

DETROIT ASTRONOMICAL SOCIETY

42° 24' 37.7" N. Latitude



83° 15' 24.5" W. Longitude
Crowell Recreation Center

Newsletter

MAY/JUNE 1984

FROM THE PRESIDENT

Astronomy Day, May 5, 1984 marks the first time the D.A.S. will be hosting an astronomy program at the Detroit Science Center. Those of you who have volunteered your time, I thank you. It's this type of cooperation that makes this organization one of the best. The volunteers should have a schedule of the lecture times. Members participating in the Astronomy Day program should be at the Science Center by 11:30 a.m. so we can set up the telescopes and the demonstration theater. Display your name tag, if you don't have one contact me.

Many members of the D.A.S. are going to the annular eclipse in Greensboro, N.C. Most members are going their own way and meeting in Greensboro, N.C. One word of caution, be ready and be mobile! We have accurate data on the eclipse but it's the weather we don't know about!

The Society has a trip planned to Stellafane, this is their 50th anniversary. I would like to hear from members that are planning to attend so we can coordinate our efforts. This year's Stellafane meeting is July 27-28 at Breezy Hill in Springfield, Vermont. We are trying to set up a group tent site as a rest area for D.A.S. members. This year Stellafane will be crowded, as most or you know the facilities are sparse and most people rely on their cars or tents if it rains (or crawl inside their telescope tube!) If we can get several tent sites, we can annex a D.A.S. rest area. I would like to hear from members on any other ideas.

Those of you who attended the Annual Dinner March 11 expressed an interest in doing something very similar next year. Those who couldn't attend missed out on a super Champagne Smorgasbord Buffet and "Tall Telescope Tales!"

Clear Skies! ■

-Jack Brisbin

CALENDAR OF EVENTS

May 4	Board of Directors Meeting, 7:00 p.m. Workshop Activities, 8:00 p.m.	June 1	Board of Directors Meeting, 7:00 p.m. Workshop Activities, 8:00 p.m.
May 5	Astronomy Day, D.A.S. at the Detroit Science Center 12:00-5:00 p.m.	June 8	General Meeting, 8:00 p.m. Lecture: "Amateur Astronomy" (4" Clark refractor displayed at Ann Arbor Conference) by Norbert Vance Physics and Astronomy Dept., EMU Workshop Activities
May 11	General Meeting, 8:00 p.m. Lecture: "Astrophotography" by Jeff Thrush Workshop Activities	June 15	Workshop Activities, 8:00 p.m.
May 18	Workshop Activities, 8:00 p.m. SWAP AND SHOP	June 22	Astronomical Films, 8:30 p.m. Workshop Activities
May 25	Memorial Day Weekend, Closed-no meeting	June 29	Workshop Activities, 8:00 p.m.
May 30	Annular Eclipse		

INVARIABLE EASTER

The date for Easter has traditionally been determined by the movement of the stars: It is the first Sunday after the first full moon after the Spring Equinox (March 21). Two British scientists at Oxford, unhappy with this variability, decided to try to track down the exact date of the Crucifixion. According to an article in the British magazine *Nature*, they started with the fact that Pontius Pilate was in power between 26 to 36 A.D. Then they looked for times when the Jewish Passover fell on Friday, the day now known as Good Friday. This, they found, happened only on April 7, 30 A.D. and April 3, 33 A.D.

To make a final decision, the researchers turned to the Biblical accounts of the moon appearing blood red at the time of the Crucifixion. They reasoned this could have been caused by an eclipse. And, indeed, there was a lunar eclipse on April 3, 33 A.D. Therefore, if you accept the reasoning and research of the Oxford scientists, there is a good case for Easter being fixed at April 5. □

