AVITRADER ISSN 1718-7966 NOVEMBER 13, 2023/ VOL. 914 www.avitrader.com AVIATION NEWS PUBLICATIONS **Weekly Aviation Headline News**



Spare Engines.

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IBA: Despite challenges - Aero Engines orders remain at a high level

UK based aviation consulting firm IBA says that in recent months throughout the aviation industry, there have been many issues and challenges. Aircraft engines in particular have felt the impacts of shop visit escalations, costs of ownership, inflationary pressures, and a higher cost of borrowing. Operators who have newer generation engines such as the LEAP-1A and PW1100G are feeling these impacts to a greater extent.

IBA has witnessed increases in the cost of ownership, with some cost escalations nearing double-digit percentage increases. The ownership economics of newer and more fuel-efficient engines are more favourable to airline operators, and it is therefore expected that operators will

absorb the cost of shop visits in the long run. For more mature assets, IBA expects questions to be raised about the likelihood of an engine being serviced. IBA's value opinions have been adjusted to reflect market conditions within the last year. Values for new technology engines are still currently tied to OEM prices and, as such, base and market values have increased further in line with OEM published figures.

A lack of spare engines has hit operators in many parts of the world, resulting in aircraft being grounded. This has driven operators to more mature engines, which have resulted in increased lease rates. IBA is expecting a large wave of shop visits for the CFM56 family and the V2500 engines. Long turnaround times are still reported, often exceeding 100 days, mainly due to a lack of spare material and labour shortages.

The Pratt & Whitney PW1100G engine has faced a particularly challenging 12 months as it navi-

A lack of spare engines has hit operators in many parts of the world, resulting in aircraft being grounded. IBA

gates through several major setbacks. These include the recent discovery of a rare condition in the powder metal of HPT stages causing over 1,200 engines to require off-wing inspections, potentially grounding many A320neo family aircraft. This is expected to progress into 2024. To add further trouble to their woes, Go First (formerly Go Air) are in the process of suing Pratt & Whitney, blaming engine issues for their recent demise with approximately 64 defective engines having been reported as of August 2023.

In the regional market, the CF34-8E continues to benefit from pilot scope clauses in North America affecting the Embraer E175-E2. However, criticisms have also become apparent regarding the cost of ownership for the CF34-10E as it falls in line with the CFM56-5B which is a massive blow for the regional engine type. IBA has witnessed limited activity for the PW150 engine because of the high number of engines

> tied into 'power by the hour' agreements. Some of the more memorable order highlights in the last quarter include Riyadh Air who, despite initially planning to opt for Trent 1000 engines, instead chose the GEnX-1B engine to power their 39 Boeing 787 aircraft in a major blow for Rolls Royce. Air India also made a particularly

large order for 80 Trent XWB engines which would inevitably make them the largest operator of the Trent XWB-97 globally, once this order is fulfilled. China Aircraft Leasing Company has committed to a further 60 A320neo aircraft that will be powered by PW1100G engines, marking a win for the US engine manufacturer. Qantas recently placed an additional order for nine Airbus A220 aircraft that includes 18 PW1500G engines, bringing their total backlog up to 29 aircraft.

AIRCRAFT & ENGINE NEWS

CFM LEAP-1A engines to power 40 Xiamen Airlines' Airbus aircraft

Xiamen Airlines and CFM International have signed an agreement for the purchase of LEAP-1A engines, to power its 15 A321neo and 25 A320neo aircraft, including spare engines. CFM International has also signed a services agreement for the carrier's LEAP-1B and CFM56-7B fleets. Xiamen Airlines has been a CFM customer since 1992, when it purchased its first CFM56-powered Boeing 737-500 aircraft. In the past three decades, CFM has been providing installed and spare engines, as well as service solutions, to Xiamen Airlines. Today, the airline operates or has on order a fleet of nearly 150 CFM-powered aircraft. Xiamen introduced its first LEAP-1A-powered A321neo earlier this year. The advanced CFM LEAP engine family is providing 15 to 20% better fuel consumption and lower CO2 emissions, as well as a significant improvement in noise compared to previousgeneration engines. Since its entry into service in 2016, the LEAP engine has been recognized by global aircraft manufacturers and airlines. It has amassed more than 40 million engine flight hours and 17 million flight cycles, while also allowing our customers to save more than 28 million tonnes of CO2.

China Eastern Airlines orders 25 GEnx engines

China Eastern Airlines has signed an order for 25 GEnx-1B engines to power its Boeing 787 fleet at the 6th China International Import Expo. The order also includes a long-term TrueChoice services agreement. China Eastern Airlines has been a GEnx customer since 2018 when it first purchased 15 GEnx-powered Boeing 787 aircraft, plus the TrueChoice services agreement. Since 2018, the GEnx engine has played an important role in the airline's fleet, with excellent performance, high reliability and outstanding fuel efficiency. The order highlights the joint commitment of China Eastern Airlines and GE Aerospace to provide world-class aviation services and drive a strong and more sustainable future for China's aviation industry.

InterGlobe Enterprises and Archer to bring all-electric air taxi service to India



Signing ceremony at InterGlobe headquarters in New Delhi between Group Managing Director of InterGlobe, Rahul Bhatia (I), and Nikhil Goel, CCO of Archer Aviation © Archer

InterGlobe Enterprises (InterGlobe), India's leading travel and hospitality conglomerate and Archer Aviation (Archer), a pioneer in electric vertical take-off and landing (eVTOL) aircraft, have jointly announced a memorandum of understanding (MOU) to collaborate on launching and operating an innovative all-electric air taxi service in India, pending regulatory approvals. Rahul Bhatia, Group Managing Director of InterGlobe, and Nikhil Goel, Chief Commercial Officer of Archer, signed the MOU, outlining their shared vision of introducing a cutting-edge transportation solution. The proposed partnership aims to enhance urban mobility in India through a safe, sustainable, and low-noise electric air taxi service, offering cost-competitive alternatives to ground transportation. The collaboration plans to engage local business partners for aircraft operations, vertiport infrastructure development, and personnel training. Additionally, the partnership envisions securing up to 200 of Archer's Midnight aircraft for operations in India. Archer's Midnight aircraft, a four-passenger eVTOL, is designed for rapid back-to-back flights with minimal charge time between them. The goal is to reduce travel time significantly, with a Delhi-to-Gurugram trip, typically taking 60 to 90 minutes by car, accomplished in approximately 7 minutes. Beyond urban air taxi services, the collaboration intends to explore various use cases for electric aircraft in India, including cargo, logistics, medical and emergency services, as well as private company and charter services. Rahul Bhatia expressed excitement about this new venture, stating, "Over the last two decades, InterGlobe has been involved in providing safe, efficient, and affordable transportation to hundreds of millions of Indians across the country. We are excited at this new opportunity of bringing an effective, futuristic and sustainable transport solution by introducing Archer's electric aircraft to India." Archer's CEO and Founder, Adam Goldstein, highlighted the potential impact of the collaboration, saying, "India is one of, if not the largest opportunity for eVTOL aircraft utilisation in the world, as it is home to the world's largest population of over 1.4 billion people and its largest cities face some of the greatest congestion challenges in the world." Nikhil Goel, Chief Commercial Officer of Archer Aviation, shared the enthusiasm, stating, "At Archer, our goal is to make cities greener, smarter, more efficient places to live. We couldn't be more excited to be partnering with Rahul and the InterGlobe team to bring our Midnight aircraft to Indian cities and fundamentally transform mobility across the country, with the goal of starting with Delhi, Mumbai, and Bengaluru." The collaboration addresses the growing issue of urban congestion, offering a sustainable and efficient solution. Archer's electric air taxis aim to provide safe, low-noise urban mobility as India strives to become a US\$5 trillion (£4 trillion) economy while tackling the challenges of a doubling urban population by 2050, with commutes in major cities projected to take up to two hours.

