Aviation Weather Awareness and Reporting Enhancements (AWARE)

PROGRAM/PROJECT: Aviation Safety Program/Weather Accident Prevention Project
LEAD AGENCY/COLLABORATING AGENCIES*:* National Aeronautics and Space Administration (NASA), Federal Aviation Administration (FAA), National Oceanic and Atmospheric Administration (NOAA), and a Cooperative Research Agreement (CRA) with Rockwell.
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SERVICE AREA (S)/INITIATIVE (S)

- ***National Aviation Weather Initiatives***:
  N/A

FUNDING

- ***Programmed/Planned ($'s/FY):*** FY04 FY05

TYPE OF PROGRAM/APPLICATION

R&D

SCOPE OF PROGRAM/PROJECT

- ***What's being developed, procured, etc.:*** *technologies and prototype to enable display and briefing of flight plan relevant graphical and text-based weather information, and decision support tools to advise pilot of probability of mission success based on pilot preferences, risk tolerance, and aircraft equipage (advisory only).*
- ***How will operations be changed/improved:*** *improvements in pre-flight weather briefings, particularly for General Aviation pilots, consisting of flight plan relevant information and decision support aids, will lead to improved pilot situational awareness.*

PROGRAM/PROJECT MANAGEMENT

- ***Basic guidance document for this program:*** WxAP Project Plan.
- ***Program/Project verification process:*** NASA sponsored annual Weather Accident Prevention reviews, Aviation Safety Program Executive Council reviews, and reviews/audits at the project/element level.
- ***Method used for end product validation:*** Combination of (a) system-level modeling and simulations, (b) laboratory-based experiments and (c) flight experiments via appropriate industry and/or NASA research aircraft. Many of these validation efforts are performed under cost-shared cooperative research agreements with industry.
- ***Operational training for the user:*** Training guidance for the use of new graphical weather pre-flight briefings will be developed in conjunction with the AvSP System Wide Accident Prevention (SWAP) project.

SCHEDULE/IMPLEMENTATION

- ***Next major program milestone:*** AWARE was completed. Technologies to be integrated into the Airborne Hazard Awareness System (AHAS).
- ***Program becomes operational:*** N/A
- ***Plans for further improvements:*** N/A