# Detroit Astronomical Society Newsletter 



MARCH / APRIL / 1989

## F'ROM THE PRESIDFNT

At the January meeting, a proposal was presented by Dr. Blanchard requesting members of the D.A.S. to assist in teaching astronomy to studente in the Brandon School District in northern Oakland County. As of this writing, training dates have not been finalized. But Dr. Blanchard will notify those members that expressed interest in assisting in the astronomy program. It is an ambitious program, but a well thought out effort involving the school district and the local community.

The benifits for the society is the use of some dark sky observing sites.

There are members interested in taking a field trip to Adler Planetarium in Chicago. The details have not been worked out yet, but open to suggestion, depending on those interested in going.

The main reason for scheduling an observing session on March 17 is to observe the asteroid 324 Bamberga occult a star. The observing sescion will be at Camp Wathana, the Minuka Campsite. Thero will be no electrical power at the site, so bring battery powered drive correctors. Dress warm. CLEAR SKIES!

## JACK BRISBIN

## CALENDAR OF EVENTS

March 3 Board of Directors meeting 7:00 PM. Workshop activities 8:00 PM
March 10 General meeting and lecture 8:00 PM. Cosmology-A General Lecture. Lecturer: Mr. William McEntee.

March 17 Observing session-Camp Wathana-Minuka Campsite. Dress .arm.
March 24 No meeting-Easter weekend.
March 31 Astronomical films 8:15 PM. Black holes and Quasars. How we know the Earth moves.

April 7 Eoard of Directors meeting 7:00 PM. 'Uorkshop activities 8:OC PM
April 14 General mecting and lecture. Reverse polarity and the long weather cycle. Lecturer: Mr. Dick Lloyd.

April 21 Uorkshop activitios 8:00 PM.

## MEMBERSHIP INTEREST

The following members have renewed their membership in the society. Michael Manyak, Ralph Fortney, Jack Brisbin, Leslie Gombar, A.C. Leigh IaChapelle, Lennox A. Walsh, Donald A. Misson, Ken Heilig and Michael Cyrek.

A bit of history about the D.A.S. from a newsletter dated January, 1975:

## 23 TELESCOPE MIRRORS COMPLETED IN 1974

During the past year, 23 reflecting telescope mirrors vere completed by D.A.S. members at the Allen Center and Mercy College Friday workshops. They ranged in diameter from $4 \frac{1}{4}$ to $12 \frac{1}{2}$ inches. In past years, the most popular size has always been the 6 inch - sometimes outnumbering all other sizes by a ratio of more than 3 to 1 . In 1974, 8 inch mirrors ran neck and neck with the 6 inch sizo. We are not so sure of our statistics on tho number of scopes completed during the year, since once the final figuring of the mirror is completed the rest of the project may be completec at home with no feedback report on completion. We are able to definitely account for 8 completed telescopes during the year, with a probsbility of another 5 completions. This woula leave another 10 finished mirrors as part of an unfinished telescope-building project.

Sinc: Jacks initial report, I've recicved some additional information from Dr. Blanchard at the last meeting of the D.A.S. on the Erancon School District Project.

The schedule is now confirmed for weckly instruction and telescope building classes that will be held on Hednesdays from 7 to 9 PM except for the March 29 date which follows Easter Sunday.

The first subject of discussion will bo Telcscopos folloved by Vinter Constellations, Moon, Star Movoment and finally Planets. Then a toloscope construction project will be done by the students. The school system will supply the parts for the construction of 4 Newtonian toloscopes with Dobsonian mounts.

The beginning date of the program is March 8 and the final day June 7 . The last day will be a starfest or observing sossion with th no:ly constructed telescopes and any additional tolescopes brought to the obscrving area.

The classes will be held in the Brandon Middle School in Ortonville undrr the supervision of Dr. Joy Haller, an assistant superintendent. 20 students are expected to attend and are to be accompanied by their parents as well.

The school system will supply all the audio and visual oquipment rcquired to aid in the instruction. They will also supply the liability requirements and the security as well.

Local bussiness organizations arc also involved.
The frefze Out hold on Saturday, February 18 at the Dennison Building of the University of Michigan was well represented by our socicty. Talks were given by some university professors as well as some amateur astronomers, two of which were from the Warren Astronomical Society. There was also the usual flee market.

