



The Newsletter of the Milwaukee Astronomical Society

March-April 2002

Presidents Corner

By Scott Jamieson

The incredibly mild winter has allowed many of us to continue to observe all winter and it's been a fun time. The hill has been very active on the weekends with the most active telescopes being the LX200 and B-scope. One thing is becoming very apparent, the computer equipment does not take well to being in observatory conditions and we will be designing and building some insulated enclosures to help to keep condensation and bugs out and maintain more acceptable temperatures. We have had to replace two more computers this year and would like to make them more reliable. In one respect, we had to replace them eventually because the files generated by our cameras are simply too large to transport by floppy disk unless you just have a few, so all of the new computers have CD writers.

One of the more active users of the LX200/ST9 combination in Tangney Observatory has been Tom Schmidtkuntz. He has written a simple startup procedure for this equipment that we will be posting at the control room to help those just getting started. Tom has also generated a very nice set of observing targets for each season of the year that will be of good use to both imagers and visual observers. Copies of these will also be posted in the control room.

A donated printer will soon make it possible for anyone using the Tangney Observatory to print out copies of the images they take to take home. We do ask that the images be printed in negative only so that the ink cartridges last a while.

Important News - There has been considerable discussion over the years about how long the MAS will be able to stay on the hill because of increasing light pollution from all of the development taking place in New Berlin and surrounding areas. The fantastic cameras we have had made some pretty spectacular imaging possible from the hill, but the sky has to be very clear and clean to be able to get good results visually. I have been dedicated to staying in New Berlin as long as possible, but I now believe it is important to know what our options are before we wait too late and find that there are no alternatives within an acceptable radius of Milwaukee. These discussions have been informal until now but your board of directors has directed me to start researching our alternatives for a new site with much darker skies. Preliminary research has indicated that the best areas are to the northwest, near Holly Hill, and to the southwest near Eagle. General development seems to be stronger toward the northwest so, at this time we will be researching the area around the Southern unit of the Kettle Moraine.

Another aspect of this issue is the cost of acquiring new land. The resale value of the portion of the hill that the club now owns may not be able to pay for a new site and will not cover the extra cost of demolition to make the land saleable. (The central acre is owned by Carroll College and on permanent loan to the MAS only as long as astronomical research is done there.)

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2 Therefore, for the immediate future, we will concentrate on trying to find some state or county forest land that is well protected in the future but that we could possibly get a free or very low cost long term lease. This has been done successfully by other clubs in more remote areas. This will involve some traveling and research by several members over the next year. One of our founder members, Bill Albrecht, has generously donated \$1000 to help in the search towards a site that will become the home of the MAS for the next 75 years.

Our current thought is that a remote observing site used occasionally and also keeping the current site for convenience is not practical long term because the needed equipment would never be in the right place. The maintenance is bad enough on our current site and would be prohibitive with two sites. We would still have a meeting place in town such as the UWM or other site so that people who primarily attend the meetings but don't observe would not be inconvenienced at all. Many people have told me over the years that that don't use the hill for their own visual observing because there are much better sites elsewhere.

I realize that this will be a very controversial activity but we must face up to the issue sooner or later and much later may be too late. Please give me your positive or negative input directly at SJamie16@aol.com or at the coming meetings.

Elections Coming Up -

Don't forget that the elections for the board of directors and officers of the MAS are coming up in May. We have four director positions becoming available, with two of the incumbents permitted to run for re-election. All officer positions are also open to new candidates, including the President. Any member can run for the board or for an officer position, but we do ask that you demonstrate your desire to become involved in the club continuously and that you can be available for meetings. Gerry Samolyk is the contact for director candidates and I am the contact for officer candidates.

Messier Hunt to take place in March -

The annual attempt to hold a Messier Hunt will take place the night of Saturday, March 15-16 on the hill with a cloud /rain date the following Saturday. This is always a lot of fun with usually 12 to 15 members coming out for at least part of the night. Come out and try your hand and hunting down all of the famous faint fuzzies in one night! It is a severe challenge to get them all, so in the spirit of fun instead of work we encourage you to make up your own list and just spend a pleasant evening with friends. I will help with identification by having my own LX200 available, but I intend to search with one of the porta-scopes.

