



Issued by the

*Milwaukee Astronomical Society*

December 1987

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**December Program-Meeting**

Last December Pete Smitka made an offer that many refused! What happened? You'll find out at the December meeting.

Early this year, Pete offered his time and talent to teach construction of Dobsonian telescopes. Seven members accepted; seven telescopes ranging from 6" to 12.5" were produced. Two more were made for general membership use.

Pete will show and tell how these telescopes were produced in his slide-illustrated talk, "Telescopes." A number of them made in class will be on display.

WHEN? Friday, December 18, 8:00 P.M.

WHERE? The Child & Adolescent Treatment Center auditorium  
 9501 W. Watertown Plank Road, Wauwatosa.

The site may be reached by the Route 71 bus. There is ample, well lit, free parking. Guests are welcome.

**Loaner Scopes Are Ready!**

On a related note to this month's general meeting, the two 8" Dobsonian loaner "APOLLO" telescopes are now complete and available for general use away from the observatory. They will accept either 1.25" or 2" eyepieces.

One is located on the north side, at the home of:

Matt McNeeley  
 8200 N. Cedarburg Road  
 Brown Deer (354-5307)

The south side location of the other is at the home of:

Richard Sterle  
 8115 W, Waterford Avenue  
 Greenfield (543-7459)

No deposit or rental fee is required, but an agreement to cover loss or damage must be signed. The loan period is from 14 - 21 days with an extension possible.

**New Members**

Noel Hansen, Brown Deer; and Tim Kralkow, Hartland were introduced at the November meeting.

**Meteor Showers**

**Geminids** - December 13-14. Peak at 1 AM. 50-80 per hour. Look south.

**Ursids** - December 22-23. Peak at 4 AM. 10-15 per hour. Look north.

**Quadrantids** - January 4-5. Peak at 4 AM. 40-150 per hour. Look north.

Peak dates may vary a day or two before or after maximum..

**Calendar of Events**

- Monday, December 14 - Board Meeting 7:30 P.M.
- Friday, December 18 - December Program-Meeting.
- Tuesday, December 22 - Winter begins at 3:46 AM CST.
- Wednesday, December 23 - "**Focal Point**" Deadline.
- Sunday, January 3 - Full Wolf Moon.
- Wednesday, January 6 - First Wednesday, 7:30 PM at the observatory.
- Saturdays - Observatory maintenance and improvements. Help wanted. Call 475-9418 or 258-5626.
- Saturday Nights - Member's night at the observatory.

## Gift Suggestions

Have you considered giving an item for enjoying astronomy? The astronomy magazines are full of fine, quality things. How about giving a membership to the *Milwaukee Astronomical Society*? It will last at least a year and it keeps giving! Neat, well made sweat shirts are also available. Call 352-7144 about the last two items.

## For Sale

Telescope mirror, 12.5" diameter, f5, never used. Make offer.

(258-5626)

Celestron Deluxe binoculars, 20 x 80, with case, like new. Also very sturdy Bogen liquid bearing tripod, adjustable for zenith viewing. Both items complete for \$350.

Rick Moskow  
(691-1088)

Steiner 15 x 80 Observer binoculars. Superb German optics, light weight, armor coated, waterproof, mint condition. Cost over \$500 new, will sell for \$350 or trade for a rich field telescope.

Mike Weisner  
1526 Chestnut Lane  
Waukesha, Wisc. 53186  
(547-7658) after 6 P.M.

Coulter mirror, 10", f5.6. Coulter diagonal, 2.14". Novak Research Quality holder. Asking \$125 or offer.

Dennis Horvath  
(421-2787) after 5 P.M.

## Observatory News

Again, please keep the washroom doors closed to conserve power. The 26" Zemlock telescope dome needs sealing. Remember to make sure the slits on all domes are closed and secure before leaving. Some years ago, snow had to be shoveled out of the "A" dome because the slit was not closed properly!

## Season's Greetings

The officers and directors of the Milwaukee Astronomical Society wish everyone of all faiths a pleasant holiday season and good fortune for the New Year.

*Peace!*

## M.A.S. for Dark Skies

Songwriter Irving Berlin wrote a popular, happy song about blue skies. Astronomers, amateur as well as professional, would be elated over dark skies.

The sunlit side of our earth appears uninhabited as seen from space at a distance of several hundred miles. From the same distance, inhabited land areas on the dark side are prominently speckled and streaked with manufactured light. Certainly some of it is necessary, a lot of it isn't. Why are empty parking lots, store windows, advertising signs, and athletic fields, for example, lit all night? Are yard lights really necessary?

The existence of one of the world's finest scientific institutions is being threatened. Mt. Palomar, home of the 200" Hale reflecting telescope, may be forced to close as Mt. Wilson was forced to do last year. Kitt Peak is also in jeopardy.

