JPDO and NextGen Weather
...what both are up to

Mark Zettlemoyer, NWS/JPDO
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Delays attributable to weather reduced through improved airport capacity in weather, improved aircraft capability in weather, and advances in probabilistic decision making.

Through High Density Operations, new runways, and other operational improvements, airport capacities increased, allowing increased throughput while maintaining reasonable Demand/Capacity ratios.

Through Trajectory Based Operations, satellite navigation, data communications, and other operational improvements, en route capacities increased.

Future individual aircraft (airframes, engines) and ATC exhibit:
- Noise reduction
- Reduction in fuel burn
- Reduction in emissions

Now to be optimized for Target 2025
Foster collaboration among Federal partners
Enable high level discussion & decision making
Coordinate with the international community
Major accomplishments (FY11)
  – Definition of “optimized” NextGen Target 2025
  – Unmanned Aircraft Systems (UAS) RD&D Roadmap
  – Integrated Surveillance ConOps (for common air picture)
    • Via NextGen Information Sharing Environment
  – Continued Global Harmonization…work seamlessly with other global aviation systems

Work the details to the vision … but collaborate to get there!
JPDO FY12

• Proposed Flagship Products
  – UAS integration feasibility studies
  – NextGen Information Sharing Environment (NISE) development ...interagency collaboration in the NETE*

• Ongoing and new efforts (resources permitting)
  – Integrated Surveillance
  – TBO Roadmap and TBO Safety Case
  – Future AOC/FOC
  – Global Harmonization

* Net-Enabled Test Environment
“The Secretary of Transportation shall establish in the Federal Aviation Administration a joint planning and development office to manage work related to the Next Generation Air Transportation System.” Responsibilities shall include:

- Create and carry out a plan for NextGen
- Oversee R&D and create a transition plan for that system
- **Coordinate goals and priorities** and coordinate research activities within the Federal Government with United States aviation and aeronautical firms
- Facilitate transfer of technology from research programs to Federal agencies with operational responsibilities and to the private sector
- Review activities relating to **noise, emissions, fuel consumption, and safety** conducted by Federal agencies

“The Office shall **consult with the public** and ensure the participation of experts from the private sector including representatives of commercial aviation, general aviation, aviation labor groups, aviation research and development entities, aircraft and air traffic control suppliers, and the space industry.”
NextGen Stakeholders and JPDO

**JPDO Mission:** develop framework for NextGen planning and development, identify and prioritize key multi-agency concerns, and drive consensus in investment choices and decisions.

- Department of Transportation (DOT)
- Department of Defense (DoD)
- Department of Homeland Security (DHS)
- Department of Commerce (DOC)
- Federal Aviation Administration (FAA)
- National Aeronautics and Space Administration (NASA)
- White House Office of Science and Technology Policy (OSTP)
- Office of the Director of National Intelligence (ODNI) *(ex officio)*
# JPDO Working Group Co-Chairs

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*Access to SMEs to work issues*
NextGen Weather Concept

• Integrated and consistent common weather data picture for observation, analysis, and forecast available to all system users

• Net-centric (net-enabled) capability that:
  – Makes accurate information available, securable, and usable in real time
  – Pushes information to known users and is discoverable by others

• “Virtual” distributed repository

• Integration of weather information into operational decision-making
Acronym Check
IPSA = Interagency Portfolio & Systems Analysis
NCOD = Net-Centric Operations Division
OFCM = Office of Federal Coordinator for Meteorology
CASR = Committee for Aviation Services and Research
NETE = Network Enabled Test Environment
WISE = Weather in the (NextGen) Information Sharing Environment
NextGen Weather
NextGen Weather

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