

## Aircraft Ice Protection (AIP)

**PROGRAM/PROJECT:** Aircraft Icing Project [<http://icebox-esn.grc.nasa.gov>]

**LEAD AGENCY/COLLABORATING AGENCIES:** National Aeronautics and Space Administration (NASA), Federal Aviation Administration (FAA), National Oceanic and Atmospheric Administration (NOAA), and the Department of Defense (DoD)

**LEAD AGENCY POINT OF CONTACT:** Mary Wadel, GRC, 216-977-7510, [mary.f.wadel@nasa.gov](mailto:mary.f.wadel@nasa.gov)

**PROGRAM POINT OF CONTACT:** Andrew Reehorst, GRC, 216-433-3938, [andrew.l.reehorst@nasa.gov](mailto:andrew.l.reehorst@nasa.gov)

### **SERVICE AREA (S)/INITIATIVE (S)**

- *National Aviation Weather Initiatives:*  
5: 11

### **FUNDING**

- *Programmed/Planned (\$'s/FY):*      \$1.3M /FY 03    \$1.3M /FY 04

### **TYPE OF PROGRAM/APPLICATION**

R&D/Prototype Demonstration

### **SCOPE OF PROGRAM/PROJECT**

- *What's being developed, procured, etc.:* (1) remote sensing technologies to measure icing conditions; (2) systems to monitor and assess aircraft performance; and (3) instrumentation and measurement techniques to characterize atmospheric icing conditions.
- *How will operations be changed/improved:* developments will improve safety, assist in avoidance of icing conditions, and promote improved aircraft certification guidelines.

### **PROGRAM/PROJECT MANAGEMENT**

- *Basic guidance document for this program:* Aircraft Icing Project Plan.
- *Program/Project verification process:* Aero-Space Technical Advisory Committee (ASTAC) and Subcommittee reviews, peer reviews, and NASA Aircraft Icing Forums.
- *Method used for end product validation:* Technical peer reviews and experimental testing.
- *Operational training for the user:* None is expected.

### **SCHEDULE/IMPLEMENTATION**

- *Next major program milestone:*
- *Program becomes operational:* The Aircraft Ice Protection Element will develop enabling technologies to be implemented by industry, government agencies and academia.
- *Plans for further improvements:* Smart Icing System ice management demonstration, ground-based remote sensing field test, flight datalink for icing information, super-cooled large droplet instrumentation technologies.