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There is unequivocal pursuit of industry-recognised EGT margins *(photo: Aero Norway)*

Delivering power

Aero Norway is pushing ahead with a forward-looking business growth strategy for CFM56 engine maintenance. **Keith Mwanalushi** speaks to CEO Glenford Marston from the facility in Stavanger

Last year, Norwegian-based engine MRO facility Aero Norway celebrated 25 years of supporting CFM56-3, CFM56-5B and CFM56-7B engines. The facility, located close to Stavanger Airport, has seen many changes through its history. In 1991, it was opened as a Braathens facility until the year 2000, when it was acquired by Pratt & Whitney (P&W) and then Aero Gulf. Subsequently, Aero Norway took over the operation in 2013 where it now operates a state-of-the-art facility designed specifically for CFM56 engines.

Current Chief Executive Officer Glenford Marston was part of the transition team from P&W when a Qatari businessman Tariq Al Jehani bought the business and took over the company. "We have done quite a lot of good things in the time and we have grown very quickly," Marston declares.

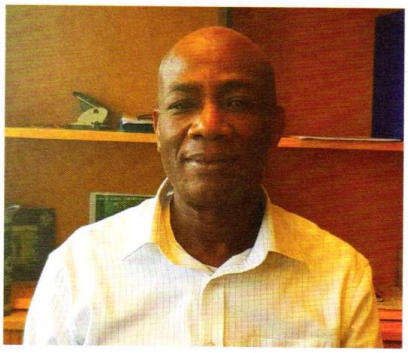
The first strategic decision was a vigorous rebranding exercise that would bring Norwegian back in the name. "It was called Aero Gulf and as such it confused a lot of people because the history of the shop always had Norway in it. We wanted to get that Norway back in. We have now achieved that with the current brand. It's very simplistic, but very clean," says Marston.

He is justifiably proud of the facility's achievements with the CFM56. Clearly, the global operator base is extensive – the CFM56-5B is the engine choice of the ubiquitous A320 family and the CFM56-7B, is exclusively powering the Boeing 737 NG family. The CFM56-3 is deployed on the 737 Classics.

Marston believes working exclusively on the CFM56 is the key to the success of the business because the services model that CFM has staked its reputation on for decades is underpinned by independent engine MROs and usage of the CFM56 series shows no signs of waning.

"You have good volumes of engines to get your teeth into and although it's competitive, we are not scared of competition when it comes to quality and pricing."

Marston sees a steady flow of engines from the -3, -5 and the -7 variants, and as CFM pushes out new models and engines, Aero Norway has sights fully set on ▶



Marston is keen to support more of the smaller airline operators *(photo: Keith Mwanalushi)*

servicing the new LEAP engine – "That will be a natural progression for us."

When looking at the market forces today, Marston feels the outlook for the CFM56 is solid, and he says the business is working to ensure it can sustain its flexibility.

In fact, aviation consultancy firm IBA has identified a total of 1,300 lease returns and extensions which are to take place in 2018. The A320ceo and 737-800 aircraft are expected to account for most lease ends in 2018. A320-200 lease end dates are expected to exceed those of the 737-800 in both 2018 and 2019.

There are plans for some 62 engine inductions in 2018 *(photo: Keith Mwanalushi)*

IBA is projecting a concentration of lease ends between the years 2019-22, with a peak towards 2022. This will mean a busy cycle ahead for operators and lessors and subsequently MROs.

Marston agrees with the projections saying now is quite a peak time for the CFM engines, especially for the -5 and -7 because there has been a delay in shop visits for the bulk of engines due to how well they have performed in service.

He says operators that had originally planned say 10,000 to 12,000 cycles with these engines were in fact achieving 15,000 to 20,000 cycles. "I think shop visits will peak for the -5 and -7 especially. For the -3 there are less customers operating the Classics but there is still a lot of work out there to be done," Marston states.

Despite the dwindling number of 737 Classics in operation Aero Norway has no intention of closing the -3 side of the business. The company's customer base is mixed flying the Classics, NGs or Airbus. While Marston observes that larger MROs are taking the Classics out of their portfolio Aero Norway will continue to put those engines through their shop in Stavanger.

"It's a progression for our smaller customers to go from the Classics to the NGs so you will find that we are working on different engines for the same operator. It's all about fulfilling their needs – not everyone has the same pocket and we are very unique in identifying that."

Marston continues to emphasise that by utilising larger MROs for shop visits, it's a different model that the bigger players attach to putting the engine through that shop. "Because we are so small, we can be very flexible towards their needs and their budget. A lot of customers don't understand that if you have the quality that we have all you need to display is your flexibility in fulfilling their needs and as a result we get good business," he says.

Aero Norway is planning for the upcoming lease ends with balancing capacity versus capability for the engines services and making step changes to introduce more -5s and -7s. Last year the company did 80 engine inductions, and the plan for 2018 is to push that number up to 92.

