The WASP (Warren Astronomical Society Paper) is the official monthly publication of the Society. Each new issue of the WASP is e-mailed to each member and/or available online at www.warrenastronomicalsociety.org. Requests by other astronomy clubs to receive the WASP, and all other correspondence should be addressed to the editor, Cliff Jones, email: cliffordj@ameritech.net.

Articles for inclusion in the WASP are strongly encouraged and should be submitted to the editor on or before the first of each month. Any format of submission is accepted, however the easiest forms for this editor to use are plain text files. Most popular graphics formats are acceptable. Materials can be submitted either in printed form in person or via US Mail, or preferably, electronically via direct modem connection or email to the editor.

Disclaimer: The articles presented herein represent the opinions of the authors and are not necessarily the opinions of the WAS or the editor. The WASP reserves the right to deny publication of any submission.

---

Astro Chatter
by Larry Kalinowski

I’m going to throw a wrench into the works that involve giving a scholarship to high school seniors. As much as I feel they deserve all the financial help they can get, our club shouldn’t be in the “scholarship business”. To put it bluntly, we’re not a business oriented group. In fact, we shouldn’t be. That’s not what the WAS is designed to be. Our outreach programs and educational talks at meetings, Stargate, public star parties and public schools fulfill our requirements. If you think our business meetings are long now, you’ll cringe if we continue on the road to “free” financial giveaways. There are other organizations better suited to scholarship distributions. Let’s honor the original reasons our society was created to be, to provide the dissemination of knowledge and enjoying the fellowship of observing jaw dropping astronomical sights.

Almost all of the people who have been asked to give an opinion about a scholarship award have agreed that it was a good way to go. However, when you delve into the particulars about obtaining funds, who will be eligible and who will determine the winners, a lot of problems come to light. I’m not completely against awards and recognition, only the problems that monetary awards bring to organizations who aren’t equipped to handle that kind of award. I’m all for a non-monetary award like Guy Maxim suggested. He feels a telescope award might be more appropriate. In fact, the board was wondering what to do with some of the ‘scopes that have accumulated in our storage building. Some need repair but that might be less costly than a scholarship award. It might even appeal more to the amateur astronomer group than the ones looking for financial help. We have the possibility of getting new, younger members with that kind of award.

Looks like Jupiter has a new Red Spot. The June 2006 issue of Sky And Telescope (page
18) reports that an old spot, about half the size of the Great Red Spot, has started changing color since last February. The new red spot was called BA, back when it was colored white. Last February, Christopher Go, a Philippine astrophotographer captured an image of BA and realized it was turning red. The new red spot is affectionately called Red Junior.

The gamma ray outburst (GRO), reported in last months WASP, has turned into a supernova just three days after it was detected by the Swift space probe. It’s located at RA: 03:21:39.71 and Dec.: +16:52:02.6, a blue object in photos, it’s supposedly visible in small amateur telescopes.

Bob Watt says you have a chance to get in on another Binoviewer package if you missed out in the last group purchase. This time the viewer will be available with an additional Barlow lens as well as the matched 20mm eyepieces. The best part of it all is the price. Binoviewer, eyepieces and Barlow all go for $169. You can reach Bob at 586-757-4741 for more information.

Apparently, component “B”, in the Schwassmann-Wachmann 3 comet has undergone an outburst and has changed from magnitude 12 to 9. The outburst has produced more pieces and the count has gone up from eight to “quite a bit”. With another month to go before it reaches perihelion, more action is expected. When breakups occur, there’s no telling just how bright the end result can produce. The broken components may produce gases that could increase the brightness of those pieces tremendously.

According to the latest Hubble telescope observations, our tenth planet (Xena) is smaller than originally determined. Now the diameter is supposed to be about the size of Pluto. If Pluto’s a planet, Zena should be too. I know, you’re saying let’s wait and see what the IAU has to say about it. Well, scientific nomenclature doesn’t mean a hill of beans when it comes to the general public. First impressions delve deep in the public’s minds and Zena is probably here to stay. When it comes to names, even amateur astronomers prefer the name Sirius, instead of alpha Canis Majoris. What’s really important is defining the term “planet”. The IAU hasn’t done that since Pluto’s discovery in 1930.

