

Strutting in the stratosphere at the McDowell Observatory

By Diane D. Tilley
Observer Correspondent

LYNDHURST – Have you ever had a fantasy of spending an evening out, cavorting with famous stars? Well, now that dream can come true. Every Monday and Wednesday evening, between 8 and 10 p.m., the general public is welcomed to enter the William D. McDowell Observatory located at the Richard W. Dekorte Park in Lyndhurst. It is part of the New Jersey Meadowlands Commission's Center for the Environmental and Scientific Education. You can climb the spiral staircase leading to the dome, look through the 20-foot F9 Classical Cassegrain Tele-

scope and gaze at stars and galaxies far, far, away.

The Observatory, which opened one year ago, has provided youngsters and adults alike the ability to explore the mysteries of the night skies under the tutelage of Director of Astronomy Dr. John Sloan and Steve Kahofer – a volunteer assistant and amateur astronomer. Entering the space is like pursuing an alien landscape; dim red-domed lights are strategically placed to provide illumination while maintaining your eyesight. The 25 steps of the spiral stair case put you smack dab near the 20-foot, 6-inch aluminum ash dome.

Digital controls open and close the retractable dome constructed to rotate

360 degrees. That allows the telescope to track the stars and planets. A built-in weather sensor gives the astronomer the ability to pre-plan or gauge the time frame that certain heavenly objects are viewable. In the center of the concrete floor, the streamlined telescope rests on a pillar that descends 250 feet and is anchored into the earth's bedrock for solid stability. It is connected to various computers and is remotely controlled. The robotic component insures pinpoint accuracy. In addition, it is equipped with filters to eliminate light pollution – the light that is produced by surrounding city lights – specialized cameras, photometers to measure the brightness of the stars. It



CAST YER EYE TO THE STARS – The William D. McDowell Observatory on the NJMC's grounds in Lyndhurst has been drawing crowds for informal but sensational viewings.

can calculate how the stars vary over time. Spectroscopes analyze wavelengths of light.

Despite all the technology contained in the dome, basic amenities such as heat or air-conditioning are lacking.

"Heat or cooling sources emit waves that will distort viewing," Dr. Sloan explained.

Because the night sky evolves with the seasons, there is plenty of variety in what can be viewed. The rumbling of the dome as it is rotated into position elicited gasps of adults and children who lined up to take their turn to peer

through the telescope at the rings of Saturn and the Orion Nebula along with a star cluster known as the Owl for its resemblance to its name sake. The Owl renamed ET since it resembles to our favorite extra-terrestrial blockbuster film 1982.

Dr. Sloan and Steve Kahofer pointed out to the children exactly what they were seeing and answered questions such as "Why is Pluto not a planet anymore – did it explode?" Because of the size of Pluto and the many objects now visible beyond Neptune, scientists have reclassified Pluto and the other objects as Plu-

roids. Other questions ranged from "What color are the stars? How many are there and how far away are they?"

Dr. Sloan said they have big plans for the future.

"We hope to connect the program to the World Wide Web so students will be able to access information and download pictures taken from this telescope to use for school and research projects," he said. "We want provide remote viewing to make the telescope more accessible for the handicapped by tying it into the

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screens and computers in our classroom labs in the main building."

One of the most pleasant

aspects of the open night viewing is the informal atmosphere it is conducted in. The informal atmosphere is amenable for adults and children alike. Everyone gets a turn to peer through the telescope. The flexibility

of the program to be presented is ruled only by the weather, so if the desired heavenly body is not visible it can be revisited sometime later in the session or a substitute in another area of the sky can be viewed.

Dr. Sloan and his assistant have a knack for breaking astronomical theories, facts and concepts into terms easily understood by visitors of all ages. While watching the faces and lis-

tening to the questions of the younger visitors, you are left to wonder what future astronomer among them will be standing in the future in Dr. Sloan's place answering questions and

explaining the mysteries of tomorrow's night skies.

For more information on the William D. McDowell Observatory call 201-460-8300, or go to their Web site at <http://www.njmeadowlands.gov/ec>.