The W.A.S.P. newsletter

October 2005

The Warren Astronomical Society Paper

P.O. Box 1505
Warren, Michigan 48090-1505
www.warrenastronomicalsociety.org

Volume 37, Number 10 // October, 2005

2005 WAS OFFICERS

President	Ken Bertin	email:	syzygie@aol.com
1st VP (program chairperson)	Norm Dillard	email:	jupiter1927@sbcglobal.net
2nd VP (observatory chairperson)	Riyad Matti	email:	riyadmatti@yahoo.com
Secretary	Bob Berta	email:	biker123@netzero.com
Treasurer	Jim Shedlowsky	email:	jimskeebros@cs.com
Vince Chrisman	Director, Publications	email:	thexxfiles@hotmail.com
Marty Kunz	Director, Public Relations	email:	solarmartykz@aol.com

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

The Ninth Annual, Astronomy On The Beach, gala at Kensington MetroPark, was a huge success. Officials estimated at least 2,000 attended, with at least 1,000 on Friday night and over 1,000 on Saturday night. Both nights were cloudless and observing was darn good in all directions. The lecture area was jammed to the hilt and table sales by the different clubs and businesses were having brisk sales. There seemed to be more kids involved in our star party this year too. A superb display of Northern lights made a lot of people gasp Saturday night. Thanks to the many clubs that helped, this year's event will long be remembered.

The photo shows three members of the Liftport Group Inc., adjusting the "climber", a device that will be used to send objects into orbit via the carbon nanotube Space Elevator. Believe it or not, nanotube technology is getting closer to the dream of creating a ribbon of nanotubes, strong enough to reach above Earth's atmosphere to transport material into space after climbing all the way to the top of the ribbon. A "pipedream" just a few years ago, it's getting closer to reality.

The Giant Magellan Telescope (GMT) is also closer to reality. This proposed telescope would

be 21.4 meters wide (842.4 inches or 70.4 ft.). It'll consist of six off axis mirrors and one on axis mirror, each mirror being 330 inches in diameter. The first mirror oven was started on July 12, glass loaded in, and by July 23 there was a complete melt down. The oven is rotating once every twelve seconds to keep the melted surface with the right basic curvature. First light is not expected until 2016. Northern Chili has been selected as the erection site. This telescope will be the first of a new class, with more to come.

Jim Shedlowski, was grinning from ear to ear because he managed to find a trailer for the club's 22 inch Dob. It's going to be parked at Dennis Schmalzal's house for the time being. That is, until we can make some kind of agreement with the MetroPark people about storing it on the grounds of Stargate. The 22 in. 'scope will remain in its storage shed until it's required to be moved with the trailer.

Speakers for the month of October are Dale Partin and Dave Baily. Dale, is fascinated with measuring the solar system. He'll talk about *Measuring The Distance To The Sun, The Ancient Way", on October 3, at the Cranbrook meeting. Dale's previous measuring accomplishment was the moons of Jupiter and gave a great talk about his efforts. Dave will continue his talk on "Atmospheres, Deep And Shallow", at the MCCC meeting, on October 20, bldg. "B", room 209. Both meetings start at 7:30 PM.

If I remember correctly, our new officers for 2006 will be elected in October, so it's your chance to nominate yourself, or your best choice, at the Cranbrook and MCCC meetings. Your best way of making a difference in the way we do business or conduct our meetings and outreach programs, is to become an officer. Your ideas will have a bigger "punch" at board meetings. Our president and treasurer are reaching the end of their allotted serve time and have to be replaced. The other officers could run another term. At the present time, nominees include Norman Dillard and Dr. Philip Martin for president, Riyad Matti for First Vice Pres., Bob Berta for Second Vice Pres., Steve Green for Secretary, Dale Partin for Treasurer, Vince Chrisman for Director of Publications and Marty Kunz for Director of Public Relations.

It looks as though my announcement about changing Daylight Savings Time has been postponed for awhile. When I announced it, the bill hadn't passed through the House or Senate. By the time it did pass, changes were made. Now it won't happen until 2007 and the extensions are only going to be a week earlier and a week later than normal.

