Lufthansa Bombardier Aviation Services

20 years of excellence
The one-stop shop for Bombardier business jets

Customer portrait
“Smart Partnership”
Successful cooperation model with easyJet

Innovation and technology
Testing for the Dreamliner
Dedicated to the air management system

Digital Fleet Solutions
Wizz Air joins AVIATAR
Partner for Lufthansa Technik’s MRO IT platform
20 years of excellence
Over the last twenty years, Lufthansa Bombardier Aviation Services has grown to become a one-stop shop for Bombardier business jets.

VIP & Special Mission Aircraft Services
• Lufthansa Bombardier Aviation Services: Dedicated to Bombardier business jets

Innovation and technology
• Air management system: Testing for the Dreamliner

Customer portrait
• easyJet: “Smart Partnership”
• NEOS: Fly as you want

Digital Fleet Solutions
• b2b-aero joins AVIATAR
• Wizz Air selects Lufthansa Technik’s MRO IT platform

Engine Services
• Engine service center: Foundation stone laid for XEOS
• Lufthansa Technik Turbine Shannon: 25 years of engine parts expertise

Aircraft Services
• Lufthansa Technik Budapest: Shining in new splendor

Airline Support Team
• Airframe Related Components: A race against time

Employee portrait
• Katharina Wiele: Fascinated by shining strips

Component Services
• Software: Material planning at its best
• Lufthansa Technik Vostok Services: Speaking the customer’s language

Events and exhibitions
• MRO Europe 2017: A business goes digital

Categories
• News
• Personalities
• Events
• Products and services
• Contacts

Lufthansa Technik Connection is a complimentary information service for Lufthansa Technik’s family and friends. Published every two months. This and earlier issues can be downloaded from our website www.lufthansa-technik.com/connection

Publisher
Lufthansa Technik AG
Kai Raudzus · Corporate Marketing · HAM T/TM-M
Weg beim Jaeger 193 · 22335 Hamburg, Germany
Info +49-40-5070-5053 · Fax +49-40-5070-8860
marketing.sales@lht.dlh.de · www.lufthansa-technik.com

Sarah Ahadzadeh Ghanad · Database management

Editorial production
Editorial office: Flightlines, Hamburg
Design: Art Works!, Hamburg
Photos: Lufthansa Technik AG, Deutsche Lufthansa AG
Printing: Beisner Druck GmbH & Co. KG
Open for business

In a grand ceremony, Lufthansa Technik has opened its new wheels and brakes workshop in Frankfurt. Taking just two years to construct, a total of around 60 million euros was invested in the state-of-the-art facility with some 200 workplaces.

All signs are clearly pointing to growth for the future of Lufthansa Technik’s wheels and brakes services. The MRO provider’s new ultra-modern facility with a gross floor area of 14,500 square meters was built on a 35,000-square-meter plot at the Frankfurt East Harbor location. Thanks to optimized processes, tailored logistics and state-of-the-art plant equipment, the new site enables the cost-effective supply of wheels and brakes for Lufthansa and numerous other European customers from a central location in Germany. In the old shop on the airport site some 27,000 wheels and 5,000 brakes were repaired in 2016, way more than the original maximum capacity of the facility, which was designed for 15,000 wheels and 2,500 brakes annually. The new facility now allows growth to 32,000 or 6,000 units per year, opening up opportunities for further business especially with low-cost carriers.

“We are very deliberately developing this new facility here in the heart of Germany,” said Dr. Thomas Stueger, Executive Board Member Technical Operations, Logistics & IT at Lufthansa Technik. “When the right conditions are in place, it is possible to work not only efficiently but also economically even in a high-wage economy thanks to the latest production techniques and the unique experience of our staff.”

“I would like to thank all the trades, partners and colleagues for the excellent cooperation in implementing this ambitious project,” said Frank Zimmermann, Head of Project Management of the new wheels and brakes workshop. The facility exceeds the requirements stipulated in the Energy Savings Ordinance by more than 30 percent. A separate combined heat and power plant, for example, was constructed for this purpose. Even the waste heat from the machines will be used for air-conditioning the building.

Owing to the importance of wheels and brakes for the safety of flight operations, considerable effort is invested in their maintenance. Lufthansa Technik takes care of all the necessary work – from wheel or brake changes to small repairs or complete overhauls of a wheel or brake. Every component passes through numerous stations until finally, after a thorough check in accordance with internationally applicable aviation laws, it is approved for operation in the final inspection.
**TCS® for SriLankan Airlines’ A320 fleet**

**Total Component Support // SriLankan Airlines and Lufthansa Technik have extended their existing component support contract for the growing Airbus A320 fleet of Sri Lanka’s national carrier. The expanded Total Component Support (TCS®) agreement comprises all aircraft of SriLankan Airlines’ A320 fleet, including its new A320neo aircraft. Currently, this fleet consists of nine A320 and six A320neo aircraft.**

Dinnaga Padmaperuma, Chief Technology Officer of SriLankan Airlines, said: “We are glad to extend our components contract with Lufthansa Technik and we hope that this collaboration will further enhance Lufthansa Technik’s commitment to the regional support of our A320 fleet.”

Gerald Steinhoff, Vice President Corporate Sales Asia Pacific at Lufthansa Technik, said: “I would like to express my deepest appreciation to SriLankan Airlines for the continued trust in our component services. We are fully committed to contributing to the company’s successful A320 fleet growth.”

The components will be repaired and overhauled at Lufthansa Technik’s global network of repair facilities. Pooling will be provided through Hong Kong and Singapore, where Lufthansa Technik operates two warehouses for the Asia Pacific region.

---

**MoU with Air Esurfing**

**Connectivity // Lufthansa Technik has signed a memorandum of understanding (MoU) with the Chinese company Air Esurfing (ARE) for providing connectivity services to Chinese airlines. Air Esurfing is dedicated to providing in-flight entertainment and connectivity (IFEC) services to airlines in China. The MoU provides for a long-term partnership between Lufthansa Technik and Air Esurfing with the goal of offering turnkey connectivity solutions for commercial airlines in China. Once the contract has been signed, Lufthansa Technik and Air Esurfing will install high-speed and state-of-the-art Ku-band/Ka-band antenna and on-board distribution systems in 200 Airbus A320 family and Boeing 737 aircraft.**

“Together with Lufthansa Technik, we are about to transform the domestic in-flight connectivity market in China,” said Grant Zhou, CEO of Air Esurfing.

“The partners intend to use China’s Ka-band and Ku-band satellite capacity for domestic in-flight connectivity services over mainland China.”

---

**»nice HD« for new Phenom 300E**

**Original Equipment Innovation // Embraer has selected Lufthansa Technik’s Original Equipment Innovation (OEI) division to supply its latest version of the »nice HD« cabin management and in-flight entertainment (CMS/IFE) system for the aircraft manufacturer’s newest Phenom 300E business jet. Embracer’s decision in favor of this most recent »nice HD« solution is another vote of confidence in the system’s advanced technology, design and innovative features. Designed by Lufthansa Technik and customized exclusively for Embraer, the latest »nice HD« provides passengers with features superior to that of any other solution in the segment. A unique graphical user interface has been co-developed with Embracer that allows full cabin control as well as custom user-selected backgrounds. The solution supports wireless streaming to personal electronic devices including the interactive »niceview MOBILE« moving map and »nicemedia« applications. A custom audio system, with new amplifiers and speakers, was specifically designed by Lufthansa Technik for cabin installations and produces unmatched audio performance.”

