Breeze Airways reveals new A220 livery, confirms order for 20 additional A220-300 aircraft from Mobile Final Assembly Line

Breeze Airways has revealed its new A220-300 livery, while confirming that it has reached a purchase agreement with Airbus for 20 more of the aircraft. This previously undisclosed order for 20 brings Breeze's total order book to 80 A220-300s, the first of which will be delivered in Q4 2021.

The aircraft's fresh paint job was completed at Airbus' facility in Mobile, Alabama, which will deliver approximately one A220 per month to Breeze over the next six-and-a-half years. The airline plans to begin flights with the Airbus fleet in the second quarter of 2022.

The A220 superior efficiency will support the new airline's business objectives to offer a great travel experience, with low fares and high flexibility. Breeze is expected to provide nonstop service between underserved routes across the U.S. at affordable fares.

Breeze started airline operations in May 2021. This first A220 is the first new aircraft that will be operated by the airline.

The A220 is the only aircraft purpose-built for the 100-150 seat market and brings together state-of-the-art aerodynamics, advanced materials and Pratt & Whitney's latest-generation PW1500G geared turbofan engines. Benefitting from the latest technologies, the A220 is the quietest, cleanest and most eco-friendly aircraft in its category. Featuring a 50% reduced noise footprint and up to 25% lower fuel burn per seat compared to previous generation aircraft, as well as around 50% lower NOx emissions than industry standards, the A220 is a great aircraft for urban operations.

Over 170 A220s have been delivered to ten operators in Asia, North Americas, Europe, and Africa, proving the great versatility of Airbus' latest family member.

Quelle:
Airbus Press Release 13 September 2021

Pilot and Technician Outlook 2021–2040

As the commercial aviation industry navigates an uneven global recovery from the recent market downturn caused by COVID-19effective training and an adequate supply of personnel remain critical to maintaining the health, safety and prosperity of the aviation ecosystem.

Long-term demand for newly qualified aviation personnel remains strong, as 612,000 new pilots, 626,000 new maintenance technicians and 886,000 new cabin crew members are needed to fly and maintain the global commercial fleet over the next 20 years.

Meeting projected pilot, aircraft mechanic and flight attendant demand is wholly dependent on industry's investment in a steady pipeline of newly qualified personnel to replace those who have left or will soon exit the industry through mandatory retirement, early retirement, recent layoffs and furloughs, and ongoing attrition. The global aviation industry will need to keep a sharp focus and engage in collective efforts to build a robust, diverse talent pipeline through more educational outreach and recruitment, development of new pathways to aviation careers, investment in early-career learning opportunities, and deployment and adoption of more efficient learning methods. Opportunity for aspiring aviators will abound while operators will face stiff competition in recruiting and retaining top tier talent.

Those in this industry who emerge from market downturns have historically resumed their growth trajectory through collaboration, adaptation, and innovation. To address challenges created during the COVID-19 pandemic, the training industry is adopting increasingly innovative solutions. Many training providers have transitioned their offerings to online and virtual formats where possible, allowing students to continue their learning safely and remotely. Immersive technologies, adaptive learning and flexible distance learning methods have allowed the training pipeline to remain intact while evolving how training is delivered. Continued investments in these technologies will likely lead to a long-term fundamental shift in how training is conducted.

Training methodologies also continue to progress toward a holistic approach that focuses on competencies rather than prescriptive tasks. As commercial operators and training providers look toward the future, we expect to see continued investments in artificial intelligence, machine learning, and mixed reality technology that will help tomorrow's students more quickly, efficiently, and effectively close their knowledge gaps. This will lead to a better, safer, and more efficient aviation industry.

Quelle:
Boeing Press Release 14 September 2021

Pentagon and Lockheed Martin Agree to F-35 Sustainment Contracts

Supporting Readiness for the Warfighter While Reducing Costs

The F-35 Joint Program Office awarded the Lockheed Martin (NYSE: LMT) industry team annualized contracts covering fiscal years 2021-2023 to support operations and sustainment of the global F-35 fleet, supporting mission readiness and further reducing costs.

