

SIDEREAL TIMES

The Official Publication of the
Amateur Astronomers Association of Princeton

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Volume 33

Midsummer 2004

Number 7

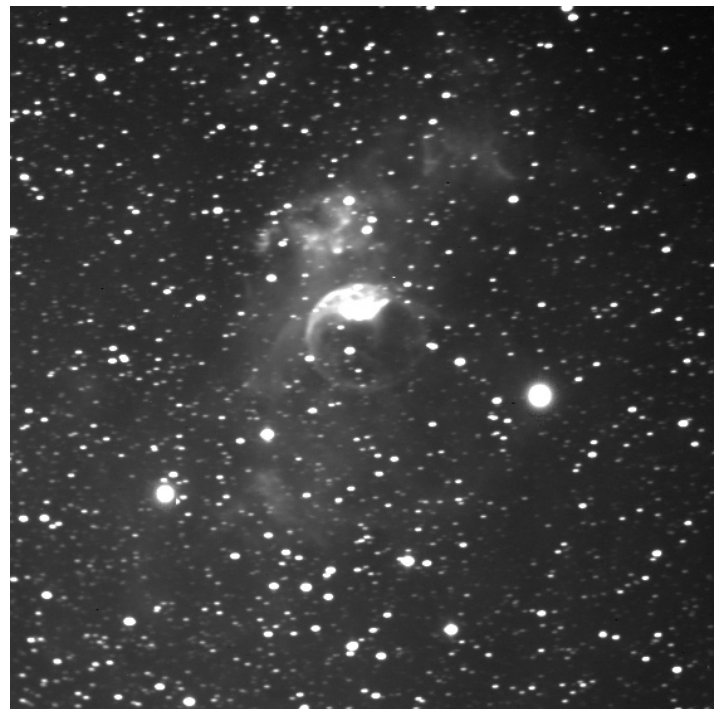
From the Director

Mid-Summer Greetings. Here's hoping that this mid-summer edition of the Sidereal Times finds you well and enjoying all the splendor that summer's bounty brings. And hopefully you will have some time to spend under these summer skies with your favorite astronomical instrument solidly positioned under your eye.

Summer Vacations and Observing. Destinations may vary, but most of us have one big thing in common when July and August roll around-- to enjoy our summer days and especially our vacations with family and friends. Seeking a splendid escape to the beach or the cool breezes and green hills of the foothills and mountains of the northeast can offer a chance to take a longer look at the summer sky. I remember my sailing days with my 27 ft Catalina on the Chesapeake when securely anchored at nightfall we'd lay back and gaze at the Milky Way and the summer constellations. And what about it...are you taking advantage of those dark sky destinations you are heading to for summer vacation? I will certainly be bringing my traveling scope, a Tak FC-76, on our trip to St John, VI in August.

StarQuest Memories. StarQuest was a blast this year! Thanks (on behalf of all who attended) go to those who made this event really click-- especially **Don** and **Anthony Monticello** and **Larry Smith** (SQ Co-chairs) for the excellent planning and execution. Thanks also to **Barlow Bob Godfrey**, **Bill Murray**, **Ron Mittelstaedt**, and **Brian van Liew** for their help. Finally a special thanks goes to **John Miller** for a huge contribution by bringing in our outstanding speaker, **Dr. Ben Oppenheimer**, for an outstanding keynote address, "*Imaging Extrasolar Planets*". Many of you may have seen the article in the NY Times-Science Times on June 22 (right after SQ) where Dr. Oppenheimer's scientific quest was written up in detail.

The observing at StarQuest, especially on Saturday night, was worthy of pulling an all-nighter, and several of us had our eyepieces and CCD cameras working all night long (including **Brian Van Liew** and **Bob Vanderbei with their CCDs**). Below is an image of the unusual planetary nebula known as the **Bubble Nebula**, **NGC-7635**, taken at Starquest using my C-11 at f/6.3 with a deep-sky



NGC-7635 "Bubble Nebula" taken with C-11 f/6.3
ST-10XME by RA Parker 6-19-04

filter, on a Losmandy G11 mount and using the SBIG ST-10XME CCD camera. It's an example of the improvement in seeing and contrast, whether visually or with film or CCD camera, one can attain by observing in the darker sky environment where StarQuest is held. This nebula is so faint that it was invisible through the eyepiece that night even in north Jersey (although maybe **Mark Jaworsky** could see it in his giant 18 inch Dob!).

Plans for AAAP Picnic & Observing Party in Sept at WC Park.