On June 2nd and 3rd (Friday and Saturday) GLAAC is having a special star party for those clubs that have participated in the past “Astronomy On The Beach” star parties. Astronomy club members will be allowed to use the grassy, beach area until two or three in the morning. The public is not invited to this event. If you’re a new member in our club, this is a good chance to examine different kinds of telescopes and find out which type you would like to own if you haven’t decided yet.

Bill Beers has announced the coming of The 5th Annual CADILLAC WEST – SPRING - STAR PARTY. It'll be at his Cadillac hideaway between the dates of May 24 through 29, 2006. There’s space for tents and campers, with motels nearby and features a Saturday barbecue. See the flyer somewhere in this newsletter for additional information.

Open houses at the Stargate Observatory will be on May 6 (Astronomy Day), May 20 (spring cleanup), June 24, July 29 (picnic), August 19, September 16, October 14, November 11 and December 2. All these dates occur on a Saturday. The Cranbrook Science Center will also have a special program for the public during the Astronomy Day afternoon. Solar and planetary viewing are possible if the cloud conditions are favorable. Stargate’s event occurs during the evening hours. Members are asked to help out at these events, if possible, so bring your telescopes, binoculars and sky pointers.

Be prepared to have your picture taken at the upcoming club picnic on July 29. There’s talk about getting a group picture and some individual pictures of members and their telescopes for adding some recent club activity pictures on our web site.

Speakers for May include Bob Berta and Jim Shedlowski. Bob’s talk is entitled “I’m Only Human”, on May 1, at the Cranbrook Science Center. According to Bob, it’s about how your mind and vision can be tricked into seeing what doesn’t exist. Jim’s talk is entitled The Eyes Have It. If you’ve attended any of his past talks, you can expect something excellent. It’s at the MCCC meeting on May 18, Bldg. B, Room 209. Both meetings start at 7:30PM.

May’s discussion/computer group meeting will be on the 25th, (the fourth Thursday of the
month) at Gary Gather’s home in Pleasant Ridge. He lives at 21 Elm Park Blvd., three blocks south of I-696 and about a half block west of Woodward Ave. Meeting will start at 8:00 PM. Last month’s subjects covered Schwassmann-Wachmann 3, the U of M branch in Dearborn’s plans for a 16 inch reflector, the DOAA presentation of “When A Man Looks Upward”, the small and large Magellanic clouds and Celestron’s new hand held, talking planetarium. A record attendance was reached with 11 people at the meeting. You can reach Gary at 248-543-3366, or me, at 586-776-9720 for any further information.

All space photos are courtesy of SPACE.COM and SPACEWEATHER.COM, unless otherwise noted.

∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞

THE SWAPSHOP

This column is for those who are interested in buying, trading or selling items. Call 586-776-9720 (cometman@mybluelight.com) if you want to put an item for sale or trade in this section of the WASP. The ad will run for six months. The month and year, the ad will be removed, is also shown.

FOR SALE. Ten inch box Dobsonian telescope. F4.5, 1/8 wave parabolic mirror. 50 inch long tube. Two inch (with 1¼ in. adapter) rack and pinion focuser, 8X50 right angle, upright image finder with interchangeable eyepiece capability and an inch and a quarter 12mm eyepiece. $500. Larry Kalinowski, 856-776-9720 (10-06)

FOR SALE. Sceptre Dragon Eye 16” Color monitor. The monitor has great picture quality and contrast ratio. Dot pitch is .29 mm and the highest resolution is 1024 x 768 with over 16 million colors. Dimensions is 16” x 16” x 16” and weighs around 30 pounds and the color is beige. Awesome monitor for astro photos. The asking cost is $45. Contact Michael Robacker at MBRobacker@hotmail.com or (248)-398-7010. (6-06).

