



Minutes of General Meeting, 17 May 2003

President Lucy called the meeting to order at 8:00 P.M. in Joppa Hall, Room J70.

Treasurer's report: \$1653.55

Old Business:

Astronomy Day: See Article. Discussion ensued about how we may better approach next year's Astronomy Day event. We'll defer discussion until closer to next May, however there was general consensus that we may shorten the time period for next year.

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

Doug Wittich, announced his intention to demonstrate astronomy for a Brownie Troop next week. In addition, he has a Boy Scout outing that he could use some support for on 7 June. Please contact Doug at: 410-256-0257.

New Business:

Dues: Following discussion, the members present voted to alter the dues structure. Effective the 1st of July, this year, the annual dues will be:

\$36.00 Family

\$24.00 Individual

\$12.00 Students [Defined: Full time college and lower]

The annual rate will be adjusted quarterly to pro-rate. Renewal is due June of every year.

Bottom Line: Everyone has until the end of June to get your dues in. After that the new rate is effective.

Certification and Training for use of Observatory: Mark Kregle, Bill Geersten and Steve Channel will put together a training checklist to certify members to use the observatory and equipment. The training will ensure safe observatory operations and best care for the

equipment. The “Rule of Two” is mandatory: i.e. members wishing to use the observatory must do so in the company of at least one other member. This rule ensures safety and responsible use of the facility. We will publish a list of members that have “interior keys” for the observatory, or feel free to contact Steve/Carol Channel (srccac2@comcast.net). We will post the number for Harford Community College Security on the observatory phones (which are now working, by the way!!).

Public Open House: Effective for the 7 June open house, we will use the “new” area. Public may park in the high school lot and access the viewing field via a walkway through the woods and across the observatory road. Members assisting with scopes and etc. will be able to pull into the viewing field to unload and park their vehicles. How many members show up for the open house events will determine whether we will open up the Observatory for viewing. We must have enough “bodies” to escort people up the road to the observatory as well as some people to direct traffic and actually demonstrate within the observatory itself. The best of all worlds would be to have plenty of members available to have scopes in the field and the observatory going all at once. So, please plan to support the once a month open houses if at all possible.

Election of Officers:

The slate of officers was voted. Our leaders for the next year:

President: Wayne French

Vice-President: Tom Rusek

Treasurer: Carol Channel

Secretary: Steve Channel

Executive Board:

Drew Wilkerson

Lucy Albert

Phil Schmitz

Grace Wyatt

Please lend them your enthusiastic support to help the society to prosper!

Following the election, President Wayne led a unanimous vote of thanks for outgoing Pres. Lucy Albert. Lucy’s dedication and enthusiasm over the last 7 years has carried the load for the HCAS. She really has embodied the spirit of the organization. We won’t say we’ll miss her, because Lucy will always be a prime mover in the Harford County Astronomical Society and we expect to see her continued support at events for many years to come! Thank you, Lucy!!

President Wayne then outlined his agenda for the coming year. He plans on to submit a tax-cut package to the House next week, followed by increased federal support of...uh; ooopps...got my Presidents mixed up.

Actually, President Wayne is pushing hard to get the Training/Certification program underway and will keep nudging us along the path toward maximum use of our new observatory and public site capabilities. If you’re on the Yahoo Group HCAS site, you’ll see his “Wayne and Jane” grams...keep ‘em coming Wayne and keep us on track!



Astronomy Day, 10 May 2003

The day was overcast and threatening rain when the intrepid “first group” of members arrived to set up for Astronomy Day. We got areas roped off and displays set up ready for the first public folks to arrive. And arrive they did, despite the generally dismal skies!



At about 3:00 we had the “unveiling” of the newest Hubble image, courtesy of the Space Telescope Science Institute.



An absolutely stunning revelation of the Helix Nebula! It is hard to come up with the superlatives that describe this and the other Hubble images. It was wonderful opportunity for our club and we are grateful to Lucy for working behind the scenes to have us included!

Several times during the afternoon clouds parted and we actually had a solar projection image sunspot! While Carol Rusek kept folks



and Grace “manned” the gate, Tom tracking through the displays.

At 9:00 PM, Thomson was able to The moon was fair the sucker holes was

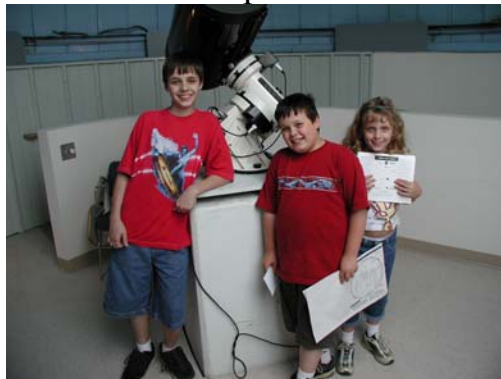
the clouds again parted and George shoot some views for the visitors. game as was Jupiter, but tracking the rule!

