



Donaldson Site Operations

Near real-time materials tracking and SAP integration at an MRO facility

Customer Benefits:

- >> Streamlined material flow and increased productivity by automating key SAP processes with passive RFID
- >> Proactively address WIP delays through acting upon automated alerts when parts did not arrive at their intended destination on time
- >> Notify key staff of Hot Parts' arrival/status thus enabling DSO to expedite receiving and production processes

Donaldson Site Operations (DSO) is a Lockheed Martin military aircraft overhaul center that conducts Maintenance, Repair and Overhaul (MRO) and Major Modification activities. DSO faced the following challenges in its day-to-day operations:

- Difficulty locating materials led to a high number of expended labor hours
- Not knowing when 'Hot Parts' (mission-critical components) had arrived left opportunities for improved efficiencies
- High labor costs associated with manual data entry and accuracy

The answer for DSO was to deploy Savi SmartChain® Asset Management Solution (AMS) as a centralized Parts Notification & Tracking solution that would send status alerts and track aircraft components as they moved within the facility.

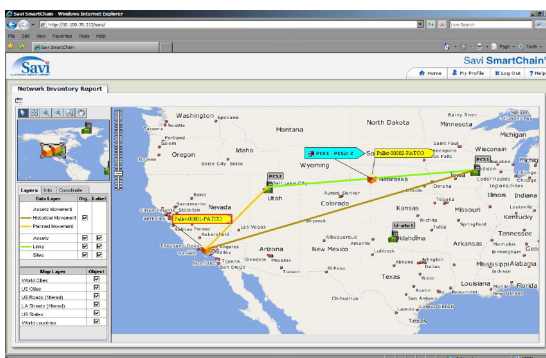


Integration of SmartChain AMS with SAP, DSO's official system of record, was a key element of the DSO deployment. Unlike SAP, SmartChain AMS provided ground-level materials tracking. For DSO this also meant processing automated updates for arriving parts, parts that stayed in one area too long and parts rejected by Quality Assurance.

SmartChain AMS helped DSO improve its material flow and eliminate costs. Specifically, DSO was able to:

- Streamline the flow of parts within the facility and increase productivity by automating key SAP transfer and consumption processes with passive RFID
- Proactively address Work-In-Process (WIP) delays through acting upon automated alerts when parts did not arrive at their intended destination on time
- Notify key staff of Hot Parts' arrival/status thus enabling DSO to expedite receiving and production notification

Within the first six months after deployment, DSO achieved 100% elimination of lost materials, a 67% reduction in manual data entry, and averaged a 55% reduction in delivery time getting Hot Parts to the aircraft.



Savi SmartChain Asset Management Solution (AMS)

SmartChain AMS improves asset management and utilization through real-time tracking via bar code, RFID, GPS and sensors. Key value drivers include:

- **Improved Visibility:** Captures near real-time asset updates and displays them on maps and reports
- **Improved Utilization:** Identifies and balances over- and under-utilized assets
- **Increased Operational Efficiency:** Sends alerts when shipments arrive or are delayed, creating awareness and empowering organizations to reduce safety stock levels. This helps reduce exposure to costly expedited shipments and demurrage fees.

In summary, SmartChain AMS answers the questions, "Where are my assets and how can I better utilize them?"



Before solution implementation

After solution implementation



Missing materials delay operations	→	100% part traceability = streamlined operations
Labor-hours spent searching for missing material	→	Better use of labor-hours
No way to monitor flow of parts through facility	→	Ability to closely monitor part flow
Staff unaware of Hot Parts' arrival in warehouse	→	Instant alert when Hot Part arrives
Delayed notification when QA rejects Hot Part	→	Instant alert when Hot Part rejected
Manual paper process for designating Hot Parts	→	Eliminated paper "Hot Sheets"
Reliant on manual data entry	→	Automated data capture
Staff comfortable w/ SAP look & feel	→	SAP look & feel retained, w/ added capabilities

More About DSO...

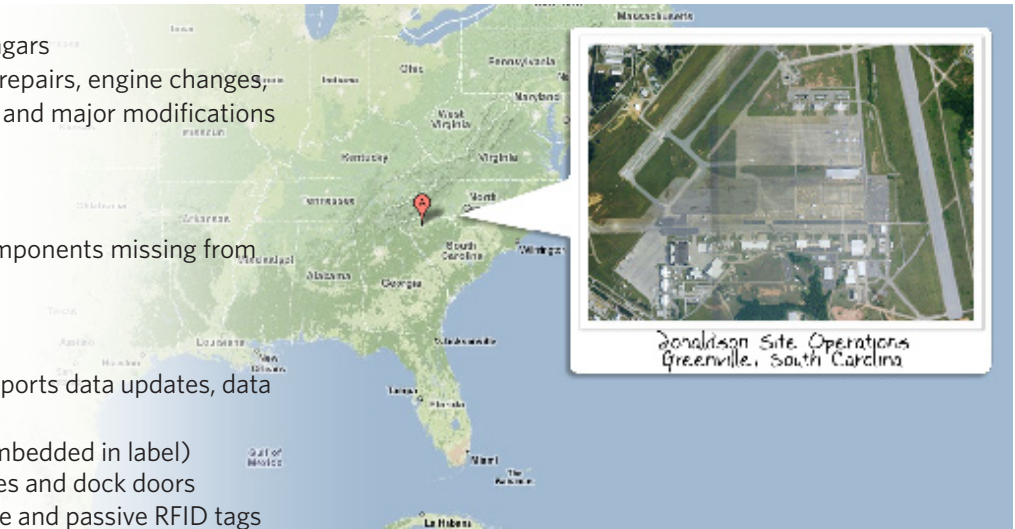
- Site covers 180 acres with 14 aircraft hangars
- Aircraft services include large structural repairs, engine changes, flight control changes, airframe overhaul and major modifications
- 135 PO Line item receipts per day

More About Hot Parts...

- Hot Parts are mission-critical aircraft components missing from warehouse inventory

More About the Solution...

- The SmartChain AMS/SAP interface supports data updates, data queries and alert events
- 2,000 passive RFID labels (w/antenna embedded in label)
- 13 fixed passive RFID readers at WIP cages and dock doors
- 12 handheld readers for scanning bar code and passive RFID tags



Donaldson Site Operations Greenville, South Carolina

About Savi

Savi Technology provides an integrated suite of complementary Automatic Identification & Data Capture technology products and solutions that drive business value by reducing supply chain assets, inventory and operational costs for commercial enterprises, defense agencies and other government customers. Founded in 1989, Savi is a wholly owned subsidiary of Lockheed Martin [NYSE: LMT], with headquarters in Mountain View, Calif., and offices in Singapore; Melbourne, Australia; Farnborough, UK; Lexington, Ky.; and Washington, D.C. For more information, visit www.savi.com.

About Lockheed Martin

Headquartered in Bethesda, Md., Lockheed Martin is a global security company that employs about 146,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The corporation reported 2009 sales of \$45.2 billion. For additional information, visit www.lockheedmartin.com.

Contact Savi

Let us show you how Savi's supply chain solutions can work for your organization.

United States

+1 888 994 SAVI (7284)
+1 650 316 4700

International

Savi Asia +65 6403 8000
Savi Australia 1800 891 960 (Dial from within Australia only)
Savi EMEA +44 (0) 1252 553200 (United Kingdom)