The annual contracts fund critical sustainment activities for aircraft currently in the fleet and build enterprise capacity to support the future fleet of more than 3,000 F-35 aircraft. This includes industry sustainment experts supporting base and depot maintenance, pilot and maintainer training, and sustaining engineering for the U.S. and our allies across the globe. It also covers fleet-wide data analytics and supply chain management for part repair and replenishment to enhance overall supply availability for the fleet.

"Together with the F-35 Joint Program Office, we recognize the critical role the F-35 plays in supporting our customers' global missions and the need to deliver this capability affordably," said Bridget Lauderdale, Lockheed Martin vice president and general manager of the F-35 program. "These contracts represent more than a 30% reduction in cost per flying hour from the 2020 annualized contract, and exemplify the trusted partnership and commitment we share to reduce sustainment costs and increase availability for this unrivaled 5th generation weapon system."

The FY2021-2023 contracts represent a planned next step in further reducing overall operations and support costs for the F-35 program, which are shared between government and industry. Lockheed Martin has reduced our cost per flight hour by 44% in the past five years, with a forecasted reduction of an additional 40% in the next five years. The cost savings in the FY21-23 annualized sustainment contracts support Lockheed Martin's efforts to realize these

goals. The savings will be achieved through improved cost and velocity in our supply chain, continued reliability improvements, and greater manpower efficiencies to provide product support solutions across the growing, global fleet. We remain committed to partnering with our customers and teammates to drive F-35 sustainment costs down.

The contracts also pave the way for a longer-term, Performance Based Logistics (PBL) agreement for the F-35 program. PBLs are an industry best practice, facilitating agile sustainment solutions for the fleet and incentivizing even further affordability and performance results.

The F-35 Joint Program Office, together with each U.S. service, international operators and the F-35 industry team, leads F-35 sustainment and the Global Support Solution. The 2021 annualized sustainment contract will cover industry sustainment activities through Dec. 31, 2021.

Greater Reliability and Affordability

Program data shows the F-35's reliability continues to improve as the jet is approximately twice as reliable as fourth generation fighters. It also shows maintenance labor hours needed per flight hour are well within the contractual requirement, while the global fleet is averaging around 70% mission capable rates. Lockheed Martin has significantly lowered its share of cost per flight hour over the last five years, and the broader F-35 team is working across government and industry to achieve greater affordability.

More than 690 aircraft have been delivered and are operating from 21 bases around the globe. More than 1,460 pilots and 11,025 maintainers have been trained and the F-35 fleet has surpassed 430,000 cumulative flight hours.

Quelle:
Lockheed Martin Press Release 13 September 2021

E. China’s Zhejiang eyes aviation and commercial aerospace development

East China's Zhejiang Province is set to double the scale of its aviation and aerospace industry by 2025 and aims to rank among the country's top aerospace manufacturing clusters by 2035, according to a recent government plan.

According to a development plan for aerospace industry in Zhejiang Province published as part of the 14th Five-Year Plan (2021-25) periods, the province will add two listed aerospace companies, introduce five landmark aerospace manufacturing projects, and cultivate more than 10 private enterprises in the supplier system of Chinese aircraft manufacturer Comac.

In terms of innovation the province is set to jointly build 20 scientific research institutes and new research and development institutions. It also plans to build 10 aerospace application service enterprises covering general aviation and drone development.

At present, there are more than 100 aerospace related enterprises in Zhejiang, with revenue of

nearly 10 billion yuan ($1.5 billion) in 2020. Currently, 80 percent of this revenue comes from the manufacturing sector.

Quelle:

Global Times (China) 05 August 2021

Luftreiniger für Schulen und Kitas

Rheinmetall liefert Geräte für die Stadt Hamburg

Der Technologiekonzern Rheinmetall hat im Rahmen einer öffentlichen Ausschreibung den Auftrag der Hamburger Behörde für Schule und Berufsbildung zur Lieferung von Luftreinigungsgeräten erhalten. Die jetzt erfolgte Bestellung von 1.000 Luftreinigern beläuft sich auf einen einstelligen MioEUR-Betrag. Die fertig montierten und betriebsbereiten Geräte vom Typ RX pro sollen bereits bis Ende September 2021 ausgeliefert werden.

