

Boeing's holistic P-8 training system will enable the RNZAF to conduct up to 70 per cent of all Poseidon-related training in a simulated environment. As part of the contract, Boeing will provide:

- Operational Flight Trainer (OFT) – Full-motion simulator incorporates all P-8 unique displays and switches.
- Weapons Tactics Trainer – Simulates mission systems and tactical operations, and when coupled with the OFT, forms a Weapons Systems Trainer that enables multi-crew, high-fidelity mission rehearsal training in the same simulated environment.
- Virtual Maintenance Trainer – Enables training of maintenance professionals to properly perform maintenance tasks and procedures on the P-8A aircraft.
- Scenario Generation Station – Creates custom scenarios for mission training.
- Brief/Debrief Station – Provides post-mission analysis and playback.

In addition, Boeing's Electronic Classroom will give RNZAF instructors and students access to courseware and testing capabilities. Boeing also will provide initial Instructor Cadre Training to a group of RNZAF instructors,

enabling them to continue training additional RNZAF P-8A instructors and aircrews following delivery of the training system in early 2024.

"This holistic training system will enable aircrew to safely train for all aspects of flying and maintaining the P-8A Poseidon," said Tonya Noble, director of International Defense Training for Boeing. "We look forward to bringing these training capabilities in-country and working alongside the RNZAF to ensure readiness of aircrew and maintenance personnel."

All training will be conducted in Ohakea, New Zealand. In March 2020, the RNZAF acquired four P-8A Poseidon aircraft through the US Navy FMS process, with expected delivery beginning in 2023. New Zealand is one of seven nations operating the P-8.

US Air Force awards Lockheed Martin USD 900 million sustainment support contract for F-16 aircraft

Lockheed Martin was recently awarded a USD 900 million contract by the US Air Force for sustainment support and depot-overflow services for F-16 aircraft for the next 10 years. The contract includes depot-level maintenance activities, predefined programmatic work, aircraft modification and unplanned drop-in maintenance. Work on this contract will be performed at the company's site in Greenville, South Carolina, which is equipped and ready to support F-16 operations for years to come.

As the F-16 Fighting Falcon's Original Equipment Manufacturer, Lockheed Martin is uniquely positioned to provide the most comprehensive knowledge of the aircraft and tailored sustainment solutions to optimize the F-16 fleet for greater capability, readiness and performance.

Lockheed Martin's team of F-16 experts are on-site and prepared to meet the service's most challenging problems, partnering between Production and Sustainment operations, giving full life cycle coverage for the F-16. The F-16 Fighting Falcon offers advanced interoperable capabilities that enhance partnerships with allies across the world. It has been proving its effectiveness for decades and continues to remain the best value among 4th generation jets for its capabilities and affordable lifecycle costs. To date, a total of 4,588 F-16s have been produced and are currently operated by 25 countries.

Avioane awarded USD 27 million contract to Elbit System for first phase upgrade of RoAF trainer

Elbit Systems was recently awarded a USD 27 million contract from Avioane Craiova S.A. for the first phase of the upgrade program of the Romanian Air Force's ("RoAF") IAR-99 Standard trainer aircraft. The contract will be performed over a four-year period and includes integrated logistic support.

Yoram Shmuely, General Manager of Elbit Systems Aerospace said, "We are honoured to provide continued support for the RoAF. This upgrade program follows a range of technologies delivered by Elbit Systems to the RoAF in collaboration with Romanian companies, including large scale upgrades for various fixed-wing aircraft as well as the supply of advanced capabilities for rotary-wing aircraft."

Under the contract, Elbit Systems will equip the IAR-99 Standard aircraft with advanced avionics systems and live training Embedded Virtual Avionics system as well as Close Air Support and Air to Air capabilities. This technology upgrade will facilitate an effective transition of RoAF pilots to the operation of advanced fighter aircraft such as the F-16.

First batch of COVID-19 vaccine transported by Emirates SkyCargo

Emirates SkyCargo has transported the very first batch for Pfizer-BioNTech COVID-19 vaccines for Dubai Health Authority. The vaccines were transported from Brussels on Emirates flight EK 182 on 22 December 2020.

HH Sheikh Ahmed bin Saeed Al Maktoum, Chairman and Chief Executive, Emirates Group said: "Emirates is proud to be transporting the first batch of Pfizer vaccines for COVID-19 into the UAE for the Dubai Health Authority. Our healthcare ecosystem has played an absolutely critical role in every step of the fight against COVID-19. I would like to thank everyone who has worked unceasingly over the last year to protect the lives of those most vulnerable against the disease. In recognition of their immense contribution for the wellbeing of everyone in the UAE, it has been our honor to transport these vaccines free of charge on our flight."

