

Global logistics solution accelerates time-critical aircraft parts distribution

Summary

When a leading aerospace maintenance, repair, overhaul (MRO) and aftermarket services provider headquartered in the United Kingdom required global logistics support for high-value items, AIT delivered a comprehensive solution combining air freight, customs brokerage, on-site disassembly support, freight forwarding and inventory management through AIT's forwarding stocking locations, all overseen by our 24/7 control tower. The result: faster part availability, improved visibility, reduced operational complexity, and expanded market access.

The Challenge: Complex operations, limited regional presence and time-critical delivery demands

The customer's supply chain demands included time-critical and economical shipment options, transportation and storage for oversized components including engines, multi-country customs clearance solutions, and onsite operational support at aircraft disassembly sites. In addition, the company required hands-on support with regional inventory positioning, small-parcel export management, and a centralized control structure to manage a global network of repair vendors, storage locations, and end users worldwide.

Key challenges included:

- **Urgent delivery demands** – Numerous shipments required delivery within 24 hours, with aircraft-on-ground (AOG) orders needing an immediate response
- **Network intricacy** – Parts had to be transported across Asia, Europe, the United Kingdom, and the United States involving multiple stakeholders
- **Disassembly site limitations** – A small team was available to identify, tag, document, and pack parts along with necessary paperwork, including handling of dangerous goods
- **Small-parcel export volume** – Frequent shipments necessitated cost control, consolidation, and efficient routing with visibility on a unified platform
- **Dangerous goods compliance** – Including repackaging, certification, and strict adherence to global regulations
- **Customs complexity** – Multi-country regulations required accurate tariff management
- **Environmental risks** – Potential exposure to temperature, humidity, and other weather conditions affecting sensitive parts
- **Communication challenges** – Cultural differences and time zone gaps hindered global coordination
- **Vendor and key performance indicator (KPI) oversight** – Multiple repair partners across regions with diverse KPIs and constraints

Case Study: Aerospace Logistics



The Solution: Integrated freight forwarding, warehousing and control tower model for improved speed, visibility and scalability

AIT's aerospace team designed a scalable, end-to-end logistics program that combines transportation, warehousing, trade compliance and operational support into a single, integrated solution.

Time-critical air freight and AOG response

The team implemented a global air freight solution using commercial and private networks of passenger and freighter aircraft to support same-day pickup and next-day delivery. Next flight out, charter and on-board courier services ensured rapid response for AOG requirements, supported by proposed solution turnaround times often within 30 minutes.

On-site disassembly and logistics support

To support part identification, classification, tagging, packing and documentation at teardown locations, AIT deployed on-site teams.

In addition to uploading serial numbers, certificates and images into the warehouse management system for real-time visibility, the team of specialists ensured proper segregation and handling of dangerous goods. They also provided rapid crating to optimize space and reduce costs before drop-shipping urgent parts directly from the disassembly sites.

Regional inventory positioning and storage

AIT established forwarding stocking locations (FSLs) within its global warehouse network to position high-demand parts closer to customers.

The team preserved chain-of-custody integrity for parts arriving at these facilities with full inspection and documentation. Climate-controlled storage provided protection for temperature-sensitive parts like avionics and tires. The strategically positioned locations also delivered 24/7 AOG fulfillment, including ATA 300-compliant packaging and re-packaging. Finally, bonded and free trade zone options enabled deferred duties and foreign market access.

Freight forwarding and export optimization

AIT implemented a flexible export model to manage high volumes of small parcel shipments. The model was based on a mixed fleet strategy for pricing flexibility and faster turnaround, and included shipment consolidation to reduce carrier costs, dangerous goods re-packaging and certification, and optimized routing and carrier selection.

Case Study: Aerospace Logistics



Control tower and visibility

A centralized 24/7 control tower staffed with AOG experts provided a single point of contact across the customer's supply chain, including end-to-end tracking with online visibility plus KPI dashboards and performance reports. With seamless coordination across carriers, repair partners and other vendors, the control tower model reduced friction and delivered faster response times.

Customs and compliance

AIT managed global compliance requirements through accurate tariff classification and duty mitigation, importer and exporter of record services, documentation neutralization, and in-region compliance including third-party screening.

RESULT: Faster turnaround times, lower costs and expanded market reach

AIT's aerospace team consistently met the customer's logistics requirements, supporting same-day collections and next-day deliveries.

The partnership expanded quickly, with AIT taking on the customer's U.S. 3PL operations including on-site personnel at aircraft disassembly locations.

By integrating transportation, warehousing and operational support, AIT helped the customer scale globally, improve responsiveness to AOG events, and optimize its supply chain for speed, visibility, and cost efficiency.

The AIT Difference Makers

- ✓ **Aerospace logistics** expertise across the supply chain
- ✓ Rapid response model with **fast quoting, decision making and execution**
- ✓ **24/7 control tower** and operational support
- ✓ **Integrated air freight, road transport, freight forwarding, inventory management and storage** services
- ✓ **Forward stocking locations** enabling foreign market access and visibility
- ✓ **Climate-controlled, Free Trade Zone and bonded storage** options
- ✓ **Dangerous goods compliance** expertise
- ✓ End-to-end **digital visibility**
- ✓ **On-site disassembly** support
- ✓ **Multilingual** global teams

Discover what AIT can do for you

For more information about AIT's aerospace logistics solutions, visit www.aitworldwide.com/contact-us/ and click Request a Quote.

www.aitworldwide.com

