



Minutes of General Meeting, 14 June 2003

President Wayne French the meeting to order at 7:35P.M. in Joppa Hall, Room J70.

Treasurer's report: \$2306.67

Old Business:

Observatory: All that is standing between us and the start of member training for the observatory operations is BAD WEATHER!!! Mark K., Steve C. and Bill G. have compiled some standard operating procedures; log books, security arrangements and etc. With a few clear nites, Bill and Steve can do the final alignment of the scope. Steve will send out an announcement of the training schedule immediately once the alignment has been completed. So, hope for a change in the weather!

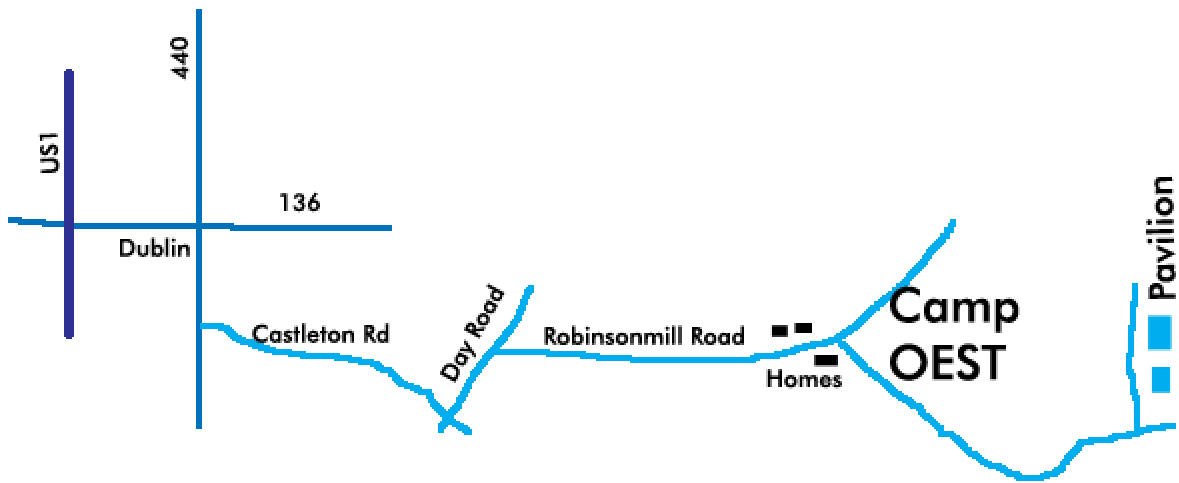
Public Outreach:

Drew Wilkerson discussed scheduling for the Boy Scout Camp Oest. Members are highly encouraged to support this schedule and to provide a short (two hour) observing schedule for the scouts. Anticipate around 50 scouts for each evening. This is a partial fulfillment of our obligation to the Boy Scouts of America for the use of the Broad Creek dark sky site. The schedule is attached. On nites that will not allow observing, we may provide a short "this is astronomy" talk. Drew and Tom Rusek have the best suggestions for those occasions. All are encouraged to contact Drew and get scheduled...if only for one or two evenings. If you can support others, it is always better to have several members present, especially if it looks like an evening we can observe.

Members can use the club scope(s) to support this event.

Directions to Camp Oest Broadcreek

Travel North on 136 and cross US1. Continue to Dublin and turn Right on 440 at 4 way stop. Travel 100-200meters on 440 and make first left turn on Castleton Road. Continue a mile or so to Day road, there will be a sign there for Camp Oest. Make left on Day road and travel 100-200 meters to make first right on Robinsonmill Road. Follow Robinsonmill Road for about 1 mile to Camp Oest. Make right hand entrance into camp and follow road ½ mile to the Pavilion on the right. Please arrive about 8:45PM to allow time for set up.



