
the

WASP



Journal of the Warren Astronomical Society

August 1981



Eight day moon by Larry Kalinowski

Warren Astronomical Society Paper

Editor: Bob Wilson

4429 Holmes
Warren, MI 48092

(313) 649-5600 (Work)
(313) 979-3831 (Home)

The W.A.S.P. is the official publication of the Warren Astronomical Society and is available free to all club members. Requests by other clubs to receive the W.A.S.P. and all other correspondence should be made to the editor at the above address. Articles should be submitted at least one week prior to the general meeting.

W.A.S.

Warren Astronomical Society
P.O. Box 474
East Detroit, MI 48021

President: Doug Bock
1st V.P.: Frank McCullough
2nd V.P.: Alan Rothenberg
Treasurer: John Wetzel
Secretary: Nancy Tomczyk

The Warren Astronomical Society is a local, nonprofit organization of amateur astronomers. The Society holds a meeting on the first Thursday of each month.

1st Thursday Cranbrook Institute of Science
 500 Lone Pine Road
 Bloomfield Hills, MI

Membership is open to those interested in astronomy and its related fields. Dues are as follows and include a year's subscription to Sky and Telescope.

Student	\$17.00	College	\$21.00	Senior Citizen	\$21.00
Individual	\$26.00	Family	\$31.00		

Stargate

Observatory Chairman: Alan Rothenberg

Stargate Observatory is owned and operated by the Warren Astronomical Society in conjunction with Rotary International. Located on the grounds of Camp Rotary, Stargate features a 121" club-built Cassegrainian telescope under an aluminum dome. The observatory is open to all club members according to the "Stargate Observatory Code of Conduct."

Lectures are given at Stargate Observatory each weekend. The lecture will be either Friday or Saturday night, depending on the weather and the lecturer's personal schedule. If you cannot lecture on your scheduled weekend, please call the Chairman as early as possible or contact an alternative lecturer. Those wishing to use Stargate must call by 9:00 p.m. on the evening of the observing session. The lecturers for the coming month are:

Aug. 7/8..... Jon Root
Aug. 14/15..... Lou Faix
Aug. 21/22..... Dave Harrington
Aug. 28/29..... Frank McCullough

Emergency back-up lecturers:
Doug Bock
Alan Rothenberg
Don Misson

The cover.

8 Day Moon by Larry Kalinowski. Taken in 1969 from his backyard in Roseville using a 6", f/10 Newtonian and barlow. Exposure was 1/4 sec. @ f/22 on plus-X film.

MINUTES OF THE JULY 2, 1981 MEETING OF THE WARREN ASTRONOMICAL SOCIETY

The meeting was called to order at 7:55 by Doug, our president.

Most of the meeting was taken up with announcements of new and old business. Old business first.

Larry Kalinowski, Doug Bock and Frank McCullough won awards for their exhibits at the Apollo Rendezvous in Dayton.

June 6, there was a star party at Brighton and on June 26 there was another party at Stargate. On July 31 there will be a star party at Stargate.

Now for all the new business. We seem to be having a problem with our meeting places. As of right now there will only be one meeting during the summer months, as Green Acres School is closed down for the summer. Also, Cranbrook has informed us that as of July 1, 1981, there will be a \$25.00 charge for room rental. Doug has come back with a counter-offer of \$200.00 a year and our helping with four member nights. There still is no agreement as of this date. We did have a vote as to how many would like to stay at Cranbrook. The yes's had it at 11; the nay's 2.

We also had a vote to raise the dues to \$5.00 across the board. Yes 17, the Nay's none. Members voted on a \$5.00 re-initiation fee for members who are 30 or more days late in paying their dues. Members whose dues are due will have 30 days before their membership is up, be notified of this. The vote was, yes 13, no 3. This will take effect September 1, 1981.

Doug also brought up the subject of incorporating the club. The executive committee does endorse this as it does have many advantages as making us a tax-deductable organization. This will be discussed at a later date.

There are some new sub-groups started for those who are interested.

ASTROPHOTOGRAPHY	Larry Kalinowski	CHAIRMAN
CALCULATOR AND COMPUTER	Larry Kalinowski	CHAIRMAN
OCCULTATION AND MINOR PLANET	Dave Harrington	CHAIRMAN
VARIABLE STARS	Chuck Fausel	CHAIRMAN
DOUBLE STARS	Lou Faix	CHAIRMAN
DEEP SKY	Doug Bock	

Let's all show some support and interest in these sub groups.