The one good thing about going back to Standard Time is the fact that you can begin observing one hour earlier. With Mars in its best viewing position at the end of the month, this means convenient evening observing. Morning observers won't have that luxury.

At the end of this month, Saturn will be rising around 11:00 PM, making the ringed planet the showpiece of the night and morning sky. It'll rise two hours earlier at the end of November, crossing the Meridian about 3:00AM.

Now's the time to start thinking about attending our 2005 WAS Awards Banquet. Specifics aren't available yet but it usually is held on the third Thursday of December. This year that's December 15, at DeCarlos, on Ten Mile Road, just east of Mound Rd. in Warren, MI. The board of directors has made one stipulation for attending. Male dress must be business casual, at least. There were a lot of complaints about the general dress in past years. Some, from the guests that attended. That means no Levi's or everyday wear. Sport Jackets and slacks will be a minimum, even if you don't have a tie to wear. Female members and guests should dress to compliment their partners.

Here's an outreach tip. Set your 'scope up on Halloween, after dark, and keep your goodies at hand. Youngsters will get a double treat after looking through your telescope.

The October computer group meeting is scheduled for October 27, (the fourth Thursday of the month) at Gary Gathen'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. You can reach him at 248-543-3366, or me, at 586-776-9720 for any further information.

All photos are courtesy of SPACE.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.

CORRECTION. Frank Boyle's ad that appeared in the June edition of the WASP, had some errors. If you tried to connect with him and failed, please try the new info in this month's ad.

PRICE LOWERED!! FOR SALE. Meade Quasar, model DS-114-EC, with Autostar computer controller, tripod and three eyepieces, now $200. Call Frank Boyle at 313-886-8851 or fboylelady@aol.com. (12-05).

FOR SALE. Computer, Compact Presario, model 5204, 15 inch H.P. monitor, Compact Presario 5204 CPU, Pentium mid tower, 124 MB Ram, 350 Mhz CPU, 2 Gigabyte hard drive, 2 speakers with headphone jack, Acer keyboard 6511Q, ECM-S3103 mouse, Windows 98 operating system, 56K modem, Floppy disk, 36X CD Rom, extra paralell port for printer or Zip drive, 10/100 Mhz Lan Card. 54189-OEM 1650002 00005. $98.89. Mike Best, Cell phone #734-459-2378. StarMikeBest@comcast.net. (11-06).

FOR SALE. New HP ink cartriges for the HP600 series ink jet printers. Two black cartriges (HP51629A) and one color cartidge (HP51649A). Bought a new printer, can't use them anymore. $10 each. They regularly run about $25 to $32 each. 586-776-9720. Cometman@mybluelight.com. (11-05).

FOR SALE. Pool cover for in-ground pool. 20X35 ft. for 15X30 pool or smaller. Never Used. $30. 586-776-9720. Cometman@mybluelight.com. (4-06).

Note from the President:

While you are attending the October 3 meeting, I will be somewhere outside of Madrid observing an Annular Eclipse. This will be my second Annular, the first being in May of 1994. That eclipses' center passed over Toledo, Ohio. We in the Detroit area enjoyed this center eclipse in that we were directly on its path.

What was most interesting about that 1994 eclipse was the attitude of the educational institutions in our area.

I spent the day on the athletic field of Birmingham Groves High School with several friends (who brought telescopes) and over 500 Groves students and teachers and nearly another 250 middle school students and teachers. We had several telescopes and supplied hand held solar filters for everyone (courtesy of Thousand Oaks Optical Company). It was a terrific day and I am sure everyone there was treated to an event they will long remember.

Just a few miles away in both Southfield and Bloomfield Hills, the board of education of those districts chose to lock in their students so that they could not possibly damage their eyes looking at the sun. When I called to question the spirit of this ruling, I was told that the schools were afraid of litigation. Needless to say, I found the answer incredulous. I told them that 40 years in the future, how would it be for a grandchild to ask their grandparent what it was like to see this rare event, only to be told that their educators felt it more prudent to deny observation than to be sued. It wasn't like there wasn't adequate time to prepare some event like we did. We have known where these will occur for hundreds of years.