Nabil Sultan, Emirates Divisional Senior Vice President, Cargo said: "At Emirates SkyCargo we are doing our part to join Dubai's efforts to fight the COVID-19 pandemic. Thanks to the effective management of the pandemic by Dubai's visionary leadership, the city has retained its position as a global logistical hub for connecting vital cargo including PPE, medical supplies, vaccines, food and other essential items. Emirates SkyCargo has set up the world's largest airside hub dedicated to distributing COVID-19 vaccines and we stand ready to support not just Dubai, but countries around the world, including markets with limited cool chain infrastructure with our advanced capabilities. By transporting COVID-19 vaccines across our extensive network, we look forward to helping people around the world get back on their feet after the devastating impact of the pandemic."

On arrival at DXB, the containers with the vaccines were unloaded on priority from the aircraft and then taken to Emirates SkyCargo's dedicated pharma facility Emirates SkyPharma to await clearance for delivery.

Abu Dhabi opens the door for International tourists, 14 day quarantine rule relaxed

Abu Dhabi Emergency Crisis and Disasters Committee have relaxed entry restrictions in Abu Dhabi starting today. International tourists, residents and travellers from selected destinations, flying with Etihad Airways, will be allowed to enter the emirate without the need to self-isolate for 14 days.

The list of countries eligible for entry without quarantine, referred to as 'green' countries, will be reviewed by the Department of Health on a two-week rolling basis. Travelers from 'green' countries will need to self-isolate until they receive a negative PCR test result. Those entering the Emirate from countries not on the 'green' list will be subject to a reduced quarantine period of 10 days.

Tony Douglas, Group Chief Executive Officer, Etihad Aviation Group, said: "With Abu Dhabi at the forefront of the global response to COVID-19, the approach to managing the pandemic has positioned the capital as one of the safest cities in the world to visit. The gradual reopening of our border cements the rigorous health and safety measures we have implemented across the airline. We can proudly say Etihad has played its part, by positioning ourselves as an industry leader, ensuring guests travelling with us do so with complete peace of mind."

On arrival into Abu Dhabi International Airport, all passengers will undergo thermal screening and COVID-19 PCR testing. This applies to all arrivals, excluding children under 12. Once passengers arriving from 'green' countries receive their negative test results, they will be allowed to enjoy Abu Dhabi without the need to quarantine or wear a medical wristband. Guests staying more than six days must conduct another PCR test on day six and then again on day 12 for longer stays. Tests start from AED 85 in the UAE. Guests travelling from other destinations will be required to follow quarantine guidelines, which have been reduced to a period of 10 days.

UAE residents who have participated in the vaccination trials or National Vaccination Programme are also exempt from quarantine in Abu Dhabi.

Delta at the forefront in shipping COVID-19 vaccines

The world is all geared up for COVID-19 vaccines and air freighters are working round the clock to have the COVID-19 vaccines delivered to their desired destinations. Delta has always been on the forefront since the start of the pandemic by delivering essential goods and medical supplies. Now Delta is once again geared up to support COVID-19 vaccine shipments – most recently from Detroit to Atlanta and San Francisco – following successful shipments of test vaccines earlier this year.

These critical vaccines are being shipped with the highest priority on Delta aircraft, with the entire journey monitored in Delta's unique Vaccine Watch Tower that enables full end-to-end visibility for all vaccine shipments. With 24/7 centralized monitoring and customer reporting, the Tower works closely with Flight Operations to ensure the safe and secure transportation of the vaccines at the required temperature.

"Within three hours of being engaged, Delta Cargo had the vaccines in hand and on their way. Our successful COVID-19 vaccine shipments this week prove what we've known for a long time: that we're ready and able to take on more in the all-hands-on-deck domestic and global distribution effort of this life-saving vaccine," said Rob Walpole, Vice President – Delta Cargo. "Our vaccine task force, which was created months ago to understand the shipping requirements and work with healthcare and pharmaceutical experts, has built scalable critical shipment capabilities to support this effort."

Delta's extensive experience in shipping vaccines involves years of building an operation validated by Pharma industry standards and includes being the first US passenger airline to receive IATA's Center of Excellence for Independent Validators Pharma Logistics Certification at our Atlanta hub and headquarters. Even before the COVID-19 pandemic, Delta offered four tailored pharmaceutical shipping options that meet specific temperature requirements for vaccines – ensuring integrity through the entire journey.

With large warehouses and cooler facilities in Atlanta, Detroit, Los Angeles, New York-JFK and Seattle, as well as a network of 49 certified Pharma airports across the globe, Delta has the necessary infrastructure in place to support COVID-19 vaccine shipments. In addition to robust domestic shipment capabilities to support rapid distribution within the U.S., Delta has a broad and nimble global distribution network in coordination with strong airline partners – providing worldwide reach with stop-gap reliability and greater ability to warehouse and ship vaccines from more global hubs.

