

This Months SAAA Events

Club Meeting: Thursday, December 21 @ 7:00 PM

- *Macatawa Bay School Planetarium*
- *Annual Christmas Party (See page 5)*
- *Everyone bring a treat to pass*

Observing Session: Friday, December 22 @ 6:00 PM

- *Vivekananda Monastery, 6723 122nd Ave, in Fennville*
- *Weather Permitting*
- *Sunset at 5:13 PM*

Board Meeting: Thursday, January 4 @ 5:30 PM

- *Beechwood Inn, 380 Douglas Avenue , in Holland*

Celestial Highlights:

Dec. 4
Full Moon

Dec. 10
Jupiter, Mars, and Mercury very close together in SE 40 min. before dawn

Dec. 12
Last-quarter Moon

Dec. 13-14
Geminid meteor shower

Dec. 20
New Moon

Dec. 21
Winter solstice - first day of winter

Dec. 27
First quarter Moon

Inside this Newsletter...

Table of Contents:

<i>November Meeting Minutes</i>	2
<i>Board Meeting Minutes</i>	2
<i>What's Up In The Sky?</i>	3
<i>Photos of Mercury Transit</i>	3
<i>NASA Space Place</i>	4
<i>SAAA Christmas Party</i>	5
<i>Field Trip</i>	5
<i>Editor's Comments</i>	6
<i>Astronomy Show & Swap Meet</i>	6

Members in ACTION...



SAAA members participate in Mercury transit at Hope College on Wednesday, November 8, 2006. From left to right; Robin, Nathan, Russ and Ian.

November Meeting Minutes

The general meeting of the Shoreline Amateur Astronomical Association was brought to order by Peter Burkey on Thursday, November 16, 2006 at 7:15 pm. Seven members attended the meeting which took place at Macatawa Bay School Planetarium. Jim Reier provided refreshments.

The meeting opened with old and new Club business.

Old Business

- The SAAA received \$58 in proceeds from Park Township for the deep sky presentation on October 19th.
- Mark Logsdon, Peter Burkey and Jim Reier received training on the new planetarium control console on September 27, 2006. A second training session took place on October 10th and was attended by Mark and Jim.
- Peter summarized the Mercury transit that took place on November 8th at Hope College. He shared photos of Mercury transiting the Sun. Each photo was taken by holding the camera up-to the eyepiece of the telescope. Well done!
- Robin Hudson distributed results of the meeting topic survey that was administered in October. Members reviewed the survey and held a lengthy discussion.

New Business

- Peter motioned for the survey to be discussed at the next executive board meeting so that SAAA programs for 2007 reflect member feedback in the survey.
- Officer elections occurred in November. Congratulations to the following individuals who begin serving a two year term in January 2007:

President..... Jim Reier
Vice President..... Russ Hills
Treasurer/ALCOR... Mark Logsdon
Secretary..... Robin Hudson
Member-At-Large... Peter Burkey

- 7pm on December 21st is the SAAA Christmas party in the planetarium. All members please bring a treat to pass.
- Constellation of the Month for December will be Auriga, presented by junior member, Ian Hudson.

Next, Jim Reier presented a 5-minute video from Jack Hoerkheimer, StarGazer. The episode is from the week of Nov 6th through 12th titled: *"The Moon, A Planet And A Star Line Up In A Row This Sunday Morning"*.

Robin Hudson presented the constellation of the month, Taurus the bull. A planetarium session ensued projecting the winter sky with Taurus positioned high in the south, chased by Orion the hunter. Robin guided members on a tour of Taurus revealing the bright star Aldebaran, the Hyades, and Messier objects M1 and M45, which are the Crab Nebula and the Pleiades, respectively. Hardcopies of Robin's presentation were distributed to all members present.

The meeting came to a close at 8:50 PM.

Board Meeting Minutes

The officers and at-large members of the SAAA assembled for a board meeting on November 30, 2006 at the 84 East restaurant on 8th Street in Holland. President Peter Burkey brought the meeting to order at 5:30 pm.

In attendance were Peter Burkey, Jim Reier, Robin Hudson, Russ Hills and Mark Logsdon.

SAAA treasurer Mark Logsdon reported all transactions and indicated a balance of \$517.96.

