

SIDEREAL TIMES

The Official Publication of the
Amateur Astronomers Association of Princeton

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Treasurer:
Ron Mittlestaedt

Program Chairman:
Mark Lopez

Assistant Director:
John Miller

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“Virtual” Observations of the May 7th, 2003 Transit of Mercury

Like any devout amateur astronomer, I sacrificed my Huygenian eyepieces upon Ara yesterday, beseeching good weather for this morning’s transit of Mercury across the solar disk. That ritual done, I faithfully set my alarm clock for 4:00 AM and went to bed. My offering, however, did not impress the gods, as they knew that I withheld my Naglers from them and responded in kind.

The alarm rang at 4:00. I got up peeked outside and was greeted by a pristine sky with blazing stars. Could not believe my good



fortune, but little did I know what was in store. I went back inside, showered, shaved, packed my scope and solar filter into my car, opened the garage door...., and was greeted by the Campbell’s

version of the Condensed Pea Soup Nebula. Undaunted, and hopeful that our club’s observatory at Washington Crossing State Park, Titusville, NJ enjoyed better conditions, I set off. A few minutes later I arrived at the park and met my fellow AAAP club members Brian Van Liew and Bill Murray already there and set up awaiting the sunrise. After exchanging greetings I set my scope up on my car hood and joined the wait for sunrise. You know the fog wasn’t quite as thick here and our hopes that there was a possibility of observing the transit were raised. Meanwhile fellow club member John Church arrived with the projection set up for our clubs 6” Hastings-Byrne refractor with the hopes of recording observations of Mercury transits with this telescope in three different centuries (19th, 20th and we hoped the 21st).

As the skies brightened the trees along the edge of the field became less and less distinguishable as the fog thickened and thickened.

Simpson Observatory (609) 737-2575

Soon the time of sunrise (5:52 AM) came and went and the trees were no longer able to be distinguished. Brian slewed his scope to the position the sun was and of course we saw...

...a misty, gray curtain with even diffuse illumination. No evidence of a solar disk could be seen. Not to be disappointed, Brian calls up the circumstances of the transit on his pocket PC, running The Sky planetarium software and lo and behold, we were greeted by a “virtual” image of the sun’s disk with a tiny black disk (conveniently annotated with “Mercury”) near its edge. We even recorded this image to “virtually” prove that we “virtually” saw it. Soon 6:

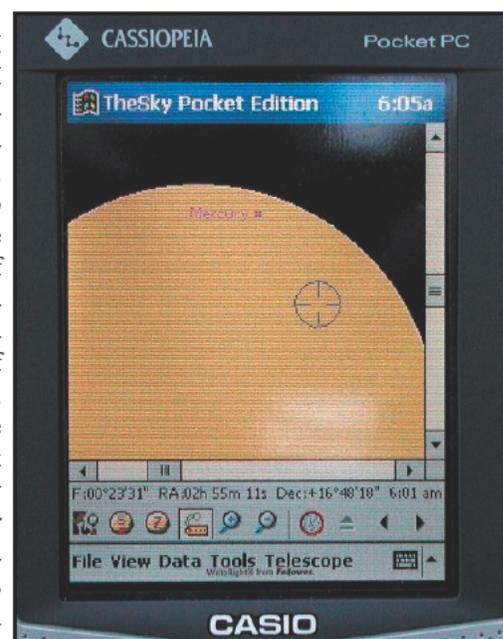
28 and 6:32 AM arrived and I called out, “Third Contact” and “Fourth Contact”, respectively to signify the time when the disk of Mercury arrived at and emerged from the edge of the solar disk, respectively. The fog was as thick as ever. Slowly we packed up our equipment, said our good byes and departed each in his own way

peaceful in the knowledge that the Hastings-Byrne would have to wait until at least Nov 8th, 2006 to record a Mercury transit in the 21st Century.

On my way to work, as I crested the Second Watchung Mountain the skies parted and it is a beautiful sunny day outside...., now. The gods had the last laugh.

Of course there is June 8th, 2004 transit of Venus (the first since 1882) to look forward to. Anyone have a long range forecast?