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AIRCRAFT & ENGINE NEWS

The GEnx engine family has more than 50 million flight hours since entry into service in 2011 and is the fastest-selling, high-thrust engine in GE history with nearly 3,000 engines in service and on backlog, including spares. At present, six out of seven airlines in China that fly Boeing 787 fleets have selected the GEnx engine. The engine powers more than 90% of Boeing 787 aircraft in China, amassing a total of more than 6.8 million flight hours. The GEnx-1B powers two out of every three 787 aircraft in service. The engine also provides a 1.4% fuel burn savings for the typical 787 mission compared to its competition. The added fuel savings enables more than two million fewer pounds of CO2 per aircraft annually. Representing a giant step forward in propulsion technology, GEnx uses lightweight durable materials and advanced design processes to reduce weight, improve performance, and lower maintenance, making it the best engine choice for long-haul flights.

CDB Aviation leases fleet of six Boeing and Airbus aircraft to Hainan Airlines

CDB Aviation, a wholly owned Irish subsidiary of China Development Bank Financial Leasing (CDB Leasing), has announced on the sidelines of Airline Economics' Growth Frontiers 2023 Singapore conference, the signing of lease agreements for a fleet of three new Boeing 737 MAX 8 and three Airbus A320neo aircraft with its existing Chinese airline customer, Hainan Airlines. The three MAX aircraft will be delivered to the carrier between August and November of next year, while the three neo aircraft will arrive between October and November that same year.

Eva Air places major order with Airbus

Eva Air has placed a significant order with Airbus. The Taiwanese carrier has chosen to acquire 18 A350-1000 jets, marking a successful expansion of Airbus' largest wide-body model. In addition to the A350-1000s, Eva Air will also add 15 A321neo single-aisle aircraft to its growing fleet. The total value of this deal is estimated at approximately US\$10.1 billion (£8.3 billion). The introduction of the A350-1000 planes will herald a significant transformation for Eva Air, as the airline is set to replace its existing Boeing 777-300ERs. Presently, the airline operates a fleet of 34 Boeing 777-300ERs, with some of these aircraft approaching their 20-year mark. As of the previous month, the airline boasted a total fleet of 87 aircraft, primarily composed of passenger jets and a selection of freighter aircraft. Earlier this year, the carrier expanded its future capabilities by adding five 787 Dreamliners to its order backlog.

Crisalion Mobility to showcase INTEGRITY at Dubai Airshow

Crisalion Mobility, a Spanish leader in the design and development of advanced electric mobility solutions, will make its Dubai Airshow debut this year, where it will introduce its new eVTOL (electric vertical take-off and landing) aircraft INTEGRITY. "Dubai Airshow is a global platform of the latest and greatest developments in our industry, and we are looking forward to showing visitors what INTEGRITY can do and how it aligns perfectly with



eVTOL aircraft INTEGRITY

© Crisalion Mobility

the region's sustainability programs," said Carlos Poveda Rey, founder and CEO of Crisalion Mobility. "We are proud to say we are leaders in our sector thanks to patented technology, FlyFree and our disruptive team". Crisalion, which recently rebranded from UMILES Next, designed INTEGRITY for passenger and cargo applications in urban and inter-urban locations. The vehicle's primary uses include urban air mobility (UAM), emergency medical services (EMS), cargo and tourism. Crisalion is one of the first European eVTOL companies to complete test flights in European airspace with its scaled prototype. INTEGRITY was developed using Crisalion's FlyFree technology, a unique and patented stability system that controls the aircraft's movements in all directions. FlyFree provides greater efficiency, stability, reliability and manoeuvrability through sophisticated rotor-control software that allows maximum control of each propulsion unit. INTEGRITY is built for a pilot and up to five passengers and has been meticulously designed for accessibility for people with reduced mobility. It has a range of 100 km, a cruising speed of 180 kph and a top speed of approximately 216 kph. As a fully electric aircraft, it is aligned with the sustainability goals of GCC countries and is significantly quieter than conventional helicopters, generating just 45 decibels. Crisalion has enjoyed robust growth, with €15 million (£13 million) in funding raised to date and another financing round scheduled for the first quarter of 2024, to be advised by investment bank BlueBull. During this process of rebranding and renewed investment, Crisalion Mobility has significantly grown its team over the last few months, bringing on board seasoned professionals such as Manuel Heredia, Managing Director, Óscar Lara as COO and Gustavo Rodríguez as CTO. Other appointments are set to be announced imminently. This expansion is a clear reflection of Crisalion Mobility's commitment to talent and excellence.

MRO & PRODUCTION NEWS

RECARO celebrates ten years in Qingdao; completes facility expansion



A ten-year milestone was celebrated at an event on October 26, 2023, in Qingdao © RECARO

RECARO Aircraft Seating (RECARO) has celebrated a decade of success at its facility in Qingdao, China. The milestone was marked with an event on October 26, 2023, with distinguished guests including customers, VIPs, suppliers and the RECARO leadership team in attendance. "Reaching the ten-year milestone is an exciting accomplishment, not just for the Asia Pacific region but for overall RECARO," said Dr Mark Hiller, CEO of RECARO Aircraft Seating and RECARO Holding. "The resilience of our colleagues

in Qingdao, especially in recent years, is what sets RECARO apart. Our presence in Qingdao is a very important part of our strategy for the region and greatly contributes to the success of our global footprint." In parallel with the ten-year anniversary, the third and final phase of the space2grow expansion plan was also successfully completed in October. The company acquired nearly 11,000 m² of land in 2019 to maximise the usage of workshops and office space at the site. Construction of the new facilities took approximately 12 months. The RECARO Aircraft Seating, which first opened its doors to the facility in Qingdao in 2013, was the first international aircraft seat manufacturer to establish production facilities in China. Today, the facility employs a dedicated workforce of 160. RECARO Aircraft Seating continues to maintain its global presence with facilities also in Germany, the United States and Poland.

AIRCRAFT & ENGINE NEWS

Boeing anticipates Southeast Asia fleet will nearly quadruple

Boeing projects that Southeast Asia is poised to emerge as a global leader in air traffic and fleet expansion, with its commercial airplane fleet set to nearly quadruple to more than 4,000 jets by 2042. The region is expected to witness unprecedented growth, establishing itself as the world's fastestgrowing single-aisle airplane market over the next two decades, driven by the ascent of low-cost carriers (LCCs) as the dominant business model. According to Boeing's 2023 Commercial Market Outlook (CMO), an annual long-term forecast of demand for commercial airplanes and related services, Southeast Asia's air traffic will experience substantial growth as the market reopens. Dave Schulte, Boeing Commercial Marketing Managing Director for Asia-Pacific, anticipates that expanded connectivity, tourism and low fares will fuel increased travel, particularly among the growing middle class in the region. LCCs are expected to play a pivotal role in meeting the rising demand for air travel.

The 2023 Southeast Asia CMO outlines key projections for 2042, including:

• Low-cost carriers in Southeast Asia are forecasted to introduce more than 2,000 new single-aisle jets in the next two decades, representing nearly two-thirds of the projected 3,390 single-aisle deliveries in the region.

• LCCs are anticipated to command 56% of passenger traffic in 2042, a significant increase from the 22% recorded in 2012.

• Of the total commercial airplane deliveries to Southeast Asia by 2042, 83% will support fleet expansion, while 17% will involve the replacement of older aircraft with more fuelefficient models.

• The wide-body fleet is expected to triple in size, with demand for nearly 800 airplanes, encompassing passenger jets like Boeing's 787 Dreamliner and 777X, as well as freighter models.

• Fleet growth will drive a demand of US\$310 billion (£252 billion) in aviation services, covering maintenance, repair, training and spare parts.

Commercial airplane deliveries to Southeast Asia (2023-2042): Regional Jet: 45, Single-Aisle: 3,390, Wide-body: 770, Freighter: 20

Boeing's 2023 CMO for Southeast Asia, published annually since 1961, stands as the industry's most comprehensive analysis and is a testament to the company's commitment to forecasting aviation trends.