Delta Cargo launched a Cargo Charter operation in March to provide safe and reliable transportation of goods around the globe by working primarily with Delta's established world-leading logistics partners. Delta dispatched idled aircraft on cargo-only flights to transport millions of pounds of supplies quickly and safely. Delta has operated over 1,800 cargo charter flights since February and is now averaging 30 cargo-only flights globally each week, carrying medical and PPE equipment, pharmaceuticals, US mail, home office supplies and food.

SIA to commence digital health verification process for seamless travel experience

Singapore Airlines (SIA) has started trials on a new digital health verification process, which will be the first in the world to be based on the International Air Transport Association's (IATA) Travel Pass framework. This will offer customers the ability to securely store and present information related to Covid-19 tests, as well as their vaccination status in the future.

This service will initially be offered to customers travelling on flights operated by Singapore Airlines from Jakarta or Kuala Lumpur to Singapore. If successful, this could be extended to other cities in the SIA route network.

Customers who take their Covid-19 tests at selected clinics in Jakarta and Kuala Lumpur would be given either digital or paper health certificates with a QR code. Airport check-in staff and Singapore's immigration authority would be able to verify the authenticity of these certificates via a secure mobile app, and ensure that the customers meet Singapore's entry requirements. Customers without a digital certificate can also present the paper version for manual verification.

Ms JoAnn Tan, Acting Senior Vice President Marketing Planning, Singapore Airlines, said: "Covid-19 tests and vaccinations will be an integral part of air travel for the foreseeable future. We are offering a digital solution that allows the easy and secure verification of this information, and supports the industry's safe and calibrated recovery from this pandemic. Using IATA's robust Travel Pass framework would also provide our customers and governments with the assurance that they need about the security and authenticity of the test and vaccination information."

This is a faster and more secure way to validate a passenger's health credentials than the existing protocols, speeding up both the airport check-in process and the immigration entry process into Singapore. It would make it easier for SIA customers to control their information, reduce friction during their travel journey, and result in a more seamless experience with the aid of digital technologies in the new normal.

IATA's Timatic registry will provide the back-end information on the Covid-19 testing and entry requirements. This is part of the modular Travel Pass solution, which aims to allow travellers to easily and securely manage their travel in line with national requirements for Covid-19 testing and vaccine information.

Mr Nick Careen, IATA's Senior Vice President Airport, Passenger, Cargo, Security said: "Partnering with Singapore Airlines for the world's first deployment of the Timatic Covid-19 module of the IATA Travel Pass is a big step forward. Together we will demonstrate that people can return to travel with confidence that they are meeting all government Covid-19 entry requirements. We already have plans to add additional features in the New Year. This will help ensure that SIA's customers will be among the first to benefit as governments re-open their borders with testing or vaccination requirements. And the experience gained through collaboration helps prepare for the eventual global deployment of the IATA Travel Pass."

Singapore Airlines also plans to integrate the entire process into the SingaporeAir mobile app from around mid-2021, again using the Travel Pass framework. This would support the drive towards a secure and convenient industry standard for the verification of Covid-19 test and vaccinations.

The verification is enabled by an application developed by Affinidi, a Temasek-founded technology company enabling portable and verifiable data credentials.

Ms Margaret Tan, Director (Airport Operations Regulation & Aviation Security), CAAS said: "SIA and IATA trials are an important step to facilitate the return of air travel. It is an innovative approach to ensure a seamless travel journey whilst ensuring that health and border agencies are reassured that the passengers have the necessary health credentials to protect public health. We hope that other countries and airlines will consider taking a similar approach. CAAS will work with our partners to incorporate such solutions into our air travel recovery efforts." SIA will work closely with its partners in Singapore, including the Ministry of Transport, Civil Aviation Authority of Singapore (CAAS), Immigration and Checkpoints Authority (ICA) and Changi Airport Group (CAG) in the facilitation of these trials towards the eventual restoration of a seamless travel experience for its customers.

Delta –First US carrier to offer quarantine-free flights between the US and Europe

Delta customers with essential travel needs can now fly from Atlanta to Amsterdam without having to quarantine after arrival, and with the knowledge that their fellow passengers and crew are COVID-19 negative after undergoing pre-flight testing protocols. Delta is the first US airline to offer COVID-free, quarantine-free flights between the US and Europe, which allow customers to avoid quarantine after testing negative for the virus prior to travel and upon arrival in the Netherlands and Italy.

"Air travel is the backbone of the global economy. In normal times, it supports more than 87 million jobs and contributes to USD 3.5 trillion in GDP worldwide," said Perry Cantarutti, Delta's Senior Vice President -Alliances and International. "The arrival of a vaccine is fantastic news, but it will take time for it to become widely available around the world. It's for this reason we have worked tirelessly with the authorities and our partners to create a blueprint for travel corridors that will enable air travel to safely resume."