Meet at the Pavilion

Camp Number 410-879-4922
 Our POC Donna Miller 410-465-0087
 My number Drew Wilkerson 410-692-9477

Date	Name	Name	Name
June 26, 2003	George Jones 410-734-6591	Mark Kregel 410-734-7961	
June 30, 2003	George Jones 410-734-6591		
July 3, 2003	George Jones 410-734-6591	Larry & Fran Armstrong 410-671-7334	
July 7, 2003			
July 10, 2003	Larry & Fran Armstrong 410-671-7334		
July 14, 2003	Lucy Albert 410-679-7055	George Jones 410-734-6591	
July 17, 2003	Carol & Steve Channel 410-420-8647		
July 21, 2003	Carol & Steve Channel 410-420-8647		
July 24, 2003	Lucy Albert 410-679-7055	Kathy Tingler 410-671-9403	
July 28, 2003	Drew Wilkerson 410-692-9477	George Jones 410-734-6591	
July 31, 2003	Drew Wilkerson 410-692-9477	George Jones 410-734-6591	

Public Star Parties: We discussed the possibility of holding some extended opportunities for the public to view Mars as it increases in size and detail over the next two months. The latest suggestion is for the week of 23-30 August. At least one, if not several, evenings during that time could provide opportunity for the public to come see the Red Planet at the Observatory. **We will nail down the final times and dates and I'll send those out via hard copy along with the announcement for training classes.** Signs are being

prepared for display at our new public open house parking to let people know if the “show is open” or not.

Those of you watching our Yahoo Group site know that Grace Wyatt has really been busy to find marketing opportunities for our club. In her words:

I spoke with Sandy at Harford Cable Network today. He is willing to do a spot about the HCAS on the Harford Magazine Show (Comcast Cable Channel 3 in Harford County) to be broadcast in August. The 7 to 10 minute segment will be broadcast three times a week every week in August.

President Wayne has stepped up to contacting the Network and will arrange the interview. Great job Grace!! In addition, the Harford Co. Public Library will host an Astronomy display. Again, as Grace says:

I have spoken with Pauline at the Edgewood Library. We can have a display in one of their large display cases during the month of August. The display cases are located in the entry way of the library. We would put in the materials on August 4 and remove them on August 31. We are asked not to remove any of the materials during the month. The display cases are locked at all times and objects are insured by the library.

Several members have some very interesting objects to display. Phil Schmitz even has offered some of his extensive meteorite collection for this purpose!

Guest Observing at Pennsylvania Dark Sky Site: Phil Schmitz will be updating his EMAIL list to notify all interested in the opportunity to go to the dark sky site in Pennsylvania. You'll remember his glowing reports of that area from last fall. Anyone interested please contact Phil and get on the list: paschmitz@hotmail.com

New Business:

Bill G. discovered some excellent astronomical reference texts (his third set of Burnham's Celestial Handbooks!!) that he offered to any interested member for very reasonable costs. The proceeds went straight into the club fund...outstanding contribution Bill. Thanks!

Wayne distributed a great capture of literature on “Hypothetical Planets” and shared some book finds he had come across during his yard sale expeditions.

Steve and Carol announced the availability of the Teaching Company Course, “Understanding Astronomy: An Introduction to Astronomy” taught by Dr. Alex Filippenko, Cal Tech. They will be happy to lend the taped lecture series to members. The series of 40 lectures covers basic and intermediate topics and is geared for a general audience. Here is the opportunity for beginners to learn some of the basics and for old hands to brush up on familiar concepts. Contact Steve and Carol, 410-420-8647 for availability. Course outline available at: <http://www.teach12.com/ttc/assets/coursedescriptions/180.asp>

Program: Building a Telescope by John Dobson. The “original” himself took us through all the steps he uses to construct one of his revolutionary Dobsonian designs. Humor, angst and even some drama.... a good show!

MARS IS HERE!!

Bill Geersten advises: "Mars is not "coming"! Mars is here. It shows a lot of surface detail in small scopes NOW. It will only get better. Don't waste a clear night, take a look!
 There may be more clouds and there may be another major dust storm.
 Take a look now !!!

Bill's chart of Mars info:

