



**LOGISTICS SOLUTION GUIDE:**

# What You Need to Know About Aerospace Logistics

**Optimize your aviation supply chain with expert support—  
all day, every day.**

Commercial aviation runs on tight maintenance windows and fixed departure schedules, so aerospace logistics providers must deliver with speed, control and traceability. Shipments often support line maintenance, repair, or overhaul (MRO) events and aircraft-on-ground (AOG) recovery—requiring tailored packaging, delivery coordination and a clear chain of custody.

For AOG events and critical components, like engines, auxiliary power units (APUs), landing gear, and avionics line replaceable units (LRUs), providers must be able to coordinate next-flight-out (NFO), onboard courier, dedicated trucking or charter transport—backed by 24/7 monitoring and proactive exception management.

Programs also rely on stock positioning and planned transport for oversized or damage-sensitive items (e.g., interior kits and landing gear) to protect aircraft availability and revenue service.

Whether it's an emergency AOG delivery or strategic transit of aircraft parts, the right logistics provider is crucial to success.

# What Areas Does Aerospace Logistics Cover?

From urgent requests to routine deliveries, aerospace logistics supports airlines, manufacturers and lessors with time-critical shipping, planned maintenance supply and specialized handling.



## 01 | AOG Global Services

AOG recovery demands immediate execution for everything from LRUs and rotables to engines, APUs and landing gear—often with after-hours airport delivery and strict documentation. Logistics providers must be available around the clock for rapid escalation and milestone updates. These crucial shipments often require additional expertise and specialized services, such as dangerous goods specialization and packing, enhanced shipment monitoring, NFO, onboard courier/hand-carry, charter coordination and dedicated expedited trucking.



## 02 | Aircraft Engine Logistics

Engine moves support both AOG recovery and planned shop visits. They typically require dedicated equipment (engine stands/QEC where applicable), preservation, secure chain-of-custody and planned airport handoffs. Move planning also covers dimensional constraints, customs/temporary import-export (as applicable), and dangerous goods considerations tied to residual fluids or related materials.



## 03 | Leased Aircraft Returns

End-of-life returns and redeliveries are timeline-driven transitions between lessees, spanning storage release, ferry positioning, MRO induction, return-condition work and acceptance/redelivery milestones. Logistics commonly includes interior kit moves (seats, galleys, in-flight entertainment, placards), spares/rotable repositioning, records/document movement, and cross-border customs clearance with a secure chain of custody.



## 04 | Aircraft Leasing Logistics Support

Leasing programs often require multi-party coordination among lessors, airlines, manufacturers, and storage facilities for inductions, redeliveries and entry-into-service readiness. Logistics support focuses on synchronized scheduling, secure chain of custody, customs/document control and positioning critical materials and spares to meet contractual dates.



## 05 | Aviation Asset Management

Asset management keeps reusable materials and engine stands available when engines move. Support can include serialized inventory control, condition reporting, technical warehousing, pooling/positioning and reverse logistics, with global visibility via trackers (GPS/IoT), plus barcode/RFID and WMS-driven check-in/check-out. A logistics provider with a control-tower model helps centralize governance and align assets to AOG response and shop-visit schedules.

## Four Traits of Top Aerospace Logistics Providers

Look for aerospace logistics providers that combine aviation know-how with time-critical execution and strong visibility.

### Comprehensive Supply Chain Solutions

Choose a partner that can scale from planned replenishment to AOG response—supporting NFO/charter, dedicated trucking, high-value unit moves, rotatable exchanges, reverse logistics and airport/airside delivery. A logistics control tower should provide a single point of contact, standard operating procedures, partner coordination and proactive exception management.

### Transportation Flexibility

AOG and shop deadlines require flexibility across modes—NFO, charter, hand-carry, dedicated trucking and time-definite freight—matched to dimensional and handling constraints. Strong airport coverage and reliable partners help reach line stations and MRO hangars quickly.

### Additional Support

Aviation programs need 24/7 monitoring, milestone updates and fast escalation—ideally through a control-tower model with real-time visibility and exception management. Look for EDI connectivity, proof of delivery and customs clearance, supported by disciplined document control.

### Industry Expertise

Your provider should understand aviation compliance, documentation control and secure handling across airports and MRO environments, including:

- ✓ FAA/EASA regulatory environments (as applicable to the program and geography)
- ✓ IATA/ICAO requirements for air transport (including dangerous goods where applicable)
- ✓ Repair station/MRO operating environments (e.g., Part 145 context)
- ✓ Aviation distribution quality expectations (e.g., AS9120/ASD contexts, where applicable)
- ✓ Directorate of Defense Trade Controls
- ✓ Foreign Corrupt Practices Act
- ✓ International Traffic in Arms Regulation
- ✓ [Hazardous Materials](#) (Air, Ocean and Road)

## How Can AIT Help Me With Aerospace Logistics?

AIT helps keep aircraft flying with end-to-end aerospace logistics for engines, APUs, avionics, landing gear and interior kits—supported by 24/7 monitoring, specialized equipment access and proactive communication.

With subject matter experts in 27 countries staffing more than 150 operating locations across major aviation markets, AIT's dedicated aerospace logistics team provides consistent execution, local expertise and faster coordination across borders and time zones.