Satellite Digital Audio Radio Service (S-DARS)
Phase I & II Demonstration
Rockwell Collins-NASA Cooperative Research Agreement (CRA)

PROGRAM.PROJECT: Weather Accident Prevention Project/Weather Information Communications
LEAD AGENCY/COLLABORATING AGENCIES: Rockwell Collins, National Aeronautics and Space Administration (NASA)
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SERVICE AREA(S)/INITIATIVE(S)

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

FUNDING

- ***Programmed/Planned ($'s/FY):*** /FY03 /FY04

TYPE OF PROGRAM/APPLICATION

Proof of Concept.

SCOPE OF PROGRAM/PROJECT

- ***What's being developed, procured, etc.:*** *demonstrate the use of satellite digital audio radio to provide low cost, high bandwidth communications to airborne commercial airliners.* A number of applications are being demonstrated on American Airlines flights over the North Pacific. Delivery of high-resolution weather graphics to the flight deck is one application. NCAR-RAP provides gridded weather hazard data to the S-DARS network (convection, in-flight icing, turbulence; oceanic hazards) via an S-DARS server.
- ***How operations will be changed/improved:*** *Near real-time oceanic weather hazard update capability for the airborne flight crew; on-demand and automatic updates for CONUS weather hazard information and alerts.*

PROGRAM/PROJECT MANAGEMENT

- ***Basic guidance document for this program:*** Rockwell Collins/NASA cooperative agreement; NASA/NCAR cooperative agreement.
- ***Program/Project verification process:*** Program reviews, monthly reporting, phase final reports.
- ***Method used for end product validation:*** In-service evaluations (ISE) on revenue passenger flights.
- ***Operational training for the user:*** Hands-on and textual materials.

SCHEDULE/IMPLEMENTATION

- ***Next major program milestone:*** N/A
- ***When program will become operational:*** N/A- Proof of concept complete.
- ***Plans for further improvements:*** N/A