The Dennison building houses the $U$ of $M$ astronomy departmont and library. The library is a finc institution which has dozens of periodicals in astronomy and physics as well as the required hardbound books on the subject.

If anyone ever has an opportunity to visit this library, I suegest
they do so. that they do so.

The following material has been derived from a couple of charts supplied by Gary Frey of the North Pines Observatory. The first data is the Lunar Grazing of 3 stars during the months of March, April and May. Tho second data applies to Asteroidal Occultations from March 18 to December 3.

|  | Date |  | USNO No | LUNAR <br> SAO |  |  | ime |  | Mag. | Alt. | Az. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| March | 12, | 1989 | X 5301 | 76431 | 23 | 58 | 58 |  | 8.0 | 63.3 | 240.3 |  |
| April | 11, | 11 | ZC 885 | 77625 | 2 | 10 | 10 |  | 5.6 | 39.6 | 274.0 |  |
| May | 6, | " | ZC 560 | 76228 | 11 | 27 | 0 |  | 3.8 | 5.9 | 62.4 |  |
| Date |  |  | Name | STHROIDAI <br> Un. Time <br> H M : | $\begin{array}{r} \mathrm{OCC} \\ \mathrm{Hag} \\ \mathrm{PI} \end{array}$ |  | $\begin{aligned} & \text { TIO } \\ & \text { g. } \\ & \text { ar } \end{aligned}$ |  | $\mathrm{R} / \mathrm{A}$ | Dec. | $\Delta \mathrm{Mag}$ | Time |
| March |  | 32.4 | Bamberga | 4318 | 11 | 9 |  | 1 h | $15^{\prime}$ | $-2^{\circ} \mathrm{IR1}$ | 2.9 | 15.la |
| May | 26 | 481 | limita | $527+$ | 13. | 9 |  | 3h | 91 | $+1^{\circ} 61$ | 4.2 | 18 s |
| July | 26 | 192 | Nausikna | 65418 | 11 | 7 | 4 | 3 h | 71 | $+2.034$ | 4.0 | 3.30 |
| oct. | 15 | 617 | Patroclus | 9396 | 14. | 9 |  | 2 h | 301 | +905 ${ }^{\prime}$ | 5.4 | 9.95 |
| 1 | 23 | 521 | Rrixia | 2. 2718 | 10. | 97 |  | 1 h | 91 | $-13^{\circ} 71$ | 3.8 | 21.6\% |
| Nov. | 11 | 147 | Protogene | 13116 | 14 | 99 | 6 | 11 h | 121 | $+3^{\circ}$ 工4' | 1 5.3 | 3.75 |
| Dec. | 2 | 895 | Helio | $647+$ | 12. | 61.0 | . 9 | 6 h | 2.91 | $+21^{\circ} 6^{1}$ | 1.9 | 11 S |
| 1 | 3 | 664 | Judith | 63554 | 15. | 68 | 8 | 5h | 91 | $+11^{\circ} 42$ | 16.8 | 3.65 |

On Tuesday, February 23, I was at a Yindsor Centor R.A.S.C. meeting and one of the members mentioned from a roport he rocirvod from the AAVSO that a supernova was discovcred in the galaxy M66 (NGC 3627) in the Const llation Leo. It is a spiral galaxy type Sb and a companian to 165. The galaxies R.A. is llh 19.1 and the dec. is +130 07'.

I wonder how many members make use of the observational deta that Sky \& Teloscope magazine provides for the amateur such as:

The Celestial Calcndar which provides data on the planets, moons of Jupiter and other objects.

The double star catalog on page 183 of the Fobruary isout by "'illiarn Henry Smyth provides a lot of interesting objects to observe as arc tho star tablcs on page 182.

The University of Michigan Astronomy Dopartment will br hosting the summer m cting of the Amirican Astronomical Society in Ann Arbor from June ll to the l5. Voluntecrs are needed to help show slides during talks, set up tables and poster boards, etc. In return, volunteers will reci ve froe admission to the meeting to hear talks and attend society functions. (There is usually a $\$ 105$ registration fec for non-A.A.s. members) This moting of courso involves the professional astronomers throughout the country.

