## GREEN BANK STAR QUEST THE 4TH

JULY 4, 5, 6, 7, 2007 "THE DREAM CONTINUES!"



By, Rodney Waugh - KVAS

Once again the Central Appalachian Astronomy Club and the Kanawha Valley Astronomical Society joined up with the National Radio Astronomy Observatory at Pocahontas County's beautiful Green Bank, and held the largest radio and optical star party in West Virginia. Four days and nights of astronomical fun for all!

Star Quest was featured in the July issue of Astronomy Magazine in a listing of star parties, including a group photograph! A story was in the Charleston Gazette that went out on the AP wires and Sky & Telescope Magazine picked it up and featured it on their website!

NRAO staff offered high tech tours of the facilities thru-out Star Quest.

The registration desk was manned by club members thru-out the event to provide information and Star Quest badges to participants and answer questions ranging from where I can set up my camp to electrical questions for RV's, and even questions about outside actives like "When can I ride the Cass Railroad".

The campground is large and offers 25' X 45' sites. Ten toilets, including one that is handicapped accessible and a wash station are scattered around the campground. A

battery recharging station was located in the old barn. Hot showers were available to the campers at the bunkhouse. An air conditioned bunkhouse bunk could be had for only \$15.00 a night. The registration fee is only \$75.00 for the entire event.

Sue Ann Heatherly offered an introduction to radio astronomy followed by Tom Crowley of SARA drove in from Cheifland Florida an astronomical community, and offered hands on instruction and use of the 40-foot radio telescope for Star Quest participants.

Several vendors set up shop in the visitor's center and just about anything astronomical was offered! Telescopes, binoculars, lasers, miniature telescopes, accessories of all sorts and even astronomical hats, shirts and astronomical underwear could be found! Star party specials were everywhere. A flea market was just outside with some great deals!

"First steps in Astrophotography", a program offered by Stas Edel & Jeremy Bumgardner of CAAC laid the groundwork and more for dozens of people interested in astrophotography.

Children's activities included twinkle, twinkle little star, constellation station 1, the Great Milky Way, what the Hubble sees, and more than I can list.

The hot food was provided by the famous visitor's center Starlight Café. It is amazing the quality and quantity of good food that was prepared! The meals were buffet style and served in the NRAO cafeteria. No one left hungry! Ice cream cones were available at the Starlight Café for only a dollar. The ice cream was stacked so high, it was a challenge to eat it before it melted!

The main attraction was the West Virginia Rocket Boys! Quentin Wilson, Jimmy O'Dell Carroll and Roy Lee Cook gave a talk about their activities that along with others led to the book "Rocket Boys" and the movie "October Skies". They also emphasized the importance of reading and education. They work with schoolteachers in several states to build interest in education among young people. Quentin sold "T" shirts that read "I SPEAK GEEK!" The Rocket Boys were happy to autograph the shirts.

Dr. Andrew Clegg, the director of the Electromagnetic Spectrum Management Program of the National Science Foundation discussed the difficulties that are involved in keeping the frequencies used for radio astronomy clear. Besides radio and TV, a lot of everyday household items produce radio waves that must be eliminated or minimized. NRAO operates a truck that searches for radio interference in the surrounding areas. Often an electric fence, electrical equipment, wireless internet or even a home microwave is sniffed out by NRAO'S Westly. NRAO has legal authority to enforce the rules in the Radio Quiet Zone.

Robert Royce an optician, explained telescope optics and discussed the refiguring of Ed Connors 8" f6 refractor. Robert comes from Connecticut and operates a company named Precision Optical Components. He does work for the military, NASA and the general public.

Donald Nicholson and Harold McAlister flew in from California's Mount Wilson Observatory to speak of the history of this great institution. They discussed past and present projects. Don Nicholson is the sharpest 89 year old I have ever met! Don has worked with people such as George Hale, Edwin Hubble and Albert Einstein! His father, Seth Nicholson discovered 4 of the moons of Jupiter!

Other programs included Mark "Indy" Kochte on the "Mercury Messenger" Project. Dr. Jack Littleton of West Virginia University on "Extrasolar Planets", and "Missing Mass the search for dark matter". Brent Maynard on "webcam imaging and registax processing". Dr. Jim Thiemann on "Radio Jove" an introduction to radio astronomy and a chance to learn how to build a small radio telescope. Dr. Michelle on "a brief history of women in radio astronomy". To see all of the many programs offered, you need to look at the program schedule.

The raffle was the last event held Saturday night and dozens of door prizes were won! Watch the Star Quest website for more information.

Friday night and Saturday night were exceptional! The dark skies cleared to the point the Milky Way looked like a cloud. The campground and RV area was crowded with telescopes of all kinds. Anyone interested could travel around and look at dozens of astronomical objects thru telescopes that were shared by their owners. I know of no other hobby where the owners of thousands of dollars of equipment are so happy to share. The payback to the owner/operators is the comments like: o-gee, look at that, I have never seen it that well, it has color! And so on, that the viewers make. Saturday night's observing was topped off by a fireball that traveled near the Zenith and moved from North to South. It left a trail that was visible for several seconds and covered over one hundred degrees of sky!

CAAC, KVAS and NRAO offer's their thanks to the many people that put forth the great effort that led to this year's very successful Star Quest! If I missed any one, it is only because it is near impossible to list them all! To get a true understanding of Star Quest, you need to look at the schedule.