# Peoria Astronomical Society

# STARLITE

THE OFFICIAL PUBLICATION OF THE PEORIA ASTRONOMICAL SOCIETY

www.astronomical.org

Spring 2007

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### Messier Marathon on St. Patricks Day!

By John Barra

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It's Messier Marathon time again and this time the new moon Saturday falls on March 17, St. Patrick's Day. The prime date for the marathon will be that Saturday at Rich Tennis's StarHouse in rural Eureka. The cloud/rain date is the Friday night before.

Remember, a cloud/rain date requires one to check the weather reports the few days before. If it looks like conditions will be bad for the prime date and the conditions look good the night before, then we will hold the marathon on the night before. Check your e-mails for final decisions on whether the marathon remains on for any particular night.

You should take special note that daylight savings time now starts a couple of week earlier, on March 11. Therefore, darkness and the marathon will start an hour later than in the past. One should be at the site to start setting up around 7 with darkness beginning around 8 or so. If you do have to come after dark, remember your headlights can effect everyone's dark adaptation.

As usual, I will have checklists available at the StarHouse. If anyone heads to the Jubilee Observatory, there should be checklists still in the warmup room. For the marathon, don't forget to bring warm clothing. Layers work best so you can adapt to changing temperatures. Also bring water, coffee or hot chocolate and bring snacks to share.

Based on past experience, we get a clear night to begin a



marathon in mid-March about once every three or four years. Of those nights, it stays clear enough of the night to complete the marathon once every two times. So I hope the luck of the Irish is with us this year.

## Please welcome our newest PAS members!

JUDD ISBELL BRIAN ROWE

#### STARLITE looks to the future...

There is no doubt that technology has affected all of our lives. Many of us own or have access to a computer, and have a private email address.

Due to the rapidly increasing costs of printing and mailing the Starlite, we are turning to cyberspace for help.

The board is encouraging everyone who has a home or private email address to receive the Starlite via email. To sign up for electronic delivery, please send an email to starlite@astronomical.org

In the message, list the email address(es) you want the star-lite delivered to. Multiple

emails are ok. Also be sure to include your **first and last name**. Future Starlites will be emailed to you in a PDF document, that you can view or print from your home computer.

Your email address will be kept strictly confidential, and not used for anything but Starlite mailings.

If you do not have email or a computer, don't worry...anyone who does NOT sign up for electronic delivery will still be sent a printed copy through the postal service.

Tim McGrath, Starlite Editor PAGE 2 STARLITE

#### **Upcoming Events**

## SUMMER MEETING LOCATION CHANGES!!

This year, we will not be holding our summer meetings at Lakeview Planetarium. Instead, we will be holding star parties for our June, July, and August meetings.

**June 23**—Northmoor Star Party (public invited)

**July 14th**—Jubilee Star Party (PAS members & guests only)

**Aug 11**—Jubilee Star Party (public invited— This one will be somewhere in the main park.)

National Astronomy
Day is April 21st!

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on out and join us!

#### PAS/TCAA Winery Star Party

Date: **Sat. May 19** (no rain date) Place: Mackinaw Valley Vineyard

Time: 6:00 P.M. and goes all night.

Members and guests of Peoria Astronomical Society and Twin City Amateur Astronomers are invited.

No Cost to attend, but bring some money for a bottle or two of wine!

RSVP to Rich Tennis by May 12th.

PAS members will have telescopes set up at the

Grand Prairie Mall for public solar viewing. Come

#### **ICC Star Party**

PAS is once again hosting a big star party for the ICC astronomy classes.

Primary Date: Fri, April 13

Backup Dates (if needed) Saturday, April 14 Friday, April 20 Saturday, April 21

\*New moon is on April 17 and 1st Quarter is on April 24. The times would be from about 7:45 -10:00 pm.

#### Mark your calendar...

The 2007 PAS annual banquet will be Sep 29th, at Midstate College. There will be a special guest speaker!

