

N.M. Observatory to Help New Astronomers

June 15, 2007

Associated Press/AP Online

CLOUDCROFT, N.M. - An observatory being refurbished near Cloudcroft is getting a new mission - providing telescope time for budding astronomers around the world.

The Tzec Maun Observatory in the Lincoln National Forest was built by the Air Force in 1962 to track Soviet space activity during the Cold War. Its 48-inch diameter Newtonian telescope was last used in the mid-1990s by the National Science Foundation.

"When we first came in here in late 2004 to begin refurbishing the system, it was like walking into a 'Twilight Zone' episode," said observatory director Ron Wodaski. "There was equipment lying around half-assembled and books sitting on desks still opened, just like all the people had vanished while in the middle of their daily duties."

The system, operated by the Tzec Maun Foundation, will give away telescope time to students around the world via the Internet.

"Through our program, we will train teachers how to use the systems and they in turn will train their students," Wodaski said. "It won't cost users a single penny. It will be absolutely free."

Once it's finished in the next year or two, the facility is intended for a telescope with a 1-meter diameter primary mirror, Wodaski said.

The foundation is spending more than half a million dollars getting the observatory ready.

"The high cost of retrofitting the entire facility is due largely to the fact that it was originally built to 1960s specifications to meet the needs of the military," Wodaski said.

One phase, which included gutting the electrical system and rewiring, cost \$350,000, he said. The renovation also had to modernize the control systems, which included dome rotation and a movable windscreen that protects the telescope during high winds, he said.

The hydraulic system that controls the windscreen was built to military aircraft specifications. Wodaski said it took more than a year to find a team with enough experience to restore it and another year to do the work.

He wrote the operational and user software for the Tzec Maun facility, which is the Mayan word for the planet Mercury and is pronounced "Teh-Zeck-Moan."

Beginning-level students will use software called "snapshot astronomy," advanced users will use "astronomy studio" and intermediate level users will have access to either, Wodaski said. He called snapshot basically a "point and shoot system," while studio is oriented toward research.

The Tzec Maun Foundation does not yet have the title to the facility.

"We will eventually receive the facility from the NSF, but the transfer is not official yet and may take some time," Wodaski said.

The building includes two auxiliary domes with smaller telescopes that will go into service before the larger telescope is completed. The foundation also has a second facility near Mayhill with four smaller telescopes that can be used by beginning and intermediate level students.

The observatory is not open to the public.

"Think of this as a factory that ships its product over the Internet," Wodaski said. "People do not come here for the product. They get it online from anywhere in the world."

On the Net:

Tzec Maun Foundation: <http://www.tzecmaun2.org>

Information from: Alamogordo Daily News, <http://www.alamogordonews.com>