Mark Christensen, of the Fox Valley Astronomical Society, in Illinois, reports that a friend of his passed away and he has agreed to help sell the astronomical equipment in the estate. The stuff is arranged in lots.

Lot #1. Celestron C-11 Telescope with CL 700A Motorized mount/Controller and heavy duty tripod. 3 Celestron boxes, Celestron visual back 1 ¼ in., Celestron 2 inch diagonal, 26 and 25 mm Plossl eyepieces, 2-25 lb weights, heater system and sliding astronomy chair. $3200 or best offer.

Lot #2. Takahashi FSQ Quadruplet Fluoride Refractor Telescope with 106mm objective and 530mm focal length lens. Includes an EXQ 1.6X extender, Celestron Box and Takahashi 1 ¼ in diagonal. $2800 or best offer.

Lot #3. Meade series 4000 eyepieces. Includes a 56mm ($140), 40mm ($140), 32mm ($100), 14mm($100) 2 in dia. eyepieces and a 6.7mm 1 1/4in Ultra Wide eyepiece ($50).

Lot #4. Canon camera and assorted astrophotography equipment and accessories. 7X50 binoculars. Approximate value $200. Contact Jim Griffin at kanecountyastro@yahoo.com, or by phone, during the day, at 630-232-8070. (5-06).

∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞

WAS SUB-GROUPS

Want to delve more deeply into a specific field of interest in astronomy? Joining a sub-group just may be the answer. Please contact the chairperson listed by the subgroup of interest for more information, meeting times and location. Current sub-groups are:

Discussion/Computer Group - Larry Kalinowski
Lunar/Planetary/Double Stars - Alan Rothenberg
Deep Sky Group - Phil Martin
Solar Group - Marty Kunz
Hands on Group - Riyad Matti
WAS Meetings scheduled for 2006

Cranbrook Meetings – Every 1st Monday
Jan 2 Feb 6 Mar 6 Apr 3
May 1 Jun 5 July 3 Aug 7
Sep 4 Oct 2 Nov 6 Dec 4

Macomb Meetings – Every 3rd Thursday
Jan 19 Feb 16 Mar 16 Apr 20
May 18 Jun 15 Jul 20 Aug 17
Sep 21 Oct 19 Nov 16 Dec *
★ Banquet date to be determined.

☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼

Presentations for 2006

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Presenter</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/01/06</td>
<td>Mon</td>
<td>Bob Berta</td>
<td>I'm Only Human</td>
</tr>
<tr>
<td>5/18/06</td>
<td>Thurs</td>
<td>Jim Shedslowsky</td>
<td>The Eye's Have It</td>
</tr>
<tr>
<td>6/05/06</td>
<td>Mon</td>
<td>Gary Ross</td>
<td>Pictures By Mark Christensen</td>
</tr>
<tr>
<td>6/15/06</td>
<td>Thurs</td>
<td>Riyad Matti</td>
<td>Observing Project</td>
</tr>
<tr>
<td>7/03/06</td>
<td>Mon</td>
<td>Marty Kunz</td>
<td>TBD</td>
</tr>
<tr>
<td>7/20/06</td>
<td>Thurs</td>
<td>Larry Phipps</td>
<td>Tube hopping on Interplanetary Super Highway</td>
</tr>
<tr>
<td>8/07/06</td>
<td>Mon</td>
<td>Norm Dillard</td>
<td>Satellite Galaxies</td>
</tr>
<tr>
<td>8/17/06</td>
<td>Thurs</td>
<td>Justin Nomura</td>
<td>Quantum Theory</td>
</tr>
<tr>
<td>9/11/06</td>
<td>Mon</td>
<td>Philip Martin</td>
<td>TBD</td>
</tr>
<tr>
<td>9/21/06</td>
<td>Thurs</td>
<td>Larry Kalinowski</td>
<td>TBD</td>
</tr>
<tr>
<td>10/02/06</td>
<td>Mon</td>
<td>Dale Partin</td>
<td>The Drake Equation – Extraterrestrial Intelligence</td>
</tr>
<tr>
<td>10/19/06</td>
<td>Thurs</td>
<td>Jim Frisbie</td>
<td>Observing Double Stars</td>
</tr>
<tr>
<td>11/06/06</td>
<td>Mon</td>
<td>Ken Bertin</td>
<td>The Herschel Family</td>
</tr>
<tr>
<td>11/16/06</td>
<td>Thurs</td>
<td>Dave D'onofrio</td>
<td>Intelligent Design - Is it a Science</td>
</tr>
<tr>
<td>12/04/06</td>
<td>Mon</td>
<td>OPEN</td>
<td>TBD</td>
</tr>
<tr>
<td>12/21/06</td>
<td>Thurs</td>
<td>Banquet</td>
<td>TBD</td>
</tr>
</tbody>
</table>