Gene Ramsey and others have proposed holding our annual club picnic in mid- to late-Sept this year at WC Park. We would like to begin planning this event, so please get in touch with fellow club members to brainstorm on making this a fun event. I think that a barbecue followed by a night observing sounds like just the ticket to wrap up this long summer.

Simpson Observatory (609) 737-2575

Dark Skies! -- Rex

Observations

Another year at the Summer Star Party. It's Tuesday of the first week, July 13th and drizzling. The event started Friday July 9th. Friday night was clear, but not very transparent. I could never focus the stars to pinpoints. Saturday the sky was overcast until midnight at which point I was able to do some decent observing and sketching. Sunday was the same with clear skies most of the night. Monday it was partly cloudy until nightfall when it turned mostly cloudy.

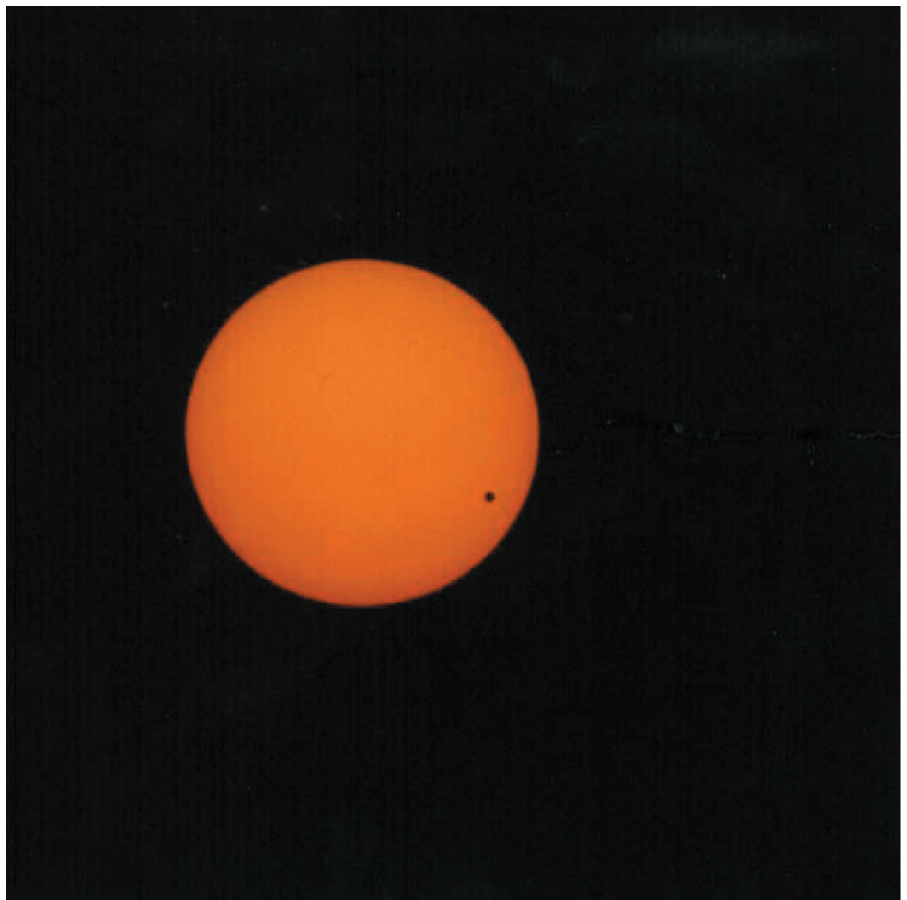
At StarQuest 2004 I was able to go through Bill Murray's "Deep Sky Challenge" in a short time. Thanks for "The Sky" software for Macintosh computers. For a couple of years I used a pocket PC with "The Sky" software, but found that this program is only an abbreviated version of the one I am using now.

The harness that allows my computer to talk to my telescope was not too difficult or expensive to install. Most of my questions were answered by the Software Bisque web site link to the Yahoo Chat Room for "The Sky" for Macintosh Computers. I was surprised that everything operated correctly on the first start up. Unlike the pocket PC, I am able to download the current visible comets from the Software Bisque web site. The latest comets c/2003 K3 (LINEAR) and c/2001 Q4 (NEAT), which are a snap to locate with my scope using this program. I didn't even have to open a star chart during this trip. The only books I used was Stephen James O'Meara's, "The Messier Objects" and John H. Mallas and Evered Kreimer's "The Messier Album" to help with the description and identification of certain objects.

I have found over the years that it is more enjoyable to sketch planetary nebulas, galaxies and emission nebula than globular and open clusters. I find that globular and open cluster are just a group of dots arranged in the correct order some darker (brighter) than others. With planetary, emission nebula and galaxies I can be a bit more creative with the pencil. I can blend the wisps of nebulosity at the consistency I observe.