If you aro interested in volunteering, please call Micheel Mest at (313) 763-5822.

Professor Michael Uest will also be present at the Warren Astronomical Societys rogular meeting at Macomb County Community College on Thursday, March 16 at 7:30 PM. He will be here primarily to recruit volunteers for the A.A.S. meeting in Ann Arbor. Hovevor, he will also presum dly give a talk on cosmology. The college is located on the southwest corncr of Twelve Mile Road-and Hayes. Entrance to the parking lot is off Eunert Avenue which is th first block west of Hayes. The meetings are held in the $B$ building.

On one of tho latter pages Ilve reproduced a copy of thepherides for 4 minor planets courtesy of Ken Kelly of the $\because . A . S$.

A reminder again to all the members, pleas ronew your mombership when expiration is approaching. And to all potential now memb rs, the annual duos are:

Regular, $\$ 32.50$ ( 18 years and older), family, $\$ 37.50$ and junicr, $\$ 22.50$. Included is a subscription to Sky \& Telescope magazin and the Reflector, a quarterly newsletter published by the Astronomical Loague. Both are mailed to your homs.

The Skywatchcre Hotline (837-01z0) is made possible by mombersip dues and is a public sorvice of the DAS informing the public of current obscrvational astronomy and local astronomical rivente. At the and of th. tape, DAS events aro announced.

If you have any news items partaining to astronomy or rat d organizations, any projects you are doing that may be of interest to the members or educational data that you would like to supply, mail your information to tho aditor.

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\begin{aligned}
& \text { Mike Cyrek, Witor } \\
& \text { Detroit Actronomical Socicty } \\
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& \text { Detroit, MI } 48212
\end{aligned}
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The largost star known is stimated to b: about $5.7 \times 10 \mathrm{~km}$ in diameter. This star is jpsilon Aurigac B (RA 4h 58.4m, Dec. + 430 441). It is a binary and is still somowhat of a mystery today.

The III Garl of Rosse was the first to discover th" spiral neturo of galaxios in the year of 1845 with a hucc (for that time) t-lescope he built himself with the holp of his workmen at his estate. This tolcocope had a metallic mirror and was 72 inches across. It was a reflector with a vory limited range. (That is laterally)

The first object discovered by Charl"s Mossir vas th Crok Irbula, also known es Ml with the pulsating star known as Taurus $A$. Thie star is considered to be the sourco of the nebula.

## GENERAL INFORMATION

ThC OA.S. is a non-prolit organization with membership open 10 any individual who is interested in astronomy. Guests are atovays welcome withoul i:narge or obligation. Our purpose is to encourage and promote the study of asilonomy and rebated sciences
The D.A.S. meets each Friday evening al the Crowell Recrealion Center located al 16630 Lahser Road. Delrort. Michigan. The Center is $1 / 4-m i l e$ souln of MeNichols (Six Mile Road). On the east side ol Lahser Road at ine lrallite signal light. This lacilly is a modern. well equipped building with ample oll-sireel. lignted parking. It is operated by ine City of Delroll Recreation Department and it is their linest lacility serving itis side of the city. Since we aratneir guests, it is important 10 De considerate in the use of the Crowell Recreation Center to insure our continued welcome.
The meetings consist of lalks. teclures, films. slides, mirror making. sharing and fellowsnip with Aslronomy as our com. mon denominator. Scheduled events and leatures will degin al $8: 30 \mathrm{p} . \mathrm{m}$. The ollicers and Board ol Directors meet privalely on the lirsi Friday ol each monin at 7:00 p.m. in the mirror polishing room. The regutar business meeting for the general membership is held on the second Friday ol each monin and starts promplly al $8: 00 \mathrm{om}$. We ask inal the lasi person De out ol the oulding by 10.30 p.m. 10 accornmodate the building custodian.
Guring the summer months ol July and August the Regular and Board ol Director Meetings are suspended Formal pro. prams are reduced and emenasis is placed on scheduled star parlies.

HEP FOR REFERENCE



MINOR PLANETS FOR FEE. - MAP.
(Calculated by Ken Kelly)


EPHEMERIS FOR (3) Juno



EPHEMERIS FOR (4) Vesta


Elements Epoch: Bgagit - Elements Source: 1989 Ephemerides of Minor Planets

