



Rotables, worth keeping in house?

The parts market is seeing growing consolidation.
Photo: Iberia Maintenance

In aviation MRO, rotables refer to components or inventory items that can be repeatedly and economically restored to a fully serviceable condition. **Keith Mwanalushi** looks behind the curtains to see how service providers manage such vital parts.

The aviation industry is renowned for its focus on efficiency and streamlining. Faced with the constant need to make cost savings, many airlines around the world have decided to streamline their in-house repairs departments.

Dave Shorter, Director of PBH at AJ Walter (AJW) observes that for decades, operators made do by forming patchwork agreements with local MRO providers leaving them with the headache of managing a host of individual relationships in any given region, potentially including negotiating language barriers and different customs regimes. "This approach is not only time inefficient but makes it difficult for operators to ensure competitive pricing due to a small number of regional suppliers.

"As a result, airlines are increasingly making the strategic decision to outsource their component MRO to aggregators like AJW Group, replacing a web of different suppliers with a single point of contact," says Shorter.



Dave Shorter, Director of PBH, AJ Walter

This type of arrangement, as Shorter explains, ensures better customer service, in the customer's preferred language, and generates cost savings derived from the aggregator's ongoing relationships with suppliers, where they benefit from economies of scale. "Large aggregators like AJW also have access to

a huge pool of component data across the aircraft they support. This enables them to benchmark an operator's performance anonymously against their competitors, and drive efficiencies for their customers by drawing on best practice learned through their work for multiple operators."

Devin Adderley, Vice President of Sales, MRO Services at GA Telesis says airlines are putting more pressure on performance and efficiency as well as holding the MROs accountable through penalties. "MROs are focusing more on their core competencies. The larger MROs will outsource items which are not part of their core competencies to the small MROs using the performance Metris required by the airlines DER repairs have also seen an increase in the MRO industry, but many airlines are not accepting of DERs. Performance is the key, if the MRO is performing on items repaired inhouse, they will continue to see growth on these items."

The industry has seen significant consolidation within the engine OEM market and the same is happening on the component OEM market, suggests Cornelius Dalm, Head of Sales, Account Management and Marketing at Spairliners GmbH.

"This means that individual OEMs will gain more and more power, and it is important that OEM-independent options are



Devin Adderley, Vice President of Sales, MRO Services, GA Telesis



A380 operators can go with Spairliners for full component support.
Photo: Spairliners

kept available for airlines in order to offer them cost-efficient and reliable MRO alternatives," Dalm explains.

Depending on the aircraft type some airlines have developed their own repair capabilities and are able to perform MRO services for their own inventory. "This trend I mainly see in the U.S for Ejet fleets of more than 70 aircraft. Then it makes sense for the airlines to manage their own inventory and perform at least some of the repairs themselves," adds Dalm.

On the Embraer Ejet market there are several independent repair shops around the world which offer repair capabilities for a certain scope, but Dalm observes there are only limited OEM-independent suppliers on the market which offer MRO services for the full Ejet scope such as Spairliners. "This means that the operator has the option to directly enter into and manage multiple contracts with different OEMs and or specialised repair shops or to contract the full scope with the aircraft OEM or Spairliners as an integrator for the full scope. In the A380 market there are way less options available. The A380 operators can only choose between the aircraft OEM or the component OEMs or go with Spairliners who offers full component support for the entire A380 scope."



Cornelius Dalm, Head of Sales, Account Management & Marketing, Spairliners

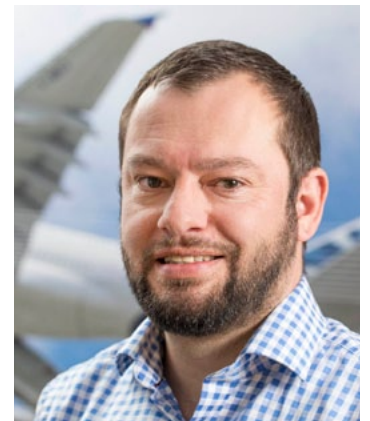
When asked if there are any sound arguments for keeping in-house repair shops, Dan Wadley, General Manager at Bii states: "Several component traders (and major operators)

have in-house capability, and for those who specialise in certain components (or have a large fleet to maintain at designated home bases) it makes perfect sense. In-house capability can afford better control of the repair cost and completely avoids the cost and time needed to ship to a separate repair shop."

There is much to be said about third party repair programmes, possibly being the best solution for expensive but repairable parts, some believe. "Third party MRO providers have the advantage in terms of being more local to the end user, as well as proving the most experience with a vast selection of issues, on a variety of subsystems and parts, and these from a wide selection of OEM's," comments Stephan Jezler, SVP Aviation International at RUAG Aviation.

Tom Covella, Group President of STS Component Solutions believes that third party repair programmes are definitely viable solutions for high dollar repairable parts. "However, this will be dependent on the third parties and what factors they are building into the overhaul and repair scheme. The OEMs obviously provide a high level of creditability with the repair of their own products as they have all of the design and manufacturing capabilities, tooling and test equipment on hand."