The Summer Star Party was well attended this year, situated at the Shady Pines Campgrounds in Savoy, Massachusetts. With the twenty-five dollar registration fee an attendee receives three dinners and three breakfasts, well worth the money spent. The campground is under new management, taken over by the son of the original owner of the property. There has been several improvements, mainly the food. This year a meal plan was offered for the other days that the registration fee didn't cover. Though I didn't take advantage of the plan I heard the food was rather good.

Thursday was the day where we would decide that if the weather wasn't good we would depart on Friday. On that day the forecast was to be several hours of clear skies on Thursday night and mostly cloudy on Friday night. On Thursday skies were partly cloudy with some rain and the night started the same way. Around 9pm the clouds moved out and the clearest and most transparent



Transit Photo taken from the Twin Lights at The Atlantic Highlands on the coast of NJ. Ralph and I were invited by the STAR astronomy club to participate in viewing the transit with them.

skies opened up. It was already dark when I finally set back up after a four-day lay off. I first object was NGC 6207, a galaxy next to M13, the great globular cluster in Hercules. When I can view structure in this galaxy I know the seeing will be good. NGC 62207 is about 11.8 magnitude and the spiral arms were very apparent.

I was able to sketch the Messier objects in Ursa Major on this night before the high thin clouds moved in about three hours later and we were done for the night.

After saying our good byes we headed back to New Jersey. Next is the Black Forest Star Party at Cherry Springs in September. Registration was filled three weeks after it opened at 450 attendees.

Ron Mittelstaedt

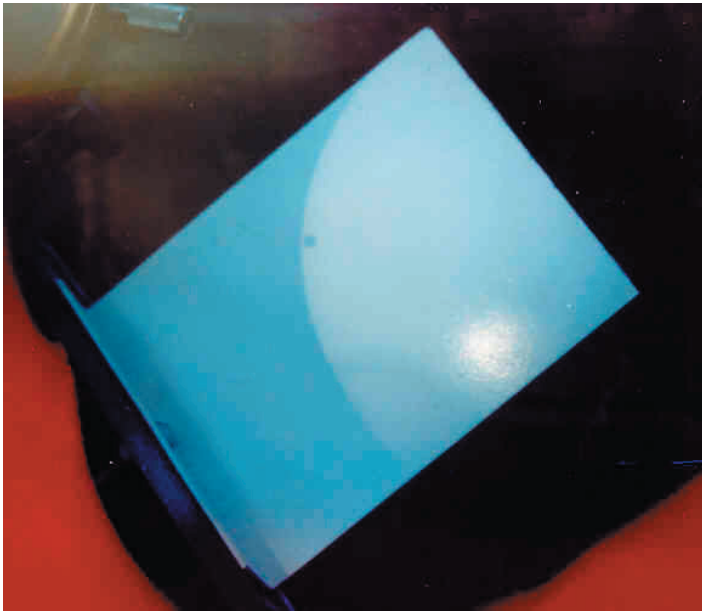
Deadline for Submissions
to the September Edition
of the
Sidereal Times
August 27, 2004

Transit in the Park

Absent the Bulletin Board, I'm sharing some results from that magnificent spectacle we saw this morning.

Several of us saw the last stages of the transit from the observatory, with the 6-1/4 inch refractor. The sun fortunately cleared a very poorly placed tree in time for us to have a good view. I used eyepiece projection onto a screen, the same setup that I was going to use for that ill-fated Mercury transit a year ago. Congressman Rush Holt was with us. Also in the party were Don Monticello, Darryl Foyuth, and his son.

After correcting for the 26-second error of my watch, which I determined from CHU time signals after I got home, third contact was seen by group consensus at 7:06:04 EDT. The expected time for



WC, as determined by interpolation from Sky & Telescope (June issue, p. 74) from predictions for Washington and New York, was 7:05:56, i.e., we were about 8 seconds late. With eyepiece projection, contrast is not all that good (especially with ambient light interference), but it does allow a group to watch instead of just one person. The "black drop" effect was not very obvious, but we did see some indications of it.

For fourth contact, we recorded 7:25:44 EDT as compared with 7:25:54 from the S&T predictions, so we were 10 seconds early on that one.

In between third and fourth contacts we thought we saw some illumination of the atmosphere of Venus as depicted on p. 79 of the June S&T.

I'm having some photos developed this afternoon. Unfortunately, due to some earlier bumbling by yours truly, some of them will be light-struck. We'll see what we get.

If anyone else timed these events, I'd like to hear your results.

John Church

From the Treasurer

The treasury balance is \$XXXX, there are 124 paid members. StarQuest raised the treasury another \$XXXX.