MRO & PRODUCTION NEWS

Eve names three new suppliers for eVTOL aircraft



Garmin, Liebherr-Aerospace and Intergalactic have signed supply agreements with Eve Air Mobility © Eve

Eve Air Mobility (Eve) has named three new suppliers for its electric vertical take-off and landing (eVTOL) aircraft. Garmin®, will supply the avionics for the aircraft while Liebherr-Aerospace will supply the flight controls actuators. Intergalactic will provide the thermal management system. "We are looking forward to working with each of our suppliers as we progress with our eVTOL development," said Johann Bordais, CEO of Eve Air Mobility. "Each of our suppliers undergoes a very stringent review that evaluates not only performance and quality of their product, but also their dedication to continuous improvement and customer support and satisfaction. We are looking forward to a long-term working relationship with each of our suppliers." Garmin will supply the G3000[®] Integrated Flight Deck for Eve's eVTOL which features large-format, light weight, high-resolution glass displays integrating seamlessly with Eve's vehicle management and flight control systems. Tailored for the needs of eVTOL aircraft, the flight deck's intuitive touchscreen interface reduces pilot workload by providing direct access to a full suite of avionics capabilities including an integrated flight management system, NAV/ COM radios, transponder, audio management and access to a breadth of applications including checklists, charts, synoptics, and full-featured maps. Liebherr will develop electromechanical actuators (EMA) for the fly-by-wire flight controls of Eve's eVTOL. Liebherr is well known for their expertise in the manufacturing of precision gears and dependable actuation, crucial for this type of technology. The actuators will be powered by the aircraft's electrical system and the technology will ensure high performance, configurability and easier maintenance. Intergalactic will provide the thermal management system which will maintain an optimal temperature range for equipment including batteries and other electronic components. The system will also help ensure a comfortable temperature inside the cabin of the aircraft. The three new suppliers are in addition to three that were announced at the Paris Air Show this past summer. Nidec Aerospace, a joint venture between Japan's Nidec Corporation and Brazil's Embraer, will provide the electric propulsion system for Eve's eVTOL while BAE Systems will supply the energy storage system. DUC Hélices Propellers will provide the rotors and propellers.

MRO & PRODUCTION NEWS

GKN Aerospace and GE strengthen existing partnership with wide-ranging new agreement



GE engine

© GE Aerospace

GKN Aerospace and GE have deepened their long-term partnership on a series of industry-leading engines including the GEnx programme, the fastest-selling high-thrust engine. The new agreement focuses on three key areas: new technology insertion, fan case production and assembly and repair of high volume, complex engines structures. The groundbreaking technology insertion programmes on the GEnx will focus on alternative material solutions, providing a more sustainable manufacturing footprint for several products currently flying. GKN Aerospace will provide component design expertise as well as its latest technologies, to help drive the GEnx programme towards its targets on carbon emission reduction targets and cost reduction. Upgraded components are expected to go through development, validation and insertion from 2024 to 2030. GKN Aerospace has also secured life-of-programme contracts under the new agreement. It will now deliver 100% of GEnx, CF6 and GE90 fan cases, as well as 50% of GE9X fan case assembly for the duration of the programme. The final element of the enhanced partnership sees GKN Aerospace join GE Aerospace's repair network, supporting the

GEnx with specialised repair content. GKN Aerospace will deploy its expertise in structural design-and-make of advanced fabrications to repair high-volume, complex structures across its global repair network. Joakim Andersson, President of GKN Aerospace's Engines business, said: "GE Aerospace and GKN Aerospace have had a strong relationship for more than 40 years and we are extremely proud of our partnership. Over the years we have grown our responsibility across all major GE engines and today we are in a long-term partnership with design authority for multiple programmes. This major new agreement is the next step. It ensures that we will continue to jointly develop the right technologies and solutions for world-leading engines such as the GEnx and CF6 for today and the future."



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MRO & PRODUCTION NEWS

Sanad unveils SAMENA-region's first certified CFM LEAP engine MRO centre

Sanad, the global aerospace engineering and leasing solutions company, wholly owned by Abu Dhabi's sovereign investor Mubadala Investment Company PJSC (Mubadala), has announced the inauguration of its LEAP engine MRO centre, marking a significant milestone as the first certified engine MRO centre in the South Asian (India and Pakistan), Middle East and North Africa (SAMENA) regions. This world-class centre, spanning over 5,000 m², will offer advanced technical capabilities within Sanad's new state-of-the-art facility in Abu Dhabi, becoming part of the global LEAP MRO network. The announcement follows a landmark 11-year shop visit off-load agreement, signed during the Paris Air Show in June 2023, in partnership with GE Aerospace and Safran Aircraft Engines, both leading providers of jet engines, components and aircraft systems. Through the agreement, Sanad significantly expanded its MRO services to include new-generation CFM International LEAP-1A and -1B engines that power Airbus A320neo and Boeing 737



Official inauguration of Sanad's CMF LEAP engine MRO centre

© Sanad

MAX-family aircraft. These engines have gained global recognition for their exceptional reliability and fuel efficiency. In a special ceremony in Abu Dhabi, Sanad unveiled the centre and showcased the first LEAP engine inducted in record time and marking the commencement of the LEAP engine MRO programme. The MRO centre began operations within a month of signing the agreement and successfully completed the MRO process on the first LEAP engine from flydubai just four months after its signing. The centre is poised to receive over 450 LEAP engines for MRO services.



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Scandinavian Airline SAS secures US\$1.21 billion investment from consortium

Scandinavian airline SAS has successfully secured a substantial investment agreement, totalling 13.2 billion Swedish crowns (US\$1.21 billion), through a consortium that includes Air France-KLM, Lind Invest ApS, and the Danish state. This agreement marks a significant milestone in SAS's restructuring efforts, with Castlelake providing a loan to replace the previous debtor-in-possession financing from Apollo Global Management. Notably, the winning consortium increased its proposed investment by an additional US\$25.26 million. In accordance with the agreement, Castlelake will take a 32% stake in the company, Air France-KLM will hold around 20% and the Danish state will have approximately 26%. These investments will contribute to the reorganisation of SAS, with the total amounting to US\$1.16 billion. The airline intends to utilise Castlelake's US\$505.25 million credit agreement to refinance existing loans, enhance liquidity, and facilitate its exit from voluntary restructuring proceedings. Air France has confirmed the increased financing for the restructuring aid. Anko van der Werff, SAS's Chief Executive, expressed, "By entering into this investment agreement, SAS is taking the next step in its Chapter 11 process in the U.S." SAS is now actively seeking approval from the U.S. Court for the investment agreement and the new debtor-in-possession financing, aiming to secure this approval as swiftly as possible in November. This development follows SAS's prior agreement with Apollo Global to raise US\$700 million in fresh financing, made in August of the preceding year. The largest carrier in Scandinavia found itself in a challenging financial situation, prompting its Chapter 11 bankruptcy protection filing in the United States in mid-2022. The company had faced persistent financial struggles due to high operating costs and reduced customer demand resulting from the COVIDpandemic. (£1.00 = US\$1.21/SEK13.45).