Mark Jaworsky



From the Editor

As you see in the Masthead, a new club officer has been installed (Secretary, Mark Jaworsky) and we have started a new year of AAAP. Of course Mark has been around for many years and will do a great job on our Board of Directors where he has served before as both Assistant Director and Program Director. We also extend our thanks to Lisa Yeh for serving as our Secretary for the past year.

Everyone should be reminded that our June meeting will be at the NJ State Museum Planetarium for our annual special show hosted by Bill Murray. It will be a presentation narrated by Leonard Nemoy and titled, "Mysterious Mars." These shows have always been a great way to cap off our program year.

I have been in touch with the Nature Center at Washington Crossing State Park and we have set up the dates for our Fall course offering, "Introduction to Amateur Astronomy." It is scheduled for every Friday evening starting September 5, and concluding on October 3. The first session will start at 6:30 PM to take advantage of daylight, each subsequent session will start at 7:30 PM. After the first session, and if the weather is clear, the group will come over to the Simpson Observatory at about 8:30 PM to be introduced to the sky. Our course has always been well received and resulted in attracting new members to our club.

The course is open to interested persons from 8th grade through adult and may not be just for beginners. It is an excellent opportunity for school teachers and even experienced amateur astronomers that have considered teaching a course like this themselves. Contact the Nature Center to sign up (609) 737-0609, there is a \$5 fee to cover the cost of handouts. Enrollment is limited to 25 persons.

Vic Belanger

From the Assistant Director

Hello Astro Ducks. Moss growing on finder scopes. Mold forming on parabolic mirrors. Calling the front of my scope the "bow..." I reviewed the long-range weather forecast on our web site a few days ago. It dutifully listed clouds and precipitation (heavy at times), for a solid, unrelenting six days. SIX! I stared at the screen and started to murmur like the character Renfield in the old Dracula movie.

Well, at least there's arm chair astronomy. Like many of you, I've recently purchased more good astronomy-related titles than I can possibly finish for months to come. Did any of you make the Mike Lemonick book signing (Echo Of The Big Bang) at the Princeton Barnes & Noble last Wednesday? Oh, there was a full lunar eclipse also scheduled - but it was cancelled. Due to you-know-what.

Here's a tip: James Gleick's new book titled, "Isaac Newton" has recently hit the bookstores. It is a small tome, magnificently written; insightful, probing, descriptive and well cited. Gleick is known for other well-written biographies including "Genius: The Life and Science of Richard Feynman" (a sensational read!!).

Your web site "Announcements" section has just been updated. Hop over and keep up with all your local and regional astro events! And bring a paddle.

John Miller

Minutes of the Regular Meeting of the AAAP May 13, 2003

Director Kirk Alexander called the meeting to order at 8:03 PM. About 70 members and general public attended the lecture, 25 of whom stayed for the business meeting.

Prior to introducing the evening's keynote speaker, Program Chair Mark Lopez announced that science author and columnist Michael Lemonick will be making a speaking engagement promoting his new book "Echo of the Big Bang" at the Barnes and Noble Booksellers in the Princeton Marketfair on Thursday evening May 15th, 2003 at 7:00 PM.

Program Chair Mark Lopez then introduced evening's keynote lecture presented by Dr. David N. Spergel of Princeton University. Dr. Spergel gave a talk entitled "WMAP and the Emerging Standard Cosmological Model", in which he presented the first year's science results and conclusions from NASA's ongoing science mission the Wilkinson Microwave Anisotropy Probe. The talk was well received.

The business meeting reconvened at 9:17 PM.

The first order of business was the election of the Board of Trustees. The slate of nominees was published in the May issue of the *Sidereal Times*, but in the absence of Secretary Lisa Yeh, it was read aloud by the membership. The slate of nominees was

Director:	Kirk Alexander
Assistant Director:	John Miller
Treasurer:	Ron Mittlestaedt
Secretary:	Mark Jaworsky
Program Chairman:	Mark Lopez

Vic Belanger moved that the slate be approved. The motion was seconded and the slate was unanimously approved.

