

# A tailored solution

The MRO sector hasn't escaped COVID-19's impact on aviation but for engine specialist AeroNorway the crisis presents an opportunity for its bespoke maintenance capabilities. Aaron Woolner reports.



**G**lenford Marston, chief executive of MRO AeroNorway, can see the impact of COVID-19 from his office, with numerous Boeing 787s from struggling low-cost carrier (LCC) Norwegian parked up on the nearby airport rather than darting around the skies. The image of unused airplanes also highlights a major issue for aviation maintenance providers, not only do airlines require less servicing they also have alternative solutions at hand.

"I can look out of the Aero Norway office and see quite a few 787s from Norwegian parked up. The same is true,

more or less, for airlines all over the world. If, for example, an airline has parked twelve aircraft and only has two in operation, one of which then needs a replacement engine, they are not going to do the repair. They will go back to their ten parked aircraft and organise an exchange instead.

When we look at our business segment for narrow bodies - airlines have the potential to swap engines from their parked aircraft to operational ones. It's what a lot of them are doing right now, they are delaying shop visits by utilising parked assets, because cash is king."

It's unsurprising that airlines are focussed on cashflow at the moment

and the cost savings from opting for a swap instead of a repair are potentially huge. Marston estimates that an engine swap would cost an airline a maximum of \$40,000 to get the aircraft fully back into service versus a minimum of \$1.6 million for a full core performance restoration that doesn't include LLP replacement.

And this focus on cashflow has had an immediate impact on the MRO sector, with major players such as Lufthansa Technik moving to a three-day working week, while fellow German firm MTU Aero Engines announced on July 6 that it was looking to cut headcount by up to 15%.





AeroNorway has also felt the pinch, while the firm entered 2020 with a backlog from 2019 that kept the facility at full steam for the first quarter, finding business now is becoming a “struggle”, with most end users now non-committal over new work and backing out of agreed workschemes. So far cost-cutting measures have not included redundancies though the firm has put in place a hiring freeze.

AeroNorway is now down from eight or nine inductions a month to six or seven, the majority of which are 737 classic freighters, with Marston saying the company needs to do at least five heavy repairs a month in order to

survive. “It’s time roll up your sleeves and fight for all the scrapes you can get,” he says.

The Oslo-based firm supports three engine models, CFM56-3, CFM56-5B and CFM56-7B. And while in 2020 demand for the latter two, which typically power single aisle aircraft that have mostly been grounded since the start of the COVID-19 pandemic, has been weak there has been continued need to service the CFM56-3 which powers the classic 737 freighters.

The freighter demand has been such that in early May the engine MRO provider invested in five more CFM56-3 engines which it will introduce into

its refurbish and sell programme. The original plan was to undertake a total of six refurbish and sell CFM56-3 engines for 2020, however, to support demand for freighter engine overhauls and to fill the slots caused by deferred CFM56-5B and CFM56-7B -worksopes as a result of COVID-19, five more of the CFM56-3 engines have been added to the firm’s portfolio.

Alongside this investment in engines has been an upgrading of the firm’s facilities, which included the installation of a new highspeed grinder while it is currently in process of replacing its plasma spray machine, including High-Velocity Oxygen Fuel capability.



Marston says that the firm stayed in the CFM56-3 market because customer demand and crucially AeroNorway's ability to offer customisable solutions. "At Aero Norway, we can tailor our specialist CFM56 engine service to meet specific requirements. The customer will say, 'We need an engine, and we would like to fly for 4,000 or 5,000 cycles. Can you customise a workscope for me with a guarantee that the aircraft will fly for that amount of cycles?' and we are able to provide that solution."

According to Marston it is this flexibility that gives AeroNorway an advantage in the current market where airlines are looking for more bespoke repairs and a customised workscope, with the chief executive saying that because of the firm's size it is agile enough to respond to the new environment.

"A lot of operators now will even delay core performance shop visits and just carry out repairs that are required to meet their new cycle usage. This trend for a smaller customised workscope plays into our hands because our size and independence means we are flexible and agile enough to meet their needs."

Predicting the future shape of aviation is currently impossible given the shifting sands of lockdowns and the potential for a second wave of COVID-19 to undo the slow reopening of airports



and resumption of flying, but Marston is clear that while the current crisis for the sector may be unprecedented it is not fatal.

"Everybody knows the industry is suffering. I've been in the aerospace business for 30 years and I have seen lots of ups and down before. Normally it is driven by economics – if people don't have money they don't travel –



but the current situation is the result of unprecedented health issues.

Even though it is something we've never experienced before I still believe this industry is resilient, because people simply are not going to catch the bus, or the train, or the boat. They will fly again, the issue is when, because it looks like this current downturn will last longer than any others I have seen."

### Lufthansa Technik Q&A

Aircraft retirements and groundings have put the MRO sector under pressure and Thomas Illner, head of product sales engine services Europe, Middle East and Africa at Lufthansa Technik, says that demand for bespoke servicing is on the rise.

#### ***To what extent are customers opting to swap engines rather than perform a full peak performance overhaul as a result of COVID 19 downturn in passenger demand?***

Thomas Illner: Optimisation of engine life including engine swaps are one of our major strengths. As a result, our existing concepts already contain optimised life swaps in combination with full performance overhauls before COVID19. On one hand, we realise that our more bespoke services are requested more frequently, but on the other we observe customers who are using the current situation as opportunity to hedge

and balance full shop visits and green time, to avoid a potential bottleneck once the overhaul demand increases.

#### ***How significant is the impact of increased aircraft retirement on secondary market parts pricing?***

Thomas Illner: Lufthansa Technik has been evaluating the surplus market very closely also before COVID 19. Over the last years, we already established a broad network of surplus business partners and we are using the current situation to increase our network. We assume that the availability of tear down engines is rising further which will also drive the availability of surplus parts. Needless to say that engine documentation history is essential.

However to answer the pricing question, an important question for the time being is whether it will be a one-time effect to certain extend or the availability remains on a constant higher level. During phase-

outs of sunset engine types we learned that surplus parts can also be sold out at certain point of time. In any case, the increased availability will support a constant material supply chain and minimises instable supply chain situations on new parts. We assume that it will definitely put OEM under pressure depending the engine type and its life cycle. However, we also learned in times of sunset fleets that the catalogue list prices always remained unchanged.

#### ***Have MROs been expanding the offer of sale & leaseback of engines as a source of liquidity for airlines?***

Thomas Illner: We have seen that kind of service in the industry. If clients ask us for help, we assess the individual case in order to support our customers with individual solutions. Since we see very professional sale and leaseback providers in the market, we are working on such services together with partners.