AviTrader™

avitrader.com | Edition #107

February 2023

MRO

Aerospace Magazine

Cost Control:

Managing the rising cost of component repairs

Technology

A smoother migration to MRO software

VTOL Aircraft

Creating opportunities for support services

Industry Interview

Demetrios Bradshaw
Managing Director, Aeras Aviation

Trent 700 engine undergoing overhaul at EGYPTAIR MAINTENANCE & ENGINEERING in Cairo.
© Keith Mwanalushi

Calls from Egypt are loud and clear: cooperation is crucial for Africa

There have been a lot of discussions about African aviation and we are all too familiar with the challenges that face the region's air transport sector. During a visit to Cairo in Egypt recently there was a strong feeling of cooperation and partnerships amongst aviation industry players in a bid to strengthen aviation services in Africa.

The post pandemic recovery is slow, but it's happening nonetheless. We know that IATA has several initiatives aimed at Africa in 2023 so it will be interesting to see how those play out. Currently, we are seeing that cooperation and partnerships are shaping how the industry responds to challenges and growth opportunities in the region.

In Cairo , EGYPTAIR MAINTENANCE & ENGINEERING just signed a partnership with Petra Aerospace of Jordan that will extend the capabilities of the Egyptian MROs engine services for repair and overhaul of CFM56-3 engines.

I had the opportunity to meet with Eng. Walid El-Khafif, Chairman and CEO of the EgyptAir maintenance division while in Cairo and he says the extension of engine services with Petra will also include engine teardowns at the Cairo facility. This will no doubt be welcome news, because we see a need for collective efforts for the region's airlines – many stifled with high costs – to have improved access to used serviceable materials, pooling and exchanges in local markets, and at a decent price, perhaps.

However, prices for the repair of components globally are rising. In this issue we have scoured the market and the trend pattern is pretty clear; the cost is rising so having a clear strategy and exploring possible alternatives in the market might be worthwhile but that's if lessors and OEMs are willing to engage in those discussions – very unlikely!

Keith Mwanalushi
EDITOR

CONTENTS

Cover image:
Logix.Aero

Publisher
Peter Jorssen
p.jorssen@avitrader.com

Editor
Keith Mwanalushi
keith@aeropublications.co.uk

VP Sales & Business Development (Advertising)
Tamar Jorssen
tamar.jorssen@avitrader.com
Phone: +1 (778) 213 8543

Graphic Designer
Volker Dannenmann
volker.dannenmann@gmail.com

Sales & Marketing Manager
Malte Tamm
malte.tamm@avitrader.com

Managing Editor
Heike Tamm
heike.tamm@avitrader.com

Published monthly by
AviTrader Publications Corp.
Suite 305, South Tower
5811 Cooney Road
Richmond, British Columbia
V6X 3M1
Canada
Tel: +1 (424) 644-6996
www.avitrader.com

Follow us on twitter Follow us on LinkedIn

Pandemic leaves rising component repair costs in its wake

TRANSITIONING leased engines or aircraft?

Keep your asset prepared, protected, and ready to fly.

Willis Services provides global engine and aircraft transition services to meet your unique needs. Our award-winning consultancy is focused on providing solutions to help mitigate the risks associated with planned – and unplanned – asset transitions. Combined with our approved Part 145 aircraft and engine maintenance facilities, we can provide our customers a customized services package to meet your specific needs.

OUR CAPABILITIES INCLUDE:

- ✓ Technical records management
- ✓ Onsite physical inspections
- ✓ Back-to-birth trace reviews
- ✓ Records systems maintenance
- ✓ CAMO & shadow CAMO services
- ✓ Ferry flight/demo flight support
- ✓ ARC issuance support
- ✓ Part 145 engine maintenance services
- ✓ Engine disassembly
- ✓ Engine stand leasing
- ✓ Engine/APU borescope
- ✓ Engine C-Check maintenance
- ✓ Engine removal & installation
- ✓ Aircraft disassembly
- ✓ Aircraft parking & storage
- ✓ Part 145 aircraft line & base maintenance

Willis Asset Management Limited

Willis Aviation Services Limited

Willis Engine Repair Center US/UK

Willis Services

sales@willisasset.com | +44 (0) 1656 754 777
www.wlfc.global/services

Lufthansa Cargo now operates world's first AeroSHARK modified freighter

Modification of Lufthansa Cargo's first 777F with AeroSHARK *© Lufthansa Cargo*

As a result of new technology developed by Lufthansa Technic and BASF, Lufthansa Cargo is now operating a Boeing 777F with AeroSHARK technology which will reduce its fuel consumption by one percent. The technology was first used on a SWISS 777-300ER and this is the first instance of the new technology's use on a freighter aircraft. The AeroSHARK modification was performed in mid-January as part of a scheduled maintenance layover for the freighter and was completed well within the time frame. The aircraft has now returned to active service and set off on its premiere flight from Frankfurt to Bangalore in India, before flying on to Chengdu in China. AeroSHARK is a surface film that mimics the microscopic structure of shark skin. It consists of ribs around 50 micrometres in size – the so-called riblets. If the airflow on the fuselage and engine nacelles of the Boeing 777F is optimised in this way, significant fuel savings can be achieved. For Lufthansa Cargo's aircraft, Lufthansa Technik estimates fuel savings of about one percent. Extrapolated to Lufthansa Cargo's entire 777 fleet, this will result in annual savings of more than 4,000 metric tons of kerosene and nearly 13,000 metric tons of CO2 emissions. Over time, the AeroSHARK modification will be incorporated within the entire Lufthansa Cargo 777 freighter fleet which will make these eleven aircraft more fuel-efficient and produce lower emissions. SWISS is also having its twelve Boeing 777-300ERs modified with AeroSHARK. Last December, Lufthansa Technik obtained a Supplemental Type Certificate (STC) from the European Aviation Safety Agency (EASA) for two types of Boeing 777s, paving the way for the serial application of AeroSHARK to the 777 fleets of the launch customers.

StandardAero establishes CFM56-7B service centre at DFW International Airport

StandardAero has achieved a number of milestones associated with the introduction of a service centre for the CFM International CFM56-7B turbofan engine at its DFW Centre of Excellence at Dallas/Fort Worth International Airport. StandardAero's CFM56-7B service centre will significantly expand the engine support options available at DFW to operators of the Boeing 737NG-family of aircraft. The DFW facility has now added the CFM56-7B to the operations specifications for its FAA Part 145 Repair Station, thereby enabling StandardAero's skilled team of professionals to provide powerplant support services to Boeing 737N operators. StandardAero is already authorised by CFM International to provide a full range of maintenance, repair and overhaul (MRO) services for the CFM56-7B from its facility in Winnipeg, MB, Canada, and its experienced DFW-based technicians are cross-training with their established Winnipeg counterparts. StandardAero has also installed the first of four dedicated gantries to support the CFM56-7B service centre within the 220,000 ft^2 engine DFW facility, facilitating the provision of a range of service offerings which will be made available over the coming months, including borescope inspections, boroblend repairs, engine module changes, QEC/LRU removal/installation and other 'quick turn' shop visits. The company will also be adding additional service capabilities in the near future, including fan, top case, bottom case, hot section and LPT repairs. Later this year, StandardAero will be introducing dedicated CFM56-7B test capabilities at the DFW facility's six-cell engine test centre, with CFM56-5B capability to follow. This milestone, which is expected to be achieved in early summer, will enable StandardAero to provide operators with performance and pass-off testing services, without the need to send their engines to a dedicated overhaul facility.

Air France chooses Lufthansa Technik for APU service of Airbus A350 fleet

Lufthansa Technik and Air France have signed a long-term agreement for the technical support of auxiliary power units (APUs) of the French airline's entire Airbus A350 fleet. Over the next six years Lufthansa Technik will provide extensive MRO services for the Honeywell HGT1700 APUs at its Hamburg site. Lufthansa Technik has long been certified by the manufacturer Honeywell as an official partner for MRO of the HGT1700 and as an official warranty station for this APU-type. The services for Air France cover a large part of the service portfolio, such as tests, repairs and overhauls, replacement of line replaceable units and life-limited parts as well as AOG (aircraft on ground) support and engineering services. Both labour and materials are billed on a "not-to-exceed" model, allowing Air France to exercise full cost control over the agreed services at all times.