COVID-tested flights to Amsterdam are operated in conjunction with Delta's trans-Atlantic partner KLM and will depart four days a week, with both carriers operating two frequencies each. Delta, meanwhile, will operate service to Rome three times a week. These flights are clearly identified in the Delta.com booking process so customers can see which flights require the new testing process.

Both trial programs will be available to all citizens permitted to travel to the Netherlands or Italy for essential reasons, such as for certain specified work, health and education reasons. Customers who are transiting via Amsterdam to other countries will still be required to follow entry requirements and any mandatory quarantine in place at their final destination.

Emirates expand their global destinations network with addition of Istanbul

Emirates recently added Istanbul to their global network thereby expanding their European network to 31 destinations. Now Emirates customers can safely and easily connect to destinations across its wide global network with one convenient stop in Dubai. Flights to/from Istanbul will operate once daily by the Boeing 777- 300ER from 21 December.

Customers, who purchase an Emirates ticket for travel on or before 30 June 2021, can enjoy generous rebooking terms and options, if they have to change their travel plans. Besides this, All Emirates customers can travel with confidence and peace of mind with the airline industry's first, multi-risk travel insurance and COVID-19 cover. This cover is offered by Emirates on all tickets purchased on or from 1 December 2020, at no cost to customers.

A330neo – Ideal Aircraft to operate for post COVID-19 recovery

Uganda Airlines recently took the delivery of its first A330neo, the latest version of the most popular widebody airliner. It is the first Airbus aircraft delivered to Uganda Airlines, which was established in 2019.

The A330-800 is the latest addition to Airbus' commercial aircraft product line, to keep offering its customers unbeatable economics, increased operational efficiency and superior passenger comfort. Thanks to its tailored, mid-sized capacity and its excellent range versatility, the A330neo is considered the ideal aircraft to operate as part of the post-COVID-19 recovery.

The A330neo will enable the new airline to launch its long-range operations with non-stop intercontinental flights to the Middle East, Europe and Asia.

Featuring Airbus' Airspace cabin, passengers can enjoy a unique experience and explore its full comfort with 20 full-flat, business-class beds, 28 premium-economy seats and 210 economy-class seats, totalling 258 seats.

The A330neo is a true new-generation aircraft, building on the features of the popular A330 and using technology developed for the A350. Powered by the latest Rolls-Royce Trent 7000 engines and featuring a new wing with increased span and A350-inspired Sharklets, the A330neo provides an unprecedented level of efficiency. The aircraft burns 25 per cent less fuel per seat than previous generation competitors. The A330neo cabin offers a unique passenger experience with more personal space and the latest generation in-flight entertainment system and connectivity.

Boeing uses thermal disinfection technique for flight deck safety against COVID-19 virus

Boeing and University of Arizona have initiated the use of age-old thermal disinfection technic to use in the fight against COVID-19. Researchers validated that applying heat to surfaces, especially on hard-to-clean flight deck equipment, effectively eliminates SARS-CoV-2.

Results indicate that the virus can be destroyed by more than 99.99 per cent after three hours exposure to temperatures of 50 degrees Celsius (120 degrees Fahrenheit) and will still effectively kill more than 99.9 per cent of the virus at 40-degree Celsius temperatures (104 degrees Fahrenheit).

"Passenger and crew safety are our top priorities that extends from the cabin to the flight deck," said Michael Delaney, who leads Boeing's Confident Travel Initiative (CTI) efforts. "Thermal disinfection could deliver another valuable tool to destroy COVID-19 on sensitive and difficult-to-reach components that protect pilots."

Boeing completed the testing as part of its CTI effort to support customers and enhance the safety and well-being of passengers and crews during the COVID-19 pandemic. This testing was conducted in a protected laboratory environment at the university using flight deck parts and SARS-CoV-2, the virus that causes COVID-19, this fall.

"We're basically cooking the virus," said Dr. Charles Gerba, University of Arizona microbiologist and infectious disease expert. "Thermal disinfection is one of the oldest ways to kill disease-causing micro-organisms. It's used by microbiologists in our laboratory every day."

The flight deck is one of the most challenging areas to sanitize using traditional chemical disinfectants. In areas with sensitive electronic equipment, heat has the ability to disinfect without adverse effects from cleaners. The flight deck is designed to withstand temperatures up to 160 degrees Fahrenheit (about 70 degrees Celsius), which makes thermal disinfection a safe, practical and effective sanitization method.

As air travel is fundamentally disrupted by the global COVID-19 pandemic, Boeing and the University of Arizona continue to test recommended cleaning methods in a lab against SARS-CoV-2 and other similar viruses to further validate their efficacy.