Fraport reports net profit of €357.0 million for first nine months

During the first nine months of the 2023 fiscal year, the Fraport Group delivered a strong performance with key operating figures exceeding 2019 levels. The Group result (net profit) reached €357.0 million in the first nine months, buoyed by traffic growth across the Group's airports. This positive performance was driven, in particular, by a strong third quarter – with revenue, EBITDA (earnings before interest, taxes, depreciation and amortization) and net profit achieving new records. In view of this development, Fraport has confirmed its outlook for the full 2023 fiscal year, expecting to reach

MRO & PRODUCTION NEWS

eXtra Performance Wing demonstrator takes off



A modified Cessna Citation VII business jet has been chosen as the eXtra Wing Performance demonstrator © Airbus

Led by Airbus subsidiary and technology incubator UpNext, the eXtra Performance Wing project aims to improve flight performance and respond to environmental concerns by completely re-thinking aircraft wings as we know them today. Using biomimicry – biologically inspired engineering - the project seeks to develop a wing that can change shape and form during flight to maximise its aerodynamic efficiency. If the concept is successful and integrated into new aircraft, it has the potential

to significantly reduce fuel consumption. The November first flight was an important milestone for the project because the demonstrator is fitted with the exact systems that it will have when the eXtra Performance Wings are installed for flight testing starting in 2025. The data gleaned from this and subsequent flight tests will allow Airbus engineers to measure important baseline performance metrics that will be used to determine the impact of the new wing design, such as reductions in CO2 emissions and fuel consumption. While the eXtra Performance Wing technologies could be applicable to any kind of aircraft and propulsion system, the chosen demonstrator is a modified Cessna Citation VII business jet. As the targeted wingspan of the eXtra Performance Wing is more than 50 metres (that's long: an A320 wingspan is 35.8 metres), the Cessna's 16 metre wingspan represents an approximately one-third scale model of the final design. "Things are evidently simpler at a smaller scale," said Sebastien Blanc, eXtra Performance Wing Technical Director. "But we chose the Cessna specifically because it constituted the best trade-off between project complexity and representativeness of the final design." Launched in September 2021 the eXtra Performance Wing project is part of Airbus' Wing Research portfolio. This project explores some of the many technologies that could one day be integrated into the next generation of Airbus aircraft and complements the Wing of Tomorrow programme. Airbus UpNext seeks to fast-track future technologies by developing radical technological breakthroughs in an agile environment.

Ontic invests in engine fan product lines from Curtis-Wright

Ontic, a leading licensor and manufacturer of complex engineered parts for the global aerospace and defence industries, has signed a license agreement for fan products from Curtiss-Wright's Sensors division. The highperformance fans and blowers are used on commercial and military platforms to provide cooling to key systems. Currently manufactured at Curtiss-Wright's Sensors Division's site in Gilbert, AZ, this product line will transition to Ontic's recently refurbished Chatsworth facility in California. Making use of its existing and extensive manufacturing capability, sitting alongside other highly engineered fan and blower technologies, as well as other complementary prod-



Ontic has signed a license agreement for fan products from Curtiss-Wright's Sensors Division @ Ontic

uct lines. Gareth Blackbird, Vice President and Chief Commercial Officer at Ontic, explained: "We're very pleased to be bringing this significant license investment to our Chatsworth facility in California, where we continue to invest and grow following recent investment and refurbishment of the facilities. Ontic has long been a partner of Curtiss-Wright and we're pleased to bring new investment to this product line." Investing in the future of divested product lines such as these is where Ontic excels and adds value, ensuring the aircraft of today can continue to operate with a robust spares, maintenance and repair support pipeline.

the upper range of the given forecasts. In the first nine months (9M) of fiscal 2023, Group revenue as per IFRIC 12 rose by €494.5 million to €2,631.9 million (9M/2022: €2,137.4 million; 9M/2019: €2,486.7 million). The 9M-revenue for the first time includes proceeds from aviation security fees, totalling €167.0 million. These were levied by Fraport after assuming responsibility for passenger security screening at Frankfurt Airport with the start of 2023. Group EBITDA improved by 15.8% year-onyear to €959.5 million in the first nine months (9M/2022: €828.6 million; 9M/2019: €948.2 million). The Group result (net profit) improved noticeably by €258.9 million to €357.0 million. Last year's nine-month Group result of €98.1 million was negatively impacted by a full €163.3 million write-off of loan receivables from Thalita Trading Ltd. in connection with the investment at Pulkovo Airport (LED) in St. Petersburg. (£1.00 = €1.15 at time of publication).

Airbus releases strong nine-months financial results amidst global operational challenges

Airbus has unveiled its consolidated financial outcomes for the nine months concluding on September 30, 2023. The company reported that gross commercial aircraft orders totalled 1,280 (9m 2022: 856 aircraft) with net orders of 1,241 aircraft after cancellations (9m 2022: 647 aircraft). The order backlog amounted to 7,992 commercial aircraft at the end of September 2023. Airbus Helicopters registered 191 net orders (9m 2022: 246 units) which were well spread across programmes. Airbus Defence and Space's order intake by value was € 8.5 billion (9m 2022: € 8.0 billion), including the renewal of the in-service support contract for Germany's A400M fleet. Consolidated revenues in the nine months increased 12% year-on-year to €42.6 billion (9m 2022: €38.1 billion). A total of 488 commercial aircraft were delivered (9m 2022: 437 aircraft), comprising 41 A220s, 391 A320family aircraft, 20 A330s and 36 A350s. Revenues generated by Airbus' commercial aircraft activities increased 18%, mainly reflecting the higher number of deliveries. Airbus Helicopters' deliveries increased slightly to 197 units (9m 2022: 193 units) with revenues rising three percent, reflecting the overall performance across programmes and services. Revenues at Airbus Defence and Space decreased six percent, mainly driven by a backloaded A400M delivery profile and updated estimates at completion of certain satellite development programmes. A total of four A400M military airlifters were delivered (9m 2022: 7 aircraft). Consolidated EBIT Adjusted an alternative performance measure and key indicator capturing the underlying business

MRO & PRODUCTION NEWS

Rolls-Royce signs TotalCare agreement with Amazon Global Air

Rolls-Royce has signed a TotalCare service agreement with Amazon Global Air to supply maintenance services to its fleet of ten Trent 700-powered Airbus A330-300P2F (passenger-to-freighter) aircraft, which will be operated by its carrier partner. TotalCare is designed to provide predictability and operational certainty for customers by transferring time on wing and maintenance cost risk back to Rolls-Royce. This industry-leading premium service offering is supported by data delivered through



© Rolls-Royce Trent 700 engine

the Rolls-Royce advanced engine health monitoring system, which helps provide customers with increased operational availability, reliability, and efficiency. The popular A330 conversion programme began in 2017 and is accelerating as both capacity and suitable feedstock become available. There have been 28 A330 converted aircraft since 2017, 85% of which were Trent 700-powered aircraft. This supports a key pillar of Rolls-Royce's commercial strategy, which is to focus on keeping these reliable and proven engines in service for many years to come.

FINANCIAL NEWS

Jazeera Airways posts KD13.27 million in profit



Jazeera Airways (Jazeera) has posted KD13.27 million in Group net profit for the first nine months of 2023. Total revenues for the period were up 12.8% to KD158.9 from KD140.8 million in 2022, while operating profit was at KD18.08 million. Last year, the company's profit also included a one-time gain of KD1.73 million resulting from the sale-andleaseback of engines. The airline

© Jazeera Airways

continued to lead the market with a 35.78% share, 17% higher than the same period in 2022. Jazeera's passenger numbers maintained strong growth, increasing by 35.6% to 3.5 million. For the nine-month period, load factor also grew to 79% compared to 76.4% last year. Retail lease revenue at Jazeera Terminal (T5) was 52% higher compared to the previous year, while duty free revenue was KD 4.02 million, an increase of 22%. In the third quarter, Jazeera launched direct flights from Kuwait to Islamabad and Tehran, now flying to a total of 64 destinations. As part of its planned expansion, the airline welcomed two additional aircraft to its fleet in the last quarter. Jazeera Airways now operates a fleet of 22 aircraft across its network in the Middle East, Central and South Asia, Africa and Europe. In line with adopting sustainability practices into its operations, in the last quarter Jazeera became the first low-cost carrier in the Middle East to switch from plastic to eco-friendly food service ware in-flight. By changing from plastic cutlery to 100% biodegradable spoons, forks, knives and napkins, Jazeera reduces 300 kilograms of plastic on its flights each month. This initiative is part of Jazeera's goal to achieve net-zero emissions by 2050. (£1.00 = KD0.38 at time of publication).

margin by excluding material charges or profits caused by movements in provisions related to programmes, restructuring or foreign exchange impacts as well as capital gains/losses from the disposal and acquisition of businesses – was €3,631 million (9m 2022: €3,481 million). EBIT

Adjusted related to Airbus' commercial aircraft activities increased to \leq 3,216 million in the nine months (9m 2022: \leq 2,875 million), reflecting the higher deliveries and a more favourable hedge rate, partially offset by investments for preparing the future. The ramp-up on the A220 programme

is continuing towards a monthly production rate of 14 aircraft in 2026. Production on the A320family programme is progressing well towards the previously announced rate of 75 aircraft per month in 2026. The modernisation and digitalisation of the industrial system continues, as illustrated by the inauguration of the A321XLR equipment installation hangar in Hamburg. The A321XLR is progressing towards certification, with entry-into-service expected to take place in Q2 2024.