AvAir teams up with Sanad to create global component exchange pool

AvAir, an industry-leading inventory solutions provider for the aviation aftermarket, has completed an agreement with Sanad, a global industrial services leader and a wholly owned subsidiary of Mubadala Investment Company (Mubadala), to provide asset management solutions for a vast array of Airbus, Boeing, and Embraer components. All materials will be made available for exchange to AvAir's network of customers worldwide. With this agreement, AvAir and the Sanad Group will create one of the world's largest component exchange pools, allowing customers access to overhauled and serviceable components, when and where they are needed.

ATSA becomes first South American operator of Dash 8-400 aircraft to join De Havilland Canada's cargo solutions programme

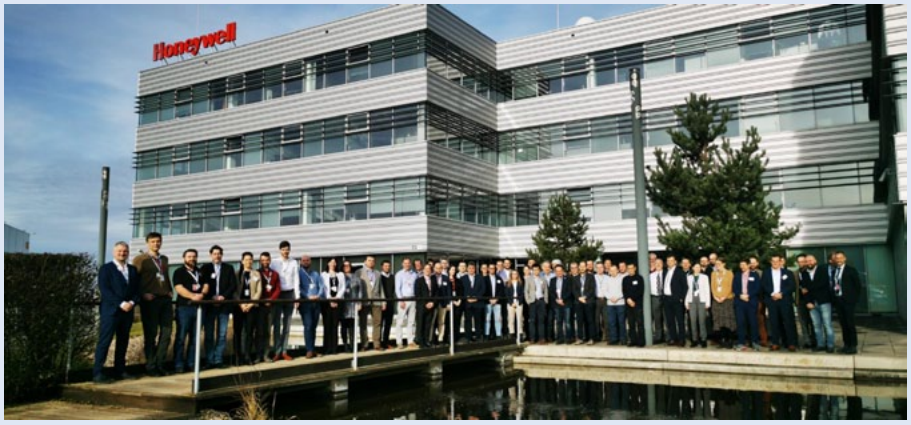
Image of ATSA Dash 8-400 aircraft *© De Havilland Canada*

De Havilland Aircraft of Canada (De Havilland Canada) has released that Aero Transporte S.A. (ATSA) has signed a firm agreement for a Dash 8-400 freighter conversion with a large cargo door (Dash 8-400 F-LCD). With this agreement, ATSA has become the first South American operator of Dash 8-400 aircraft to join De Havilland Canada's cargo solutions programme and ATSA's Dash 8-400 F-LCD aircraft will be the first one operating on the continent. ATSA currently operates two Dash 8-400 aircraft from its base in Peru to support the mining sector. "As an experienced operator of the Dash 8-400 aircraft, we have first-hand knowledge of its outstanding performance capability to support our expanding cargo operations in Peru's mining sector. Our country's complex geography that includes arid coastal plains, the Andean mountains and the rain forests of the Amazon basin, make the Dash 8-400 aircraft the ideal choice for this type of operation," said Carlos Cueva, President, ATSA.

ST Engineering secures CFM56-7B engine maintenance contracts from two airlines

ST Engineering has reported that its Commercial Aerospace business has secured CFM56-7B engine maintenance contracts from two established airlines based in Asia. Under these contracts, ST Engineering will carry out heavy maintenance of CFM56-7B engines for the two airlines at its engine MRO facilities in Singapore and Xiamen, China. Tay Eng Guan, SVP/GM of Engine Services at ST Engineering, said, "As flying activities continue to climb back up towards the pre-pandemic level, maintenance needs for the CFM56-7B engine are expected to rise in the next few years. These two airlines have been ST Engineering's longstanding customers for over ten years and we are pleased to continue our support for their engine maintenance needs and to help see through their recovery and growth." ST Engineering will be providing new engine solutions to better support customers by expanding capabilities into LEAP engines which power new-generation aircraft. The group started offering quick-turnaround services for the LEAP-1B engine at its Singapore facility in early 2022 and will provide the same service at its Xiamen facility this year. ST Engineering will soon also provide solutions for the LEAP-1A engine, starting with quick-turnaround services in 1H 2023.

Honeywell launches disruptive research on hydrogen fuel cells for aircraft



NEWBORN launch event © *Honeywell*

A consortium led by Honeywell has launched a European Clean Aviation project that will develop a new generation of hydrogen fuel cells for the aviation industry. Project NEWBORN will involve multidisciplinary collaboration between 18 partners from ten European countries to develop an aerospace-qualified megawatt-class fuel cell propulsion system powered by hydrogen. Green hydrogen, the term given to hydrogen produced by splitting water into hydrogen and oxygen using renewable electricity, is an extremely clean power source that can be used to propel future aircraft, which makes it appealing as the aerospace sector works to reduce carbon emissions. The megawatt-class fuel cell propulsion system delivered by NEWBORN will give birth to future, sustainable aviation beyond a megawatt. The final demonstrator will be integrated and tested by Pipistrel Vertical Solutions, a Slovene-based disruptive general aviation manufacturer. Work on NEWBORN will be performed at the Honeywell Technology Solutions research and development center in Brno, Czech Republic, and at other Honeywell and project-partner sites across Europe. Clean Aviation Joint Undertaking, the European Union's research and innovation programme for transforming aviation toward a sustainable and climate-neutral future, will fund €700 million (£625 million) over 20 selected ground-breaking sustainability projects in response to its first Call for Proposals for disruptive technology research to power the climate-neutral aircraft of the future. Project NEWBORN was the No. 1-ranked project in the first Call for Proposals, receiving the highest score by the selection committee.

Turkish Technic to provide base maintenance services to Air Serbia

Air Serbia A320ceo © *Turkish Technic*

Turkish Technic has signed an agreement with Air Serbia for the base maintenance services of four Airbus A320-family aircraft along with one A330 aircraft. In accordance with the contract, base maintenance of the first Airbus A320ceo aircraft has commenced at Turkish Technic's Istanbul Ataturk Airport facilities. Its certificate of release to service will be issued in the first week of February. The other aircraft within the scope of the contract will be taken to service at Istanbul Ataturk Airport facilities in the upcoming months. Operating as a one-stop MRO company with high-quality service, competitive turnaround times, comprehensive in-house capabilities at its state-of-the-art hangars, Turkish Technic provides maintenance, repair, overhaul, engineering, modification, tailor-made PBH and reconfiguration services to many domestic and international customers at five locations.

Seal Dynamics and Crane Aerospace & Electronics establish new partnership

Seal Dynamics, a subsidiary of HEICO, has partnered with Crane Aerospace & Electronics to exclusively distribute Crane's PL Porter brand mechanical seat actuation products to the commercial aerospace aftermarket. Crane products, particularly the PL Porter brand name, are well recognised and respected by airlines around the world. Seal Dynamics' ability to understand the complexities of the passenger seat aftermarket together with its technical sales capabilities is a powerful combination. This partnership will advance a new strategy to expand market share and raise customer satisfaction to bring exponential value to the airlines and MROs utilising and supporting a wide variety of seat programmes. Seal Dynamics, founded in 1976, with its corporate headquarters based in Hauppauge, NY, and with offices in the UK, Singapore, Dubai and Florida, is one of the world's largest technical sales distributors of aerospace components.

