Rheinmetall to take central role in F-35 programme

Germany's Rheinmetall could become a second source of F-35 centre fuselages after striking an initial agreement with Lockheed Martin and incumbent supplier Northrop Grumman.

The subject of a letter of intent (LoI), the pact would see Rheinmetall establish a centre fuselage integrated assembly line (IAL) in Germany.

Should the deal proceed, it would be the second such facility, expanding on Northrop's existing IAL in Should the deal proceed, it would be the second such facility, expanding on Northrop's existing IAL in Palmdale, California.Palmdale, California.

Rheinmetall's LoI with Lockheed and Northrop is part of a package of offset agreements related to that purchase.

"The centre fuselage IAL is recognised as a state-of-the-art facility supported by technologies exclusive to Northrop Grumman, seamlessly blending automation with our expertise in aerospace tooling," says Glenn Masukawa, vice-president and F-35 programme manager at the US firm.

"Engaging with Rheinmetall demonstrates our commitment to collaborate with international partners to manufacture advanced aircraft."

Quelle:

FlightGlobal 20 February 2023

EDGE Launches New Autonomous and Unmanned Solutions at IDEX 2023

UAE's <u>EDGE Group</u> has unveiled new unmanned and autonomous solutions with enhanced capabilities for application across air, land, and maritime domains on the opening day of the International Defence Exhibition and Conference (IDEX 2023).

The new breakthrough products and systems cover a wide range of missions, including tactical intelligence, surveillance, and reconnaissance (ISR), logistics support, and sophisticated combat operations.

Mansour Almulla, CEO and Managing Director of EDGE Group said:

"Today marks the culmination of extensive investment in industry-leading companies, innovation, and rapid product development to significantly expand our offerings and ensure our local and global customers can access the most cutting-edge solutions in the market. We are proud to debut a portfolio of 'Made in the UAE' autonomy-enabled solutions that will enable our customers to expand their reach to new heights and depths across multiple combat environments."

He added:

"Strengthening sovereign capabilities and bringing globally competitive products to market are strategic priorities for EDGE, and launching 11 new solutions in this critical domain reflects our steadfast commitment to international security and prosperity." Providing a high-tech and autonomous means of carrying out a wide range of military operations, **JENIAH** is an unmanned combat aerial vehicle (UCAV) with a substantial payload, extended range, and capable of operating at high speed. Displayed alongside the UCAV is its Ground Control Station which is designed to monitor and command the system.

With an even higher payload of 500 kg and a maximum range of 360 km at a cruising speed of 120 km/h, **AIRTRUCK** is designed for strategic logistics support such as supplying troops in remote locations, medical evacuation, and reconnaissance.

Another addition to the QX range, **QX6-50** is developed for logistics purposes for military and civilian applications. Capable of carrying a 50kg payload for up to 200km, the rotarywing unmanned aerial vehicle (UAV) can operate autonomously and is highly modular with other QX variants for ease of maintenance.

Designed to accelerate product development and reduce time to market, the **Instrumented Testing Platform** is a fixed-wing UAV that provides for in-house flight testing of air-tosurface munitions.

Harmonising manned and unmanned aviation, EDGE showcased two unmanned traffic management (UTM) solutions following a strategic investment in UTM provider High Lander. **Universal UTM** offers real-time, autonomous monitoring of flight plans and drone activity, with the capability to approve or deny flights, suggest alternative routes, and react to mid-flight changes. Also displayed during the event, the interactive **Mission Control Platform** allows users to automate and control a drone fleet to execute operations, and offers real-time airspace control.

Quelle: UAS Vision 21 February 2023

Ausbildung zum Verkehrspiloten ATPL(A) ab initio – März 2023

Der nächste Ausbildungsbeginn für den Verkehrsflugzeugführer / Verkehrspilot im Direktunterricht ab initio ATPL(A) startet am 01.03.2023 in den Schulungsräumen der Flugschule ARDEX in Berlin – Steglitz, Schützenstr. 21a / Ecke Rugestraße mit dem Theorieunterricht. Auf unserer Website www.flugschule-ardex.de/atpl-ab-initio können Sie sich gern zur Ausbildung informieren.

Nehmen Sie persönlich Kontakt mit uns auf und erfahren weitere Einzelheiten zum Kurs. Quelle:

The Transall Turns 60

A Symbol of Franco-German Cooperation

On January 22, 1963, French President Charles de Gaulle and German Chancellor Konrad Adenauer signed the Elysée Treaty, a bilateral agreement establishing close ties between the two countries in the areas of security, diplomacy, and education.

