



Broadening the base

Maintenance companies have turned into providers of multiple services at multiple locations. And the market leaders have never been more in demand, reports Martin Roebuck

Arrangements for maintenance of executive aircraft are moving on to a new level as leading players expand their operations globally, seek approvals from additional registries and widen their range of activities. There is perhaps no better example than AMAC, whose competencies range from single-engine turboprops to widebodies and which has just set up outside its home base of Switzerland for the first time.

AMAC is a relatively new player in private, VIP, and corporate aviation services, established only in 2007. But its four founders – who left a rival concern to launch the business – have long expertise in aircraft maintenance and completion. The name was chosen because the same four letters stand for Aircraft Maintenance and Completion (AMAC Aerospace, based in Basel) and also, fortuitously, for Aircraft Management and Charter (AMAC Corporate Jet, in Zurich).

AMAC is an approved completion centre for Airbus and Boeing, carrying out completions on the Airbus A320 series, A330s, A340s, Airbus Corporate Jets, Boeing Business Jets, B777s

and B747s. When it comes to base and line maintenance, the company covers the market virtually from top to bottom. It has part 145 approvals for Pilatus, Gulfstream and Global Express aircraft (including the XRS and Global 5000), the A320 family, A330, A340, BBJ, B777 and MD-80, with approvals pending for the B747-400 and B747-8i.

Group COO Bernd Schramm says: "We saw a new niche. The market demand was there and the timing was right. We started up six or seven months ahead of the banking crisis, so funding was still available! In Basel-Mulhouse, we found an airport where there was enough space to build a private facility.

"We took a 35-year land lease agreement



AMAC Ignaz Gretener (left), VP of the general aviation business unit at Pilatus, presented AMAC CEO Kadri Muhiddin with a traditional Swiss Cowbell at the Airex exhibition in Istanbul to commemorate the Middle East sales, distribution and maintenance agreement between the companies



AMAC Aerospace has three hangars at Basel-Mulhouse

with the airport and built a two-bay 4,500sq metre hangar initially. Soon after we built a larger 8,400sq metre unit that can accommodate a B747, a B777 and a BBJ at the same time," Schramm says.

A third facility, also of 8,400sq metres, was inaugurated in September. It makes AMAC Aerospace the world's largest privately owned completion centre, and second among all its competitors. Completions account for around 65% of the company's work, and it has a two-year backlog on its order book, but it is looking for a 60:40 split between completions/refurbishments and maintenance.

"Most completion centres don't provide maintenance. The issue is not that there's a lack of capacity currently, but we assume there will be once the aircraft currently being completed have been handed over," Schramm says. Executive aircraft demand a different handling procedure, so a dedicated facility will be needed, he comments.

AMAC is equipped to provide simultaneous maintenance, refurbishment and aircraft modifications in a single downtime period. This requirement is nothing new, of course, and many MROs hold the respective part 145 and part 21 approvals. "It's always been the case that if an aircraft is undergoing a six or eight-week check, you look at what you should be doing in the cabin," Schramm says. The trick is to efficiently project-manage the work so the aircraft spends the minimum time on the ground.

BBJs will be a particular focus of attention as the oldest aircraft reach 12 years old, he predicts. "There will be a lot of work replacing cabin management and entertainment systems as these have evolved so fast. It falls in the grey area between maintenance and completion, and involves both design and production teams. We have full in-house capability for this refurbishment and modification work," Schramm says.

AMAC's rapid growth during a time of worldwide recession is no accident. Its co-

founders were recognised industry experts with extensive networks of contacts.

"Customers, or more often their representatives, know you by name – and not just you, but the engineering director, the project management team and even the aircraft supervisors. They know you're capable and strong," Schramm says. "VIP aviation is a small market, especially where high-end projects and widebodies are involved. It's about personal relationships more than marketing or sales activity."

The reputation of AMAC's founders enabled recruitment of skilled personnel (the company today employs 550) without recourse to headhunting. Basel is well located in the so-called "three country corner", meaning AMAC could draw from France's Alsace region and south-west Germany as well as Switzerland. The area has a good pool of craftsmen and the crisis in the car industry, which is present in the locality, made for a useful source of skilled labour.

Beyond Europe, AMAC is approved by the authorities in Aruba, Bermuda, the Cayman Islands, Saudi Arabia, Qatar, Oman, the UAE, Cameroon, Nigeria and Chad to carry out maintenance operations in Switzerland. As well as developing its profile there, however, the group – which also sells aircraft – is also expanding geographically. It launched an Istanbul-based subsidiary, AMAC Turkey, in September after acquiring a sales and service centre at Ataturk Airport.

"We have good contacts in the Middle East, and the biggest part of our client base is there," Schramm says. "We signed an exclusive Middle East sales and distribution agreement with Pilatus at the beginning of this year. Part of the deal was that we would provide maintenance in Turkey, and we are seeking EASA part 145 approval for Pilatus."