Iberia Maintenance and RwandAir sign multi-year maintenance contract

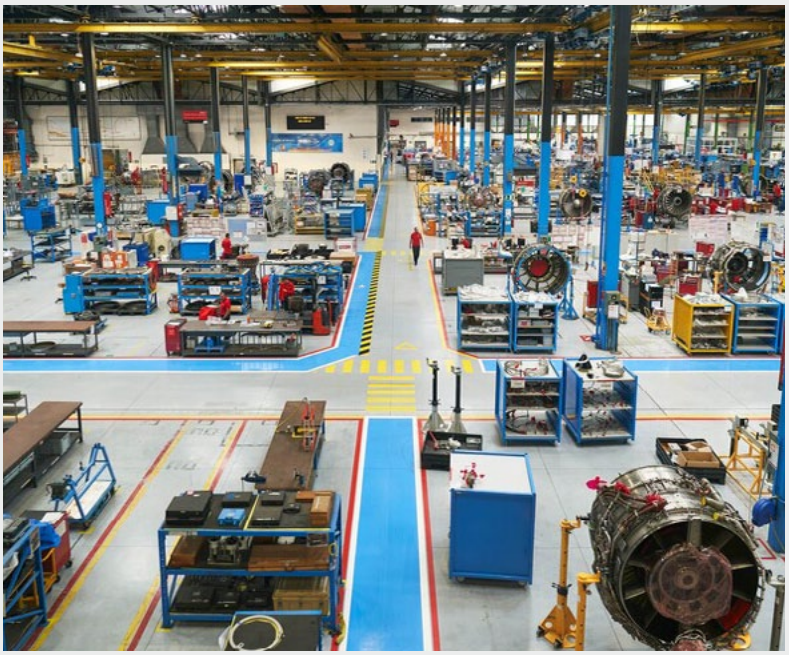


Photo: Iberia Maintenance engine shop

Iberia Maintenance and RwandAir have signed a multi-year exclusive contract to maintain the CFM56-7B and 7BE engines powering the airline's Boeing 737 fleet. Iberia Maintenance was selected by RwandAir following a rigorous process, with a proposal deemed to be the most competitive, including engine lease, logistics and customised work scope utilising the Spanish company´s engineering expertise. Iberia Maintenance's engine shop, located in Madrid, is specialised in CFM56, V2500 and RB211 engines and provides services to a worldwide customer base of airlines, OEMs and the wider industry. Operating from Kigali, RwandAir is one of the world's fastest-growing airlines and operates one of the youngest state-of-the-art fleets on the African continent operating 12 aircraft with an average age of just under six years. The airline currently offers services to 25 destinations across 21 countries throughout Africa, Europe, the Middle East and Asia.

Aero Star Aviation receives Mexican AFAC repair station certification

Aero Star Aviation has received certification to be a Mexico AFAC repair station at its Dallas, TX facility. This certification provides safety and certification continuity between the FAA and Mexican aviation authorities. AFAC formulates government policy for the development of aviation in Mexico, oversees training, aviation infrastructure and technical development as well as safety. "This additional certification provides our customers additional service opportunities and the flexibility to have their aircraft serviced in strategic locations as needed," said Chris Grinnell, owner/ President, Aero Star Aviation. Aero Star Aviation is an approved FAA repair facility and aircraft maintenance company that specialises in Embraer Phenom 100 and 300 aircraft. Founded in 2013, with two locations in Dallas, Texas and Ft. Lauderdale, Florida, Aero Star Aviation offers aircraft maintenance, including scheduled maintenance, pre-purchase and ten-year inspections, engine change, line maintenance, wheel assembly exchange and AOG support..

Lufthansa Technik Turbine Shannon expands operations

Lufthansa Technik Turbine Shannon © *Eamon Ward*

Irish company Lufthansa Technik Turbine Shannon (LTTS) is expanding its business and facility in response to growing market demand. With a new building in Shannon's Free Zone covering 2,000 m² and equipped with state-of-the-art technology, the company is increasing its capacity. It will offer new products for CFM56 and V2500 turbine engines powering Boeing 737 and Airbus A320 aircraft. Operations are set to commence in the new facility in the first quarter of 2023, offering new highly skilled jobs to the mid-west region of Ireland. After experiencing a sharp fall in activity during the COVID-19 crisis, LTTS has already created in excess of 100 jobs. The expansion will enable the company to grow in products for which there is strong demand in the foreseeable future. LTTS, a member of Lufthansa Technik's EPAR network (engine parts and accessories repair), specialises in the repair of components for both high-pressure and low-pressure turbines for CFMI, IAE, and GE aircraft engines. The company was originally founded in 1992, today employs a staff of more than 250 people and has some 8,000 m² of floor space available at its existing site in Shannon Smithtown.

ASL Aviation Holdings and AMETEK MRO AEM sign new landing gear partnership agreement

Aviation Holdings and AMETEK MRO AEM have signed a new agreement for the provision of landing gear services for ASL's European fleet of B737 next-generation and classic aircraft. The agreement covers the provision of overhaul services and loan gear sets until the end of 2026 and builds on ASL's existing relationship with AEM, which has been an ASL trusted supplier for many years. "This agreement epitomises the desire for ASL to create strategic partnerships with suppliers of the calibre of AEM. It allows us to consolidate the overhaul activity for landing gears across our European B737 fleet and benefit from cementing a relationship with a trusted supplier in whom we have great confidence will deliver an excellent service for us," said James George, Head of Procurement, ASL Aviation Holdings.

Cargolux and GE Aerospace sign long-term support agreements for GE9X and GEnx engines

Cargolux Boeing 747-8F © *AirTeamImages*

GE Aerospace and Cargolux, the Luxembourg-based all-cargo airline, have entered into a long-term support agreement for the GE9X powering Cargolux's new fleet of Boeing 777-8 freighters. The agreement includes a multi-year GE TrueChoice service agreement as well as the order of two spare engines. A TrueChoice services extension has also been agreed for Cargolux's Boeing 747-8F fleet powered by GEnx-2B engines. In October of last year Cargolux revealed plans to replace its ageing 747-400 freighter fleet with an order for ten Boeing 777-8F aircraft. The TrueChoice suite of engine maintenance offerings incorporate an array of GE capabilities and customizations across an engine's lifecycle. All TrueChoice offerings are underpinned by GE data and analytic capabilities and experience to help reduce maintenance burden and service disruptions for customers.

VTOL: A rising **opportunity** for support services?

LCI will acquire up to 40 Chaparral cargo systems © *LCI Aviation*

AviTrader MRO editor recently caught up with Dave Merrill, Chief Executive Officer at Elroy Air to discuss the development of the new VTOL cargo flyer and the case for maintenance support.

The appeal towards vertical take-off and landing (VTOL) aircraft is growing steadily, as with their potential to meet size gaps in the aviation and related sectors. Several different applications for these vehicles are under development with some already in the flight test phase.

Elroy Air, the company developing what it calls the first end-to-end autonomous VTOL aerial cargo system, unveiled its pre-production Chaparral aircraft just over a year ago. "We have seen a lot of demand for our VTOL aircraft, the Chaparral and to date we have demand for more than 900 systems," declares Dave Merrill, CEO at Elroy. The Chaparral is designed for aerial transport of up to 500 lbs (225 kgs) of goods over a 300 nautical mile range. This is enabled initially by a turbine-based hybrid-electric powertrain with distributed electrical propulsion, and specially designed aerodynamic modular cargo pods.

US regional carrier Mesa Airlines saw a requirement for The Chaparral early in the programme and placed an intent to order 150 aircraft to serve the express parcel and healthcare sectors. Mesa operates large fleets of aircraft for airline partners including United Airlines and DHL. "Mesa Airlines is a significant partner who saw the value of Chaparral early on. They are committed to enabling autonomous VTOL solutions in their network and we're excited to work with them," says Merrill, but he was unable to disclose specific delivery dates at the time of this writing.

Dave Merrill, CEO at Elroy Air

The most recent order is from LCI Aviation in January this year - a subsidiary of Libra Group and who's commercial aviation portfolio includes fixed-wing aircraft leases to international carriers. LCI will acquire up to 40 Chaparral units. "Through our agreement with LCI, the Chaparral will be available for financing - enabling much broader access to the aircraft. We are proud that the Chaparral will now be part of LCI's aviation fleet and look forward to

> **"We have multiple partners who provide MRO services, and we will be building this capability out to regionally support our customers."**
>
> *Dave Merrill, Elroy Air*

providing aerial cargo transport globally."

The new VTOL aircraft will complement LCI's existing fleet of helicopters and fixed wing aircraft. In addition, LCI and its parent company, Libra Group, whose subsidiaries own and operate assets in approximately 60 countries, plan to share commercial, financial and end-user expertise with Elroy Air through well-established industry networks.

