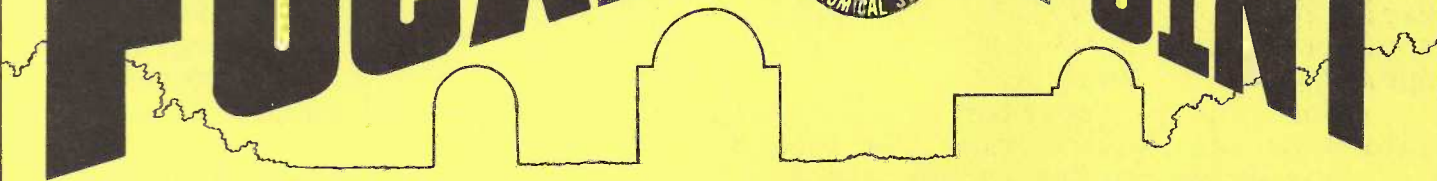



FOCAL POINT



Issued by the
MILWAUKEE ASTRONOMICAL SOCIETY

- ; MARCH 1984 : -

CALENDAR:

- * Wed., Mar. 14 - ALCON '84 Committee meeting, 7:30 P.M.
- * Fri., Mar. 16 - March Program-Meeting, 8 P.M.
- * Wed., Mar. 21 - 26" Telescope meeting, 7:30 P.M. at the home of Gerry Samolyk, 931 S. 76th St.
- Fri., Mar. 23 - Board of Directors meeting, 7:30 P.M.
- * Wed., Apr. 4 - First Wednesday, 7:30 P.M., at the observatory.
- Wed., Apr. 4 - April Focal Point deadline.
- * Sat. Nights - Members nights at the observatory.
- * Please read on for details.

MARCH PROGRAM-MEETING: While the atom is so tiny that a million million billion of them will make a drop of water, it is, nevertheless, a very complex non-solid bit of matter. Despite the fact that they are mostly empty space, they can combine to form people, planets, stars, and galaxies.

Two of the simplest elements composed of atoms are hydrogen and helium, the stuff that makes up many stars. Dr. John Mathis of UW-Madison will discuss evidence based on observations of how most elements are formed from hydrogen and helium in his talk "The Origins of the Atoms."

Dr. Mathis is chairman of the UW-Madison Astronomy Department. He is a popular speaker and has given several informative talks to appreciative MAS audiences in past years.

WHEN: Friday, March 16, 8 P.M.

WHERE: The UW-Milwaukee Physics Bldg., corner of Kenwood and Cramer, room 133.

Guests are welcome. There is ample parking.

ALCON '84: Committee Chair Dan Koehler reports that over 300 information packets have been sent. Two people from Waukegan will introduce a new style of telescope at Astro Mart. Papers are beginning to arrive. Astromedia Corp. of Milwaukee is supplying free advertising in Astronomy magazine.

Please read the ALCON '84 Takes Shape article on page 3 of your Feb. 1984 the Reflector.

The ALCON '84 Committee will meet March 14 at 7:30 P.M. in the Carroll College Union on the corner of East and College Aves. in Waukesha. Meet in the "window" room in the basement.

Please pick up your convention information packet at the General Program-Meeting, if possible, to save 88 cents postage.

GRAZING OCCULTATIONS that will occur in the near future are tabulated below:

<u>DATE</u>	<u>TIME (CST)</u>	<u>MAG.</u>	<u>CUSP</u>	<u>% SUNLIT</u>	<u>RATING</u>
Mar. 12-13	7:53 P.M.	6.3	3.4 ^o S	74	Favorable
Apr. 4-5	6:45 P.M.	8.1	7.1 ^o S	6	Marginal
Apr. 25-26	4:18 A.M.	7.1	4.0 ^o S	20	Favorable

Observatory Director Gerry Samolyk notes that about twelve bits of data were collected during the February 5-6 graze.

The graze occurring the night of March 12-13 will feature a double star and will happen at the southern part of the moon where there is scant graze information. Close double stars "fade out" rather than disappear suddenly. Observers will meet at a site south of Waterford and east of Burlington in Racine County.

Grazing occultations occur when the moon passes so close to a star that the moon "grazes" the star, causing the viewer to see the star disappear behind the moon's mountains and reappear in its valleys.

The observing technique can be quickly learned on site. The observer stations his 'scope at an assigned breakout connection somewhere along a two-mile long cable. At the predicted time, he/she makes observations to note if the star does not disappear, peek-a-boos by alternately disappearing or reappearing, or remains hidden. The event is recorded by operating a push button which activates a pen at a centrally located recorder. Analysis of a graph shows the lunar topography at the point of contact.

A 6" or larger reflector or 2.4" refractor is adequate for viewing. Ten-inch telescopes may be borrowed from the observatory. Bring an AM pocket radio, a flashlight, a pencil, and a notebook or clipboard. A short wave radio is useful for time signals. The event can also be recorded on a tape recorder by using a "cricket" clicker.

Call John Asztalos at 258-5626 or Gerry Samolyk at 475-9418 after 5:30 P.M. for details, go-nogo information, or if you need a ride.

IF YOU'RE LOOKING FOR SOMETHING TO DO, you might want to join one or more of the new observing programs:

1. The International Halley's Comet Watch program coordinated by Brian Cieslak (679-9663).
2. Asteroid Occultation program. Needs a volunteer to take charge.
3. "M" or Messier objects search. Do the 107 object Messier Catalog to obtain experience to find the "H" or Herschel objects.
4. "H" or Herschel object search. Approximately 4,000 objects. Will start in fall under Dan Koehler (662-2987). Please see the Herschel Club article on page 6 of the February, 1984 the Reflector.

