

# Maximo Soars to New Heights in the Aviation and Airport Industry – Session 5303A

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# Interloc Advantage

- 100% Maximo IBM Premier Business Partner
- Gold Technical Accreditation across North America
- >100 employees with extensive Maximo Industry expertise:
- Community support- CanMUG, GOMaximo, MUWG, Tivoli User Community



# IBM Recognized for Services and Products



## 2012 Winner x 2

- Best of Show for Mobile Informer
- Smarter Planet for Asset Management for innovative Maximo implementation at BART



## 2013 Finalist Beacon Award

- Best Solution for Managing the World's Infrastructure for Mobile Informer



## 2013 Winner

- ISM Library Solution Excellence

## 2013 Finalist

- Best Asset and Facilities Management for brand new Maximo Implementation at Encana
- Best of Show for Interloc Mailer



## 2014 Finalist Beacon Award

- Best Solution for MidSized Business – Oil & Gas Solution developed for Calgary Market



## 2015 Finalist Beacon Award

- Best Solution for Outstanding Software Delivery for Service Delivery and Management for Mobile Informer

# Interloc provides a full range of Maximo services

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- Maximo Implementations, Upgrades...
- Business Process Improvements
- Industry and Maintenance Best Practices
- Data, System, & Performance Assessments
- Interface and Java Development
- Training, Administration, Reports...
- Hosting
- Maximo Software Sales & Support
- 24 x 7 Follow the Sun Live Support
- Mobility Solutions

Come see us  
at Booth P4



**Reno-Tahoe  
International**

# Maximo Soars to New Heights

February 22, 2015

# Introduction

## ❖ Renea' Ghassedi

- Application Specialist
- Worked for RTAA for 3 years
- Born and Raised Nevadan!

## ❖ Reno-Tahoe Airport Authority

- Quasi Government Entity
- Reno-Tahoe International Airport
- Reno-Stead Airport



# Reno-Stead Airport

- ❖ 5,000 acre general aviation airport
- ❖ Former military base surrounded by BLM land
- ❖ Home of the National championship air races
- ❖ New terminal
  - 12,000 sq. ft.
  - Pilot's Lounge, EOC, Conference Room
- ❖ Attracting high tech UAS companies to Northern Nevada



# Reno-Tahoe International Airport

- ❖ 62nd busiest commercial airport in the U.S.
- ❖ 10 passenger airlines serving RNO
- ❖ 3 cargo airlines
- ❖ 23 Gates
- ❖ 3 runways
- ❖ 3.8 million passengers per year
- ❖ 24/7 operation





# Flights from Reno-Tahoe International Airport



Alaska Airlines

allegiant

American Airlines

DELTA

jetBlue

Southwest

Thomas Cook Airlines

UNITED

U-S AIRWAYS

volaris

Visit [www.renoairport.com](http://www.renoairport.com) for an online searchable flight tool.

# Notable Reno-Tahoe Companies



**SCHEELS.**



**WAL★MART®**



**amazon.com®**



**BARNES & NOBLE**  
BOOKSELLERS  
www.bn.com



**MERCK**



**Cabela's**  
WORLD'S FOREMOST OUTFITTER®



Whisper Jet Helicopters



Reno-Tahoe  
Airport Authority

# How and Where is Maximo Used?

## ❖ Reno-Tahoe International Airport & Reno-Stead Airport

- Airfield Maintenance
- Building Maintenance
- Facilities



**Reno-Tahoe  
International  
Airport**

## ❖ Modules Used

- Assets
- Job Plans
- PM Work Orders
- Transportation (New!)
- Work Order Tracking



**Reno-Stead  
Airport**

# How and Where is Maximo Used?

## ❖ ELS (Elite Line Services Company )

- Third-Party Company
- BHS Operations

## ❖ Modules Used

- Assets
- Inventory
- PM Work Orders
- Purchasing
- Work Order Tracking



# Maximo 6.2 Environment

- ❖ Stand-alone Microsoft Windows Server 2003 SP2
- ❖ Microsoft SQL Server 2000
- ❖ IBM WebSphere Application Server 6.0
- ❖ BIRT reporting server installed
  - Never fully used