Messier Certificate to be Awarded in April -

The April meeting will give me a chance to do

something I have never got to do since I have been President of the MAS. Assuming it gets here in time, I will be awarding a Messier Certificate to Steve Diesso for finding and identifying all of the Messier objects. This is quite an accomplishment under most conditions, but Steve managed to do most of it from the MAS hill with a 6 inch telescope relying completely on star-hopping!!!

I have never been able to complete mine and greatly respect anyone that can do it. As Steve would tell you , it is a great way to learn the sky. Please join me in saying:

CONGRATULATIONS STEVE!!!!!!



Last Messier object viewed by Steve Diesso's Messier list. It had taken 2-1/2 years to complete his journey.

Date 12/9/01
B-scope ST-9

180 second exposure (6 30 sec. track and accumulate)

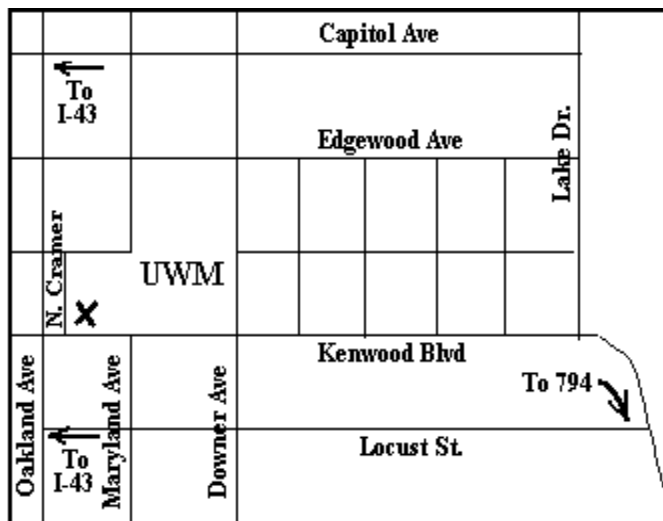
Finally, as I mentioned last month, I have completed my new observatory (pictured below). It is similar to the Bi-Cylinder Dome featured in my article in Sept 1997 Sky&Telescope but this time the base is stationary and only the dome rotates. This change was made mainly due to the constant snow getting under the wheels, but I now think it is a great improvement and simplifies the construction of the dome itself. Since my main activity is CCD imaging with a LX200, this dome is only 10 feet in diameter but this still gives me plenty of headroom due to the Bi-Cylinder shape. The scope and Camera are both controlled from my basement, and over the next few months the dome will be motorized for control while I observe the Telescope between shots via a TV camera mounted to the dome.



3 MAS March Meeting

The next meeting of the Milwaukee Astronomical Society will be held on March 15th at the UWM Kenwood campus in room 133 in the Physics building at 8:00pm. The monthly meetings will be held here until thru April of 2002.

The board meeting will be held at 7:30pm. All board members should attend. Visitors are welcome. See the map below for directions.



MAS Picnic

By Vern Hoag

The annual picnic will be held on July 13th this year. Chris Weber has volunteered again to help set up the grounds and cook the food. Mark your calendar for an afternoon with your fellow members and an evening of observing. Starting time will be announced at a later date.

Welcome New Members

We would like to welcome Ryan & Kristin Nord, Jeff & Shelly Drew, Thomas Schneider and Christopher Noegel to our club. Please help them to feel at home. Also as new members don't be afraid to ask questions. There are plenty of people willing to help

Dark Sky Institute

Lee Kieth was contacted by Jack Troeger of the Dark Sky Institute of Ames Iowa. He would like to share the following web sights with our membership.

www.savethemilkyway.org and www.darkskyinstitute.org/darksky/scopes.html

How to find it?

by Gary Parson

This issue I would like to explain what a planisphere is. A planisphere will show you a particular section of the night sky at a certain time. You as a beginner will find this to be a very valuable tool to learn the night sky. The planisphere consist of two parts the base and the movable disc. The base carries the map of the stars at a given latitude on earth during the year. For us the latitude is 42 degree's. Different constellations will come into view month by month because of the earths rotation around the sun. A scale of months and days are on the outside of the base. Each month is divided into 5 day segments. (see picture B)