Initially, Istanbul will service only Pilatus PC12-NG aircraft, but AMAC hopes quickly to build on this, avoiding the need for Middle Eastern operators to travel further into Europe for maintenance.

"We will look for different aircraft types to maintain there," Schramm says. "It's a smaller facility than we have in Basel, with just 1,500sq metres of hangarage, but we could handle small business jets up to Challenger or Dassault Falcon level. Some models have only limited coverage in the region, and we are analysing where additional support is needed."

Saudi vote of confidence

Flying Colours Corp, established in 1989, has been in existence rather longer than AMAC but is on a similar expansion path. Initially specialising in aircraft sale and lease, the company has become a global leader in all aspects of aircraft completions, refurbishment and maintenance from its base at Peterborough in Ontario, Canada. Its acquisition in 2009 of JetCorp Technical Services, based in St Louis, Missouri – which itself had been in business for more than 25 years – further cemented Flying Colours' position in the MRO sector.

The company holds maintenance approvals from Transport Canada, the FAA, EASA and the authorities for the Cayman Islands, Aruba and the Isle of Man. A prestigious new addition came in September when Saudi Arabia's General Authority of Civil Aviation (GACA) gave its approval for Flying Colours to carry out maintenance at Peterborough on aircraft registered in the Kingdom. The company is now authorised to undertake continuing airworthiness and maintenance work on a wide range of aircraft, including the full Bombardier Challenger range, the Global Express and the Dassault Falcon family, which are popular in Saudi Arabia and across the Gulf region.

Eric Gillespie, executive VP, sales and marketing, says Flying Colours aims continuously to upgrade what it offers, but the process of gaining an approval can vary enormously from one jurisdiction to another.

"Aruba and the Isle of Man were relatively straightforward. They go over your facility and



manuals – sometimes remotely – but essentially they want to work with you,” he says.

In other cases, it can take several months to tick all the boxes, even if all that is required is minor amendments to the content and format of existing EASA or FAA manuals. GACA “reviewed everything very strictly,” Gillespie says, and the company has been in dialogue with China’s CAAC for a year so far.

“Our quality assurance official was over there for a week, and there are only three or four times in the year when you can do that. Some approvals take longer than others and it’s just a procedure you have to go through. But with the new Bombardier completions we have done for the Chinese market, we felt it was a good thing to have maintenance approval for Chinese-registered airplanes. I hope we will get there by the end of this year or early 2013,” he says.

Flying Colours looks to act as a one-stop shop for its clients and tries to combine jobs on a single schedule as far as possible. “The longer a plane sits on the ground, the more it costs,” Gillespie says. There is parallel expertise in Peterborough and St Louis when it comes to maintaining Challengers and Globals, but JetCorp takes care of heavy maintenance on Learjets while Flying Colours is more focused on refurbishment and currently carries all exterior paintwork.

This can mean occasional shuttling between the two facilities, which are 1,800km apart. For example, a Learjet 60 recently had some maintenance and interior refurbishment carried out at St Louis, was flown two hours up to Peterborough for repainting and then returned to St Louis for redelivery.

A regular two-day truck service also moves parts and fittings between the sites. “If we’re full here [in Peterborough], cabinetry can be built up at JetCorp,” Gillespie explains.

The key is to improve efficiency without creating too much duplication. In recent months, Flying Colours has looked at expanding hangar capacity at St Louis and incorporating a paint

shop there, though Gillespie says no final decision has been made on this yet.

The company’s perspective has become more international in line with the market. “Five or six years ago we were probably handling 70% North American-based aircraft. Now it’s 40% North American and 60% international.”

It is probably this factor that has seen an accelerating rate of consolidation in the maintenance sector as long-established “mom and pop” businesses have failed to adapt to clients’ more sophisticated requirements. Gillespie observes that a number of paint shops have closed in Canada, for example. “They couldn’t compete for whatever reason.”

There has been a trend towards component suppliers acquiring smaller competitors in recent years in the search for increased global share and the MRO market is now mirroring those changes, he says.

Experienced maintenance workers have been back in the labour market in the US following the closure of facilities in Wichita, Little Rock and elsewhere. Meanwhile the Peterborough facility, which can draw from labour pools in Montreal and Toronto, has benefited in the same way as AMAC in Switzerland from the slowdown in the automotive sector. GM and Ford have both laid off skilled workers who may have a relevant background in upholstery or wiring.

From time to time, Flying Colours re-trains people who have lost employment elsewhere, whether in similar or entirely unrelated businesses, and Gillespie says the company is looking to restore the programme in 2013.

It’s more relevant to the completions side of the business than maintenance with its higher level of technical know-how, and there’s no guarantee of a job at the end of the six-month course. But he says the company has hired up to 70% of those who took previous courses, and around half of them stayed on for the long haul.

Total duplication not needed

The civil aviation authorities for Aruba and UAE approved Rizon Jet in Doha, Qatar, as a business aircraft maintenance organisation in September. The additional certifications continue the company’s rapid expansion of its international capability, following the Bermuda Department of Civil Aviation’s approval of the facility earlier in the year.

