SMURFS 95'

Thomas Bader

Dark skies is what I had come for, and SMURFS 95' did not disappoint. The Milky Way was visible from horizon to horizon, with easily detectable dark lanes and rifts. In a word GLORIOUS. One fellow astronomer put it well in describing his first night up there. "I was glad the first night wasn't completely clear, it gave me time just to marvel at our own galaxy." The second and third nights were excellent, very clear skies on both nights with a slightly higher level of transparency the third night. The kind of nights when you hate to see the dawn but it's just as well cause your pretty exhausted and getting a bit slap happy. I decided in advance that I would slow down and really take in the objects I found instead of trying to see as many as possible. I found this method much more enjoyable and rewarding. What follows are some notes from a journal I have just begun.

See BADER, page 3

RECENT HEADLINES

Submitted by Lorna Simmons


Radio Astronomers Warn of Interference Created by Mobile Phones, New York Times, National, July 18, 1995

Lorna Simmons has submitted these articles to the Editor. Because of the length of these articles and the limited space available in the WASP, these articles have been returned to her. See Lorna if you would like to read her copies of these articles. They are very interesting and informative.

MINUTES OF MEETINGS

CRANBROOK 8/3/95

John Herrgott, President of the Warren Astronomical Society, began the meeting with an introduction of new members.

Glenn Wilkins gave a report on the club's treasury.

John asked for any observations from the group. Mike O'Dowd began with a published account of a new comet. This was followed with information and explanations provided by Larry Kalinowski on the comet "Hale Bopp". Larry then chal-

see MINUTES, page 4

A SPECIAL ATTRACTION - COMING SOON....

The election of club officers takes place in October, at the Macomb meeting. Nominations will be accepted at the Macomb and Cranbrook meetings soon. Please take some time to think of those club members (or yourself!) that you would like to nominate for officer positions.

1995 Officers
President: John Herrgott 810-648-1442
1st VP: Frank McCullough 810-773-1981
2nd VP: Scott Jorgenson 810-645-9684
Secretary: Blaine McCullough 810-678-8929
Treasurer: Glenn Wilkins 810-528-9295

The Warren Astronomical Society, Inc., is a local, non-profit organization of amateur astronomers. The Society holds meetings on the first and third Thursdays of each month, starting at 7:30 p.m.

First Thursday meeting: Cranbrook Institute of Science
1221 North Woodward Ave
Bloomfield Hills, Michigan
48302

Third Thursday meeting: Warren Community College
7523 14 Mile Rd.
Troy, Michigan 48090

Membership and Annual Dues
Student: $12.00  College: $25.00  Individual: $30.00  Family: $77.00  Senior Citizen: $17.00

Send membership applications and dues to the treasurer:
Glenn Wilkins
4233 Brightwood Drive
Troy, MI 48098

Among the many benefits of membership are:
- Discount magazine subscription:
  Astronomy $18.00 (12 monthly issues)
  Sky & Telescope $20.00 (12 monthly issues)
- Loaner telescopes (with deposit). See 2nd VP.
- Free copy of each WASP newsletter.
- Free use of Stargate Observatory.
- Special interest subgroups. See chairpersons.
- Free use of W.A.S. library. See librarian.
- Call list: don't miss unexpected events.
- Free membership in Astronomical League, including Reflector newsletter.
- More benefits are listed in Member Booklet

The Warren Astronomical Society Paper (WASP) is the official monthly publication of the Society. Each new issue of the WASP is made available at the Macomb meeting on the third Thursday. Non-members will be charged $1.00 for each new issue. Back issues, when available, are free. Requests by other clubs to receive the WASP and other correspondence should be addressed to the editor.