---

**Operational again after hurricane Maria**

Lufthansa Technik Puerto Rico // Three weeks after hurricane Maria had devastated the island of Puerto Rico, Lufthansa Technik Puerto Rico redelivered their 100th heavy maintenance check for Spirit Airlines, the launch customer for the facility. “Thankfully all of our employees are safe and well,” said Pat Foley, CEO of Lufthansa Technik Puerto Rico. “And despite the situation we have found ourselves in, it was the strong will of all employees to rise again and to come back to work as soon as possible. The motivation of the whole team has been extraordinary. And once again, I would like to thank our customers, on this occasion, for their unbroken trust and the time they have given us for our comeback despite their operational needs.”

Kirk Thornburg, Vice President Technical Operations Spirit Airlines, also commented: “It has been remarkable to see how quickly Lufthansa Technik Puerto Rico has been able to become operational again under these circumstances. Our maintenance team salutes all at Lufthansa Technik Puerto Rico in this achievement. We are delighted to receive our 100th maintenance check back safely once again from Puerto Rico.”
Cooperation with Parker Aerospace

Component Services // Parker Aerospace and Lufthansa Technik announced an agreement for long-term collaboration for Airbus A350 component MRO services. The agreement covers the majority of repairable components for the Parker-designed A350 fuel, hydraulic and fuel tank inerting systems. Under the terms of the agreement, Lufthansa Technik and Parker Aerospace will jointly develop repair procedures to increase component and systems reliability and reduce related maintenance costs for airline customers worldwide. Airbus and operators will benefit from shared best practices and collaborative approaches to continuous improvement in repair performance. “Parker’s objective has always been to develop a strong network and provide local solutions for MRO and part availability," said Vic Jorcyk, Vice President of Commercial Aftermarket at Parker Aerospace. “By collaborating, we will achieve the best cost-savings for customers, optimize reliability, and develop better repairs by combining our competencies.”

E190 material supply for Georgian Airways

Spairliners // Georgian Airways, the Tbilisi-based national flag carrier of Georgia, and Spairliners, a market leader in aircraft component care based in Hamburg, Germany, have signed a multi-year contract for all-embracing component maintenance services of two Embraer E190 aircraft. The contract comprises pool access and component repair services for Georgian Airways. Spairliners supports Georgian Airways with spare parts from its large-scaled component pools in Munich, Germany, and Paris, France. The agreed component repair services are carried out by Spairliners’ parent companies Lufthansa Technik and Air France Industries KLM Engineering & Maintenance. With this contract, Spairliners builds on a long and successful business relationship existing between Lufthansa Technik and Georgian Airways for many years. “With our technical know-how and our competitive cost structures, we want to make a significant contribution to the success of Georgian Airways in the Eastern European aviation market,” said Sven-Uwe Hueschler, CEO at Spairliners. This is the second customer Spairliners has gained in Eastern Europe since beginning of 2017. In March, Ukraine International Airlines signed a long-term repair, lease and exchange agreement with Spairliners for its five E190 aircraft.

“All systems go” for new trainees

Lufthansa Technik Group // At the traditional start of the German training year, 151 young people started either traditional or dual-study training programs with the Lufthansa Technik Group. All told, Lufthansa Technik in Germany will now be home to 569 young people on their way to professions in technical aircraft services or aircraft logistics. 95 young people will begin their training directly at Lufthansa Technik and another eleven will be starting at Lufthansa Technik AERO Alzey. The company specializing in overhauling smaller jet and propeller engines is expanding its training capacity (it now has a total of 31 training slots) to safeguard the company’s strong growth over the long term. Lufthansa Technik Logistik Services has 25 new trainees for new trainees for the future-oriented profession of warehouse logistics specialist as well as four people training to become specialists for forwarding and logistics services. This is likewise an increase in the company’s training commitment, and one that reflects the rapid development of supply networks for customers all over the world.

CF34 engine services for Regional Jet

Lufthansa Technik AERO Alzey // Regional Jet, the subsidiary of Nordica and LOT, has signed a five-year agreement with Lufthansa Technik AERO Alzey. The regional jet engine specialist in the Lufthansa Technik Group will provide engine MRO services for Regional Jet’s CF34-8C5 engines powering the airline’s Bombardier CRJ fleet. “We are convinced that we can rely on the vast expertise of Lufthansa Technik AERO Alzey to maintain the CF34 engines of our CRJ aircraft. We believe that Lufthansa Technik AERO Alzey will provide the best service and operational stability for Regional Jet – a young but quickly expanding operator," said Anton Onnik, CEO of Regional Jet. 

Stay up to date!

Customer Newsletter // Lufthansa Technik’s online customer newsletter Connection Flash supplements our popular bi-monthly Lufthansa Technik Group Magazine Connection with first-hand news on innovative technologies and developments, new services and offers, and future events.
Dedicated to Bombardier business jets

Over the last twenty years, Lufthansa Bombardier Aviation Services has grown to become a one-stop shop for the maintenance of Bombardier business jets – with a number of premieres and special layovers along the way.
Two decades ago, Bombardier Aerospace and Lufthansa Technik decided to found a company together for the maintenance of Bombardier business aircraft. Business began with just 17 employees and 20,000 hours of work performed during the first year. Meanwhile, Lufthansa Bombardier Aviation Services has become a one-stop shop with a long list of customers and extensive capacity.

In the process, the company has benefited from the expertise of its two shareholders: Bombardier as an aircraft manufacturer and Lufthansa Technik as an aircraft maintenance specialist. A third shareholder was added in 2005 with ExecuJet Aviation Group, a leading global business aviation organization. Today, 220 MRO specialists look after customers’ aircraft at the company’s two strategically located sites in Berlin and Moscow – with 187,000 hours of work provided in 2017. This 20-year growth curve, which turned the small company into one of the leading MRO providers for Bombardier business jets in Europe, the Middle East, Africa and the CIS, is a reason to celebrate.

Full spectrum of services

“We offer operators of business aircraft from Bombardier all the services they need from a single source,” said Managing Director Christoph Meyerrose. Lufthansa Bombardier Aviation Services provides its customers fully approved Bombardier warranty work and all-round services for Learjet, Challenger and Global aircraft, including the full spectrum of line and base maintenance activities, structural inspections and engine services, as well as upgrades and modifications.

“"We aim to maximize the availability of business jets," explained Christoph Meyerrose. "Our promise is to take care of all the details while our customers relax in the knowledge that they are receiving the highest level of safety, the chance to lower their maintenance costs and, most..."
importantly, the continued smooth operation of their aircraft." Open seven days a week and with an AOG hotline reachable 24 hours a day, the company offers customer support whenever and wherever it is needed. In cooperation with ExecuJet, Lufthansa Bombardier Aviation Services also provides first-class fixed-based operator (FBO) services, including everything a business jet customer needs from flight planning and organization to baggage handling.

Many “firsts” for business jets

Over the past few years, the company has demonstrated its expertise again and again with special layovers and premieres, including the world’s first 7500-landings inspection (mid-life inspection) of a Global Express. And Lufthansa Bombardier Aviation Services set two records for its customer Swiss Air Ambulance: the world’s first 7800-landings inspection of a Challenger 604 and the fastest 96-months inspection. Moreover, the staff has also been able to add the first European maintenance of a Global aircraft and the first 8-C-check in Europe to its impressive list of achievements.

