GLOBERANGER
a Fujitsu company

# Advanced Solutions for the Aerospace Industry Delivering Significant Cost and Efficiency Improvements

Leveraging AIT and M2M-enabled business solutions for airlines, MROs and OEMs

## Contents

# In an industry that depends on timely data and decision making to keep planes in the air, outdated and unreliable information systems can leave the fleet in an inefficient holding pattern.

GlobeRanger IoT and asset tracking solutions helps the aerospace and aviation industry achieve unprecedented levels of efficiency and safety. Providing fast, accurate and reliable information, coupled with near real-time visibility drives this efficiency, while informed decision making realizes significant cost improvements.

GlobeRanger's industry leading **AIT** (Automatic Identification Technologies) solutions support all aspects of the aerospace industry including MRO, inventory management and supply chain integration. Here is how GlobeRanger is helping solve some of the most persistent and pressing problems across the aerospace and aviation industries on a day-to-day basis:

# The Enabled Enterprise

Aerospace and aviation organizations are dealing with a growing inventory of rotable spares, expendables, consumables, and a general lack of visibility throughout the value chain. GlobeRanger's **iMotion™** IoT enablement platform can help to improve the visibility of assets throughout the supply chain by managing data from multiple sources, including RFID tags, M2M devices, IoT (Internet of Things) enabled devices, ERP and other enterprise applications. iMotion™ helps optimize processes and eliminate redundant tasks, which significantly reduces lead times and labor costs for maintenance, inspection, reporting, inventory management and other day-to-day activities.

GlobeRanger can help build the foundation for improved visibility by AIT-enabling parts, components, tools, equipment and other assets. We have a complete range of AIT sensors, readers and supporting software specifically engineered for aerospace industry requirements, including high-memory tags that support Spec 2000 data formats for parts tracking. We also offer complete tagging and consulting services and can configure our software solutions to run independently or integrate with your existing IT infrastructure.

GlobeRanger's highly configurable iMotion™ platform lets you choose what data will be communicated back to your host systems for analysis and archiving. iMotion™ gathers, filters and processes data from this sophisticated network of devices and sensors located on assets throughout your organization's value chain. Flexible data collection and processing at the edge allows organizations to filter input so they can manage by exception and receive near real-time notification when user-determined thresholds are neared or breached.

Your business rules determine what you want to monitor, what data you receive, when it should be reported and the automated responses and alerts the system should make. Having actionable information can make the difference between planned and unplanned downtime and associated costs.

# The Enabled Airplane

GlobeRanger's ATA Spec 2000 compliant asset tagging and management solutions enable individual or groups of aircraft components to communicate identity, location, serviceability, maintenance history and other information. As a result, elimination of wasteful maintenance processes and an increase in throughput is achieved. AIT-enabled maintenance replaces lengthy manual and visual processes to enable Instructions for Continued Airworthiness (ICA) compliance. iMotion-supported applications and devices can function whether or not there is network connectivity, allowing completion of assigned tasks at anytime.

# Emergency Equipment Management

GlobeRanger's solution makes inspecting emergency equipment a hands-off process. Instead of manually handling each piece of equipment, technicians can simply walk through the aircraft with a mobile RFID reader. It will automatically confirm that emergency equipment is present and serviceable, alerting if anything is missing. The solution reduces emergency equipment management time from hours to minutes.

# Rotable and Repairable Management

GlobeRanger's rotable and repairable management solution enables near real-time locating and chain of custody tracking of serialized rotable components, and other high-value aircraft parts. From the removal of the component to its reinstallation on the aircraft, every hand-off in the value stream is captured, timed and reported to give unprecedented supply chain visibility.

GlobeRanger drives maintenance process efficiency by creating a 'pull' production system. When a part is removed from the aircraft, messages are sent to stakeholders alerting them of status changes, as required. This enables maximum utilization of required assets, and the disposition of those that are not needed.

# Built-in Intelligence Removes Cost

GlobeRanger's aerospace solutions are a culmination of 10 years of collaboration with major airlines, aircraft and component OEMs, technology standards organizations and aviation regulatory authorities. Our real-world experience along with our highly configurable and scalable software solutions and tools enables solutions to be created and integrated very quickly, which minimizes deployment cost.

