



The Warren Astronomical Society Paper

P.O. Box 1505

Warren, Michigan 48090-1505

www.boonhill.net/was

Volume 36, Number 1 //

2003 WAS OFFICERS

\\ January 2004

President

Ken Bertin

email: szyzygie@aol.com

1st VP (program chairperson)

Norm Dillard

email: jupiter1927@aol.com

2nd VP (observatory chairperson)

Riyad Matti

email: riyadmatti@yahoo.com

Secretary

Bob Watt

email: rdwatt@comcast.net

Treasurer

Nancy A. Rowe

email: nancyannrowe@sbcglobal.net

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 WASP or the editor. The WASP reserves the right to deny publication of any submission.

Astro Chatter

by Larry Kalinowski



Hello 2004! Another year older and deeper in debt, as the saying goes. Hopefully, you've made the transition from '03 to '04, without any major problems. I hope you got that new telescope you've been telling the wife that you wanted or that accessory that'll make you find those elusive deep sky objects a lot easier. If I didn't wish you a happy New Year at the Awards Banquet, then I'll do it now. Happy New Year and many more to come!

You missed the best meeting of the year if you weren't at the Banquet last month. About fifty to sixty people were there, a full house. Our featured speaker, Dr. Therese A. Kucera of The Goddard Space Flight Center, amazed all of us with her PowerPoint presentation of our nearest star. Her motion pictures of solar phenomenon were outstanding. The large sunspots and massive coronal ejections (MCE's) were the focal point of

her presentation. Events that, just recently, gave earthlings some concern. She captured our minds and could easily have continued past the hour or so, that she spent with us.

There were awards, so many that our club must have an abundance of outstanding members. All of the speakers that gave presentations during the past year were given awards for their participation in club activities. Those included were; Nancy Rowe, Steve Uitti, Cliff Jones, Dave D'Onofrio, Phil Martin, Brian Klaus, Jim Winn, Norm Dillard, Mike O'dowd, Richard Gala, Mike Simonsen, Allan Rothenberg, Riyad Matti, Jim Shedlowski, Doug Bock, and Vince Chrisman. Another special award went to outgoing president Marty Kunz for his ability to keep the club solid during a major stressful series of events during the last couple of years. The award plaque featured a gavel signifying the strength of his judgements. Other award winners were Dave D'Onofrio, for his outstanding work in the GLAAC, the group that has sponsored the Kensington "Astronomy On The Beach" public star parties in the past. Last year's

event supposedly drew 10,000 people over the two days that many clubs participated in. Mars and good weather also helped with the two day show, but Dave's representation of the Warren society was outstanding. Jim Shedlowski was also awarded as the most promising, new, amateur astronomer. Cliff Jones was recognized for his excellent work as our WASP editor-in-chief.

Louis Namee, our librarian, received an award and special thanks for devoting the last ten years of his life to keeping our library in shape. Lou has documented our entire library by book name and title, as well as, general content of each book and who donated the literature. Videos are also included in the documentation. A grand legacy for our club.

If I've missed mentioning the name of any award winner, I apologize. I've tried to recall the group as best as I could, from memory. If anyone new comes to mind, you'll get your mention in the next WASP.

The top raffle prize went to Steve Uitti. It was the Palomar Sky Survey, on twenty CD-ROMS. The prize is valued at \$400. It is a reproduction of the actual sky survey, both northern and southern skies, taken with a 24 inch, Schmidt camera based at Palomar Observatory, during the 1940's and 50's. If I remember correctly, both red and blue sensitive, 12 X 12 inch glass plates are reproduced on the CD-ROMS and cover the sky down to about 18th magnitude. It is a researcher's dream and probably contains thousands of objects still unidentified today. At the present time, the Schmidt camera has been modified to take another 12 X 12 format but this time it's all CCD's. The camera is being operated by the LINEAR group and is primarily used to find near Earth asteroids and comets.

In case you're wondering where those seven poinsettia center pieces came from, which were also raffled for the evening, they're the creative handiwork of our outgoing treasurer, Bill Beers. The centerpieces featured two ringed planets, suspended over the red leaves.

