

Space Weather Analysis and Forecast System (SWAFS)

PROGRAM/PROJECT:

LEAD AGENCY: Headquarters United States Air Force, Directorate of Weather (HQ USAF/XOW)

LEAD AGENCY POC: HQ USAF/XOWR, 703-696-4930, DSN 426-4930, scats.xowr@pentagon.af.mil

PROGRAM POC: Mr. Jerry Reif, 402-294-9645, DSN 271-9645, gerald.reif@afwa.af.mil

SERVICE AREA(S)/INITIATIVE(S)

- *National Aviation Weather Initiatives:*
N/A

FUNDING

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

TYPE OF PROGRAM/APPLICATION

Product Development

SCOPE OF PROGRAM/PROJECT

- *What's being developed, procured, etc.:* integration of space weather analysis and forecast capability into the Air Force Weather Agency (AFWA) strategic processing center. SWAFS Initial Spiral (IS) re-hosted software from the 55th Space Weather Squadron to AFWA platforms during FY 00-02.
- *How operations will be changed/ improved:* Integrates space weather into the AFWA infrastructure and upgrades capabilities in space weather product production and dissemination. Provides capability to produce classified space weather products for dissemination.

PROGRAM/PROJECT MANAGEMENT

- *Basic guidance document for this program:* USAF Operational Requirements Document (USAF 003-94-I/II/III-C), 1 May 97.
- *Program's verification process:* System/Software Design and Test Readiness Reviews conducted for each delivery. Configuration and functional audits completed after each software delivery.
- *Method used for end product validation:* Verification and Validation of models and algorithms performed prior to turn-over to contractor for development and integration. Contractor conducts Qualification Test & Evaluation (QT&E) and HQ AFWA conducts Force Development Evaluation (FDE).
- *Operational training for the user:* Both hands-on and text training materials provided by the contractor to users to allow the government to make effective use and sustainment of the system. AFWA Help Desk personnel receive training provided by the contractor.

SCHEDULE/IMPLEMENTATION

- *Next major program milestone:* N/A
- *Program becomes operational:* SWAFS Initial Spiral is currently operational.
- *Plans for further improvements:* The follow-on program provides incremental enhancements and upgrades for existing models and algorithms using current technology FY03-05 (Spiral 2) and future models and algorithms using new technology beginning FY06 (Spiral 3).