The movable disk has a window that shows you the different constellations visible above the horizon at a certain time. You will notice that there are compass directions also so you can also be orientated. (N, S, E, W). Different constellations will be in the window at different times of the night because of the earths rotation. A scale of hours showing the time of date will be on the edge of the disk. This will always be your local time. Be sure to make allowances for daylight savings time. When looking at the planisphere the very center point of it is the zenith (Polaris) and also the point of rotation for the disk. In picture A, it is where you can see the round metal circle. Holding the planisphere in front of you looking south turn the disk until you have the time of day and the closest day of the month touching each other. In picture B it would be March 16th at 8:00pm. While holding the planisphere over your head with the bottom edge pointing south, look into the window part of the disk and all the constellations will be into view for that time and date. Planispheres can cost from \$10.00 and up and are worth every cent. You can buy them from astronomy magazines, book stores and astronomy shops. I know Barnes and Noble have them for sure. If you want to learn the night sky quickly in my opinion this is one of the best tools made for you to achieve your goals.



A

The center window on the Planisphere will show you the constellations and larger stars in those constellations.



B

You will notice that the date and hours for this location would be March 15th at 8:00pm

Do you have an email Address

If you have a email address that is new or changed please contact me via email at glpar1951@prodigy.net or call me at 262-895-3015.

Library News

By Scott Laskowski MAS Librarian

Concern: We have two books missing since about the spring of 2001. These books were never signed out.

1. A Journey through time: (Hubble....)
2. Shadows of forgotten ancestors.

If you have a book and its been over 2-3 months **please return them** so other have the option to use these resources.

Due to the very generous donation of T. Hoff of 2 dozen or more books several years ago we have begun to acquire a juvenile astronomy section. Upon requests more were added, and now we have added even more books that were recommended by educators of my acquaintance.

These guides contain some of the same subject material, but don't be deceived. They overlap geology, earth science, space flight, our solar system to star maps. They are on different levels for different ages and interests. For example understanding eclipses, stellar evolution, variable stars for those who would like their children to more serious observations, to photography for the pure pleasure of it and history, data and knowledge that are probably just as interesting to the children and there parents. Here our are new books to the MAS library.

1. Usborne starting point science: **Earth and Space**-by Susan Mayes & Sophy Tahta 1995
2. The usborne **First Encyclopedia of Space**-by Paul Dowswell-2001
3. The Usborne: **Complete book of Astronomy & Space**-by Lisa Miles & Alastair Smith-1998.

Please feel free to give advice or new books recomandations(title, author and publisher)to the MAS.

Sputnik???

Does anyone know for sure if there is a piece of sputnik in the blue display case in the quonset hut at MAS observatory. If so please contact Lee Kieth or contact me at glpar1951@prodigy.net

Z UMA (Z ursae Majoris

By Henry Gerner

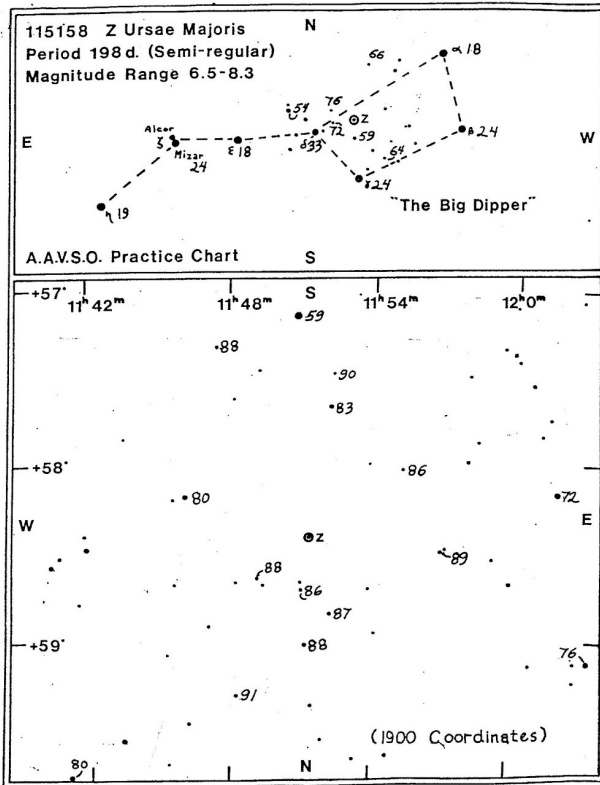
A couple of years ago the MAS started a project to introduce members to variable star observing. This program is on the MAS website under **Special Projects (Z UMA)**. The site gives a brief technique in observing this star and provides 4 different star charts to find it.

