



Signs of the times

2018 has been a busy year for MROs despite the challenges.
Photo: S7 Engineering

It has been a challenging year for the aviation industry marred by higher fuel prices and saw the collapse of several airlines, but it has also been a year of significant opportunity especially in the MRO sector. **Keith Mwanalushi** reviews.

With the global aircraft fleet projected to reach almost 38,000 by 2028, the global aircraft MRO is estimated to reach a 10-year consolidated market size value of around 115 billion U.S. dollars.

AJW Group has had a very successful 2018 with several new relationships and partnerships formed and many existing global contracts extended.

"We have also grown our team both in the UK and in our locations across the globe," declares Boris Wolstenholme, Chief Strategy Officer at AJW Group.



Boris Wolstenholme, Chief Strategy Officer, AJW Group.

Airlines that were announced or extended partnerships with AJW Group in 2018 include Allegiant, Air Incheon, Azul Cargo Express, AlMasria, Air Mediterranean, Cambodia Airways, Ellinair, Electra Airways and Just Us Air.

"We are also delighted to have formed strategic partnerships with Bombardier Business Aircraft and COMAC." The partnership with Bombardier sees AJW undertake all repair management for the airframe OEMs rotatable inven-

tory. Wolstenholme explains that a key feature of the contract is the strategic sourcing of repairs from OEMs and MROs, including AJW's maintenance hub for component repair and overhaul service, AJW Technique. He says this is a huge strategic win for AJW Group.

The work with COMAC saw AJW work closely with the OEM and Iceland's airports authority, ISAVIA, since September 2017 to complete crosswind testing. "This partnership with China's flagship aircraft manufacturer is a great example of the increasingly bespoke and strategic way in which we are working with customers," he says.

ADSoftware celebrated their 20th anniversary in 2018. "In this highly competitive industry of MRO software companies it means we are doing something right," feels Frederic Ulrich, CEO of AD Software.

The MRO software company has over 50 customers worldwide, both rotary and fixed wing. "Our market share is expanding quickly, we even exceeded our objectives for this year by a margin." He adds that the new users signed up are of strategic importance. "We are now the selected MRO IT solution for ENAC, the leading aeronautics and aviation university in



Frederic Ulrich, CEO of AD Software



CSAT is expanding capability in line maintenance services.

Europe (a fleet of 130 aircraft). In East Africa we were awarded two contracts to support maintenance operations of two flag carriers (operating 787, Q400, ATR and more) with our IT solution, AirPack.”

Ulrich says a good setup phase is the foundation of any efficient MRO system. “This is why we perfected our process to make it faster and easier for operators to install AirPack. With this it takes us a few days to make a complete assessment of the operator’s aircraft records and define a tailored implementation schedule.”

Last but certainly not least, ADSoftware was selected by ATR as their partner after an extensive selection process. “We will work together to develop new processes and methods to integrate and manage key technical data. We are all extremely proud of this success; it is unquestionably a breakthrough for ADSoftware.”

2018 has also been a hugely successful year for AerFin. In terms of service agreements, AerFin has welcomed BA CityFlyer and IKAR to its BeyondPool™ support programme, offering the airlines a fixed-cost solution to cover all component requirements on their E-Jets. These two programmes collectively see AerFin support more than 30 E-jets with access to reliable and high-quality stock.

Elsewhere in the business, AerFin has strengthened its relationship with NORDAM by expanding its strategic-services agreement to include consignment, exchange and lease-management of spare nacelles for V2500-A5 and CFM56-5B engines.

In April this year, AerFin also signed a three-year TrueChoice™ Material Service Agreement with GE Aviation for serviceable OEM parts and advanced repair and technology upgrades for the CFM56 and CF34 engines.

On the acquisitions side of the business, the firm signed agreements on a range of assets, particularly in the narrow body market, including numerous Airbus A320 family airframes and several CFM56-5B,

CFM56-7B and V2500 engines.

In addition, AerFin continues to support their strategic partners with lease and sale programmes across its engine portfolio, including V2527-A5, CF34-8E and CFM56-5C. These programmes add breadth of service solutions that AerFin brings to the market.

Finally, earlier this year, AerFin CEO and Founder Bob James received an OBE in the Queen’s Birthday Honours List for services to exports in the aerospace industry.

“This year, the market has seen several operators cease trading, a trend which has been driven by the sustained increase in the cost of aviation fuel, with the weak domestic currencies and intense competition, which has left several carriers to vulnerable financial failure,” states James Bennett, Director – Sales and Marketing at AerFin.