To enable quicker deployment and time to value, GlobeRanger offers a suite of prebuilt applications and development tools. GlobeRanger's **Visual Device Emulator** simulates real-world behavior of tags, readers and sensor devices providing the ability to model actual deployment scenarios prior to equipment purchase. This eliminates the dependence on physical hardware for development, testing and integration of RFID systems.

## Payloads Management

Tracking tens of thousands of items of passenger luggage and other aircraft payloads from the first change in custody to delivery back to the customer is accurately and effectively managed. Custom notifications can include the customer in every step of the process.

# Tools and Ground Support Equipment

Safety and efficiency depend on knowing where essential assets, tools and supplies are at all times. GlobeRanger provides customers with the key components and experience needed to identify and track all types of items in a wide range of operating conditions. RFID tags can be embedded or attached to assets, tools and equipment to authorize self-service checkout and provide automated, near real-time location tracking.

GlobeRanger aerospace solutions can provide location and status of required items, issue alerts, track utilization and optimize inventory, process improvement and sustained operational efficiency. Any type of sensor technology can be implemented, to suit the individual assets being tracked ensuring a comprehensive infrastructure to control devices, manage networks and transform data to optimize business processes. The solution is completely hardware independent and can implement readers and devices from any supplier to match the specific requirements of an asset.

## GlobeRanger for Aerospace – At-a-Glance

Advanced solutions for the aerospace and aviation industries that leverage AIT and M2M-enabled business solutions for airlines, MROs and OEMs, delivering significant cost and efficiency improvements:

» Optimize facilities with better visibility of key inventory and asset utilization

  » Enable better logistic decision support

  » Maximize facility and resource utilization

  » Optimize asset and material inventories

» Maintain the aircraft and its configuration more efficiently at lower cost

  » Improve maintenance efficiency

  » Built-in intelligence removes cost

# Why Choose GlobeRanger?

**GlobeRanger IoT and asset tracking solutions are flexible and scalable, and our end-to-end implementation service means you can start small and realize value early in the solution deployment. And being hardware independent, we match best-of-breed devices, sensors and RFID tags to your requirements.**

**GlobeRanger delivers rapid time-to-value. Our patented emulation technology allows us to architect, design and implement solutions in days or weeks. By focusing on our customer's specific needs and requirements we can create early wins that enable our customers to meet or exceed their business case and ROI expectations.**

## GlobeRanger – improving the visibility of our customer's operations since 1999

GlobeRanger was founded in 1999 to help organizations improve the visibility of their business operations. Using a combination of our technology platform and years of specialist experience, we simplify the development, deployment, and management of IoT technology and sensor-based solutions. Today, we are widely recognized as an industry leader in IoT enablement and RFID-based asset tracking solutions. As an end-to-end solution provider, we work with our customers across a broad range of industries to deliver the most reliable, scalable, and flexible enterprise edge solutions, at the lowest cost of ownership.

Our innovative approach was strengthened further in 2014 when GlobeRanger was acquired by Fujitsu.

GlobeRanger's solid grounding in IoT enablement and asset tracking solutions now benefits from the backing of one of the world's largest technology firms. Worldwide support and access to a $1.6 billion annual R&D budget has helped us to retain our agility to move quickly and spearhead the latest industry developments.

Leveraging Fujitsu's global footprint and financial strength, Fujitsu and GlobeRanger collaborate to bring best-in-class solutions for industrial IoT and manufacturing, distribution and logistics, aviation, defense and many other industries. The combination of Fujitsu's financial strength and industry knowledge combined with GlobeRanger's IoT and RFID expertise bring our customers the high value, low risk solutions they need to transform their organizations.

## Contact Us

**www.globeranger.com**
**info@globeranger.com**

GlobeRanger Corporation
1130 E. Arapaho Road, Suite 450
Richardson, TX 75081
(+1) 469 330 5500

GlobeRanger Corporation
22 Baker Street
London
W1U 3BW