Articles for inclusion in the WASP are encouraged and should be submitted to the editor on or before the first Thursday of each month. Any format of submission is accepted, however the easiest forms for this editor are files in plain text format and graphics in PCX format. Materials can either be transmitted in person, via US Mail, via direct modem connection at the phone number listed below (call using voice first), or E-Mailed on the Internet to

ah314@detroitfreenet.org

For further information, see or call the editor:
Toni Bondono
51064 Kingwood
Shelby Twp, Michigan, 48316

810-751-4706

Disclaimer: The articles presented herein represent the opinion of their authors and are not necessarily the opinion of the Warren Astronomical Society or this editor. The WASP reserves the right to edit or deny publication of any submission.

Stargate Observatory is owned and operated by the Society. Located on the grounds of Camp Rotary on 29 Mile Road, 1.8 miles east of Romeo Plank Road, Stargate features a 12.5 inch f/17 club built telescope under a steel dome. The observatory is open to all club members in accord-ance to the "Stargate Observatory Rules" published in the member hand-book. Those wishing to use the observatory must call the 2nd VP by 7:00 p.m. on the evening of the session.

The coordinates for Stargate Observatory are 82° 56' 0.4" W, 42° 46' N.

Library: The Society maintains a library of astronomy-related books and periodicals at the Macomb meeting room. See the librarian, Louis Namee, to
check out a book.

Special interest groups
Computers: Larry Kalinowski 810-776-9720
Deep Sky: Doug Bock 810-750-0278
Lunar/Planetary: Riyad Matti 810-546-3223
Solar: Marty Kunz 810-477-0848
Math: John Herrgott 810-546-1442

Look for some interesting internet sites?
Currently being discussed is new theory on the extinction of dinosaurs caused (?) by asteroids at
listproc@lepomis,psych.upenn.edu In the body of the letter type "subscribe dinosaur" followed by your name.

Conversations on astronomical topics of interest for amateur astronomers can be found at
astro-request@mindspring.com In the body of the letter type "subscribe astro"
How about a 500k magazine put out twice a month concerning general astronomy? You'll find this at
URL ftp://ftp.netcom.com/pub/re/resource e-mail subscriptiontoresource@netcom.com to be added to the mailing list. You will recieve text and images bi-weekly (uuencoded .zip files)

Happy Surfing!
NGC 7000, North American Nebula:
- Huge, with an 82 degree Nagler at 96 power with a field of .9 degrees it covered 3 fields across and 4 and a half fields down. Impressive - with an O-III filter the nebula was very distinct. Prominent features were the contrast between the nebula and surrounding region. Actually could not find it at first because I was in the middle of it and did not realize it was that LARGE also the Gulf arm was distinct.

NGC 6960, Veil Nebula:
- Fascinating nebula travels through 3 fields (.9 degree each) and looks like a river with wide and narrow passages. Very distinct with O-III filter.

M-33
Faint - can easily look straight through it. However with further examination, especially observing the slight contrast with surrounding area the galaxy stands out readily. With further study spiral structure is evident in fleeting glimpses in and out. With prolonged study approx. 20 minutes, distinct spiral pattern deep in core and pinwheel streams extending outward. Averted vision and looking for contrasting areas necessary to detect detail. Observations with 16 Nagler at 92 power and 32 WF at 50 power.

NGC 7331 and Stephen's Quintet:
Searched in vain after easily detecting NGC 7331, the guide galaxy, the first night for over an hour but could not find the quintet. Jeff Bondono across the way found it in his 14' at 160 power but no luck on my 13' reflector. Returned to the search the next evening with help from Charlie from Genesse club and Jeff. With their help I came to realize that I was searching too far South and wrong East-West orientation (had assumed west in my field is west earthbound). Easily located once direction was changed by putting NGC 7331 at upper right of field and quintet appeared at lower left. I could make out 3 of the 5 galaxies in the quintet. Little fuzzballs barely distinguishable from surrounding stars in field. A great victory!

M 82
- Bright column of light at 90 power, increased power to 160 and a most impressive detailed elongated galaxy, with a wealth of detail. Numerous knots contained within. At 160 still very bright and taking up half the field (one-quarter degree). Dark lane running through it, but not just a "normal" dust lane, many jags and dips across both edges lengthwise. In addition many small dark knots contained within the main bright core. A marvelous sight! Great candidate for sketching.