Speaking on the latest development progress, Merrill says flight testing has now moved to a new facility at Byron Airport in California. In partnership with Urban Air Mobility - a joint-venture between MS Commercial, Inc. and Nearon Enterprises - Elroy Air has leased and prepared a new 7,000 square foot hangar at Byron Airport for its ground and flight test campaigns, to ensure smooth and efficient progress into the next flight test campaign and beyond. The Byron hangar is equipped with a large storage and work area, the first production Chaparral vehicle (C1-1), and due to the Chaparral's wing stowing mechanism multiple C1 systems this can be housed and maintained in the hangar.

"We have worked with the Contra Costa county airport team to establish a dedicated test area where a helipad has been installed for dedicated flight testing purposes," he reveals.

Elroy Air is using the new facility to support full-scale ground and flight testing. The company will initially be conducting tie-down testing to validate the software and hardware of its Chaparral C1 vehicles to validate safety of flight through a series of ground tests. Elroy Air has moved their Ground Control Station (GCS) to the airport, a custom-built mobile enclosure with engineering stations, weather monitoring, viewport windows, a dedicated network infrastructure, a datalink control and monitoring radio system and a rooftop observation deck. The GCS contains its own uninterruptible power supply (UPS), aircraft monitoring computers, and a climate control system. The GCS will be used to support both ground and flight tests.

"We plan to conduct flight testing in 2023 and 2024 and conduct limited demonstrations with customers beginning in 2023 and more in 2024," Merrill further reveals.

Regarding certifications, Merrill explains that EVTOL aircraft present new configurations to regulators that have not been certified before, but many of the subsystems and materials are familiar to regulators and there is very strong collaboration between OEMs and regulatory authorities like the FAA.

VTOL technologies and propulsions are clearly still in their infancy and developing an aftermarket support network will be a key focus in the years to come. Merrill says delivering on the mission to provide logistics to areas that are difficult or hard to reach using traditional manned aircraft means there is need to build a system and support that system on a regional level. "We have multiple partners who provide MRO services, and we will be building this capability out to regionally support our customers as we deploy systems worldwide."

Mesa Airlines is an early partner for the Chaparral
© Mesa Airlines - Facebook

KELLSTROM TECHNICAL SERVICES GROUP

Kellstrom Technical Services Group (KTSG) enables our customers to succeed in a demanding global environment advising them along the aviation maintenance and asset acquisition value chain. Highly qualified technical engineering, regulatory and operations management professionals are dedicated to unbiased maintenance, engineering, support services, and technical records on today's emerging, mid-life, and mature commercial airframe and engines.

- Three Engine Hospital Shop Visit Facilities
- Supporting Global Field Service Management
- Aircraft Heavy Visit Maintenance &
- Passenger-to-Freighter Visit Management
- Technical Records & Digitization
- Engine Health Monitoring & On-wing
- Technical Support
- Return to Service & Lease Return
- Condition Management
- End-of-Life Aviation Lifecycle Solutions

KTSG Supports:

Airlines | Asset Owners | Cargo Operators | Lessors | OEMs | Operators | Whole Asset Financial Institutions

VORTEX Aviation

Kellstrom Aerospace

THE AIRCRAFT GROUP™

www.kellstromaerospace.com/KTSG | KTSG@kellstromaerospace.com

Setting up SME workshops that engage strategic users can smoothen software migration.
© TRAX

Planning is key for effective software migration

AviTrader MRO examines the key implementation steps and procedures that ensure airlines achieve a smooth migration to MRO software technologies and highlights the unique challenges involved in developing safety-critical processes.

By Keith Mwanalushi

Aircraft operators are increasingly seeking greater efficiencies from the integration of new software technologies, especially on the MRO side. Easier implementation processes often save time and cost for airlines but creates a challenge for developers to make the process more efficient and think outside the box.

TRAX, which provides aircraft maintenance software solutions has a Project Management Office (PMO) that handles system implementation and contract management from project initiation through to project closing. Omar Santos, Vice President, Global Services and Support at TRAX, says this office oversees the project managers and the integration and professional services personnel provided to assure successful product implementations.

Omar Santos, Vice President, Global Services & Support at TRAX

"The PMO office monitors risk management, project schedules planning and control, resource management, deliverables, and reports to the TRAX management teams and this office follows the Project Management Body of Knowledge [PMBOK] approach and its entire collection of processes, best practices, terminologies, and guidelines that are accepted as standard within the project management industry," Santos explains.

He says TRAX project managers and product specialists have a high degree of aviation-specific knowledge and

Matthias Wagenmann, CTO at Swiss-AS

experience. "We see this as key to a successful implementation as it allows TRAX team members to work more effectively with our clients on business process analysis."

Santos feels the TRAX team members can more effectively help with remapping of existing processes, documentation, identification of inefficiencies, software system configuration, recommendations for best practices, and process improvements based on their industry knowledge. He further mentions another key to achieving a smooth migration to TRAX eMRO and eMobility software is to set up SME workshops that engage strategic users. "This allows the customer and TRAX to demonstrate the software benefits, and to get buy-in from the team to help lead the migration effort given the normal resistance to change in any workplace."

Surprisingly, Santos indicates that a significant bottleneck can appear at the end of a successful – from the project plan schedule standpoint -- implementation. He says that is because "go live" is not really the end of the process, it is a stage in which team members need assistance with new software and processes. "It is a turning point where end users may need training, some outlier scenarios not previously tested pop up, or unvalidated migrated data causes issues. Post-implementation support is a necessary component to a successful project," he states.

At Swiss-As, AMOS implementation projects are not simply a software replacement, but actually a business transformation, informs Matthias Wagenmann, CTO at Swiss-AS. "For such large initiatives, the pre-conditions for any smooth software implementation are to start with proper scoping and planning in accordance with clear and measurable objectives."

Following standard project management methods, Wagenmann says the project team then breaks-down the activities (WBS) into smaller deliverables. At Swiss-AS, AMOS implementation projects are divided into the following work-streams with teams working in parallel; project and change management, business process re-design, training and support, data migration, API integrations, IT and systems, and go-live planning and preparation.

"The final scope will drive the project duration; our customers are now capable to implement not only AMOS, but as well our paperless and mobility suite within a shorter period of time," Wagenmann states.

Swiss-AS consultants also play a key-role guiding the customer's project team, as Wagenmann highlights, having done so many successful AMOS projects, the company can provide expertise regarding each work-stream. "Especially regarding the AMOS business process modelling and associated configurations. Bottlenecks to look out for are in the data migration work stream because the migrated data needs to be validated by business experts."

Finally, he says the go-live strategy must be carefully assessed to meet the business operations; a "big-bang" or a staggered more modular approach.

Nauman Saeed, COO at SkySelect says the key for implementation is aligning expectations within the company and understanding what is feasible and if so, when and how fast. "Typically, you start with the top management to understand key objectives and how these should be achieved."

This then follows documentation of the process jointly with the process owners to ensure that all needs are covered, and business complexity is understood, Saeed explains. "You will never be able to cover all complexities and uncertainties; however, it is important to have a clear understanding of what might delay or structurally impact the business objectives."

He says once mapping begins the technical teams then need to understand what can be achieved with current

Nauman Saeed, COO at SkySelect

"You will never be able to cover all complexities and uncertainties; however, it is important to have a clear understanding of what might delay or structurally impact the business objectives."

Nauman Saeed, SkySelect

MROs are exploring how they can use their technology to simplify and improve process. © *AAR*

functionality, which developments might be needed, as well as defining which interfaces (inputs and outputs) are required and what time should be dedicated to design, build, test and actually implement these developments and interfaces.

"Only then can a feasible project plan can be presented for top management to sign off, understanding the complexities and potentially changing the order of developments based on immediate business needs," Saeed continues. "In the end, it is all about understanding business needs and complexities and communicating them effectively throughout the organisation to develop one plan. There will be changes to this plan and escalations, but when the baseline is clear, the focus can shift to implementation."

Throughout implementation, Saeed stresses that communication and managing expectations remain key, alongside training and understanding smaller issues, as well as finding flexible ways to solve any complications in the short term while providing long-term solutions – "In the end, it's all about communication and collaboration that will make it a success."

