

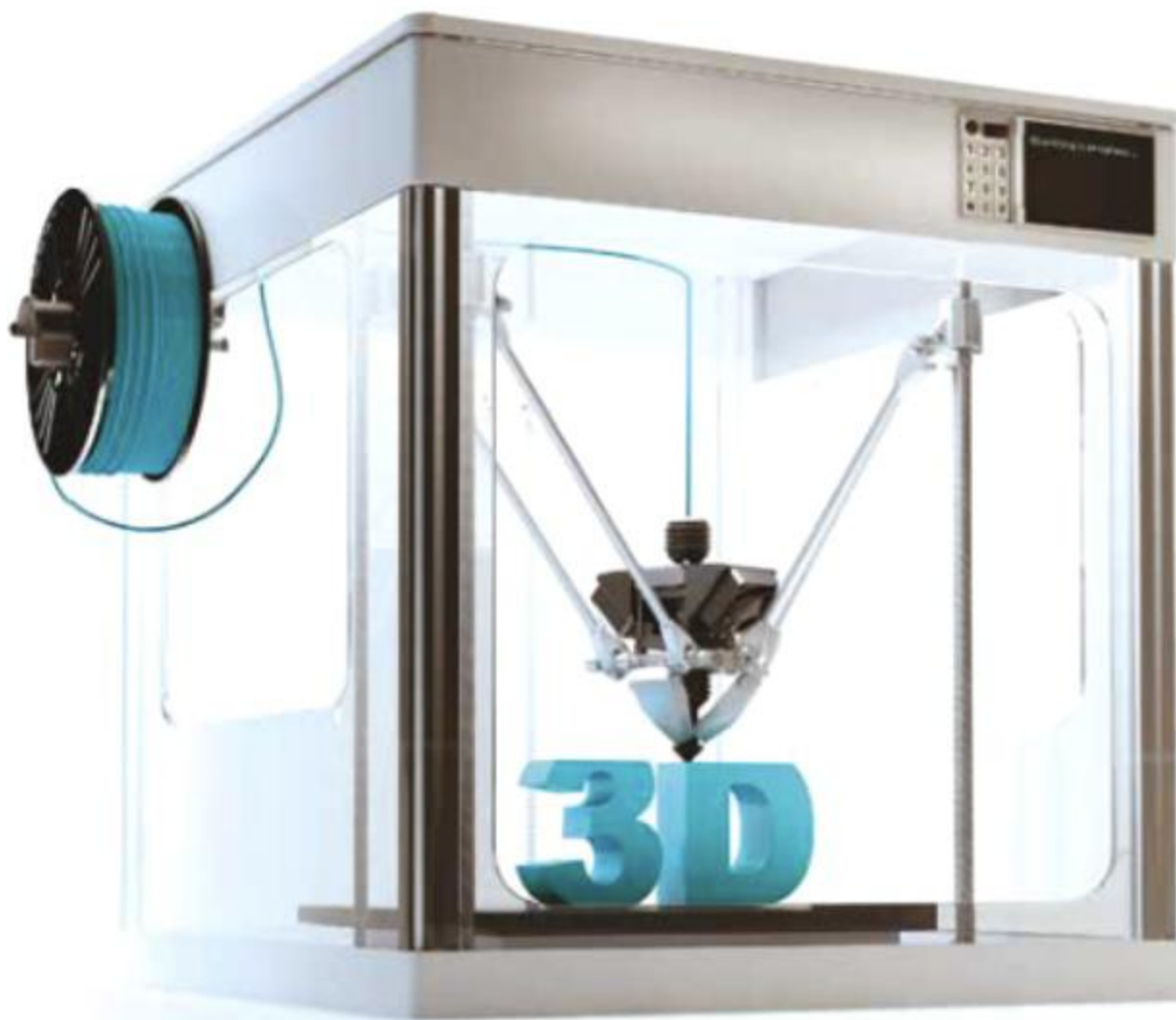
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APRIL 2024 • VOLUME 26 • ISSUE 3

MIRO

Management



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BUILDING RESILIENCE

Mario Pierobon finds out from industry experts what is driving change and improvement in MRO supply chain logistics, the levels of performance, and what is needed to continue to build resilience



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1. Inside AJW's warehouse
2. Clyde Buntrock, chief executive, AJW Aviation & AJW Technique



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Proper coordination and scheduling maintenance and service needs in advance is at the forefront of driving improvement in MRO supply chain logistics, as is communication about timelines and how to work through supply chain issues.

The events of recent years have highlighted the agility of industry stakeholders who have driven change and process improvement to survive and navigate the ongoing challenges.