May	Mercury is too low in the sky to be easily seen, and Venus is not visible in May. Mars and Saturn rise at about sunset and set at about sunrise. Jupiter rises about 5 hours before the sun.
Tues. 1	Alpha Scorpiid Meteor Shower peak. Up to 8 per hour. New Moon (Mon., April 30) 11:45 p.m. EDT
Fri. 4	Mercury stationary in right ascension; resumes direct motion 9:00 a.m. EDT
Sun. 6	Eta Aquarid Meteor Shower peak (April 21-May 12) 10-40 per hour
Tues. 8	First Quarter Moon 7:49 a.m. EDT
Mon. 14	Moon passes 0.5° south of Saturn 4:00 a.m. EDT
Tues. 15	Full Moon 00:28 a.m. EDT Penumbral eclipse of the moon 00:40 a.m. EDT (10:42 p.m.-2:39 a.m.)
Wed. 16	Moon passes 0.6° south of Uranus 7:00 a.m. EDT
Tues. 22	Last Quarter Moon 1:45 p.m. EDT
Wed. 30	New Moon 12:48 p.m. EDT Annular eclipse of the sun visible from southeast U.S. Only partial phases from Michigan. See S&T Nov. 1983, page 400. From Detroit: First contact 11:14 a.m. EDT, maximum eclipse 12:39 p.m. EDT 74.7% obstruction, fourth contact 2:09 p.m. EDT

June Mercury and Venus are not visible this month.
Mars and Saturn are near the meridian at sunset and set just after Midnight.
Jupiter rises at about sunset and sets at about sunrise.

Wed. 6	First Quarter Moon 12:41 p.m. EDT
Sun. 10	Moon passes 0.2° south of Saturn 9:00 a.m. EDT
Wed. 13	Earliest sunrise Full Moon 10:41 a.m. EDT
Thurs. 14	Alpha Scorpiid Meteor Shower peak (June 2-17) some fireballs. Up to 5 per hour
Fri. 15	June Lyrid Meteor Shower peak (June 10-21) 5:00 a.m. EDT 8-10 per hour
Wed. 20	Mars stationary in right ascension; resumes direct motion 6:00 a.m. EDT
Thurs. 21	Summer solstice 1:03 a.m. EDT Summer begins Last Quarter Moon 7:11 a.m. EDT
Wed. 27	Latest sunset
Thurs. 28	New Moon 11:19 p.m. EDT

—Nancy Waggoner

OBSERVER'S NOTE

The twinkling of stars occurs not within the stars themselves, but as a result of starlight passing through the Earth's atmosphere. Planets present a broader path of light than do stars, it would be like comparing a disc to the pin points of star light. The large disc-like planets are less likely to twinkle and from this we get the old rule that stars twinkle and planets don't. The best seeing conditions with a telescope are when the air is steady and clear, this occurs on nights when the stars twinkle least.

GENERAL INFORMATION

The D.A.S. is a non-profit organization with membership open to any individual who is interested in astronomy. Guests are always welcome without charge or obligation. Our purpose is to encourage and promote the study of astronomy and related sciences.

The D.A.S. meets each Friday evening at the Crowell Recreation Center located at 16630 Lahser Road, Detroit, Michigan. The Center is 1/4-mile south of McNichols (Six Mile Road), on the east side of Lahser Road at the traffic signal light. This facility is a modern, well equipped building with ample off-street, lighted parking. It is operated by the City of Detroit Recreation Department and it is their finest facility serving this side of the city. Since we are their guests, it is important to be considerate in the use of the Crowell Recreation Center to insure our continued welcome.

The meetings consist of talks, lectures, films, slides, mirror making, sharing and fellowship with Astronomy as our com-mon denominator. Scheduled events and features will begin at 8:30 p.m. The officers and Board of Directors meet privately on the first Friday of each month at 7:00 p.m. in the mirror polishing room. The regular business meeting for the general membership is held on the second Friday of each month and starts promptly at 8:00 p.m. We ask that the last person be out of the building by 10:15 p.m. to accommodate the building custodian.

During the summer months of July and August the Regular and Board of Director Meetings are suspended. Formal programs are reduced and emphasis is placed on scheduled star parties.

MEMBERSHIP includes SKY & TELESCOPE magazine and "The Reflector," a newsletter of the Astronomical League; both are mailed to your home. Annual dues are as follows: Regular \$25.50 (a person 18 years or older), Family \$30.50, Junior \$15.50 (a person 17 years or younger). Forward membership renewal card from S& T, along with dues (make check payable to Detroit Astronomical Society), to the Treasurer: Dave Corkery, 31960 Barton, Garden City, Michigan 48135. □

I have been interested in telescope design, assembly and astrophotography for many years. The building of my present 8" f/7 Newtonian telescope with a 4 1/4" f/12 guide scope required some research and design but with minimum machining. This experience gave me insight into the requirements needed to produce an instrument capable of deep sky and planetary photography.

