New Observatory Opens in Lansing!
by Rich Michaels

The all new Fox Park Public Observatory opens to the public on the evening of Saturday September 11th in Potterville, just southwest of Lansing, Mi.

I am asking you to pass this along to others in the Michigan astronomical community. We would love to have you join us in our facility in this wonderful county park featuring dark skies, a wide open horizon and large field for star parties.

We have a 30 X 30 roll off roof observatory featuring a Celestron C-14 and two LX200 12" telescopes mounted on massive concrete piers. We are currently looking to raise the remaining funds to mount a very large 20 to 24 inch Cassegrain (most likely) on our 3rd massive concrete pier. These scopes are remotely controlled from the adjoining dark lab which has numerous computers and astronomical software. We also own a Starlight MX-5 one-shot color CCD and various other accessories.

As a lover of the stars, we invite you to join us on our first big day for a Chicken StarBQ (we borrowed this concept from the nice folks at GRAA ) as well. The Chicken StarBQ in the park runs from 4:30 to 7:30pm that day. The observatory opens at 8PM and is free to the public.

COME ON OUT AND ENJOY SOME CHICKEN UNDER THE STARS ON SEPTEMBER 11!!!

If you would, please rsvp to:  
Rich Michaels  
Fox Observatory  
President  
rich975@gte.net  
CHECK OUR RECORDED HOTLINE FOR OBSERVATORY INFORMATION AT 517-645-MOON (6666).

FOX PARK PUBLIC OBSERVATORY IS LOCATED JUST OFF I-69 (sw of Lansing), 1 MILE NORTH ON M-100 AND 1.1 MILES WEST ON GRESHAM HIGHWAY, ENTER FOX PARK ON RIGHT (north), FOLLOW TO REAR.

AND SOON TO UP AND RUNNING:  
www.foxobservatory.org  
mail@foxobservatory.org

Astro Chatter
by Larry Kalinowski

The Keck telescope, on Mauna Kea, in Hawaii, along with researcher Seran Gibbard, may have detected liquid seas on Saturn's largest moon, Titan. Gibbard, a planetary scientist with the Lawrence Livermore National Laboratory, has detected liquid hydrocarbons on the moon’s surface but isn’t able to say, just yet, what kind they are. It could be Methane, Ethane or some other hydrocarbons. The surface of Titan dips to -290 degrees F.

So far, about one million people have registered with the SETI@HOME project. Whether they're all running that signal locating software judiciously, is yet to be determined. However, ten times as many have signed up than was actually hoped for.

Deep Space One, the space probe with the ion pro-
see LARRY on page 4

The WASP 25 Years later
by LoriAnn Skonieczy

Here is another installment to The WASP 25 Years Ago. It is excerpted from the November 1974 issue of the WASP. The column was called Letters to the WASP.

I am certain that many readers of the WASP have wondered why we have no published any letters from our vast readership. Well, I can assure you, it was not because we hadn't received any. The postman regularly strains his finger-nails bringing in the tons of correspondence. But after you examine the following sample, you will understand why this correspondence has gone unpublished.

Sir:  
One of the most noble enterprises of any amateur astronomical organization is the spreading of astronomical information to the public. One of the most effective

see LORIANN on page 7
The WASP

Published by
Warren Astronomical Society, Inc.
P.O. Box 1505
Warren, Michigan 48090-1505

1998 Officers
President Steve Greene 1-800-593-1199
1st VP Chris MeHling 248-549-6896
2nd VP Rick Gossett 770-399-0534
Secretary LoriAnn Skonieczny 810-373-4059
Treasurer Joe Van Poucher 810-771-9303

The Warren Astronomical Society, Inc. is a local, non-profit organization of amateur astronomers. The Society holds meetings on the first Monday and third Thursday of each month, starting at 7:30 p.m.

