# Guide Star October 2003 Features+

# **Reporting from the Rockies**

#### By Truman Kohman, Correspondent

The astronomy club of Helena, Montana is the Astronomical Institute of the Rockies (AIR). They have a roll-off-roof observatory with a 14-inch Newtonian in a light-free site about 10 miles east of Helena. The president is Ashley Oliverio, a lawyer who writes a weekly "Montana Skies" piece in a local paper. The club has about 50 members, about half of whom are active.

Jane and I were in Helena late last month, when the AIR had a viewing night for members only (to which I was invited) on Friday, August 29, and a public viewing night on Saturday, August 30. Both nights were very clear, the crescent Moon having set. (In fact all but one or two of the thirteen nights we were there were clear!) Helena was visible to the west, and its glow extended about 45 degrees up, but overhead was completely dark except for a fantastic Milky Way. We had good views of Mars, M31, M32, M110, M13, and Uranus, which I found.

#### <u>At Raystown Lake</u> As Usual, Good AAAP Showing At Off-Site S.P., Depsite Bad Weather

by George Guzik (from AAAP Listserver)



It wasn't exactly the best night to hold a star party but we did what we could to make it work, anyway! On August 9, a group of us traveled to Raystown Lake in central Pennsylvania at the invitation of Ranger Dolores Smith. Our goal for that evening was to hold a public star party for the campers at the lake.

The rainy weather waiting for us upon our arrival forced us to go to our backup plan, which was an indoor presentation on astronomy. Raystown has a fabulous visitor's center which, in turn, has a really nice classroom facility. The CD with a PowerPoint presentation went into the classroom's PC, Bill and Maureen Moutz set up their Dob and binoculars, and Mark Orsatti set up a new 11" Celestron (equipped with the "works"). Our presentation began with only three attendees in the audience but, by the half-way point (and with a bit of "recruiting" by Mark), we had about 3/4 of the room filled. The attendees received information about amateur astronomy in general, information about the AAAP in particular, and had an opportunity to see telescopes and ask questions. After the presentation, we retired to the campground where we met Charlotte and Jim Tunney who attended to help with the star party.

I do hope we have another opportunity to hold an event at Raystown. Based upon what I could see, it looks like a good, dark site with only a few outdoor lights.

My thanks go out to *Bill and Maureen Moutz*, to *Mark Orsatti* and his wife, and to *Charlotte and Jim Tunney* for participating in this event. I also thank the staff at Raystown for sponsoring the event!

There were about 200 visitors on a Saturday evening. I was only able to view Mars through members' 10-inch Meade Schmidt-Newtonian and 5-inch refractor, so I contented myself with binocular views of M31, M33, M13, M22, the Perseus double cluster, and nebulae in Sagittarius.

I'm looking forward to my next visit, in June, for our grandson's graduation from high school.



### Great Help At Recent Wagman Star Parties

#### by Tom Reiland (from AAAP Listserver postings)

<u>Sept. 5 Star Party</u> - Friday night wasn't very good, but we did have some clearing after 10 PM. There were about 100 or more visitors and approximately 20 members helped with the Mars Party. Saturday night was better, but we still had cirrus clouds in and out most of the night. Around forty members handled themselves well with a very large crowd of over 550 visitors. I want to especially thank the parking crew of *John Holtz, Ed Honkus, Eric Fischer, John Close* and *Geoffrey Trees* and anyone else who might have assisted them.

<u>Sept. 10 Star Party</u> - *Flacc Stifel*, *Bob Kalan* and I lectured and entertained fifty students, teachers and parents from Transfiguration School tonight at Wagman Observatory. It stayed cloudy until there were only a few people left. Flacc and Bob stayed and showed the last two of the guests Mars. The group was very grateful and I'm sure that they'll be back. Too bad it didn't clear off a few hours earlier. Thanks again to Flacc for talking to them about the Brashear Refractor and the Observatory and to Bob for bringing his lap top to show our visitors his photos of Mars, the Moon and other celestial wonders.

<u>Sept. 20 Star Party</u> – We had about 35 members assist with the star party last night and between 250 and 300 visitors. That brings our yearly total to approximately 2,200 guests....We could exceed 3,000 attendees for 2003 if the weather cooperates. We've done rather well considering that the weather hasn't been good for many of our events. We did have a good one last night. Transparency was very good, but the seeing was fair at best. It did get humid and cool later on and everything was dripping wet when I left at 3:30. There was plenty to see. Thanks again to all who helped out tonight. Our visitors thought yinz guys were wonderful.





#### How I Made An Occulting Bar to First View Phobos

by Flacc Stifel (from AAAP Listserver)



I have a 5-element 13 mm Erfle eyepiece which is one of two supplied with my 1962 Questar scope. This eyepiece has a little ring which screws into the scope end of the unit which serves as a field stop. The eyepiece has its own internal threads for focusing, kind of like the right hand eyepiece of a pair of binoculars. The eyepiece gives about 318 power, and a pretty good image scale for this purpose on the Brashear.

I cut and epoxied a narrow strip of shim brass across the field stop ring, blacked both sides with candle flame carbon, and installed the ring into the eyepiece. The self-focusing arrangement allows the observer to twist the front of the eyepiece and bring the occulting bar into sharp focus. One side of the bar is lined up with the approxinamte center of the field. The image of Mars at opposition is about .020 inches at prime focus of the Brashear, so the bar is made a bit wider than that, so all the light of the planet's disk can be hidden behind the bar.

The eyepiece is installed and, since Phobos was at eastern elongation, the bar gets positioned pretty much north-south and the planet hidden behind it. Imagine my surprise when that tiny spark of light was clearly visible from time to time, as determined by local seeing conditions, right near the predicted 3-o'clock position. Of course the Brashear has a very steady drive. A little tweek of the RA slow motion control will bring the purple fringe around the planet's image in and out from behind the bar. The moon can be seen with the edge of the planet visible once you know where to look.

As the hour between 12 and 1am progressed, the moon moved in closer to the planet. Several people observed the moon.

Since Deimos was not well placed, it will have to wait for another day\*. I think observations would be possible with a Dob, but difficult because of having to keep everything stationary while waiting for those moments of good seeing. By the way, we were unsuccessful in observing the moons at the last opposition. I'm happy to answer other questions and arrange for others to have a look for the moons.

(\*Editor's note: Since Flacc posted this article, he and others were successful in observing Deimos as well.)

## Pictures from AstroSplash....Er, Ah...AstroBlast 2003

Taken by Larry McHenry