It is really our duty as astronomy buffs to get out the word to our educational organizations about the many wonderful events that are available to view. We should routinely alert the schools in our area, of eclipses, transits, occultations, meteor showers, close approaches by planets, sunspots and the coming of auroras. We should all take the time to volunteer ourselves to speak before groups, classes, school assemblies, in order to have children (and adults) learn accurate

astronomical information, instead only being concerned with what someone's sign is.

The knowledge (or lack thereof) the public has about astronomy is laughable at best, appalling at worst and it is partly our fault for not having a little bit of star hustler in each of us.

Respectfully submitted,

Ken Bertin

∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞

WAS Meetings scheduled for 2005

Cranbrook Meetings – Every 1st Monday

October	3	November	7
December	5		

Macomb Meetings – Every 2nd Thursday

October	20	November	17
December	15 –Banquet		

☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼☼

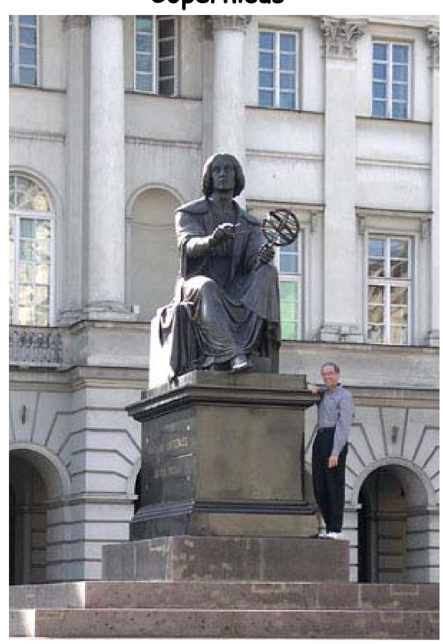
October 2005 Calendar

Saturday, Oct 1 • 6:00 am: Mars is stationary
Monday, Oct 3 • 6:28 am: New Moon; Annular eclipse (Spain & Northern Africa)
Friday, Oct 7 • 2:00 am: The Moon passes 1.4° South of Venus; 9:00 pm: The moon passes 0.2° north of Antares
Saturday, Oct 8 • Draconid meteor shower peaks
Monday, Oct 10 • 3:01 pm: First Quarter Moon
Wednesday, Oct 12 • 11:00 am: The Moon passes 5° south of Neptune
Friday, Oct 14 • 1:00 am: The Moon passes 3° south of Uranus; 9:58 am: The Moon is at Perigee (227,080 miles from Earth)
Sunday, Oct 16 • 2:00 pm: Venus passes 1.6° north of Antares
Monday, Oct 17 • 8:14 am: Full Moon; Partial Lunar Eclipse (Western U.S.)
Wednesday, Oct 19 • 9: am: The Moon passes 5° north of Mars
Friday, Oct 21 • Orionid meteor shower peaks
Saturday, Oct 22 • 9:00 am: Jupiter is in conjunction with the Sun
Monday, Oct 24 • 9:17 pm: Last Quarter Moon
Tuesday, Oct 25 • 1:00 pm: The Moon passes 4° north of Saturn
Wednesday, Oct 26 • 5:33 am: The Moon is at apogee (251,341 miles from Earth)
Saturday, Oct 29 • 11:00 pm: Mars is closest to earth (43.1 million miles away)
Monday, Oct 31 • 2:00 pm: The moon passes 1.2° north of Spica

∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞

∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞∞

Copernicus



Jon Blum in Warsaw

UPDATED SPEAKER LIST FOR 2005

10/3/2005	**MONDAY**	**DALE PARTIN**	**MEASURING DIST. TO THE SUN, THE ANCIENT WAY**
10/20/2005	**THURSDAY**	**DAVE BAILEY**	**ATMOSPHERES, DEEP AND SHALLOW PART II**
11/7/2005	**MONDAY**	**KEN BERTIN**	**HISTORY OF ASTRONOMY**
11/17/2005	**THURSDAY**	**ALAN KAPLAN**	**STELLAR EVOLUTION**
12/5/2005	**MONDAY**	**RICHARD SZUMANSKI**	**T.B.D.**
12/15/2005	**THURSDAY**		**AWARDS BANQUET**

Earth Science Week 2005 Contrail Count-a-Thon

In recognition of Earth Science Week, the GLOBE Program and NASA invite you to join in a scientific exploration on Thursday, October 13, 2005, to observe the sky over your area and report on the presence or absence of contrails. Teachers, students, and anyone interested in helping to develop a better understanding of Earth are welcome to participate.

Contrails are cirrus clouds formed when water vapor condenses and freezes around small particles (aerosols) in aircraft exhaust. Some of the water vapor comes from the surrounding air, some from the aircraft exhaust. Contrails, especially thin ones, are very hard to see from satellites, and may have an impact on Earth's atmosphere. In order to improve contrail prediction models, scientists need observations both of contrail occurrence and absence. Visit http://www.globe.gov/earthsciweek2005 for more information on contrails and clouds. Instructions on how to participate in this event and report your information can be found at this Website. The observations that are reported will be tallied and analyzed by NASA scientists looking for clues to contrail prediction. A report on their findings will be posted to the website.

Nancy Leon
Education and Public Outreach Lead
NASA New Millennium Program/Space Place
NASA/JPL 4800 Oak Grove Drive
Mailstop 301-235
Pasadena, CA 91109

Improbable Bulls-Eye

by Dr. Tony Phillips

In 1977, Voyager 1 left our planet. Its mission: to visit Jupiter and Saturn and to study their moons. The flybys were an enormous success. Voyager 1 discovered active volcanoes on Io, found evidence for submerged oceans on Europa, and photographed dark rings around Jupiter itself. Later, the spacecraft buzzed Saturn's moon Titan—alerting astronomers that it was a very strange place indeed! —and flew behind Saturn's rings, seeing what was hidden from Earth.

Beyond Saturn, Neptune and Uranus beckoned, but Voyager 1's planet-tour ended there. Saturn's gravity seized Voyager 1 and slingshot it into deep space. Voyager 1 was heading for the stars—just as NASA had planned.

Now, in 2005, the spacecraft is nine billion miles (96 astronomical units) from the Sun, and it has entered a strange region of space no ship has ever visited before.

"We call this region 'the heliosheath.' It's where the solar wind piles up against the interstellar medium at the outer edge of our solar system," says Ed Stone, project scientist for the Voyager mission at the Jet Propulsion Laboratory.

Out in the Milky Way, where Voyager 1 is trying to go, the "empty space" between stars is not really empty. It's filled with clouds of gas and dust. The wind from the Sun blows a gigantic bubble in this cloudy "interstellar medium." All nine planets from Mercury to Pluto fit comfortably inside. The heliosheath is, essentially, the bubble's skin.