Honeywell reusable, three-dimensional knitted face cover with replaceable filters

COVID-19 pandemic is gradually getting under control across the world and aerospace sector along with other industries is gearing up for a fresh start for 2021. Meanwhile many aerospace companies are using 3D technology, additive manufacturing to make masks, PPE kits and other related materials. Honeywell has manufactured a new reusable, three-dimensional knitted face cover with replaceable filters for everyday use.

The Honeywell Dual-Layer Face Cover incorporates Honeywell's decades of expertise producing respiratory-protection products. The new face covering features an innovative 3D knit design that contours to the wearer's face and is made with a washable material, making it easy to clean.

The face cover also has a hidden pocket that securely holds a Honeywell protective filter made with melt-blown polypropylene, which is similar to the material used in the construction of N95s masks. The replaceable filter can block up to 97 per cent of 3.0-micron-sized particles (BFE) and 0.1-micron-sized particles (PFE).

"Honeywell has vast experience in developing respiratory innovations for industrial workers and first responders, and we have leveraged that expertise to bring the Dual-Layer Face Cover to market," said Praveen Reddy, president of Honeywell's personal protective equipment business. "When social distancing measures are difficult to maintain, people want a protective face covering that is comfortable, easy-to-clean, stylish and manufactured by an industry-leading safety technology provider."

The face covering's base layer features a seamless, 3D knit construction using polyester, nylon and cotton and provides four-way stretch, minimizing gaps and enhancing comfort. It has a contoured design with adjustable ear straps, a flexible nose clip and ventilation holes for enhanced comfort, function and breathability for most adult face shapes and sizes.

In addition to the new reusable face covers, Honeywell also offers individual Safety Packs for people attending sporting events, traveling or visiting public places. The resealable, easy-to-open kits include a disposable face mask, gloves and wipes.

These new safety products are part of Honeywell's strategic initiative to quickly develop and deploy solutions to help important sectors of the global economy recover and to help protect people as we return to public spaces. Honeywell also increased production of N95 face masks globally to help protect frontline healthcare workers, emergency responders and governments in responding to COVID-19.

China Airlines plans to increase their cargo capacity by 15 in 2021

China Airlines recently unveiled the first of six Boeing 777 Freighters, officially becoming the 20th operator of the world's largest and longest range twin-aisle freighter. The 777 Freighter joins the airline amid growing demand for dedicated freighters as operators grapple with the impacts from the COVID-19 pandemic.

"Air cargo demand has risen in light of the global pandemic and has played a critical role in maintaining profitability for our airline despite the downturn in passenger traffic," said China Airlines Chairman Hsieh Su-Chien. "The efficiency and capability of the 777 Freighter enables us to modernize our freighter fleet, while also allowing us to increase capacity and open into new markets. We look forward to delivering world-class service to our customers."

China Airlines aims to increase its cargo capacity by 15 per cent in 2021 and is planning to launch the 777 Freighter on routes connecting Taipei with North America — a key market with strong demand and escalating yields. An operator of all-Boeing freighter fleet, China Airlines debuted its new 777 Freighter during a ceremony in Taipei to mark the carrier's 61st anniversary. The airline is set to take five more 777 Freighters as part of an order announced at the 2019 Paris Air Show.

The 777 Freighter is the world's largest, longest range and most capable twin-engine freighter. The airplane has a range of 9,200 km (4,970 nautical miles) and can carry a maximum payload of 102,010 kg (224,900 lbs). The airplane will allow China Airlines to make fewer stops and reduce associated landing fees on long-haul routes, resulting in the lowest trip cost of any large freighter.

The 747 and 777 freighters, both of which make up China Airlines' world-class freighter fleet, are capable of carrying tall and outsized cargo loads on 3-meter (10-foot) tall pallets. This common main-deck pallet height capability enables interchangeable pallets, adding to the versatility of both models.

"With the global air cargo fleet expected to grow by more than 60 per cent over the next 20 years, the unmatched efficiency of the 777 Freighter will significantly boost China Airlines' air cargo capabilities and enable them to scale their world-class cargo operations," said Ihssane Mounir, senior vice president of Commercial Sales and Marketing for Boeing. "We are honored to strengthen our partnership with China Airlines as they continue to build one of the world's most dynamic freighter fleets."

In addition to commercial airplanes, Boeing provides China Airlines with total life cycle support services to streamline parts provisioning and flight and maintenance operations. The entire China Airlines fleet uses Jeppesen FliteDeck Pro, which provides access to digital navigation charts and interactive maps to optimize performance and enhance situational awareness.

China Airlines also recently signed an agreement for Airplane Health Management (AHM), which tracks real-time airplane information, providing data and decision support tools that allow technicians to quickly and correctly resolve maintenance issues. This allows airlines to take proactive actions based on AHM-generated alerts, reducing disruptions to operations and the costs associated with unscheduled maintenance. With the agreement, China Airlines joins more than 100 global customers using the AHM solution.

