AMES on target for forward thrust

Just three years since it first opened its doors in March 2010, Dubai-based Aerostructures Middle East Services (AMES) is expanding its jet engine nacelle repair capabilities from its technical base in the UAE. The announcement was made as the company exhibited at the MRO Middle East event at Dubai World Trade Centre in January.

The expansion means that AMES is now able to accommodate the region’s very large nacelles and thrust reversers for Engine Alliance GP7200s that power Airbus A380s, and General Electric’s GE90 engines used on Boeing 777s.

The EASA Part 145 certified company also offers nacelle and thrust reverser services for Rolls-Royce Trent 700 and 500 engines, which equip Airbus A330s and A340s, as well as for the A340 and A320 family’s CFM International CFM56 powerplants.

Speaking at MRO Middle East, Alexandre Mule, deputy general manager of AMES, said: “Here in this region we are able to offer the maintenance for all these very large engine nacelles, which is a very key market for this area, where the long-haul routes are very important.”

A statement from the company added: “As a next step, the company is preparing to implement service capabilities for CFM56 nacelles on Boeing 737s, along with a broadening of its on-wing support for various engine nacelle types.”

Success stories
Set up as a 50/50 joint venture between Safran’s Aircelle and Air France Industries KLM Engineering & Maintenance, AMES has become one of the region’s success stories since it opened its 2,200sqm facility in Jebel Ali Free Zone, Dubai three years ago.

“We forecast double-digit expansion of our business in the coming years as AMES builds its services and responds to Middle East airline growth,” said general manager François Vitti.

Mule credits the expertise of AMES’s two parent companies for the company’s success. They offer their joint capabilities to Middle East customers, providing services for a full range of nacelle types: Rolls-Royce, General Electric, CFM International and Pratt & Whitney engines.

“AMES combines the expertise of one OEM and a leader in the MRO industry with AFI,” explained Mule.

AMES was created to support the Middle East’s jetliner fleets of Airbus A320s, A330s, A340s and A380s; Boeing 747s, 767s and 777s; along with McDonnell Douglas MD-11s and Embraer 170/175s. When the company opened in 2010 there were more than 390 of these aircraft in the active inventories of the region’s airlines, with some 200 additional jetliners on order.

“Our services are tailored to meet all of the market’s expectations, with solutions that range from repair and overhaul to logistics, spares and on-site support at customer locations,” Vitti explained.

The primary focus for AMES is the repair of fan thrust reversers, with the additional capability to handle other nacelle components such as air inlets, cowl doors and nozzles. Its central location in the UAE between Dubai and Abu Dhabi enables the company to serve a region that covers Bahrain, Egypt, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia and Yemen, as well as neighbouring countries.

Proximity to the customer
“For us close proximity to the customer is very important,” said Mule.

“We chose to come to this region because it is a growing market for the maintenance industry,” added Vitti.

“Because of the cost of transportation we have to be located here in the UAE, in the Middle East, near Emirates, Etihad, Qatar, Gulf Air,” he continued. “If you look at the nacelle for the B777 or the A380, these are very big engines. Transporting these big nacelles to Europe or the United States would be very costly and you will spend time on the transportation. So it makes sense to come here, in close proximity to the customer, to reduce the cost of maintenance, to reduce the cost of transportation and to reduce the turnaround time.”

Vitti added: “The brand of AMES broadly speaking after two years is known by major airlines – Emirates, Etihad, Qatar, Saudia, Kuwait Airways and Gulf Air.

“The brand of AMES is not new – we are a ‘frequent flyer’ in the market. In the beginning we had to go to the customer, now they are coming to us.”

AMES also announced at the show that it has successfully developed on-wing support activities, which involves the deployment of teams into the field, in addition to its in-shop repair and overhaul at Dubai.

Through the on-wing support, we are sending people to help our customers in their facilities – to carry out inspections and to do maintenance directly on the aircraft on site,” explained Mule.

“This is what the customers are looking for,” added Vitti. “We appreciate this contact with the customer.”

After the success of its first three years of operations, what does the future hold for AMES? “Our strategy is to continue to develop these activities because, rather than providing maintenance, we are providing service,” said Vitti.

“Maintenance is part of the global service that we offer to our customers.”
Why MROs will get a

Cloud computing for the aircraft industry may sound like a terrible pun but, in reality, many companies are latching on to the benefits it can bring. Ramco, which is a specialist in the field, is keen to promote this new approach, as Steve Nichols found out.

Touted to be the next generation of computing applications, cloud computing aims to create a smarter work environment. Businesses have become spoilt for choice when it comes to choosing the solution that will best suit them. But, with hundreds of MRO software providers in the market today, it can be a difficult choice to find the right one.