Jim Reier handed-over a check in the sum of \$58 from Park Township to treasurer, Mark Logsdon. Mark Logsdon also received a personal check from Mark Schurman covering member dues for 2006 and 2007.

Robin Hudson agreed to email members about the December 21st Christmas party held at 7:00 pm in the MAC BAY Planetarium. The Christmas party will be a social event and members are encouraged to bring their families.

Ian Hudson will present Auriga as the constellation of the month for December and Jim Reier will give a presentation on the Star of Bethlehem.

Mark Logsdon revealed that Dr. Kevin Cole of Grand Valley State University has agreed to be a guest speaker and requested to speak at our February meeting. Dr. Cole specializes in meteorite research. The title of his presentation is to be announced. Stay tuned for more info!

Russ Hills agreed to prepare a handout that describes telescope construction to address survey inquiries on the differences between reflectors, refractors, and catadioptrics.

The board agreed to re-institute the club newsletter, the Shoreline Observer. The newsletter will include board minutes, submitted articles, NASA space place articles and other astronomy aids.

We proceeded to discuss topics for 2007 while referencing the member survey. Here is a summary of upcoming meeting topics:

January..... Presentation on meteor impacts / Member dues collected

February..... Dr Kevin Cole presentation on Meteorites

March..... Desktop planetarium software presentation covering Starry Night, Deep Sky and other popular apps.

April..... Park Township presentation on lunar and planetary motion with emphasis on seasonal equinox and the summer and winter solstice.

May..... Planetarium tour of southern skies with a southern-hemisphere constellation of the month.

June..... Presentation of Astronomical League membership benefits including Messier, Herschel, Caldwell, Lunar, constellation hunter and other observational award programs.

What's Up In The Sky?

December, 2006

By Peter Burkey

My attempt to view the transit of Mercury on Nov. 8 turned into a typical observing fiasco. The day started out clear, but by 3:00 p.m. clouds had moved in, leaving those of us gathered on Hope's campus for the public viewing looking through our solar telescopes at nothing. All we wanted was a glimpse through a break in the clouds but no such luck.

So we packed up and departed and as soon as I pulled into my driveway (four blocks away) it was sunny! Unable to regroup, I set up and watched the transit by myself (my next door neighbor had a look but left to hunt for his dog) until finally I had to drag my wife out of the house so I would have someone with whom to share what I considered to be an extremely memorable event.

That's happened before, in 1998, when I took her to Aruba to watch a total eclipse of the sun with a couple hundred other folks. In fact, almost all of my best observations have been in the company of others. I've seen a meteor shower with a group of math and science teachers and a lunar eclipse with my softball team. Friends and I have shared views of comets, aurora, transits, and occultations. I've risen before dawn to observe with students and stayed up all night to observe with astronomy club friends.

In April, 1979, while driving to a party at a friend's house in Allegan, I watched the crescent moon approach the bright star Aldebaran. Upon arrival, I told everyone to come out and see this extraordinary event - a bright star covered by the unlit side of a crescent moon! One person joined me. The others missed the significance of how rare an opportunity this was - I have never seen another occultation anywhere near as spectacular. I'm sure my lone companion remembers that night as vividly as I do.

If you have an interest in astronomy, but don't know how to pursue it, consider our local astronomy club, the Shoreline Amateur Astronomers (www.holland-saaa.org). We offer camaraderie, resources of information, and the opportunity to observe in a safe, dark location. It's more fun and more interesting when you can get together with friends to enjoy what's up in the sky.

This month in history:

- Dec. 4: Mars Pathfinder launched - 1996
- Dec. 14: Gene Cernan, Apollo 17 astronaut, becomes last person to walk on Moon - 1972
- Dec. 15: Venera 7 becomes first spacecraft to land on Venus - 1970
- Dec. 24: Apollo 8 sends Seasons' greetings from lunar orbit - 1968
- Dec. 25: Isaac Newton born - 1642
- Dec 27: Johannes Kepler born - 1571