Poject FibreSense–fibre-optic sensing technology for aerospace propulsion systems

Saab and Rolls Royce have taken up a joint research programme called Project FibreSense to use fibre-optic sensing technologies for aerospace propulsion systems. Fibre-optic sensing technologies have the potential to provide a novel solution that acquires multiple measurements such as strain, pressure and temperature along a single wire. Compared to existing technologies, this low-weight integrated solution could offer higher temperature and accuracy within the harsh operating environment of an engine. Such advanced measurement systems compliment the journey to the Intelligent Engine and enhanced data driven engine services.

"We are excited to be working together with Saab on this pioneering project and developing technologies that demonstrate both companies' position at the forefront of innovation. This initiative builds on the strong collaborative spirit between Saab and Rolls-Royce and we look forward to developing further joint projects in the future" said Alex Zino, EVP Business Development & Future Programmes, Rolls-Royce.

The research will take place within the Eureka Network projects programme as a joint initiative between the Swedish Innovair and the British Aerospace Technology Institute (ATI).

"The collaboration between Rolls-Royce and Saab is a direct result of a series of initiatives towards strengthening Saab's cooperation with UK industry. We hope that, with the positive outcome of this initial collaboration, we can continue to partner in other areas of technology that are beneficial to our companies," said Magnus Lewis-Olsson, President Saab UK.

Eureka is an international co-operation programme supporting collaborative market-oriented research and development projects for innovative products, processes and services. This joint initiative between the UK and Sweden aims to develop project proposals which have strong market potential in these countries and globally.

Textron Aviation introduces new LinxUs flight data monitoring service for Cessna Citation

Textron Aviation recently announced new aircraft flight data monitoring (FDM) service options for Cessna Citation business jets equipped with Aircraft Recording System II (AReS II). Through Textron Aviation's proprietary LinxUs data reporting ecosystem, Cessna Citation customers can now choose to transfer their flight data to one of two customer-selected Flight Operational Quality Assurance (FOQA) providers, Flight Data Services L3Harris Technologies' Flight Data Connect service or Safran Electronics & Defense's Cassiopée Flight Data Monitoring solution.

Beechcraft, Cessna and Hawker customers receive factory-direct support by Textron Aviation through a global network of service and part centres, mobile service units and 24/7 1CALL AOG support.

"At Textron Aviation, we are always looking for ways to enhance the aircraft ownership experience," said Brian Rohloff, senior vice president, Customer Support. "Our innovative LinxUs FDM program enables customers to improve

CONTINUE ON PG 44

Oman Air presents ARIA State-of-art in-flight entertainment training system

Oman Air has recently added a new in-flight entertainment training system in their effort to improve efficiency and guest's service. The kiosk-based system displays ARIA, the airline's in-flight entertainment system, along with First, Business and Economy Class screens and the cabin crew control panel. This kiosk eliminates the need to use aircraft for training cabin crew making the training process more efficient and cost-effective.

Oman Air's system also facilitates quality control reviews of all content before it is installed into the system for guests to view. ARIA, the airline's state-of-the-art entertainment system, presents all the latest blockbuster titles, an extensive library of TV box-sets, audio spanning all types of music and games for children and adults. Guests intuitively control their preferences and create playlists from Hollywood to world movies, classical to modern tunes to enjoy throughout their flight whenever they choose, using the system's Touch Personal Media Unit.

CONTINUE FROM PG 43

their operational efficiency, training, and reliability by transferring their flight data to one of two customer-selected data management providers."

Customers have the flexibility to select a service provider that best fits their needs, ensuring they receive the most comprehensive flight data monitoring capabilities for their aircraft. The wireless transfer of data to the provider of choice requires no additional equipment, making it a simple and seamless process.

The first Citation to benefit from this advanced service offering is the Cessna Citation CJ4 business jet with future expansion of the program to include additional AReS II-equipped Cessna aircraft. Additional aftermarket flight data monitoring solutions are also in-work with solutions anticipated to roll out in 2021.

LinxUs FDM further expands the LinxUs and LinxUs Air brands providing customers with a suite of real-time solutions. LinxUs fault notification and diagnostics enable downtime reduction, returning the aircraft to service faster than ever. Textron Aviation's 1CALL center, along with service designees receive automated notifications for potential AOG events. LinxUs identifies the indicated cause of the fault, enabling maintenance to be scheduled before the aircraft lands. This allows our service professionals to pre-position the resources necessary to respond quickly.