On February 25, 1963, the prototype of the C160 Transall (TRANSport ALLiance), a military cargo aircraft resulting from French-German cooperation, made its first flight at Melun-Villaroche.

Both of these anniversaries deserve to be celebrated for their significance in highlighting how aviation, and space technology, have been major instruments in the construction of a united Europe, and for recognizing the fruitful cooperation between France and Germany as one of the seeds of Airbus's creation and success.

The Franco-German Military Cargo Plane and Its Legacy

The Transall project began in 1957 when Nord-Aviation proposed a cargo aircraft to replace the ageing Noratlas for the French Air Force. As French needs alone were not sufficient to ensure the program's viability, a partner had to be found, and Germany became interested in the project. On December 15, 1958, three aircraft manufacturers were selected to study and produce the aircraft: Nord-Aviation on the French side, and Weser Flugzeugbau (VFW) and Hamburger Flugzeugbau (HFB) on the German side.

In 1959, the aircraft's design was defined, starting with the choice of Rolls Royce Tyne engines. On December 16, 1959, an intergovernmental agreement launched the program, and production was split between the three cooperating countries' factories. Assembly lines were established in Bourges, Bremen, and Hamburg.

Finally, on November 22, 1967, the first C160 was delivered to the French Air Force, followed by its German counterpart in April 1968. Production continued until 1973, resulting in a total of 169 aircraft, including three prototypes, six pre-production models, and 160 serial aircraft, 50 for the French Air Force and 110 for the Luftwaffe.

In addition to the standard version, two variants were added: one for South Africa (Z) and another for the French postal service (P). Other planned developments never materialised, such as the C161, equipped with an elevated cockpit and front access to the cargo hold, a twin-engine (C161J Jet), and even a quad-engine Transall.

However, the Transall NG (New Generation) announced by Aerospatiale, MBB, and VFW on May 7, 1976, did come to fruition. The aircraft was equipped with modern avionics and an inflight refuelling boom. This time, a single assembly line was established in Toulouse, as only France ordered 25 units. The C160 NG made its first flight on April 9, 1981, and deliveries began in 1982.

The Transall's silhouette is well-known to the public for having been featured on the news many times. Robust and reliable, the Transall has been involved in all military and humanitarian operations from the 1970s to 2020.

The Transall's operational history in France and Germany concluded in two stages. The Luftwaffe bid farewell to it on October 11, 2021, and on April 3, 2022, the last flight of a C160 under French colours took place. The aircraft, registered as 212, joined the Aeroscopia Museum in Blagnac, not far from the factory where it was born. In 2023 two C160s remain in service with the Turkish Air Force.

Quelle:

Airbus Press Release 23 February 2023

Boeing Sets F/A-18 Production Completion Date as Defense Business Pivots to Future Work

- Defense, Space & Security plans St. Louis workforce growth supporting new and nextgeneration military aircraft programs and services

- *F/A-18* Service Life Modification will continue through the mid-2030s; advanced capabilities development and upgrades for global fleet continuing for decades

Boeing [NYSE: BA] expects to complete new-build production of the F/A-18 Super Hornet fighter aircraft in late 2025 following delivery of the final U.S. Navy fighters. Production could be extended to 2027 if the Super Hornet is selected by an international customer.

To meet demand for defense products and services, Boeing plans to continue hiring year-overyear for the next five at its St. Louis site. More than 900 people were hired in the region last year.

"We are planning for our future, and building fighter aircraft is in our DNA," said Steve Nordlund, Boeing Air Dominance vice president and St. Louis site leader. "As we invest in and develop the next era of capability, we are applying the same innovation and expertise that made the F/A-18 a workhorse for the U.S. Navy and air forces around the world for nearly 40 years."