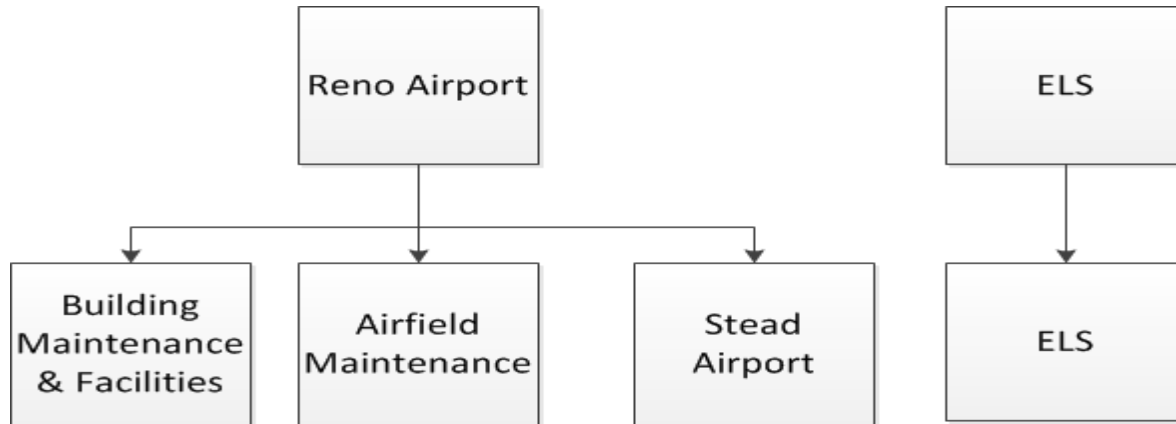


# RTAA Project Scope

## ❖ Upgrade Maximo

- Install the latest version of Maximo in a virtual environment

## ❖ Site



# RTAA Project Scope

## ❖ Enhance our data standards

Add/Delete	Work Order Required Fields	
<ul style="list-style-type: none"><li>▪ Craft Codes</li><li>▪ Asset Classifications</li><li>▪ Clean-up Assets &amp; Locations</li><li>▪ Failure Codes</li></ul>	<ul style="list-style-type: none"><li>▪ Work Type</li><li>▪ GL Account #</li></ul>	<ul style="list-style-type: none"><li>▪ Work Group</li><li>▪ Location and/or Asset</li></ul>

## ❖ Create an integration between Fuelmaster Plus (Syn-Tech Systems) and Maximo

## ❖ Assistance with upgrading existing reports to new Maximo version

## ❖ Assistance with testing & go-live

# New Maximo 7.5 Environment

- ❖ VMware vSphere 5.1
- ❖ Microsoft Windows Server 2008 R2
- ❖ Microsoft SQL Server Standard 2008 R2
- ❖ IBM WebSphere Application Server 7.0



# RTAA Upgrade Highlights

## *with an Interloc Solutions Partnership*

- ❖ Upgraded Maximo 6.2 to 7.5.0.6 using IBM Upgrade Utility (on a SQL Server database)
- ❖ Customized work order tracking screens
- ❖ Configured email listener application for creating service requests in Maximo
- ❖ Interloc split the 1 site into 3 sites (i.e. creating a Multi-Site configuration in Maximo)

# RTAA Upgrade Highlights

## *with an Interloc Solutions Partnership*

❖ Created/configured/moved items to the appropriate sites and locations, using CSV input files and the Maximo 7.5 export/import feature

- Asset records
- Location records
- User records
- PM records
- Job Plans
- Person Groups
- Component Codes

# RTAA Upgrade Highlights

## *with an Interloc Solutions Partnership*

- ❖ Installed and configured Transportation 7.5.1
- ❖ Created custom Fuel Master interface for importing asset MILES and HOUR meter data into Maximo
- ❖ Installed and configured BIRT tool for report development
- ❖ Conducted Maximo system administrator and end user training

# Lesson Learned

## *with an Interloc Solutions Partnership*

- ❖ Run through the upgrade process start to finish more than once.
  - Keep accurate records of how to fix the integrity errors
  - This is the BIGGEST reason why the upgrade went so smooth.
- ❖ Explain to the stake holders what to expect when we transferred the data to the new sites.
  - Work order history missing
  - PM's not generating correctly

# Lesson Learned

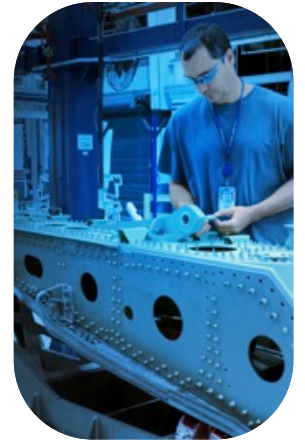
## *with an Interloc Solutions Partnership*

- ❖ Do More Testing with users and their assigned roles
  - Security was a huge challenge
- ❖ If multi-site exists PMWogen Cron will need to be configured for multi-site use.
  - Make sure the “Where” clause is added to the PM options for each site
- ❖ Make another username for Cron tasks.
  - This way the Cron task is not dependent on the Admin account.
    - Example: MaxCron

# Lesson Learned

## *with an Interloc Solutions Partnership*

- ❖ Problems with upgrading SQL 2000 database to SQL 2008 database
  - Make sure the .bak file does not get corrupted in the Copy and Paste move.
- ❖ It is recommended to run Maximo 7.5 with IE only
  - Google Chrome and Firefox have printing/display issues



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Rick Bain, Spirit AeroSystems



# SpiritAero: Who we are

Largest non-OEM designers and manufacturers of aerostructures for commercial, military and business regional jets in the world.



