Next Generation Air Transportation System Joint Planning and Development Office

Friends and Partners Meeting Vision for Aviation Weather Policies

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NASA

Agenda

- Objective of Policy Activity
- Make-up of Policy Team
- Policy Criteria
- Methodology
 - Policy Identification
 - Policy Analysis
- Policy Categories

Objective of Policy Activity

Identify weather policy issues associated with the Next Generation Air Transportation System (NGATS)

- ensure sound, timely analysis
- recommend solutions to the JPDO.

Make-up of Policy Team

- Al Kaehn (NOAA)
- Bill Phaneuf (ALPA)
- Dave Metzbower (FAA)
- Jeremy Andrucyk (NWS)
- John Murray (NASA)
- Kevin Johnston (NWS)
- Mark Andrews, IPT Lead
- Nick Stoer (Consultant)
- Richard Deininger (Boeing)
- Ron Colantonio (NASA)
- Steve Green (NASA)
- TBD (ATO Safety)
- TBD (Institute Representative)

- Arnold Lee (IAI)
- Bruce Carmichael (NCAR)
- Gene Wilhelm (CAASD)
- John McCarthy (IPT Co-Chr)
- Ken Leonard (FAA)
- Lisa Bee, Deputy IPT Lead
- Mark Weber (Lincoln)
- Paul Stough (NASA
- Rick Heuwinkel, Chair (FAA)
- Sadegh Kavoussi (Avmet)
- TBD (Aircraft Cert, FAA)
- TBD (Air Transport, FAA)

Policy Criteria

- To be considered *policy*, a weather issue must meet *all* of the following criteria:
 - Business Case Plus: Business Case alone is insufficient basis for decision. A judgment call is also needed.
 - High Level: Decision to be made at agencies' Senior Executive level or higher.
 - <u>Strategic</u>: Is significant to the realization of the NGATS

Methodology--Policy Identification

- Potential policy issues identified by:
 - JPDO or WxIPT Leadership
 - Other IPT's in JPDO
 - WxIPT Teams
 - Policy Team
- Issue Statement developed by author or Policy Team
- Assessment of Issue against Policy Criteria
- Prioritization of Policy Issues
- Policy Analyses Assigned

Methodology -- Policy Analysis

- Statement of issue & how it meets policy criteria
- Describe how weather subsystem works today
- Identify drivers for change
- Identify policy choices
- Identify pros and cons of alternatives
- Recommendation

Policy Categories

- Government and Private Sector Roles & Responsibilities
- Standards
- Who Pays for What
- Controllers' Roles Re Weather Information
- Technical/Operational Service Issues
- Interagency Roles & Responsibilities

Government & Private Sector Roles & Responsibilities

What will be the government's role in provision of "official" weather information (current and future, three dimensional, digital) to all NAS decision makers in terms of:

- Observations
- Generation of weather information
- Dissemination
- Display design
- Display systems
- Standards for the above

Standards

- <u>Consistency</u>: Assuming continued mixed government and private provision, how do we ensure that weather information available to all decision makers in the NAS is consistent in terms of?
 - Temporal and spatial consistency
 - Intensity of the phenomena
 - Useability of the airspace
- <u>Regulations & Procedures</u>: What changes in regulations and procedures are needed to optimize safety and efficiency of operations under NGATS?

Next Generation Air Transportation

Who Pays for What

- Who pays for in-situ aircraft data?
- Who pays for generation and uplink of weather information to the cockpit?
- Who pays for access costs and communication costs from government ports to end users?

Controllers' Roles Re Weather Information

- Will controllers assume responsibility for tactical separation of aircraft from hazardous weather?
- Will controllers continue to bear the responsibility for relay of weather information to the cockpit?

- Will the code for digital weather information be BUFR, GRIB, or some other code?
- How long will government continue to produce legacy products and product forms (e.g., alphanumeric descriptions of weather phenomena) after the same information is available in digital format?
- Which weather information will be produced in probabilistic terms and how will it be phased in?

Interagency Roles & Responsibilities

- How will interagency weather R&D be managed for efficiency and rapid implementation?
- Which agency(ies) will develop, manage, and maintain the 4D weather information network?