Our 10" and 12" telescopes will be used until the 26" 'scope is ready. Or use your own instrument.

LIGHT POLLUTION: Action to provide dark skies for Halley's comet is underway (please read the Dark Skies for Comet Halley Journal which you recently received). The Milwaukee Astronomical Society has been working for years to reduce light pollution in the area of the observatory. We don't ask that lights be turned off (nice if some were), but that they be shielded. Shielding is inexpensive and provides better lighting.

Assistant Director John Asztalos talked with some of the observatory's neighbors about shielding yard lights. He also suggested speaking with the Mayor of New Berlin about getting Wisconsin Electric Power Company to shield lights within a mile radius of the observatory.

Let's thank him and hope he has a lot of cooperation.

MEET STEVEN RYAN of Wauwatosa. He is our newest member of the Milwaukee Astronomical Society.

TSP '84: The Southwest Region of the Astronomical League will proudly present its Sixth Annual Texas Star Party deep in the heart of Texas on May 30 through June 3. The site is Fort Davis, Texas, a remote mountain village with an ideal sky and location for viewing and astrophotography. Fort Davis is located in the mountains about 165 miles southeast of El Paso.

Featured will be a special observing session through McDonald Observatory's 107-inch reflector, tours, papers, and speakers, one of whom is MAS member Richard Berry, editor of Astronomy magazine. There will also be a forum for amateur telescope makers, seminars for photo-electric photometry and computer applications. Photogs can expect same-day film processing service. And there will be viewing through the new 16" Edmund Halley Observatory right on site.

Lodging and food are available as well as recreational activities.

For complete information please contact Carol N. Rodgers, Registrar, 128 N. Commerce, Burleson, Tx. 76028 (817-295-1026) or call your Focal Point editor at 933-3052. Current prices are \$16/single and \$6.00/each additional family member. Rates will increase after March 17.

PLEASE TAKE THE TIME to read your February, 1984 copy of the Reflector. It contains a great deal of general information, including a big article on ALCON '84. The Dark Skies for Comet Halley Journal is must reading and should be saved as a timetable.

FOR SALE: Yellow-green filter, \$400; 2x Barlow, \$8; mirror diagonals, \$8; eyepiece, 8mm RKe, \$20; eyepiece, 15mm RKe, \$20; 35mm camera with Barlow, \$40. All items will fit in an 1 $\frac{1}{4}$ " opening.

Please call Don at 545-2313.

FOR SALE: Celestron 5" 750mm f/6 telephoto lens, \$350 or best offer.

Please call John Wiesen at 781-4757.

OBSERVATORY NEWS:

IN GENERAL: Now that the sun seems to be winning at tug-of-war with Ol' Man Winter, the ol' slow poke will soon be packing up his icicles and snow to summer at the north pole. Which means maintenance and improvements at the observatory will soon begin. ALCON '84 will occur in only 4 $\frac{1}{2}$ months and it would be a big plus if everything looked nice. Directors Gerry Samolyk and John Asztalos will make up lists of things to do. Most of the work will be painting and maintenance. We need volunteer forepersons to oversee each project or program and others to work with them. If everyone would pledge, say, at least 10 hours, the job would get done in a hurry. You can come out Saturdays, Sundays, evenings, or during the week. Call Gerry at 475-9418 or John at 258-5626. We could also use the woman's touch, so ladies are also welcome.

NOTE: Owing to soft ground, please do not drive past the upper parking lot chain.

26" TELESCOPE: The large mirror cell plates are finished. Other small parts are in the works. A gearbox proposal is due with an estimated cost of \$750. Gerry Samolyk is stressing that the new building should soon be wired to clear the building permit.

FIRST WEDNESDAY NIGHTS will resume Wednesday, April 4, 7:30 P.M. at the observatory, weather permitting.

These events occur on the first Wednesday of each month. Their purpose is to acquaint MAS members, especially the recent joiners and youngsters, with observatory equipment, observing techniques, new programs, or to use the library. Some of the older, experienced members will be close by to answer questions.

The observatory is located west of New Berlin, on Observatory Road, 1 mile west of the Calhoun (KX) Road.

MEMBER'S NIGHT KEYHOLDERS:

Mar. 10	P. Borchardt	445-1181	Apr. 7	G. Hall	786-8579
17	R. Berry	442-4267	14	C. Hesselstine	482-4515
24	W. Collins	255-4169	21	P. Murn	464-1539
31	B. Ganiere	425-1384			

Saturday night is member's night at the observatory. All members are invited to come out to observe, learn how to use the equipment available, or just chat. Call the keyholder the Fri. before his night - cancel Sat. if necessary. Keyholder should report anyway. He will also oversee tours during the week ending with his assigned night. Mr. J. Toeller (352-7144) will act on requests.

- : FULL SAP MOON, SATURDAY, MARCH 17 : -

DIRECTORY:

President - Peter Smitka - 785-0926
Vice President & Program Chairwoman - Eileen Korenic - 541-3999
Secretary - Brian Ganiere - 425-1384
Treasurer - James Toeller - 352-7144
Observatory Director - Gerry Samolyk - 475-9418
Asst. Obs. Director - John Asztalos - 258-5626
ALCON '84 Chairperson - Dan Koehler (662-2987), Eileen Korenic (541-3999)
FOCAL POINT Editor - LeRoy Simandl - 933-3052
MAS Observatory - 18850 W. Observatory Rd., New Berlin - 542-9071

APRIL FOCAL POINT DEADLINE - WEDNESDAY, APRIL 4, 1984.