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Dome is in very sad shape

By Becky Rundall, Peoria Times Observer

In 1609, Galileo Galilei used a telescope to explore the night sky for the first time and discovered stars never before seen by human beings. He saw craters on the moon and the moons of Jupiter.

To celebrate the immense changes his discoveries brought to the world, the International Astronomical Union has designated 2009 — the 400th anniversary of his discoveries — as the International Year of Astronomy.

The Peoria Astronomical Society, created in the 1930s, is planning its own celebration to coincide with the 2009 events — the completion of a new dome for its Northmoor Observatory.

It will be what Rich Tennis calls a “shining example of astronomy in Peoria.” A 10-year veteran of the society, Tennis serves as the go-to guy for light control — to combat light pollution, which prevents would-be stargazers from seeing the night sky. He is also the fundraising chairperson for the new dome.

In 1955, Northmoor Observatory opened on the grounds of what is now Leo Donovan Golf Course, off North Knoxville Avenue, to give area residents an unobstructed view of the night sky. At the time, the cost to build the circular housing and its “top hat” was \$11,500.

Fast-forward to the 21st century — the old steel dome is showing her age, and it is going to cost

10 times that much to replace her, along with electronics and safety upgrades and changes to the observatory’s classroom facility.

Several years ago, the society hired Kenyon and Associates Architects to assess the dome’s deterioration. They determined that replacement would cost less than repair.

The Northmoor Observatory has played a significant role in Illinois history and education. The observatory was the first in the state to offer viewing to the public. Each year, an average of 2,500 people head to the observatory on clear Saturday nights from April through October, from sunset to midnight. They have been doing so for 50 years, assisted by society members who volunteer their time. They also offer private viewings by appointment to organizations such as the Girl Scouts and Boy Scouts.

Tennis says that the society is a member group of 105 amateur astronomers who enjoy the night sky. Although its main goal is to serve the membership, it also educates the whole community about astronomy and its value.

The new rotating dome will be durable aluminum rather than steel, and its opening will fold much like a bi-fold door but on the vertical. The Ash-Dome will be custom manufactured by the Ash Manufacturing Co., of Plainfield.

Continues on page 2



**Please welcome our
newest members!**

**RUSS & CARA
BEALE**

LARRY KRUZAN

**JAMES & JEANIE
SIMPSON**

SANDRA ADKINS

2008 Dues—Final reminder!



By Brian Hakes

The 2008 membership dues notices have been sent. With postage as high as it is, second and third mailings of dues notification can be costly. The PAS board asks for your consideration in paying dues before the second mailing. Non-paid members will be dropped from the membership roster after March 31st.

Dome is in very sad shape

Continued from page 1

The society is shooting for starting the replacement work at the end of the 2008 season, with a goal of finishing before April 2009. They said they hope not to interfere with the viewing season. As owner of the grounds and the building itself, the Peoria Park District will provide a driveway for construction vehicles between golf course greens and tees, and will remove the old dome.

Tennis said they will keep the original 9-inch refractor telescope, which was manufactured by the Gaertner Scientific Co, in Chicago and still provides “excellent views” and is irreplaceable, according to the PAS Web site. Tennis said, “It looks like a telescope, a real antique.” The refractor was built for the Illinois Watch Co. of Springfield in 1913, and the lens was ground by the same optician who ground the lens for the experiment to determine the speed of light. This type of lens grinding is “both an art and a science,” Tennis explained. Bradley University purchased the telescope in 1935 and eventually donated it at the time of the observatory’s construction.

Over the last five years, society members have raised \$38,000 toward their goal of \$115,000. Additionally, the Caterpillar Foundation has contributed \$15,000, with a promise of \$10,000 in a matching

challenge grant, with a time-line of two years — the end of 2009. Tennis said the society needs to accelerate the fund raising efforts because the cost of the dome is rising over time. The longer the delay, the higher the cost will be. “The cost is a moving target,” he said. They have already lost \$5,000 to \$6,000 over the last year.

