

NextGen Institute Annual Public Meeting

October 16, 2009

U.S. Department of Transportation
Headquarters (Conference Center—
Oklahoma Room)



Overview

- NextGen Operations
- NextGen Contracts Update
- Integrated Communications, Navigation, Surveillance (ICNS)
- Emergency Management Operations and Control System (EMOCS)



Our Web Address

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NextGen Institute



Next Generation Air Transportation System
INSTITUTE

Partnering Industry and Government

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NextGen Institute 2009 Annual Public Meeting

The NextGen Institute will hold this year's annual public meeting in conjunction with the JPDO's All Hands meeting on October 16, 2009 from 9:00am to 12:00pm. The meeting will be held at the U.S. Department of Transportation Headquarters (Conference Center - Oklahoma Room) 1200 New Jersey Ave, SE Washington, DC 20590. Headquarters can be accessed via the Navy Yard Metro Station (Green line).

The NextGen Institute will give an overview briefing of the 2009 calendar year progress and then the public will be given an opportunity to ask questions about the NextGen Institute and its operations. The public is cordially invited to attend this joint Industry/Government/NextGen forum. For the full agenda click [here](#).

IMPORTANT: Due to a limited amount of space, if you are planning to attend, please confirm your attendance by filling out this brief [online form](#).

Please direct any questions concerning the NextGen Institute's public meeting to:
Email: ryan_ctr.greaves@faa.gov
Phone: 202 220 3490

Posted 10/9/2009

Done

NextGen Overview

- Vision 100—Century of Aviation Reauthorization Act, Pub. L. 108-176, represents a multi-agency initiative to transform the future air transportation system.
- This act created the JPDO as the means by which six government agencies combine resources and talent to effect the transformation and further, Vision 100 directed that "the [Joint Planning and Development] Office shall consult with the public and ensure participation of experts from the private sector."
- The NextGen Institute was established in March 2005 via an Other Transactions Agreement between the National Center for Advanced Technologies (NCAT) and the Federal Aviation Administration (FAA)
- "...the mechanism through which the JPDO will access world-class private sector expertise, tools, and facilities for application to NextGen activities and tasks."



Purpose

- Enabling partnership between the government and private sector on goals and priorities and definition, development, and implementation of NextGen
- Establishing a mechanism for gathering and applying the best expertise in support of NextGen
- Encouraging the development of transformational ideas
- Sustaining a long-term undertaking by promoting jointly supporting solutions and coordinated investments



Goals

- Establish the mechanism for the JPDO to access world-class expertise, tools, and facilities for application to the NextGen activities and tasks
- Conduct FAA/JPDO-requested work in support of planning, research, analysis, assessment, architecture, setting functional requirements, prototyping, simulation, and demonstrating future system attributes
- Validate new concepts and approaches
- Establish and maintain a collaborative relationship between the government and private sector that will serve as a catalyst for fostering a shared vision of NextGen and combine the talents and resources of government, industry and academia



Institute Management Council

- IMC serves as an industry decision-making body providing oversight
- Advise the JPDO Director and FAA Senior VP of NextGen and Operations Planning on NextGen planning and implementation priorities
- Assist the JPDO Director and FAA Senior VP of NextGen and Operations Planning in communicating these priorities to FAA Administrator and other government stakeholders
- Invite FAA Administrator and key staff to IMC meetings to ensure industry priorities are understood



Institute Management Council Roster

Co-Chairmen

- James C. May - Air Transport Association
Marion Blakey – Aerospace Industries Association

Commercial Airline Operations

- *James C. May - Air Transport Association

Commercial Pilots

- *John Prater- Air Line Pilots Association

Air Traffic Control Technology

- *Pete Dumont- Air Traffic Control Association

Air Traffic Controllers

- Pat Forrey- National Air Traffic Control Association

Airport Operators

- Greg Principato - Airports Council International - North America

At Large

- Michael McCormick - National Business Travel Association
- Henry Ogrodzinski - National Association of State Aviation Officials
- Charlie Huettner – Aerospace States Association

