

Pooling Programs Help Airlines Mitigate Supply Chain Challenges

Keith Mwanalushi December 05, 2024



Norse Atlantic Airways works closely with United Airlines in the U.S. through the IATP program to handle AOGs.

Credit: Norse Atlantic Airways

CAIRO— Airlines and MROs are still facing challenges in securing a consistent supply of certain components and services from suppliers and OEMs, so pooling and sharing technical resources continues to be popular.

Demand for solutions that can quickly resolve aircraft-on-ground (AOG) situations more efficiently has doubled in the post-pandemic period according to utilization rate trends on the International Airlines Technical Pool's (IATP) platform. IATP is a convention of international airlines and associate members that include OEMs and service providers. More than 650 delegates converged on Cairo, Egypt in October to discuss pooling solutions and technical performance in aircraft operations.

Dilemmas in the supply chain have led to increased prominence of resource sharing, as illustrated by Norse Atlantic Airways, an IATP member since 2022. David Kerr, the airline's head of technical procurement and supply chain, says the major drive for joining the platform was to reduce investment in parts and to keep inventory low, in addition to access to an aircraft recovery pool.

THE PULL FACTOR FOR NORSE ATLANTIC

A notable example is the relationship between Norse Atlantic and United Airlines through the IATP program. "Most of our flights go to [John F. Kennedy International Airport] and they [United] have a huge stock in Newark," says Kerr. He says United has assisted Norse on several occasions when the Norwegian carrier has been in AOG situations in the U.S. by providing it with loans for items such as wiper motors and access to its vast inventory of electrical line replaceable units which are very specific to the [Boeing 787](#).

"United make a little bit of money out of it, but it's a relationship that we've been so lucky to have," says Kerr.



Sharing of technical resources continues to be significant in the post-pandemic period. Credit: Norse Atlantic Airways

Kerr points out that AOG situations are a race against time. "If you're AOG when the aircraft arrives, you've only got a very limited amount of time because the crew have already reported to the aircraft," he says. This further pushes the agenda for resource sharing.

When Norse Atlantic joined IATP in 2022, it brought along 787 related parts to the pool including Safran main and nose wheels for pooling at bases such as London and Oslo. Kerr says access to these items is extremely critical. "You don't really use them, but if you go over some FOD [foreign object debris] on the runway and you get a hole in the wheel, you need access to wheels, which are very expensive," he says.

In September, Norse Atlantic launched thrice weekly services between London Gatwick Airport and Harry Reid International Airport in Las Vegas, where pool resources are available. "So, we don't have to buy any additional wheels there because British Airways has them in the IATP pool in Las Vegas," says Kerr.

Another example is the increasing charter work Norse conducts during the winter months. The airline signed a five-month charter agreement with British cruise line P&O Cruises to fly people to the Caribbean from the UK for their cruises. The flights land in Barbados, where Norse has access to the British Airways' pool of wheels. This eliminates the need for additional purchases, shipment or storage of wheel inventory by the airline.

"Without the IATP platform, we could have spent [probably] an extra \$1 million on just wheels to ensure they are placed where Norse flies," Kerr says.

MITIGATING STRATEGIES BY MROs

The nature of the business means AOGs are unavoidable, but some MROs are playing a more proactive role in addressing the challenges. For instance, experts at EgyptAir Maintenance & Engineering (M&E) in Cairo continue to observe the ongoing disruptions in the global supply chain, which clearly impact the availability and delivery times of components.

Logistics challenges associated with the transportation of spare parts, especially those classified as dangerous goods, are subject to stringent regulations and often face delays. This is particularly evident in the current climate, where shipping times have extended beyond historical norms.

To mitigate these challenges, Ibrahim Fathy Zaki, the new chairman at EgyptAir M&E, highlights several strategies the company is applying, starting with the diversification of suppliers.

