## OPERATORS TACKLE USM CHALLENGES TO BOOST EFFICIENCY IN AFTERMARKET MRO

Operators are exploring collaborative frameworks to share resources, parts, and information, which can enhance overall efficiency and reduce costs. Freighter Trends learnt that implementing blockchain can enhance supply chain transparency and traceability, ensuring the authenticity of parts and improving the reliability of the supply chain. Building relationships with multiple suppliers can reduce dependency on single sources, providing more options and flexibility in sourcing parts. Developing advanced repair techniques can extend the life of existing parts, reducing the immediate demand for new components. Here are the details .....

What innovative solutions are available to address the current parts shortages in the industry?

Dan Trigg, Senior Sales Manager, EirTrade Aviation - At EirTrade we are very aware of the parts shortages, the delays in piece parts availability and long TATs from workshops. We've built very close relationships with our end user customer base and through those can track where we see shortages in the market appearing. Market intel is key to getting ahead of the curve and building up stock to ensure we're meeting our customer requirements in a timely manner. EirTrade is also using Avsight as our CRM, a very powerful tool that assists us with building reports, tracking market trends and monitoring stock levels. Furthermore, we have been working extensively to expand our vendor base for procurement and repairs. Additional staff have been hired for purchasing stock, salvaging repairs with extended lead times and replacing material that is Beyond Economic Repair

Michael Garcia, VP of Commercial, Kellstrom Aerospace - Kellstrom addresses the challenges of parts shortages through several innovative approaches, including consignment, exchanges, and Just-In-Time (JIT) inventory support.

Consignment: We collaborate closely with our partners to strategically place materials on-site based on their specific consumption needs. This approach ensures that necessary parts are readily available, reducing downtime and improving operational efficiency.

Exchanges: Our exchange programs offer quick turnaround times, allowing partners to maintain operations without the need to manage extensive inventories. This solution provides the necessary support without the burden of inventory management.

Just-In-Time (JIT) Inventory Support: Kellstrom leverages advanced data analytics to work with MROs and airlines, helping them forecast and plan for future inventory needs. This proactive approach ensures that the right parts are available precisely when needed, optimizing inventory management, and reducing waste.

Ismael Fadili, VP Sales Europe – AMETEK MRO - There is no magic recipe as we are dependent on the OEMs. The best way to

Dan Trigg

manage part shortages is to have an accurate forecast from customers and based on these predictions we can establish mid-term/long-term provisioning commitments with our suppliers and give clear visibility to them in order to plan for, and prioritise, our orders.



Dan Trigg - Airlines are often implementing inventory management systems which provide real-time data and predictive part requirement analysis. With increased costs across many areas, it is important for airlines to streamline their procurement in the most cost-efficient way. By using these systems, they can negotiate better deals ahead of time to avoid paying inflated AOG prices. They can also procure in a way that avoids overstocking.

Delays in new aircraft production and difficulties in USM procurement are also leading operators into retaining older aircraft to address these capacity deficits. This is creating a cycle which leads to less aircraft retirements and a continued shortage of key spare parts.

EirTrade understands these difficulties and as such is working





tirelessly to increase the number of teardowns and procure high demand USM to support our end user base. Despite the problems the market faces, EirTrade has positioned itself as an invaluable partner for USM supply.

David Rushe - In the years prior to the pandemic, the cost savings associated with USM material in times of higher supply, had reduced the need for PMA/DER repairs in the component repair process. However, there has been renewed appetite in the last 18-24 months for PMA and DER. We have also seen airlines harvesting their own assets, particularly on the airframe side, in order to secure USM material through their in-house MRO capabilities. Operators are also working with USM players and teardown providers on consignment and teardown outsourcing projects, where they maintain full visibility on material being removed from airframe and engines.

Ismael Fadili - If there are no exchange

programmes in place, PMA or DER repairs are the best ways to support part shortages and USM availability.

Michael Garcia - To mitigate the challenges posed by the shortage of USM, operators are prioritizing strategic planning to avoid maintenance events that could lead to bottlenecks or, worse, Aircraft on Ground (AOG) situations. Meticulous planning is crucial. By leveraging expertise to precisely identify the materials required for specific maintenance events, operators can ensure ample time to source and plan, thereby avoiding work stoppages and maintaining operational continuity.

In addition, operators are extending the service life of aircraft that had been slated for retirement, redeploying them to meet the ongoing demands of air travel. This strategy helps to offset the reduced availability of USM. Some providers are also becoming more open to using PMA (Parts Manufacturer



Approval) and DER (Designated Engineering Representative) solutions as alternative sources to keep their fleets operational in a constrained supply environment.

## FREIGHTER TRENDS

How has the reduction in narrowbody retirements impacted the availability of Used Serviceable Material (USM) on the market?

Dan Trigg - You can see an availability shortage of the high-moving parts across most platforms, but particularly A320 and B737NG. This in turn increases the value of said components and puts major pressure on OEMs to support the airlines. This has a bottleneck affect which is prolonging maintenance schedules.

This again is something EirTrade is constantly monitoring in an effort to assist our customer base. Our aim is to have as much USM on the shelf, ready to go, available for sale or exchange in order to remove such headaches for airlines.