Another delight demonstration of meteorites. His table was always busy and he kept throwing out the “tektite, regolith, etc” terms that bring joy to the hearts of space-rock hounds!!!



was Phil Schmitz’s display and

We had close to 80 visitors all told and picked up three new memberships!



Star Parties:

MASON DIXON: May 30 – June 1st., Codorus St. Park, PA, <http://masondixonstarparty.org/>



In Search of Alien Oceans

by Patrick L. Barry and Dr. Tony Phillips

A robotic submarine plunges into the dark ocean of a distant world, beaming back humanity's first views from an alien ocean. The craft's floodlights pierce the silty water, searching for the first, historic sign of extraterrestrial life.

Such a scenario may not be as fantastic as it sounds. Many scientists believe that Jupiter's moon Europa conceals a vast ocean under its icy crust. If so, heat from the moon's interior—which would keep the ocean from freezing solid—may also drive subaquatic volcanoes and hydrothermal vents. On Earth, such deep-sea vents provide chemical energy for ecosystems that thrive without sunlight, and some scientists even suggest that Earthly life first got started around these vents.

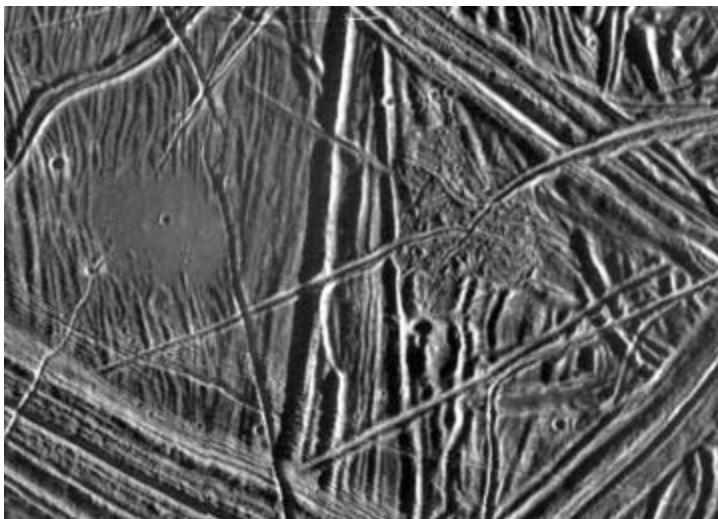
So a warm European ocean spotted with thermal vents could be a natural incubator for life. That's why some scientists hope that someday we will send a probe to Europa that could bore through the ice and explore the ocean below like a submarine.

To plan for such a mission, scientists would first need to put a camera in orbit around Europa. By looking for places where water has welled up to fill the spindly cracks that riddle Europa's surface, scientists can estimate where the ice is thinnest-and thus easiest to bore through.

That mission scenario presents a problem, though. Europa orbits Jupiter inside the giant planet's punishing radiation belts. Continuous exposure to such high radiation would damage today's scientific cameras, making the information they gather less reliable and perhaps ruining them completely.

That's why NASA is designing a more radiation-tolerant CCD that could be used on a mapping mission to Europa. A CCD (short for "charge-coupled device") is a digital camera's chip-like core, which converts light into electric signals.

"We've seen the effects of this radiation during the Galileo mission to Jupiter," says JPL's Andy Collins, principal investigator for the Planetary



Imager Project. "Galileo has orbited Jupiter for many years, dipping inside the radiation belts only for brief intervals. Even so," he says, "we've seen clear signs of damage to its instruments."

Cracks on the icy surface of Jupiter's moon Europa give

evidence of a liquid ocean below.

By using the hardier CCD's developed by the Planetary Imager Project, a future probe could remain in Jupiter's radiation belts for many months, gathering the maps scientists will need to finally get a peek behind Europa's icy veil. And who knows, maybe there will be something peeking back!

To learn more about the Galileo mission to the Jupiter system, visit <http://www.jpl.nasa.gov/galileo/> . For children, a fun, interactive "Pixel This!" game at http://spaceplace.nasa.gov/p_imager/pixel_this.htm introduces CCDs and how a really tough one will be needed for a future mission to Europa.

JUNE EVENTS

7TH : Public Open House, Observatory Field, dusk

14th: General Meeting, Joppa Hall, Rm70, 7:30PM

21 and 28: Start Party at Broad Creek

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