Being an engineer and never content with present conditions, I began designing a 14 1/4" Newtonian specifically for astrophotography and photoelectric photometry. This 14 1/4" f/6 required hundreds of hours of research and design along with hundreds of hours of machining, welding, wiring and assembly. The drastic increase in effort and time (5 years) was due to a new wire drive system which replaces the worm and gear. This fork mounted telescope is to be used for special tracking conditions; therefore it required large structural considerations, a unique motorized short focus unit, independent suspension of the 8" guide scope (to prevent stress on the main tube), and remote control for all functions.

A major portion of the design had to be completed before any aluminum or stainless steel was purchased. The medium to small machining was completed at my home using a small lathe, drill press and combination cutoff/band saw. The big work (up to 20" dia discs) was done with the help of Don Misson in his machine shop.

On July 13, 1984, this telescope will be on display at the D.A.S. and I will be speaking on its design and construction. **Due to its size and weight, it will be shown at D.A.S. only once.** □

Gary Frey

NOTES OF GENERAL INTEREST

Detroit Science Center Science Fiction Film Series (new) every Friday and Saturday
All shows at 7:15 and 9:30 p.m., tickets are \$2.00 each.
The Center is located at 5020 John R, Detroit, Michigan Phone 577-8400

Crestwood Planetarium- 1501 North Beech Daly, Dearborn Heights —all shows begin at 7:30 p.m.

May 15 and 16 —"Summer Sky Wonders," a look at the wonders visible in the sky this summer.

Apollo Rendezvous and Telescope Fair —June 8th and 9th, 1984- Dayton, Ohio

Excerpts from a letter from the city of Petersburg, Virginia:
Annular Eclipse, May 30, 1984.

We'll send you a packet of information about preferred observation locations, accommodations, food, and things to see and do in the Petersburg area.

We are making arrangements to have available for you the best and most convenient viewing points all over town. Please let us know of your interest so that we can send the packet of information and help you however we can to have an ex-tremely enjoyable visit. For further information, please contact the Petersburg Tourist Information Center, P.O. Box 2107, Petersburg, Virginia 23804, phone (804) 861-8080.

Best wishes for good viewing, Sincerely, R. Dulaney Ward, Jr., Director of Tourism □

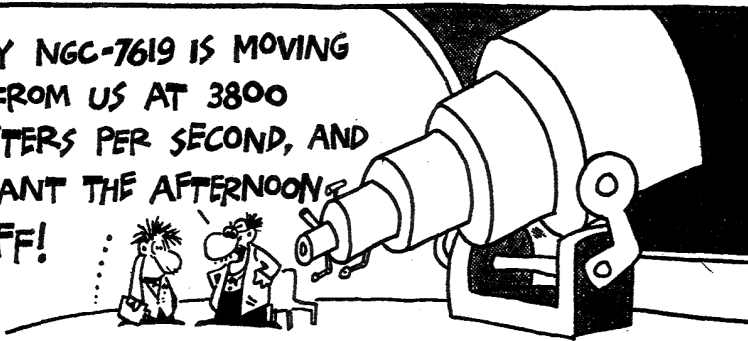
The D.A.S. newsletter will not be published during the summer months of July and August. The next newsletter to be published will be for September/October.

Activities at the Crowell Center will continue throughout the summer with the exception that there will not be any planned lectures. Informal activities, spontaneous events and telescope making activities will continue as usual.

Information on current activities can be obtained at the Friday night meetings or by calling the D.A.S. telephone 837-0130 (Detroit number) to hear a recorded message detailing each week's events and any star party announcements.

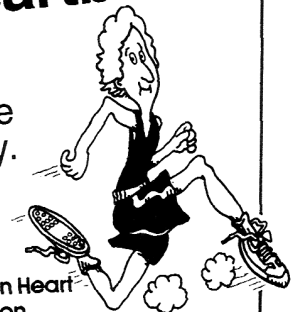
TIDBITS & TWITS

GALAXY NGC-7619 IS MOVING AWAY FROM US AT 3800 KILOMETERS PER SECOND, AND YOU WANT THE AFTERNOON OFF!



Don't be a heartbreaker

Exercise regularly.



American Heart Association