



The Warren Astronomical Society Paper

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www.boonhill.net/was

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2003 WAS OFFICERS

// October 2003

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The WASP (*Warren Astronomical Society Paper*) is the official monthly publication of the Society. Each new issue of the WASP is mailed to each member and/or available online www.boonhill.net/was. 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

If you missed the Seventh Annual GLAAC star party, at Kensington Metropark, you missed a fine event.

The weather cooperated as best it could for both nights and the crowds just kept coming and coming. There were nearly seventy telescopes spread out over the Martindale Beach area, of every known make and all you could see was people in lines, standing shoulder to shoulder, eagerly waiting to see Mars. This was probably the largest event ever presented to the public in the park's history. The views of Mars seen in telescopes and on TV and laptop screens, were the best viewing I have ever seen of that planet. Believe it or not, our 22 inch club telescope has now been surpassed at the GLAAC star party. A 24 inch Dob appeared on the scene. However, I didn't inquire about any information as to who or what club owned the 'scope. The largest image was seen Saturday night when it was projected live, on a large screen, giving the audience an image size well over a foot in diameter. The polar cap could easily be seen, as well

as large dark areas around the planet's equator. Topping the show off, was the guest speaker, astronaut Jerry Ross, who made a special trip to the site and relayed his experience about his numerous shuttle flights, including a trip to the space station. Videotapes of his flights provided spectacular, in space views. Needless to say, he was swamped with requests for autographs. Thanks to the many clubs that participated in the event, it turned out to be spectacular. The total estimate of attendees for both nights was suspected to be around ten thousand. If you were one of the people that helped out during the star party, whether you brought a telescope or not, contact Dave D'Onofrio at 313-563-6652 or dave1act@aol.com.

THE 11TH ANNUAL ISLAND LAKE PUBLIC STAR PARTY happens on Saturday, October 4th and this event brings a huge crowd. Hosted by the FAAC (Ford Amateur Astronomy Club) with support by Rider's Hobby Shops, The Detroit Science Center, University Optics, Heavner Canoe Rental and Island Lake State Park. Volunteers from all clubs are asked to attend and help out with telescope operations, whether it be with your own 'scope or with relief for someone else's. Hot food, vendor sales and a raffle always fill the bill at this star party. Last

year the main prize was a fine "goto" telescope, as well as dozens of other lesser astronomical prizes.

Mars will continue to be an exciting telescopic object. Even beyond September and October. If you would still like a copy of MARS PREVIEWER II (the program was shown briefly at the end of Riyad Matti's talk about imaging Mars at the August MCCC meeting), I'll have some CD copies with me during the next few meetings. It graphically shows the side of Mars facing the Earth, for any date and time and the cursor reveals the name of the areas clicked upon. You can reverse the program image to match your telescope image too, as well as print a copy to take to your telescope if you don't have a laptop computer.

Because of the change back to standard time in late October, Saturn's rise time will also make an abrupt change, at that time. Normally everything rises in the east about two hours earlier each month. In the beginning of October, Saturn rises about 12:30AM in the Detroit area. By the end of October, it'll rise about 9:30PM. Quite a difference. The change back to standard time has some advantages, doesn't it?

The Moon will be about one day before first quarter on Halloween night. It's a good time to show those young goblins what back yard astronomy is all about. Just move your 'scope out to the front yard and I guarantee you'll have a crowd of eager monsters around your telescope in a very short time. Have a basket of hand out candy at your side, to make it a double treat for the youngsters.

At the October 6th meeting at Cranbrook, Vince Chrisman will substitute for Ken Bertin with a talk about the Vatican Observatories. Ken had to make an unexpected change in his schedule. Many have pondered the reason why the Roman Catholic Church decided to turn their eyes to the skies. Was it an honest attempt to find new evidence for our existence or was it just a reflex caused by the fact that the church knew they wronged one of the greatest observers of the seventeenth century, Galileo Galilei. See you there.

The MCCC meeting on the 18th features Cliff Jones, our newsletter editor and publisher, and his long waited for, book report on The Amateur Astronomer, a book originally published by Scientific American.

October also gives us the chance to elect new officers at the MCCC meeting. Elections will probably be held early in the meeting so get there early or you'll miss seeing the smiling faces of the winners. This time the ballot has more than one candidate in each office, so a battle is expected. Last year all offices had only one candidate. It made for a fast, sweet election but quite dull, as elections go.