Just as the original observatory was constructed through donations from the community, including a significant contribution by Murray Baker, Tennis is hoping that the community will come forward again. They are also searching for anyone who could make a large donation, possibly even in the form of stocks.

Tennis applauded Caterpillar’s role in supporting and promoting scientific endeavors like the observatory. He said the company recognizes the benefits the observatory provides the community, benefits that include education about astronomy and our universe. After all, Tennis said, astronomy is one of the oldest sciences and includes physics and chemistry. “We’d like to have people come visit this summer to ‘kick the tires’ and to see the telescope inside this rusty dome,” Tennis said.

This article was reprinted with permission from the Peoria Times Observer



Important Dates!

March 5th—membership meeting

10 Toughest Messier Objects
Presented by John Barra

March 19th—Board meeting

Northpoint Hardees, 7:30pm.
All members invited.

April 2nd—Membership meeting

Lakeview Planetarium, 7:30pm.
Planetarium Show

April 5th—Clean-up day, 10am

Northmoor Observatory
WMBD Channel 31 will be sending a reporter, so lets pack the place!

April 12th—Clean-up day, 10am

Jubilee Observatory
Lets get it ready for some star parties!

April 16th—Board meeting

Northpoint Hardees, 7:30pm
All members invited.

May 2nd—Chuck Collins of Channel

31 will be doing his weather report from Northmoor Observatory!!

May 3rd— Opening Night

Northmoor Observatory

May 7—Membership meeting

Lakeview Planetarium, 7:30pm.
Program: Comet Holmes
Presented by Rich Tennis

May 21—Board meeting

Northpoint Hardees, 7:30pm
All members invited.



Astronomical Data Calendar

March

- 3 Mercury Greatest Western Elongation
- 5 Moon and Mercury 1.0° apart
- 5 Moon occults Venus
- 7 New Moon
- 8 Uranus in Conjunction with the Sun
- 14 First Quarter Moon
- 14 Moon and Mars 1.2° apart
- 21 Full Moon
- 24 Mercury and Venus 58' apart
- 27 Mercury and Uranus 1.6° apart
- 29 Third Quarter Moon

April

- 5 New Moon
- 12 Moon and Mars 23' apart
- 12 First Quarter Moon
- 16 Mercury Superior Conjunction
- 20 Full Moon
- 21 Lyrid meteors peak
- 28 Third Quarter Moon

May

- 5 New Moon
- 5 eta-Aquarid meteors peak
- 11 First Quarter Moon
- 13 Mercury Greatest Eastern Elongation
- 19 Full Moon
- 27 Third Quarter Moon



Messier Marathon Set For April 5th

By John Barra

This year's Peoria Astronomical Society's **Messier Marathon** has been set for Saturday, April 5 at Rich Tennis's Starhouse in rural Eureka. The rotation of the new moons this year has caused the marathon to be set on a unusually late date.

The Astronomical League sets this year's prime date on Saturday, March 8. This date did not work out for several reasons. First, the Starhouse is not available that date. Secondly, the weather is normally too cold this early in March. Finally, three Messier objects are not observable early in the morning this early in March.


The league set Saturday, March 29 as the secondary date. While normally only one or two objects are not observable on that date, a third-quarter moon would likely make many more non-observable early in the morning.

On the following Saturday, the date picked, a couple objects that are supposed to be observable will not be. However, those objects are nearly impossible to observe during a marathon at the Starhouse. And a new moon will not interfere with any objects.

Only three are considered unobservable on this date.

The added benefit of an early April marathon is the likelihood of warmer weather.

While April 5 is the main date, the back up date is Friday, April 4. That means watch the weather report and your PAS emails the few days before to see which date will be chosen.

Do not forget to arrive early so you do not have to worry about your lights. Dress appropriately and bring snacks to share. 



