

FOCAL POINT



Newsletter for the

Milwaukee Astronomical Society

November 1990

From The Editor

It's been a year since Tom and I assumed responsibility for the Focal Point. We are pleased to have had the opportunity to serve our Society and will continue to be responsive to your concerns. We enjoyed—and were enlightened by—the many fine articles and other news items sent in. As we look ahead we ask for your continued support and input. Only then can the Focal Point truly serve as a network link to its many members.

— Matthew McNeeley

2nd NCRAL Meeting

Tuesday, November 13, 7:30 pm at Carroll College. Chairperson Dan Koehler will hold the 2nd meeting for those who expressed interest in organizing for the 1992 Regional Convention that will be sponsored by MAS. The meeting will be held on campus in the Student Center located at East Avenue and College Avenue in Waukesha. If any questions, call Dan at 662-2987.

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November Program/Meeting

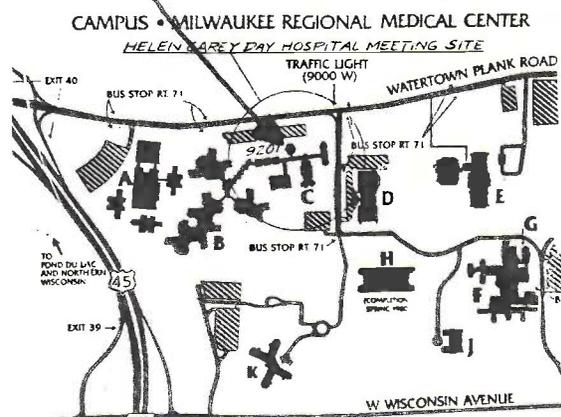
Our speaker for Friday, November 16 will be Mr. Alan Dyer, Associated Editor of Astronomy Magazine. Mr Dyer will describe the exiting new developments in amateur astronomy telescopes, equipment, and related items such as computer software.

Mr. Dyer is truly an expert in this topic as is evidenced by recent articles in Astronomy, and his presentation is sure to entertain as well as inform. Just in time to stimulate a few ideas for your Christmas wish-list! Join us for a most interesting talk.

All members and guests are invited to attend. Meeting held at **8pm sharp** at the Helen Carey Day Hospital Building, 9201 W. Watertown Plank Road. Entrance open from 7:30 to 8:15 pm only.

— Thomas Renner

ENTER THROUGH A-FRAME



Summer Calender of Events

- November 12, Monday MAS Board Meeting
7:30 at the Richard Wiesen's House
 - November 16, Friday 8:00 pm Program-Meeting
 - November 17, Saturday New Moon
 - November 23, Friday Deadline for Dec. Focal Point
 - November 27, Tuesday Mars at opposition
 - December 5, Wednesday First Wednesday Meeting
7:30 at the Observatory
- Saturday Nights—Member night at Observatory—Call key holder

Library News

You might need a calendar to count the shopping days until Christmas, but here is a cordless, no-battery way to keep track of the hours: Sundials: How to Know, Use and Make Them by R. Newton and Margaret Mayall. They come in an amazing variety of designs from the first caveman's stick in the ground to the acre-large monster of Jaipur, India to the elegant sun clock at the Kitt Peak visitor's center. In this book you not only learn the developmental history of dialing but also are given actual instructions for building one of your own. (anyone else out there think a sundial would add an air of distinction to the Observatory grounds?)

On his way back to Colorado from AstroFest, John Asztalos stopped in at the Sept. 21 Open House and delivered six award winning slides of Mars from the 1988 opposition. His series from July 23-Nov. 9 appeared in Astronomy but the colored copies given us are far superior to the magazine reproductions. Thanks, John.

Thanks also to Barb Swiontek who has donated three more books from her library to ours:

Astronomy From Space (1983) is an overview which includes discoveries relating to comparative geology of the planets, the sun and its magnetic sphere of influence, and the new universe revealed by high energy wave-length observation.

The Moment of Creation, Trefil (1983) is a non-mathematical summary of the physics needed to address the earliest state of the universe and a philosophical consideration of the questions that remain unanswered.

Colours of the Stars, David Malin and Paul Murdin (1984). Beautifully illustrated, as you would expect, this book "shows how colour is related to objects in astronomy, how the colours of stars, nebulae and galaxies can be seen and photographed, and how colour and photography enhance our astronomical understanding."

For those ready to take another step in their understanding or study of variable stars, with an emphasis on photoelectric photometry, there is Getting the Measure of Stars, Cooper and Walker (1989). Please see the review by David Crawford in the November 1990 issue of Sky & Telescope.