2006 Stargate Observatory Open House Schedule

May 6 – Start at 3 P.M.: National Astronomy Day Public Star Party (Following the Afternoon solar observing open to the public at Cranbrook)
May 20 – Start at 6 P.M.: Spring clean-up and General observing.
June 24 – Start at 6 P.M.: General observing.
August 12 – Start at 6 P.M.: Public Meteor Shower open house (sponsored by the Park Service)
August 19 – Start at 6 P.M.: General observing.
September 16 – Start at 6 P.M.: General observing.
October 14 – Start at 6 P.M.: General observing.
November 11 – Start at 6 P.M.: General observing.
December 2 – Start at 6 P.M.: General observing.

Notes:
1. Normal closing time will depend on events, weather, and other variables.
2. The observatory may be closed one hour after opening time if no members arrive within the first hour.
3. Contact me for other arrangements, such as late arrival time.
4. An alternative person will be appointed to open the observatory if I cannot attend a scheduled date or opening time.
5. Members may arrive before or stay after the scheduled open house time.
6. Dates are subject to change or cancellation depending on weather or staffing availability.
7. An e-mail will be posted no later than 2 hours before starting time in case of date change or cancellation.
8. It is best to email me up to 2 hours before the posted opening with any questions you may have. I will not be able to receive e-mail after 2 hours before open time.

Generally only strong rain or snow would prevent the open house...even if it is clouded over I plan on being there. Often the weather is cloudy but clears up as the evening progresses.

Bob Berta

∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞

Special notices:

COMET NEWS: Astronomers are now monitoring more than 30 fragments of dying comet 73P/Schwassmann-Wachmann 3, which is approaching Earth for a close encounter in mid-May. One of the brightest fragments, fragment B, is splitting in two in plain view of amateur astronomers using backyard telescopes. Visit Spaceweather.com for pictures of the breakup, sky maps and more.

Great Lakes Star Gaze 2006

Be sure to register early!!!

Location and dark skies are the main attractions of the Great Lakes Star Gaze. The Gladwin location provides excellent observing without having to travel hours into northern Michigan. Limiting magnitudes are estimated to be around 6.5 at the zenith with some minor light domes from the cities of Mt. Pleasant and Midland (approximately 30 miles away).

We mix interesting talks and events during the day with great observing at night. Some great door prizes have been given out in past years, and this year will be no exception. This event is well attended and provides a great opportunity to network with other amateurs. The range of equipment that people bring is awesome and there are some good views to be had.

A detailed flyer/registration form will be available here shortly. In the mean time, be sure to browse some of the pictures from our past events.

Sponsors & Donations

Great Lakes Star Gaze gets strong support from local and national vendors, who provide us with a fantastic selection of door prizes. See last years sponsors for details.

