



Capitol Skies

The newsletter of the Madison Astronomical Society

January/February 2005

From the President

by Neil Robinson

Greetings Fellow MAS Members.

The winter Solstice and associated festivities are upon us with long nights offering opportunities for stargazing the brightest constellations of the year.

The club has been doing fixup work at the YRS observatories and getting ready to break ground for the new C11 mount as soon as the turf firms up in the spring.

The club recently received a \$2000 grant from Altria Corporation, and I would like to thank Matt Mills for initiating the idea of pursuing this grant and Mary Ellestad for collecting, delivering and explaining the necessary documents to satisfy Altria of our grant-worthiness.

Weather permitting, New Years Eve should offer the annual opportunity for MAS members to gather at UW Space Place to help showcase our sport to the public as part of US Bank Eve.

The next regular meeting will be Friday, January 14 as usual at UW Space place at 7:30 pm. Hope to see you there!

From the Observatory Director

by Tim Ellestad

Winter at YRS

I hope that everyone will be able to find some time available and some clear nights to enjoy winter observing at the Yanna Research Station. The cold months can provide us some strikingly dark, transparent skies. Please take advantage of the chill-fighting luxury of our snug, nicely heated clubhouse.

Please remember that to bring the heat up from 50 degrees (the maintained temperature) to room temperature simply set some time on the heater timer on the floor just below the air conditioner. The rest is automatic. Please DO NOT change the thermostat settings. When you lock up and go home please remember to eliminate any time left on the heat timer by turning it around to the zero position - you'll hear a loud snap of the relay as the heaters shut off. While the heat would eventually time out anyway we can still help save on our bill from Alliant Energy.

The Orion Nebula is calling. Enjoy.

YRS repaired

As per our contract with Alliance Construction much needed repairs at the Yanna Research Station have been accomplished. As they indicated when we signed the contract, Alliance scheduled our work after the completion of their house construction jobs and, as it turned out, deer hunting. While it seemed we might be running out of working weather this year the job got done without any panic. The Alliance crew did a

From the Treasurer

by Mary Ellestad

Donation From Altria Group: In early December, MAS received a generous donation from Altria Group, Inc. Altria is the parent company of Kraft, Oscar Mayer and a number of other companies. The Madison Astronomical Society extends a sincere thank you to Altria for their donation towards our operating expenses. I would also like to thank member Matt Mills for the front work that resulted in this donation and for putting them in touch with me. Altria required quite a list of items regarding MAS that I was able to collect and send to them. It was certainly worth our effort - Thanks again to Altria and Matt.

Spring Banquet: Friday, March 11th. The MAS banquet will be at CJ's East with cocktails at 6:00 and dinner at 7:00. The speaker will be our friend Jim Lattis from Space Place. He is still choosing the topic and, since his presentations are always enjoyable and informative, it should be a great evening. Please plan on attending - it would be nice to get to know some of our newer members and the "older" ones are always fun, too. The menu choices are Roast Beef - \$15, Chicken Cordon Bleu - \$16, Broiled Walleye - \$18, Vegetable Stir Fry - \$13. Dessert Alert - includes a chocolate sundae! Please send your check to Mary Ellestad, 2810 Mason St., Madison, WI 53705 by March 1st.

thorough and expedient job, faithfully living up to their very modest estimate. They will be doing some additional work for us in the Spring, building the new installation for the C11 telescope.

A very high priority job was the repair of the Clubhouse door thresholds. The original thresholds were simply treated lumber pieces that extended out from the foundation slab to support the front of the aluminum door threshold plate. Years of sitting in the ground, eternally wet, finally

Continued on page 3

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Madison Astronomical Society members are active in sharing the pleasures of astronomy with the public, acting as a resource for students and teachers, and exchanging information at Society meetings which occur monthly. The Society continues to pursue its original goal to "promote the science of astronomy and to educate the public in the wonders of the universe."

For more information about the Society, please contact one of the officers listed above.

MAS thanks

Internet Dynamics Corporation
for hosting our web presence.

