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Cost Control:

Managing the rising cost of component repairs

Technology

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VTOL Aircraft

Creating opportunities for support services

Industry Interview

Demetrios Bradshaw
Managing Director, Aeras Aviation



Pandemic leaves rising **component** repair costs in its wake

Material costs, along with lead times, have all increased.
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The rising cost of component repairs post-pandemic including higher material prices, means industry players need smart strategies to brace for the impact and perhaps push for alternative and cheaper solutions.

By Keith Mwanalushi

Everyone is talking about the higher cost of component repairs – it is no surprise that Covid induced supply chain issues are now causing delays, availability problems and cost pressures in the market. “Costs are continuing to rise across the board, both material and labour costs have gone up across all our vendors worldwide,” observes Conor Keane, the Repair Manager at EirTrade in Ireland.

Keane cited several economic and political factors that were involved; also mentioning material costs, along with lead time increases that have led to both monetary and time constraints for

EirTrade – “We are hoping to see things stabilise this year to allow for more accurate forecasting and planning,” he says.

Close communication with customers is a key factor in navigating these issues and giving prompt and honest updates to operators has allowed players like EirTrade to share any cost burden as they navigate the ever-changing landscape. “Increased costs are not always something we can just pass on, but by keeping our customers up to date we can manage expectations, and we are also extending our repair network to try and



EirTrade's Repair Manager – Conor Keane

COST CONTROL FOR COMPONENT REPAIRS



Cliff Lorenzo, President of Northeast Aero Compressor (NEACO)

reduce unexpected delays in particular areas,” Keane states.

Cliff Lorenzo, President of Northeast Aero Compressor (NEACO) - which was recently acquired by Jet Parts Engineering – says that over this past year, NAECO have seen costs grow exponentially due to supply chain shortages, cost of secondary repairs, and exorbitant pricing increases by the OEMs, in the post pandemic period. “In years before the pandemic, we would typically see average material price increases ranging from 5-15% across the



Carlos Garafalo, Manager Asset Life Cycle at AMROS Global

board, annually. This year, we have seen price increases of up to 15% with some OEMs, quarterly,” he notes.

At NEACO, they have been able to leverage provisioning skills, through increasing purchase quantities on long lead time parts while carrying a larger inventory with higher trigger purchase points to minimise their customer’s lead time. NEACO also has an on-site DER, PMA sister company Jet Parts Engineering, and DER sister company PG Aerotech to minimise turnaround time (TAT) and cost to operators.

“We have seen an uptick in customers reaching out for long-term contracts, to lock in flat-rate contracts,” Lorenzo reports. “This is a smart initiative on their part to hedge the current climate of continually increasing costs to repair stations,” he adds.

At AMROS Global they are also seeing repair cost increasing, especially on the OEM owned shops, but in reality, Carlos Garafalo’s, Manager Asset Life Cycle Solutions says the most dramatic increase has been on the TATs at any given shop, along with raw material and spare availability. “We see a significant impact on exchange transactions plus repair costs. Some suppliers are simply not offering anymore spares for exchange because there is a high uncertainty on when the core units will come back serviceable on the shelf due to the long lead times at the repair shops,” he stresses.

Some of the strategies at AMROS include trying to procure, where possible from regional suppliers to minimise the impact of the current challenges in the transport and logistics sectors. For critical items, Garafalo suggests keeping components on wing as long as possible, until the situation stabilises –



The obtainability of some components continues to concern the market.
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“This has put a great deal of pressure and we are seeing heavy delays on the return to service of aircraft in post-Covid times, so we are constantly looking for alternatives like lower modification parts and even PMA items.”

Certainly, almost every repair station is increasing their prices – “ They are doing this both to pass on additional costs associated with piece parts, capital, and labour, as well as increasing their margin in an economic situation where demand for repairs outstrips available supply,” comments David Chaimovitz, Chief Executive at Setna iO.

Chaimovitz understands the need for repair businesses to have healthy margins and says there is a huge amount of capital required upfront and major governmental regulatory hurdles to overcome and not to mention the extreme level of knowledge and skill required to

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Carlos Garafalo, AMROS Global

successfully operate a repair business in a safe and reliable manner.

Setna iO is a parts trading company currently acquiring multiple full assets for disassembly on a regular basis, while also actively purchasing inventory to support the industry and flight-hour programme operators – “ the only solution is foresight and patience. Also, opening our repair shop, Setnix, has added significant capacity and the ability to fast track our repairs, when piece parts allow it,” Chaimovitz highlights.

There are several factors that are affecting both the OEM price and longer lead time including the supply of raw material for components. Tracey Downes, Head of Component Sales at APOC Aviation suggests the growth in the cost of raw material supplies in the aerospace industry can be attributed to the increase in the commercial and ageing aircraft fleet size, and considering that most airlines are hanging onto their aircraft for longer. She says, by mid-Covid there was a trend to retire aircraft earlier or to invest in cargo conversions, this has left the industry with a considerable shortage of highly desirable parts in 2023.

“The best way we can overcome supply chain shortages and logistical challenges is not with short-term fixes but by taking the long-term perspective and correctly identifying present and future needs for parts that the market needs,” Downes suggests.



David Chaimovitz, Chief Executive at Setna iO.



Repair cycle management are looking at longer term component repair arrangements.