## Astronomical Data Calendar

#### March

Mar 3 05:18p Full Moon

Mar 3 03:30p Lunar Eclipse, First Contact,

Mar 3 07:12p Lunar Eclipse, Last Contact

Mar 5 09:36a Uranus in Conjunction with the Sun

Mar 11 10:55p Third Quarter Moon

Mar 18 09:43p New Moon

Mar 21 08:47p Mercury Greatest Western Elongation,

Mar 25 12:23p Mars and Neptune 57' apart

Mar 25 01:17p First Quarter Moon

Mar 25 03:45p (23) Thalia Opposition

Mar 29 12:49a Moon and Saturn 33' apart,

#### **April**

Apr 1 12:18p Mercury and Uranus 1.5° apart

Apr 2 12:16p Full Moon

Apr 10 01:05p Third Quarter Moon

Apr 11 12:34p (3) Juno Opposition

Apr 14 03:58p Moon and Uranus 37' apart

Apr 17 06:37a New Moon

Apr 22 12:08p Lyrids peak,

Apr 24 01:36a First Quarter Moon

#### May

May 2 05:10a Full Moon

May 2 11:04p Mercury Superior Conjunction

May 6 07:09a eta-Aquarids peak,

May 9 11:28p Third Quarter Moon

May 16 02:28p New Moon

May 19 10:09p Moon and Venus 59' apart

May 22 12:49p Moon and Saturn 30' apart

May 23 04:03p First Quarter Moon

May 29 08:27p (4) Vesta Opposition

May 31 08:04p Full Moon

I got my Sky\*Scout as a Christmas present, so I have not had a lot of clear nights to really test it. However, I did have one night and the following morning to give it a short run of its capabilities.

The Sky\*Scout is about 7 x 4 x 2.5 inches is size and about 1 1/2 pounds.

It comes with a nice carrying case that has separate padded compartments, one to put the furnished accessories in, 2 ear buds for stereo audio and computer hookup connections,. The carrying case has a sturdy, adjustable shoulder strap. Earbuds to get the audio part (nice lady's voice) of the programmed information are anchored by a tether that prevents being unplugged

during use. There is a hand strap that can be used to free your hands during its being out of the carrying case. All openings are sealed to prevent moisture...mist, dew, coffee, dust...from interfering with operation. The plugs are tethered to prevent loss. A CD is included to provide instruction on operation, which is more compete with the printable manual off the CD.

There is a "help" button on the finder, that is red-lit...as are all the buttons and display...that gives detailed help on using the various menus. The menus are Identify, locate, GPS (no need to buy one now), field guide, and settings. There is a 4-way toggle button that allows you to go to the various branches in the menu and a menu button to select which you want to operate. Volume and light control buttons and a off/on button are in easy view and reach. There is a USB port to download database updates and a Skytour/SD card slot to provide interactive guided tours (sold separately...I knew there would be a marketing feature to squeeze more \$ out of my pocket).

The two zero-mag, view-through, redilluminated rings to either identify or locate an object during operation. Aim is accurate by having the two lit circles concentric. To locate an object flashing arrows show direction to move



and increase frequency as it gets closer to view. All flash when located. Movement should be slow and steady to allow computer to track where it is pointing.

After a quick review of operations, I took it outside a clear evening sky. It takes a short time to set all the GPS satellites to get it oriented. It cautions you on not being close to a large metal object...cars, etc. I found that the metal rails of Star House are considered a large metal object. There is an audio or message display that tells you. The message can be paused, rewound, or forwarded.

So, the first object that I wanted to locate was the 1st quarter moon, and it missed it by the width of the moon, but that was due to my being too close to Star House. Reset the GPS away from Star House and it worked great.

The "Identify" menu worked well for any of the naked eye objects and if near several lesser objects, it gave them as well. There is an "Identify" button to press when centered on the object. Then object(s) can have more information shown when the "Select" toggle is pressed. The information can be audio or visual. The menu show the nights highlights, planets, stars, Constellations, and deep sky objects.

I had some problem with the first try to locate an object as it had subtle codes to sort though the message display. There is a straight raised molded portion that looks like a green laser with the sight line, which I have yet to do, or there is a 1/4-20 tapped thread that allows for mounting on a tripod, or such that some accessory holder could be used to hold the pointer-laser. It allows for a "see-eye dog" system to direct views for dobsonian telescopes and other such non-setting circle operated telescopes.