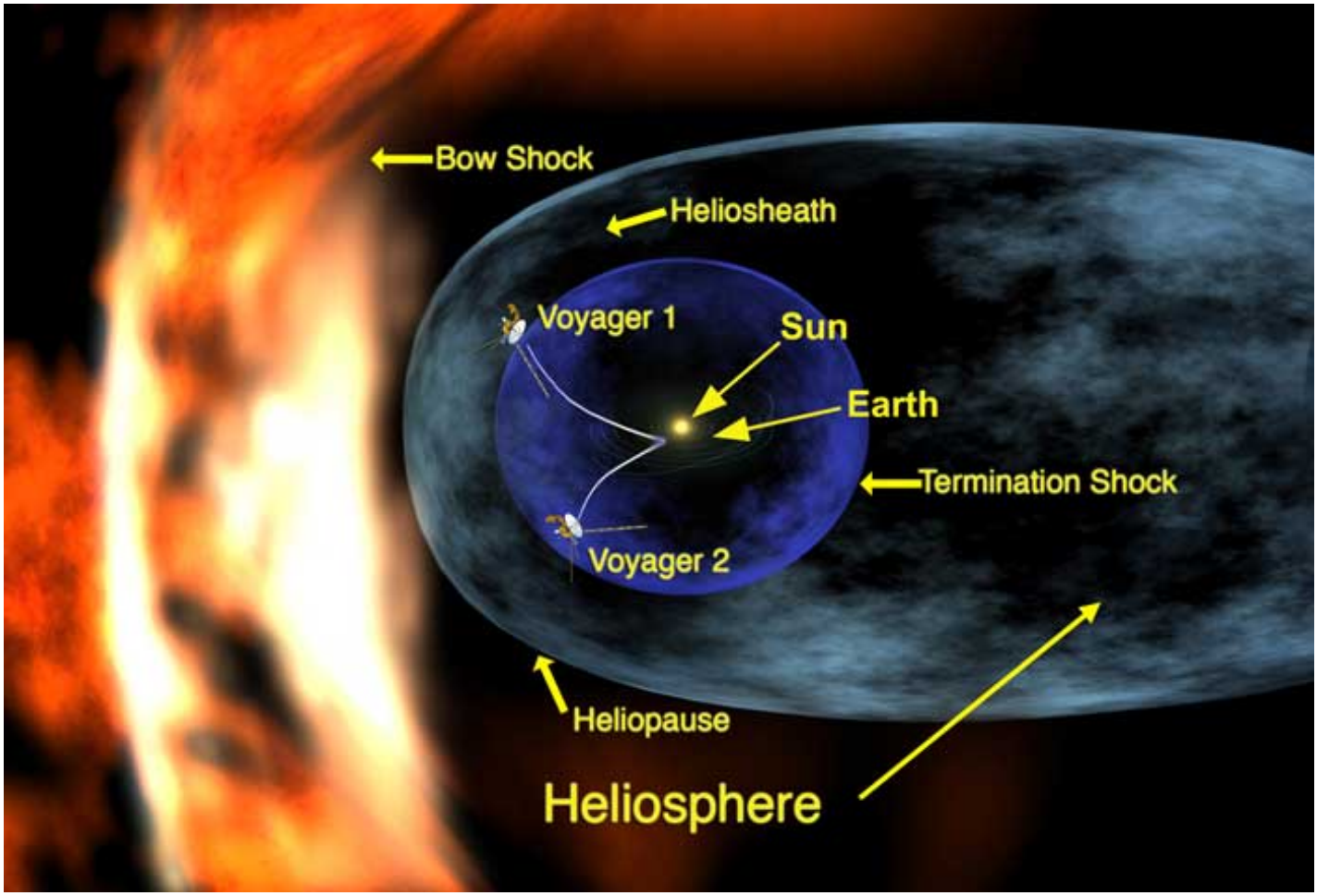
"The heliosheath is different from any other place we've been," says Stone. Near the Sun, the solar wind moves at a million miles per hour. At the heliosheath, the solar wind slows eventually to a dead stop. The slowing wind becomes denser, more turbulent, and its magnetic field—a remnant of the sun's own magnetism--grows stronger.

So far from Earth, this turbulent magnetic gas is curiously important to human life. "The heliosheath is a shield against galactic cosmic rays," explains Stone. Subatomic particles blasted in our direction by distant supernovas and black holes are deflected by the heliosheath, protecting the inner solar system from much deadly radiation.

Voyager 1 is exploring this shield for the first time. "We'll remain inside the heliosheath for 8 to 10 years," predicts Stone, "then we'll break through, finally reaching interstellar space."

What's out there? Stay tuned…

For more about the twin Voyager spacecraft, visit voyager.jpl.nasa.gov. Kids can learn about Voyager 1 and 2 and their grand tour of the outer planets at spaceplace.nasa.gov/en/kids/vgr_fact3.shtml .



Voyager 1, after 28 years of travel, has reached the heliosheath of our solar system.

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

Voyager 1