David Rushe – VP, Global Business
Development & Origination, Magellan
Aviation Group - Supply has certainly
tightened, particularly for post-2007
build airframes, which typically exhibit a
higher degree of parts commonality with
newer tech A320neo and 737 MAX.
Thankfully, the network of repair shops
and OEMs is wider and more diverse for
narrowbody components, which helps
deal with TAT risk. APU and landing gear
values have been slower to recover to
pre-Covid levels, but we are now seeing
a supply and demand balance for good
life serviceable units.

Ismael Fadili - At AMETEK MRO we're seeing less USM availability, but as our primary business service revolves around the provision of repair services under special OEM service agreements, this is not affecting us too much as it only forms a limited portion of our spares usage.

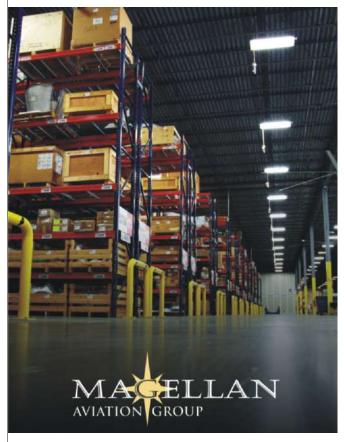
Michael Garcia - The reduction in narrowbody retirements has significantly decreased the number of part-out assets, further straining supply chains already impacted by the pandemic. However, the growing demand for travel and the need for green time engines have led asset owners to re-invest in performance restorations. Instead of retiring and parting out older assets, owners are now more inclined to extend the life of these assets through restorations. This shift helps ensure the availability of green time in a market where asset readiness is increasingly limited; however, has had a draining effect to USM availability.



Will there be a shift in attitudes and acceptance towards Parts Manufacturer Approval (PMA) and Designated Engineering Representative (DER) parts? Dan Trigg - We are already seeing a shift in mindset by some of our customers on certain material. Not everyone can accept and not all parts are suitable for OEM/PMA repairs, so it is with caution that we use them. However, by accepting these, you are speeding up the repair process as well as bringing costs down. Both key in the current climate.

 $\label{eq:continuous} \mbox{EirTrade work closely with all customers to}$ 





establish their needs in respect to OEM, PMA and DER solutions. By building these close relationships, we make sure that each customer gets what they require in accordance with their quality standard. We also have our own very strict QA requirements which are adhered to at all times.

David Rushe – Yes, as stated earlier, the market is back to being more receptive to PMA and DER repairs, but it is worth noting that this remains within the constraints of lease agreement provisions and limited to non-critical components, particularly on the engine side. Where the cost benefits of PMA/DER usage come into play, is on older operator-owned and

amortized aircraft, with more pronounced maintenance costs. We would often see a degree of PMA/DER content in such assets.

Michael Garcia - Attitudes toward PMA and DER parts can vary significantly depending on the operator's preferences and the specific maintenance requirements. While PMA and DER parts are reliable replacements that meet form, fit, and function standards, the ultimate decision often lies with the asset owners. The key factor remains the reliability and availability of parts that can get aircraft back in service efficiently, whether they are PMA, DER, or OEM. As supply chain constraints continue to challenge the industry, there may be a growing acceptance of PMA and DER parts, especially among operators and maintenance providers seeking dependable solutions

to support passenger and cargo operations.

How are organizations adapting their supply chain management practices to cope with the unpredictability of the current environment?

Dan Trigg - EirTrade has bolstered their sales, purchasing and assets teams over the last year with more personnel from both a trading and airline background. Each team works together to ensure we are consistently looking out for trends in the market on both a USM and major asset level. We purchase and sell accordingly to stay on top of these trends.

The extensive lead times in the MRO sector really emphasise the importance of having

material tagged and ready to go in stock. When any new teardown begins, we make sure a high percentage of material is shipped immediately to a workshop for certification. Our goal is to provide complete support to the airlines in these difficult times. We also have exchange pools of high demand parts designated purely for our airline customers.

David Rushe – Magellan has established warehouses in the US, Europe and Asia, offering full time-zone support and an enhanced AOG support network. We are constantly reviewing and diversifying our network of approved repair shop providers, to work on reducing TATs for component repairs, without sacrificing quality. This also extends to our teardown partners on the airframe and engine side. Magellan has long had a focus on acquiring younger, higher spec assets as this is where we are seeing the highest degree of market demand.

Ismael Fadili - At AMETEK MRO we are encouraging greater collaboration with customers to ensure accurate forecasting and thus enabling is to make a commitment to our suppliers. This provides an effective way to tackle the current situation.

We are also working as to support more DER repairs, and offer customers PMA options.

Michael Garcia - At Kellstrom Aerospace, we take great pride in our commitment to exceptional customer service and meticulous attention to detail. In today's challenging environment, where imitation may be flattering, it often falls short in addressing the unique needs of our customers. We distinguish ourselves by deeply understanding our customers' requirements and leveraging our 40 years of expertise as supply chain leaders to deliver tailored solutions.

To navigate the current unpredictability, we've implemented a range of innovative strategies. Our consignment programs, exchange services, and Just-In-Time (JIT) inventory support ensure that our partners have timely access to critical materials, minimizing downtime and avoiding bottlenecks. We also work closely with asset owners to extend the service life of aircraft, particularly in a market where the availability of Used Serviceable Material (USM) has been impacted by fewer retirements.

Through our steadfast focus on customer service, partnership, and adaptability, Kellstrom Aerospace continues to set the standard in supply chain management, ensuring that we deliver the highest level of support for maintenance events with professionalism and expertise.

