FOCAL POINT

Issued by the

MILWAUKEE ASTRONOMICAL SOCIETY

- : JANUARY, 1986 : -

CALENDAR:
Fri., Jan. 17 - January Program-Meeting 8 P.M.
Tue., Jan. 21 - Board Meeting, 7:30 P.M. (J. Toeller).
Fri., Jan. 24 - Voyager II encounters Uranus.
Sat., Jan. 25 - Full Wolf Moon.
Wed., Feb. 5 - First Wednesday meeting at observatory.
Wed., Feb. 5 - FEBRUARY "FOCAL POINT" DEADLINE.
Mon., Feb. 10 - Comet Halley at perihelion.
Saturdays - Observatory maintenance and improvement.
Sat. Nights - Member's night at the observatory. During winter months, check first before coming out to the observatory.

JANUARY PROGRAM-MEETING: The history of forming images by concave mirrors begins in the early part of the 17th century when Father Zucchi, an Italian Jesuit, first used an eye lens to view an image in a concave mirror. Later, Gregory and Newton devised and built working instruments using reflecting mirrors. Cassegrain later developed the convex mirror and telescopes using mirrors eventually evolved into the giant 200" Hale at Palomar and the 236" instrument in use in Russia.

Fortunately, amateurs using care and patience can make their own mirrors. The twelve 10" Portascopes use mirrors made by MAS members Bill Collins and Jim Toeller.

Our next general meeting will high-light Mr. Dan Joyce of the Chicago Astronomical Society. As a mirror expert, he will present a workshop featuring methods and shortcuts that should remove the fear of making your own mirror.

WHEN: Friday, Jan. 17, 8 P.M.
WHERE: At the Child and Adolescent Treatment Center (CATC) auditorium, 9501 W. Watertown Plank Rd., Wauwatosa. May be reached by Rt. 71 bus.

IN MEMORIUM: The Milwaukee Astronomical Society offers sympathy and condolences to the family of George Ceolla who passed away December 31.

Mr. Ceolla, a retiree of Allis-Chalmers, originally joined the Society in 1957. He rejoined late last year and was introduced to members and guests present at the December general meeting.

MEET OUR NEWEST MEMBERS Ron and Dana Morgenson, son Jason, daughter Katie, Milwaukee; John and Nedra Ohm, sons Jeff and John, New Berlin; Patricia Wiese, Milwaukee. All will be introduced at the January meeting.

COMET HALLEY NEWS: Check its progress with "Sky and Telescope," "The Reflector," or "Astronomy" magazines. By nightfall January 15 it should be about 10° north and west of Jupiter. Look for a fuzzy patch below the water jar in Aquarius. The tail will point up. Observe from a dark place. The moon will be waxing crescent. By the end of the month the comet will be near the western horizon. Then, as it moves toward perihelion Feb. 10, we all say goodbye until late February when we get up before the birds to watch the east-southeast sky before sun-up.

The Society is getting tons of exposure from the media. President Dan Koehler estimated we've shown the comet to 6-8000 people. We've gotten $400 which will be forwarded to the Astronomical League. A lady ninety years young was shown the comet at Whitnall Park. She also saw it in 1910!

Show Halley to your neighbors. This is a big chance to boost your Society.

OBSERVATORY NEWS: Details of 26" telescope completion worked out at a previous committee meeting. John Asztalos made some excellent pictures of Comet Halley on hypersensitized film. A lot of comet observing is being done at the observatory. In addition to keeping the washroom doors closed, also close the door to the darkroom. The general membership is invited to attend First Wednesday meetings. During the winter months, check first to see if access to the observatory is possible.

APOLOGIES! The December, 1985 "Focal Point" reported that Sally-Jo Trummer is the new MAS historian. This is incorrect! Our new historian is Sally Waraczynski, 3725 S. 71st St., Milwaukee 53220 (321-0918). If you have any historical articles, pictures, or memorabilia pertaining to the MAS, please forward them to her at the above address.

GRAZING OCCULTATIONS:

NIGHT OF	MAG.	TIME	% SUNLIGHT	CUSP ANGLE	RATING
Feb. 1- 2	6.8	2:07 AM	48	14.1S	Favorable
Mar. 14-15	7.4	3:06 PM	18	1.4N	Favorable
Mar. 18-19	8.0	10:51 PM	54	7.0N	Marginal
Mar. 19-20	6.4	11:43 PM	64	7.5N	Favorable
Apr. 14-15	8.3	7:34 PM	27	7.7N	Marginal

A grazing occultation occurs when the moon passes a star so closely that, when viewed through a telescope, the star intermittently disappears and reappears as the moon's mountains and valleys pass by. Telescopes are spaced a tenth of a mile apart along a two mile stretch of road at a predicted location. Sightings are recorded at a central station.

For details, call Virgil Tangney (327-7976).

Participants in graze expeditions can deduct expenses for tax purposes. Gerry Samolyk (475-9418) has forms.

The February First Wednesday meeting will cover grazes.