The F/A-18 production decision allows Boeing to:

- **Redirect resources to future military aircraft programs:** To support work on the next generation of advanced crewed and uncrewed aircraft, Boeing plans to build three new, state-of-the-art facilities in St. Louis. These facilities, as well as the new Advanced Composite Fabrication Center in Arizona, and the new MQ-25 production facility at MidAmerica St. Louis Airport, represent more than a \$1 billion investment.
 - Boeing has invested \$700 million into St. Louis infrastructure upgrades during the past decade, enabling the introduction of new design and build techniques streamlining processes and improving first-time quality.
- **Ramp up production of critical new defense programs:** Boeing St. Louis will increase production of the world's first all-digital training system, the T-7A Red Hawk, and the world's first carrier-deployed autonomous refueling aircraft, the MQ-25 Stingray, along with ongoing production of new F-15EX Eagle IIs and 777X wing components.
- Focus on modernization and upgrade efforts: Boeing will continue to develop advanced capabilities and upgrades for the global F/A-18 Super Hornet and EA-18G

Growler fleet. Throughout the next decade, all Block II Super Hornets in Service Life Modification will receive the Block III capability suite. Boeing will also continue to add advanced electronic attack capability as part of ongoing Growler modifications.

Since the F/A-18 debuted in 1983, Boeing has delivered more than 2,000 Hornets, Super Hornets and EA-18G Growlers to customers around the world including the U.S. Navy, Australia, Canada, Finland, Kuwait, Malaysia, Spain and Switzerland.

Quelle: Boeing Press Release 23 February 2023

Frontier Airlines selects CAE for next-generation flight operations software

CAE today announced that it has signed a 10-year agreement to equip Frontier Airlines (NASDAQ: ULCC) with CAE's next generation of flight operations solutions. With implementation scheduled to begin later this year, CAE's cloud-based Operations Control, Crew Management and Flight Management solutions will support Frontier with the latest and most feature-rich operations software available today.

Frontier Airlines becomes the latest airline in North America to move to CAE's portfolio of next-generation solutions – the first since the acquisition of the Sabre AirCentre business in February 2022. CAE's solutions will enable Frontier to take advantage of the latest-available technology, driving step-change improvements in performance over legacy software in the optimization of flight plans, aircraft usage, and crew communication and engagement.

"We are thrilled to partner with CAE and begin integrating the latest versions of their industry-leading, comprehensive software solution," said Brad Lambert, Vice President, Flight Operations, Frontier Airlines. "As we have seen in the industry over the last few years, updating core operational software is imperative to optimize flight operations, identify flight planning efficiencies and more quickly manage disruptions and recovery."

"We are proud to have Frontier Airlines extend its partnership with CAE and become our latest customer to benefit from our next-generation flight operations solutions," said Pascal Grenier, CAE's Senior Vice President, Flight Services and Global Operations. "Frontier is positioning its business for long-term operational success, with CAE's newest solutions modernizing its operations to improve efficiency, reduce costs, and better manage disruptions. Our solutions are constantly evolving and getting better thanks to forward-looking and innovative customers like Frontier."

In addition to committed, sustained investment in its solutions, Frontier will benefit from CAE's robust delivery model, extensive experience in deploying mission-critical software in complex operational environments requiring intricate system integrations, and 24/7/365 support.

Quelle:

CAE Press Release 20 February 2023

Die AERO ist mit der AERODrones (19 – 21. April 2023) auch im Zukunftsmarkt Drohnen erfolgreich

AERODrones ist eine Messe in der Messe – Verlängerung auf drei Tage – Unbemannte Luftfahrzeuge im Dienst der Gesellschaft

Unbemannte Luftfahrzeuge haben eine Revolution in der Luftfahrt ausgelöst. Sie ermöglichen Missionen, die vorher nicht denkbar waren. Auf der Luftfahrtmesse AERO (19. - 22. April 2023) findet mit der AERODrones wieder eine Spezialmesse statt, die aufgrund des großen Erfolgs um einen Tag verlängert wird.

Unbemannte Fluggeräte (Drohnen) bieten einen großen Nutzen für die Gesellschaft. Sie decken vielfältige Aufgabenspektren ab und sind im zivilen Einsatz bei Behörden und Organisationen mit Sicherheitsaufgaben (BOS) nicht mehr wegzudenken. Aber auch in anderen Bereichen wie dem Umweltschutz, der Landwirtschaft, dem Handwerk oder der Filmindustrie sind Drohnen schon längst alltäglich genutzte Werkzeuge. Schon in naher Zukunft werden weitere Aufgaben, wie zum Beispiel in der Logistik, hinzukommen. Der weltweite Markt für Drohnen entwickelt sich zu einem Geschäftssegment, das in den nächsten Jahren Milliardenumsätze erwirtschaften wird.