On wide-body aircraft, the company has decided to increase the production rate for the A350 to ten aircraft a month in 2026 and continues to target rate four for the A330 in 2024. Airbus Helicopters' EBIT Adjusted increased to €417 million in the nine months (9m 2022: €380 million), reflecting the overall performance across programmes and services. 9m 2022 also included net positive non-recurring elements. EBIT Adjusted at Airbus Defence and Space decreased to €-1 million (9m 2022: €231 million). It included charges of €0.4 billion related to updated estimates at completion of certain satellite development programmes, mostly recorded in the third quarter. 9m 2022 also

Aquila Air Capital closes US\$100 million financing

Aquila Air Capital (Aquila), a leading lessor focused on end-of-life solutions, has announced the successful closing of a US\$100 million (£83 million) financing. The financing is aimed at increasing Aquila's ability to deliver bespoke lease solutions for passenger and cargo operators across the globe. "We are thrilled to announce the successful closing of this new credit facility. It will enable us to



© Aquila Air Capital

further our mission of being a trusted partner to all players in the value chain, from buyers and sellers of aircraft assets to operators," said Al Wood, Aquila Air Capital's Chief Executive Officer. Deutsche Bank acted as sole structuring agent and underwriter for the financing. Since the lessor's inception in 2021, Aquila has been focusing on end-of-life aircraft transactions and has amassed a portfolio of 65 aircraft and engine assets on lease to more than 20 customers globally. "We're building a world-class customer-centric organisation that is uniquely positioned to provide a wide range of bespoke leasing solutions for complex transactions. We appreciate the strong support from our investor and lender base; it reflects the market's confidence in the outlook for our industry and Aquila's operations," Wood added.



included net positive non-recurring elements. (£1.00 = €1.15 at time of publication).

Ryanair posts profit of €2.18 billion in first half of FY 2024

Ryanair has reported that in the first half of FY2024 scheduled revenues increased 37% to €6.1 billion, traffic grew 11% to 105.4 million, while average fares rose 24% to €58 due to a strong Easter and record summer 2023 demand. Ancillary revenue increased 14% to €2.5 billion (€23.70 per passenger). In the total first-half of FY24 revenue therefore rose 30% to €8.6 billion. Total operating costs increased 24% to €6.2 billion, primarily due to much higher fuel costs (+29% to €2.8 billion), higher staff costs (reflecting pay restoration, pre-agreed pay increases and higher crewing ratios as the carrier invested in ops. resilience) and higher ATC fees (incl. airport and handling charges). Ryanair reported that its FY24 fuel requirements are almost 85% hedged at approx. US\$89bbl (a mix of forwards and caps) while its FY25 hedging has increased to just over 50% at approx. US\$79bbl. This will deliver savings of approx. €300m on the fuel already hedged for FY25. Over 90% of FY24 €/\$ opex is hedged at 1.08 and almost 50% of FY25 is hedged at 1.12. This strong hedge position leaves the carrier very well protected from recent short-term fuel price volatility. Ryanair targets approximately 183.5 million (+9%) FY24 traffic, although the final figure depends on Boeing meeting its delivery commitments between now and year-end. As previously guided, it expects ex-fuel unit costs to increase by €2 this year. Forward bookings (both traffic and fares) are robust over the late October mid-terms and into the peak Christmas travel period. With the benefit of constrained EU capacity this winter (Eurocontrol expect EU capacity to recover to only 94% of pre-COVID) and the impact of P&W engine repairs on competitor fleets, Ryanair currently expects Q3 average fares to be ahead of the prior year Q3 by a mid-teens percentage. Unhedged fuel costs, however, are significantly higher making it unlikely that the company replicate last year's bumper Q3 performance. Despite uncertainty over Boeing deliveries, a significantly higher full-year fuel bill (up c.€1.3 billion on last year), very limited Q4 visibility and the risk of weaker consumer spending over coming months, Ryanair now expects that FY24 PAT will finish in a range of between €1.85 billion to €2.05 billion, assuming modest losses over the H2 winter period. This guidance remains highly dependent on the absence of any unforeseen adverse events (for example such as Ukraine or Gaza) between now and the end of March. 2024. (£1.00 = €1.15 at time of publication).

MILITARY AND DEFENCE

U.S. Army awards Textron Aviation contract for Beechcraft King Air turboprops

Textron Aviation has been awarded a contract by the U.S. Army Contracting Command, Redstone Arsenal, AL, for the Cessna SkyCourier, Cessna Grand Caravan EX, Beechcraft King Air 360 and Beechcraft King Air 260 turboprop aircraft in support of Foreign Military Sales (FMS). The indefinite delivery, indefinite quantity (IDIQ) contract allows up to US\$100 million (£83 million) for the acquisition of Textron Aviation aircraft over a fiveyear period. The Cessna Sky-Courier, Cessna Grand Caravan EX and Beechcraft King Air are designed and manufactured by



Beechcraft King Air 360ER Special Missions Maritime Patrol aircraft \oslash Textron Aviation

Textron Aviation, a Textron company. The initial award is for three King Air 360 Extended Range (KA360ER) aircraft, of which two are destined for the Peruvian Naval Aviation Force (Fuerza de Aviación Naval) and one for the Ecuadorian Naval Aviation (Aviación Naval Ecuatoriana). All three of the initial King Air turboprops will perform maritime patrol to enforce the sovereignty of Peru and Ecuador over their respective Exclusive Economic Zones (EEZ).

INFORMATION TECHNOLOGY



Cyprus Airways has become the latest carrier to deploy airline technology provider **AirFi's** wireless in-flight entertainment across its fleet of Airbus jets. The newly resurrected flag carrier of Cyprus is gearing up for both fleet and route expansions, with new aircraft on the horizon and a commitment to be a

Cyprus Airways will deploy AirFi's wireless streaming solutions onboard its two A320 and two A220 aircraft *© Cyprus Airways*

catalyst for tourism growth on the island. As part of its focus on innovation and customer service, the airline is installing AirFi's portable wireless streaming solutions onboard its all-Airbus fleet of two A320 and two A220 aircraft. It will also seek to outfit new aircraft that are added to the fleet with AirFi's products in the near-term. Each aircraft will be equipped with two AirFi boxes, enabling passengers to access digital entertainment on their personal electronic devices, including movies, TV games, music, a moving map and destination-based video content. AirFi's streaming in-flight entertainment solution is set to go live with Cyprus Airways in time for the holiday season, thanks to a swift rollout by the AirFi team. Cyprus Airways has chosen to include AirFi's Dance24 channel as part of its entertainment offering. With a special focus on electronic dance music, the channel is well suited to a considerable demographic of the airline's market, who will be travelling to and from the country's music festivals and party resorts, such as Ayia Napa. Unique features like these will help the carrier position itself as a premium brand, while also providing fun, accessible in-flight experiences for passengers. During the second phase of the deployment, in-seat ordering will be enabled. AirFi's technology will seamlessly integrate with the mobile point-of-sale (mPOS) solution used by Cyprus Airways' crew to allow travellers to order items from the carrier's in-flight menu using their mobile devices.

