Global Theater Weather Analysis and Prediction System (GTWAPS)

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. Robert E. Monroe, Air Force Weather Agency, AFWA/XPSI, 402-294-9669, DSN 271-9669, robert.monroe@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 is being developed, procured, etc.:*** *fine-scale visualization products depicting weather impact variables in support of operations.* The GTWAPS provides an open, expandable system for advanced target-scale numerical weather modeling capability consisting of a suite of IBM hardware running the Mesoscale Model 5 (MM5) model.
- ***How operations will be changed/improved:*** *GTWAPS produces a wide variety of visualization products in support of Air Force and Army aviation and ground operations -- improved decision making from resource protection to combat and training operations.* GTWAPS replaces the Advanced Weather Analysis and Prediction System (AWAPS).

PROGRAM/PROJECT MANAGEMENT

- ***Basic guidance document for this program:*** Requirements for this program are documented in the Air Force GTWAPS Program Development Plan (PDP).
- ***Program's verification process:*** Spiral development acquisition strategy. Each spiral consists of a 12-month period at which time the government and contractor test against identified requirements. Configuration and functional audits were completed at Final Operational Capability (FOC).
- ***Method used for end product validation:*** Daily product verification takes place in-house. Operational Utility Evaluation which measures effectiveness and performance issues was performed prior to Initial Operational Capability (IOC).
- ***Operational training for the user:*** Both hands-on and text training materials are provided by the contractor to users to allow the government to make effective use of the system.

SCHEDULE/IMPLEMENTATION

- ***Next major program milestone:*** N/A
- ***Program becomes operational:*** GTWAPS is an operational system.
- ***Plans for further improvements:*** Follow-on advanced development is anticipated as improvements to numerical modeling are developed and computer resources continue to improve. Follow-on improvements through technology refreshments and incremental technology insertions are planned through FY05 when MM5 will be replaced by the Weather Research and Forecasting Model (WRF).