The pen is still a mighty weapon. Please re-read page 1 of your September "Northern Lights" newsletter and write to one or all of the people listed in the article. Members present at the November M.A.S. general meeting signed copies of a petition, drafted by M.A.S. president Dan Koehler, that will be forwarded to authorities in California. At least take time to write a post card. If you no longer have your copy, here are some addresses:

Mr. Thomas King  
Palomar Dark Sky Defense  
358 Manzanita Drive  
P.O. Box 1530  
Julian, California 92036

San Diego County Board of Supervisors  
1600 Pacific Highway  
San Diego, California 92101  
(Mt. Palomar is in Supervisor  
John McDonald's district.)

Astronomy is a vital, truly necessary science and a great hobby. Let's do what we can do to foster it. The situation is gradually becoming critical since telescope installations can't be placed just anywhere!

## Library News by Sally Waraczynski

June Regis and I are pleased to report that use of the library is steadily increasing. If there is any way we can assist you to find material on a particular subject, please do not hesitate to call. Meanwhile, here are the latest additions to our collection:

### Variable Stars - M. Petit.

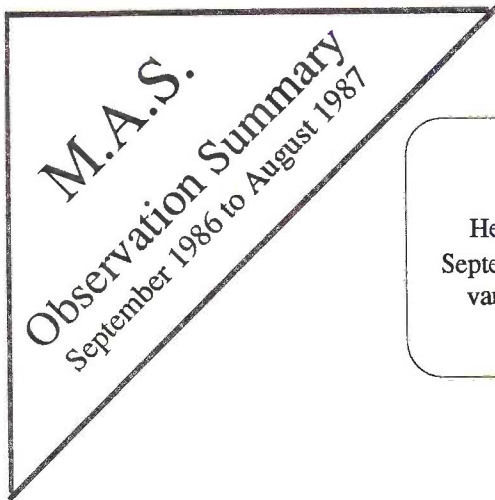
During the time a star is on the main sequence, its gravitational and radiation pressure are in equilibrium. Before and after that period of stability, however, the star undergoes changes which are detectable in its spectrum or in variations in luminosity. Continuous, long-term observation of variables by amateurs provides data of great value to professionals who study stellar evolution but haven't the time to spend at a telescope in that pursuit.

Petit's book goes into the many classes of variable stars and other objects and gives a background on the probable mechanisms causing a type of variability; but it concentrates on the observational parameters that distinguish each sub-group. This is not a "how to" manual but rather a source book for information on particular types of variables.

### Uranometria 2000.0 Volume 1 The Northern Hemisphere to minus 6 degrees - Tirion, Rappaport, and Lovi. (in the chart area, for reference only)

In response to the availability of larger apertures for amateur use, the computer technology to help do the job quickly and accurately, and Wil Tirion's cartographic and artistic expertise; the publishers are pleased to bring you... another atlas. Well, not just another atlas - this one will take you down to magnitude 9.5; it is very sturdily constructed; labeling includes dark nebulae, quasars, radio and x-ray sources; and handy margin notes guide you to the next chart.

Volume 1 contains 259 charts - one per page (no foldouts). The scale is 1.85 cm. to 1 degree of declination. There is a diagrammatic index. Projections are highly distortion free. There is even a precession (from 1950.0) reference mark in the corners of each chart. To my thinking, however, the outstanding feature of this new atlas is its 27 page history of uranography or sky-depicting. It is absolutely fascinating reading!



We're Not Doing Nothing

Here is an observation summary for the *Milwaukee Astronomical Society* from September 1986 through August 1987 as compiled by Gerry Samolyk. It contains the various observations made by members of M.A.S. and goes to show that amateur astronomers can make tangible contributions to the field.

**Lunar Occultations** - Our lunar occultation program has been enhanced this year by the March passage of the Moon through M-45. These events will continue through the next few years. The following observers participated in this program.

<u>NAME</u>	<u>REG. OCCS</u>	<u>M45 OCCS.</u>	<u>TOTAL</u>
J. Asztalos	-	7	7
B. Borchardt	1	14	15
P. Hess	-	3	3
C. Hesseltine	-	5	5
D. Koehler	-	18	18
C. Laskowski	-	5	5
N. Nichols	-	6	6
F. Roldan	22	11	33
T. Ross	3	-	3
G. Samolyk	9	26	35
P. Smitka	-	24	24
V. Tangney	3	11	14
K. Waraczynski	-	7	7
S. Waraczynski	31	10	41
R. Wiesen	-	9	9
=====			
GRAND TOTALS	69	156	225

One graze expedition was mounted on June 14, 1987. The event was at a low altitude on a 91% sunlit moon. Although no useful timings were obtained, a few observer comments are worthy of note: "That was the faintest 5.0 mag star I've ever seen"; "A prayerful observing posture will not guarantee success."

**Meteors** - P. Hess recorded 15 photos of the suspected Upsilon PEG meteor radiant were obtained and reported. The purpose of this project is to help determine if this shower is real, and if so to locate the radiant. No shower members were noted in these photos.