Shevantha

INFORMATION TECHNOLOGY

Digital records and asset management solution provider flydocs, has announced a five-year extended software deal with Cebu

Pacific Air (CEB), the Philippines' leading carrier, to digitise and automate processes

of daily records and asset management of its fleet of over 80 aircraft. The renewed partnership will benefit Cebu Pacific Air with a seamless interface through flydocs' enhanced integration with the leading M&E software AMOS to support aircraft records auditing and receive a fully paperless approach to its records and asset management. Commenting

announcement,

Weerasekera, VP Engineering-Maintenance at Cebu Pacific Air said: "Over the past three

years, as a long-term partner, we've grown with the support of flydocs, a global leader in

digital records and asset management, as we

have been able to successfully work through

their commitment of being innovative to digitising our aircraft maintenance records.

The integration of flydocs and AMOS would

benefit us by improving operational efficiency,

data accuracy, real-time Information, and

compliance management. The significant

extension of our agreement represents a

deepening of our partnership as we look

forward to continuing our close collaboration

with flydocs." It also currently operates flights

to 24 international destinations, spanning

across Asia, Australia, and the Middle East.

The airline flies from three strategically placed

hubs: Manila, Cebu, and Clark.

the

on

KOREAN AIR Collins Aerospace Ascentia Agreement Signing Ceremony mbei 2023 **Collins Aerospace**

In Chiang Mai, Thailand Jonghoon Oh, Korean Air and Clotilde Enel-Rehel, Collins Aerospace, have signed an agreement to © Collins Aerospace equip Korean Air's Boeing 787 fleet with Ascentia®

Collins Aerospace has released that Korean Air will use Collins Aerospace's Ascentia® Prognostic and Health Management (PHM) solution on its growing Boeing 787 fleet. "Ascentia's ability to monitor the health of a wide variety of components on our Boeing 787 fleet will help us improve reliability by predicting potential issues before they occur," said Jonghoon Oh, General Manager - Predictive Maintenance Team, Korean Air. "By tailoring Ascentia to our specific requirements, it will further improve our predictive and preventative maintenance operations, giving our passengers an even more reliable travel experience." The cloud-based solution uses advanced data analytics and machine learning algorithms to help airlines improve maintenance operations and increase aircraft reliability. Analysing flight data and maintenance records in real-time allows Ascentia to help predict potential maintenance issues and provide recommendations for corrective actions, improving aircraft availability and reducing unscheduled downtime. "Ascentia is designed to help airlines improve their customers' experience," said Clotilde Enel-Rehel, Executive Director for Customer Programmes at Collins Aerospace. "Our data-driven solution will provide Korean Air with predictive maintenance recommendations to optimise its schedule and improve its operational efficiency." Collins Aerospace's Ascentia solution is currently in use by several major airlines around the world. Equipping KAL's Boeing 787 fleet with Ascentia represents a significant milestone as Collins Aerospace expands its presence in the Asia-Pacific region.



OTHER NEWS

Southwest Airlines (Southwest) has announced an off-take agreement with **USA BioEnergy, LLC** (USA BioEnergy), for up to 680 million gallons of neat sustainable aviation fuel (SAF). Over the term of the 20-year agreement, once blended with conventional jet fuel, the SAF could produce the equivalent of 2.59 billion gallons of net-zero fuel and avoid 30 million metric tonnes of CO2. Southwest plans to begin purchasing SAF from USA BioEnergy's facility near Bon Wier, Texas, as early as 2028. Additionally, as part of the off-take agreement, Southwest and USA BioEnergy have established a long-term strategic relationship offering Southwest the opportunity to purchase up to another projected 180 million gallons of SAF per year from future planned production facilities. "This off-take agreement with USA BioEnergy marks important progress in the development of our SAF portfolio and furthers our goal to replace ten percent of our total jet fuel consumption with SAF by 2030," said Michael AuBuchon, Managing Director Fuel Strategy and Management at Southwest Airlines. "We look forward to the opportunity to grow our strategic relationship with USA BioEnergy



Southwest Airlines has signed an off-take agreement with USA BioEnergy for up to 680 million gallons of SAF © Shutterstock

ergy and potentially purchase more SAF from them in the future." Southwest recognises the critical role that commercially viable SAF will play in the carrier's strategy to achieve its near-term and long-term carbon goals and is taking action to forge relationships across the aviation value chain to proactively address the challenges on the path to its goal of net-zero carbon emissions by 2050.



EFTA's cadets now also fly the Diamond DA42-VI light piston twin-engine aircraft © EFTA

Emirates Flight Training Academy (EFTA), which was started with a focus on the national cadet pilot programme for Emirates, now offers its world-class training to cadets from all over the globe. Besides the exceptional success of its graduates – who've all been snapped up by Emirates after a stringent recruitment process – the academy is flying high on the integration of three brand-new Diamond aircraft into its training programme. Although the majority are students who've recently graduated from high school, the cadets range in age from 17 to 26 years. In fact, an Emirates cabin crew is now a cadet at EFTA, having met the academy's strict eligibility criteria. EFTA's cadets now also fly the Diamond DA42-VI light piston twin-engine aircraft, which has successfully introduced multi-engine piston training at the academy. This means cadets train on three different aircraft types – single-engine, twin-engine and multi-engine light jets. This is a rarity among flight training academies that generally train cadets on just one or two aircraft types. Flight deck careers have seen a huge resurgence post-pandemic and are riding another wave of popularity. Salaries

have increased, airlines are fast tracking career paths and expanding at a phenomenal rate, aircraft are more sophisticated, demand for travel is booming – all these and more have made aviation a sought-after career. According to Oliver Wyman's latest research, the gap between supply and demand of pilots is currently about 17,000 and it will increase to 24,000 in 2026. EFTA combines cutting-edge learning technologies and a modern fleet of 29 training aircraft – 22 Cirrus SR22 G6 single-engine piston, four Embraer Phenom 100EV very light jets and three Diamond DA42-VI light piston twin-engine aircraft. EFTA's state-of-the-art facility, which is spread over 12.5 million ft² (1.2 million m²) equivalent to 200 football pitches, currently has 36 modern classrooms, six full-motion flight simulators, an independent Air Traffic Control Tower and a dedicated 1,800m runway.

SAS and tour operator Apollo have announced that they will extend their partnership for the 2024 summer season. The option to extend is part of

a framework agreement signed in 2021 and the extension is worth around SEK1.4 billion (£105 million). SAS will fly Apollo customers from around 15 locations in Sweden, Norway and Denmark to around 20 Mediterranean destinations in Greece, Croatia, Cyprus, Bulgaria, Spain and Türkiye. "We are proud of the longstanding partnership with Apollo and thrilled that SAS also next summer will welcome Apollo customers on board. SAS continues to add new and more sustainable aircraft to our fleet, providing passengers with a more comfortable and sustainable way of travel," says Paul Verhagen, EVP and Chief Commercial Officer at SAS. Strategic partnerships, such as the one with Apollo, allows SAS to serve a seasonal demand that is important for Scandinavian travellers. Furthermore, it enables Apollo to offer direct flights from major cities as well as regional airports in Sweden, Norway and Denmark. "For Apollo, it's natural to continue the partnership with SAS. With a long history of providing high customer satisfaction and emphasis on being a driving force within sustainable aviation, we are confident that summer season 2024



SAS will provide flights for Apollo in the summer season of 2024 @ AirTeamImages

will deliver great travel experiences for our customers," says Tobias Jönsson, CEO of DER Touristik Nordic AB. The agreement between SAS and Apollo covers flights from 15 locations in Scandinavia to 22 destinations in Europe SAS and tour operator Apollo have announced that they will extend their partnership for the 2024 summer season. The option to extend is part of a framework agreement signed in 2021 and the extension is worth around SEK1.4 billion (£105 million). SAS will fly Apollo customers from around 15 locations in Sweden, Norway and Denmark to around 20 Mediterranean destinations in Greece, Croatia, Cyprus, Bulgaria, Spain and Türkiye. "We are proud of the longstanding partnership with Apollo and thrilled that SAS also next summer will welcome Apollo customers on board. SAS continues to add new and more sustainable aircraft to our fleet, providing passengers with a more comfortable and sustainable way of travel," says Paul Verhagen, EVP and Chief Commercial Officer at SAS. Strategic partnerships, such as the one with Apollo, allows SAS to serve a seasonal demand that is important for Scandinavian travellers. Furthermore, it enables Apollo to offer direct flights from major cities as well as regional airports in Sweden, Norway and Denmark. "For Apollo, it's natural to continue the partnership with SAS. With a long history of providing high customer satisfaction and emphasis on being a driving force within sustainable aviation, we are confident that summer season 2024 will deliver great travel experiences for our customers," says Tobias Jönsson, CEO of DER Touristik Nordic AB. The agreement between SAS and Apollo covers flights from 15 locations in Scandinavia to 22 destinations in Europe.