Gerry Samolyk asked me to give it a try and I gave a few readings on the apparent magnitude as compared to other stars. (comparison stars are given by the AAVSO). I was hooked!! This star Z UMA is a semi regular red giant variable that has left the main sequence as shown on Hertzsprung-Russell diagram that plots absolute visual magnitude versus spectral type. I started observing this star in February of 2001 and have watched the star change from a magnitude of 8.7 to 6.5 and it is currently going back down a magnitude.

I use a 8" Dobsonian at f4.5 with an Orion EZ finder (Red Dot) although I do recommend a finder scope. From the web site in the wide finder chart where the pot attaches to the handle of the **Big Dipper** is a 3.3 magnitude star named **Delta UMA**. I aim the red dot on that star and move the scope so that star is on the outer edge of the red dot finder. I then look through my eyepiece (28mm) and move my scope slightly away from the direction of **Delta UMA** until the asterism (pattern) of a fish hook comes into view that matches the view as shown on the 86 comp star centered eyepiece chart. When guiding to other comparison stars I keep the images in focus, then I take the image out of focus to compare magnitudes as it is easier to determine if **Z UMA** is brighter or then the comparison star. A plot is made using **Z UMA**'s apparent magnitude vs. the Julian date.

(See chart and light curve on page 5)

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You have to experience the thrill of watching a star change its visual magnitude due to its nuclear furnace going through its changes. I highly recommend giving it a try.