Director Kirk Alexander then introduced Archivist/Librarian Pete Oppenheim to propose new acquisitions for the club library. Pete proposed that the club authorize him to purchase two items, a new book by Jerry Lodriguss on post-image processing techniques and a planetarium software program called *Desktop Universe*. The proposed expenditures were about \$50 for the book and \$299 for the software package. A discussion ensued on the library traffic, and merits of both acquisition proposals. At the end of the discussion, the proposal to purchase the book was approved but the proposal for the software package was deferred.

Treasurer Ron Mittlestaedt reported that the treasury had a balance of \$XXXX.94. Ron also reported that he has received \$XXX.46 in prepaid StarQuest registration fees. In the absence of Membership Chairman Saul Moroz, Ron reported that the membership rolls of the AAAP stood at 126 members.

In other treasury business reported by Ron, the new Paramount ME robotic mount for Washington Crossing was ready and would be picked up at NEAF on Sunday May 18th by WC Observatory Chair Rex Parker. Ron reported that he would issue Software Bisque a Check for \$XXXX for the mount on Saturday May 17th. Ron also reported that the existing GT-1100 Paramount has been sold to the Somerset County 4-H Club for \$XXXX. He will send

(Minutes, continued on page 3)

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a letter to Software Bisque crediting the difference between the ME purchase and the GT-1100 sale as a charitable donation to the AAAP. Ron also reported that the adaptor plate for the new mount arrived the previous week.

Assistant Director John Miller reported that the North East Astronomy Forum (NEAF) would take place on the campus of Rockland Community College in Suffern NY on Saturday and Sunday May 17-18, 2003. John also reported that he received a request from Joseph Patterson, a visiting Professor at Princeton from Columbia University for assistance to have an observing session for graduate and undergraduate astronomy students during the total lunar eclipse of May 15-16, 2003.

Program Chairman Mark Lopez reported that two speakers are confirmed for StarQuest. AAAP member and Princeton University Faculty Member Bob Vanderbei will be speaking on NASA's Terrestrial Planet Finder satellite. Craig Small from the Hayden Planetarium and City University of New York will be speaking on chasing solar eclipses.

Mark reported that the final meeting for the AAAP membership would be the traditional special session to be held at the New Jersey State Planetarium, hosted by Bill Murray. There is a choice of two programs "Search for Life in the Universe" narrated by Leonard Nimoy and "Mysterious Mars". The consensus of the membership was to have the latter.

Mark also reported that he volunteered to help with a request that Kirk received to hold a retirement party for a science teacher from a small school in PA at the observatory. Ron Mittlestaedt also volunteered the services of Keyholder Team 5.

Mark also reported that he has received a request from a Boy Scout troop that is planning to hold a campout at WC members on June 20th and 21st to bring telescopes to show them the night sky. This is a return request as members did host an event for this troop last summer. Action was deferred until the June meeting as Mark reported that more details should be available then.

Member Brian Van Liew reported that he had received a request from the Girl Scouts to hold an observing session at their Camporee at Camp Agnes DeWitt in Montgomery on the evening of May 31st.

Assistant Washington Crossing Observatory Chair Gene Ramsey, reporting in the absence of Chair Rex Parker, said that he received reports of three sheep that were killed by bear attacks in the vicinity of Washington Crossing State Park. Gene suggested that keyholder members operating the observatory on non-public nights play the radio to announce their presence to any wandering bears. Gene also obtained a 24-hour hotline number (1-877-927-6337) to obtain information on recent bear sightings and one (1-908-735-8793) to report specific bear problems. Gene will have these posted at the observatory.

Gene reported that he contacted the Park Ranger at Washington Crossing to arrange to have the grounds next to the observatory mowed on a regular basis. The Park Ranger promised to talk to the maintenance scheduler to arrange this.

Gene reported that the water at WC has not yet been turned on and

that he was unsure of the procedure. The procedure is to contact Wayne at the Interpretive Center to do this and to be present at WC in case of leaks from potentially frozen pipes. Gene said that he would do so and try to have the water on for the next Friday public session.