So it comes as no surprise that many governments also rely on the company’s services and have entrusted various governmental aircraft from a variety of nations to Lufthansa Bombardier Aviation Services’ hangars over the last two decades. From the beginning of its operations, for instance, the Special Air Mission Wing of the German Air Force has been among its customers – initially with seven Challenger aircraft and since 2011, with its four Global 5000.

The successes of the past enable Lufthansa Bombardier Aviation Services to be optimistic about the future. Thanks to its longstanding relationships with partners, suppliers and industry associations, they are always quick to recognize the latest trends and use their knowledge to develop early innovations for their customers. As Christoph Meyerrose said: “We set ourselves apart from our competitors through our very close partnership with the manufacturer, Bombardier. And we will continue to do everything to lead the competition and to add new Bombardier aircraft programs to our product portfolio.”

Lufthansa Bombardier Aviation Services provides fully approved Bombardier warranty work and all-round services for Learjet, Challenger and Global aircraft.

Celebrating 20 years of growth:
Christoph Meyerrose, Managing Director;
Andy Nureddin, VP Customer Support & Training,
and Jean-Christophe Gallagher, VP and General Manager Customer Experience (from left)
Testing for the Dreamliner

With the 787, Boeing has introduced a new technology into air conditioning systems. Among others, electrically powered cabin air compressors (CAC) replace the engine bleed air system. To repair this and other components of the air management system (AMS), Lufthansa Technik has developed and built the corresponding test bench.

The Boeing 787 is a commercial aircraft using a bunch of new technologies. Extensive use of composite materials, new systems and components give it a unique position among its rivals. The air conditioning system stands out in particular. It does not use high-pressure air from the engines – bleed air – to drive the air conditioning units. Instead, four cabin air compressors (CAC) – radial compressors driven by electric motors – are used. With 110kW each, their combined power requirement roughly equals the total electrical power consumption of a Boeing 737. The CACs are powered by common motor starter controllers (CMSC). Pin-programming allows these standard modules to be also used for other electric drives such as the ram air fan and the motor-driven compressor.

To be able to test the components of the new system based on electric drives, a development project for an air management system (AMS) test bench was launched in March 2015. To ensure that all the information needed to build the test bench and testing systems was available, Lufthansa Technik concluded a contract with Vortex Systems LLC, the American company that had built the manufacturer’s test bench.

The aim of the Lufthansa Technik project was to build a test bench that could be used to test the cabin air compressor, the motor-driven compressor and the ram air fan. The ram air fan supplies air to the ram air duct when the aircraft is on the ground. The motor-driven compressor produces compressed air for the nitrogen generation system, which delivers the gas to the fuel tank inerting system. The CAC replaces the classical bleed air system. Because its standard power module is also used to control the ram air fan and motor-driven compressor, those were also considered during development.

Lufthansa Technik decided to produce the test bench largely by itself and with the necessary CE conformity to comply with the applicable product-specific regulations in Europe. All engineers involved in the project were able to familiarize themselves with the complex testing system during the development phase and contribute their know-how to the process. As a result, Lufthansa Technik was able to improve some of the test bench characteristics and save a considerable amount of money on its construction thanks to the clever selection of subsystems and test bench components.

Meanwhile, the cabin air compressor, ram air fan and motor-driven compressor have completed successful test runs. The initial operation of the test bay and the production of the first devices at the Lufthansa Technik facility in Hamburg is scheduled in November.
Since its foundation in 1995, easyJet has recorded phenomenal growth and economic success. The number of passengers has more than doubled in the past decade, for example. The airline flies in a point-to-point model rather than the hub-and-spoke model; easyJet has 28 European bases.

easyJet’s successful business approach is based on a combination of several factors. Key elements are a high but comfortable number of seats per aircraft, a high load factor and high aircraft utilization. The backbone of the strategy is its young and homogenous fleet: easyJet operates A320 family aircraft only, including the new A320neo. This is a recipe for much simplified training and maintenance and reduced overall operational costs.

While Lufthansa Technik supports easyJet with a series of traditional MRO services at different locations – line maintenance being one of them – the maintenance contract that was signed in 2016 is something quite unique. The two companies developed a new cooperation model that resulted in what is referred to as “Smart Partnership.”

With a fleet of at least 55 aircraft, Gatwick (LGW) is the largest base for the low-fare airline. Here, Lufthansa Technik, as a Part 145 maintenance organization, performs light base maintenance input and AOG hangar support for the carrier’s Airbus fleet. Head of line maintenance UK and Ireland, Karl Warren, explained: “Our operations at Gatwick were set up especially for easyJet. We simply listened to easyJet and embraced their innovative vision for this ‘Smart Partnership’. In a remarkable co-creation effort we developed a solution that in effect consists of practically making a small but effective MRO company available to the customer at Gatwick. The tasks are clearly assigned: easyJet supplies the hangar and infrastructure while Lufthansa Technik provides the part 145 expertise – maintenance staff, tooling and part 21 technical assistance when required.”

Our operations at Gatwick were set up especially for easyJet.

Karl Warren

Lufthansa Technik has a staff of about 60 engineers on site who execute two so called P-checks per night, seven days a week.

The rather unorthodox approach jointly developed by Lufthansa Technik and easyJet turned out to work well. On the occasion of the one-year anniversary of the London Gatwick hangar, easyJet’s Chief Executive Officer Carolyn McCall said: “Today, the one-year anniversary of our London Gatwick hangar is being celebrated. In 2015, we embarked on designing and building our new two-bay hangar at Gatwick Airport, which is run in partnership with Lufthansa Technik today. Our partner helps us a lot to keep our planes in the air. So, well done to the team in Gatwick for a great first year.”

“Smart Partnership”
On Wednesday, 25 October 2017, the first scheduled aircraft rolling across the threshold was the 1,000th input. Kevin Creed, easyJet maintenance manager at London Gatwick, commented: “It goes without saying that this number of inputs in such a short time frame is truly astounding and is the result of great effort from the management teams, support teams and production staff. I would like to express my sincere gratitude and appreciation for the hard work that everybody put in to our continued success here.”

The airline’s trust and confidence in Lufthansa Technik resulted in another base maintenance agreement only a few months after the “Smart Partnership” agreement was concluded. The base maintenance agreement covers more than 100 aircraft of the airline’s A320 family to be serviced by Lufthansa Technik’s network during the next five years, for example in Malta, Sofia and Budapest.

**A320neo**

The flexible, customized and highly efficient support provided by Lufthansa Technik is a perfect fit for easyJet’s A320 fleet, which is geared toward maximum efficiency. This approach will now also be applied to the A320neo. In June, easyJet took delivery of its first modernized Airbus model. With 130 aircraft of this type on order, easyJet is Europe’s largest customer for this new aircraft. Reducing both fuel consumption and emissions while keeping up the family policy of high efficiency, this aircraft type represents a logical continuation of the easyJet philosophy.
Corporate Key Account Manager Axel Haug views the development of the two companies’ cooperation optimistically: “easyJet establishes a special relationship with its suppliers. You practically feel like an employee of the company. That is particularly apparent at Gatwick airport, where Lufthansa Technik and easyJet jointly designed our co-branding. The airline also promotes an open culture towards errors: If there is a problem, it is addressed immediately and we jointly find solutions and fixes quickly. Overall, the relationship with easyJet shows that Lufthansa Technik is able to deliver excellent, tailored quality MRO services at economic prices palatable for low-cost carriers. Lufthansa Technik also benefits by gaining the ability to apply insights out of our continuous learning results as we further develop our product portfolio together with easyJet.”