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This ties in with APOC’s longer-term company objectives, as Downes explains: “We are seeking to reduce the burden of tied-up capital and free up cash flow. By identifying our parts procurement cycles in advance while ensuring precise budget and capital flow planning, we are optimising operations and freeing up cash flow for other investments. We are also transparent and open with our customers and they appreciate there is a huge backlog and issues with the repair shops and are very understanding.”

The market is looking for best value for money - basically the best price, quality, delivery, and proper terms and conditions of each deal, highlights, Armando Filho, Material Management Director at Vallair. “Operators are also searching for alternative solutions like serviceable condition items with green time, leasing and pool stock options to minimise costs.”

Filho says MROs are busy, sometimes overloaded, and still facing supply chain

issues to source the proper parts in stock to process repairs on time. “This is one of the reasons that repair costs have been increasing and consequently lead times are not so friendly. It’s the reason why Vallair is looking for ways to innovate and bring in more exchange, leasing, and pool stock solutions to support market demand,” he states.

Longer-term component repairs

Industry observations suggest operators are increasingly seeking longer term component repair arrangements in a bid to lower costs in the current environment – similar to the airframe side of things.

Keane from EirTrade agrees to a large degree, saying several operators will be trying to lock in longer term agreements to try and reduce costs going forward. “Whether or not repair vendors will be reciprocal of these is yet to be seen. From our perspective it makes sense to try and

“Lessors are often the reason that DER and PMA parts are not allowed, as they are concerned these repairs will reduce the price of their assets in an end of lease and life situation.”

David Chaimovitz, Setna iO.



Tracey Downes, Head of Component Sales, APOC Aviation

lock in any particular pricing or discounts as this allows us to plan more accurately further into the future," he says.

Chaimovitz, from Setna iO has observed this trend too. "Yes, we are seeing this - if an operator can predict a maintenance event prior to actually needing a repair for an on-wing failure, the airline can avoid an AOG while finding reduced pricing. This is also beneficial for the repair shop, as they can purchase inventory for future repairs in advance, lowering cost for the end user while also having an expected stream of work to ensure reasonable profitability," he explains.

Downes at APOC concurs and says airlines, MROs and lessors need to consider a multiplicity of sourcing scenarios. "Some airlines that have traditionally heavily outsourced through pooling, PBHs[flight-hour] or repair cycle management are looking at longer term component repair arrangements." For example, Boeing created a component services programme as a low-risk method for airlines to reduce aircraft maintenance costs. According to Downes, the programme provides around the clock access to a dedicated inventory pool of selected high value, dispatch-critical components, such as avionics, actuators, and precision mechanical assemblies.

The programme allows participating airlines to shrink their inventory of

dispatch-critical, high-value line replaceable units. APOC are reviewing closely and monitoring this situation –"We are continually investing in software, which positions APOC as a frontrunner in the sector ready to support the renewed growth in the USM market," notes Downes.

Are PMA parts and DER repairs a viable solution?

At APOC Aviation, they are observing that currently, the demand is still for OEM parts and CMM repairs. Experts at APOC feel airlines still prefer OEM parts due to the contract they have with the lessors when the aircraft is re-delivered. During an AOG situation however, PMA parts and DERs are more acceptable.

Meanwhile, EirTrade are seeing continued growth on this side of their business, as Keane further tells: "Many operators are looking to reduce costs, and this is a safe and cost-effective way of doing this. Across multiple engine types and aircraft, we are seeing an uptick in operators utilising DER repairs in particular, and this has allowed us to maximise our returns across all our product lines and reduce scrap and waste. Allowing more competition and reducing waste of ultimately good parts will only help to make our industry greener and more renewable."

NEACO have a strong relationship with Jets Parts Engineering – a PMA provider and PG Aerotech - a DER repairs specialist and this allows the company to lower costs and pass that on to operators. "In some cases, we have been able to improve on-wing reliability by incorporating improvements with these alternative solutions," says Lorenzo.

Lorenzo observes a greater openness today to utilise PMA and DER repairs than pre-pandemic. "Airlines are so focused on the post-pandemic recovery, hence the cost savings from PMA and DER are a hard proposition to resist." He points to some legacy airlines that have been benefiting from this for decades, and those are typically the operators that are in better financial health today. "Of course, PMA

and DER are not the only factors giving them the upper hand, but an overall mindset to explore alternatives helped get them there. I believe some other airlines are now seriously considering those alternatives and pushing back on lessors and OEMs who are trying to keep them in their grip," he adds.

The folks at Setna iO and AMROS echo similar thoughts on the issue. Chaimovitz says operators should and do use PMA and DER repairs. "Lessors are often the reason that DER and PMA parts are not allowed, as they are concerned these repairs will reduce the price of their assets in an end of lease and life situation."

AMROS anticipate increased interest in PMA and DERs, however, Garofalo reckons there is still a lack of commitment for such but foresees growing demand with the rising capacity limitations and supply chain disruptions.

In conclusion, Filho from Vallair reminds that this has been an ongoing debate for a long time already: "This is a long and continuous discussion, but basically the OEMs and majority of approved MROs and airlines do not accept PMA parts and DER repairs. It's an option for the ones that do accept, but it's still a longstanding issue for more than two decades. I do not see major change happening now, similar discussions always happen when the market is affected by a crisis."



Armando Filho, Material Management Director at Vallair