OTHER NEWS

The UK Civil Aviation Authority (CAA) has granted Virgin Atlantic a permit for an unprecedented transatlantic flight powered solely by sustainable aviation fuels (SAF). The CAA revealed the authorisation for the forthcoming flight from London to New York, scheduled for November 28, after successful technical assessments of the British airline's proposal, supported by a consortium of prominent companies including Boeing, Rolls-Royce, BP and others. The aviation industry is under scrutiny for its significant contributions to carbon dioxide and non-CO2 emissions, which exacerbate climate change. Airlines are increasingly turning to SAF, a biofuel with lower carbon emissions compared to traditional jet fuel, as a means to decarbonise the sector. However, they have cautioned that this transition will be gradual and costly, potentially leading to higher ticket prices and slower passenger demand growth. Rob Bishton, CEO of the CAA, stressed the regulator's role in facilitating the aviation industry's adoption of sustainable practices and pushing the boundaries to create an eco-friendlier aviation sector. "This permit not only allows Virgin Atlantic and others to showcase their commitment to sustainability but also serves as an example of how the industry is continually exploring new technologies," Bishton remarked. The CAA's authorisation enables Virgin Atlantic to proceed with the application process with aviation authorities in the United States, Ireland and Canada since the flight will traverse the airspace of each of these countries. The UK regulator conducted a comprehensive analysis of various aspects of the planned flight, including ground testing with Rolls-Royce on a Trent 1000 engine running on 100% SAF. This initiative, partially funded by the UK government, aims to test and demonstrate the feasibility of powering aircraft with sustainable fuels, as per the CAA's statement. In an effort to support this transition, the UK government allocated up to £1 million (US\$1.2 million) to Virgin Atlantic in December of last year to assist the industry in achieving the world's first transatlantic flight powered entirely by SAF. Virgin Atlantic CEO Shai Weiss emphasised the importance of radical collaboration across consortium partners and the government to reach this milestone. He also reaffirmed the airline's commitment to utilising 10 percent SAF by 2030 and urged the government to aid in establishing a UK SAF industry.

INDUSTRY PEOPLE



 BOC Aviation has appointed Steven Townend as Managing Director and Chief Executive Officer with effect from January 1, 2024. He will replace Robert Martin who will step down

from the role on December 31, 2023, and will remain as a non-executive Director of the Board. Furthermore, Wu Jianguang will be appointed Chief Financial Officer with effect from January 1, 2024, replacing Townend in the role of Chief Financial Officer which he will relinquish on December 31, 2023. Townend has more than thirty years of leasing and banking experience in aviation. Prior to his appointment as Chief Financial Officer in October 2020, he had previously held Chief Commercial Officer roles with BOC Aviation in both London and Singapore for over 16 years. Wu has been in the role of Deputy Chief Financial Officer since November 2022. At that time, he transitioned from the Bank of China after a 30-year career, where he was most recently General Manager of the financial management department. Wu will oversee Accounting and Reporting, Financial Planning, Financial Control, Tax, Treasury and Settlement Departments.

· Gulfstream Aero-

space has appointed

John Kenan to the

position of Senior

Vice President of

Manufacturing and

Completions, effec-

tive March 2024. He

will succeed Greg



John Kenan

Collett, who will retire in March after more than 25 years with the company. Most recently, Kenan served as VP of Completions across all Gulfstream sites and was a member of the manufacturing and completions leadership team. In his new role, Kenan will oversee the strategic and tactical direction for production and completions of all new Gulfstream aircraft. "John has had a tremendous amount of success overseeing many of our aircraft production programmes and flight test operations since joining us more than a decade ago," said Mark Burns, President, Gulfstream. "He is a well-respected leader with deep expertise and will be a great addition to our senior leadership team." Kenan joined Gulfstream in 2012 as an integrated production team manager. His previous leadership roles include Director of G700/G800 production, Director of G550/G650 production, Director of flight test operations and Senior Manager of G450/G550 major assembly. Kenan earned his bachelor's degree in Business Management and master's degree in Applied Engineering from Georgia Southern University. Since joining Gulfstream in 1998, Collett has held various leadership roles in operations, including oversight of initial phase manufacturing, final phase manufacturing, new product development and manufacturing operations. He joined Gulfstream's senior leadership team when he was appointed SVP of Manufacturing and Completions in 2019.



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Commercial Jet Aircraft

Aircraft Type	Company	Engine	MSN	Year	Available	Sale / Lease	Contact	Email	Phone
A319-100	FPG Amentum	V2527M-A5	3705	2008	Now	Sale / Lease	Eoin Kirby	eoin.kirby@fpg-amentum.aero	+353 86 027 3163
A320-233ceo	FPG Amentum	V2527E-A5	4457	2010	Now	Sale / Lease	Lei Ma	ma.lei@fpg-amentum.aero	+852 9199 1875
A330-200	Doric	Trent 772B-60	1310	2012	Q2/2024	Sale / Lease	Maurick Groeneveld	maurick.groeneveld@doric.com	+49 69 247559-931
A330-200 EFW	ALTAVAIR	Trent 772B-60			Now	Sale / Lease	Clive Bowen	clive.bowen@altavair.com	+44 7899 892493
B737-800 SF	GA Telesis		27988	2000	Now	Sale / Lease		aircraft@gatelesis.com	
B737-900	BBAM	CFM56-7B26/3	34953	2007	Now	Sale / Lease	Steve Zissis	info@bbam.com	+1 787 665 7039
B777-300ER	BBAM	GE90-115BL	39237	2013	Feb 2024	Sale / Lease	Steve Zissis	info@bbam.com	+1 787 665 7039
Regional .	Jet / Turboprop Airc	raft							
Aircraft Type	Company	Engine	MSN	Year	Available	Sale / Lease	Contact	Email	Phone
SAAB 2000	Jetstream Aviation Capital	AE2100A	031	1996	Now	Sale / Lease	Donald Kamenz	dkamenz@jetstreamavcap.com	+1 (305) 447-1920 x 115
SAAB 340B CRO	G Jetstream Aviation Capital	CT7-9B	224	1990	Now	Lease	Bill Jones	bjones@jetstreamavcap.com	+1 (305) 447-1920 x 102
SAAB 340B Plus	Jetstream Aviation Capital	CT7-9B	450	1998	Now	Lease	Bill Jones	bjones@jetstreamavcap.com	+1 (305) 447-1920 x 102
Commerci	ial Engines								
AE3007Engines		Sale / Lease		Comp	any		Contact	Email	Phone
(2) AE3007A1E		Now - Sale		Aircraft and Engine Lease Corp.				fleetmanager@aelc.aero	
CF34 Engines		Sale / Lease		Comp	any		Contact	Email	Phone
CF34-8E5		Now - Lease		Luftha	nsa Technik A	AERO Alzey	Kai Ebach	k.ebach@lhaero.com	+49-6731-497-368
CF34-10E5		Now - Lease							
CF34-8C5		Now - Lease							
(2) CF34-3A		Now - Sale		GNS			Shlomi Levi	shlomi@g-n-solutions.com	+972-52 850 8511
(1) CF34-10E6		Now - Lease		Engine	e Lease Finan	се	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
(1) CF34-10E6		Now - Lease		Willis	Lease		Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
(2) CF34-10E5		Now - Sale / Leas	e	DASI			Joe Hutchings	joe.hutchings@dasi.com	+ 1 954-478-7195
(1) CF34-8C5A1		Now - Sale/Lease	/Exch.	Magel	lan Aviation G	roup	Bradley Hogan	bradley.hogan@magellangroup.net	+1 980.256.7120