Die Luftfahrtmesse AERO in Friedrichshafen wird mit der AERODrones 2023 den unbemannten Fluggeräten ein prominentes Forum bieten. Anknüpfend an den großen Erfolg der "Messe in der Messe" AeroDrones des vergangenen Jahres, wird die AERODrones 2023 an drei statt bisher an zwei Tagen (19. bis 21.04.2023) stattfinden. Die erweiterte Fachveranstaltung wird sich auch 2023 in Halle A2 unter dem Thema "Drohnen im BOS-Einsatz" auf Polizeien, Feuerwehren und Rettungskräfte fokussieren. Das Konzept wird Hersteller, Zulieferer und Partner aus der Drohnenindustrie mit Vertretern der unterschiedlichen Behörden zusammenbringen. Im Vordergrund steht der Austausch zu neuen Technologien und Produkten sowie zu Missionen, zu Einsatzerfahrungen mit Drohnen – und ihrer Abwehr – sowie daraus resultierenden Anforderungen. Der Ausstellungsbereich ergänzt den Wissenstransfer im Rahmen des dreitägigen Konferenzprogramms auf der Bühne in Halle A2 sinnvoll.

Die AERODrones findet in Zusammenarbeit mit den Partnern der Polizei Baden-Württemberg und dem Bundesamt für Bevölkerungsschutz und Katastrophenhilfe (BBK) statt und wird unterstützt vom Verband für unbemannte Luftfahrt UAV DACH und CURPAS. Tobias Bretzel, Projektleiter AERO des Messeveranstalters fairnamic GmbH, sagt: "Wir rechnen bei der AERODrones wieder mit über 50 Ausstellern. Bereits jetzt liegen unter anderem Anmeldungen für eine Teilnahme von Firmen und Organisationen wie DJI, Remote Vision GmbH, Droniq GmbH, UMS Skeldar, Spleenlab, M4com System GmbH sowie des DRK (Deutsches Rotes Kreuz) vor."

Martin Landgraf, der Stellvertretende Leiter der Polizeihubschrauberstaffel Baden-Württemberg, sagt: "Die Polizei Baden-Württemberg ist sehr gerne bei der dritten Drohnenfachveranstaltung AERODrones auf der AERO Friedrichshafen als starker Partner wieder dabei. Wir freuen uns, aktiv zum wichtigen Wissens- und Erfahrungsaustausch zwischen den Drohnen-Nutzern, -Herstellern und BOS-Organisationen beizutragen."

Dr. Michael Judex, Referatsleiter Grundlagen Krisenmanagement und IT-Verfahren im BBK, hebt hervor: "Das BBK hat schon sehr früh den hohen Nutzwert von Drohnen für die nichtpolizeiliche Gefahrenabwehr erkannt und durch die Formulierung von Handlungshilfen für den Einsatz von Drohnen im Bevölkerungsschutz einen essentiellen Beitrag zur sicheren und effektiven Nutzung dieser dynamischen Technologie geleistet. Die AERODrones wird dieses Jahr wieder eine tolle Gelegenheit sein, sich mit Anwendern, Industrie und Technologiepartnern zu vernetzen."

Quelle: AERO Friedrichshafen

Lockheed Martin Announces New Acting Senior Vice President of Government Affairs

Lockheed Martin announced today that Senior Vice President (SVP) of Government Affairs Christian Marrone has decided to resign, effective Feb. 28, for personal reasons. Greg Walters, vice president of Legislative Affairs, has been named acting SVP, effective immediately.

Walters joined Lockheed Martin in 2004 and has led several critical initiatives, including the legislative component of campaigns to reestablish the LM EO Overhead and GPS III Satellite franchises. Prior to joining the company, he served 14 years as a staff member of the House Appropriations Committee and four years in the Department of Defense.

He graduated from University of Pittsburgh with a bachelor's in Economics and received his MBA from Johns Hopkins University.

Quelle: Lockheed Martin Press Release 23 February 2023

Exhibition showcasing China's manned space achievements kicks off; new-gen manned spacecraft on display for first time

An exhibition showcasing China's 30 years of achievements in manned spaceflight opened at the National Museum of China on Friday. For the first time, the new-generation of manned spacecraft and the lunar surface lander are on public display, according to China Manned Space Agency (CMSA).

The exhibition highlights China's ambitious space pursuits, showcasing the breakthroughs and core technologies that the country has successfully mastered in the process. Through its endeavors, China has paved a unique path of development for its aerospace industry.

The China manned spaceflight program, established in 1992, ended in 2022 with the completion of China's space station. The station has now fully entered the operation and application stages, the CMSA said.

Some 27 manned spaceflight tasks were carried out over the 30 years, all of which were completed successfully and in a spectacular manner, according to the CMSA.

