

Airborne Hazard Awareness System (AHAS)

PROGRAM/PROJECT: Aviation Safety Program/Weather Accident Prevention Project

[http://awin.larc.nasa.gov/ahas_abs1.htm]

LEAD AGENCY/COLLABORATING AGENCIES: National Aeronautics and Space Administration (NASA)

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SERVICE AREA(S)/INITIATIVE (S)

- *National Aviation Weather Initiatives:*
1: 6 2: 3 3: 4 5: 3 6: 3 7: 4 8: 4

FUNDING

- *Programmed/Planned (\$'s/FY):* \$1.2M/ FY 03 \$700K/FY04

TYPE OF PROGRAM/APPLICATION:

R&D/Product Development

SCOPE OF PROGRAM/PROJECT

- *What's being developed, procured, etc:* a prototype AWIN system providing capabilities to combine information from various sources, including on-board sensors and datalinks, and to display graphical weather information to the pilot. AHAS can automatically parse text and weather data, convert it to graphics, evaluate both tactical and strategic hazards in the weather data stream, and provide alerts to pilots. AHAS currently supports primarily WxAP AWIN transport research, but is being modified for GA purposes, and will be integrated with TPAWS by FY-05. Potential extensions include integration of TAMDAR-derived products, terrain/traffic, and tactical/terminal-areas products.
- *How will operations be changed/improved:* Improved situational awareness for better hazard avoidance and improved flight crew en route weather decision-making.

PROGRAM/PROJECT MANAGEMENT

- *Basic guidance document for this program:* AWIN Level III Plan.
- *Program/Project verification process:* Weather Accident Prevention Project Reviews, NRC Review, and Industry Review.
- *Method used for product validation:* Flight tests.
- *Operational training for the user:* TBD

SCHEDULE/IMPLEMENTATION

- *Next major program milestone:* FY-05 integration with TPAWS technology.
- *Program becomes operational:* NASA will rely on industry to commercialize AHAS technologies.
- *Plans for further improvements:* TBD