Satellite Weather Information System (SWIS)
Rockwell-NASA Cooperative Research Agreement (CRA)

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

- ***National Aviation Weather Initiatives***:
  N/A- See IND-10

FUNDING

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

TYPE OF PROGRAM/APPLICATION

R&D/Prototype Demonstration

SCOPE OF PROGRAM/PROJECT

- ***What's being developed, procured, etc.:*** *technologies to enable dissemination of graphical weather information to the cockpit using satellite communication data link.* Rockwell Collins and other industry partners developed and demonstrated a cockpit weather information system for the display of graphical weather information disseminated via satellite data link technologies.
- ***How will operations be changed/improved:*** *the use of satellite data link for dissemination of graphical weather information will enable the use of advanced cockpit weather information systems any where in the world. These technologies will assist in the reduction of aircraft accidents attributable to weather.*

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 partners.
- ***Operational training for the user:*** Training guidance for the use of new graphical weather information technologies will be developed in conjunction with the AvSP System Wide Accident Prevention (SWAP) project.

SCHEDULE/IMPLEMENTATION

- ***Next major program milestone:*** N/A
- ***Program becomes operational:*** WxAP develops enabling technologies that need to be implemented by industry or other government agencies. Working cooperatively with industry through CRA's will enable quicker implementation and technology transfer to meet the project safety goal.
- ***Plans for further improvements:*** Aviation weather information technologies using satellite data link technologies will be further developed and demonstrated for General Aviation as well as transport aircraft.