Business Aircraft Operations

- Ed Bolen - National Business Aviation Association



Institute Management Council Roster

Federal Advisory Committees, Universities, and Non Profit Research Organizations

- Margaret Jenny – RTCA
- Steve Hampton - Embry-Riddle Aeronautical University

Small Aircraft General Aviation

- Craig Fuller - Aircraft Owners and Pilots Association

Helicopter Operations

- Matt Zuccaro - Helicopter Association International

Manufacturers of Air Vehicles and Airborne/Space-borne and Ground Based Equipment

- *Marion Blakey - Aerospace Industries Association
- *Peter J. Bunce - General Aviation Manufacturers Association

Regional Commercial Airline Operations

- Roger Cohen - Regional Airline Association

Ex-Officio

- *Charlie Leader - Joint Planning and Development Office

*-Executive Committee Member



Overall Industry Commitment

- > 300 approved Industry Working Group (WG) members integrated in planning
- Organized in 9 WG and Study Teams
- ~ 20% of their time
- Salary/Travel Costs/Expenses pro bono
- Industry Commitment Exceeds \$14 Million a year



Optimizing Sequencing in the Terminal Area Phase 1

- **Sponsor:** Environment Working Group
- **Contractor:** Innovative Solutions International, Inc.
- **Contract Value:** \$250k
- **Purpose:** Conduct investigations for the integration of CNS/ATM technologies to support applications that will reduce fuel burn, emissions and noise, and eliminate terminal area airspace congestion.

The validation of this concept can provide a path forward for Next Generation Air Transportation System (NextGen) implementation of safer, cleaner, and more efficient terminal area operations across the U.S.

- **Start Date:** August 17, 2007
- **Status:** All deliverables have been approved by the Environment Working Group.



Optimizing Sequencing in the Terminal Area Phase 2

- **Sponsor:** Environment Working Group
- **Contractor:** Innovative Solutions International, Inc.
- **Contract Value:** \$250k
- **Purpose:** Conduct demonstrations of the integration of CNS/ATM technologies to support applications that will reduce fuel burn, emissions and noise, and eliminate terminal area airspace congestion.
- **Start Date:** Sept. 30, 2008
- **Status:** The contract for Phase 2 was signed on September 30, 2008.
 - Period of Performance extended to 9/30/10
 - First three of six Deliverables accepted by Environment WG
 - Remaining three deliverables:
 - Flight Demonstration Tests
 - Analysis of Operational and Environmental Improvements Draft Report
 - Written Report



Emergency Management Operation Control System (EMOCS)

- **Sponsor:** Aviation Security Working Group
- **Contractor:** Harris Corp.
- **Contract Value:** \$350k
- **Purpose:** The purpose of this task is to plan for the development and implementation of a fully operational low altitude airspace emergency management communications, navigation, surveillance, and weather system, applicable to both the civil and government first responders, which can support both fixed and rotary wing operations.
- **Start Date:** December 17, 2007
- **Status:** The deliverables have been approved by the Aviation Security Working Group



NextGen Integrated Communications, Navigation, Surveillance (ICNS) Study

- **Sponsor:** Air Navigation Services and Aircraft Working Groups
- **Contractor:** Raytheon
- **Contract Value:** \$2.25M
- **Purpose:** There were be two phases to this study. The first phase included an operational narrative/scenario, create top-level ICNS requirements to enable the operational scenarios, identify a set of alternatives, and identify and prioritize the analyses to be conducted. Phase 2 further defined and expanded Phase 1 products, executed the required analyses, and developed the remaining deliverables.
- **Start Date:** Contract Award March 9, 2009
- **Status:** All deliverables have been accepted



Integrated Communications, Navigation, Surveillance (ICNS) Study

Raytheon Team



Emergency Management Operation Control System (EMOCS)

Aviation Security
Working Group



Questions and Answers

Question and Answer Session