I learned a lot about observing faint objects and was able to put into action methods I had read about such as looking for contrasting areas and using high magnifications on galaxies, and found them to be quite useful. What a GREAT time, you can bet I will be back next year.

**STAR PARTY INFO**

Update from Doug Bock on two upcoming Star Parties....

**CADILLAC WEEKEND STAR PARTY**
September 22-25, 1995
Head up Thursday night if you wish.
Doug Bock's property west of Cadillac
Phone: 1-810-750-0273
Let him know if you are going

**Fall Star Party**
September 16, 1995
2:00 starting time
2:00-DUSK-GAMES
4:30 Fire up the barbeque
Dusk: Start observing
Northern Cross Observatory
6383 Hartland Rd
Fenton MI 48430
Don't miss out! This is a great observing site. Doug provides some electricity (extension cords), use of his bathrooms, and a barbeque. Enjoy the skies and the companionship of fellow astronomers. This is a wonderful way to learn the sky from those who know.
lenged the "Macomb Group" vs. the "Cranbrook Group" to collect information on the variable stars in the constellation of Lyra. Anyone interested may obtain a charting sheet from Larry. The goal is for people to observe the changes in the variable stars and then to report these observations back to Larry. At a future meeting at Cranbrook and at Macomb the group will chart their observations and come up with the magnitudes the stars go through. Participants at this years SMURF Star Party gave observations. Observed were many Messier objects, Pegasus, open clusters in Sagittarius, Saturn, and many more...Ben Tolbert observed M8 and Sagittarius from Waterloo. Marty saw meteor showers and satellites. Saturday evening seemed to be a good viewing night for most of those who did observe.

John reminded club members of the following dates:

Aug. 8-Board Meeting at John Herrgott's home (since cancelled due to scheduling conflicts).

Aug. 16-Public Showing at Riverbends Park. Meet in the Bittersweet Pavilion at 8:30 p.m. for the showing. If interested, bring your dinner and join us at 6:30 p.m.

Aug. 25 and 26-Lake Hudson camp out. Maps and directions available. $21 will pay for your reservation. Call John for details. Remember: you must also have a valid state park sticker for admission in the park.

Aug 11&12-Perseid Showers will occur, just past a full moon. Call John if you would like to watch from Stargate.

Astrofest (Chicago, Sept. 15) and Island Lake dates (Sat, Sept. 2) are coming up. Ask John for more information.

The computer group stated that they are trying to contact Mt. Wilson. Anyone interested should contact Larry Kalinowski.

Snacks were provided by Angie and Fred Judd during the break.

Maryann Greuling recently returned from a dinosaur dig in Montana. She had fossils and pictures to share. Maryann and her partner were responsible in the excavation of the shoulder of a very large dino.

Marty Kunz presented a video from Nasa that featured astronauts in their environment on the shuttle during a space mission.

The meeting adjourned and those interested went to a local restaurant.

ARTICLES WANTED. SCOPES AND OTHER SALE ITEMS WANTED. SEE EDITOR OR PAGE 2 FOR INFORMATION ON SUBMITTING.

TREASURER'S REPORT
Balance as of June 30, 1995
$6,122.52

WELCOME!
To new and returning members
Nancy Hogan
Paul Strong
Joe Malburg
Scott Jorgensen
Walter Wawrzynski
Tim Skonieczny
R. Marvin

Remember, one of the perks of membership is discount magazine subscription. Talk to the treasurer, Glen Wilkins, about your subscriptions to Sky & Telescope and Astronomy Magazine.