Dieser Auftrag wird über das Rheinmetall Tochterunternehmen Pierburg GmbH abgewickelt und ist ein bedeutender Meilenstein in der Umsetzung der „Beyond Automotive“-Strategie innerhalb des Rheinmetall Konzerns.

Der Rheinmetall Luftreiniger RX pro ist eine mobile Filter- und Desinfektions-einheit zur Reinigung und Dekontamination der Luft in Innenräumen von bis zu 80 Quadratmetern. Dabei werden Bioaerosole wie Viren, Bakterien, Pollen sowie Feinstaub sicher und umweltfreundlich aus der Luft gefiltert.

Die Luft wird dazu an der Unterseite des Geräts angesaugt und nach der Reinigung durch verschiedene Filterstufen wieder in die Raumluft abgegeben. Bestückt sind die Anlagen mit hocheffektiven HEPA-Filtern, die die Luft permanent von allen Substanzen bis zu einer Größe unter einem Mikrometer befreien. Luftreiniger dieses Typs leisten bereits in Operationsräumen, Intensiv-stationen und Laboratorien wertvolle Dienste. Sie zeichnen sich durch eine Filterung mit Abscheidegraden von >99,95 (HEPA 13) bis >99,995 Prozent (HEPA 14) aus.

Der Markt für Geräte zur Luftreinigung befindet sich zurzeit in einer starken Wachstumsphase mit Zukunft. Aktuell befördern vor allem staatliche Stellen die Nachfrage nach mobilen Luftreinigern. So unterstützt die deutsche Bundesregierung in der pandemischen Lage den Kauf solcher Geräte, um den Präsenzbetrieb in Schulen und Kitas möglichst sicherzustellen. Für die Anschaffung der Luftreinigungsgeräte stellt der Bund den Ländern 200 Millionen Euro zur Verfügung. Rheinmetall ist mit dem RX pro bei öffentlichen Ausschreibungen gelistet und hat bereits zahlreiche Aufträge von Einrichtungen in Deutschland erhalten.

Nachdem der Konzern sich bereits in der Frühphase der COVID-19-Pandemie als zuverlässiger Lieferant von persönlicher Schutzausrüstung (PSA) für staatliche Stellen in Deutschland bewiesen hat, bringt sich das Unternehmen seit einiger Zeit auch im Bereich der Luftreinigung ein. So wurden der Französischen Schule Düsseldorf und der Ivo-Frueth-Schule Oberndorf schon im Frühjahr unentgeltlich Luftreiniger zur sofortigen Nutzung in den Schulkantinen überlassen. Das besondere Anliegen dabei: Schülerinnen und Schüler und deren Familien zu schützen und ihnen ein Stück Normalität im Schulalltag zu ermöglichen.

Quelle:
Rheinmetall Press Release 03 September 2021

CAE and BETA Technologies announce strategic partnership for pilot and maintenance training program

• *CAE and BETA to partner and create best in class training program for the ALIA Electric Vertical Takeoff and Landing Aircraft (eVTOL)*
• *BETA Technologies is an industry leader in Advanced Air Mobility with forward purchase orders from UPS Flight Forward, United Therapeutics & Blade for ALIA eVTOL Aircraft and supporting charging infrastructure*

CAE announced today that BETA Technologies (BETA) selected CAE as its partner of choice to design and develop its pilot and maintenance technician training program for the ALIA eVTOL aircraft. CAE will leverage its decades of training expertise to develop a full suite of innovative, digitally integrated curriculum and courseware solutions for the aviation workforce of tomorrow. The new training program will be built from the ground-up, in parallel with BETA's aircraft certification journey, taking into account the unique operational and mission specific inputs for this aircraft.

