Improved Solar Observing Optical Network (ISOON)

PROGRAM/PROJECT: http://www.nso.edu/nsosp/isoon/description.html
LEAD AGENCY: Headquarters United States Air Force, Directorate of Weather (HQ USAF/XOW)
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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.:*** *ISOON is a semi-autonomous, remotely commandable patrol telescope designed for studies of solar activity in support of space weather specifications and forecasts. ISOON is designed to replace the existing Solar Observing Optical Network (SOON), which USAF currently operates as a world-wide network of 4 telescopes for monitoring solar activity. Both SOON and ISOON provide data that support a wide variety of users of space weather specifications and forecasts.*
- ***How operations will be changed/improved:*** *ISOON detects solar flares as well as magnetic field signatures and sunspot groups that are known to lead to flares and other eruptive activity. Numerous communication, navigation, and surveillance systems operated by DOD and civilian agencies are adversely affected by solar activity.*

PROGRAM/PROJECT MANAGEMENT

- ***Basic guidance document for this program:*** N/A
- ***Program's verification process:*** N/A
- ***Method used for product validation:*** N/A
- ***Operational training for the user:*** Operator & maintenance courses conducted at Holloman AFB.

SCHEDULE/IMPLEMENTATION

- ***Next major program milestone:*** N/A
- ***Program becomes operational:*** The prototype instrument was completed and demonstrated in 2002. Due to programmatic decisions, ISOON is presently planned to be operated by Air Force Research Laboratory at a single site (Sacramento Peak) for research and limited support to space weather operations.
- ***Plans for further improvements:*** N/A