AVITRADER AVIATION NEWS PUBLICATIONS THE AIRCRAFT AND ENGINE MARKETPLACE

Commercial Engines

CFM Engines	Sale / Lease	Company	Contact	Email	Phone
(1) CFM56-5B3/3	Now - Lease	FTAI Aviation LLC	Mark Napoles	mnapoles@ftaiaviation.com	+1 786-785-0777
(1) CFM56-5B4/P	Now - Lease				
(1) CFM56-5B3/P	Now - Lease				
(1) CFM56-5B1/P	Now - Lease				
(1) CFM56-7B26	Now - Lease				
(1) CFM56-5B4/3	Now - Lease	Willis Lease	Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
(3) CFM56-5C4	Now - Lease				
(1) CFM56-5B4/P	Now - Lease				
(1) CFM56-7B26/E	Now - Lease				
(1) CFM56-5B4/P	Now - Sale/Lease/Exch.	AeroDirect	Sean Miller	SMiller@aerodirect.com	+1.404.229.3723
(1) CFM56-5B2/P	Now - Sale/Lease/Exch.				
(4) CFM56-5B5/P	Now - Sale / Lease	BBAM	Steve Zissis	info@bbam.com	+1 787 665 7040
(1) CFM56-5B4/P	Now - Sale / Lease				
(5) CFM56-5B6/P					
(2) CFM56-7B26/3	Now - Sale / Lease				
(1) CFM56-7B26/3	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
(1) CFM56-5B3/3	Now - Lease				
(1) CFM56-5B4/P	Now - Lease				
(2) CFM56-5B4/3	Now - Lease				
(2) CFM56-5B4/3	Now - Sale / Lease	GA Telesis		engines@gatelesis.com	
GE90 Engines	Sale / Lease	Company	Contact	Email	Phone
(1) GE90-94B	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
(2) GE90-94B	Now - Sale/Lease/Exch.	BBAM	Steve Zissis	info@bbam.com	+1 787 665 7039
LEAP Engines	Sale / Lease	Company	Contact	Email	Phone
(5) LEAP-1B28	Now - Lease	Willis Lease	Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
(1) LEAP-1A26	A26 Now - Lease		Declan Madigan	declan.madigan@elfc.com	+353 61 291717
(1) LEAP-1A33	Now - Lease				
PW1100G Engines	Sale / Lease	Company	Contact	Email	Phone
(1) PW1100G-JM	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
(1) PW1521G-3	Now - Lease				
PW 4000 Engines	Sale / Lease	Company	Contact	Email	Phone
(2) PW4168A	Now - Sale / Lease	GA Telesis		engines@gatelesis.com	
(1) PW4168A	Q4/2022 - Sale	ALTAVAIR	Clive Bowen	clive.bowen@altavair.com	+44 7899 892493

AVITRADER AVIATION NEWS PUBLICATIONS THE AIRCRAFT AND ENGINE MARKETPLACE

Commercial Engines					
PW Small Engines	Sale / Lease	Company	Contact	Email	Phone
PW121	Now - Sale Lu		Kai Ebach	k.ebach@lhaero.com	+49-6731-497-368
PW127F	Now - Sale				
PW150A	Now - Sale / Lease				
PW127M	Now - Lease				
(1) PW150A	Now - Sale/Lease/Exch.	Willis Lease	David Desaulniers	leasing@willislease.com	+1 (561) 349-8950
Trent Engines	Sale / Lease	Company	Contact	Email	Phone
(2) Trent 772B-60	rent 772B-60 Now - Sale/Lease/Exch.		RRPF Marketing	RRPFMarketing@rolls-royce.com	+44 7528975877
(1) Trent XWB-84	Now - Sale/Lease/Exch.				
(1) Trent 556-61	rent 556-61 Now - Sale/Lease/Exch.				
V2500 Engines	Sale / Lease	Company	Contact	Email	Phone
(1) V2527-A5	Q3/2022 - Sale/Lease/Exch.	Rolls-Royce & Partners Finance	RRPF Marketing	RRPFMarketing@rolls-royce.com	+44 7528975877
(1) V2533-A5	Now - Sale/Lease/Exch.				
(1) V2527-A5	/2527-A5 Now - Sale/Lease/Exch.		Sean Miller	SMiller@aerodirect.com	+1.404.229.3723
(2) V2533-A5	533-A5 Now - Lease		Jennifer Merriam	leasing@willislease.com	+1 (561) 349-8950
(1) V2533-A5	Now - Sale/Lease/Exch.	BBAM	Steve Zissis	info@bbam.com	+1 787 665 7039
(1) V2533-A5	Now - Lease	FTAI Aviation LLC	Mark Napoles	mnapoles@ftaiaviation.com	+1 786-785-0777
(1) V2527-A5	Now - Sale/Lease/Exch.	Magellan Aviation Group	Bradley Hogan	bradley.hogan@magellangroup.net	+1 980.256.7120
(1) V2527-A5	Now - Lease	Engine Lease Finance	Declan Madigan	declan.madigan@elfc.com	+353 61 291717
Aircraft and Engine Parts, Co	omponents and Misc	. Equipment			
Description		Company	Contact	Email	Phone
(2) GTCP331-200ER, (2) GTCP131-9A,	Now - Sale	Setna IO	David Chaimovitz	david@setnaio.com	+1-312-549-4459
(1) GTCP131-9B					
(1) A321 Enhanced Landing Gear 2020 OH					
(1) GTCP36-150	Now - Sale	GNS	Shlomi Levi	shlomi@g-n-solutions.com	+972-52 850 8511
(3) A320 LG Shipsets, (1) A320 NLG, (5) A340	LG Shipset	GA Telesis		landinggearsales@gatelesis.com	
(1) A321 LG Shipset, (4) 767 LG Shipset					
(1) 777-200 LG Shipset, (3) 737 LG-Shipset					
GTCP131-9A (2), GTCP131-9B(2)	Now - Lease	REVIMA APU	Olivier Hy	olivier.hy@revima-apu.com	+33(0)235563515
GTCP331-200, GTCP331-250	Now - Lease				
APS500C14(3), APS1000C12(2), APS2000	Now - Lease				
APS2300, APS3200(2), APS5000(2)	Now - Lease				
PW9014(4) PW901C(2) Now - Sale / Lease					
TSCP700-4E	Now - Sale				
(1) GTCP331-500B	Now - Sale/Lease/Exch.	BBAM	Steve Zissis	info@bbam.com	+1 787 665 7039
(2) APS2300, (1) APS3200	Now - Sale / Lease	DASI	Chris Glascock	chris.glascock@dasi.com	+1 954-801-3592
(1) APS3200B, (1) APS3200C		GA Telesis		apu@gatelesis.com	+1-954-849-3509
(1) 131-9A, (4) 131-9B, (1) 331-350					
Engine stands: CF6-80C2, CFM56-3, CFM56-5/	A/B/C, PW4000			stands@gatelesis.com	+1-954-676-3111
(3) APU GTC131-9B	Now - Sale / Lease	Willis Lease	Gavin Connolly	gconnolly@willislease.com	+44 1656 765 256
Engine stands now available	Now - Lease				
(2) PW901A, (1) PW901C(1), PW125B RGB	Now - Lease	Lufthansa Technik AERO Alzey	Kai Ebach	k.ebach@lhaero.com	+49-6731-497-368



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