JPDO Update
Aeronautics and Space Engineering Board

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Objectives

• Provide an update on the JPDO reporting structure and organization
• Review changes in priorities and planning activities
• Discuss several underlying research issues for NextGen
Interagency Collaboration

• Provide a forum for partner agency engagement
• Synchronize long-range research with mid-term implementation path
• Facilitate and coordinate change
• Engage industry via the NextGen Institute
JPDO Organization Chart

Director

Deputy Director – NASA
Assistant Director – Defense

Institute Management
Council

NextGen Institute

Sr. Advisor for Surveillance and PNT *

Chief Architect

Interagency Portfolio and System Analysis

Net-Centric Operations

Strategic Interagency Initiatives

Integration Manager

Working Groups

Business Management
2011 Priority Areas

• Define an optimal NextGen 2025 given current data/conditions and risk analysis
  – Prioritize required research and policy analysis to achieve that definition

• Champion the NextGen vision
  – Frame the debate and facilitate decision making to achieve advanced NextGen capabilities beyond 2025

• Accelerate Net-Enabled Aviation System Operations to achieve greater data-sharing efficiencies
Define an “Optimal” NextGen 2025

• Targeted Capabilities for 2025
• Integrated Surveillance (IS)
• Flight Prioritization
• Global Harmonization Roadmap
Champion the NextGen Vision

- Trajectory-Based Operations (TBO) Roadmap
- TBO Safety Case Planning
- Unmanned Aircraft Systems (UAS) Research, Development, and Demonstration Interagency Roadmap
- Airline and Flight Operation Center
- Avionics Roadmap Version 2.0
Unmanned Aircraft Systems (UAS)
Net-Enabled System Operations

- Information Exchange Architecture and Process
  - Weather
  - Integrated Surveillance
  - Unmanned Aircraft Systems
- Cyber Security
Net-Centric Technology Transfer Opportunities

- Information Sharing Initiatives
  - Collaborative Ops
- Information Sharing Initiatives
  - Weather
- Research and Development
  - Information Operations
  - Human Factors
- Cyber Security
- Architecture
- Requirements and Planning
- Modeling and Simulation
- Net-Centric Solutions
  - Information Sharing Initiatives
    - Collaborative Ops
- Experiments
  - Information Sharing Technologies and Capabilities
- Software Testing and Development
- Net-Centric Solutions
  - Experiments
    - Information Sharing Technologies and Capabilities
  - Service-Oriented Architecture
    - Intelligence, Surveillance, Reconnaissance
Verification and Validation
Human Factors
Aviation Environmental Issues

**Community Noise Impacts**

**Air Quality**

**Water Quality**

**Global Climate**

**Energy**