"We have what we call a roadmap that kind of dictates how we operate, we do this every year. Our short-term plan is to do 120 engines by 2020 – maybe even surpassing that. The capacity of the shop is around 140 engines, but our goal is to consistently do 120," Marston explains.

In terms of work scope Aero Norway uses the same manual as other MRO providers and is not unique in

doing that but rather provides its own limits inside the manual limits as Marston put it. "We are a little more stringent with our suppliers and our external repair vendors, but we have a very good relationship with them. They have to be part of the commitment we make to our customers because on average we guarantee our customers more than other MROs."

The unequivocal pursuit of industry-recognised EGT [Engine Gas Temperature] margins reduces costs and improves reliability – the greater the EGT margin achieved, the healthier the engine. Engines will also last longer on wing, and the engine components, especially in the hot section, will remain in better condition.

The standard offer for a -3C1 is approximately 25°C EGT at most shops according to Marston and that is the industry standard, but he says Aero Norway offers at least 30°C and, in some cases, even 35°C margin.

However, Marston states that currently, they are averaging 40°C for the -3C1 for the shop – "it's not every single engine that you will get 40, but the year on year average is in access of 40°C."

To achieve those margins Aero Norway has become meticulous with measurements especially in the core area of the engines, the parts used and the quality of those parts. Also, there is attention to the limits that are stuck to in line with the engine maintenance programme. "We have our own programme which is formulated from the OEM work scope planning guide and we've incorporated that into our engine maintenance programme."

For engine material supply he feels the market is very buoyant today. "There is a lack of material because the OEM cannot provide enough new parts to keep up with the demand," Marston reveals.

He also mentions the importance of good support from external vendors because they buy engines and tear them down to look after the market.

There is a growing programme to tap into local talent from across Norway *(photo: Keith Mwanalushi)*

Marston doesn't see much potential for tearing down for the third-party market however Aero Norway does partake in tears for the -3 for its own material use. "We also partner with material suppliers to tear their engines down, but we will block off what material we need. We don't do tear downs just for the sake of it, but we will if we are taking most of the material. Then that makes sense to our business." ▶

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> "It doesn't matter whether you have 50 or 10 aircraft – you are number one. Nobody jumps anybody here"
> Glenford Marston, Aero Norway

The shop floor has many experienced people (*photo: Aero Norway*)

As for the 737 Classics Marston reckons there is still a glut for them today with fuel prices at what they are. "Many operators who have Classics in their fleet will rather utilise them if it keeps money in their pockets because the NGs still carry a high cost – they are not cheap, but you can pick up a Classic quite cheaply. It's the engines that actually carry the value, they can pick up the aircraft for next to nothing."

Classics are of course being converted for cargo, and markets like China are hungry for freighters.

Marston admits that the business may not be suited to support the likes of Ryanair and easyJet due to their sheer size but many of the big MROs do offload some of this work to Aero Norway which makes sense to their business. "We will not take on the big easyJet's because they will take over your shop, we want a broad customer base which keeps our business quite healthy," he says.

Rather, the smaller operators such as the regional and small low cost carriers are just the kind of operators Marston is interested in. "When they come to the shop we can offer them a package," he states.

He adds that the support extends to anything from the need for engineering assistance to sending a field team to go over and troubleshoot a problem or perform repairs.

"Every single customer that comes through, and I will maintain this while I'm the boss, is number one," Marston stresses. "It doesn't matter whether you have 50 or 10 aircraft – you are number one. Nobody jumps anybody here."

He suggests the situation is not quite the same at the larger MROs. "If they have a fleet of Ryanair's or easyJet's to maintain – they will be number one. A guy with his 10 engines or 10 aircraft will never get up that pecking order because he only takes one engine through the shop every two or three years, but that's not the case here at this facility. We want to support a lot of small operators too because they need to fly as well."

Based on the scheduled induction work-flow and the partnerships with global MROs, Aero Norway signed a significant working capital terms sheet with Sparebank 1 SR-Bank, a Norwegian high street bank and the largest bank in Norway, Marston explains. "This is a working capital facility for the company which is being provided as a combination of engine purchase financing, general overdraft and capital expenditure funding for new tooling for the workshop. It was important for us that this funding should come from Norway, and we are proud to be recognised not only as one of the country's leading aviation after-market businesses, but also one that experiencing positive growth and global recognition."

Aero Norway has also just completed some structural changes and will see two senior appointments announced in the commercial and operational areas from March.

An apprentice programme is also progressing well. "We have an aeronautical school nearby, we supply them with materials to help them with schooling and training and then we go in and cherry pick the best students and we do the same at several other regions in Norway."

With the current strategic business plan on course and a solid set of financial numbers, its seems things are looking up in Stavanger. ■