Photos of Mercury Transit

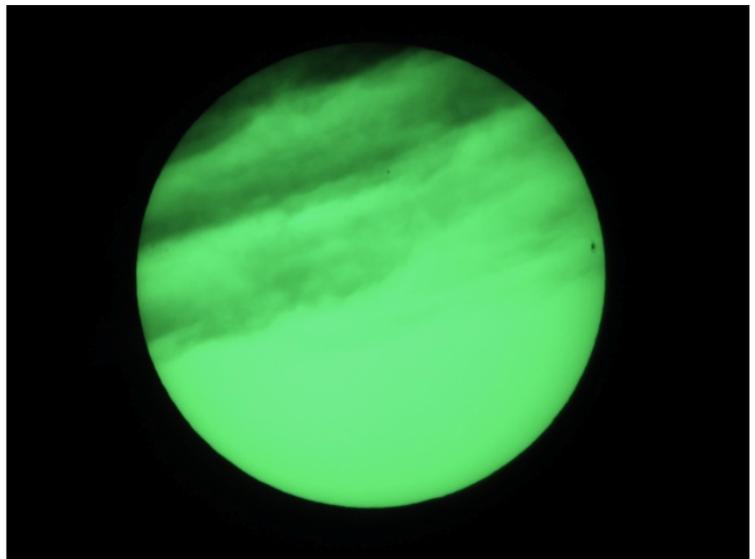
By Peter Burkey, November 8, 2006

Mercury is the dot halfway between edge and center at 12 o'clock, not to be confused with the sunspot at 3 o'clock.)



Greetings!

After a valiant but unsuccessful attempt to view the transit at Hope College, as soon as I got home the sky cleared and I was able to get the scope on it. These crude photos (one with clouds, one without) were made by pointing my digital camera at the eyepiece - hand held. Ah, the irony. - PB





Martian Devils

by Dr. Tony Phillips

Admit it. Whenever you see a new picture of Mars beamed back by Spirit or Opportunity, you scan the rocks to check for things peeking out of the shadows. A pair of quivering green antennas, perhaps, or a little furry creature crouched on five legs...? Looking for Martians is such a guilty pleasure.

Well, you can imagine the thrill in 2004 when scientists were checking some of those pictures and they *did* see something leap out. It skittered across the rocky floor of Gusev Crater and quickly disappeared. But it wasn't a Martian; Spirit had photographed a dust devil!

Dust devils are tornadoes of dust. On a planet like Mars which is literally covered with dust, and where it never rains, dust devils are an important form of weather. Some Martian dust devils grow almost as tall as Mt. Everest, and researchers suspect they're crackling with static electricity—a form of “Martian lightning.”

NASA is keen to learn more. How strong are the winds? Do dust devils carry a charge? When does “devil season” begin—and end? Astronauts are going to want to know the answers before they set foot on the red planet.

The problem is, these dusty twisters can be devilishly difficult to catch. Most images of Martian dust devils have been taken by accident, while the rovers were looking for other things. This catch-as-catch-can approach limits what researchers can learn.

No more! The two rovers have just gotten a boost of artificial intelligence to help them recognize and photograph dust devils. It comes in the form of new software, uploaded in July and activated in September 2006.