Clearly, the initial phase of the project is a key driver for the success of the implementation. During this phase, the project managers of both the provider and airline introduce the teams to form an initial level of understanding, and vitally, discuss the deliverables. "It is important to ensure everyone is on the same page with what functionality is key to the go-live of the system," declares Peter Mortimer – Sales Director at Rusada Aviation Software. He says by focussing on the key deliverables, the users gain confidence in the new system and confirm that they can complete their day-to-day work within ENVISION - the solution provided by Rusada.

Mortimer points out that process mapping also takes place in this initial phase. "This involves our business consultants spending time with key users for each area, to discover how they work on a daily basis. This is with a view to aligning ENVISION to work with current business processes, but also to improve and fix any areas of frustration."

He explains that process mapping then leads into the data analysis phase which involves a deep dive into the data from the customer's legacy system, with training on Rusada's import templates and working together to form a plan for extracting, formatting, and importing data into ENVISION. Mortimer adds that data loading can easily become a bottleneck for a project, especially if the customer intends to use this time to perform a data cleansing process.

"When planning a project, we do often incorporate time for data cleansing, however this is difficult to do without a prior view of the data and the amount of work that is required. Often, gaining access to a customer's data as early in the process as possible means that we can create much more accurate project plans," Mortimer notes.

At Canadian-based Win Air, every

Peter Mortimer – Sales Director at Rusada

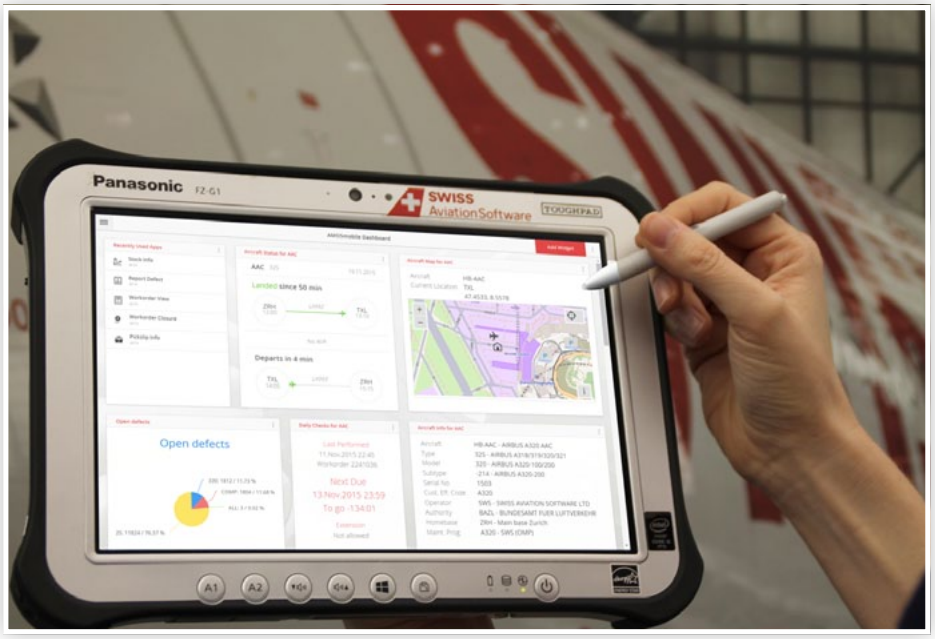
> **"Often, gaining access to a customer's data as early in the process as possible means that we can create much more accurate project plans."**
>
> *Peter Mortimer, Rusada*

implementation starts with consultative discussions with their business development team. Patrick Micacchi, Client Advocate says these consultations are focused on understanding an organisation's maintenance, inventory, and finance processes to determine the modules needed for their WinAir configuration. "Understanding the user's requirements is vital to a successful implementation. The WinAir implementations team creates a unique training syllabus for every customer to match their configuration, and training sessions are specifically tailored to how their organisation plans to use the software on a daily basis."

Once the WinAir configuration has been confirmed, training and migration of data starts. "We take a hands-on approach with our clients throughout the implementation process. Our team liaises with the client's project manager to schedule training sessions and weekly check-in meetings to review their progress, answer questions and ensure that the implementation is on track. While our trainers are busy teaching, our aircraft services team is available to build maintenance programmes and load aircraft data into the client's database."

During the implementation process, Micacchi warns of issues to be ware of including missing training sessions and check-in meetings which can result in an extended implementation timeline. "We also prescribe that clients do their 'homework' after each training session, giving the customer an opportunity to practice what they learned in a sandbox environment. If those activities are not completed, retention of information is dramatically decreased. Our customers are coached to avoid these obstacles to ensure a smooth transition to WinAir," states Micacchi.

Patrick Micacchi, Client Advocate at WinAir



Swiss-AS consultants play a key-role guiding the customer's project team.
© *Swiss-As*

After the client has completed training, the go-live date can then be set. Micacchi indicates that WinAir will continue to provide online support throughout the go-live process, and onsite support can be arranged if necessary. "This is an exciting time for our clients as they now get to put their training into action. Once the go-live is complete, a client advocate will be assigned and regular check-in calls will be established to ensure success in using WinAir. This support is included and will continue for the duration of the subscription term," he says.

Developing safety-critical MRO software

Naturally, when developing a safety-critical software, a strong focus on quality is a must, reckons Wagenmann. At Swiss-AS, around 25 software quality engineers work exclusively on ensuring a stable and robust system. More than 100 servers continuously execute >100'000 automated tests and alert when functional or performance regressions are detected.

Another key aspect Wagenmann mentions is IT security, which minimises the vulnerability of the system to unauthorised disclosure of information, damage to data or disruption of service. "Swiss-AS mitigates this risk through continuous checks for publicly disclosed vulnerabilities within the libraries used, static source code analysis and comprehensive penetration testing of the entire system."

As the level of digitisation increases, so does the demand for system availability, Wagenmann observes. "We invest heavily into the robustness and stability of AMOS and we provide tools to monitor the operation and detect emerging operational problems before they result in an interruption of operations," he notes.

Given the mission critical importance of regulatory and safety aviation software, the folks at TRAX have found the necessity of incorporating multiple

MRO software is essential for gaining efficiency at all levels.
© Etihad

auditing capabilities and approval steps for data entry and transactions. In addition, they have added validations throughout the system for users conducting various tasks or actions. For example, a task card can validate a skill or certification, including if it has expired or not, before a user can sign on a job.

Saeed at SkySelect reminds that it can be difficult to look back and answer the who, what, when, where of aircraft parts procurement, especially when operations are constantly moving and changing in real time. "First and foremost — and rightfully so — there is a lot of compliance that needs to be followed to ensure flight safety. These compliance obstacles are challenging and hinder the efficiency and profitability of airlines and MROs."

To combat these challenges, Saeed feels the aircraft parts supply chain needs a system that can easily answer any questions about a specific part. He says the purchaser should be assured that all the right suppliers were invited, can understand when and how challenges were solved, and know everything about the part their company is acquiring.

"Even in 2022, far too much of the process and information of buying and selling aircraft material is done offline," Saeed suggests. "This makes it extremely difficult to track and find information critical to compliance and safety. The quickest way to compliance and transparency is moving from a manual, paper-based system to a modern digital process."

Mortimer from Rusada echoes some similar thoughts saying a challenge often faced is keeping up with different regulatory requirements and different variables. He points to no set standard for Service Bulletins for example, saying these come in all sorts of different formats, with often complex rules and variables to follow. "To ensure we cater for all these variables, we build our software with flexible rule creation tools as standard, meaning that for most requirements of an SB, or complex maintenance task, we can cater for it - out of the box."

Another challenge observed at WinAir in development relates to the diversity of each client in how they utilise the system. Certainly, every organisation will have unique workflows based on their maintenance policy manual. Given that no two users operate exactly the same, Micacchi notices a high degree of variability in the requirements of maintenance software from one user to another. "Thankfully, at WinAir we offer a highly scalable solution which can be configured to an organisation's requirements."

WinAir have developed a range of standard configurations that operators can choose from, each with pre-defined modules that allows users to add additional features to their configuration as needed to maximise the utility of their software package.