Innovative future

Brendan McConnellogue, Head of Maintenance at easyJet, points out: “Innovation is in easyJet’s DNA – from our launch almost 20 years ago when we changed the way people fly to the present day where we lead the industry in digital, web, engineering and operational innovations to make travel more easy and affordable for our passengers.”

With an eye to the future, easyJet has already made provisions for post-Brexit conditions. In July the airline was granted an Austrian Air Operator Certificate (AOC) and operating permit by the Federal Ministry for Transport, Innovation and Technology. Establishing easyJet Europe, a new airline, allows easyJet to ensure continuous operations across and within European countries even after the UK leaves the EU.

About easyJet
+ Founded: 1995
+ Headquarters: London Luton Airport
+ Staff: >10,000 employees, 2,300 pilots
+ Network: More than 889 routes to 140 airports in 31 countries
+ Fleet: 278 Airbus A320 family aircraft (incl. A320neo)

b2b-aero joins AVIATAR

Repair data and tracking management provider b2b-aero has integrated its fast-growing “Capabilities App” solution into Lufthansa Technik’s open, modular and neutral platform AVIATAR.

Lufthansa Technik enriches the product portfolio of its digital AVIATAR platform. The b2b-aero Capabilities App enables users to find and compare offerings for test, repair and overhaul services for specific part numbers. By consolidating relevant information of the part and the supplier portfolio, it makes deep industry knowledge on pricing, repair station performance and certifications accessible. Finally, the application offers the functionality to send requests for quotes (RFQs) to selected suppliers and to manage proposals online.

More than 620 repair stations are currently listing more than 3.3 million capabilities and over 10,000 PDF certificates from various authorities. Michael Harms, CEO b2b-aero: “It is a great opportunity to be part of the AVIATAR platform. Our industry-leading software will bring significant value to all AVIATAR users and drive the digitalization of component processes. We make our solutions available to new customer groups and therefore we are looking forward to providing further solutions on the AVIATAR platform.”

Sven Heitsch, Vice President Digital Fleet Solutions Operations of Lufthansa Technik: “We are proud to welcome b2b-aero in the AVIATAR ecosystem. b2b-aero will bring essential value to all AVIATAR customers with their One-AeroMRO solutions. The integration of the Capabilities App by b2b-aero is a major milestone for our open and modular platform. b2b-aero is the first partner of AVIATAR to use our software development kit. We are looking forward to announcing additional b2b-aero services on AVIATAR as well as welcoming more industry leading partners on our platform.”

Lufthansa Technik Connection 6.2017
**VIATAR** features an open and modular architecture, allowing not only the safe storage of Wizz Air’s operational data, but also the use of the data for predictive maintenance solutions, condition monitoring and fault analytics. Christian Ambiehl, Wizz Air’s Head of Maintenance, said: “As one of the most innovative low-cost airlines in Europe, Wizz Air also has a track record of economic success. Working with VIATAR, we are going to bring additional value and benefits to our fleet operations by interconnecting our various data sources on a single screen. As a long-term Lufthansa Technik customer, we appreciate their focus on the technical and operational side of the airline business.”

Dr. Christian Langer, Head of Digital Fleet Solutions at Lufthansa Technik, said: “Wizz Air has demonstrated how a start-up airline can become a strong player in Europe’s airline market. We look forward to co-create new apps and digital solutions for the business with one of Central and Eastern Europe’s leading low-cost carrier. This start-up spirit combined with the skills and technical operations vision of Wizz Air will help VIATAR to become an even stronger partner for operators in their digital transformation strategies.”

VIATAR allows operators and other players in the MRO market to collaborate on an open and neutral platform. The platform applies analytical models to provide new insights, recommendations and notifications, enabling customers to make faster and better decisions. VIATAR rewards its users through the optimization of operating hours, reduced consequential costs and safer as well as more reliable fleet operations.

VIATAR is an innovative and holistic platform that offers an extensive variety of digital products and services for MRO by combining multiple apps, web-based, and in one place.

VIATAR is independent of Lufthansa Technik and any MRO service contracts. It serves as a central and connecting hub for apps that offer digital products and services for the aviation industry. Specified to their individual needs, customers can select from those apps and chose the ones they prefer.

**Predictive maintenance for Wizz Air**

Wizz Air is partner for **Lufthansa Technik’s MRO IT platform VIATAR**. Both companies have announced that the largest low-cost carrier of Central and Eastern Europe will use the services available through the MRO provider’s Digital Fleet Solutions.

Working with VIATAR we are going to bring additional value and benefits to our fleet operations.

Christian Ambiehl

---

From left: Dr. Christian Langer, Head of Digital Fleet Solutions at Lufthansa Technik; Heiko Holm, Chief Technical Officer at Wizz Air, and Robert Gaag, Vice President Corporate Sales EMEA at Lufthansa Technik.
Two years ago, Lufthansa Technik and GE Aviation decided to create a world-leading aircraft engine service and overhaul center for GEnx-2B and GE9X engines. Laying the foundation stone of the XEOS facility on 27 September 2017 marked the start of the practical launch of the project. At the ceremony, Thomas Boettger, XEOS Managing Director of Business, said: “Today’s celebration marks a symbolic launch of our project. XEOS means modern technologies, world-class solutions as well as highest standards of quality and safety.”

Work on the construction site began in early August 2017. The joint venture will invest around 230 million euros to create one of the most advanced aircraft engine service centers in the world. The rough framing work for the main building will be completed by March 2018. As soon as in summer 2018, the first pieces of repair equipment will be brought in. According to the plan, the buildings will be handed over to the investor in December 2018, so that in spring 2019 the center can receive its first engines. In its full-fledged configuration, XEOS will employ 600 aviation specialists. The XEOS center is already attracting top-class specialists, engineers and students of technical faculties all over Poland. Today the center already employs 86 people, a number expected to increase to 100 by the end of this year. In spring 2019 when the plant is to be fully operational, there will be about 140 people working there. The plant is intended primarily to service GEnx-2B engines, and in subsequent years also GE9X.
Shining in new splendor

The facility of Lufthansa Technik Budapest is shining in new splendor after the **Hungarian base maintenance company** recently renovated and repainted its hangar.

Lufthansa Technik Budapest has been one of the main pillars of Lufthansa Technik’s base maintenance network in Europe since 2000. The company offers overhaul and maintenance services for the Boeing 737 Classic and NG and for A320 family aircraft. Around 450 highly skilled engineers and mechanics perform overhauls on an average of 160 medium-range aircraft every year.

The hangar used by Lufthansa Technik Budapest is rented from Budapest Airport. It was built in 1983 and needed some renovation work, having been in operation for more than 30 years. All window frames and windows were replaced and the insulation in the hangar roof was refurbished fully. Finally, the hangar was repainted in Lufthansa colors. Now it meets all of the requirements of a modern 21st-century facility.

The 6,000-square-meter hangar has two docks, providing sufficient space for five aircraft to be overhauled. The cutting-edge ventilation system allows aircraft to be painted in the hangar immediately following overhaul. In addition, Lufthansa Technik Budapest operates numerous workshops spread over a total of almost 2,800 square meters of floor space, including shops for non-destructive crack testing, cabin fitting work and flight control systems. On completion of the hangar renovation works, the new outside appearance finally matches the state-of-the-art services of the Hungarian company.