Snacks, Snacks

<table>
<thead>
<tr>
<th>Cranbrook</th>
<th>Macomb</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/7 Riyad Matti</td>
<td>9/21</td>
</tr>
<tr>
<td>10/5</td>
<td>10/19</td>
</tr>
<tr>
<td>11/2</td>
<td>11/16</td>
</tr>
<tr>
<td>12/7</td>
<td>12/21 BANQUET</td>
</tr>
</tbody>
</table>

Sign-Up for snacks available. Contact Toni Bondono or sign the sheet available at the meetings.
Astronomical Fun Factors

Val Germann
Central Missouri Astronomical Society
Columbia, Missouri
germannvh@aol.com
9 Jan 1995

In evaluating amateur telescopes and accessories all of us are accustomed to making decisions based on price and performance: optical performance, mechanical performance, etc. But one very important feature that is frequently overlooked is the Astronomical Fun Factor or AFF. The AFF is used to calculate something called the Astronomical Fun Unit, or AFU, per hour. The AFU varies from +1.0, a whole lot of fun, through 0.0, no fun at all, to -1.0, or negative fun. To calculate AFU you must perform:

Observing Time, Hours X Fun Factor = Astronomical Fun Units

Let us use these concepts to investigate the AFF of a 50mm finder on a 12.5-inch, f/6.0 Newtonian on a Dobsonian mount. For several reasons I have been forced lately to use this telescope without the finder. This is not a lot of fun. For the first ten minutes or so it is not so bad but then things get worse and by the time I’ve been struggling along for an hour or so the experience has definite overtones of negative fun. Three calculations are made and then the results summed:

1) 0.167 Hours X +1.0 AFF = +0.167 Astronomical Fun Units.
2) 0.333 Hours X 0.0 AFF = 0.000 Astronomical Fun Units.
3) 0.500 Hours X -1.0 AFF = -0.500 Astronomical Fun Units.

At this point I have had enough and go back into the house to watch The Simpsons on Channel 13 or Unsolved Mysteries on Lifetime.

Since the use of the 50mm finder for an hour is a whole lot of fun, AFF equal to +1.0, the AFU associated with its use is the total difference between an hour of observing with the finder and an hour of observing without it, viz:

4) AFU w/finder (1.00) - AFU w/o finder (-0.333) = +1.333 AFU.

Is this scientific, or what! Articles to come will discuss the AFU of various astronomical products. Clear Skies!

Please Call Frank McCullough 810-773-1931.

From Abrams Planetarium Sky Calendar

August’s predawn darkness hours, with Saturn high in the southern sky, offer us a better edge on view of Saturn’s system of rings and satellites than we’ll have again until the year 2039. At the start of August we’re viewing the dark side of the rings from a point less than 1/40 below their plane. Using telescopes of various sizes, can you see the rings at all? How many of Saturn’s moons can you see, arranged in a straight line like beads on a string? Titan, the brightest, appears farthest E of Saturn (about 4 ring-lengths from the nearer ring edge) on Aug.2 and 18, and farthest W on Aug. 10 and 26. Watch it shuttle back and forth in its 16-day orbit. For more on watching Saturn and its rings and moons, see the August issue of Sky and Telescope.
Calendar of Events

Thu Aug 17 7:30 pm  Macomb Meeting.
Sat Aug 19  Stargate—moon 2 days past third quarter
Sat Sep 2 Island Lake Star Party
Thu Sep 7  Cranbrook Meeting.
Fri Sep 15  Astrfest-Chicago. Contact John Herrgott
Sat Sep 16  Equinox Star Party at Doug Bock's Northern Cross Observatory
Thu Sep 21 7:30 pm  Macomb Meeting.
Fri-Sun Sep 22-24  Observing in Cadillac - contact Doug Bock.
Thur Oct 5 7:30 pm  Cranbrook Meeting
Thur Oct 19 7:30 pm  Macomb Meeting. Election of club Officers
Thur Nov 2 7:30 pm  Cranbrook Meeting
Thur Nov 16 7:30 pm  Macomb Meeting
Thur Dec 7 7:30 pm  Cranbrook Meeting
Thur Dec 21  Annual Holiday/Awards Banquet