AerFin®
BEYOND SUPPORT
Selected for you.
Exclusive access to
V2500 select material.
Contact us now at engine.sales@aerfin.com
and www.aerfin.com/our-portfolio

Pandemic leaves rising **component** repair costs in its wake

Material costs, along with lead times, have all increased.
© EirTrade Aviation

The rising cost of component repairs post-pandemic including higher material prices, means industry players need smart strategies to brace for the impact and perhaps push for alternative and cheaper solutions.

By Keith Mwanalushi

Everyone is talking about the higher cost of component repairs – it is no surprise that Covid induced supply chain issues are now causing delays, availability problems and cost pressures in the market. "Costs are continuing to rise across the board, both material and labour costs have gone up across all our vendors worldwide," observes Conor Keane, the Repair Manager at EirTrade in Ireland.

Keane cited several economic and political factors that were involved; also mentioning material costs, along with lead time increases that have led to both monetary and time constraints for EirTrade – "We are hoping to see things stabilise this year to allow for more accurate forecasting and planning," he says.

Close communication with customers is a key factor in navigating these issues and giving prompt and honest updates to operators has allowed players like EirTrade to share any cost burden as they navigate the ever-changing landscape. "Increased costs are not always something we can just pass on, but by keeping our customers up to date we can manage expectations, and we are also extending our repair network to try and

EirTrade's Repair Manager – Conor Keane

COST CONTROL FOR COMPONENT REPAIRS

Cliff Lorenzo, President of Northeast Aero Compressor (NEACO)

reduce unexpected delays in particular areas," Keane states.

Cliff Lorenzo, President of Northeast Aero Compressor (NEACO) - which was recently acquired by Jet Parts Engineering – says that over this past year, NAECO have seen costs grow exponentially due to supply chain shortages, cost of secondary repairs, and exorbitant pricing increases by the OEMs, in the post pandemic period. "In years before the pandemic, we would typically see average material price increases ranging from 5-15% across the board, annually. This year, we have seen price increases of up to 15% with some OEMs, quarterly," he notes.

At NEACO, they have been able to leverage provisioning skills, through increasing purchase quantities on long lead time parts while carrying a larger inventory with higher trigger purchase points to minimise their customer's lead time. NEACO also has an on-site DER, PMA sister company Jet Parts Engineering, and DER sister company PG Aerotech to minimise turnaround time (TAT) and cost to operators.

"We have seen an uptick in customers reaching out for long-term contracts, to lock in flat-rate contracts," Lorenzo reports. "This is a smart initiative on their part to hedge the current climate of continually increasing costs to repair stations," he adds.

At AMROS Global they are also seeing repair cost increasing, especially on the OEM owned shops, but in reality, Carlos Garofalo's, Manager Asset Life Cycle Solutions says the most dramatic increase has been on the TATs at any given shop, along with raw material and spare availability. "We see a significant impact on exchange transactions plus repair costs. Some suppliers are simply not offering anymore spares for exchange because there is a high uncertainty on when the core units will come back serviceable on the shelf due to the long lead times at the repair shops," he stresses.

Some of the strategies at AMROS include trying to procure, where possible from regional suppliers to minimise the impact of the current challenges in the transport and logistics sectors. For critical items, Garofalo suggests keeping components on wing as long as possible, until the situation stabilises –

Carlos Garofalo, Manager Asset Life Cycle at AMROS Global

The obtainability of some components continues to concern the market.
© AFI KLM E&M

"This has put a great deal of pressure and we are seeing heavy delays on the return to service of aircraft in post-Covid times, so we are constantly looking for alternatives like lower modification parts and even PMA items."

Certainly, almost every repair station is increasing their prices – " They are doing this both to pass on additional costs associated with piece parts, capital, and labour, as well as increasing their margin in an economic situation where demand for repairs outstrips available supply," comments David Chaimovitz, Chief Executive at Setna iO.

Chaimovitz understands the need for repair businesses to have healthy margins and says there is a huge amount of capital required upfront and major governmental regulatory hurdles to overcome and not to mention the extreme level of knowledge and skill required to

> **"Some suppliers are simply not offering anymore spares for exchange because there is a high uncertainty on when the core units will come back serviceable on the shelf due to the long lead times at the repair shops."**
>
> *Carlos Garofalo, AMROS Global*

successfully operate a repair business in a safe and reliable manner.

Setna iO is a parts trading company currently acquiring multiple full assets for disassembly on a regular basis, while also actively purchasing inventory to support the industry and flight-hour programme operators – " the only solution is foresight and patience. Also, opening our repair shop, Setnix, has added significant capacity and the ability to fast track our repairs, when piece parts allow it," Chaimovitz highlights.

There are several factors that are affecting both the OEM price and longer lead time including the supply of raw material for components. Tracey Downes, Head of Component Sales at APOC Aviation suggests the growth in the cost of raw material supplies in the aerospace industry can be attributed to the increase in the commercial and ageing aircraft fleet size, and considering that most airlines are hanging onto their aircraft for longer. She says, by mid-Covid there was a trend to retire aircraft earlier or to invest in cargo conversions, this has left the industry with a considerable shortage of highly desirable parts in 2023.

"The best way we can overcome supply chain shortages and logistical challenges is not with short-term fixes but by taking the long-term perspective and correctly identifying present and future needs for parts that the market needs," Downes suggests.

David Chaimovitz, Chief Executive at Setna iO.

Repair cycle management are looking at longer term component repair arrangements. © *APOC Aviation*

This ties in with APOC's longer-term company objectives, as Downes explains: "We are seeking to reduce the burden of tied-up capital and free up cash flow. By identifying our parts procurement cycles in advance while ensuring precise budget and capital flow planning, we are optimising operations and freeing up cash flow for other investments. We are also transparent and open with our customers and they appreciate there is a huge backlog and issues with the repair shops and are very understanding."

The market is looking for best value for money - basically the best price, quality, delivery, and proper terms and conditions of each deal, highlights, Armando Filho, Material Management Director at Vallair. "Operators are also searching for alternative solutions like serviceable condition items with green time, leasing and pool stock options to minimise costs."

Filho says MROs are busy, sometimes overloaded, and still facing supply chain issues to source the proper parts in stock to process repairs on time. "This is one of the reasons that repair costs have been increasing and consequently lead times are not so friendly. It's the reason why Vallair is looking for ways to innovate and bring in more exchange, leasing, and pool stock solutions to support market demand," he states.

Longer-term component repairs

Industry observations suggest operators are increasingly seeking longer term component repair arrangements in a bid to lower costs in the current environment – similar to the airframe side of things.

Keane from EirTrade agrees to a large degree, saying several operators will be trying to lock in longer term agreements to try and reduce costs going forward. "Whether or not repair vendors will be reciprocal of these is yet to be seen. From our perspective it makes sense to try and

> **"Lessors are often the reason that DER and PMA parts are not allowed, as they are concerned these repairs will reduce the price of their assets in an end of lease and life situation."**
>
> *David Chaimovitz, Setna iO.*

Tracey Downes, Head of Component Sales, APOC Aviation

lock in any particular pricing or discounts as this allows us to plan more accurately further into the future," he says.

Chaimovitz, from Setna iO has observed this trend too. "Yes, we are seeing this - if an operator can predict a maintenance event prior to actually needing a repair for an on-wing failure, the airline can avoid an AOG while finding reduced pricing. This is also beneficial for the repair shop, as they can purchase inventory for future repairs in advance, lowering cost for the end user while also having an expected stream of work to ensure reasonable profitability," he explains.

Downes at APOC concours and says airlines, MROs and lessors need to consider a multiplicity of sourcing scenarios. "Some airlines that have traditionally heavily outsourced through pooling, PBHs[flight-hour] or repair cycle management are looking at longer term component repair arrangements." For example, Boeing created a component services programme as a low-risk method for airlines to reduce aircraft maintenance costs. According to Downes, the programme provides around the clock access to a dedicated inventory pool of selected high value, dispatch-critical components, such as avionics, actuators, and precision mechanical assemblies.

