SEGMENT ONE NEAR TERM DEMONSTRATIONS

Integration of Ground and Cockpit Weather into Decision Making

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Objectives of WTIC

- The objective of the Weather Technology in the Cockpit (WTIC) program is to ensure the adoption of cockpit, ground, and communication technologies, practices, and procedures that will:
  - Provide pilots with shared and consistent weather information to enhance common situational awareness
  - Provide airborne tools to exploit the common weather picture
  - Utilize the “aircraft as a node,” functions to autonomously exchange weather information with surrounding aircraft and ground systems
  - Facilitate integration of weather information into cockpit NextGen capabilities (e.g. Trajectory Based Operations)
  - Result from WTIC R&D supporting certification and operational approvals
What Must Be Accomplished to Effectively Conduct Weather Technology in the Cockpit Services and Operations

1. What incremental weather information is needed in cockpit operations (and when is it needed)?
   a. For tactical decision support (121, 135, 91)?
   b. For situational awareness (121, 135, 91)?
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2. What communication services are needed to provide the weather information needed in cockpit operations as outlined in answering (1) above?

a. Signals in space?

b. Ground support /infrastructure (interface/processing/archiving, etc.)?
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3. What airborne equipage and/or software is needed?

a. Communication equipage/software (121, 135, 91)?
b. Interface/processing/storage, etc. equipage/software (121, 135, 91)?
c. Display and decision support equipage/software (121, 135, 91)?
d. Sensor equipage/software?
e. Additions/modifications to existing onboard technologies (e.g. FMS)?
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4. What policy and guidance will need to be modified, created, or rescinded in support of (1) through (3) above (121, 135, 91)?
   
a. Certifications (avionics, procedures, etc.)?
   
b. Standards?
   
c. Guidance (AIM, Pilots Handbook, etc.)?
   
d. Rules and regulations?
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5. What training will be needed to support and implement the results of (1) through (4) above (121, 135, 91)?
Thank you

Please hold questions till end of Near Term Demonstrations - Segment One