Visit MAS on the web at:

www.madisonastro.org

Calendar of Events

- December 31 US Bank Eve, from 6-10 pm. Telescopes will be set up in parking lot if the sky is clear. We typically have between 500 and 1000 visitors that evening and telescope viewing is always mentioned as one the activities that brings people to Space Place. Volunteers will receive a US Bank Eve t-shirt! Space Place (1605 S. Park St.).
- January 14 MAS regular monthly meeting. Our speaker is our own John Rummel, speaking on "Getting started with digital astrophotography." Space Place (1605 S. Park St.). Business meeting 7:00, main presentation 7:30.
- January 19 MMSD Planetarium Public Program: Skywatching: explore the current night sky. Learn how to identify constellations and planets and more. Memorial High School, corner Mineral Point and Gammon, 663-6102 for info. All tickets \$2. Programs at 6:30 and 7:45.
- January 25 Space Place Annual Telescope Clinic, 6:30-9 pm. Come help new or inexperienced telescope owners set up and try out their telescopes. One-on-one help is especially useful so the more volunteers we have, the more people we can get out looking at the night sky.
- February 11 MAS regular monthly meeting. Program TBA. Space Place (1605 S. Park St.). Business meeting 7:00, main presentation 7:30.
- February 12 Earth Partnership for Families, 6:30-8:30 at the McKay Center in the UW Arboretum. Indoor activities (including hot chocolate and cookies) are planned along with telescope viewing. The event is free and open to the public so bring your family along for a fun evening!
- February 16 MMSD Planetarium Public Program: Update on the Cassini mission to Saturn and the Titan Huygens lander. Memorial High School, corner Mineral Point and Gammon, 663-6102 for info. All tickets \$2. Programs at 6:30 and 7:45.
- March 11 MAS annual banquet, CJs east. Menu choices and instructions for reserving your spot can be found in the treasurer's column on page 1 of this newsletter. Cocktails at 6:00 pm, dinner at 7:00.

Your Turn

Dear editor,

MAS observing member Matt Mills was able to secure a \$2,000 donation to the Madison Astronomical Society from Altria, the parent company of Kraft Foods and Oscar Mayer. He presented the check at the December Annual Holiday party.

In January of 2004 Matt was looking into writing a grant proposal to the fund a new observatory at Yanna Research Station. He learned of the Shoemaker-Levy Grant but the money for the grant temporarily ran out. While investigating the grant proposal he came across the club history on Oscar Mayer and the

Monona observatory. The Madison Astronomical Society was instrumental in saving the Oscar Mayer Observatory building. He approached Altria, the parent company of Madison's Oscar Mayer Company. They said they would give the Madison Astronomical Society \$2,000 from their nonprofit donation fund.

Matt hopes the money will be used for club improvements. Matt is now working on securing several more donations and grants. He would like to see other club members use their connections to bring more donations into the club.

Debbie Mills

Observatory Director, cont.

rotted them out. Alliance installed the replacement treated lumber pieces with a hollow gap underneath, open to the outside. This way the wood can dry out in good weather, extending the service life of the new thresholds.

In addition to new thresholds some long overdue additions to the clubhouse are now installed - combination storm and screen doors. These doors will provide several much needed improvements to the building. They will protect our existing exterior doors from the ravages of sun and weather; they will add some insulation effect; and they will provide a nice way to cross-ventilate the clubhouse in good weather without letting in all the bugs in Brooklyn Township.

Our clubhouse has had a notable flaw in its exterior finish which dates back to its very construction. The stucco cladding that covers the exterior walls was not well finished at the top of the end walls where the cladding should meet the soffits. There were some significant gaps left. These gaps could let in weather, hornets (and other bugs), and possibly vermin. The guys from Alliance installed some additional cedar trim to cover these gaps. Come warm weather we will have to caulk, prime and paint the new wood. This is a nice solution to an otherwise glaring

defect.

The extension of the privy deck handrail has been constructed. Building code requires our handrail to extend all the way down the wheelchair ramp due to the deck and ramp elevation and pitch. Along with the railing Alliance also installed the code-required wheel barrier lip along the edges of the ramp and deck.

The Art Koster Observatory or AKO has needed some additional construction to suit the installation of the Pro Dome, its most recent top. The old dome that was replaced had an extended skirt around its base that covered the top ring of the building framing. The new dome sits atop that top ring, leaving it exposed to the elements. While the top ring is built of treated lumber it was not designed to be weather tight. So some additional construction was needed to seal off the AKO where the walls meet the dome's base ring.