Days of Yore...Messier Marathon 2001

PAS Member is newest Solar System Ambassador

By DeWayne Bartels

PAS Member **DeWayne Bartels** is a member of the latest class of Solar System Ambassadors, a public outreach program of NASA and the Jet Propulsion Lab. He has already given his first program as an SSA ambassador to the Suburban Kiwanis Club of Peoria on Jan. 29. The program was on the Voyager Mission.

The SSA program grew out of the smaller Galileo Ambassador program which began in 1997 with 16 Ambassadors. By 1999, other missions were interested in participating and the program was converted to the present Solar System Ambassadors program. The first complete year as the Solar System Ambassadors program was in 2000 with 145 Ambassadors in 45 states.

In 2008, there are 494 ambassadors in all 50 states. The missions that currently support the SSA program are: Cassini, EPOXI, Genesis, Ulysses, Voyager, Mars missions, MESSENGER, New Horizons, Dawn, Spitzer, Earth missions and the Deep Space Network. The URL for the SSA public website is <http://www2.jpl.nasa.gov/ambassador/index.html>

More than showing up required . . .

By Tim Lester

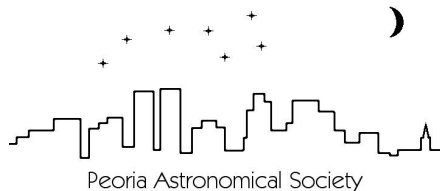
When you become a keyholder at one of our observatories it is an honor not a privilege, remember that you earn a key it is not given. With this responsibility is performing maintenance and/or hosting duties, this is not just showing up on your scheduled date but actually helping out by doing some extra work.

If you are scheduled to work at Northmoor, show up an hour before sunset and walk around after you unlock the door, does the telescope need cleaned or does the carpet need vacuumed? Spend a little time and effort to help out other members by cleaning and show the public we care about our facility.

If you are scheduled to work at Jubilee, sweep out the warm-up building, use the weed eater to clean the edges of the sidewalk, if you are a keyholder to one of the domes, open the dome to clean out any debris or wipe the tube of a telescope off.

We are lucky to have a couple of fine observatories built and left by former and current members, let's take care of them for the next generations to enjoy and continue to provide the public with numerous years of viewing the night time skies from clean facilities.

STARLITE



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From Starlites Past...

By John Barra

40 YEARS AGO

February Starlite 1968

"We offer special congratulations to Art Grebner and George Triff for having observed and described all Messier objects--a large task and much work."

In the last issue of the Starlite, we listed all PAS members who had received their Astronomical League Messier Certificates. Art and George were on that list. Elsewhere in this issue is an article on this year's Messier marathon. While one cannot use observations during a marathon towards his or her AL certificate, the marathon does give practice to those attempting to complete the list and a skill test to those who have completed the list.

"Mike Davis has received his doctorate in radio astronomy at the University of Leiden in the Netherlands. Mike received his very first information in astronomy at one of the society's classes in 1954."

Anyone who knows anything about Mike Davis' career in astronomy since 1968, please let the editors of Starlite know. It would make an interesting future article.

25 YEARS AGO

March Starlite 1983

"This winter we have had two star parties at Jubilee. The Millikin Astronomy Club from Decatur and the University of Illinois Club from Champaign both made a visit to look through our 24" telescope. The U of I club made a return visit on March 11."

Were the winters milder 25 years ago or did members have more free time on their hands. We have trouble getting other astronomy clubs to show up for star parties even when the weather is good and the party is at a winery.

"Jerry (McElyea) plans to have Northmoor Observatory open for the occultation of Jupiter (Apr. 2 at 8:41 am.) and would appreciate having company. He plans to get there while it is still easy to locate Jupiter in the telescope. Anyone planning to do serious viewing should bring his own telescope."

Why is it that only rarely does a lunar occultation of a planet happen during normal nighttime viewing hours? And then it would be cloudy.