- Sally Waraczynski

Night (de) Light

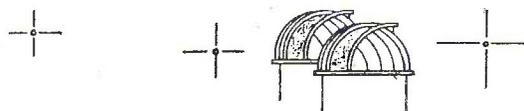
A few short years ago as a new stargazer, I was scanning the sky with 7 X 50 binoculars (westward from M31) and I happened upon a lovely group of stars stunning in the shape of a nearly perfect "V". With the "V" open toward the pole star, it was as if to embrace this slice of dark, autumn sky. I learned that these stars comprise 16,17,19, 20 in Andromeda.

Although the "V" can be seen as designated "digits" in the sky, I'm more taken with the historic, heavenly appellation from the Age of Enlightenment, namely "Gloria Frederika", glory to Fredrick.

Named after the exploits and successes of Fredrick the Great of Prussia, it is this interplay of sky beauty with seeming timelessness and earthy concerns that intrigues me. My hope is that their temporal endeavors were worthy of cosmic codification. To them, the "V" was a herald of hope and victory; to us it is a heavenly, glorious "V". I wonder what you see when gazing at "Glory Fredrika."

- Matthew McNeeley

From the Past



DOUBLE DOME

- 20 years ago

New Observing Programs

Two new programs will permit Society members greater use of Observatory facilities. A member-only open house will take place on Monday nights; and in the planning stage, a program to invite members to set up their equipment on the Observatory grounds any night they choose. A key may be rented that will unlock the parking lot chain, turn off the yard light and supply power. Details will appear in a future issue.

- 10 years ago.

Our Joy was Short Lived!

The expressway lights are back on and so is some of the light pollution. Some members claim that when they lights were out they saw naked eye objects they haven't seen in years! West Allis is converting 4600 units to low scatter, energy conserving low pressure sodium lamps.

Voyager 1 will fly by Saturn on Nov. 12. Don't miss the Channel 10 special.

New Members

The MAS Board recently announced the addition of the following new members. Let's all help them feel welcome:

Harold B. Biller - Milwaukee

Fred Haggerty & Betty Jo, Matthew and Nathan - Waukesha

Alan Dyer - Hartland

James Hervat - Milwaukee

Don & Fran Reinke - Waukesha

Susan M. Berce - New Berlin

Shane Schipper - Waukesha

Kathryn S. Korstange - Shorewood

★

**Ask
 The
 Astronomer**



Why is the first variable star in a constellation begin with an "R" as in R Leonis and not with an "A"?

- *Fading Fast*

Dear Fading:

Naming conventions for many things in astronomy are shrouded in antiquity and convention and variable star names are no exception. Here's the scoop:

The letters A-Q were used by Johann Bayer in the mid 1600's in his famous atlas, Uranomtria (the original). Though Bayer's letters were not generally used, they were popular in the mid 1800's when the German astronomer Argelander started naming variables.

Once a star's type of variability (another long story) is confirmed, it's given a designation based on the sequence of discovery. The first gets an "R", the second an "S", on up to "Z". Now the fun begins! Around 1880, the letters were used up so they were doubled up to give RR, RS . . . RZ then SS, ST. . . SZ, etc. up to the 54th star, ZZ. With discoveries growing rapidly, additional designations continued with AA, AB, etc., then BB etc. up to QZ. This brought the number to 334 ('J' was omitted) for each of the 88 constellations. For constellations in the Milky Way, even this proved inadequate. After letters, they are designated simply by V335, V336, etc. in order as they are confirmed.

The record holders are Cygnus, Aquila and Orion with V1000+, Ophiuchus with V2000+ and the champion, Sagittarius with a mind numbing V4000+! The poorest constellation is Caelum the Chisel in the Southern Hemisphere where the last variable has only a Z. Stars with Greek letters or other designations keep them. Modern catalogs contain over 28,000 known variables with another 12,000-14,000 suspected!

Special Thanks . . .

. . . to Paul Borchardt for organizing the Greenbush Campout. While the weather was far from perfect, those in attendance did enjoy the limited viewing. Staying warm was no problem as we huddled around the campfire and shared star and other stories waiting for the sky to clear.

. . . to Tom Renner for the Annual Banquet. Our first visit to the Old Town Restaurant was well received by our members as the setting, the songs and the speaker - Ms. Carolyn Petersen - all combined for a most memorable evening. The food was superb too.

. . . to Nick Nichols, who, for most of the 1980's, plowed the Observatory parking lot free of charge. Our dues are kept low because the construction and maintenance of our observatory is done by members like Nick who donate their time and energies.

Help Wanted: Snow Plowing

Since Nick is no longer in a position to provide this service, we are looking for a member who can plow the blacktop portion of the drive this winter. Call Gerry Samolyk at 529-9051 if you can help.

Wanted

1-1/4" filter wanted. Deep Sky or Daystar. Call Rick Moscow 786-2250 days.

Winter Star Party

The Southern Cross Astronomical Society is again hosting the 1991 Winter Star Party located 30 miles from Key West, Florida. on February 14-18, 1991.