**Asteroid Occultations of Stars** - This is a relatively young program to improve our knowledge of the orbits and sizes of asteroids. The uncertainty of the path of these orbits makes it impossible to accurately predict the ground path of one of these events, so negative results can be just as important as positive ones. Last year, the following observers made contributions to this project observing five events: J. Asztalos, L. Keith, T. Renner, G. Samolyk, V. Tangney, and S. Waraczynski. One positive result was observed by G. Samolyk on 1-24-87, a possible 14 second contact on #471 Papagena.

**Planets** - T. Ross continues as our active Jupiter observer. This year he reported 75 meridian timings of features in the atmosphere of the planet. Four satellite timings were also reported, see December "Sky & Telescope" page 634 for information about these events.

**Variable Stars** - Two observers made observations of long period variables, J. Pfannerstill made 9 observations, and V. Tangney made 3. G. Samolyk observed 196 minima of Eclipsing Binary stars and 14 maxima of RR LYR stars, for a total of 3126 observations.

## Congratulations!

M.A.S. members Jim and Dorothy Kube received Messier object certificates at the November general meeting. The awards were presented by Lee Keith who has much expertise in locating Messier and Herschel objects, and, in fact, heads programs for this purpose.

There are 107 Messier objects. One must find at least 70 to be eligible for a certificate. They are fairly distributed throughout the sky. A 6" reflector is adequate. (Messier worked with a 2" telescope!) According to "Astronomy" magazine, the region from 2hrs. R.A. to 8hrs. R.A. is best in winter, 8 to 14hrs. in spring, 14 to 20hrs. in summer, and 20 to 2hrs. in fall. Fortunately, spring and summer are best. A "Messier Club Observer's Handbook" may be obtained by sending an 8.5" x 11" SASE with 66 cents postage to:

Lee Keith  
Herschel / Messier Club Coordinator  
1239 B East Randolph Court  
Milwaukee, Wisc. 53212

(The book is a gold mine of information.)

The Kubes may now start on the challenging 400 object Herschel object list! Only a few observers have completed it.

## Advertise!

MAS members may advertise in the "Focal Point" if an astronomical item is for sale or needed. There is no charge.

Send your article(s) or ad(s) to:

LeRoy Simandl  
4201 W. Highland Blvd.  
Milwaukee, Wisconsin 53208  
(933-3052)

## Gain Immortality - In Print!

The M.A.S. recently received a letter from Mike Porcellino of Chicago. Mike is putting together material for a book on "Observational Astronomy for the Beginner." The book is aimed at a person receiving his/her first telescope; either a 2 - 3 inch refractor or a 4 to 6 inch reflector.

Mike wants to tap the experience and expertise of the M.A.S. members. He wants photos or drawings of objects, "from the Sun to 3C273", made with amateur instruments. If he uses your material, he will give you credit!

He also wants your comments on these specific questions:

- \* How do you train yourself to "see"?
- \* How can an amateur with a small instrument make any contribution to astronomy or science?
- \* What are your favorite objects for the small telescope?
- \* What hints do you have for observing under city lights and smog?

Send your written comments, photos, or drawings to Lee Keith, 1239 B East Randolph Court, Milwaukee 53212 and I will forward them to Mr. Porcellino. Be sure to put all photo information, your name, the objects name(s), exposure, film used, exposure and f/stop, etc. **ON THE BACK** of the photo with a **FELT TIP** pen so the marks will not show through. You wouldn't want to mar your link with immortality would you?

## Members Night Keyholders

Dec. 12	G. Hall	786-8579		Jan. 2	D. Koehler	662-2987
Dec. 19	D. Harris	964-1428		Jan. 9	N. Nichols	542-2055
Dec. 26	L. Keith	961-8752		Jan. 16	A. Penikis	354-9708

## Directory

President .....	Dan Koehler .....	662-2987
Vice President .....	Dr. R. Wiesen .....	781-4757
Secretary .....	Ms. K. Wesener .....	961-8752
Treasurer .....	J. Toeller .....	352-7144
Observatory Director .....	G. Samolyk .....	475-9418
Assistant Observatory Director .....	J. Asztalos .....	258-5626
Librarian .....	Mrs. S. Waraczynski .....	312-0918
Assistant Librarian .....	Mrs. J. Regis .....	962-0896
Program Chairman .....	M. McNeeley .....	354-5347
FOCAL POINT Editor .....	L. Simandl .....	933-3052
	4201 W. Highland Blvd. Milwaukee, Wisconsin 53208	
MAS Observatory .....	18850 W. Observatory Rd. New Berlin, Wisconsin	542-9071

# \* This space for rent \*

We now seem to have extra space in the "Focal Point" with the new format. If you have an interesting article or photograph that you would like to see in the newsletter, please send it in and help fill our pages.