Advanced Air Mobility (AAM) covers a range of revolutionary new aircraft enabling transport of people and cargo between places previously not served or underserved by civil aviation, with eVTOL aircraft at the forefront. In support of this emerging market, CAE's dedicated Advanced Air Mobility group offers training and operational support solutions to help innovative companies such as BETA certify their eVTOL aircraft, train their pilots and maintainers, and scale standardized AAM operations across global markets.

"CAE has a rich history in participating in the development and launch of many innovative aircraft," said Kyle Clark, Founder & CEO at BETA. "Flying and maintaining electric aircraft requires an understanding of electric systems and flight dynamics that are new to aviation. Our team is thrilled to be bringing in CAE's expertise into the fold as we work hand in hand to teach the next generation of pilots and mechanics the unique aspects of flying and maintaining electric aircraft.

"We are drawing on CAE's close to 75 years of aviation industry thought leadership to help accelerate the advancement of the Advanced Air Mobility industry. We are very excited to partner in the enablement of this new generation of aviators and technicians, who we believe will play a key role in the future success of this revolutionary industry," said Nick Leontidis, CAE's Group President, Civil Aviation Training Solutions. "CAE is a high technology solutions company at the leading edge of digital immersion, and we are committed to supporting the continuing needs of BETA and its operators throughout the lifecycle of the program. This marks the first step to what we believe will be a long-term partnership with BETA, and another example of our commitment to future aviation technologies and sustainability".

BETA brings a diverse customer base to the advanced air mobility market. BETA is the first eVTOL to receive manned airworthiness from the U.S. Air Force and the company has customers across a suite of industries including logistics (UPS Flight Forward), medical (United Therapeutics), passenger (Blade), and military (U.S. Air Force). BETA has hundreds of hours of manned full-scale flight testing and recently flew its ALIA aircraft over 200 miles.

In November 2020, CAE released a report on 2020-2029 Pilot Demand Outlook in which it was estimated that an expected global requirement of 264,000 new pilots were needed in the civil aviation industry to sustain growth over the next ten years. This does not take into account the additional surge in demand for pilots and technicians in Advanced Air Mobility. CAE is committed to leveraging new digital technologies and developing training methodologies designed for a faster, better, and more efficient throughput of highly qualified pilots and maintenance technicians for this new era of aviation.

Quelle:
CAE Press Release 15 September 2021

Deutsch-Chinesisches Normeninformationsportal

Das Deutsch-Chinesische Normeninformationsportal dient als die Informationsquelle für die in beiden Ländern geltenden Normen und Normungssysteme. Unternehmen können über eine leistungsstarke Suche die für ihre Produkte notwendigen Normen einfach und gezielt recherchieren. Suchbegriffe können in Deutsch, Englisch und Chinesisch eingegeben werden. Die gefundenen Normtitel werden in Deutsch und Chinesisch mit jeweils englischer Übersetzung angezeigt.

Das Portal wird von den nationalen Normungsorganisationen von China und Deutschland - Standardization Administration of China (SAC) und DIN Deutsches Institut für Normung e. V. – betreut. So werden ausgewählte bibliographische Daten zu den rund 60.000 Normen, die über das Portal recherchierbar sind, monatlich ausgetauscht und aktualisiert. Bei Normen, die auf internationalen Normen beruhen, wird auch der Grad der Übereinstimmung (identisch, modifiziert) angegeben.

Quelle:
DIN e. V.

GA-ASI Flies UAS in the Canadian Arctic

MQ-9 Demonstrates Ability to Fly in High-Latitude Environment

In a flight that originated from its Flight Test and Training Center (FTTC) near Grand Forks, N.D., General Atomics Aeronautical Systems, Inc. (GA-ASI) flew a company-owned MQ-9A "Big Wing" configured Unmanned Aircraft System north through Canadian airspace past the 78th parallel.