Rizon Jet’s bases in Doha and at Biggin Hill in London now both have EASA, Qatar, Aruba, Bermuda and Cayman part 145 approvals, alongside FBO, charter and aircraft management operations.

The company is certified to maintain a range of Hawker, Bombardier Challenger and Global types at both locations, but Mike Clarke, its new Doha-based director of technical services, says complete duplication would be a wasteful strategy since fleet make-up and customer requirements differ so much between the two regions.



Mike Clarke says Rizon Jet’s Doha operation is well positioned to provide clients across the Middle East and in Asia with MRO services

For example, Rizon Jet this year added line and base maintenance for the Learjet 45 and Challenger 300 at Biggin Hill, but is unlikely to offer Learjet 45 capability in Doha.

"If a company wants to try you out on a Learjet but also has Airbuses, Challengers and Globals, you want to know if they can commit some of their other aircraft to you as well," Clarke says. "If they won't, you have to ask, what would it take for us to do one new type? Can we get the manuals and do the cross-training?"

"We're a fairly new company and trying to establish ourselves in the markets we're geared for, the Challenger 604, the Global Express and Hawkers. We have a wider range of certifications in the UK than here in Doha. We did study how much the Learjet 45 would cost, but there are very few over here."

Rizon Jet's 4,000sq metre MRO facility in Doha can accommodate eight business jets in its two bays, and Clarke believes the operation is well placed geographically to exploit business opportunities across the Middle East and in nearer parts of Asia, "We should be looking for Asian registers. There's definitely a market," he says.

The company is looking to mirror its EASA part 145 approval to handle an enquiry that recently came from Pakistan for support on a Challenger.

"They would pay to come over and do the audit," Clarke says. "The customer would organise this on behalf of the Pakistani authorities. If they were happy with the customer's report, they would give temporary dispensation or just OK us on the basis that we meet European standards. We're doing the same in Bahrain and we have also had enquiries from Jordan."

Rizon Jet is seeking relevant Saudi approvals as it negotiates with a number of prospective clients there, but Clarke agrees with Flying Colours' Gillespie that the bureaucracy can be challenging there. "You need a man on the ground to pester civil aviation."

One segment the company has definitely ruled out, though not through lack of interest on its own part, is US-registered aircraft. "There's demand, but we have come up against a stumbling block because the FAA is not auditing companies any more. They haven't got the resources," Clarke says. "So when we know an aircraft is on the N register, we don't pursue it."



Discussions in SR Technics' VIP workshop. The company aims to combine cabin refurbishment with maintenance to minimise downtime

Benefits of doubling up

Like most larger completion centres and MROs, ST Aerospace aims to combine procedures at its main base in San Antonio, Texas. STA, which has FAA, EASA and Bermuda part 145 approvals, has more than 70,000sq metres of hangars, repair shops and paint facilities on San Antonio International Airport, providing maintenance and modification services across a wide range of VIP and commercial aircraft.

Ron Soret, general manager of completions, says that as BBJs from the early 2000s come in for heavy maintenance checks, STA can also schedule structural modifications, avionics upgrades, interior refit and reconfiguration.

Although STA largely works primarily with commercial airlines, Soret says business jet owners and operators increasingly value the company's competencies and experience. Not least in today's uncertain climate, it offers financial stability.

SR Technics recently carried out the complete cabin refurbishment of a VIP aircraft for a Middle Eastern customer, in parallel with a heavy maintenance C-Check. It was the company's second project for the government client, and combining the two tasks at its new VIP facilities in Zell, Zurich, allowed the downtime to be kept to a minimum. Redelivery, in mid-August, was on the exact date defined at the start of the project.

"The newly installed carpeting and flooring as well as the reupholstered seats add a luxurious modern look, touch and feel to the interior," SR

Technics says. "Handcrafted new furniture and cabinets optimise cabin space and functionality, using WVIP standards and finishes.

"Behind the scenes, a full systems modification was performed, including an upgrade of the satellite communications system. At the same time, the IFE system was enhanced, replacing current equipment with industry-leading technologies and high-definition monitors."

André Wall, president of SR Technics, says the company took over the oldest hangar at Zell and renovated it to create a dedicated, isolated, secure facility, adding a lounge that the customer "owns" while work is carried out. Thus they can monitor progress at any time.

Wall predicts growing demand for high-end services and says the company's expanding MRO operation in Malta, which received FAA certification in July to go with its EASA approval, will open up additional capacity at its main Swiss base.

But where SR Technics differentiates is through its people rather than its square meterage, he emphasises. "A hangar and equipment, everyone can have. Skills, they can't. We have 200 employees going through four-year apprenticeships and we have a culture of continuous improvement here. People are not going to be saying, 'I can do this cheaper in Indonesia'.

"We don't need to have our books filled beyond two years," Wall sums up. "You run the risk that the client gets bored, or feels he is not the number one priority on a smaller job." ●