For a copy of the Flyer in PDF, go to the web page: http://www.boonhill.net/sunset/PDFforms/GLSG4Flyer.pdf

For a copy of the registration form in PDF, go to: http://www.boonhill.net/sunset/PDFforms/GLSG4Reg.pdf

30991 Five Mile Rd., Livonia, MI 48154
(734) 425-9720 – Ask for John or Dan

Orion New Items:  O3 Filters 1.25"  $ 89.99
                           2.00"  $139.99
Orion 80 Express Refractor  $ 399.99
Orion 150mm Mak OTA        $ 649.99

We sell at Orion catalog prices EVERYDAY..why shop anywhere else?
PRESENTS

The 5th Annual
CADILLAC WEST - SPRING
STAR PARTY
May 24 – 29, 2006

Hosted By: Bill Beers (Warren Astronomical Society)
Located 14 miles west of Cadillac, Mich. at Bill Beers cabin (RSVP for map)

***DARK SKIES***

**Saturday Barbecue**

Accommodations Available:
Limited Floor Space in Cabin
Plenty of Space for Tents/Campers
Best Value Inn (231-775-2458) 12 miles east
Driftwood Lodge (231-775-2932) 12 miles east
Caberfae Peaks (231-862-3300) 1 mile east

----- A/C POWER AVAILABLE -----
(Donations accepted)

For More Info Contact: Bill Beers Phone #586-566-8367 or E-mail “BEEZOLL@AOL.COM”
John Lines Phone #248-969-2790 or E-mail “JELINES@YAHOO.COM”
Doug Bock E-mail “DBOCK1@CHARTERMI.NET”

(PLEASE RSVP IF YOU ARE PLANNING ON ATTENDING)

This will be a “Virgo Cluster” event.
How many galaxies can you see in the same field of view.
Who Wants to be a Daredevil?
By Patrick L. Barry and Dr. Tony Phillips

When exploring space, NASA naturally wants to use all the newest and coolest technologies—artificial intelligence, solar sails, onboard supercomputers, exotic materials.

But “new” also means unproven and risky, and that could be a problem. Remember HAL in the movie “2001: A Space Odyssey”? The rebellious computer clearly needed some pre-flight testing.

Testing advanced technologies in space is the mission of the New Millennium Program (NMP), created by NASA’s Science Mission Directorate in 1995 and run by JPL. Like the daredevil test pilots of the 1950s who would fly the latest jet technology, NMP flies new technologies in space to see if they’re ready for prime time. That way, future missions can use the technologies with much less risk.

Example: In 1999, the program’s Deep Space 1 probe tested a system called “AutoNav,” short for Autonomous Navigation. AutoNav used artificial intelligence to steer the spacecraft without human intervention. It worked so well that elements of AutoNav were installed on a real mission, Deep Impact, which famously blasted a crater in Comet Tempel 1 on July 4, 2005. Without AutoNav, the projectile would have completely missed the comet.

Some NMP technologies “allow us to do things that we literally could not do before,” says Jack Stocky, Chief Technologist for NMP. Dozens of innovative technologies tested by NMP will lead to satellites and space probes that are smaller, lighter, more capable and even cheaper than those of today.

Another example: An NMP test mission called Space Technology 9, which is still in the planning phase, may test-fly a solar sail. Solar sails use the slight pressure of sunlight itself, instead of heavy fuels, to propel a spacecraft. Two proposed NASA missions would be possible only with dependable solar sails—L1 Diamond and Solar Polar Imager—both of which would use solar sails to fly spacecraft that would study the Sun.

“The technologies that we validate have future missions that need them,” Stocky says. “We try to target [missions] that are about 15 to 20 years out.”

A menagerie of other cool NMP technologies include ion thrusters, hyperspectral imagers, and miniaturized electronics for spacecraft navigation and control. NMP focuses on technologies that have been proven in the laboratory but must be tested in the extreme cold, vacuum, and high radiation environment of space, which can’t be fully recreated in the lab.

New NMP missions fly every year and one-half to two years, taking tomorrow’s space technology for a daredevil test drive.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.
Artist’s rendering of a four-quadrant solar sail propulsion system, with payload. NASA is designing and developing such concepts, a sub-scale model of which may be tested on a future NMP mission.