Here's something new in the amateur astronomy field around the Detroit metro area. Rider's Hobby Shops and The Ford Amateur Astronomical Club are co-sponsoring THE FIRST ANNUAL ASTRONOMY SWAP MEET in Livonia on Sunday, January 25, 2004. It'll run from 8:00am to 3:00pm. Everyone is welcome to bring their old

astronomical equipment and put the items up for sale or possibly swap your item for something else that someone else has brought. Admission is \$5.00, at the door, or \$4.00 if you register early. If you have so much to sell that you need your own table, there's a \$15.00 charge at the door or a \$12.00 charge for advance registration. Doors open at 7:00 am for setup. Make your checks payable to FAAC for advance registration and table reservations. Send your payment to the Ford Amateur Astronomy Club, P. O. Box 7527, Dearborn, MI, 48121-7527. The swap meet will be held at 30943 Five Mile Road, Livonia, MI, in the Livonia Plaza (Kroger) Shopping Center, on the south side of Five Mile, just east of Merriman, near Rider's Hobby. For more information, contact Jim via e-mail: w8tu@comcast.net or call (734)-453-1422.

The first speaker for the new year is Ken Mullin. He'll be speaking at the Cranbrook meeting on January 5. His subject...the planets.

The first speaker for the MCCC meetings, this year, will be Guy Maxim, who is a member of the Oakland Astronomy Club. His topic is The Beginning, The End and Everything In Between.

By the time you get to read this article, the celebrations will be over for most of us. 2003 will have ended with hoops, hollers and fireworks but there will be one dying ember still glowing in the southern sky. If you don't believe me take a look at the southern sky at midnight. Right near the meridian, about 30 degrees above the horizon, you'll see that ember still glowing brightly, a reminder of the new year to come. In about three months from now, at midnight, it'll slowly burn out into the western horizon.

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.

WANTED. Used, five inch Schmidt-Cass. Contact Mike Best at 734-459-2378 or starmikebest@aol.com. (7-04).

FOR SALE. Celestron, 8 in. Schmidt Cassegrain, 9 volt electric drive, PEC (periodic error correction),

four speed quartz drive, heavy duty aluminum adjustable tripod, enhanced coatings and carrying trunk. Best offer over \$695. Mike Best, starmikebest@aol.com. (7-04).

FOR SALE. Classic 6 in. Criterion RV-6 Dynascope., 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 mirror testing. Asking \$50 for the three book set. 586-776-9720. (2-04).

Newtonian reflector, 110v AC electric drive, aluminum pier with three feet, 6x30 two ring finder and rotating tube. Best offer over \$395. starmikebest@aol.com (7-04).

FOR SALE. Refractor, 3 in., metal tube, 1 1/2 in. two ring finder scope, 2 in. tracking erecting eyepiece telescope, Eastman Kodak Aero-Ektar 7.12 in. (178mm) f.l., 5x5, F2.5 camera #EM6294 (\$150 estimated value), AC heated dew shield for the 2 in. tracking scope, wood, heavy duty, surveyors tripod, two fitted wooden cases, two boxes of machine equipment tools for telescope construction. No mount. Best offer over \$495. starmikebest@aol.com. (7-04).

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. 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. 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. 586-776-9720 (2-04).

