

## **In-Situ Turbulence Algorithm (ITA)**

**PROGRAM/PROJECT:** Aviation Weather Research Program/Turbulence Product Development Team  
[<http://www.faa.gov/aua/awr/>]

**LEAD AGENCY/COLLABORATING AGENCIES:** Federal Aviation Administration (FAA)/National Center for Atmospheric Research (NCAR)

**LEAD AGENCY POINT OF CONTACT:** Warren Fellner, 202-314-1490, warren.fellner@auatac.com

**PROGRAM POINT OF CONTACT:** Bob Sharman, NCAR, 303-497-8457, sharman@ucar.edu

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

- *National Aviation Weather Initiatives:*  
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### **FUNDING**

- *Programmed/Planned (\$'s/FY):* \$195K /FY03 /FY04

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

R&D/Product Development

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

- *What's being developed, procured, etc.:* a software package to enable commercial aircraft to automatically measure (quantitatively) turbulence and downlink the information in real time.
- *How operations will be changed/improved:* improved accuracy of turbulence observations will improve the forecasting of turbulence and help reduce injuries associated with turbulence encounters.

### **PROGRAM/PROJECT MANAGEMENT**

- *Basic guidance document for this program:* FAA Turbulence Product Development Team Technical Direction
- *Program/Project verification process:* Monthly and quarterly reporting, semi-annual program reviews, science panel reviews, RE&D advisory committee project assessments, use of test beds for demonstrations and evaluations
- *Method used for end product validation:* Algorithm tuning, flight simulator testing, flight testing
- *Operational training for the user:* Hands on training is provided for Aviation Weather Center forecasters

### **SCHEDULE/IMPLEMENTATION**

- *Next major program milestone:* FY04- Implement on 70+ 737 aircraft
- *Program becomes operational:* FY05
- *Plans for further improvements:* N/A