A traditional limitation of long-endurance UAS has been their inability to operate at extreme northern (and southern) latitudes, as many legacy SATCOM datalinks can become less reliable above the Arctic (or below the Antarctic) Circle – approximately 66 degrees north. At those latitudes, the low-look angle to geostationary Ku-band satellites begins to compromise the link. GA-ASI has demonstrated a new capability for effective ISR operations by performing a loiter at 78.31° North, using Inmarsat's L-band Airborne ISR Service (LAISR).

The flight over Haig-Thomas Island, in the Canadian Arctic, demonstrated the UAS's flexibility by operating at very high latitudes. The flight, which took off on Sept. 7 and returned to the FTTC on Sept. 8, was conducted with cooperation from the Federal Aviation Administration, Transport Canada and Nav Canada.

Covering 4,550 miles in 25.5 hours, it was one of the longest range flights ever flown by a company MQ-9. The flight was performed under an FAA Special Airworthiness Certificate and a Transport Canada Special Flight Operations Certificate.

GA-ASI partnered with Inmarsat Government, a leading provider of secure, global mission-critical telecommunications to the U.S. government in the design, acceptance testing and deployment of an enhanced satellite communications (SATCOM) system. The SATCOM was one of the key enablers of the flight and consisted of a GA-ASI designed L-band High Data Rate system, as well as an Inmarsat Low Data Rate backup datalink that could retain the aircraft's link to the Ground Control Station even when operating in the high-latitude environment.

"As the global leader in UAS, we have enabled our UAS to operate in Arctic regions, over land and sea, where effective C2 and ISR-data transfer was previously not feasible," said Linden Blue, GA-ASI CEO. "As new customers come online, we want our aircraft to be able to provide them with the high data rate surveillance and high endurance that our aircraft are known for, and be able to do so in any environment."

GA-ASI coordinated between domestic and international airspace authorities for the flight. This is part of the company's ongoing Airspace Integration initiative, designed to demonstrate how UAS can fly safely across international borders, in controlled airspace, and in this case, to extreme northern latitudes.

"At Inmarsat Government, we take pride in delivering SATCOM solutions that empower our customers' current and future UAS missions around the world, even in the most challenging environments," said Tom Costello, Chief Commercial Officer, Inmarsat Government. "We are proud to partner with organizations like GA-ASI that enable the government and military to enhance their use of UAS and deliver the SATCOM required for full situational awareness and mission success."

MQ-9A has unmatched operational flexibility, and when modified with the Big Wing, it has endurance over 43 hours, speeds of 220 KTAS, and can operate at altitude of up to 45,000 feet. It has a 4,800 pound (2,177 kilogram) payload capacity that includes 4,000 pounds (1,814 kilograms) of external stores. It provides long-endurance, persistent surveillance capabilities, with Full-Motion Video and Synthetic Aperture Radar/Moving Target Indicator/ Maritime Radar. An extremely reliable aircraft, MQ-9A Big Wing is equipped with a fault-tolerant flight control system and triple redundant avionics system architecture. It is engineered to meet and exceed manned aircraft reliability standards.

GA-ASI's newest models, the MQ-9B SkyGuardian® and SeaGuardian®, represent the next generation of UAS, having demonstrated airborne endurance of more than 40 hours, automatic takeoffs and landings under SATCOM-only control, and a Detect and Avoid system. Its development is the result of a company-funded effort to deliver a UAS that can meet the stringent airworthiness certification requirements of various military and civil authorities.

Quelle:
GA-ASI Press Release 10 September 2021

DGLR und MTU Aero Engines: Wolfgang-Heilmann-Preis 2021 geht an Niklas Bürkle

Niklas Bürkle erhält den Wolfgang-Heilmann-Preis 2021. Die mit 1.500 Euro dotierte Auszeichnung geht an den 27-Jährigen für seine Masterarbeit zum Thema „Numerische Untersuchung der Spraydispersion eines luftgestützten Kraftstoffzerstäubers in Flugtriebwerken“. Dafür hatte er am Karlsruher Institut für Technologie (KIT) die Traumnote 1,0 erhalten. Bürkle hat dort Maschinenbau studiert und promoviert jetzt am Institut für Thermische Strömungsmaschinen.