First Monday meeting:
- Cranbrook: Institute of Science
- 1221 North Woodward Ave
- South campus, Bldg. B, Room 209
- Bloomfield Hills, Michigan
- 14600 Twelve Mile Rd.
- Warren, Michigan

Membership and Annual Dues

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Send membership applications and dues to the treasurer:
Joe Van Poucher
22164 Normandy
Eastpointe, MI 48021

Among the many benefits of membership are:
- Discount magazine subscription: Astronomy $29.00 (12 monthly issues)
  Sky & Telescope $27.00 (12 monthly issues)
- Loaner telescopes (with deposit). See 2nd VP.
- Free copy of each WASP newsletter.
- Free use of Stargate Observatory.
- Special interest subgroups. See chairpersons.
- Free use of W.A.S. library. See librarian.
- Free membership in Astronomical League, including Reflector newsletter.
- More benefits are listed in Member Booklet

The Warren Astronomical Society Paper (WASP) is the official monthly publication of the Society. Each new issue of the WASP is made available at the Macomb meeting on the third Thursday. Non-members will be charged $1.00 for each new issue. Back issues, when available are free. Requests by other clubs to receive the WASP and other correspondence should be addressed to the editor.

Articles for inclusion in the WASP are strongly encouraged and should be submitted to the editor on or before the first Thursday of each month. Any format of submission is accepted, however the easiest forms for this editor are files in plain text format, and graphics in PCX format. Materials can either be transmitted in person, via US Mail, via direct modem connection at the phone number listed below (call using voice first), or E-mailed on the Internet to bondono@iname.com

For further information on contribution, see or call the editor:
Jeff Bondono
51054 Kingwood
Shelby Twp., Michigan, 48316-4524
810-731-4706

Disclaimer: The articles presented herein represent the opinion of their authors and are not necessarily the opinion of the Warren Astronomical Society or this editor. The WASP reserves the right to edit or deny publication of any submission.

Stargate Observatory is owned and operated by the Society. Located on the grounds of Camp Rotary on 29 Mile Road, 1.8 miles east of Romeo Plank Road, Stargate features a 12.5 inch f/17 club built telescope under a steel dome. The observatory is open to all club members in accordance to the "Stargate Observatory Rules" published in the member handbook. Those wishing to use the observatory must call the 2nd VP by 7:00 p.m. on the evening of the session. The coordinates for Stargate Observatory are 82° 56' 0.4' W, 42° 46' N.

Library. The Society maintains a library of astronomy-related books and periodicals at the Macomb meeting room. See the librarian, Louis Namee, to check out a book.

Special interest groups
- Computers Larry Kalinowski 810-776-9720
- Deep Sky Doug Bock 716-725-2733
- Lunar/Planetary Riyad Matti 810-548-2333
- Solar Marty Kunz 248-371-0636
- Math John Herriott 810-543-1442
- Telescope Fred Judd 810-756-7456

New Members
by Joe Van Poucher

The thing that makes the Warren Astronomical Society great are its members. We are very happy to announce the following new member who joined during August of 1999. Please extend him a warm welcome.

Michael Gilbert, Farmington

WAS Anniversaries for October
9 Years
- David D'Onofrio, Dearborn Heights

4 Years
- Jack Kennedy, Royal Oak

3 Years
- Mark E. Bolk, Sterling Heights
- Paul Goelz, Rochester Hills
- Richard Brenz, Cadillac

2 Years
- Barbara Corfield, Romeo
- Frank Spisak, Shelby Twp
- Morton Sterling, Farmington Hills
- Richard D. Gossett & Family, Roseville
- Robert Zinke, Sterling Heights
- Sjon C. Moore, Harrison Twp
- Stephen Greene, Macomb Twp

Rider’s Hobby of Madison Heights is pleased to announce that we have two slightly used optical tubes for sale.

- 90mm (3.5") Refractor tube
  * Optics in good condition
  * Finder bracket included
  * Some scratches in paint
  $ 100.00

- 114mm (4.5") Refractor tube
  * Optics in good condition
  * Some scratches in paint.
  $ 50.00

Call or stop in. Ask for Eric, Tom, Steve, or Bob for more information.
Rider’s is located at 32115 John R Road.
Phone: (248) 589-8111.
Macomb Meeting
August 19, 1999
(Submitted by Bob Watt)

President Steve Greene opened the meeting at 7:30PM with 22 members in attendance.

Details of the upcoming GLAAC outing at Kensington, August 20 & 21 were covered.

The month of October will be election time, we are hoping for the turnout of people to fill the club offices that we had last year.

The meeting at Cranbrook will be on September 13 due to the first Monday being Labor Day & Macomb will follow on the 16th.

Island Lake Star Party will be on September 18, last year the crowd was estimated at 1500, great outing.