The exhibition will run for three months. The main exhibits include a life-size model of the Tianhe core module that visitors can walk into, a model of the space station assembly, as well

as models of the Long March carrier rockets that have been commissioned for space stationrelated tasks. The model of the new-generation manned launch vehicle will also be on display.

The show will also include spacesuits, the Shenzhou-13 return capsule, rocket engines, the life support system onboard the space station, and the flag of the Communist Party of China that taikonauts carried into space.

Experts believe that the exhibition will better illustrate China's space achievements, promote the spirit of patriotism, popularize knowledge of space science, and inspire the public, especially young people, to courageously explore the unknown and pursue their dreams, the Global Times learned from CMSA.

As one of the most complex scientific projects with the most intensive technologies and innovations, manned spaceflight covers a variety of fields such as mechanics, astronomy, earth science, aerospace medicine and space science.

It also involves a number of engineering technologies such as system engineering, automatic control, computer science, remote sensing and new materials, earning the label of "masterpiece" in the field of national scientific and technological achievements.

The manned spaceflight project has obtained more than 4,000 invention patents over the three decades, resulting in leapfrog development in the aerospace industry and pushing forward the rapid development of raw materials, microelectronics, machinery manufacturing, chemical industry, metallurgy, textile, communication and other fields, greatly promoting the overall advancement of China's science and technology level, the Global Times learned on Friday.

Quelle: GLOBAL TIMES 24 February 2023

China boosts defense cooperation with UAE as US influence wanes in Middle East

After announcing the signing of a contract that will see Chinese L15 supersonic jets exported to the United Arab Emirates (UAE) at an ongoing defense expo in Abu Dhabi, China's aviation industry went further and opened a UAE joint lab focusing on research and development as well as talent cultivation.

Experts said on Thursday that the move marked China's enhanced defense cooperation with the UAE, after the Arab country halted a deal to purchase F-35 fighter jets from the US.

Jointly sponsored by the Chinese Aeronautical Establishment and the China National Aero-Technology Import & Export Corporation (CATIC), the UAE Joint Lab opened on Tuesday, with the aim of working with Arab countries to explore aerospace cooperation, the stateowned Aviation Industry Corporation of China (AVIC) announced on Wednesday.

The two sides will focus on basic, utility and frontier technologies, carry out aviation research and development as well as talent cultivation, and build a technology cradle overseas, AVIC said.

The announcement came shortly after AVIC revealed on Tuesday that CATIC has successfully signed a contract with the UAE for the exports of the domestically developed L15 advanced trainer jet during the 16th International Defense Exhibition and Conference (IDEX), which is being held from Monday to Friday in Abu Dhabi.

In December 2021, the UAE suspended a deal to buy US-made F-35 fighter jets and drones due to US attempts to limit Chinese technology sales, including Huawei 5G, in the Arab country, Reuters reported at the time.

Zhang Xuefeng, a Chinese military expert, told the Global Times that although Western defense firms continue to be the main arms suppliers to Middle Eastern countries, they are failing to dominate the market in the region.

Arms procurement involves geopolitical, performance and cost factors, and rich Middle Eastern countries like the UAE and Saudi Arabia are getting tired of the tight political strings the US attaches to arms sales when other suppliers can also provide equivalent products, Zhang said.

Fu Qianshao, a Chinese military aviation expert, told the Global Times that China's FC-31 stealth fighter jet has good market prospects in the Middle East as the US encounters difficulties in promoting its F-35 in the region.

According to UK defense think tank the Royal United Services Institute, Middle Eastern countries including the UAE and Saudi Arabia are also users of Chinese CH and Wing Loong drones. In addition, Saudi Arabia has also reportedly deployed the China-made Silent Hunter anti-drone laser system.

China is exhibiting more drones and anti-drone systems at the ongoing IDEX, including a new anti-drone laser system called the Sky Shield, China Central Television reported on Wednesday.

Attractive Chinese products also include the VU-4 unmanned ground combat vehicle and AR3 modularized long-range rocket system from NORINCO.

Weapons and equipment in these categories have gained public attention, as they were deployed in the Russia-Ukraine conflict, observers said.

The deal for the L15 trainer jet with the UAE could just be the beginning, and Arab countries could further enhance defense cooperation with China and procure more Chinese defense products in order to balance US hegemonic influences, analysts said.

Quelle: GLOBAL TIMES 23 February 2023