Emiratisation strategy despite challenging circumstances

The Emirates Flight Training Academy (EFTA) recently held their first ever graduation ceremony for 25 pilot cadets who have completed its rigorous training programme. The Emirates Flight Training Academy graduation ceremony was attended by His Highness Sheikh Ahmed bin Saeed Al Maktoum, Chairman and Chief Executive Emirates Airline and Group, Emirates senior management, as well as Dubai government representatives. The ceremony was livestreamed for families and friends of the cadets to virtually show their support.

His Highness Sheikh Ahmed awarded the certificates to the successful cadets. The future aviators underwent over 1,100 hours of ground-based training, along with 315 hours of flight instruction (including simulator flying), to obtain their Integrated Air Transport Pilot Licence, as they now follow on to complete their Type Rating. The training EFTA provided its cadets exceeds the guidelines prescribed by the GCAA for ab initio pilot training.

His Highness Sheikh Ahmed commented on the milestone moment for the Academy and its cadets, "Today, we recognise the hard work and extraordinary accomplishments of our cadets as they embark on the next phase of their aviation journey. The world-class education and integrated training provided at EFTA has not only provided our cadets with the technical abilities needed for the profession, but also the passion and enthusiasm that will be the bedrock for their future careers. We will continue to look at the bigger picture, and as the industry overcomes the setbacks posed by the pandemic, we want to make sure we are ready for the future. I am immensely proud of EFTA's efforts to develop homegrown Emirati talent who will become the next generation of pilots, strengthening the UAE's position as a global hub for aviation."

Today's ceremony underscores the airline's commitment to advancing its Emiratisation strategy, despite the challenging circumstances, and providing growth opportunities as it trains and develops local Emirati talent to support the aviation industry, as well as the broader UAE economy's future requirements.

Captain Abdulla Al Hammadi, Vice President Emirates Flight Training Academy, spoke to the graduation audience, "2020 has been a year like no other, during which the 25 cadets have navigated every obstacle in their path to reach the finish line. I am truly humbled by the determination shown by each and every one of them in reaching this goal. Not only did they manage to successfully complete one of the most intense pilot training courses in the world, but they did it in the midst of a pandemic. They will always be the first cadets to have flown our EFTA planes, to have trained on our simulators and to have worn our uniform with pride. They have truly left their mark on EFTA and set a high standard for those following in their footsteps."

Hamad Aljasmi, cadet graduate, addressed the audience and echoed the sentiment of other cadets, "Today, we have all accomplished one of the major early milestones of our lives. The road to get here wasn't always easy, which makes today extra special, and shows not only our personal commitment, but also our pride. The hard work we put in, the endless nights that were spent studying, the perseverance we showed, finally paid off. Throughout our long journey, we couldn't have done it ourselves. Our gratitude goes to those who spent hours prepping us to make sure our seat on stage here today is well deserved, helping to transition us into solid, capable, professional pilots, performing at the highest standards. We couldn't have been in better hands. I couldn't be any prouder to say "YES, I am an a EFTA graduate." We promise and pledge that as long as we carry those stripes on our shoulders and wings on our chests, we will never let you down!"

Located in Dubai South, the Emirates Flight Training Academy was launched by Emirates in 2017 to qualify UAE nationals and international students to become pilots. The Academy combines cutting-edge learning technologies and a modern fleet of 27 training aircraft (Cirrus SR22 G6 single-engine piston aircraft and Embraer Phenom 100EV very light jet aircraft) to train cadets with no previous knowledge of flying.

Cadets are trained using simulators, single and multi-engine aircraft; and are provided with theoretical knowledge of the aviation industry to facilitate their transition into the airline business. The Emirates Flight Training Academy highlights Emirates' commitment as a global leader in aviation, to train and mentor pilots and meet the future talent requirements of the broader aviation industry as demand gradually recovers.

Leonardo and Italian Air Force partner for the most advanced flight training center

Leonardo and Italian Air Force have partnered to build the most advanced flight training centre at the Decimomannu Airbase. This center will be an international pilot training benchmark to host students, technicians, as well as leisure and sports areas, a cafeteria, and maintenance and logistics infrastructures to guarantee the readiness of a 22 M-346 (designated the T-346A by the Italian Air Force) airplane fleet. An entire building will be home to the Ground Based Training System (GBTS), with classrooms and the installation of a modern training system based on the latest generation simulation system.

The International Flight Training School (IFTS) is the result of a strategic collaboration between the Italian Air Force and Leonardo, which is aimed at the establishment of an advanced flight-training centre. This initiative will become an international benchmark for military pilots' training, particularly in the advanced phase of training future fighter pilots.

Luciano Carta, Chairman of Leonardo, said: "The International Flight Training School brings a very high level of technological innovation and cutting-edge training skills, which will contribute to enhancing the role of the Italian Air Force and our Company in an increasingly complex and competitive international context. For this reason, Leonardo will provide skills, technology, and innovation to support the creation of the most important training centre for military aviation, a source of pride for Italy, for Europe and for our strategic allies."