Bennett expects this trend to continue into 2019 as we see increasing consolidation in the airline market.

The increase in fuel prices coupled with the expectant resolution of some of the OEM’s entry into service challenges for new delivery aircraft will see more aircraft retired over the coming years.

In terms of USM, demand is very buoyant, says Bennett, particularly across the CFM56-5B/7B and CF34-8 product lines where AerFin has a particular focus. “This demand will continue through the coming years as many of these engines have yet to see their first major



James Bennett, Director – Sales and Marketing at AerFin

maintenance event, and in the case of the CFM56-7B for example, the predicted peak for shop visit activity is not due until 2023.”

The engine lease market is also very strong, he continues, with availability shortages of spare engines driving lease rates upward. “This has provided an excellent opportunity for AerFin to support the CF34-8E lease market, where we currently have five engines on lease, although we expect this figure to increase next year.

“We are continuing to see vertical integration in the MRO market as OEMs and larger independent MRO shops continue to merge in an attempt to improve their range of service offerings and therefore capture as much market share as possible,” Bennett states.



Pavel Hales, Chairman of the Board of Directors, Czech Airlines Technics

This year was exciting for Czech Airlines Technics. Pavel Hales, Chairman of the Board of Directors, Czech Airlines Technics says the MRO provider has become the first independent MRO organisation in Europe to successfully pass the certification process and receive the approval of the Civil Aviation Administration of China (CAAC) covering the entire line maintenance segment for one Chinese airline. “This is a great achievement for the company as we now provide line maintenance services to Chinese carriers operating their flights to and from Václav Havel Airport Prague.”

In the line maintenance segment, CSAT has already expanded its capability for the A320neo and the B737MAX aircraft types and now offers full technical support to customers who use these types of aircraft to operate their routes from/to Prague.

During 2018, Jordanian MRO provider Joramco embarked on a transformational journey which is part of a continued focus on a newly launched commitment to excellence theme.

“The Transformation focused on, new efficient processes which combined with our expanding capabilities strive to provide our customers with flexible, high quality services at competitive prices,” reports Fraser Currie, the Chief Commercial Officer.

Joramco’s capabilities increased significantly during the year with the most recent being the additions EASA part 145 approval for B787 C check in addition to B737-9 MAX. Both types are part of a comprehensive plan to expand capabilities based on market demands. Additionally, Joramco is preparing to welcome the first B777 into its hangars.

“In line with the vision of the new majority owner, Dubai Aerospace Enterprise (DAE), and in order to provide best-in-class quality services to our valuable customers, multiple transformation projects have been initiated across the entire company. These changes have taken effect and have allowed us to improve our service offering and enhance our ability to meet and exceed customers’ expectations.

Our hangars were reinvigorated, and a new corporate uniform was introduced to capture our brand identity. Besides this we invested significantly to procure new GSE and tooling,” says Currie.

Most importantly, Currie states there is significant investment in people. “We introduced comprehensive training plans for all staff during the

summer from basic engineering courses to advanced leadership and development.

This transformation was showcased during Joramco’s participation at various exhibitions and industry events such during Quarter 4 and the feedback from Industry has been exceptional, he indicates.

Looking at the wider MRO business Currie says Joramco is experiencing exceptional demand across a wide variety of fleets, attracting customers from an ever-widening radius. “The trend is showing that many airlines are looking for more than one single source provider and for an independent MRO this is what we expect. The OEM’s role is evolving, and partnerships are in focus.”

Currie stresses that these partnerships allow the OEM’s to offer a greater range of aftermarket solutions across a wider geography and for independent MRO’s this can only be good news – “The challenges are significant as operators look for reduced TAT whilst reviewing every aspect of the commercial proposition. Combined with these external challenges the MRO has to remain focused on both existing type approvals and working with airlines to meet the needs of their new types,” he says.

Over in Estonia, within Magnetic MRO the biggest highlight was certainly a successful acquisition by new shareholder. Risto Mäeots, CEO of Magnetic MRO explains that this move speaks generally about the industry which is full of growth and new opportunities but heeds on the side of caution – “The number of airlines that ceased to exist just in the second half of the year reminds us how brutal this industry can be despite the supportive macroeconomics.” Mäeots believes the trend for MRO demand is on an upswing but warns that the MROs keep increasing their capacity based on the increased demand, which in return put higher pressure on how to survive the low-season.