Gene also reported that he is bringing a group to the observatory on Friday May 16th, 2003 (rain date May 23rd). The group will be comprised of a science teacher and approximately 30 to 40 students. Members with scopes were requested to help out.

Sidereal Times Editor Vic Belanger reported that the submission deadline for the June issue would be May 30th, 2003. A firm date for the mid-summer issue has not yet been set but is likely to be around July 11th or July 18th.

Vic also reported that he would be bringing a group of campers from Mt. Misery to Washington Crossing on August 1st. Member scopes were requested if needed.

Webmaster John Miller reported that the club message board suffered a fatal crash but was now repaired. Unfortunately the previous messages could not be preserved. John reported that between April 16th and May 12th 2003 the AAAP main web page received over 2700 hits. 96% of these were external to AAAP members.

StarQuest Chairman Don Monticello reported that 24 people have already signed up for StarQuest. Don reported that he would be sending an additional mailing to regional clubs and past participants. Don also requested help on securing door prizes. It was agreed to spend \$200 on additional prizes. Ron Mittlestaedt will shop at NEAF and Brian Van Liew volunteered to request donations from various vendors. Larry Smith requested a remaining t-shirt count. Mark Jaworsky reported that he had a box of shirts from last year's event in his garage and will have a count to report at the upcoming board meeting.

Member Bill Murray reported that a total lunar eclipse would occur on Thursday evening May 15th to May 16th. Bill reported that Friday the 16th would be a planetarium night at the observatory.

Bill also reported that Jack Power donated a pier and wedge to the club. Additionally Bill proposed to store the Schmidt Camera at Jenny Jump. The consensus was to store it in the AAAP observatory space permitting. A less favored proposal was to store it in the main bunkhouse, if a secure storage area could be found.

Kirk announced that the next Board meeting will take place on Thursday May 22nd, 2003 in his Frist Student Center office at 7:30 PM. Kirk said he will send out a reminder notice with directions prior to the meeting.

The meeting was adjourned at 10:02 PM.

Respectfully submitted,
Markian S. Jaworsky
Secretary

Deadline for the
Mid-Summer Issue of *Sidereal Times*
July 4, 2003

From the Treasurer:

The treasury balance is \$XXXX.98 which includes \$XXX.00 from StarQuest patrons. There are 126 paid members.

Michele, our publisher, will continue putting the dues renewal date on the upper right corner of each Sidereal Times address label. This is the date that your renewal membership is due with the AAAP. Those with club magazine subscriptions to Astronomy, Sky and Telescope, or both, will want their subscriptions renewed about three months prior to the date of your club renewal. Please act accordingly, for if you wait until your club dues are due to pay for your magazine subscription you may miss one or two issues.

I am not going to send out renewal notices to members who get magazines, they get enough notices from their respective publishers. If I don't receive your renewal on the date indicated on your address label you will be dropped from the roster. If you are a keyholder, the respective observatory chairman will be notified and you will be asked to return the key.

The dues structure is as follows:

- \$30 basic membership.
- \$60 for membership and subscription to Astronomy or Sky and Telescope magazine.
- \$90 if both magazines are desired with membership.

If you have a Sky and Tel subscription please send the subscription notice and the postage paid envelope when renewing your membership.

You may send your dues directly to me at: Ron Mittelstaedt, Treasurer, 149 Palmer Lane, Ewing, NJ 08618-3207

Note: In the past I had mentioned "The Sky for Pocket PC", by Software Bisque. After the Delmarva Star Party at the end of April I had the first chance to use it since installing higher resolution encoders, however during the Delmarva star party, the skies did not cooperate and observing was not all that great, but I was able to see that the scope and software combination was right on. Every object on the screen that I would move to was dead center in the eyepiece field of view.

I will be having a demonstration of this product at StarQuest on either Friday or Saturday night. You will see that having this set-up has more capability than just having digital setting circles and it is somewhat cheaper.

Also the Northeast Astronomy Forum was good to me. I won a Televue 102 and a Bob Gendler mosaic.

Ron Mittelstaedt

June 2003

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