



**US Army Corps
of Engineers®**

**Public Affairs Office
Honolulu District
U.S. Army Corps of Engineers
Fort Shafter, Hawaii 96858-5440**

**Contact:
Dino Buchanan or
Joseph Bonfiglio
Telephone (808) 438-9862**

FOR IMMEDIATE RELEASE

Sept. 9, 2008

Army Corps, Air Force Open New Maui Mirror Coating Facility

By Dino W. Buchanan, Honolulu District Public Affairs

(HALEAKALA, MAUI, HI NR 30-08) A ribbon-cutting ceremony was held Aug. 21 at the Institute for Astronomy (IFA), Advanced Technology Research Center, Pukalani, Maui to officially open the recently Corps of Engineers completed Mirror Coating Facility.

The Air Force Research Laboratory/Research and Development Site, Maui (AFRL/RDSM) and Maui Space Surveillance Systems Branch co-hosted the ceremony, that was held simultaneously at the IFA in Pukalani and inside the new Mirror Coating facility, which is located within the Maui Space Surveillance Systems Complex (MSSC) on the summit of Haleakala. A video link was provided for attendees to view the ceremony from both sites.

The ceremony was attended by U.S. Senator Daniel K. Inouye, Maui County Mayor Charmaine Tavares, Honolulu District Commander Lt. Col. Jon J. Chytka, Air Force personnel, MSSC scientists and local officials.

-MORE-

2-2-2 MAUI MIRROR

The Corps' design-build construction of the Mirror Coating facility will support the Advance Electro-Optical System (AEOS) telescope at the Maui Space Surveillance Complex.

"Our supported Air Force partners are extremely happy with the facility," said Lt. Col. Chytka. "It started with a challenging environment and had many challenges along the way, but due to strong leadership, flexibility, and innovation by all parties involved a great facility was the end product."

The project consisted of constructing a 7,314 square-foot, two-story facility with appurtenances that abutted the existing AEOS telescope building.

The first floor of the facility features an open bay area that is to be used as the recoating facility for the Air Force Research Laboratory's existing 3.67-meter telescope mirror. The second floor will house two Science and Technology Rooms.

The facility will also be used by the University of Hawaii Institute for Astronomy (IFA) to recoat their telescope mirrors; one of which is four meters in diameter and is capable of recoating National Science Foundation's (NSF) proposed Advanced Technology Solar Telescope's (ATST) 4.2 meter mirror.

On October 25, 2004, the Honolulu District received direction to prepare documents for a design-build contract with a program amount of \$7.5 million.

-MORE-

3-3-3 MAUI MIRROR

This project was programmed as a Fiscal Year 2005 military construction congressional addition with the help of U.S. Senator Daniel K. Inouye and was awarded to San Juan Construction, Inc. of Honolulu in December 2005 for the design and construction of the facility for \$4,607,000.

During the documentation preparation in May 2005, the Corps was informed by AFRL that an endangered Silver Sword plant was located within the footprint of the proposed facility, plus the project needed to include provisions for the endangered Hawaiian Petrel bird which nests on the summit of Haleakala. Avoidance and mitigation resulted in the facility footprint being redesigned.

San Juan Construction began work on April 10, 2006 and completed construction October 1, 2007.

The contract entailed design and building an on-site mirror coating facility that provides accommodations for the transporting, staging, removal, coating, and recoating of mirrors up to 4.5 meters in diameter. Also included are spaces for science and technology laboratories. Construction was done at an elevation of 10,000 feet on the summit of Haleakala.

The project also included site planning, clearing, grading, erosion control, site drainage, utility systems, pavements, pedestrian and vehicular circulation systems and physical security measures. Connection to the adjacent existing AEOS fire protection system, sewer and water system, security system and electrical system was also completed.

-MORE-

4-4-4 MAUI MIRROR

The Honolulu District received a Letter of Appreciation on October 5, 2007 from the Air Force Research Laboratory recognizing the outstanding performance by the District staff and contractor for addressing environmental issues and exceeding customer objectives.

The Maui Space Surveillance System (MSSS) is a state-of-the-art electro-optical facility combining operational satellite tracking facilities with a research and development facility, the only one of its kind in the world.

The MSSS houses the largest telescope in the Department of Defense, the 3.67-meter Advanced Electro Optical System (AEOS), as well as several other telescopes ranging from 0.4 to 1.6 meters.

The Maui Space Surveillance System, also known as AMOS (Air Force Maui Optical & Supercomputing Site) by the scientific community, is routinely involved in numerous observing programs and has the capability of projecting lasers into the atmosphere, which is unusual at astronomical sites. The Maui Space Surveillance System currently, through its primary mission for Air Force Command, combines large-aperture tracking optics with visible and infrared sensors to collect data on near Earth and deep-space objects.

-HED-