The programme allows participating airlines to shrink their inventory of dispatch-critical, high-value line replaceable units. APOC are reviewing closely and monitoring this situation –"We are continually investing in software, which positions APOC as a frontrunner in the sector ready to support the renewed growth in the USM market," notes Downes.

Are PMA parts and DER repairs a viable solution?

At APOC Aviation, they are observing that currently, the demand is still for OEM parts and CMM repairs. Experts at APOC feel airlines still prefer OEM parts due to the contract they have with the lessors when the aircraft is re-delivered. During an AOG situation however, PMA parts and DERs are more acceptable.

Meanwhile, EirTrade are seeing continued growth on this side of their business, as Keane further tells: "Many operators are looking to reduce costs, and this is a safe and cost-effective way of doing this. Across multiple engine types and aircraft, we are seeing an uptick in operators utilising DER repairs in particular, and this has allowed us to maximise our returns across all our product lines and reduce scrap and waste. Allowing more competition and reducing waste of ultimately good parts will only help to make our industry greener and more renewable."

NEACO have a strong relationship with Jets Parts Engineering – a PMA provider and PG Aerotech - a DER repairs specialist and this allows the company to lower costs and pass that on to operators. "In some cases, we have been able to improve on-wing reliability by incorporating improvements with these alternative solutions," says Lorenzo.

Lorenzo observes a greater openness today to utilise PMA and DER repairs than pre-pandemic. "Airlines are so focused on the post-pandemic recovery, hence the cost savings from PMA and DER are a hard proposition to resist." He points to some legacy airlines that have been benefiting from this for decades, and those are typically the operators that are in better financial health today. "Of course, PMA and DER are not the only factors giving them the upper hand, but an overall mindset to explore alternatives helped get them there. I believe some other airlines are now seriously considering those alternatives and pushing back on lessors and OEMs who are trying to keep them in their grip," he adds.

The folks at Setna iO and AMROS echo similar thoughts on the issue. Chaimovitz says operators should and do use PMA and DER repairs. "Lessors are often the reason that DER and PMA parts are not allowed, as they are concerned these repairs will reduce the price of their assets in an end of lease and life situation."

AMROS anticipate increased interest in PMA and DERs, however, Garofalo reckons there is still a lack of commitment for such but foresees growing demand with the rising capacity limitations and supply chain disruptions.

In conclusion, Filho from Vallair reminds that this has been an ongoing debate for a long time already: "This is a long and continuous discussion, but basically the OEMs and majority of approved MROs and airlines do not accept PMA parts and DER repairs. It's an option for the ones that do accept, but it's still a longstanding issue for more than two decades. I do not see major change happening now, similar discussions always happen when the market is affected by a crisis."

Armando Filho, Material Management Director at Vallair

AMOS. AGAIN.

"The new software will make an important contribution to helping VAECO become a leading aircraft maintenance service provider in the region, while promoting digital transformation and information technology application in Vietnam Airlines' production and business activities. Thereby, ensuring a solid technical foundation for Vietnam Airlines' 4-star, now approaching 5-star, in standard flight services,"

Nguyen Chien Thang, Deputy General Director of Vietnam Airlines

VAECO / Vietnam Airlines sign up for AMOS, the world-class M&E software solution.

AMOS will accelerate VAECO's digital transformation process supporting their growing efficiency and productivity. By implementing AMOS, VAECO and Vietnam Airlines will benefit from a intelligent, best-in-class, highly secure and enjoyable-to-use software.

SWISS AviationSoftware

SWISS-AS.COM

Q&A

In the hot seat...

Demetrios Bradshaw, Managing Director at Aeras Aviation

Demetrios Bradshaw Managing Director, Aeras Aviation

What attracted you to this industry?

Prior to working in the aviation industry, I was involved in sports management. I graduated from Kingston University with BSc Business Information Technology (Hons) back in 2006 in London, UK and soon after started a sports company taking Commonwealth, European, World and Olympic athletes into schools around the UK inspiring children to participate in sport. It was also an opportunity to support amateur athletes to stay in sport as many of these amateur athletes do not have the lucrative sponsorship opportunities if any at all. Following on from the London 2012 Olympics where I was a gymnastics coach and then I moved into the world of aviation! I have been involved in the industry for over a decade now and there are so many aspects of the industry that excite me, both personally and for the future growth of Aeras.

What does a typical day involve in your role?

Not one day is the same in my role. Being a small company with offices in different time zones there are several things to be done. We are a company that tries to be as robust as possible, ensuring that we are proactive on a day-to-day basis. An average day would involve engaging with the different department heads, ranging from repairs to sales, accounts to HR to the asset manager discussing the evaluating of the models of powerplants that we are looking at for part out. We have a strong and cohesive team, all of whom posses a good level of experience within the industry, a team that we are growing organically and strategically.

I am often interacting with the different offices globally discussing how Aeras can capitalise, strategise and deliver on the objectives that were set out at the start

of the year coinciding with our company goals, targets and projections whilst being small enough to be flexible as per market trends and changes.

Tell us about the key services at Aeras Aviation.

A large part of our business is parting out powerplants, supporting both MROs and airlines ranging from the CFM56's, V2500-A5s, CF6's to name a few. Aeras Aviation has certainly transitioned itself from being seen as a broker of engine parts into an asset management company; we are now sourcing and parting out our own assets. This has certainly been a positive and productive step in the evolution of Aeras Aviation. Other services that we offer under our technical services umbrella are, consignments, technical record services, engine management programmes, fan blade exchange, repair management and material salvation programmes with aspirations to enter into rebuilds and leasing further down the line.

Are seeing renewed demand for USM post-pandemic?

Yes, we are! It is certainly an indication that things are slowly getting back to normal. We are seeing a much stronger demand for USM in the Americas compared to Europe, however, there is positive increase with our European customers especially those who are flying the CFM56-5B engines. There is also a noticeable demand for CFM56-7B USM over that of the CFM56-5B and although a substantial amount of material is interchangeable, it is quite clear that the -7B engine has clearly bounced back a lot quicker than that of the -5B, hopefully this will balance out as we see APAC come back online. We understand what those reasons are, ranging from 737NG freighter conversions and the leasing statistics of said aircraft and engines. Post pandemic, it is important that we take a macro viewpoint and how we interpret this trend will determine which assets we enter into and which assets best fit our model ensuring continuity and consistency to support our growing customer base.

What key trend are you seeing with costs, supply and demand for engine materials?

Supply chain has always been and will always be a key factor within the aviation industry. An area that Aeras tends to put a lot of focus on to ensure efficiency for our customers that we support globally. Post pandemic has certainly seen several issues arise; the major issue for many companies is that repair shops are currently not fully equipped to cater for the volume and demand of parts that are being inducted for repair from MRO's, airline demands.

We are also consistently seeing the same bottle necks with warehousing and on top of this, the cost of freight has also increased. The knock-on effect and impact of the pandemic has certainly led to repair shops, warehousing and freight companies laying off many staff in a cost cutting exercise, and in a bid to get back to pre-pandemic levels, new staff need to be employed and trained accordingly in accordance with best practices which we understand certainly takes time.

As with many other companies in the industry, and Aeras is no different with us all sharing the same challenges. There is need for us and other suppliers to repair a lot more material, have this material on the shelf and ready to go in overhauled condition in order to get its maximum value returned. A customer having to wait 90 days for a part that would normally take 30 days will have a substantial impact on achieving efficient and cost-effective operations. Following the pandemic, managing costs and budgeting efficiently is key and it is even more prudent that we have material ready to go to support our customers. The knock on effects from both a supplier and customer perspective is crucial.

Supply chain delays have undoubtedly been the major issue for us and these increased costs have had a significant impact on the bottom line as well as a risk to a company's reputation. Communication with customers is a key factor for us and it is something we proactively encourage within our team.

What engine teardowns are you currently engaged?

Aeras ended 2022 tearing down several CFM56-5B assets at MD Turbines in Miami, FL and is primed for a year of strong asset acquisitions in 2023. We started the year by securing another -5B which is being torn down at Aerfin, in the UK and we are currently working on securing and finalising several -7B assets in February. Aeras focus is always about building strategic relationships with our end users and our acquisition decisions are largely based on programmes that we have in place with specific customers, as is our pipeline of engine targets for the remainder of the year.