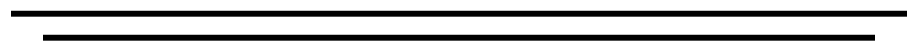
Mars Observing Schedule

Timonium, MD

N 39.43864

W 76.63374

Date	Rise	Transit	Set	Altitude (deg)	Size (arcsec)
14-Jun-2003	11:33 PM	4:46 AM	9:59 AM	36.6	14.2
21-Jun-2003	11:12 PM	4:28 AM	9:44 AM	36.3	15.3
28-Jun-2003	10:55 PM	4:13 AM	9:31 AM	36.8	16.2
5-Jul-2003	10:35 PM	3:54 AM	9:14 AM	37.2	17.4
12-Jul-2003	10:14 PM	3:34 AM	8:54 AM	37.5	18.7
19-Jul-2003	9:52 PM	3:12 AM	8:32 AM	37.5	20.0
26-Jul-2003	9:28 PM	2:47 AM	8:07 AM	37.3	21.3
2-Aug-2003	9:02 PM	2:20 AM	7:38 AM	36.4	22.6
9-Aug-2003	8:34 PM	1:50 AM	7:07 AM	36.4	23.7
16-Aug-2003	8:04 PM	1:18 AM	6:32 AM	35.8	24.6
23-Aug-2003	7:33 PM	12:45 AM	5:56 AM	35.1	25.0
27-Aug-2003	7:15 PM	12:25 AM	5:35 AM	34.8	25.1
30-Aug-2003	7:00 PM	12:10 AM	5:19 AM	34.5	25.1
6-Sep-2003	6:27 PM	11:35 PM	4:43 AM	34.1	24.6
13-Sep-2003	5:49 PM	10:57 PM	4:04 AM	34.1	23.8
20-Sep-2003	5:17 PM	10:25 PM	3:33 AM	34.3	22.7
27-Sep-2003	4:46 PM	9:56 PM	3:06 AM	34.7	21.4
4-Oct-2003	4:17 PM	9:29 PM	2:41 AM	35.4	20.0
11-Oct-2003	3:49 PM	9:05 PM	2:20 AM	36.3	18.6
18-Oct-2003	3:25 PM	8:43 PM	2:02 AM	37.4	17.3
25-Oct-2003	2:59 PM	8:22 PM	1:46 AM	38.6	16.0





Monster Trucks on Mars

by Patrick L. Barry and Dr. Tony Phillips

We all know what Mars rovers look like now: Robotic platforms, bristling with scientific instruments, trundling along on small metallic wheels. Planetary rovers of the future, however, might look a little different-like miniature monster trucks!

Enormous, inflatable tires can easily roll right over the rocks and rugged terrain of alien planets, just as they bound over old cars like as many speed bumps.

That's the idea behind a novel concept for robotic planetary rovers known as the "big wheels inflatable rover." Unlike rovers similar to the Sojourner robot that explored the surface of Mars in 1997 that depend on instructions sent from Earth or complex programmed intelligence to steer through rough terrain, this rover has three beach ball-like tires roughly five feet across that make it a true off-road vehicle.

"We sent this rover out to Death Valley, to a place called Mars Hill that has a general geological formation like Mars, and nothing could stop it," says Jack Jones, the mastermind of the inflatable rover concept at JPL. "It just kept going and going and going."

Lots of current research is devoted to developing advanced robotic intelligence that allows rovers to detect rocks in their path and maneuver around them. The alternative to such on-the-spot intelligence is tedium: Ground controllers on Earth working out the maneuvers by hand and waiting an hour or more for the instructions to travel to the distant planet.

A "big wheels" rover would need such computer intelligence to avoid very large boulders, but Jones asks, "Why worry about every little rock, pebble, and crack when you can just roll right over most of them?"

Jones imagines a scenario where multiple inflatable-wheel rovers could be sent out to explore the Martian terrain-easily and quickly traversing the rugged terrain. Samples gathered by the rovers could be returned to a central, stationary laboratory module for detailed analysis.

"The Martian surface is really very, very rough with a lot of rocks, and to be banging this laboratory equipment up and down over all of these rocks aboard the rovers doesn't make much sense," Jones says. "I suspect it might be better to leave it in a central location."

At the moment it's all very speculative; NASA currently has no definite plans to send inflatable rovers to Mars. But who knows, one day monster truck-like vehicles could be zipping over Mars' rough, red surface.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

JULY EVENTS

5TH : Public Open House, Observatory Field, dusk

12th: General Meeting, Joppa Hall, Rm70, 7:30PM

21 and 28: Start Party at Broad Creek, Members Only

AstroViews is the official publication of the Harford County Astronomical Society, P.O. Box 906, Bel Air MD 21014. For the year 2002 any items for publication in any issue are due to the editor **by the 15th of the preceding month**. Please send all contributions (electronic format is STRONGLY encouraged) to Steve Channel at EMAIL: srccac2@comcast.net, regular mail at: 602 Roxburch Terrace, Bel Air, MD 21015. Permission is not necessary for non-profit use of this material, although proper acknowledgment is required. Address changes should be brought to the attention of the editor at the address given above.

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