OFFICER REPORTS:

Second VP Rick Gossett: On July 31 , 4 members were at Stargate to witness the impact of the Lunar Prospector on the moon. The video images were hampered by thin clouds at impact time so we did not see anything , like everybody else. We stayed to see the sun come up then went to breakfast.

Stargate attendance total so far this year, 156 members & 217 guests.

Treasurer Joe VanPoucker: Balance on July 1, 1999 was $4077.07. Income - dues $156.00, subscription $29.00, Interest $3.69, total $4265.76. Expenses - subscription $29.00. Balance on July 31, 1999 $4236.76

SMURFS- This years attendance was down somewhat due to the impending bad weather. Let's hope for better conditions next year. The word is that the door prizes were the best ever. Steve Greene won an "Easy Finder", Nancy Greene won the Meade 8.8MM eyepiece, & Mike Affeldt's brother won a magazine subscription, not bad.

The break was at 8:20 Refreshments were furnished by Brian Klaus

Tonight's program: Larry Kalinowski made a slide presentation of the progress of the telescope making group. Items covered were the grinding machine, making the three tile tools, etc.

Meeting ended at 9:50PM ★

Cranbrook Meeting
August 2, 1999

PRESIDENT STEVE GREENE opened the meeting at 7:41p.m. with 37 members and their families present for Family Night. Steve announced that there are refreshments in the hall and that we will be having a planetarium show at 8:00 p.m. He also reminded everyone that SMURFS is August 12-15 in Atlanta MI and he took a count of members planning to attend.

JOHN HERGOTT shared with the club some information about the Lunar Prospector's latest mission. He stated that a 36" telescope would have been needed to see the puff from it's recent crash into the moon. Four members of the WAS were present at Stargate at 4a.m. the morning of the event to view the moon through the 12 1/2" scope in the dome. A video camera was used to film their observances.

RICK KOVARI added that the ashes of Eugene Shoemaker were aboard the Lunar Prospector and that he was the first person ever buried on the moon.

DAVE D'ONOFRIO gave an overview of the upcoming Kensington Star Party being held on August 20-21 at Martindale Beach in Kensington State Park. It will begin at 5 p.m. and end between midnight and 2 a.m. at the latest depending on the weather conditions. The following is the evening's agenda: 6pm seminars begin while solar observing is going on and a mobile display trailer will be set up for walkthroughs

7 p.m. Moon sites by the University Lowbrows

7:30 p.m. Basic Equipment by the WAS

8:00 p.m. Comet Making by the Kensington Nature Center

8:30 p.m. Astronomy 101 by the Ford Club

8:50 p.m. Light Pollution by Norb Vance of EMU

8 p.m.-12 a.m. Ongoing Porthole to the Moon by Barry Craig of the DAS9 p.m.-12 a.m. viewing out in the field including Tour of Solar System for children

PRESIDENT STEVE GREENE invited everyone for refreshments in the hall before welcoming everyone into the planetarium for a wonderful show at 8:10 p.m. The evening ended after a wonderful planetarium show and some more conversation in the hall around 9:30 p.m. ★
pelled engine has met its first encounter. Braille, the as-
teroid, failed to be photographed close up as was intended,
however, other sensors within the probe gathered
data during the approach and the far approach portion of
the photographic program did work. Only one third of the
fuel required to operate the ion engine has been used.
Now the probe is on its way for two more possible en-
counters.

The south pole of Mars is slowly entering spring on that
planet. As a result, the ever increasing illumination is
giving NASA's Mars Global Surveyor probe a much bet-
ter look at the surface, which has been in complete dark-
ness during the long Mars winter. Closer scrutiny by the
probe shows a frost that is probably water, not carbon
dioxide. The temperature of Mars' south pole is -184 de-
grees F, not cold enough to support frozen carbon diox-
ide.