Jim Shedlowski's talk during the September Cranbrook meeting took a graceful unexpected turn. I was expecting a report on the various technical parameters that seem to stump many first time 'scope buyers. Instead, he gave a very personal review of his requirements for telescope, observing satisfaction. He covered all the aspects of decision making that you or I would have to contend with before we plunked down our money on the counter. Believe me, there are a hundred things to consider when buying a telescope and Jim managed to shrink those decisions down to four main categories, called the four P's, (purpose, performance, portability and price). He admitted that everyone would have a different set of reasons for owning a telescope (purpose) and that no one instrument will satisfy all requirements (performance). That's a conclusion that many members finally realize after getting to know their telescope and their observing habits. As for the ability to move your 'scope wherever you'd like (portability), it not only depends on your physical ability but your method of transportation too. You might even be lucky enough to keep your 'scope permanently stored in one place, like a backyard observatory, or even a closet, if you're an armchair astronomer. If that's the case, portability doesn't mean much. The last item (price), is solely your own personal decision. After owning several smaller reflectors and refractors, Jim finally settled on an 8 inch, LX90, Schmidt Cassegrain. Is this the last one he'll ever own? I wonder. Thanks for a marvelous talk, Jim.

Doug Bock has taken his Remote Access Telescope (RAT) one step further than the private, radio controlled link he had established between his home and observatory. Now he can access his scope from anywhere in the world with the aid of the Internet and the pictures he's taken can be broadcast throughout the Internet in real time. There are a few refinements that need to be added, such as an automated roll off roof and auto-turn on power but both can be sidetracked with a little help from family members and a telephone call. He says his main interest is getting started in supernova discovery, not pretty pictures. He wants to contribute data to the professional, astronomical world, not just satisfy a craving to duplicate what has already been accomplished by other amateurs. His system was demonstrated at the September MCCC meeting.

I had a chance to image Mars with one of those Meade electronic eyepieces on our club's 12 1/2 inch Cassegrain at Camp Rotary. That was Tuesday, September 9th, between 10 and 11:30PM. First, let me say, getting the image squarely on the eyepiece chip, so that it appeared centered on the TV screen, was accomplished the first time I tried. I used an eyepiece to check the visual position of the planet in the center of the field of view, then removed the eyepiece and replaced it with the electronic eyepiece. A generous three inch diameter planet was almost centered on the 13 inch TV screen. All I needed was a slight correction on the hand paddle to make it centered. I was amazed at how well the tracking worked. I slipped a tape into the VCR and

recorded about a half dozen different attempts at focusing and contrast. Markings through the center of the planet showed up remarkably well. The South Pole ice cap showed the result of an approaching summer on the southern hemisphere. It was shrinking and appeared about 1/10 the size I had seen six weeks ago. I have to give Bob Halsall a lot of credit for the work he's done on that instrument. He's made it a pleasure to use.

Eleven telescopes showed up for the Grosse Pointe Park camp out on September 13. There were "goto's" and "pushto's" spread out all over the point that meets the lake. Bob Watt showed his latest acquisition, an eight inch hexagonal tube Dobsonian that allowed shifting the tube forward or backward to make balancing easier. Mark Kedzior showed his creation, a six inch, F5, Dobsonian that was so adjustable, overhead viewing didn't require bending over. His short focus six mount was expandable to provide "stand up straight" viewing. Another feature was a wooden, hinged, split ring cradle with attached altitude bearings. The cradle could be opened to remove the 'scope and replace it with another telescope if a longer focal length was required. The telescope even stored itself in the Dobsonian mount when it was time to pack up and leave. Dave D'Onofrio and Ken Bertin wowed the camping group with astronomy in 3D and 2D. It all ended with cloudy skies but the first three hours of gazing was clear enough to make a fine impression on those who lined up for a peek through the telescopes and I'm sure management, at the park, was happy with our turnout.

By the time you read this, the Jupiter, Galileo space probe, will have been swallowed up in the Jovian atmosphere and cremated somewhere in the innards of Jupiter. It was feared the contaminated probe might end up falling on Europa, allowing earth born germs to continue proliferating within the possible oceans that might exist beneath the surface. Not wanting to take that chance, scientists decided that a Jupiter burn up was the best way to go.

