



Global Aviation Innovator  
Takes Flight with GreyOrange

**Transforming Aircraft**

**Maintenance Efficiency**



## The Challenges: Navigating turbulence in aviation logistics

A leading airline in the global aviation industry faced a pressing need to optimize its aviation logistics and maintenance operations. Their old system, a traditional Automated Storage and Retrieval System (ASRS), suffered from slow order fulfillment and limited flexibility. Also, high labor costs hindered the agility required to meet fast-paced demands. Challenges included a tight timeline (6 months from project kick-off to go-live), gaining trust in the new goods-to-person (GTP) technology while transitioning away from the old ASRS and navigating supply chain delays.



### About

For this global leader in aviation across six continents, the heart of success lies in a meticulously optimized supply chain. From spare parts delivered in minutes to meals onboard, a network of intelligent robots, real-time data and agile logistics ensures every detail is accurate and on time.

### Geography

- ▶ Atlanta, GA, USA

### GreyOrange Solutions

- ▶ 15 Goods-to-Person bots powered by GreyMatter™
- ▶ 63 MSUs and 3 PPS

### GreyOrange Projected Impact

- ▶ First SaaS project with AWS in the aviation industry
- ▶ 30-minute Precision Batch Transfer (PBT) for Emergency Orders
- ▶ Order and rack presentation in seconds by eliminating the 5-minute wait time associated with the old ASRS



## The Solution: Transformative cloud software and AMRs

Partnering with GreyOrange, the client embarked on a strategic transformation of its maintenance facilities. They deployed a suite of intelligent robotics and software solutions, including:

### ▶ GreyMatter Software Platform

This intelligent orchestration platform optimizes workflows, analyzes real-time data and dynamically adjusts robot movements to ensure fast and efficient part delivery.

### ▶ Autonomous Mobile Robots (AMRs)

Replacing the slow and inflexible ASRS, these agile robots autonomously deliver critical aircraft parts directly to technicians, significantly reducing picking times and errors.

### Key solution features

- ▶ Cloud implementation with AWS
- ▶ SaaS deployment – A first with AWS in aviation
- ▶ Batch management for FAA compliance
  - 30-minute precision batch transfer (PBT) for emergency orders



## The Impact: Elevating aviation logistics efficiency

GreyOrange's GreyMatter™ platform proved instrumental in achieving real-time decision-making, considering various variables and adapting to different business rules and SLAs over time. The system provides the flexibility to handle diverse material flows for different order profiles, ensuring portability and swift implementation.

In addition to significant efficiency, productivity and fulfillment benefits, the changes have improved the overall work environment.

01



Nearly tripled order fulfillment speed

02



Always-solving intelligence for high-yield decisions

03



The freedom to move hardware to different facilities if needed

04



30-minute PBT for emergency orders

05



Order and rack presentation in seconds by eliminating the 5-minute wait time associated with the old ASRS

06



Enhanced availability for handling critical spares within 45 minutes

07



Improved stability and uptime