The third annual "Astronomy At The Beach" star party, at
Kensington Metropark, turned out to be quite a success.
At this point, I don't have the park's estimate of how
many turned out but it was clear skies for both Friday
and Saturday. The 22 inch "McCullough Memorial Tele-
scope" had plenty of observers lined up on both nights.
Joe Van Poucker and Steve Greene had their hands full of
anxious, astronomer, wannabies. I don't think the
crowd was as big as the first Hale-Bopp party but it was
close. Bob Watt had his TV hook-up going Friday along
with Barry Craig and his closed circuit TV. The best show
was on Saturday because Fred Judd brought along all
his equipment for a hands on demo of CCD photog-
raphy. His demo of photo acquisition and enhancement
amazed quite a few onlookers. Dave D'Onofrio was busy
giving more than his share of lectures on both days of
the event. All attendees had a chance to enter and win
one of two computer controlled telescopes, to be given
away at a future drawing. Hats off to all those I did and
didn't mention that gave their time to contribute to the
success of the show. That goes double for all the other
clubs that contributed too.

The stock in IRIDIUM, the company, has fallen to under
$3 per share and they have filed for chapter 11 bankrup-
tcy. What will happen to all those orbiting satellites? Do
you think that they're going to let them all decay until
they burn up in the Earth's atmosphere? Chapter 11
doesn't mean total dispersion of the company's assets. It
just means all business functions of the company will be
closely controlled by a board of trustees until the compa-
ny becomes solvent again. That means, if you're a gamb-
ler, investment in that low cost stock could be quite
profitable if IRIDIUM pulls out of its depth-idden dol-
drums. How about you? Are you willing to take a
change? A buyout by another company could help con-
siderably.

Your next TV set might have a built in hard drive. Some
equipment manufacturers are thinking about phasing out
the VCR, simply because a great many people can't fig-
ure out how to record their own programs. A recent pole
revealed most people use their VCR's for playing prere-
corded movies, never taking advantage of the recording
feature. Hard drives can record programs using simpler
commands and they can have pre-programmed features
like instant record if you're interrupted by a phone call.

According to TIME magazine, George Djorgovski, the
discoverer of that mysterious stellar object with the
strange spectroscopic peaks that have had some astron-
omers scratching their heads, says it's just what he had
suspected all along, a sub-sub-subspecies of quasar. A
little help from the Keck telescope's infrared detectors,
put the lid on identifying the object.

The September computer meeting will be held at Gary
Gathen's home on Thursday, the 23rd. His address is 21
Elm Park. Three blocks south of the I-696 expressway
and about half a block west of Woodward in Pleasant
Ridge. You can reach him at 248-543-3366 for further
information.

The Swap Shop

This is a new column for those who are interested in
buying, trading or selling items. Call 810-776-9720 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. Flint optical glass. 7 x 6.25 x 1.375 inches.
$25. 810-757-4741. (3-00).
FOR SALE. Plexiglass, 9 x 7.75 x 2 inches. $10. 810-
757-4741. (3-00).
FOR SALE. Four 4.25 inch mirror blanks. $12 each,
shipping and handling included. 810-757-4741. (3-00).
FOR SALE. Ten inch mirror, F5.5, 55 inch focal length,
fully polished, not yet parabolized. $170. 810-757-
4741. (3-00).
FOR SALE. Windows 95. Never opened, original,
unregistered, CD package. Includes installation manual.
$20. 810-776-9720. (3-00).
FOR SALE. JASON Astronomical Telescope. 60mm
objective, 910mm focal length, tripod, equatorial mount.
$175 firm. 810-776-9720. (3-00).
FOR SALE. Folded, six inch, F15 refractor, Jaegers
objective, with or without mount. 734-462-3255. (2-00).
FOR SALE. Diamond Stealth II, G460, 2X AGP video
card. Landmark DOS data transfer rate is 17,000 bits/
sec. Eight megabytes of video memory, with CD in-
stallation disk. $45. 810-776-9720. (2-00).
FOR SALE. Eighty millimeter Apochromatic refractor, F
6.25, 500 mm focal length, with 35mm Praktica camera
body, adaptor, solar filter and carrying case for all
items. $450. 734-462-3255. (2-00).
FOR SALE. PCI card that supports 2 IDE hard drives
and two floppy drives, with hard and floppy drive ca-
bles. $10. 810-776-9720. (2-00).
WANTED. Newtonian elliptical diagonal, 2.5 inches
minor axis, or larger, with or without holder and spider.
810-776-9720. (2-00).
**NEW COMET LEE C\1999 H1**

(Compiled by Larry F. Kalinowski)

*(Map scale: 7.0 deg./in., limiting mag.:7.5)*

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**Absolute Magnitude: 6.76  Magnitude Coefficient: 10.00**

**Time of Observations: 5:00 am, EDT**

Ephemeris computed for equinox 2000.0

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**1999 | R.A. (H,M) | DEC (D,M) | R | DELTA | ELONG | PHASE | PA | MAG**

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WASP
CLOSEOUT ITEMS

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Get the latest-breaking events information at the club's home page. Follow the Upcoming Events link from http://www.eaglequest.com/~bondono/WAS/ and be sure to check the link at the bottom of that page to Doug Bock's NCO Schedule of Events.