Largest global design and manufacturer of aerostructures



# SpiritAero Mission

Long-term value creation by providing industry-leading aero structures and systems achieved through competitive cost and product leadership, derived from our people, knowledge and technology

# SpiritAero Profile

- Home Base: Wichita KS
- Responsibilities:
  - Builds fuselage sections for all current Boeing program
  - Home of nacelle production for 737, 747, 767 and 777 airplanes
  - Strut/pylon production for 737, 747, 767 and 777 as well as the Bombardier C Series and the Mitsubishi Regional Jet



Spirit supports a wide variety of major OEM product lines

# SpiritAero is Dispersed

- 25 sites
- 4.3 million Work Orders total; 500,000 Work Orders per year
- 235,821 Assets
- 234,013 Inventory items



Maximo is used to track and manage Spirit assets

# Safety Matters

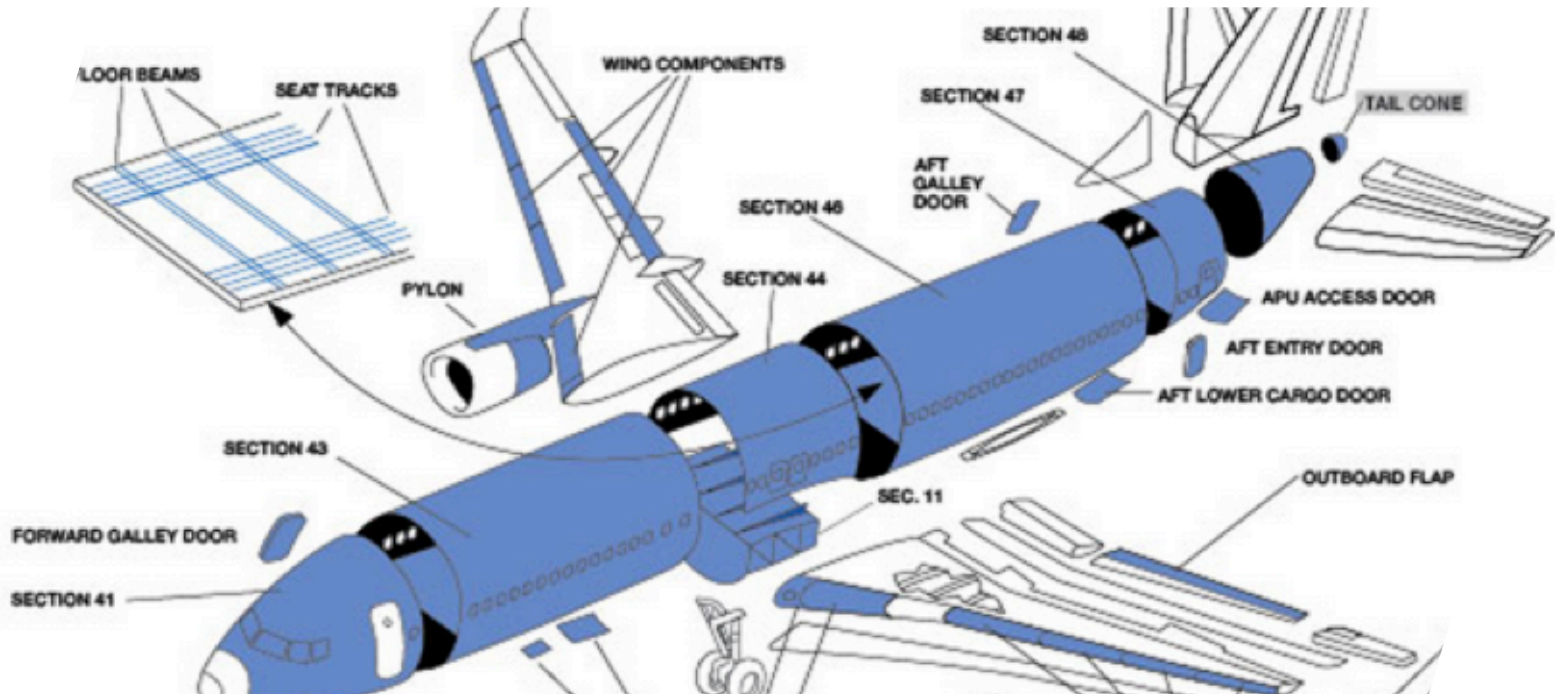
## Why Maximo?