The program ASTROMETRICA, version 3.2, has been added to the club's shareware library. It features the capability of calculating stellar positions accurate enough to report a comet or asteroid to professional astronomers for their aid in the verification of your discovery. It also has a blink capability, if you have a couple of pictures with a possible, new, solar system object, somewhere in it. Blinking will show the relative motion between the time that both pictures were taken, making it easier to find the hidden object. Floppy disk shareware is still \$1.00 for club members. See me at the meetings for the latest list of available software.

Bill Beers continues to announce that the 2003 Awards Banquet for the WAS, will be held at the old Warren

Chateau building, in Warren, on Ten Mi. Rd., just east of Mound Rd., on December 18. It's now called DeCarlo's Banquet Hall. Tickets are \$21.00 per person. It's not just for members only. Guests are encouraged to attend. All persons attending must have their reservations made by the December 1st Cranbrook meeting.

THE SWAPSHOP



This column is for those who are interested in buying, trading or selling items. Call 586-766-9720 (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. All the parts needed to build a six inch, B, Dobsonian telescope, minus the eyepiece. \$75. Call Bob Watt at 586-757-4741 or e-mail rdwatt@comcast.net. (2-04).

FOR SALE. Globes of Mars. 12 inches in diameter. One shows the extreme highlands and lowlands, the other shows a more detailed surface. Asking \$50 each. James Oravec, 586-582-0899. Retired, mornings best time to call. (2-04).

FOR SALE. Amateur Telescope Making, books 1, 2 and 3, published by Scientific American, Albert G. Ingals, editor (1972, 1972 and 1961). Famous optical authors like Porter, Clark, Wright, Hale, Hastings, Kirkham, Mayall, Baker, Dall, Paul, Cook, Schmidt and Wilson, all contributing their experience to telescope making for the amateur. They talk about lenses, mirrors, mounts, film and testing. Asking \$50 for the three book set. 810-776-9720. (2-04).

FOR SALE. Meade LX90 telescope with JMI focuser, 2 in. eyepiece, JMI hard case, JMI Moto-Focuser, Dew clip, solar filter, Dew shield, wedge, Skylight/dust filter, Update cable kit, 1.25 and 2 inch diagonal, a 26mm and Meade video eyepiece, AC adapter, and 5 inch color TV. Total value over \$2,850 without shipping and tax, asking \$2,000. 248-236-9983 or jameswynn@charter.net. (1-04).

FOR SALE. Nextstar 8 GPS telescope, one year old. The package includes telescope, tripod and two cases of accessories. The included accessories are; car battery supply adapter, Celestron ISO Pads, Celestron kit (includes 4, 6, 9, 15 and 32 mm Plossl eyepieces. A 2X Barlow, 7piece filter set, 5x12x10 locking, aluminum carry case, 20mm crosshair eyepiece, polarizing filter set #93608, 40mm Plossl, a second aluminum accessory case 6x13x18 with locks and dividers, Night Watch 3rd edition book, The Sky At Night, Nextstar 8 GPS manual and original telescope shipping carton). All items are in excellent condition. Asking price \$2,000, firm. Location is Port Huron, MI. Please e-mail if interested. mgmfan@aol.com (1-04).

FOR SALE. Orion XT8 Dobsonian telescope, 8 inch, Orion Plossl 25mm and 9mm eyepieces, Orion Moon filter, Televue Plossl 15mm eyepiece, Vixen LV 5mm eyepiece, Orion 1.25 inch Shorty Barlow, Orion EZ Finder reflex site, Orion collimating eyepiece, medium size accessory case, Orion

RedBeam LED flashlight. Cost over \$850, will sacrifice for \$450. Everything is in very good condition. Brian T. Koehler, St. Clair Shores, MI, 588-772-8238. E-mail bkok@wideopenwest.com (10-03).

FOR SALE. Six inch tube Dobsonian telescope. Includes 6 inch, F8 parabolic primary mirror, 1.25 inch minor axis secondary mirror, 1.25 inch focuser with 0.96 inch adapter, 6X30 finderscope, four vane spider assembly, 8 inch diameter heavy wall Sonotube optical tube (white), Baltic birch solid core plywood construction, stained and clearcoated with polyurethane, Ebony Star with virgin Teflon altitude and azimuth bearings. Reduced to \$290. Call Steve Greene at 586-598-1199 (10-03).