Jim Yax received a certificate for observing 70 or more Messier objects. Way to go Jim. Congratulations from all of us.

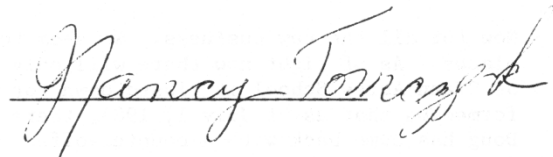
Our treasurer John Wetzel gave a report. There is \$206.88 in the treasury.

The annual summer camp out will take place August 28-30. Fun will be had by all as usual.

Alan Rothenberg, Observatory Chairman, states that the club telescope still has some problems and that there will be an observatory clean-up on August 8.

Now, for the program. Doug Bock showed some slides from the Brighton star party and from the Apollo Rendezvous. Dave Harrington showed a movie taken during his trip to Florida for the Space Shuttle.

Respectfully submitted



THE URBAN OBSERVER'S CORNER

Jonathan G. Baditoi

For years now, I've heard people claim that observational astronomy can only be fully enjoyed by those who have access to a pitch-black country sky. Well, for those of you out there who are usually confined to an inner-city observing site (as most of us are), I have good news - it just isn't true! In fact, there are an almost unlimited number of observing projects awaiting the city-dweller with a small telescope and a little determination. The purpose of this article, therefore, is to offer suggestions for new observing programs to my fellow Urban Observers. Each month, I will try to introduce another aspect of observing from areas with inferior sky conditions.

This month, we will start off with an activity that doesn't even require a dark sky at all - observing the planets in broad daylight! I will go through the list of brighter planets, and consider the prospects of locating them in the daytime, with some of my personal experiences thrown in.

Venus

Because this planet is the brightest object in the sky after the Sun and Moon, many people claim that it is visible with the naked eye in full daylight. Although I've never actually done it myself, I'm sure it's quite possible to locate it in this way. One thing is certain - Venus is easily seen even with the slightest optical aid (I've found it repeatedly with a 20mm finder). In fact, even a cheap pair of binoculars should prove quite useful in picking up this bright planet.

The first step in searching for Venus in daylight - and this goes for the other planets as well - is to consult a reference such as the Astronomical Almanac, and determine the planet's position with respect to the Sun (that is, the differentials in R. A. and Dec.). Having done this, the owner of an equatorially-mounted telescope should have no trouble in pointing his scope at the Sun and moving to the planet's location using his setting circles. Users of alt-azimuth-mounted or hand-held instruments, however, will just have to estimate where the planet is, and do some sweeping.

There is no "best time" to observe Venus in daylight, although it seems to be easiest to locate when it is at greatest elongation, far away from the Sun. For those observers wanting a challenge, I recommend searching for the planet near the time of conjunction, when it is very close to the Sun, almost obscured by the glare. At superior conjunction, Venus appears as a tiny, intense ball of light, whereas at inferior conj., Venus is at its closest point to Earth, and appears as a very large, hair-thin crescent. Incidentally, the apparent diameter of Venus at inf. con. approaches one arc-minute, much larger than it can ever be seen in a dark sky. It's a beautiful sight!

Believe me, it's easier than it sounds. In fact, I've managed to locate Venus several times when it was within five degrees of the Sun!

WARNING: Sweeping very near the Sun should never be done using a wide-field finder. The main scope should be used - but be careful never to sweep too close to the sun, for obvious reasons!

Jupiter

After Venus, Jupiter is probably the second-easiest planet to locate during the day. For this object, there definitely is a "best time" to search - that time being near "quadrature" (when the planet is about ninety degrees away from the Sun). At this time, depending on the time of day, Jupiter can be found high above the horizon at the same time the Sun is, but still far enough away that the Sun's glare won't interfere.

In the past six years, I have seen Jupiter three times during the daylight hours. My first sighting, and the one I consider to be the most satisfying, was made in Aug., 1975. By locating Jupiter one morning before sunrise, I was able to keep sight of it, using no optical aid, right up until sunrise. It is indeed possible to see the planet just before sunset or just after sunrise, as long as the Sun is no more than a degree or so above the horizon. Locating Jupiter at mid-day, however, is a different story. Although it is possible to locate it using the setting-circle method described earlier, it is much easier to wait until the planet lies near a brighter object, say Venus or the Moon. Using this technique, a minimal amount of sweeping is required (unlike Venus, Jupiter is not usually visible in the average finder, so it will be necessary to sweep with the main scope).