The thin cloud or "sucker hole" conditions allow easy identification as to where in the sky the observable stars are to help in searches in those conditions. I was able to identify Saturn the next early morning before sunrise with only two objects visible through the thin cloud cover.

It is an addition to any level of astronomer from the question..."What's that star, Dad?" to "Where is Hind's Crimson Star?



Rich Tennis

Top 10 Astronomer's Bumper Stickers

- 10. My Other Car is a Saturn
- 9. Astronomers Do It in the Dark
- 8. Cosmologists Do It with a Big Bang
- 7. My (husband / wife) asked me to give up stargazing. I sure will miss (him/her.)
- 6. Telescope in Trunk
- 5. Honk if you're from Draco!
- 4. I'm an Astronomer, Not an Astrologer Dang It!
- 3. Black Holes Suck
- 2. So Many Parallel Universes, So Little
- 1. Size does matter (for telescopes that is!)

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#### **President's Message**

By Mike Hay

As better weather begins to arrive I am thinking abount nice nights to do some observing. I know I let the cold weather keep me away from my telescope during most of the winter, shame on me. The Messier Marathon is March 17 at Star House. I hope you think about being there. Also remember that we will be having star parties at Jubilee.

This summer our regular monthly meetings will under go a change. Instead of the first Wednesday they will be on a weekend night and will be dedicated to observing. The location will also be different, more on this inside.

I would like to invite you to become more involved in the running of the society. There are several committee positions available, and we need someone to take over being parliamentarian. If you might be interested, please contact me or any board member. My e-mail address is m.hay@insightbb.com. There is a new roster included in this issue with names and phone numbers.

## **PAS Monthly Meetings & Programs**

#### March 7th

All Members Meeting, Lakeview Planetarium. John Barra will present a Messier Marathon Overview.



#### March 21st

Board meeting, Northpoint Hardees

#### April 4th

All Members meeting—Lakeview Planetarium. Phil Burroughs will present a history of time.

#### April 18th

Board meeting, Northpoint Hardees.

May 2nd

All Members meeting—Lakeview Planetarium. Dan Son will review some neat astronomical websites.

#### May 16th

Board meeting—Northpoint Hardees

**Note**: All Members meetings are held the first Wednesday of the month, at 7:30pm, at Lakeview Museum Planetarium (unless otherwise stated) Meetings are free and open to the general public.

All Board meetings are held the 3rd Wednesday of the month, at 7:30pm, at Hardees at Northpoint Shopping Center. Board meetings are open to all PAS members.

#### 2007 Membership Fees are due!!!

By now everyone should have received at least 2 dues notice for 2007. If you have already paid your dues, then THANK YOU!!! The \$30 Membership fee is due by March 31st. Any

member who has not paid the membership dues by the April Board meeting will be dropped from the membership!! These membership fees are



needed to pay for planetarium use and Science Academy membership at Lakeview, membership to the Astronomical League, Starlite, as well as speakers and other general activities.

#### Мощитоог

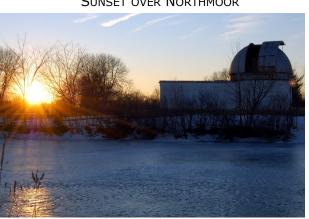
water; 5. Russia; 7. Earth; 9. NASA; 11. Down: 1. Sullivan; 3. Eclipsed; 4. Under-Atlantis; 12. Pluto; 13. Altman; 14. Thirty tunity; 6. Milky; 8. Moon; 9. Neptune; 10. Astronautical answers: Across: 2. Oppor-

#### WINTER DOMES



Photos taken by Tim McGrath

#### SUNSET OVER NORTHMOOR



#### **Not Just for Kids**

Visit these Websites for online Astronomy fun.

http://www.dustbunny.com/afk/

http://www.kidsastronomy.com/fun/ index.htm

http://www.nasa.gov/audience/ forkids/home/index.html

http://www.space.com/

#### POP ROCKETS (FROM NASA.GOV)

Build a rocket to launch into the air.