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Dan Wadley, General Manager – Bii

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ards established within the CMM. "At the end of the day if the component is achieving the desired reliability levels the argument can be had, does it matter who has overhauled or repaired the component?"

Darmilo Sosa, CEO at Wingbox Aviation believes third party repair for expensive but repairable parts may not be the best solution but a reliable solution. "Availability of parts is the critical advantage under the third-party package or programmes. Expensive repairable parts are normally in

a low stock in the market and if available in AOG or urgent it then cost more. The vendors normally stockpile optimal quantity to support all the accounts enrolled which give readily access to operators."

Shorter reckons although rotatable parts represent a relatively low level of demand events compared with consumable and expendable (C&E) parts, their value is significantly higher, both in terms of asset value and transactional cost. However, both rotatable parts and C&E parts are equally critical in terms of service level support for AJW's customers, as both can ground an aircraft.

An airline needs to ensure it has access to enough inventory that it can immediately draw on to replace a part while an unserviceable component is sent away for repair, Shorter from AJW continues. "It would be extremely expensive for an airline to own and stock every component at its bases and line stations. Many components would never be used, and surplus inventory generates no revenue and is a financial burden that airlines can do without."

He says AJW's power-by-the-hour (PBH) solutions enable airlines to overcome these inefficiencies through fixed flight-hour cost programmes tailored to their individual operational needs, allowing customers to manage cash flow.

GA Telesis undertakes rotatable exchange programmes. Adderley says the rotatable exchange programmes typically consist of items repaired in the GA Telesis MRO facilities. "It allows our customers free access on items being supported by our MRO facilities. Customers are also able to get advance exchanges which eliminates costly AOG situations.

"We also have dedicated rotatable exchange programmes which are similar to our shared rotatable exchange programmes, but the pool items have specific SBs, upgrades and other modification incorporated per the specific customer requirements. We also stock our dedicated rotatable exchange units globally in locations specified by the customer."

Adderley continues that rotatable programmes can save aircraft operator's money in several ways. He says should the MRO be willing to invest into a rotatable pool, this eliminates the need for the operator to make that investment. "Another option is also where an MRO would not only create a rotatable pool for the operator, but they will also purchase inventory from the operator which would then help to reduce inventory cost. As an MRO we are able to create a rotatable pool for an operator which would not only include purchasing inventory from the operator but also provide repair discounts along with other concessions that would provide significant savings across their inventory and MRO spend."

At RUAG Aviation, the operational model allows for both exchange and loaner programmes for rotatables, although exchanges are largely dependent on platform and customer policy. "Both options are supported by subsystems that are maintained to highest standards and reliability," notes Jezler.

He says many of RAUG Aviation's MRO customers choose to combine their heavy maintenance MRO visits with rotatable MRO as well. "Time-wise, this makes sense. Should the rotatable MRO requirements fall outside of a lengthy MRO visit, the loaner is installed so our customer may resume their operations according to schedule. A quick visit allows us to replace the loaner with their own system once the rotatable has been serviced according to the OEM requirements. We are also continuously reviewing the requirement of exchange and loan units and collaborating with partners to be able to fulfil such regional needs.

STS is involved in various rotatable exchange programmes too. "Some are flat rate exchange programmes, some are repair management and others are repair development," indicates Covella. He says each of these are established to provide operational cost reductions, but each airline may have a different strategic initiative.

Covella adds: "Factors that drive these rotatable exchange programmes include; inventory reduction, reliability improvement, predictability of repair costs; and reduction of BER (beyond economical repair) rates. These programmes are established with the OEMs and third-party component repair shops and focused on driving value and cost reduction opportunities."

Dalm also states that by joining Spairliners' component pool the operator no longer has to invest in his own inventory and does not have to manage the repair of his spare parts themselves. He says Spairliners owns more than 375 MUSD of assets for both A380 and Ejets and is currently supporting 172 Ejets and 42 A380s under exclusive agreements. "Such combined inventory brings real cost savings for our customers who benefit from this scale effect. Instead of investing individually in assets, airlines just pay for the use and access to our component pool, where we can spread the costs across all our customers. We call it 'pool effect.' In other words, we make use of the economies of scale that lead to cost savings for both, the airlines and Spairliners."

Bii's portfolio of MRO partners is carefully selected to ensure each component is repaired as efficiently as possible, tells Wadley. He says the cost, turnaround time and subsequent reliability of every repair managed by Bii is closely monitored to ensure that extremely high service levels are maintained. "To compete directly with workshops and OEMs, Bii recognises that it needs to add value to the repair process; our growing exchange pool allows us to provide guaranteed turnaround times, and our repair volume has allowed us to negotiate flat rate pricing for many components. Our customers know that Bii can be relied upon to maintain their spares within budget; in terms of both cost and time."



Darmilo Sosa, CEO Wingbox Aviation