Route Optimization
Honeywell-NASA Cooperative Research Agreement (CRA)

PROGRAM/PROJECT: Weather Accident Prevention Project
LEAD AGENCY/COLLABORATING AGENCIES: Honeywell, National Aeronautics and Space Administration (NASA)
LEAD AGENCY POINT OF CONTACT: Gus Martzaklis, GRC, 216-433-8966, Konstantinos.S.Martzaklis@nasa.gov
PROGRAM POINT OF CONTACT: Paul Stough, LaRC, 757-864-3860, h.p.stough@larc.nasa.gov

SERVICE AREA (S)/INITIATIVE (S)

- ***National Aviation Weather Initiatives:***
  None

FUNDING

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

TYPE OF PROGRAM/APPLICATION

R&D

SCOPE OF PROGRAM/PROJECT

- ***What's being developed, procured, etc.:*** *a decision support tool using new 3-dimensional algorithm and user-centered interface to enable dispatchers to consider weather information when developing routes.* Honeywell will develop and demonstrate a weather decision support tool for use by dispatchers when developing routes.
- ***How will operations be changed/improved:*** *new decision support tools will provide dispatchers with 3-D graphical weather information, improving the ability to route aircraft around weather hazards and assisting 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:*** N/A
- ***Plans for further improvements:*** Addition of terminal area weather to dispatcher decision support tool and improved graphical user interface.