Once found, Jupiter appears as a very faint, pale, yellow disk, crossed by its two equatorial belts. I have found the planet twice with my eight-inch reflector, and assume it can be picked up in a six-inch as well. I would like to hear from anyone who has found it in anything smaller than this.

Mercury

Now we get into the truly difficult objects: In the last three years, I must have spent twenty eyepiece-hours sweeping for this elusive little devil - with no luck! No luck, that is, until I decided to wait for its conjunction with Venus back in June of last year. Using the bright Venus as a guide, the nearby Mercury was later found after considerable sweeping. In the eight-inch at 50x, it appeared as a very faint, pinkish point of light. This has been my only daytime observation of Mercury, and since past searching has had hazardous effects on my nervous system, I don't intend to hunt for it again anytime soon! For anyone else wishing to give it a try, I wish you all the luck in the world - you'll need it!!

Mars

If you find Mercury difficult to find, you'd better skip Mars. The best time (and perhaps the only time) to look for this planet is halfway between opposition and quadrature. At any other time, it would either be too faint, or not high enough in the sky during the day.

I got my first (and only) look at the red planet during the day only a week after my first sighting of Mercury. On that date, Mars was situated very near Jupiter. Using this relatively bright planet as a starting point, Mars was soon found. It appeared to be very orangeish and star-like at 50x. Surprisingly, no surface details appeared at higher powers, despite a very steady atmosphere. Once again, Mars is best found when it is near a bright object.

Saturn

I must confess right here that I have never even looked for this planet in the daytime. But, since Jupiter was found to be "findable" without too much difficulty at times, Saturn must be considered to be a remote possibility. Actually, Jupiter and Saturn are really very similar in appearance. The main difference is the surface brightness, which is slightly higher in Jupiter's case.

I doubt that Saturn could be located at all unless it was located near a bright object. In fact, a golden opportunity to catch sight of the ringed planet came last summer, when a daylight occultation by the moon was visible from this area. That is, it would have been visible if the weather had cooperated. However, observers will have another opportunity to find Saturn this summer, since it will be near Jupiter for the next several months. Finding this planet in broad daylight may be the grandest challenge open to the observer with a small telescope.

If you would like to know first-hand how the planets look in daylight, but the thought of sitting out in the hot sun, sweating and sweeping, does not appeal to you, try this: locate the desired planet during morning twilight, and track the object (either manually or by clock-drive) until the Sun is well above the horizon. Although this technique isn't as much of a challenge as a daytime search, it will give you an idea of what to look for should you decide to try the real thing!

Once again, GOOD LUCK!

Next month: I haven't got any ideas yet!

WARREN ASTRONOMICAL SOCIETY
SCHEDULE OF EVENTS

August 6, 1981	Cranbrook Meeting at 7:30
August 8, 1981	Observatory cleanup and Star party 3:00 pm
August 10-16, 1981	ASTROCON 81 ** National Convention at Kutztown Penn.
August 28-30, 1981	W.A.S. SUMMER CAMPOUT *** This is the big one. Observing activities start Friday night. Baseball, football, sunbathing, or whatever games you want to bring, will be on Saturday. Sub-groups can do their field work this weekend. A cookout is scheduled for 7:00 pm Saturday. Bring your own food for the rest of the meals. The charge will be \$5.00 for members and \$6.00 for guests. This pays for the accommodations for the weekend. See you there...at STARGATE.
Sept. 3	Cranbrook Meeting at 7:30
September 17	GENERAL MEETING ** At Green Acres Elementary School This meeting starts at 7:30
September 25	STAR PARTY ** At STARGATE. If cloudy then it will be the next night, Saturday the 26th.
October 1	Cranbrook Meeting at 7:30
October 15	GENERAL MEETING at 7:30 ** Green Acres Elementary School.
October 23	STAR PARTY** At STARGATE. Starts at dusk.

PLEASE REMEMBER THESE EVENTS!

For info call Doug Bock
533-0898

NOTICE TO CHAIRPERSONS OF THE SUB-GROUPS:

If you would like future sub-group meetings put in the W.A.S.P. then call Doug Bock
and it will be put in the schedule of events.

TO ALL MEMBERS:

At the September meetings there will be a roll call vote taken for incorporation of the
club. Please be prepared to discuss this at those meetings.

Douglas H. Bock
President, W.A.S.
533-0898