—

Shining in new splendor

Following comprehensive modernization work and repainting, the hangar of Lufthansa Technik Budapest is shining in new splendor.
A race against time

The term Airline Support Team (AST®) is the name given to Lufthansa Technik’s expert teams, who lead the way throughout the industry when it comes to providing swift assistance on site for critical technical problems. The AST® team in the Airframe Related Components (ARC®) unit turned in an outstanding performance recently in every respect.

9:00 a.m.
The inquiry was logged at 9:00 a.m. in the ARC® unit. Julian Groenwoldt, Product Sales Manager Airframe Related Components, reported an AOG problem with the customer Air Serbia. A piece of sheet metal in an air duct of an Airbus A330 engine had become so bent that it was jutting out into the air flow. The aircraft happened to be the airline’s only long-haul jet and was scheduled for a fully-booked flight to New York (JFK) the following day. An overnight repair would therefore be necessary.

10:00 a.m.
At 10:00 a.m., the responsible AST® manager Paul Leidorf discovered that the material was available and informed the customer. The question now was how spare parts, tooling and the repair team could be transported to Belgrade. The only scheduled flight was the following day – not an option for Air Serbia. To save time, the customer offered to send its own aircraft to pick up the crew and equipment.

11:08 a.m.
A short time after Paul Leidorf had sent the customer the relevant proposal, an additional damage report was received at 11:08 a.m.: Because the bent sheet had collided with two blocker doors in the thrust reverser, these also had to be replaced.

12:08 a.m.
One hour later, the engineering team provided confirmation of the workscope and the work order was in place. The manner in which the AST® crew was assembled to perform the repair on site showed the true spirit of the employees. Two qualified mechanics from the later shift spontaneously declared their willingness to take on the task.

1:20 p.m.
Finally, at 1:20 p.m., the message was received from the customer: A charter plane would be used for the transport. The material now had to be assembled, readied for customs clearance and presented for transport.
At 7:40 p.m., the Lufthansa Technik Logistik Services employees delivered the team and shipment items to the aircraft. The aircraft specially chartered for the transport was a Cessna Citation Jet. To add perhaps a certain irony to the story, the twin-engine business jet aircraft bore the tail sign D-CAST. It transpired when loading the aircraft that earlier telephone calls in relation to the width of the cargo opening were highly justified: The door of the business jet was just about large enough to allow the spare parts to fit through.

At around 8:00 p.m., the Cessna took off from Hamburg Airport and landed uneventfully in Belgrade at 10:30 p.m.

The engineers from the AST® team started on the repair immediately, finishing up successfully at 8:00 a.m. the following morning.

An AOG for a very important flight was averted and the customer was very happy. The Airbus A330 took off on time for its fully booked flight to New York (JFK). Predrag Marković, Supply Chain Manager at Air Serbia, expressed his satisfaction too on how the race against time had gone. He wrote: “Air Serbia would like to thank you for your very professional and efficient support in the repair of our A330. That day, we made a request in the morning to Lufthansa Technik; your team was ready in the afternoon, came to Belgrade and performed the repair. I hope we can count on you in the future should we have a similar situation.”

Julian Groenwoldt, Product Sales Manager in the ARC® unit, gave a clear response: “Air Serbia can count for certain on the performance of Lufthansa Technik and its AST® teams, and that applies for every other operator too who turns to the Lufthansa Technik Airline Support Team with a technical problem.”

Once Air Serbia had sent the confirmation/service order, preparations began at 2:00 p.m. Tooling and material lists were readied and material assembled and packed.

Customs clearance was the next step. The material and tooling arrived at 4:00 p.m. into Lufthansa Technik Logistik Services. The experts in aviation logistics are experienced in handling such complex tasks. However, what was special in this case was that special formalities were required because the tooling had to be brought back again.

Mission accomplished
Fly as you want

The Italian airline NEOS is all geared up for growth. And with Lufthansa Technik, it is relying on a trusted partner for the component supply needs of its new Boeing 787 fleet.

At the end of year, NEOS will reach another milestone in its history: The first Boeing 787-9 is scheduled to be delivered to the airline in mid-December 2017. NEOS will then become the country’s first Boeing 787 operator. To ensure reliable component support for this brand-new aircraft, NEOS has signed a Total Component Support (TCS®) contract with Lufthansa Technik.

The new contract is a further milestone in the long-term cooperation between Lufthansa Technik and NEOS, which began when the airline started its operations in 2002. Since then, Lufthansa Technik has been providing Total Component Support for the airline’s Boeing 737NG and 767 fleets. In recent years, NEOS has also contracted Lufthansa Technik with different maintenance, repair and overhaul services.

In the 15 years since its foundation, NEOS – whose first commercial flight was on 8 March 2002 – has attracted attention in the Italian aviation market thanks to several premieres. The first regular NEOS flight to Cabo Verde in June 2002 was simultaneously the very first authorized connection from Italy to this destination.

Innovative approach in Italy

NEOS is also the first Italian airline to be certified as a maintenance organization since its inception, carrying out technical maintenance on its own aircraft and on the aircraft of other carriers with its own
On the 767 fleet, passengers are entertained by a new in-flight entertainment (IFE) system based on the wireless BoardConnect infotainment solution of Lufthansa Systems.

For its latest premiere, NEOS is relying on the support of Lufthansa Technik right from the start. Before the phase-in of the new aircraft, Lufthansa Technik will provide independent quality assurance as part of an Aircraft Production Inspection Program for the three Boeing 787-9 aircraft at the manufacturer’s site in Seattle, Washington, USA. Once the aircraft have been incorporated, Lufthansa Technik will support the daily operations of the new fleet. Services will include component repairs and overhauls, pooling and home base leases. Component supply will be realized via the German Lufthansa Technik facilities in Frankfurt and Hamburg.

Marco Brusa, Technical Director at NEOS, commented: “As the first 787 operator in Italy, we are very proud to welcome this aircraft type to our fleet. In Lufthansa Technik we have found an experienced partner to provide us with 787 component support. The company has demonstrated outstanding service reliability and made a very competitive offer. We look forward to our future cooperation.”

Georgios Ouzounidis, Senior Director Corporate Sales Europe at Lufthansa Technik, said: "We are delighted that NEOS is entrusting us with the component support for its new Boeing 787 fleet. Since the start of its operations 15 years ago, we have successfully supported the growth of the carrier. We are proud to have been selected once again so that we can continue this effective partnership."

Emanuela Marabese
Sales Executive
Phone +39-335-461688
emanuela.marabese@lht.dlh.de

About NEOS

The Italian airline NEOS was founded in June 2001 and started regular flight operations in March 2002. It currently operates a fleet of six Boeing 737-800 and three 767-300 aircraft. As a certified Part 145 company and as an approved training organization (ATO), NEOS carries out technical maintenance services and training programs for pilots and flight attendants. NEOS operates bases at the airports in Milan/Malpensa, Verona, Bologna, Bergamo and Rome, from which it offers daily regular flights and charter flights to destinations in Europe and the rest of the world.
Fascinated by shining strips

Product Engineer Katharina Wiele has dedicated herself to the world of light strips. Together with her team colleagues, she works on the enhanced development of the GuideU non-electrical floor path marking system from Lufthansa Technik.