FOR SALE. Two telescope mounting rings. Holds tubes with 12.5 to 13.25 inch outside diameter. Steel, painted black, hinged. Uses ¼-20 mounting studs which can be removed and replaced with larger studs for heavier telescopes. Asking \$45. 810-776-9720 (1-04).

FOR SALE. Spider (four vane) for a Newtonian secondary. Fits tubes with an inside diameter from 12.5 to 13 inches. Steel, painted black, thin vanes, will accept diagonal holders with 5/16 inch diameter bolt or smaller. Asking \$10. 810-776-9720, (1-04).

FOR SALE. Compact video camera for astrophotography or surveillance. SuperCircuits PC23C with Gmount adapter for 1 ¼ inch eyepiece holder. Includes 25 feet of video cable, 12 volt power supply (must use 110v AC input) and instructions. Video chip is 1/3 inch, black and white CCD with 510x490 pixel arrangement. Good for solar, lunar and bright planet photography. This video chip is not suitable for stellar photography beyond fifth or sixth magnitude. 0.04 lux light sensitivity. It also has an input for audio recording during video recording. The audio cable is not included. Weight is 6.87 ounces. It does not include a lens. Just slide it into your eyepiece holder and focus the image on the TV screen. Asking \$45. 810-776-9720 (1-04).

FOR SALE. Micronta FET, analog, volt-ohm meter. Model 22-206. Six inch meter face with mirrored DC-ohms scale. Separate ohms and zero adjust. Measures ohms, DC and AC to 1,000 volts. DC amps to 300ma. Test leads included. Asking \$20. 810-776-9720 (2-04)

UPCOMING WAS EVENTS

Oct 4	Sat	Island Lake Public Star Party
<u>Oct 8</u>	<u>Mon</u>	<u>Cranbrook Meeting (7:30 pm)</u>
Oct 16	Thurs	Macomb Meeting (7:30 pm)
<u>Nov 3</u>	<u>Mon</u>	<u>Cranbrook Meeting (7:30 pm)</u>
Nov 20	Thurs	Macomb Meeting (7:30 pm)
<u>Dec 1</u>	<u>Mon</u>	<u>Cranbrook Meeting (7:30 pm)</u>
Dec 18	Thurs	2003 Christmas Awards Banquet

Scheduled Speaker 2003/4

By Ken Bertin

DATE	DAY	PRESENTER	SUBJECT
10/6/2003	MON	VINCE CHRISMAN	VATICAN OBSERVATORIES
10/16/2003	THU	CLIFF JONES	BOOK REPORT
11/3/2003	MON	PLANETARIUM	SKY TONIGHT
11/20/2003	THU	MARTY KUNZ	MILKY WAY GALAXY
12/1/2003	MON	KEN BERTIN	OTHER ASTRONOMERS
12/18/2003	THU	NASA SCIENTIST	SOLAR ASTRONOMY
1/5/2004	MON	KEN MULLIN	PLANETS
1/15/2004	THU	GUY MAXIM	THE BEGINNING, END, & EVERYTHING..
2/2/2004	MON	NORM DILLARD	10 BRIGHTEST STARS
2/19/2004	THU	NANCY ROWE	AURORAE/RADIO PROPAGATION
3/1/2004	MON	PLANETARIUM	
3/18/2004	THU	DAVE D'ONOFRIO	PROCESSING CD IMAGES
4/5/2004	MON	STEVE UITTI	TBA
4/15/2004	THU	LARRY KALINOWSKI	TBA
5/3/2004	MON	MIKE BEST	S.E.T.I.
5/20/2004	THU		
6/7/2004	MON	JIM SHEDLOWSKY	IRIDIUM FLARES
6/17/2004	THU		
7/5/2004	MON	ALAN ROTHENBERG	TBA
7/15/2004	THU		
8/2/2004	MON	RIYAD MATTI	TBA
8/19/2004	THU		
9/13/2004	MON	PHIL MARTIN	TBA

Notes on next years speaker schedule:

Mike ODowd of our Astronomy club wanted all to know that the full title of the January 15th 2004 talk is:

COSMOLOGY
The Beginning, The End, and Everything In Between.
by Guy Maxim
from the Oakland Astronomy Club

Mars images by Phil Martin



8/15/03

8/17/03

9/05/03

See more of Phil's work on his new web site:

<http://home.comcast.net/~pmartin173187//>

Meet a Member

One of our newest members, Mike Best, will be our speaker on Monday, May 3, 2004. The topic: "Search for Extraterrestrial Intelligence -- SETI". A member of the SETI Institute (www.seti.org), Mike is a prolific astronomy and space science lecturer averaging 90 talks a year. In addition to SETI, Mike will answer questions on UFOs. He was as close to being a "Man In Black" as one can get during the 1970s as the Lower Michigan field investigator (one of 83 worldwide) for the Dr. J. Allen Hynek Center For UFO Studies. Mike enjoyed private conversations with (the late) Hynek, the Air Force science advisor for "Project Blue Book" in the 1960s. This give Mike a unique perspective on a very controversial phenomenon. Mike's website:
<http://members.aol.com/StarMikeBest/>

WARREN ASTRONOMICAL SOCIETY TREASURER'S REPORT 7/1/03 THRU 8/1/03

Beginning Balance:	\$ <u>290.28</u>
Income Total=	\$ <u>190.00</u>
Expense total:	\$ <u>-210.00</u>
Ending Balance:	\$ <u>270.28</u>

(un)Fasten your Seatbelts

by Patrick Barry and Tony Phillips

The "fasten seatbelts" light turns off, and you get up to ask the stewardess for a pillow; it's going to be a long flight. Only a kilometer ahead in the cloudless sky, a downward draft of sheering winds looms. When the plane hits these winds, the "turbulence" will shake the cabin violently and you could be seriously hurt.

You don't know about those winds, of course, and neither does the pilot. Today's weather satellites can't see winds in clear skies: they rely on the motion of clouds to infer which way the winds are blowing.

"Believe it or not, their best indication of wind shear right now is warnings from aircraft that have gone through it ahead of them," says Bill Smith of NASA's Langley Research Center.

But a new satellite technology being pioneered by NASA and NOAA could improve this shaky situation. It's called GIFTS, short for Geosynchronous Imaging Fourier Transform Spectrometer. GIFTS is an infra-red sensor that can detect winds in cloudless skies by watching the motions of atmospheric water vapor. Water vapor is mostly invisible to the human eye, but it reveals itself to GIFTS by the infra-red radiation it absorbs.

Smith is the lead scientist for EO-3, a satellite designed to test out this new technology. Slated for launch in 2005 or 2006, EO-3 will carry GIFTS to Earth orbit where it can produce 3-dimensional movies of winds in the atmosphere below.