CHANGE AND IMPROVEMENTS

According to Clyde Buntrock, chief executive of AJW Aviation & AJW Technique, operators are still facing hurdles such as prolonged logistics lead times, parts shortages and a diminished skilled workforce, and to better cope with these circumstances there has been a trend towards greater regionality in sourcing. "Our operational agility has led us to drive a pooling strategy for our 450,000 line items of inventory valued at US\$500 million, so it is our highest priority to efficiently manage this stock to best serve our customers' needs," he says.

Jason Junot, vice president of global supply chain at StandardAero, says that one of the more recent trends the company is addressing is looking towards digital technologies and tools to enhance efficiency and service offerings. He explains: "Several steps in our MRO process have been digitised. Smooth execution of service, from induction planning all the way to delivery and accurate invoicing, is critical for our customers.

"We have found that through the introduction of our digital production systems, engines and components can flow through the shop, with minimal physical information and all routing, instructions, measurements, stamping and maintenance records fully digitised which are subsequently used for the consolidated reports delivered to the customer and accurate invoicing."

StandardAero has invested in aspects of digitisation for multiple years, and the key has been to position efforts in terms of operational efficiency and quality improvements, rather than just removing paper, explains Junot. "This has allowed us to digitise the areas that matter the most. We have made steady progress in most of our facilities. We have also digitised maintenance and computer support requests, visitor sign-in and authorisation, engineering requests, preventative maintenance tracking, recordkeeping, supplier invoice approvals and the job application process." He adds: "In brief, we have established a digitisation roadmap, investing in digital capabilities that enhance the customer experience in terms of turnaround time (TAT) and on time delivery (OTD) improvements and enhancing quality standards through digitisation of the shop floor operation."

PERFORMANCE

Technologies such as predictive maintenance are currently trending and digital solutions are gaining traction, driven by their potential to enhance operators' availability and reduce airline operational costs, highlights Buntrock. "We are on a journey to digitally transform our operations, from customer-



“The key to building a resilient supply chain is to ensure it is built for rapid recovery through visibility of long-range needs”

facing sales systems and intricate back-end ERPs and operational tools to developing automated fulfilment solutions,” he explains. “We are also looking at first pilots for robotics in MRO. The key is adapting to technology by undergoing digital transformation. We are embracing ‘stage gate’ visibility of a component part’s life through the MRO process, which greatly aids planning and certainty in managing availability. In addition, we are developing Internet of Things (IoT) tracking of the physical logistics of a component in transit, including smart alerts as to deviations to planned route and light/shock and pressure sensors providing real time exceptions most especially for time critical or high value shipments.”

A disrupted supply chain, extended lead times and shortages in skilled labour are challenges that persist and remain key concerns in the aviation industry, Buntrock explains. “However, this industry has a history of survival, and businesses find ways to succeed. AJW is addressing these challenges by making inventory forecasting a priority. The surge in demand for travel coupled with last year’s record-breaking summer sales for airlines has made it crucial to enhance forecasting methods to better anticipate inventory demand.”

According to Buntrock, technology-driven forecasting tools can improve the ability to meet customer needs effectively, thus reducing inefficiencies in the supply chain and, as such, one priority is optimising inventory management and logistics operations. “The supply chain fracture has made efficient inventory management essential,” he notes. “By implementing automated inventory tracking systems, we can help streamline tracking and management processes, reducing errors and delays.”

BUILDING RESILIENCE

In response to supply chain challenges, StandardAero is continuing to expand its internal component repair and development capabilities including extensive in-house parts repair through the component services division team, which can prevent new parts-related roadblocks, according to Junot. “To help address these challenges, we work to bring operators up to speed regarding all of the industry dynamics and encouraging them to become more proactive about planning and establishing longer lead times for engine and aircraft service availability,” he says.

According to Buntrock, building a resilient and effective supply chain is

not merely about securing materials and components, it is about nurturing relationships and fostering collaborative partnerships. “Over the past nine decades, we have cultivated bonds by collaboration with industry partners and customers,” he says. “These connections are at the core of our ability to procure and supply components to our global customer base.”

The key to building a resilient supply chain is to ensure it is built for rapid recovery through visibility of long-range needs, the ability to identify potential issues that have the highest potential for supply chain disruptions and having contingency plans in place for those disruptions, according to Junot.

“Disruptions are a constant in supply chain and this process helps to ensure no matter what future supply chain disruptions occur, the supply chain team has a process to effectively and efficiently deal with them,” he says. “Finally, cyber-security has also been centrepiece for our digital investments in order to ensure customers, suppliers and other proprietary data is properly safeguarded and providing a great level of confidence to the partners.”

▲ Inside AJW’s warehouse



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