Note: Please do not contact Sky and Telescope for subscriptions for a club discount. This arrangement will start in August 2004. If you want a subscription now please contact me. I have been contacted by Sky and Tel on several occasions about members calling for club discounted subscriptions now. Sky and Tel cannot verify your membership without a current membership roster, which we will be providing to them in August. Sky and Tel has extended the courtesy of letting us renew our subscriptions at club rates without going through the club. Let us not abuse this. Also found out from a call that Anthony Sosso made to Astronomy that they will now honor a club discount rate when called. Just state that you are a member of the AAAP.

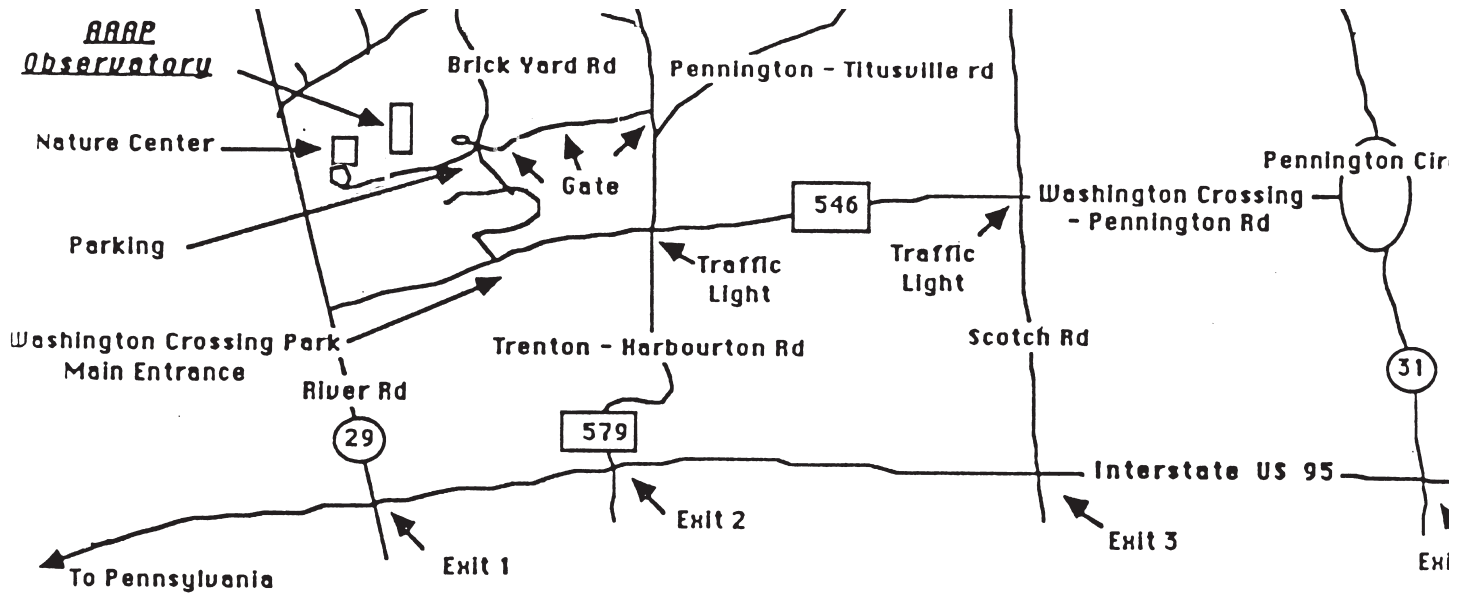
I am not going to send out renewal notices to members who get magazines; they get enough notices from their respective publishers. If I don't receive your renewal on the date indicated on

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.

Note! Starting in June, dues will be \$10 until September and then the dues will be once a year on October 1st at \$40. The dues structure for now is as follows: \$10 basic membership, \$40 for membership and a subscription to Astronomy magazine, \$43 for membership and a subscription to Sky and Telescope magazine, \$73 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. This service will be provided until September.

Ron Mittelstaedt



The best way to get to the observatory is to take Interstate 95 South towards Pennsylvania. Then take Scotch road at Exit 3 and proceed north (this amounts to right). Then, at the third traffic light take a left onto the Washington Crossing-Pennington road (County Route 546). Take this road to the first traffic light and take a right onto Trenton-Harbourton road (County Route 579). Take this road to the first driveway on the left, this is the Phillips Farm/Soccer Field entrance to the park. There is a series of three gates with club combination locks. If the gates are not open, you will need the lock combination to open the gate or be accompanied by a Keyholder member.

See us on the Web: www.princetonastronomy.org

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