“We are actively expanding our supplier base to reduce our reliance on any single source and increase our options for procuring critical components,” he says. Additionally, EgyptAir M&E is building stronger relationships with those suppliers through regular communication, collaboration and joint problem-solving initiatives.



Egyptair M&E's collaborations with OEMs and other MROs enable access to specialized services for components that may fall outside of its internal capabilities. Credit: Keith Mwanalushi/Aviation Week Network

To expedite turnaround times and ensure comprehensive coverage, the Cairo-based MRO has cultivated strategic partnerships with OEMs and other MROs, too. Zaki says these collaborations enable access to specialized services for components that may fall outside of internal capabilities.

Risk assessment and contingency planning is another area of strategic review. “We have developed robust risk assessment frameworks and contingency plans to address potential supply chain disruptions and ensure business continuity,” Zaki adds.

Iberia Maintenance was also present at the IATP convention to demonstrate its capabilities for end-to-end processes for high rotating parts such as wheels, brakes, safety components and batteries—including pooling services.

“We provide availability for these components but also repairs at our La Munoza facility in Madrid, and we also manage the logistics services with the pooling,” says Joaquin Madero Viagel, Iberia Maintenance's pool and inventory specialist.



Iberia Maintenance reorganized its supply chain team and strategies in response to changes in the supply chain. Credit: Keith Mwanalushi/Aviation Week Network

Iberia Maintenance is working closely with its airline customers to determine their needs, notes Madero Viagel. “Participation in the IATP program allows us to optimize the stock so that we can provide services at customer stations where we don't ordinarily have stock. The aim is to avoid AOGs,” says Madero Viagel.

In terms of inventory planning, Madero Viagel recognizes the ongoing difficulties in the supply of spare parts and the lack of raw material to build those components. In response, Iberia Maintenance has reorganized its supply chain team and strategies.

“We have changed the reorder point for expendables, for instance, to gain more time,” he says. “We are also working closely with the suppliers to better understand the kind of problems they face. Henceforth, we have created a safety stock; this is a minimum store level to ensure that we can support customers and keep aircraft flying.”

Iberia Maintenance is also offering some suppliers the option of component repair and storage at its facility. The unit can be stored at the company's La Munoza facility in Madrid and moved to a customer when required. “This is good for the customer because we offer the possibility of storage included in the repair price, and our location in Madrid makes it easy to move items,” adds Madero Viagel.

PARTS CONUNDRUM

At Norse Atlantic, Kerr observes a shift with newer generation aircraft compared to [Boeing](#) 747s and Airbus A340s, for example. “The aftermarket was saturated with parts, and it wasn't hard to get parts for those aircraft, but the newer types are very different,” he says.

Kerr says the 787 has always been a challenging aircraft, considering its composition—it is produced by different manufacturers from around the world. “That was part of [Boeing's](#) vision at the time, but the downside to that, I believe, is [Boeing](#) has always struggled to manage those suppliers,” he says, noting that the COVID-19 pandemic subsequently worsened this.

For example, Kerr highlights components such as 787 heat exchangers that were built with Russian titanium by Collins Aerospace in Russia. “Collins had to basically build a whole new facility in America to start producing these heat exchangers,” he says.

Coincidentally, in 2022 Kerr presented on AOGs and the supply chain at MRO Europe in London, highlighting a program called [Boeing](#) Management Control. The premise is that [Boeing](#) takes over the management of parts made by its suppliers during supply chain constraints. Kerr says this program started three or four years ago for the 787.

During his presentation, Kerr noted around 120 parts that were listed under [Boeing](#) Management Control. Last year, this increased to around 190, and in the last couple of months the latest list shows 700 parts are under management control, he says. “They used to list it by part numbers but now it's listed by areas of the aircraft because it's just so extensive,” Kerr says.

Meanwhile, IATP is looking to increase its airline membership, especially in South America. It also aims to beef up its regional aircraft pooling activities, especially for pool “P,” which caters to Bombardier, Embraer and Airbus A220 operators.