When Katharina Wiele refers to the lighting strips of GuideU, her face also lights up with enthusiasm. She works as a product engineer in the team, which looks after enhanced development, distribution and customer care for the non-electrical floor path marking system from Lufthansa Technik. Her tasks are highly diverse – from the initial idea to development through to qualification, approval and documentation – she is responsible for all aspects. Being inventive and creative is just as much part of her everyday work as producing documents. When Katharina Wiele is developing something new for a customer, her office sometimes looks a bit like a testing laboratory: Small test setups can be found directly next to her desk.

GuideU CustomFit is an example of one such enhanced development. “Many of our decisions are customer-driven,” says the engineer. In that instance, a customer approached the GuideU team and asked if the safety strips could be integrated fully into the carpet. “This presented a particular challenge in that some colors physically block the strips from recharging – as was the case with the basic brown tone of the carpet. A pure overprint was therefore not sufficient,” she says about the project.

The pivotal idea was inspired by the perforated promotional films on some buses: In just the same way that these films...
GuideU – leading the way

Available in numerous colors and different variants, GuideU is the next generation of non-electrical floor path marking systems. It consists of photoluminescent light strips on the cabin floor to guide passengers to the exits in the event of an emergency when cabin lighting fails. Designed to fit every common cabin floor material GuideU provides for very easy installation, a broad change of colors and a lifetime without maintenance. //

GuideU

Laboratory in the office: Katharina Wiele and her colleague are testing new developments.

allow a view out the window, small holes in the overprint of the GuideU strips ensure that the strips can recharge sufficiently. After several attempts they came up with an overprint on which the small holes do not impair the visual appearance and the safety marking nevertheless illuminates as a uniform strip in the darkness. “We invited the public representatives along when it came to the approval and presented GuideU CustomFit to them. It worked,” reflects Katharina Wiele.

Projects and customer care

The new development opened many doors and has already convinced numerous customers. “We develop a tailored solution for every customer. The customer sends us a carpet sample and we try out the basic color and the printing. We have gained valuable experience in the intervening time and can develop a solution in just a few steps,” says Katharina Wiele.

Apart from new developments, she also looks after customers worldwide, responding with her colleagues every day to numerous e-mails with queries or complaints. Her travel schedule is quite full. Customers have to be supported on site when GuideU is being installed, and questions have to be answered at trade fairs.

“Time is always the biggest challenge for us,” she says. “Queries are generally urgent so we have a tight schedule. You have to be well organized, in the team also.” When a new aircraft type is being rolled out, the team has to make sure that GuideU meets all of the relevant requirements. Another task that is increasingly occupying the GuideU team is the testing of LED light scenarios and elaboration of recommendations for how the scenarios can be adjusted to ensure that the GuideU strips charge sufficiently. “Imitating a red sunrise will not charge the strips for example,” explains Katharina Wiele. “The light scenario must be adjusted in such a way that the safety requirements are fulfilled. These specifications are then even entered in the Airplane Flight Manual.”

Direct path to the GuideU team

Katharina Wiele came to Lufthansa Technik as part of a dual study program at the University of Applied Sciences in Hamburg. After a number of weeks as an intern in metal processing, she studied aeronautical engineering and graduated first with a Bachelor of Engineering and then Master of Science. During her practical work experience, she gained a good impression of a wide range of different areas of Lufthansa Technik.

Following graduation, she joined the GuideU team directly and has qualified as an engineer also in recent years. “I have grown into the job and can now handle everything. My tasks are very varied and I get to travel a lot – all of which I really enjoy.” Nevertheless, she is considering changes. “I could see myself moving more in the direction of sales, but I would like to stay in the same area,” she says. Her enthusiasm for lighting strips is therefore not likely to fade any time soon.
Lufthansa Technik Turbine Shannon, part of the Lufthansa Technik EPAR network, has taken a leadership position as a center of excellence for engine parts repair. The company is on a continuous development path, preparing for the future with targeted investments.

Delivering high-quality products at competitive costs and keeping pace with changing market demands – these have been the main focuses of Lufthansa Technik Turbine Shannon since its foundation 25 years ago. The company, a wholly-owned subsidiary of Lufthansa Technik, is part of the global Engine Parts and Accessories Repair (EPAR) network. It offers its services to a large customer base, including leading manufacturers, engine shops and part traders.

An Irish success story

The company was initially founded as Shannon Turbine Technologies and located in an 8,000-square-meter purpose-built facility constructed on a green field for the provision of engine parts repair – for which it is licensed by the OEMs General Electric and CFMI International. Shannon Turbine Technologies was acquired by Lufthansa Technik Group in 1996 and renamed Lufthansa Technik Turbine Shannon. Since then, it has grown significantly to over 200 employees, successfully overhauling thousands of GE and CFMI engine parts along the way.

“We are proud of the achievements of the past 25 years, and are preparing for the future,” said Oezguer Yesilkaya, CEO of Lufthansa Technik Turbine Shannon since August 2017. “Our industry is currently experiencing its biggest-ever transformation with the highest number of new civil aircraft engine types being introduced to the market.”
The expertise and focus of Lufthansa Technik Turbine Shannon is currently on the repair of high-pressure turbine shrouds as well as high- and low-pressure turbine nozzle guide vanes from CFM56, CF6-80C2 and CF34 engines. The company has experienced many changes. Ten years ago, for example, one of its main products was the repair of combustors of the CFM56-3 engine type. And the CFM56-3 is still part of the portfolio – but the focus has shifted.

Frederic De Sousa, Western Europe EPAR Sales Manager and based at Lufthansa Technik Turbine Shannon, explained: “We follow engine life cycles, and we are first movers in repair capability introduction. Our main business allocation is right now on mature engines where we see the biggest potential. Our current focus is to win the highest possible market share of parts repairs on CFM56-5B and CFM56-7B engine types. But we also maintain capabilities for other engines, such as the CF6-80 and CFM56-5A, and continue to support legacy engines with consistent volumes.”

With the introduction to the market of many new engine types at the same time, a revolution is taking place. “We are preparing to ensure that we will become a possible provider of services to new engines such as GEnx, P&W GTF or CFM LEAP. All these new types are entering into service at the same period with unprecedented planned quantities to be delivered. This is quite unique,” said De Sousa.

Lufthansa Technik Turbine Shannon is therefore busy preparing itself, by supporting growth on mature engines and managing the transition to the next big step on the engine market.

**Worldwide EPAR network**

The growth of the Lufthansa Technik EPAR network is also supported by a worldwide sales network, led by Michael Malewski, Head of Sales and Customer Services EPAR, with presence in North America, Asia and Europe. This common sales force is in charge of selling the repair capability of the EPAR network from the various facilities such as Lufthansa Technik in Hamburg and Berlin, Airfoil Services Sdn. Bhd. and Lufthansa Technik Turbine Shannon to the various worldwide customers. The sales managers form a cross-functional team and are responsible for a region and/or specific customer.

“Lufthansa Technik Turbine Shannon is totally integrated in the Lufthansa Technik Group,” said Malewski. At the same time, as an independent repair shop, the company has the advantage of being an alternative to the manufacturers. It offers customized solutions with 100-percent repair capability of its portfolio. The various product capabilities and prices are displayed in the EPAR catalogue available on the Lufthansa Technik website.

With great team spirit in a lean production environment, collaborative OEM relationships and ongoing investments in equipment, training and product development, Lufthansa Technik Turbine Shannon will further strengthen its position as a center of excellence for engine parts repairs.