The event features warm weather, great speakers and the southernmost dark skies in the Continental US. Commercial vendors are allowed for the first time and the space is enlarged to accommodate an expected 600 amateur astronomers. Get full details and a reservation form by contacting Jim Kube at 453-8858.

Saturday Nite Keyholders

Nov. 10	Greg Cieslak	744-5703
Nov. 17	Brian Ganier	961-8745 272-4649
Nov. 24	Chris Hesseltine	482-4515
Dec. 1	Lee Keith	961-8752
Dec. 8	Dan Koehler	662-2987
Dec. 15	John Pfannerstill	475-6494
Dec. 22	F. Roldan	608-787-1730
Dec. 29	Terry Ross	784-2093

MAS Astr. Software Library

We have a substantial library of public domain/shareware astronomical software for IBM-PC and compatibles. Titles are too numerous to list, but include:

SAC Database of Deep Sky objects. Reports can be generated with any and all of the 1000's of objects. Select by position, type, brightness, etc. (693K)

Planets allows you an excellent way of calculating information on the planets. A highlight of the package is an animated solar system that even shows Halley's Comet! (300K)

SkyGlobe V2.0 is the ultimate PC planetarium. Shows stars to 7th magnitude. Constellation lines and labels, star labels, planets, direction and zoom magnification are all adjustable with just one key! Highly recommended! (193K)

AAVSO software allows you to record and report variable star observations to AAVSO via floppy instead of a paper report. (190K)

Deep Space star chart generator goes down to 8th magnitude. (694K)

To get this software or to contribute some, send a 5.25"/3.5" floppy with return postage to Lee Keith, 1239B E. Randolph Ct. Milwaukee, WI 53212. Or call 961-8752

Observation Summary for Fiscal Year 1990

Occultations - We continue to bat 1.000 on our Pleiades occultations by the Moon. Of particular value was the passage of August 14, 1990 when most of the events timed were reappearances. A summary listing the observers involved follows:

	Std. Occs.	M45 Occs.	Total	Graze Exped.		Std. Occs.	M45 Occs.	Total	Graze Exped.
C. Andrist	-	14	14	-	B. Manske (1)	-	-	-	1
J. Asztalos	-	7	7	1	J. Pope (2)	-	-	-	1
W. Berner	-	26	26	1	T. Renner	-	15	15	-
P. Borchardt	14	49	63	2	F. Roldan	-	1	1	1
P. Hess	-	9	9	-	G. Samolyk	16	64	80	3
C. Hesseltine	-	45	45	3	L. Silke	-	12	12	-
L. Keith	-	29	29	1	V. Tagney	-	36	36	1
D. Koehler	-	15	15	1	J. Toeller	-	26	26	-
D. Kriege	-	-	-	1	K. Waraczynski	-	37	37	-
D. Kube	-	34	34	-	S. Waraczynski	72	53	125	2
J. Kube	1	32	33	-	K. Wesner	-	39	39	-
S. Lascowski	-	39	39	3	R. Wiesen	-	8	8	1

Totals 104 589 693 23

(1) Madison (2) Appleton

The graze cable was laid three times, however, minimal data was obtained. We have had an increased involvement with observers from outside MAS.

Oct 22: 13 observers. Difficult to observe due to the limb of the moon being brighter than expected. Enough contacts were obtained to show no shift of the moon or star. Observers were treated to a fine aurora before the event.

Dec 4: 7 observers. Clouded out 10 minutes before graze time.

Apr 15: 3 observers. Only three contacts obtained as clouds rolled in at graze time.

Asteroids - One occultation attempt was reported by Samolyk, no positive results were obtained.

Jupiter - This was a great year to observe Jupiter since the apparition began with the vanishing of the SEB. T. Ross made 497 central meridian timings of various features last year.

Variable Stars - The following observations were made by Samolyk: Eclipsing Binary minima, 116; RR Lyr Maxima, 1; Long period variables (for Hipparcos Project), 576. Total observations, 2458. There were long period variable observations made by other observers but no totals have been received.

- Gerry Samolyk

Observing Clubs

Does it get dark too early for baseball this fall? Join an Observing Club, just for fun!

It's a great way to spend an evening. As a reminder to observers, the MAS offers: For Deep Sky observing, the Messier Club Observer's Handbook; or for double stars, the Burnham Club Observer's Handbook. Send an 8.5" x 11" SASE with \$1 postage to: Lee Keith, MAS Observing Club Coordinator, 1239B E. Randolph Ct., Milwaukee, WI 53212. They contain a wealth of information on observing techniques and hints, as well as detailed maps to find the more elusive objects. Best of all, they're FREE! After observing and recording the objects in the list, you will receive a certificate from the Astronomical League.

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