How can airlines lower their engine management costs?

Every airline is different, so it's on a case-by-case basis. Every airline or lessor wants to lower costs however in practice you have to ask if this is the most efficient and productive way to move forward. There are several external factors that we cannot control such as interest rates, inflation, volatility within a region, labour costs etc. Airlines will need to weigh up those costs against where the market is now. The current USM landscape is very different in comparison to pre pandemic levels; we have seen the surge in cargo conversions and cargo operated engines that are currently in the air, and we have to ask what the impacts are if these are not in service. One thing we do know, planning is key here in order to operate at an optimum level and Aeras can certainly contribute towards an airline or MRO working more smartly and efficiently, helping to bring costs down in their specific business case, whether it be through USM or technical support to suit their needs.

What are you most looking forward to in 2023?

2023 is looking very bright for Aeras and we want to grow our current portfolio of assets on our books. We are also looking forward to building on our existing and new technical programmes that we identified earlier for current and future customers. Apart from the above, we are also looking forward to seeing the industry bounce back to what it once was and relish the opportunity of meeting people again face to face via conferences and industry events. As Airlines and MROs look to getting back to business, we are working diligently and strategically with them to meet their goals and objectives for 2023 and beyond, through competitive pricing, a consistent and reliable supply of USM combined with a trustworthy and knowledgeable approach for their shop visit inductions.

Trax
Emro Emobility

MOBILIZING MAINTENANCE

REAL-TIME MAINTENANCE INFORMATION ANYTIME, ANYWHERE

sales@emro.com | www.emro.com

»»»⟶ *on the move*


Jean-Michel Hillion

Jean-Michel Hillion has been named Executive Vice-President of the Wheels & Brakes division of Safran Landing Systems, as of February 1, 2023. Hillion started his career in 1988 as head of production for Elecma, Snecma's Electronics division. He then created the commercial aircraft FADEC repair shop when the A320 entered service. In 1998, he took part in the creation of Snecma Control Systems and was in charge of business development. In 2001, he joined Messier-Bugatti as programme director for the hydraulics, brake control and monitoring divisions. In 2005, he became director of the systems division. In 2008, Hillion joined Sagem Défense et Sécurité to create and manage the Safran Electronics division. In 2013, he was appointed Vice-President, Boeing Programmes for the group, based in Seattle and in 2020, he became Group Vice-President, Engineering. Since January 2021, Hillion held the position of Group Vice-President Strategy and Climate.


Enrique Robledo

Iberia has announced organisational changes in its maintenance business. **Enrique Robledo** has been appointed the new director of this business, which provides services to around a hundred clients, including IAG airlines. Robledo, who will take up his new post on March 17, is currently Iberia's Director at Madrid-Barajas Airport, a role that will be taken on provisionally from that date by the current Director of Airport Services, **José Luis de Luna**. Robledo is an aeronautical engineer with a PhD in Psychology and a master's degree from IE. He began his career at Airbus and British Aerospace and has been with Iberia since 1999, where he has held various responsibilities in the maintenance business, first as Head of Materials Planning and then as Deputy Manager of the engine workshop. Robledo will replace **Andy Best**, who has been Head of Iberia Maintenance for the past two years and will take on the same role at British Airways from April 17. Best has led an all-encompassing business and cultural transformation, driving sustainable business growth and strengthening the position of Iberia Maintenance's business in the market and within the IAG Group.


Florence Minisclou

CFM International has appointed **Florence Minisclou** as Executive Vice President, replacing **Sébastien Imbourg**, who was recently named Vice President Sales & Marketing for Safran Aircraft Engines. As part of the CFM executive team, Minisclou is responsible for overseeing the CFM56 and LEAP programmes, working closely with her counterpart at GE Aerospace, **Karl Sheldon**, to monitor engineering, development, production and services activities for these programmes. Minisclou also serves as Vice President of CFM programmes for Safran Aircraft Engines. She brings a wealth of customer-focused experience and a strong vision of the market and customer environment to her role at CFM. A graduate of Institut d'Optique Graduate School ParisTech (Sup' Optique), she joined the aeronautics and defence division of Sagem (now Safran Electronics & Defense) in 1992, successively serving as system engineer, project manager and, ultimately, programme manager in charge of optronic systems in the defence industry in France and Europe. In 2003, she moved to the avionics division to manage A380 Customer Support and Services. In 2007,

on the move

she became the head of the key Airbus account. In 2010, she became director of key aircraft accounts within the commercial department and developed avionic sales for commercial, regional and business jet markets. She was then appointed Senior Vice President of Sales and Marketing for the avionics division in September 2015. After five years at this position, she became head of Safran Landing Systems customer directorate.


Patrick Armstrong

Joramco, the Amman, Jordan-based aircraft maintenance, repair and overhaul (MRO) facility as well as the engineering arm of Dubai Aerospace Enterprise (DAE) has announced that **Patrick Armstrong** has been appointed as Vice President, Commercial, as a consequence of increased business demands. Predominantly based in the Middle East and primarily in the United Arab Emirates (UAE) as an aviation professional, Armstrong has over ten years of experience in areas including customer support, marketing, sales and business development. His role at Joramco will see him take over responsibility for all commercial activities while continuing to build on the growth plan designed to deliver a streamlined customer experience.

AV AirFinance Limited (AV AirFinance), a global commercial aviation loan servicer, has released that **Michael Rubinett** has joined its U.S. affiliate, AV AirFinance L.P., as Senior Vice President – Loan Origination (Americas). Rubinett will be responsible for sourcing loan opportunities and developing customer relationships in the Americas. Rubinett has almost a decade of experience in commercial aviation and finance. Prior to joining AV AirFinance, he served as Vice President of mba Asset Management. In this role he oversaw portfolio management, remarketing and trading of managed assets and also advised debt and equity investors on airline restructurings, non-performing assets, and potential investment opportunities. Prior to mba Asset Management, Rubinett worked in capital markets at Aircastle, where he was responsible for raising debt capital and managing debt origination and aircraft trading within the lessor's various joint ventures, while also raising both unsecured and secured debt for the Aircastle platform.


Ian Davies

Latvia-based SmartLynx Airlines has announced the executive appointment of **Ian Davies** as the new VP of Technical. Davies will be responsible for strategic development, supervision and management of the organisation's CAMO operations, as well as budget control related to engineering, planning, 24/7 MCC functions, spare parts supply chain, storage and logistics, line and base maintenance, engines, APU and landing gear shop visits. He will also lead and oversee all technical departments, including Material Supply Chain and Logistics, CAMO, Engineering, MCC and SmartLynx Technik. With more than four decades of experience in the aviation industry, Ian Davies has held various influential roles at well-known companies such as EasyJet and BMI British Midland Airways. He also provided consultative services to assess the compatibility and effectiveness of Iberia Maintenance and Vueling Airlines Barcelona. For the past two years, Davies has been a Managing Director at Aerotron Composites Limited before joining SmartLynx Airlines. In addition to his daily activities, Davies will join the SmartLynx Board alongside the CEO **Zygimantas Surintas**, COO **Deniss Zilkins**, VP of Sales & Development **Edvinas Demenius**, VP of Strategy & Excellence **Skirmantas Sutkus**, VP of Safety and Security **Sigurdur Hrafn Gislason**, and VP Production **Olegs Krisovatijs**.

AviTrader MRO

The leading industry publication linking aircraft maintenance, the aftermarket, and aircraft operators

AviTrader MRO is a monthly digital magazine providing news and senior level analysis on the global commercial aviation MRO industry. Over the past decade the publication has grown to be a leading source of insight and analysis on the key issues facing the aircraft maintenance and aftermarket sectors.

14,600+	50,000+	12
Direct Distribution	Inter-Company Distribution	Annual Editions

Subscribe for free online and get the magazine straight to your inbox
www.avitrader.com

For advertising and commercial opportunities, please contact:

Tamar Jorssen

Vice President Sales & Business Development

Email: tamar.jorssen@avitrader.com

Phone: +1 (788) 213 8543

www.avitrader.com