#### What you need:

Sheets of sturdy paper

Scissors, Tape, Empty film canister (it must be one with a cap that fits inside the rim), Fizzing antacid tablet (cut in half -- let an adult do this), Safety goggles

#### Here's what you do:

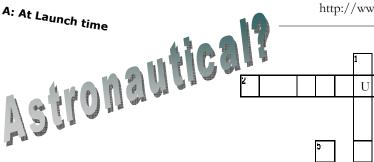
- 1. Set the film canister on the table, lid end down. Tape a tube of paper around the film canister.
- Cut out four fins for your rocket and tape them to it.
- Cut out a piece of paper for the cone.
- Roll it together so it is slightly bigger than the top of your rocket.
- Take your rocket outside to launch.

#### Launch Time! (Adults need a child to supervise.)

- 1. Put on your safety goggles.
- Turn the rocket upside down and carefully fill the canister one-third full of water. Work quickly on the next steps!
- 3. Drop in one-half of the fizzy tablet.
- 4. Snap the lid on tight.
- 5. Stand the rocket on the flat surface.
- Stand back and watch the launch!
- Have a contest with friends to see whose rocket goes the highest.

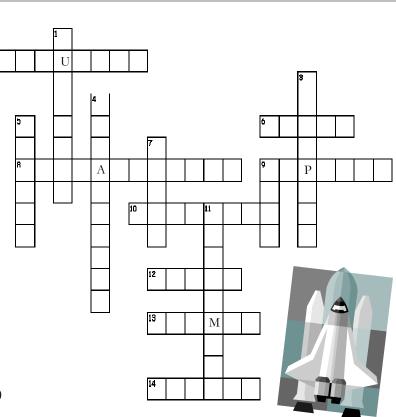
Q: When do Astronauts have lunch?

Read more about this project at http://www.nasa.gov/audience/forkids/activities/A\_Pop\_Rockets.html



- 2. Mars Rovers are Spirit and this
- 6. Astronomer's Way Favorite Candy Bar
- 8. Destination of #10
- 9. Furthest Planet from the Sun
- 10. Hail grounded this on February 26, 2007
- 12. Not the 9th planet anymore
- 13. Last name of astronaut from Pekin, Illinois
- 14. Number of years ago that Viking Landers landed Down
- 1. Last name of first woman to walk in space, Oct. 1984
- 3. The moon totally did this on March 3, 2007
- 4. Where NEEMO takes an astronaut
- 5. Soyuz's Country
- 7. 3rd Rock from the Sun
- 9. National Aeronautics and Space Administration (abr.)
- 11. Location of Peoria's Public Observatory

(visit NASA.gov and astronomical.org for additional help)





## STARLITE



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#### From Starlites Past...

By John Barra

#### 40 YEARS AGO: May Starlite 1967

"How much enthusiasm do you have? There are many who are enthusiastic for a short period of time; yes, indeed! However, there are few, very few, who are enthusiastic over a long, long period of time, who can remain determined and loyal to a cause though most any kind of obstacle." Bernice Grebner, Editor.

How very true. And, Bernice, we hope the obstacle of your recent physical problems do not keep you down for long. Our prayers are with you.

"Our own observatory, in the beginning, was in a good location on Northmoor Golf Course but as Peoria grew, it virtually surrounded the entire golf course. The added lighting caused problems both in visual observation and photography."

It is still amazing that 40 years later, despite the every growing city and light pollution, that Northmoor Observatory can still wow the crowds during public viewing sessions--as long as the scope is pointed at the moon or nearby planets.

#### 25 YEARS AGO: March Starlite 1982

"After over eighteen months of negotiation with the Illinois Department of Conservation, we have finally reach an agreement with the DOC regarding the terms of the lease for Jubilee Observatory. Many thanks for Scott Swords and Darrell Stafford for their advice and counsel."

Now it seems that the City of Peoria is getting

closer and closer to Jubilee. How soon before the next generation of subdivisions is at our doorstep? When will we have to move again?

"ALCON '82, the National Convention of the Astronomical League will convene at Peoria's Continental Regency Hotel on July 22-24, 1982. As host for this convention, Peoria Astronomical Society, Inc. is working to make ALCON '82 a success."

For those who were around to make that convention a success, I imagine you are wondering how time has flown by those past 25 years. We hope to have a more detailed article on the silver anniversary of ALCON 82 in the next Starlite.