Perhaps ‘going to the cloud’ is the way forward. But, what exactly is cloud computing and how can it benefit an aviation business?

Cloud computing in simple terms is a virtual workplace where a single installation of the MRO software can be used by multiple customers and be accessed through the internet. You just use the software you need, as a service, which is installed in an entirely different location to where you are based.

With multiple internal and external connections, and thousands of queries being handled every second, a robust computing system is required to meet the challenges in managing the infrastructure.

Solution provider

But with cloud computing, all these are taken care of by the solution provider, freeing businesses to focus on their core competencies. And Ramco is convinced that the MRO industry can benefit greatly from the cloud approach.

“With more than three million parts on an aircraft, tracking and managing each stage of maintenance work would become unmanageable without a comprehensive MRO computerised solution,” said Sam Jacob, vice president – aviation product development at Ramco Systems.

“Applications for the aviation industry are expected to simplify the complexities of managing the MRO business but traditional IT systems installed on company premises make the deployment and management of IT systems complex.”

Jacob said that a cloud-based MRO solution provides the real possibility of expanding the availability of sophisticated IT systems to smaller organisations – operators with fleet sizes of less than 10 aircraft and small MRO centres can benefit from the operational efficiencies offered by specialised integrated solutions.

Ramco has more than 1,000 customers in 35 countries, including Emirates, Air India and Eurocopter, and has pioneered the use of cloud-based computing in the aviation industry. So why has the MRO space, which has largely relied on paper-based processes before, suddenly become interested?

“The competitive nature of the airline industry has also forced the cost of doing business to rock-bottom levels,” he added. “With maintenance expenses being the second largest cost contributor after fuel expenses, organisations are aggressively re-positioning their maintenance functions. As well as addressing regulatory compliance and aircraft reliability, it is also about improving business efficiencies and delivering competitive advantage.”

Operational efficiencies

Jacob said smaller operators and maintenance centres need to build the same operational efficiencies, best practice adoption and decision-making enablers as their big brothers if they are to retain their edge and stay relevant in the market place.

So how does cloud computing help with this? Simple – it allows companies to pick and choose what their business needs from available MRO software packages. MRO applications in the cloud are designed for ‘on-demand’ usage and companies can decide what modules they want to start with and adopt other functionalities later as they wish.

For example, MRO companies can start with just materials management and maintenance programs along with planning and execution, and later expand to other functionality such as engineering, finance and human capital management solutions (HCM).

Ramco said an operator with a multiple fleet could introduce one model of cloud-based MRO software and move on to other models progressively as needs develop. Since the MRO software is offered on subscription basis, it only pays for the fleet that’s currently operational, making IT expenses completely aligned to the business.

But is cloud computing a proverbial silver bullet for MRO operators?

Operational benefits

“A switch-over to a cloud-based application in itself is unlikely to deliver the operational benefits that operators and MRO organisations seek,” said Jacob.

“The cloud-delivered software solution still needs to address fundamental challenges that organisations face in deploying enterprise applications. In order for enterprise systems to be effective, they need to get their personnel on board.”

Ramco adds that application simplicity and relevancy are the two most important parameters for successful system adoption in the field and on the shop floor.

“Applications also need to leverage the high level of penetration of mobile devices among users. Their availability on tablets and smart phones allows the application to be taken to the place of work. This means that a high level of simplicity, plus intuitive touch-screen models, can significantly increase the level of system adoption and appeal to all users, such as pilots, field mechanics and field warehouse personnel,” said Jacob.

But does this mean a one-size-fits-all approach to functionality?

“No,” said Jacob. “The secret is to tailor and extend the functionality of the cloud-based MRO software to which the organisation is subscribing. Ramco believes it is probably the only cloud software vendor that provides extension development kits (EDKs) that help customers extend the capabilities of the standard cloud product to meet their unique needs.

With a cloud application, aviation MRO
companies get the freedom to use only those features, functionalities and capabilities that are currently relevant for their business,” Jacob said. “For example, an organisation working in the field of continuing airworthiness management, and focusing on engineering and maintenance planning services, may eventually grow into a full-fledged MRO. At that point, it could start subscribing to the end-to-end contract management, execution and billing functionality of a cloud-based system.”

Ramco said that, over the years, organisations have become so dependent on IT that it is not uncommon to see systems becoming a constraint in adapting to change and scaling up for growth. But, being cloud-based, relieves the company of the lead-time to add IT capacity and upgrades – with the cloud, they can scale up capacity and usage ‘on-demand’ with no waiting time.

Priority also goes into making sure that the data transmitted is secure, through the use of encryption and secure data sockets, to prevent any form of data interception.