Today, Magnetic is still an independent MRO and continues to seek ways to be part of the OEM ecosystem and there are increasing number of opportunities Mäeots reckons.

The year has seen a hive of activity too for the MTU companies. Holger Sindemann, Executive Vice President MRO Operations at MTU Aero Engines. “We are extremely fortunate that the engine MRO market is healthy and growing,” he suggests.

The general expectation is that MRO revenues will grow at a CAGR (escalated) of 7-9% over the next ten years. The largest challenges will be in serving this growth, especially in the short to medium term.

“We are currently seeing slot capacity constraints worldwide. This is



Fraser Currie, Chief Commercial Officer at Joramco



Risto Mäeots, CEO Magnetic MRO



Holger Sindemann, Executive Vice President MRO Operations, MTU Aero Engines

the result of new generation engines entering shops earlier than planned, continued high demand for current generation engines as well as sustained demand for mature engines, such as the CF6-80C2, which are being flown longer or even revived – in some cases resulting into an immediate need for MRO services, from smaller work scopes to heavy maintenance,” says Sindemann.

MTU Maintenance is increasing capacity at all locations. By 2027, around 50% more capacity will have been added. For instance, in Hannover, they are planning additional buildings to provide space in a busy shop, in which MTU reached their 8,000th visit last year. Expansion is also underway on a new logistics centre in Berlin. Completion is slated for mid-2019 that will enable MTU Maintenance Berlin-Brandenburg to add an additional 35% production capacity by a redesign of the shop floor by 2020. Additionally, MTU Maintenance Canada introduced V2500 capabilities in late 2017 and they are considering adding CF6-80C2 capacity at this location.

Furthermore, MTU Maintenance Zhuhai, a joint venture with China Southern, is increasing capacity by 50% – taking it from 300 to 450 shop visits annually by 2021.

This was a monumental year for TrueAero. Karl Drusch, the CEO says the team has doubled in size, a 63,000 square-foot warehouse in Dallas opened as well as a sales office in France. The number of assets deployed on lease is up nearly 70% year-over-year, TrueAero completed two C-Checks and dozens of aircraft and engine deliveries and began offering multiple new product lines and services to customers.

Drusch also concurs that overall, the MRO market is still very strong. “We forecast growth in MRO as RPKs, fuel prices, interest rates, and OEM backlogs all continue to increase, motivating operators to seek lower cost solutions and extend the life of their fleets.”

That said, Drusch says the industry is going through what will ultimately be one of its more transformational phases as operators, MROs, lessors, and OEM’s all seek to deploy advanced technology, integrate vertically, merge and acquire, and consolidate market share. “Our industry will mature more in the next 5 years than it has during any other 5-year span; We’re going to see the use of artificial intelligence in predictive analytics, blockchain revolutionizing record-keeping, rapidly increasing barriers to entry for new companies, highly sophisticated operational models, and innovation as a requirement [not a competitive advantage].”



Karl Drusch, CEO True Aero

Component Control introduced several new products and enhancements to Quantum-ERP including mobile imaging and technician, MRP, and integration with Aeroexchange and

QuickBooks. Component Control also looks poised to close its largest revenue year on record and will have nearly 100 new customers.

Daniel Tautges, Sr. Vice President of Sales and Marketing says the MRO industry continues to evolve and we are seeing traditional MRO’s enter the broader service and distribution space, while distributors are moving into MRO and PMA. We see challenges existing in both logistics in Asia as well as supporting a converging service infrastructure.”



Daniel Tautges, Sr. Vice President of Sales and Marketing at Component Control

Dan Wadley, the General Manager at Bii adds that the existence of DER repairs is evidence of independent MROs’ innovation. “Components deemed BER at an OEM MRO facility can often be saved by an independent MRO using a DER repair process. In fact, there are several DER repairs available for components that the OEMs consider unrepairable, which effectively turns expendable parts into rotables! Other DER repairs consist of minor modifications, designed to improve performance or reliability.”



Dan Wadley, General Manager at Bii

at Iasi-North-Eastern Romania – “We will have the B737Max approval in place soon.”

Velescu concludes that the constant challenge is to support customers with the best strong points in the value chain: “Quality first, competitive solutions, focus on our customers’ needs and expectations. We also need to identify correctly the areas where there is still place for growth for independent MROs.”



Director Velescu and his business development team at AEROSTAR