Sept
Sat 11 4:00 pm NCO Club meeting with Autumnal Equinox Star Party Doug Bock’s
Sat 11 7:00 pm Stargate Open House, weather permitting
Mon 13 7:30 pm Meeting: Downstairs at Cranbrook Institute of Science
Thu 16 7:30 pm Meeting: Macomb Community College South Campus, Bldg. B, Room 209
Sat 18  Island Lake Star Party
Thu 23  Computer Subgroup at Gary Gathen’s

Oct
Mon 4 7:30 pm Meeting: Downstairs at Cranbrook Institute of Science
Wed 6– Sun 10  NCO Wilderness Spring Fall Party at Doug Bock’s Boon site, west of Cadillac. BYO Everything.
Fri 8 7:00 pm Stargate Open House, weather permitting
Sat 9 7:00 pm Stargate Open House, weather permitting
Thu 21 7:30 pm Meeting: Macomb Community College South Campus, Bldg. B, Room 209

Nov
Mon 1 7:30 pm Meeting: Downstairs at Cranbrook Institute of Science
Sat 6 7:00 pm Stargate Open House, weather permitting
Sat 6 4:00 pm NCO Club meeting with Star Party to follow at Doug Bock’s Northern Cross Observatory
Thu 18 7:30 pm Meeting: Macomb Community College South Campus, Bldg. B, Room 209

Dec
Sat 4 4:00 pm NCO Club meeting with Star Party to follow at Doug Bock’s Northern Cross Observatory
Mon 6 7:30 pm Meeting: Downstairs at Cranbrook Institute of Science
Thu 16 7:30 pm Annual Awards Banquet

LORIANN from page 1
methods of doing so is via the audio-visual media. It just so happens that I have an excellent slide/tape program on the solar system prepared. The photography is fantastic, as are the script and soundtrack. Now I can let the WAS have the entire package for a very reasonable, dirt cheap price…
R. Civic
Civco Enterprises, Unltd.
Earth, Mars, and other major planets
(Ed. Note: Don't call us,...)

Sir:
Since all other channels have failed, I demand that the WAS publish my observatory report…
P. Kwentus
(Ed. Note: We'll give you a whole column. After all Dear Abby had to start somewhere.)

Sir:
I have just completed installing a newly designed dual exhaust, multichannel, chromium dioxide, tunnel diode filter to the input source of my sixty-eighth generation chilled emulsion camera. I'm certain that I am now on the right track. Frankly, I'm surprised that more amateurs have not attempted to make such simple instruments as this. I don't know what I would've ever done without mine.
L. Faix
(Ed. Note: If at first you don't succeed, quit!)

Sir:
have a few jokes and puns to share with your readers. What do you call CENSORED..... CENSORED..... CENSORED
F. McCullough

Sir:
I wish to announce plans for the acquisition of a new telescope. It will be a 24" Newtonian-Cassegrain. This instrument will not be a toy like my former telescope; but, instead, it will be a moderate size instrument whose added light gathering power will finally allow me to probe the libration of the moon.
Dr. Harrington
P.S. This new instrument will, of course, be a portable one like my 14."
(Ed. Note: More power (mirror?) to you.)

Sir:
Excuse me, but I'd like to ask a question. I'm just a beginner at this so this may be a dumb question. Now stop me and tell me if I'm wrong. But, what do you think this theory... I came up with it on my own, but I like it better than any of he other theories that I've ever heard... What's the theory?... Oh, just a minute... Oh yeah, what do you think of a theory that the universe is just a giant Easter egg?
Sincerely,
B. Bock
(Ed. Note: No comment)

Well folks that's all there is for now. Keep those cards and letters coming in.
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Key to times:
SunRise: MoonRise
SunSet: MoonSet

WASP
Warren Astronomical Society, Inc.
P.O Box 1505
Warren, MI 48090-1505