UPCOMING WAS EVENTS

	Thur. 19	7:30 pm	Macomb Meeting
Mar	Mon. 1	7:30 pm	Cranbrook Meeting
	Thur. 18	7:30 pm	Macomb Meeting
Apr	Mon 5	7:30 pm	Cranbrook Meeting
	Thurs 15	7:30 pm	Macomb Meeting
May	Mon 3	7:30 pm	Cranbrook Meeting
	Thurs 20	7:30 pm	Macomb Meeting
Jun	Mon 7	7:30 pm	Cranbrook Meeting
	Thurs 17	7:30 pm	Macomb Meeting
Jul	Mon 5	7:30 pm	Cranbrook Meeting
	Thurs 15	7:30 pm	Macomb Meeting
Aug	Mon 2	7:30 pm	Cranbrook Meeting
	Thurs 19	7:30 pm	Macomb Meeting
Sep	Mon 6	7:30 pm	Cranbrook Meeting
	Thurs 16	7:30 pm	Macomb Meeting
Oct	Mon 4	7:30 pm	Cranbrook Meeting
	Thurs 21	7:30 pm	Macomb Meeting
Nov	Mon 1	7:30 pm	Cranbrook Meeting
	Thurs 18	7:30 pm	Macomb Meeting
Dec	Mon 6	7:30 pm	Cranbrook Meeting
	Thurs 16	7:30 pm	Holiday Awards Banquet



Scheduled Speakers 2004

By Ken Bertin

DATE	DAY	PRESENTER	SUBJECT
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	VINCE CHRISMAN	TBA
6/7/2004	MON	JIM SHEDLOWSKY	IRIDIUM FLARES
6/17/2004	THU	KEN BERTIN	TRANSIT OF VENUS
7/5/2004	MON	ALAN ROTHENBERG	TBA
7/15/2004	THU	ALAN KAPLAN	GLOBULAR CLUSTERS
8/2/2004	MON	RIYAD MATTI	TBA
8/19/2004	THU		
9/13/2004	MON	PHIL MARTIN	TBA
10/4/2004	THU	ED STARBACK	PLUTO

WARREN ASTRONOMICAL SOCIETY

TREASURER'S REPORT

11/1/03 THRU 12/1/03

Beginning Balance:	<u>\$ 671.93</u>
Income Total=	<u>\$ 1,475.72</u>
Expense total:	<u>\$ -332/95</u>
Ending Balance:	<u>\$ 1,814.80</u>

Bill Beers – Treasurer (2003)

MONEY WELL SPENT

By Bill Beers – Treasurer (2002/3)

As my last term as the W.A.S. treasurer comes to an end, I want to take this opportunity to update our members on some of the major accomplishments we had over the past 2 years. When I took over the treasurer position 2 years ago, we had approximately \$6500 in our

bank account, a vision to build a shed to house “Big Dob”(our 22” Dobsonian telescope), and plans to update our existing observatory at Stargate. After I wrote the first check for material for the new shed, our members pitched in and went to work on building the new structure. Two months later, we had a brand new 10’x12’ storage shed complete with cement floor, vinyl siding and electrical power. This new Dob shed makes it possible for us to store “Big Dob” without disassembly. A removable wheel assembly was added to the telescope so we can roll it in and out with ease. The 22” was rebuilt with new guide blocks, its mirror was recoated, and a complete dew heating system was added.

Other major items we purchased were: a new 2” eyepiece set for the Big Dob, a new Meade 1 1/4” eyepiece set for our loaner scopes, 3 used telescopes that we loan out for our members to use, an electronic video eyepiece and television setup used at star parties, and an overhead projector for presentations. Our Stargate observatory was refurbished with new paint to match the Dob shed, the roof was re-shingled and new trim installed. With the artwork talent from one of our members, Al McDonald, new signs were painted and hung on both buildings.

It’s amazing what a little money and the talent from some of our members has provided us. So I think most of us would agree that it was money well spent.

I’ve enjoyed being treasurer for the past two terms mainly because it was an easy way to get to know most of the membership. The rest of the officers were a pleasure to work with because their talent made our club run like clockwork. Nancy Ann Rowe will be the new treasurer starting January 1, and I believe will do a fine job. I’m looking forward to seeing what the rest of our new officers, Ken, Norm, Riyad, and Bob will have in store for us. I would also like to welcome back one of our long time members and friend, “Astro” Blaine McCullough, who had a short bout with a mild stroke. It’s nice to see he is recovering well.

I hope you all have a safe and happy holiday, and we’ll see you next year.