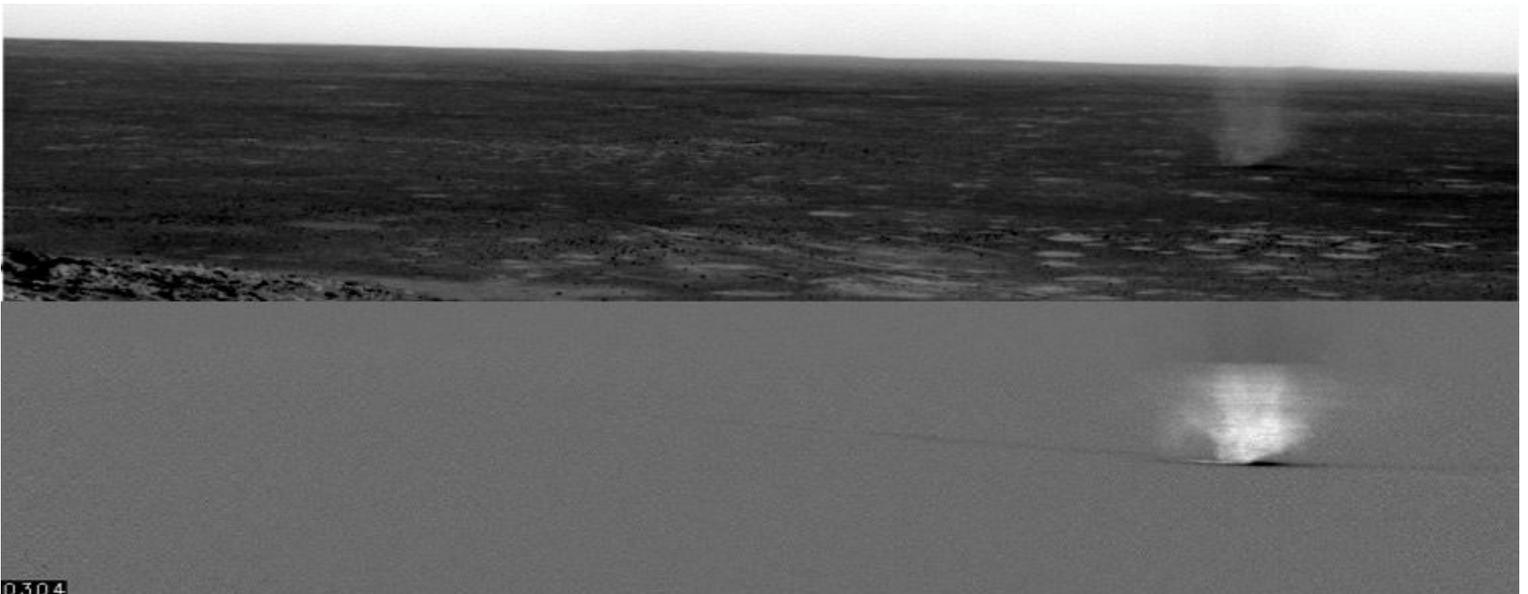
“This software is based on techniques developed and tested as part of the NASA New Millennium Program’s Space Technology 6 project. Testing was done in Earth orbit onboard the EO-1 (Earth Observing-1) satellite,” says Steve Chien, supervisor of JPL’s Artificial Intelligence Group. Scientists using EO-1 data were especially interested in dynamic events such as volcanoes erupting or sea ice breaking apart. So Chien and colleagues programmed the satellite to notice change. It worked beautifully: “We measured a 100-fold increase in science results for transient events.”

Now that the techniques have been tested in Earth orbit, they are ready to help Spirit and Opportunity catch dust devils—or anything else that moves—on Mars.

“If we saw Martians, that would be great,” laughs Chien. Even scientists have their guilty pleasures.

Find out more about the Space Technology 6 “Autonomous Sciencecraft” technology experiment at nmp.nasa.gov/st6/TECHNOLOGY/sciencecraft_tech.html, and the use of the technology on the Mars Rovers at nmp.nasa.gov/TECHNOLOGY/infusion.html. Kids can visit spaceplace.nasa.gov/en/kids/nmp_action.shtml and do a New Millennium Program-like test at home to see if a familiar material would work well in space

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.



Caption:

The top half of this image is part of a series of images of a passing dust devil on Mars caught by Spirit. In the bottom half, the image has been filtered to remove everything that did not change from one image to the other. Notice the faint track left by the dust devil. Credit NASA/JPL/Mark T. Lemmon, Univ. of Arizona Lunar and Planetary Laboratory.

SAAA Christmas Party



Thursday, December 21 at 7:00 PM

Macatawa Bay School Planetarium

We encourage you to bring your family and a tasty treat to share!

Field Trip

Heavens Above Tour

Hubble Space Telescope: New Views of the Universe

Organized by the Space Telescope Science Institute and the Midland Center for the Arts of Midland, Michigan, this new, low cost traveling exhibition features breathtaking images of the universe presented as large-formatted captioned transparencies mounted in light boxes. The images survey a range of visible-light astronomy from the solar system to stellar evolution to the farthest reaches of space and time.

Also included in the exhibition is a plasma display panel featuring ViewSpace, continuously running presentations of Hubble images and animations with interpretive text set to evocative music.



Where: Krasl Art Center
707 Lake Boulevard
St. Joseph, Michigan

When: Saturday, January 6
10 am - Noon



Members will meet at the Krasl Art Center at 10 am on Saturday January 6 and tour the exhibit at their leisure.

Editor's Comments

December 10, 2006

I hope you've enjoyed this month's Shoreline Observer. I had a lot of fun experimenting with formats and putting the newsletter together.