FOR SALE OR TRADE: 17.5" f/4.4 Dobsonian telescope complete with plywood tube and rocker, Jaeger super-focuser, 50mm wide field finder, nine-point support mirror cell, and precision diagonal holder. One person can assemble and disassemble this instrument as it breaks down into a 20 lb. eyepiece section, a 40 lb. central section, a 40 lb. mirror section, and a 50 lb. rocker section.

A photo of this great light bucket appears in "Telescope Making" magazine, issue #19. The picture will also be made available at the January General Meeting.

Offers are welcome. Please contact John Phelps Jr., 8621 W. 167 Place, Orland, Ill., 60462 (312-532-2968).

WINTER HERSCHEL OBJECTS (BY LEE KEITH):

For those observers who would like to sample the Herschel Club objects, the following are the best objects for the winter. My point in giving the list is that not all the Herschel object are dim. Many of the objects are open clusters which are not hard to find. In fact, the first object, NGC 869, is the famous "Double Cluster" in Perseus, which is easily visible in binoculars!

So next time the clouds part and the wind chills are above zero, bundle up and sample a few of these Herschel objects. You may find that they are not that tough to find and will continue on in the list!

NGC Number	Coordinates R.A.	Dec.	Seeing	Description
WINTER GROUP				
869	02h 15m	+56 55'	Good	Very rich & compact cluster with dozens of bright members. Beautiful! [Double Cluster]
1023	02h 37m	+38 52'	Good	Bright & highly elongated with very bright nucleus. With averted vision, halo extends for >10 arcminutes! Nice!
2024	05h 39m	-01 52'	Good	If zeta placed out of field, EASY to see. Just like photos. Large, round, with irregular edges, mottling and dark rift through center. EASY!
2251	06h 32m	+08 24'	Good	Flattened arrangement of fairly bright stars. Very unusual!
2266	06h 41m	+27 02'	Good	Beautiful triangular cluster of many dim stars with a bright star at one apex.Fully resolved.
2301	06h 49m	+00 31'	Good	Very nice grouping if bright stars in a line crossed by a line of dim stars, like a "T". Easily seen in finder.
2324	07h 00m	+01 08'	V.Good	Many faint resolved stars in round mass next to "Y" shaped grouping of equally bright stars. Nice!
2362	07h 17m	-24 52'	V.Good	Very pretty triangular grouping of equally bright dim stars around tau. Very pretty!
2392	07h 25m	+21 01'	V.Good	Central star very bright with direct vision. Planetary seen easily with averted (vision). Nebula "ghostly" with detail suspected. 127x
2403	07h 32m	+65 43'	V.Good	Large, bright elongated nebula with star at center, above & below edge.
2479	07h 54m	-17 35'	V.Good	Large round group of faint stars. Good contrast with field.

HELLO TO ALL FROM ED HALBACH! Everyone was pleasantly suprised at the January meeting when Ed dropped in to say hello. Never at a loss for words, he told about his present activities which includes 1300 variable star observations during November (100 hours of work despite cold and windy conditions in Estes Park, Colorado) and revision and duplication of a new set of variable star charts with 2000 A.D. coordinates for the MAS. He would like to see us begin a variable star program. Ed also told about his two-week stop at the AAVSO headquarters in Cambridge, Mass., to help prepare for their move to a new facility.

Ed Halbach is an MAS founder member and has been with the Society since its beginning in 1933. He and wife Jane are returning from extensive travels with stops in the far East, Alaska, and the U.S.

ALOHA FROM BILL ALBRECHT: Bill is still very active at his observing site near Pahala, Hawaii (Temp. 59°F). He is recording 400 variable stars a month down to latitude -61°. Not bad, considering his pet volcano is heading for its 40th eruption in the last 3 years and keeps things lively with earthquakes!

He is still active in the Mauna Kea AS which now has 65 members and growing owing to Comet Halley fever.

Bill is also a founder member of the MAS and has belonged since its inception in 1933.

THE BOARD OF DIRECTORS will meet Tuesday, January 21, 7:30 P.M., at the home of Treas. Jim Toeller, 407 W. Mall Rd., Milwaukee.

MEMBER'S NIGHT KEYHOLDERS:

Jan. 11	P. Borchart	445-1181	Feb. 8	D. Harris	964-1428
18	W. Collins	255-4169	15	D. Koehler	662-2987
25	B. Ganiere	258-5626	22	N. Nichols	542-2055
Feb. 1	G. Hall	786-8579			

Brian Cieslak (679-9663) is in charge of scheduling special programs and tours at the observatory.

DIRECTORY:
President - Daniel Koehler - 662-2987
Vice President - Dr. Richard Wiesen - 781-4757
Prog. Chairperson - Thomas Renner - 1-392-2799
Secretary - Brian Ganiere - 258-5626
Treasurer - James Toeller - 352-7144
Observatory Director - Gerry Samolyk - 475-9418
Asst. Obs. Director - John Asztalos - 258-5626
FOCAL POINT Editor - LeRoy Simandl - 933-3052
MAS Observatory - 18850 W. Observatory Rd., New Berlin - 542-9071

FEBRUARY FOCAL POINT DEADLINE - WEDNESDAY, FEBRUARY 5.