Bill



January Calendar

Sunday, January 4

- 1:00 am : Quadrantid meteor shower peaks
- 10:00 am : Jupiter is stationary
- 1:00 pm : Earth is at perihelion (91.4 million miles from the Sun)

Tuesday, January 6

- 7:00 pm : The Moon passes 5° north of Saturn

Wednesday, January 7

- 10:40 am : Full Moon

Friday, January 9

- 9:00 am : Asteroid Ceres is at opposition

Monday, January 12

- 6:00 am : The Moon passes 3° north of Jupiter
- 6:00 pm : Asteroid Hebe is at opposition

Wednesday, January 14

- 8:00 am : Venus passes 0.9° south of Uranus
- 11:46 pm : Last quarter Moon

Saturday, January 17

- 5:00 am : Mercury is at greatest western elongation (24°)

Monday, January 19

- 2:25 pm : The Moon is at perigee (225,415 miles from Earth)
- 10:00 pm : The Moon passes 5° south of Mercury

Wednesday, January 21

- 4:05 pm : New Moon

Friday, January 23

- 4:00 pm : The Moon passes 4° south of Uranus

Saturday, January 24

- 11:00 am : The Moon passes 4° south of Venus

Tuesday, January 27

- 10:00 pm : The Moon passes 3° south of Mars

Thursday, January 29

- 1:03 am : First quarter Moon

Saturday, January 31

- 8:59 am : The Moon

Calendar courtesy of Jim Mills – Check out his web site at: <http://www.njnightsky.com>.

NASA Space Place article

Compliments of Nancy Leon of JPL/NASA

So Little Time, So Many Galaxies

By Dr. Tony Phillips

Fourteen billion years ago, just after the Big Bang, the universe was an expanding fireball, white hot and nearly uniform. All of space was filled with elementary particles and radiation. "Soupy" is how some cosmologists describe it.

Today the universe is completely different. It's still expanding-even accelerating-but there the resemblance ends. The universe we live in now is "lumpy." Great cold voids are sprinkled with glowing galaxies. In galaxies, there are stars. Around stars, there are planets. On one planet, at least, there is life.

How we got from there to here is a mystery.

Finding out is the goal the Galaxy Evolution Explorer, "GALEX" for short, a small NASA spacecraft launched into Earth orbit April 28, 2003. GALEX carries an ultraviolet (UV) telescope for studying galaxies as far away as 10 billion light-years.

"GALEX is a time machine," says astronomer Peter Friedman of Caltech. Because light takes time to travel from place to place, pictures of distant galaxies reveal them as they were in the past. "GALEX is investigating the evolution of galaxies over 80% of the history of our universe."

The Hubble Space Telescope can see faraway galaxies, too, but GALEX has an advantage: While Hubble looks in great detail at very small regions of the sky, GALEX is surveying the entire sky, cataloging millions of galaxies during its 2-year mission.

GALEX is a UV mission for a reason. Friedman explains: "UV radiation is a telltale sign of star birth." Stars

are born when knots of gas condense in interstellar clouds. The ones we see best are the big ones-massive stars that burn hot and emit lots of UV radiation. "These stars are short-lived, so they trace recent star formation."

Understanding star formation is crucial to studies of galaxy evolution. When galaxies collide, star formation surges. When galaxies run out of interstellar gas, star formation wanes. In galaxies like the Milky Way, spiral arms are outlined by star-forming clouds. The shapes of galaxies, their history and fate Š they're all connected by star formation.

Even life hinges on star formation, because stars make heavy elements for planets and organic molecules.

"Our measurements of UV radiation will tell us both the rate at which stars are forming in galaxies and the distances of the galaxies," says Friedman.

How did we get here? GALEX will show the way.

Find out more about GALEX at www.galex.caltech.edu. For children, visit The Space Place at spaceplace.nasa.gov/galex_make1.htm and make a beautiful galactic mobile while learning about some of the different shapes galaxies can take.

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



This image of Messier 101 (M101), aka the "Pinwheel Galaxy," was taken in two orbits of GALEX on June 20, 2003. M101 is 20 million light years away.

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:

- Nancy Rowe
- 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