I want to extend an offer to all members encouraging you to submit articles for the Observer. Perhaps you've had an interesting astronomy experience you are willing to share, or you've come across an article (or photo) you find fascinating. Maybe you have a question about astronomy or a piece of equipment that you'd like explained. Perhaps you've just completed research and want to share your knowledge. Please know your submissions are welcome.

I seek your feedback on this issue and want to know if there is anything you like or dislike? Is something missing that could be included? Perhaps text formatting or use of icons

or graphics in the headers. I'd love to hear your suggestions

I intend to publish newsletters monthly and will do all I can to make that a reality.

Please send all comments and suggestions to:
jreier@chartermi.net

I look forward to seeing everyone at the Christmas party on December 21st.

Clear Skies!

Jim Reier



The 4th Annual

Astronomy Show & Swap Meet

*Hosted by
 Ford Amateur Astronomy Club (FAAC)
 & Rider's Hobby - Livonia*

Saturday, Feb 03, 2007 9:00 am - 3:00 pm

Holy Cross Church Gymnasium, 30650 Six Mile, Livonia, 48152

Included: ASTRONOMY PRESENTATIONS

- 10:00 am: **Al Rothenberg**, "ECLIPSES: SHORT BUT OH SO SWEET";
 11:00 am: **Clay Kessler** "GETTING STARTED IN ASTRONOMICAL IMAGING"
 12:00 pm: **Jim Frisbie** "BINOCULAR OBSERVING"
 1:00 pm: **John Kirchhoff**, "ASTRONOMICAL HARDWARE AND EQUIPMENT"

Planetarium Lectures @ 10am, 11am, 1pm, 2pm

Earn Cash By Selling Your Extra:

Telescopes - Eyepieces - Cameras - Binoculars - Mounts
 Tripods - Software - Publications - Accessories, etc.

Or, locate that special bargain you might not otherwise find!

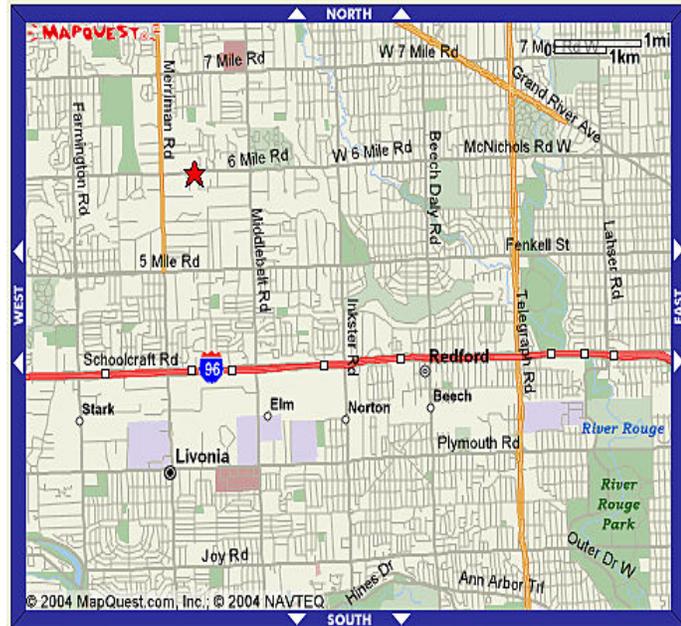
Admission: \$5.00 in advance or \$6.00 at the door
(children 15 and younger – Free)
 Sales Table: **\$15** in advance, or as available at
 the Door, **\$20** (one admission ticket included).

Advanced Registration ends January 21, 2007.

Doors Open: **8:00am for setup**. Complimentary
 Coffee & Donuts provided by *Rider's Hobby*.

Make Checks Payable: to **FAAC for advance
 admission or table registrations**. Send payment
 to Ford Amateur Astronomy Club, P.O. Box 7527,
 Dearborn, MI 48121-7527 - by Jan. 19, 2007.

Location: **Holy Cross Lutheran Church
 Gymnasium 30650 Six Mile, Livonia, 48152, north
 side of Six Mile, ½ mile east of Merriman. See
 STAR on map.**



For More Information: Contact Tom via email: key_string_guy@yahoo.com or call (313) 516-5978, or
 John Kirchhoff via email: riderslivonia@aol.com or call (734) 425-9720