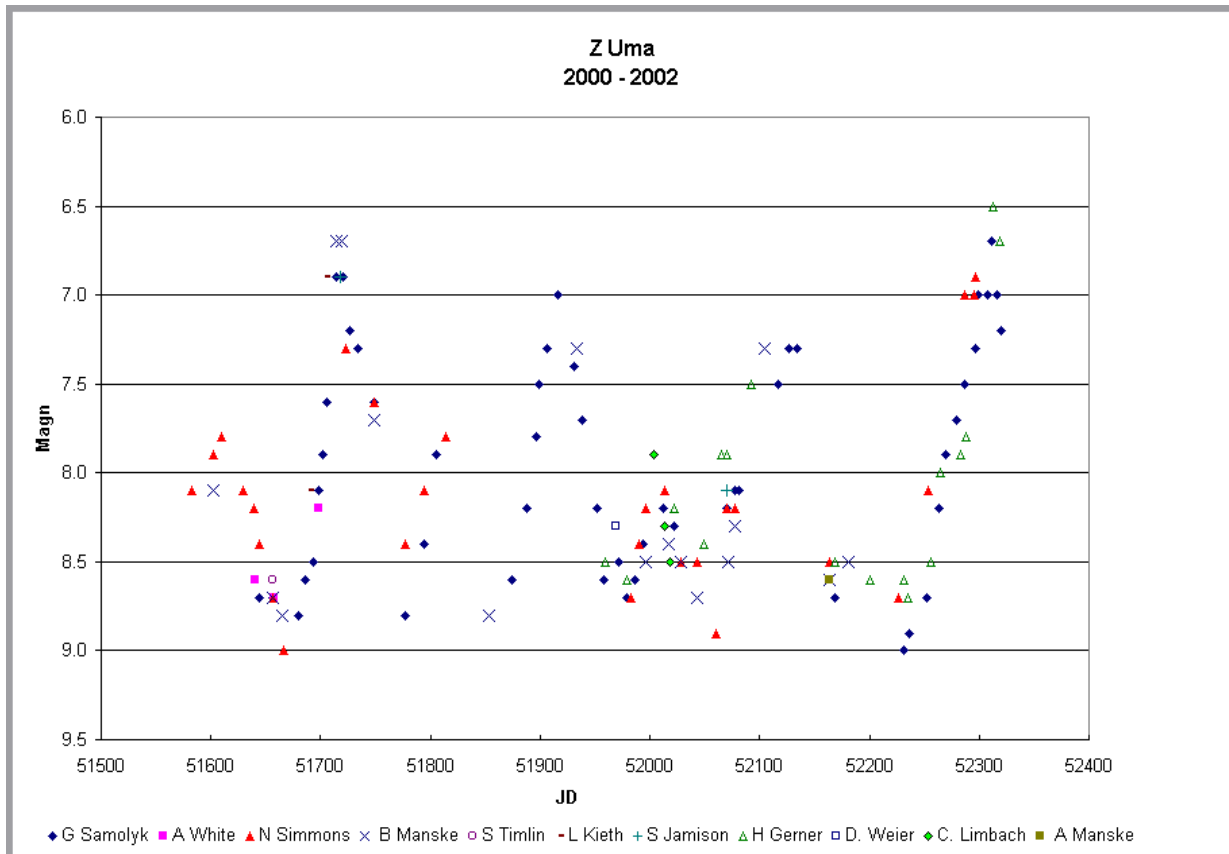
Letter from the editor

I would like to take this opportunity to thank Henry Gerner for writing the above article for our Focal Point. I would also like to thank Bob Manske for putting the FP on our web sight. It is important for all of us to be active at one time or another in our newsletter. It will make the FP more interesting for all of us to read and enjoy.

Upcoming Speakers

By Tom Pelnar

The speaker for the March meeting is to be announced. For the April meeting the speaker will be Francis Haldzen he will be talking about the neutrino telescope at the south pole.



6 MAS Officers/ Staff

President	Scott Jamieson	262-896-0119
Vice President	Lee Keith	414-425-2331
Treasurer	Dan Yanko	414-453-3382
Secretary	Henry Gerner	414-362-4441
Observatory Director	Gerry Samolyk	414-529-9051
Assistant Observatory Director	Paul Borchardt	262-781-0169
Focal Point	Gary Parson, Editor	262-895-3015

Future MAS. Events

March 15th April 19th regular monthly meeting at UMM Kenwood Campas at 8:00pm, The May 17th, June 21st, Regular monthly meetings at MAS observatory 8:00pm July 13th there will be a board meeting at the MAS picnic

MAS Membership is open to all with an interest in Astronomy and expanding their knowledge of the Universe. Yearly Membership Dues are: Individual \$28/yr.; Family \$32; Non-resident (individual \$18, Family \$22); Student (under 18) \$12.

For more information, contact Membership Chairman, Carlos Garces, 16430 Melody Drive, New Berlin, WI. 53151. Phone: **262-786-2623**. Email: cgarces@wi.rr.com

Focal Point Publishing Guidelines

Focal Point Newsletter is published bi-monthly (Sep Nov Jan Mar May and July). Articles, Announcements, Graphics, Photos, Swap/Sale Ads etc. should be **submitted at least 10 days** prior to the first of the month (of the desired issue). Article inputs are preferred via Mail, or diskette in a text or Word compatible format, if possible. Submit FP inputs to:

MAS Focal Point c/o Gary Parson
7521 E Wind Lake Rd
Wind Lake, WI 53185-1513 – Email glpar1951@prodigy.com.

Saturday Keyholders

March

2	Gerry Samolyk	414-529-9051
9	Tom Schmidtkunz	414-352-1674
16	Neil Simmons	262-889-2039
23	Chris Weber	262-789-7128
30	Dan Yanko	414-453-3382

April

6	Wanda Berner	262-646-8229
13	Paul Borchardt	262-781-0169
20	Tim Burrus	262-783-6572
27	Brian Ganiere	414-961-8745

May

4	Carlos Garces	262-786-2623
11	Brian Garness	262-538-3888
18	Chris Hesselstine	414-482-4515
25	Vern Hoag	262-548-9130

June

1	Tim Hoff	262-662-2212
8	Scott Jamieson	262-896-0119
15	Lee Kieth	414-425-2331
22	Dan Koehler	262-662-2987
29	Scott Laskowski	414-421-3517

Loaner Telescopes (available to members for local use)

Lee Keith (Franklin)	414-425-2331	8" Dob reflector
Scott Jamieson (Waukesha)	262-896-0119	8" Dob reflector
Paul Borchardt (MAS site)	262-781-0169	6" Dob reflector

MAS Observatory 262-542-9071

MAS Web Page: www.milwaukeeastro.org

The Milwaukee Astronomical Society

2933 N.68th Street
Milwaukee, WI. 53210-1208

CHANGE SERVICE REQUESTED

**The MAS March and April Monthly meeting will be held at the U.W.M. Physics building on March 15th and April 19th. The board meeting will be at 7:30 and the general meeting will be at 8:00pm.*