**Investments in the future**

The company is also engaged in a number of joint repair development projects with leading manufacturers. “Cooperation with the manufacturers is the key to our future,” emphasizes Yesilkaya. “We are investing in new technologies, automation and improvement initiatives to support current market requirements, and preparations for the developments of the future that will guarantee our success for the next 25 years.”

Michael Malewski, Head of Sales and Customer Services EPAR (right), leads the worldwide Lufthansa Technik EPAR sales network. EPAR Sales Manager Frederic De Sousa is responsible for Western Europe and based at Lufthansa Technik Turbine Shannon in Ireland.
Material planning at its best

How often does a specific component in an aircraft fail, requiring replacement? Newly developed software enables a precise answer to this question – for even better demand-oriented planning of material inventories.

Over 140 customers operating more than 4,000 aircraft rely on Lufthansa Technik for material supply. For this purpose, more than 40,000 different components with more than 130,000 different part numbers are kept in its worldwide material pools, with a total value amounting to 1.7 billion euros. The Material Availability Solutions unit has the task of ensuring that every Total Component Support (TCS®) customer always has the right component at the right time in the right place, which requires a sufficient number of spare parts in inventory. In addition to availability and prompt supply to the customer, cost-effectiveness is always critical here. Having too many components costs money and ties up resources.

The staff of Material Availability Solutions used to calculate the optimal material inventory using specific guidelines and algorithms, but over time the task became much more complex owing to the growing number of aircraft types and customers – and thus different components. “That’s when we first started thinking about taking the variety of data that we’ve collected over the course of supplying material to our customers during the last 20 years, and improving the analysis and utilization of it,” explains Project Manager Tilman Seidel.

Statistical analysis

An initial research project involved a look at the statistical probability of component failures and their dependence on factors such as flight hours, flight cycles and calendar days. This alone enabled better predictions. The follow-up project – Material eMotion – went a decisive step further toward the goal of optimizing material...
planning for the component pool and automating it as much as possible. “It was a really extensive project. Naturally, we needed mathematical know-how, but we also looked at process flows. And it was a special challenge to use and apply these data sensibly at the operational level,” says Seidel.

The analysis of the collected data enables material planners to create precise forecasts of how components of a specific technology behave during flight operations. “For instance, durability is specific to customers, because some customers replace parts more frequently than others,” explains Seidel. Generally, the statistical failure rate for components is a function of flight hours, cycles, duration and customer-specific behavior. By using the new methods, for each component a significant dependency on a certain parameter, e.g. the number of takeoffs and landings for flaps, can be proven.

**Special software**

The project team and its partners developed software that can be used for targeted analyses of the data – a tailored SAP adaptation that enables the unique treasure trove of knowledge to be used in daily operation. Success was evident quickly. Within just the first two months after the system was introduced, precise demand forecasts enabled the reduction of 35 million euros worth of inventory, and up to 98 percent of components are now planned largely automatically. The application can be extended as desired and is thus fit for further growth.

**Higher performance level**

“The simplification of our material inventories especially benefits our customers,” says Andreas Drosdowski, Head of Fulfilment Open Loop EMEA, describing the application of the new system in practice. “We can predict our customers’ demands even better and deliver better service at lower cost. In other words, our performance level has climbed noticeably again.” Among other things, static demand tracking enables more precise recommendations for inventory at customers’ home airports – and ensures better availability in the event of unforeseen incidents.

“We are getting a lot of positive feedback from our customers. It’s truly a win-win situation – lower costs with improved availability,” says a pleased Drosdowski. And the next phase is already in planning. The unit wants to use the data to advise aircraft operators on the areas where they can optimize material supply for their fleets even more. The prototype for these analyses has already been produced and tested with individual customers. The feedback was enthusiastic, and so plans now call for the prototype to be extended even further – so that together, even more improvement can be achieved. ☺
A business goes digital

There was one topic that clearly dominated the discussions at the **MRO Europe 2017 conference and exhibition**: how to bring the MRO business into the digital era, and how to use Big Data technology for optimum predictive MRO.

The 20th MRO Europe, which took place again this year in London, marked a new record for the industry’s highly rated event series: 8,200 delegates met at the grounds of the ExCeL exhibition complex in the Docklands area, among them about 500 airline representatives. The delegates came from 96 countries, and Lufthansa Technik was among the 400 exhibitors who presented their products and services on the exhibition floor.

Meanwhile, there are a couple of major providers on the market that offer data-driven solutions. Lufthansa Technik launched Condition Analytics at MRO Europe 2016 and the AVIATAR platform at MRO Americas 2017. At MRO Europe 2017, Airbus presented its Skywise product and Air France Industries & KLM Engineering and Maintenance presented their Prognos system, just to name two competitors. The potential power of all of these Big Data solutions marketed at MRO Europe 2017 seems to be clear to the delegates.

Nevertheless, operators have just started to identify the benefits and savings for their business. There are also concerns regarding Big Data analytics, and it is not clear what users can expect to get out of these tools when they feed them with their own operational data. In addition, some ethical considerations on handling the complex data must still be resolved. But there is definitely a clear vision to ultimately predict maintenance requirements much more precisely than is currently possible. Another issue that dominated discussions at MRO Europe was the lack of qualified mechanics in the industry both today and in the foreseeable future. With a record number of maintenance technicians becoming eligible for retirement, commercial MRO providers throughout the world will face an increasingly difficult challenge over the next ten years.

Further topics discussed at MRO Europe 2017 included opportunities for cost savings in all segments of the MRO business, particularly in the area of component support and supply chain management. As low-cost carriers are still on a growth path in Europe, their MRO demands and the available solutions for their dedicated operational patterns were also heavily discussed. Finally, new aircraft and engine types and the particularities of maintaining them were also a key topic of the event. The next edition of this conference and trade fair will take place on 23 – 25 October 2018 in Amsterdam, the Netherlands.

**Benefits of Big Data analytics**

**Aerospace Big Data 2017 //** At the conference on 6 – 7 December 2017 in London, UK, Sven Heitsch, Vice President Digital Fleet Solutions of Lufthansa Technik, will join two panel discussions on the topic of digital transformation. What problems can Big Data solve for airlines? And what will the price tag look like?
Speaking the customer’s language

Ten years ago, *Lufthansa Technik Vostok Services* was founded with the goal of providing a complete range of component and material services to customers in Russia and the CIS. Headquartered in Moscow City, the company has grown to currently more than 30 employees.

*Lufthansa Technik Vostok Services* started on a small scale in 2007 with a team of five employees dedicated to strongly enhancing the component and material support delivered by Lufthansa Technik as the leading MRO provider in Russia and the CIS. This local presence meant speaking the language of the customer, developing a profound understanding of the specific requirements of the region’s airlines and characteristics and thereby significantly improving the company's services. The growth of the company over the past ten years shows that these goals have been largely met. Today, the office on Tsvetnoy Boulevard in Moscow is home to more than 30 employees who provide component services for more than 300 aircraft in Russia and the CIS region. The aircraft types handled range from the Airbus A320 family and the A330 to the Boeing 737NG, 747, 757 and 767. The Russian-speaking employees are responsible for ensuring that everything runs smoothly on site, guaranteeing close support for customers and rapidly resolving any problems. In this way, the customer service center in Moscow has matured into a central point of contact for Lufthansa Technik customers in the Russian market, one that takes advantage of all the partners in Lufthansa Technik’s globally positioned Component Services division – from Hamburg to Hong Kong to Miami. Martin Lutz, the new General Director of Lufthansa Technik Vostok Services, said: “Russia is a very important market for Lufthansa Technik, especially for Component Services. We already have a large number of customers here, but our goal is to improve our position further. For our industry, we want to be number one in customer service by providing tangible added value.”