Spirit uses MAXIMO to ensure compliance and accuracy in maintaining the equipment in manufacturing environment



Maximo tracks maintenance and compliance to ensure safety

# Asset Examples



# A Long History of Maximo



IBM



2000  
Maximo 4.1

2006  
Maximo 6.2

2014  
Maximo 7.5

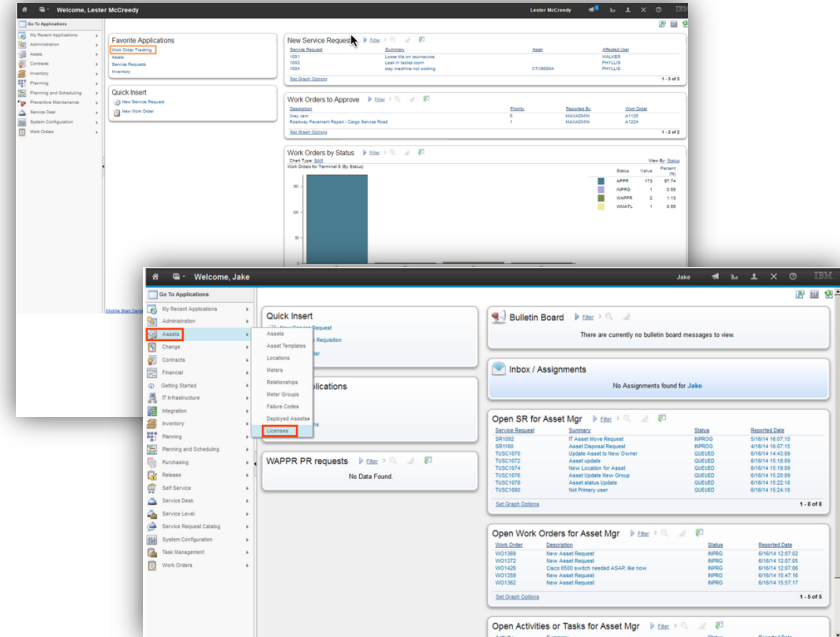
6.2 to 7.5 Upgrade Notes:

- Primarily technical upgrade with minor process changes
- Project completed by year end 2014
- Partnered with Interloc

Spirit has a long history with Maximo

# Maximo Is Pervasive

- Both IT & Enterprise Assets
  - All facilities locations & equipment
  - IT help desk
  - Change and release process for software
- Calibration add-on
- SCCD
  - Beginning to use



Spirit leverages Maximo's functionality throughout our operations

# Maximo @ SpiritAero

- Assets
- Specifications
- Reporting

*Example: Downtime History*

Changes requested through Service Requests.

Deployment from  
Development, Test to Production.

The screenshot displays the Maximo software interface. The top window shows 'Asset Downtime History' for asset 4172002, listing various downtime events with columns for Asset Number, Shop Id, Description, Status, Change Date, Workorder Code, Entered By, and Duration. Below this, a 'Service Request' window is open for request 228208, titled 'Tulsa - cycle count inventory'. It shows details for the assigned group (APPMAX), owner (APPMAX), and changed by (S006029). A progress bar at the bottom of the service request window indicates the status: New, Closed, In Progress, Pending, Resolved, and Closed.

Asset Number	Shop Id	Description	Status
4172002	11 59 00 AM	UNPLANNED	OPERATING
4142002	10 00 00 PM		
11 20 2010	11 12 00 PM		
11 20 2010	10 00 00 PM	PLANNED	
10 30 2010	11 39 00 AM	PLANNED	
10 30 2010	10 01 00 PM	PLANNED	
8 28 2010	07 32 00 PM	PLANNED	
8 28 2010	06 00 00 PM		

Screens and reporting can be customized to fit differing needs –  
Utilizing standard Change & Release processes



# Challenges

- Simultaneous WebSphere and Oracle upgrade
- Time Limitation
  - Started (05-22-2014) with a Deadline of 12/31/2014
- Concurrently undergoing “IT Transformation”

Multiple technology and transformation activities increased complexity

# Lessons Learned

- Use the same vendor for dependent tasks
- Provide a multi-step upgrade path when required
- Minimize or freeze changes in existing version
- Engage a Project Manager for discipline and reporting
- Ensure dedicated resources are available for upgrade
- Ensure the customer is engaged and supports activity
- Allow time for Business Process changes as part of upgrade

# Next Steps

- Archiving
- Expanding use of Smart Cloud Control Desk overall
  - IT Assets functionality, Change in Release functionality, IT Help Desk
- Use Maximo to replace existing legacy systems
- Extend Maximo with Mobile function
  - Interloc Mobile Informer pilot

# Thank you & Questions

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