NextGen Program Update

Wade Lester
Embry-Riddle’s Role in NextGen

- NextGen Research
- NextGen Program Management
- DB NextGen Test Facility Management
- Consortium Leadership
Integrated Airport Initiative?

- A consortium of industry leaders to research and promote NextGen concepts
- Formed March, 2006
- Catalyst for the development of what is now the Daytona Beach NextGen Test Facility
Membership includes:
- ERAU (co-lead)
- Lockheed Martin (co-lead)
- Boeing
- CSC
- Ensco
- Frequentis
- Mosaic ATM
- Sensis
- Volpe Center
- Barco
- Harris
What is the Daytona Beach NextGen Test Facility (DBNTF)?

- Initially named the Integrated Airport
- DBNTF provides the platform for research and development of NextGen concepts
- DBNTF will evolve into a robust platform that will support myriad systems and technologies

Learn more:  www.nextgenair.org
NextGen Test Facility

• Improvements
  ◦ Installed additional data storage capacity
  ◦ Install Lockheed-Martin’s ERAM system – limited capability – mid-October
  ◦ Install CSC’s Traffic Management Advisor (TMA) – limited capability – mid-October
  ◦ Install additional power capacity – in progress
  ◦ Install 10mbps Internet connectivity – in progress
  ◦ AT Coach simulation software – procurement in progress

• Future Plans
  ◦ Possible second site
  ◦ Future funding for DBNTF
NextGen Program Status
The “OTA”

- Key Points
  - In effect until 2013
  - Embry-Riddle provides the Program Manager
  - Tasks assigned to consortium members
  - Other agencies can use this contract vehicle
The “OTA”

- **Other Transaction Agreement**
  - Work under this OTA … expands the integrated airport concept and laboratory to serve as a Next Generation Air Transportation System (NextGen) Test Facility
  - ERAU and the FAA will perform operational research, evaluation and demonstration of synergy among available, emerging and planned NextGen concepts, procedures, technologies and capabilities at the NextGen Test Facility, and at other facilities or locations as required by specific tasking.
  - This facility is a component of the NextGen Test Bed centered on the state of Florida.
Work Under OTA

- **Task A – Demonstrate the Integration of Convective Weather into TMA and ERAM:**
  - Effort supported by: Embry-Riddle, Lockheed-Martin, CSC, Ensco, Boeing, Volpe Center
  - Project is well underway and on schedule.
  - The formal demonstration is scheduled for November 18, 2008.
  - A second event for Test Facility ribbon cutting and demonstrations for VIPs and media is planned for early December, 2008.

- **Task D – Flight Data Object Demonstration**
  - Effort supported by: Lockheed-Martin and Embry-Riddle
  - The kickoff meeting was conducted and issues resolved.
  - The project plan drafted and submitted to members.
  - The formal demonstration is scheduled for early March, 2009.

- **Task E – UAV Research Opportunity**
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- **Task A - Wx into ERAM and TMA**
  - Kickoff Meeting: July 7/9
  - Draft Documents Complete: September 10/30
  - Build out infrastructure: December 11/18
  - Demonstration Readiness Review: December 12/10

- **Task D - Fit Data Object Demo**
  - Kickoff Meeting: September 3/10
  - Final Documents Complete: March 3/31
Task A – Weather Component

- Storyboard
- RUC Wind
- Ensco Product
- Discussion
Freeze Horizon 120 Nm

ZJX15

ZJX78

Metering Fixes

Orlando International Airport
Note: This diagram is not the final “as-is” diagram. It is for discussion purposes only at this time.