Der Wolfgang-Heilmann-Preis wird jedes Jahr von der Deutschen Gesellschaft für Luft- und Raumfahrt (DGLR) zur Förderung des wissenschaftlichen Nachwuchses vergeben. Stifter ist die MTU Aero Engines, Deutschlands führender Triebwerkshersteller. Coronabedingt kann die Ehrung des Preisträgers nicht wie üblich im Rahmen des Deutschen Luft- und Raumfahrtkongresses (DLRK) erfolgen, sondern soll zu einem späteren Zeitpunkt nachgeholt werden. Der DLRK 2021 findet vom 31. August bis 2. September virtuell statt. Bürkle wird am zweiten Veranstaltungstag einen Vortrag über seine Arbeit halten.

„Niklas Bürkle leistet einen wichtigen Beitrag zum Verständnis des Zerstäubungsprozesses der Kraftstoffeinspritzung in Fluggasturbinen“, würdigt Dr. Martin Metscher, Leiter Technologiemanagement der MTU Aero Engines in München, die Resultate der Masterarbeit. Durch Optimierungen der Verbrennungsprozesse in Triebwerksbrennkammern ließen sich Schadstoffe ohne Effizienzeinbußen maßgeblich reduzieren, ordnet Metscher ein. Da das Emissionsverhalten der Brennkammer entscheidend von der Zerstäuberdüse beeinflusst wird, gelte es, ihr Verhalten zu verstehen. Metscher: „Durch die Untersuchungen ist es Niklas Bürkle gelungen, fundierte theoretische Kenntnisse und ein umfassendes Verständnis der komplexen physikalischen Strömungsvorgänge sowie des numerischen Hintergrunds zu gewinnen und zu demonstrieren.“ Weiterer Vorteil: „Die simulative Untersuchung einer Brennkammer bietet den Vorteil, dass ihre Funktionsweise analysiert werden kann, ohne einen kostenintensiven Prüfstand zu entwickeln.“

Die MTU würdigt mit dem Wolfgang-Heilmann-Preis jährlich akademische Nachwuchskräfte. Zwischen dem Karlsruher Institut für Technologie (KIT) und der MTU besteht eine langjährige, sehr erfolgreiche Kooperation in der Technologie-Entwicklung, deren Ergebnisse in bedeutende MTU-Zukunftsprojekte einfließen. Der Preis erinnert an Prof. Dr. Wolfgang Heilmann, der bis zu seinem frühen Tod im Jahr 1989 Geschäftsführer für den Bereich Entwicklung der beiden damaligen MTU-Gesellschaften war. Heilmann hat in Karlsruhe gelehrt und wurde 1986 von der Universität zum Honorar-Professor ernannt. 1990 lobte die MTU den nach ihm benannten Preis aus.

Quelle:
MTU Press Release 30 August 2021

Welcome to Saab´s Submarine Seminar

Saab is pleased to invite media, financial analysts and investors to the annual submarine seminar on the 28th of September 2021. Join our online seminar to learn more about Saab´s submarine operations.

The submarine seminar 2021 will be hosted by Lars Tossman, Senior Vice President and Head of Saab business area Kockums. The purpose of the seminar is to increase knowledge about Saab´s underwater capability, development and productions of submarines, and to give an update on the current submarine programs.

Participants:

Lars Tossman, Head of Saab BA Kockums

Hein van Ameijden, Managing Director of Damen Naval

Andy Keough, Managing Director Saab Australia

Moderator: Amanda Wollstad

Time: Tuesday 28th September 2021 at 09.30 – 10.30 CET.

The seminar will be live-streamed at: https://saab-seminar.creo.se/210928

It will also be possible to post questions over the web, or on Twitter using #saabinthesea.

Both the presentation and the webcast will be published for those who have missed the live-stream on Saab´s web site http://saab.com/

Quelle:

SAAB