The construction of the IFTS facility will generate positive returns for the local economy and supply chain. Once the construction is complete, the IFTS will achieve operational readiness starting in 2022, creating significant job opportunities locally.

Alessandro Profumo, CEO of Leonardo, said: "The International Flight Training School is able to meet the growing demands of the Italian Air Force and partner countries for pilot training. It is a virtuous example of a synergic collaboration between the military and industry, which, in turn, generates an important return for the whole country. We've combined the Air Force's established know-how and Leonardo's excellence in military pilot integrated training systems with maximized cost-effectiveness, whilst strengthening the international role played by Leonardo as a Training Service Provider."

A groundbreaking ceremony for the new School was celebrated recently at the Italian Air Force's base in Decimomannu (Sardinia – Italy). Italian Defense Undersecretary Hon. Giulio Calvisi, the Sardinian Region's Governor Hon. Christian Solinas, Italian Chief of Defense Staff Gen. Enzo Vecciarelli, Italian Air Force Chief of Staff Gen. Alberto Rosso, Leonardo Chairman Luciano Carta, Leonardo CEO Alessandro Profumo and Marco Zoff, Leonardo Aircraft MD, were among the attendees.

"Today's event, though simple and unfortunately with a limited number of authorities attending due to Covid-19, is an important step in an ambitious international initiative not only for the Italian Air Force and Leonardo but also for the entire nation", said Italian Air Force Chief of Staff Gen. Alberto Rosso. "The work to build the facilities which will host a state-of-the-art advanced flight training school starts at this Airbase today. Here is where Italian military pilots, and those pilots from countries who have recognized the quality and effectiveness of our integrated training system, will be trained. An integrated training system developed for those who will fly 4th and 5th generation fighters". Gen. Rosso continued: "The Italian Air Force and Leonardo share expertise and technologies to create, in the most cost-effective way, modern professionals, able to operate and manage increasingly technological and complex aircraft. Competences, quality and long-established experience of both the Air Force and our national industry in the training sector are the best calling card for this excellent training offer."

"This is an important project with no less than 20-years of operation ahead, considering the military and industrial efforts devoted to IFTS. The partnership between the Italian Air Force, thanks to its longstanding and solid flight training expertise, and Leonardo as a leader in integrated training, provides evidence of a clear synergy between two Italian excellences. A collaboration which, on the one hand, will lead to an increase in the training offer with important local benefits in terms of job opportunities. On the other hand, there is the possibility for Leonardo to attract further foreign investments, strengthening the role and world leadership in this sector" said Defense Undersecretary Giulio Calvisi.

With the new Leonardo M-345 arriving soon at the Italian Air Force's 61st Wing Airbase in Lecce Galatina to replace gradually the T-339A and FT-339C fleets, the M-346-based training syllabus advanced phase will be moved progressively to the Decimomannu Airbase.

The Leonardo M-346 is the cornerstone of the Air Force training unit, where many pilots have been trained, not only from Italy but also from a number of other countries including: the USA, Spain, France, Austria, The Netherlands, Poland, Singapore, Argentina, Greece and Kuwait.

Piper Pilot 100i, a perfect mix of simplicity and technology for advanced training

Piper Aircraft achieved a latest milestone achievement in the form of type certification from the Federal Aviation Administration (FAA) for the Pilot 100. The Pilot 100, which was announced during Sun-n-Fun in 2019, is the value priced addition to Piper's trainer-class line. Following certification, Piper began deliveries to its launch customer, American Flyers, who will be taking delivery of eight Pilot 100i aircraft by the end of 2020

"We are excited to add the Pilot 100 series to our training product line at a price point that provides optimal economics for all operators," said Piper President and CEO, Simon Caldecott. "During these uncertain times, our team has continued to remain focused and has worked diligently to bring to market an aggressively priced, proven trainer that offers the advanced systems and performance that flight schools and airline programs of all sizes desire."

"The Piper Pilot 100i is the perfect mix of simplicity and technology. The G3X avionics suite is the only glass platform that allows for toggling between round dial and tape displays in a touchscreen

format. This outperformed the G1000 suite on so many levels and was the primary reason we selected the Pilot 100i," said American Flyers' National Chief Pilot, Steven Daun.

The new Piper Pilot 100i rounds off Piper's portfolio of training aircraft products. With five model series (Pilot 100i, Archer TX, Archer DX, Arrow, and Seminole) the company offers the widest range of training aircraft of any aircraft manufacturer, and meets all the individual needs of its training operators and customers. For 2021, flight schools now have an option for a factory new, robust trainer that is priced under $300,000 and is IFR equipped with digital autopilot.

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Suntec Convention Centre,
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