Our tentative plan for this construction was to use beveled cedar siding as the top layer of the additional sill extension so as to create a sloped water shedding surface. Alliance improved this design by inverting it, giving us a wider, more effective sloped surface made of tougher, more durable material - treated lumber decking. This got edged with a nice aluminum drip cap and the

whole arrangement was surfaced with rubber membrane roofing material. To complete the watershed a rubber membrane "collar" was applied (just like the paper collar the barber gives you, guys). This "neck band" starts just up under the lower edge of the dome and extends down overlapping the roofing on the new sloped sill. The AKO top sill should now be weather protected for many years to come.

To complete the work on the AKO Alliance installed a strip of cedar "bead" trim all around the building at the top of the wall panels, just under the new sill. The new trim strip will block any wind driven precipitation from seeping in over the top of the wall panels. These pieces will be caulked and painted when the AKO itself is painted upon the arrival of suitable weather. Volunteers have already spoken for this work.

With the return of "painting weather" in '05 other work at YRS will need to be done. One significant job will be the prep, caulking and painting of the fascia, soffits, and new trim on the clubhouse. YRS will always need some kind of painting and minor repair. Please consider offering your services - this is work that members can do and MAS can greatly benefit by financially.

For Sale

Celestar 8 (C-8) with: 14mm Televue Radian, wedge-pod, 32mm Celestron Nexstar Plossl, vibration suppression pads, JMI motodec, hand controller, dew shield, skylight filter/dust seal, and telrad.

This is a great scope for visual or photographic observing. Lighter than comparable goto telescopes. It is in excellent condition. Asking \$800.00. Contact AJ Carver at acarver@wisc.edu.



Book Review: *Archives of the Universe: A Treasury of Astronomy's Historic Works of Discovery* by Marcia Bartusiak

by John Rummel

This late 2004 publication fills another important niche in the history of astronomy. Marcia Bartusiak is an accomplished science writer with a number of well-known titles to her name, including *Thursday's Universe*. Her premise in this book is that many of us know the stories - Galileo's telescopic discoveries, or Fraunhofer's explication of solar spectra - but how many of us have actually read *Sidereus nuncius* or Fraunhofer's seminal paper where he reveals that the dark spectral lines are telling us something about the stars themselves?

Bartusiak's *Archives* contains 75 excerpts from the original discoverer's themselves, from the ancient Mayan

Venus Tables and the Greeks, to the modern discovery of extra-solar planets and the accelerating expansion of the universe. In the words of the scientists and researchers themselves, you'll hear about the astronomical discoveries that shaped our modern view of the world. Bartusiak introduces each excerpt with a 3-5 page essay that puts the scientist and the discovery in context. At nearly 700 pages, this book contains a lot of primary-source meat. Because of its organization, it does not need to be read beginning to end, but you can dip your toe in at your pleasure.

Archives is another book that has taken its place on my nightstand, and will be there for some time to come.



Capitol Skies
2810 Mason Street
Madison, WI 53705

First Class

MAS would like to thank:



for hosting our web presence

This resource list is made up of people who have special interests which they are willing, even eager, to share with others in the Society. Many members, not listed, also are interested in particular aspects of astronomy and have considerable expertise in viewing and imaging the skies. Members are encouraged to come to the monthly meetings, not only to get to know the other members, but to discuss and enjoy their special or general interests in various aspects of astronomy. This is a Society of beginners and experienced amateurs. From time to time we have seasoned professionals attending. The meetings are a good time to meet these people as well. See you there.

Resource People and Special Interests

The resource list is currently being revised and rebuilt. If you would like to be listed as a club resource, please submit your name and contact info to darksky25@charter.net.

Possible areas of expertise include:

- Variable stars
- Planetary and lunar observing and imaging
- Deep space object observing and imaging
- Solar observing and imaging
- Observatory design and construction
- History of astronomy
- Computers and software
- Comet and asteroid astrometry and photometry
- Occultations and grazes

MAS Membership Form	
Name:	_____
Address:	_____
City/State/Zip:	_____
Phone:	_____
Email:	_____
Please circle membership type: <i>Enclose check and make payable to the Madison Astronomical Society. Mail to MAS Attention: Mary Ellertsd, 2810 Mason Street Madison, WI 53705</i>	
Student (\$5.00)	<input type="checkbox"/>
Regular (\$25.00)	<input type="checkbox"/>
Observing (\$60.00)	<input type="checkbox"/>