**Meet us at...**

**19 – 21 Nov. 2017 | Buenos Aires, Argentina**

**ALTA Airline Leaders Forum**

The largest event of its nature in the Latin American and Caribbean commercial aviation industry is designed to stimulate an international dialogue that promotes safer, more efficient and environmentally friendly air transport in the region.

**23 – 24 January 2018 | Dubai, UAE**

**MRO Middle East**

The MRO Middle East conference and exhibition is a focal point of the region’s aviation industry. Decision-makers from airlines and MRO providers will discuss the critical issues impacting the MRO business.

**6 – 11 February 2018 | Singapore**

**Singapore Airshow**

Singapore Airshow, Asia’s largest aerospace and defense event, is one of the top three air shows in the world and serves as a global marketplace and networking platform for the military and civil aviation community.

**14 – 15 Feb. 2018 | Panama City, Panama**

**MRO Latin America**

The MRO Latin America conference and exhibition is a networking event for the MRO market of South and Middle America. The conference will review regional and global industry drivers and look at pain points and opportunities within the MRO industry.

**1 – 2 March 2018 | Moscow, Russia**

**MRO Russia & CIS**

A major industry conference and exhibition for the region, MRO Russia & CIS has gained global recognition as the only event of its kind and scale in the ex-USSR dedicated entirely to covering the burning issues of restructuring MRO services for the region’s air transport.

Follow this link to find out more about Lufthansa Technik’s participation and presentations at upcoming fairs and conferences: [lufthansa-technik.com/events](http://lufthansa-technik.com/events)
World of services

Our range of products and services can be tailored for commercial and private fleets of every mix, kind and age.

**Total Support Services**
Total Support Services are the first choice for any customer wanting to enjoy cost-efficient and reliable flight operations and focus on his core business at the same time.
- Total Operational Support (TOS®)
- Total Technical Support (TTS®)
- Total Base Maintenance Support (TBS®)
- Total Material Operations (TMO®)
- Total Component Support (TCS®)
- Total Engine Support (TES®)
- Total Landing Gear Support (TLS®)
- Aircraft Leasing & Trading Support (ALTS®)

**Single Services**
Single Services and shop load events such as letter checks, engine overhauls or repairs of single components are at the core of a unique assembly of products and services.
- Aircraft Services
- Component Services
- Engine Services
- Landing Gear Services
- VIP & Special Mission Aircraft Services

**Special Services**
Lufthansa Technik offers a product portfolio reaching beyond traditional MRO services from the manual.
- Composite Repairs (ARC®)
- Engine Parts & Accessories Repair (EPAR)
- Maintenance Management Services (MMS)
- Logistics and training
- AOG services
- Surface treatment

**Original Equipment Innovation (OEI)**
Lufthansa Technik has successfully established a line of cabin products.
- Cabin management & IFE systems
- Aircraft and cabin equipment
- Connectivity
- Patient transport solutions

**Digital Services**
Lufthansa Technik provides innovative digital platforms to support technical operations.
- AVIATAR
- manage/m®

Please follow this link for the complete MRO service portfolio and more details about Lufthansa Technik’s solutions for fleets of any size.
www.lufthansa-technik.com/services
Boeing

**Boeing 737 CL/NG**
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services: CFM56-7B
- Completion

**Boeing 737 MAX**
- Component Services
- Further services in preparation

**Boeing 747**
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services: JT9D, PW4000, CF6-80C2
- Completion

**Boeing 757**
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services: RB211-535
- Completion

**Boeing 767**
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services: PW4000-94, CF6-80C2
- Completion

**Boeing 777**
- Line Maintenance
- Base Maintenance
- Component Services
- Completion

**Boeing 777X**
- in preparation

**Boeing 787**
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services*  
  *schedule to be defined

**MD-11**
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services: CF6-80C2, PW4000-94

Regionals

**Bombardier Q400**
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services: PW100, PW150

**Bombardier CRJ**
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services: GE CF34

**Embraer**
- 135/145, 170/175, 190/195
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services: GE CF34

Business Jets

**Airbus Corporate Jets**

**ACJ**
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services: CFM56, V2500-A5
- Completion

**BBJ**
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services: CFM56-7B
- Completion

**Bombardier**
- Challenger, Learjet,
- Global Express
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services: CF34

**Embraer**
- Legacy, Lineage
- Line Maintenance
- Base Maintenance
- Component Services
- Engine Services: CF34
Let’s talk about solutions

Senior Director
Corporate Sales
USA and Canada
Sahib Ajjam
p +1-305-677-5199
sahib.ajjam@lht.dlh.de

Senior Director
Corporate Sales
Latin America
and Caribbean
Jörg Femerling
p +1-305-379-2604
joerg.femerling@lht.dlh.de

Senior Director
Corporate Sales
Europe
Georgios Ouzounidis
p +49-40-5070-5295
georgios.ouzounidis@lht.dlh.de

Senior Director
Corporate Sales
Middle East and Africa
Richard Haas
p +49-40-5070-3053
richard.haas@lht.dlh.de

Vice President
Corporate Sales Americas
Frank Benveger
p +1-305-379-1222
sales.americas@lht.dlh.de

Vice President
Corporate Sales EMEA
Robert Gaag
p +49-40-5070-68406
sales.emea@lht.dlh.de

Senior Director
Corporate Sales Eastern Europe
and CIS
Dmitri Zaitsev
p +49-40-5070-5404
dmitri.zaitsev@lht.dlh.de

Our local country representatives

America
Canada
Stefan Kramarczik
p +1-438-989-9409
stefan.kramarczik@lht.dlh.de

Chile
Carlos Sotomayor
p +56-2-2573-7770
carlos.sotomayor@lht.dlh.de

Europe, Middle East and Africa
BeNeLux
Rudi Preud’homme
p +32-2-752-8690
rudi.preudhomme@lht.dlh.de

Italy
Emanuela Marabese
p +39-02-58571483
emanuela.marabese@lht.dlh.de

Turkey
Fulya Türköz
p +90-212-465 55 57
fulya.tuerkoez@lht.dlh.de

United Kingdom, Ireland & France
Dan Hepworth
p +44-7812-091112
daniel.hepworth@lht.dlh.de

Dubai
Ziad Al Hazmi
p +971-4-4057-557
ziad.al-hazmi@lht.dlh.de

China
Steven Wang
p +86-10-6465-1593
steven.wang@lht.dlh.de

Japan
Hidenori Sato
p +81-45-309-2777
hidenori.sato@lht.dlh.de

Vietnam
Praveen Rajagopal
p +65-6733-9081
praveen.rajagopal@lht.dlh.de
L-connect
Your world of connectivity

Lufthansa Technik is the global one-stop partner for in-flight connectivity – from planning and installation to in-service support, from cockpit to cabin, and from single aircraft to the largest fleet. Connecting your flying assets reliably, quickly and flexibly in a seamless solution prepares you perfectly for all future challenges.

Lufthansa Technik AG, marketing.sales@lht.dlh.de
Call us: +49-40-5070-5553

www.Lconnect.aero