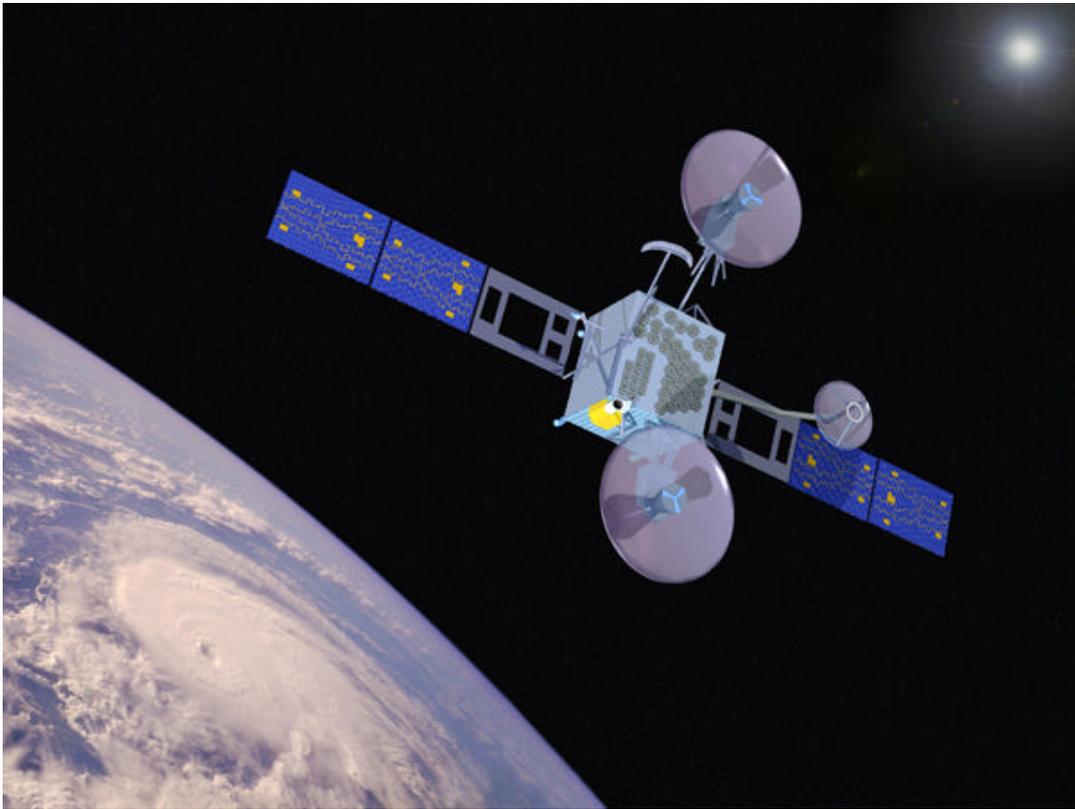
These wind data will not only improve safety, but also help the airlines save money. Knowing the winds along a flight route allows airlines to adjust the plane's fuel load accordingly, thus reducing the weight that the engines must lift. Saved fuel means saved money and less pollution.

GIFTS can help planes avoid another potentially lethal problem, too: Ice forming on their wings. If a cloud contains "supercooled" water droplets whose temperature is below freezing, those droplets will form ice on the wings of planes that pass through it. By looking at about 1700 different frequencies of the light coming from clouds, GIFTS can measure the temperature of the cloud top and determine whether it contains water droplets that could cause aircraft icing. With information from GIFTS in hand, pilots can simply avoid clouds that appear dangerous.

Once EO-3 demonstrates the accuracy of GIFTS, airlines will be able to capitalize on this potential to make flying a cheaper and safer experience.

Learn more about the GIFTS instrument and other advanced technologies being tested on the EO-3 mission at nmp.jpl.nasa.gov/eo3. Kids can go to The Space Place to play a data compression game related to EO-3 at spaceplace.nasa.gov/eo3_compression.htm.

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



EO-3, carrying the GIFTS instrument, will be in a geosynchronous orbit for extended monitoring of large regions of our planet and enabling observation of weather patterns at higher resolution than possible with existing geostationary satellites.

If you would like to renew your membership and have not already done so, or if you would like to become a member of the Warren Astronomical Society, please complete the following and submit with the appropriate US funds by Check or Money Order.

Membership	Definition	Dues (US Funds)
Student	One person under 18 years of age enrolled in grades 1-12	\$17.00
College	One person attending a College or University	\$22.00
Sr. Citizen	One person 65 years of age or older	\$22.00
Family	More than one person living at the same address	\$37.00
Individual	One person not fitting a category above	\$30.00

Fill in the WAS application and send it to our current Treasurer:

- ? **Bill Beers**
- ? **c/o Warren Astronomical Society**
- ? **P.O. Box 1505**
- ? **Warren, Michigan 48090-1505**

--tear here--

--tear here--

--tear here--

Warren Astronomical Society Membership Application

About You:

Name(s): _____

Address: _____

Telephone: _____

E-Mail: _____

Membership Type:

Individual \$30.00_____

Family \$37.00_____

College Student \$22.00_____

Student \$17.00_____

Sr. Citizen \$22.00_____

WARREN ASTRONOMICAL SOCIETY
P.O. BOX 1505
WARREN MICHIGAN 48090- 1505



TO:

The society holds meetings on the first Monday and the third Thursday of each month, starting at 7:30 pm.

First Monday meeting:

Cranbrook Institute of Science
1221 North Woodward Avenue
Bloomfield Hills, Michigan

Third Thursday meeting:

Macomb Community College
South Campus, Bldg B, Room 209
14500 Twelve Mile Rd
Warren, Michigan