IO – July 2006

Eugene Astronomical Society, Annual Club Dues \$25, Board Members: President: Richard Boyd- checkerkit@comcast.net, Stephen Caruana, Fred Domineack, Jacob Stranlien Sam Pitts www.eugeneastro.org EAS is a Proud Member of:

he Astronomical League

The World's Largest Federation of Amateur Astronomers

Issue 2006-7

IO editor- sampitts@comcast.net 688-7330 Io (EYE-oh) is nearest to Jupiter and fastest orbiting of the four Galilean moons

Monday- July 10th MEETING EUGENE ASTRONOMICAL SOCIETY At The Science Factory Planetarium

The meeting will begin at **7:00 PM** in the Planetarium. Discus what's up and out for viewing in July? Discuss and plan future events and star parties. EAS & its members are dedicated to having fun while pursuing the hobby of Astronomy, so come on out and have some fun visiting with others that share a passion for the night skies.

Come early and help others learn about their scopes. Those of you, who are new or not sure about your equipment, show up early and some of our members will assist you in understanding your equipment better. If you are planning on getting a scope please come out and ask questions, we're glad to assist you in making a good solid choice to maximize your viewing pleasure.

The Science Factory is at 2300 Leo Harris Parkway, behind Autzen Stadium.

Check EAS WEB site for up to the minute Information www.eugeneastro.org

Fred Domineck-Update

Fred is recovering at: Eugene Good Samaritan Center, 3500 Hilyard, Eugene Or., 687-9211. Take some time out and stop by and visit Fred. Some club members are working on ways for Fred to observe the stars from his wheelchair. We hope that in the near future he may be up for a ride to a Dark Sky Site and share the Stars with us once again

Visit *any branch* of Oregon Community Credit Union (formerly known as UlaneO) ask to donate to the "Fred Domineack and Bonnie Murdock" Benefit Fund"

If you're out of town, you can send checks payable to: Fred Domineack and Bonnie Murdock Benefit Fund mailing address:

> OCCU PO Box 77002 Eugene, OR 97401-0146

Cards & letters can be sent in C/ O Fred & Bonnie to: 5232 Wales Drive Eugene, OR 97402



www.eugeneastro.org



July 3	July 10	July 17	July 24
First Quarter	Full Moon	Last Quarter	New Moon
Sunset: 8:58 PM	Sunset: 8:55 PM	Sunset: 8:51 PM	Sunset: 8:45 PM
Sunrise 5:34 AM	Sunrise 5:39 AM	Sunrise 5:45 AM	Sunrise 5:51 AM
Moon Set 0:38 AM	Moon Set 4:37 AM	Moon Rise 00:03 AM	Moon Rise 04:58 AM
Mercury Set 9:51 PM	Mercury Set 9:10 PM	Mercury Set 8:24 PM	Mercury Rise 5:23 AM
Venus Rise 3:36 AM	Venus Rise 3:39 AM	Venus Rise 3:44 AM	Venus Rise 3:52 AM
Mars Set 10:59 PM	Mars Set 10:42 PM	Mars Set 10:25 PM	Mars Set 10:07 PM
Jupiter Set 2:05 AM	Jupiter Set 1:37 AM	Jupiter Set 1:10 AM	Jupiter Set 12:39 AM
Saturn Set 10:35 AM	Saturn Set 10:10 PM	Saturn Set 9:44 PM	Saturn Set 9:19 PM
Uranus Rise 11:51 PM	Uranus Rise 11:23 PM	Uranus Rise 10:56 PM	Uranus Rise 10:28 PM
Neptune Rise10:48 PM	Neptune Rise10:21 PM	Neptune Rise 9:53 PM	Neptune Rise 9:25 PM
Pluto Rise 7:03 PM	Pluto Rise 6:35 PM	Pluto Rise 6:07 PM	Pluto Rise 5:39 PM

All times are for Eugene, Oregon Latitude 44° 3' 8" Longitude 123° 5' 8" for listed Date

Events

JULY	2006
3	Earth At Aphelion (1.017 AU From Sun)
4	STS-121 Launch, Space Shuttle Discovery, Launch Time: 2:38 p.m.
7	Comet Tuttle-Giacobini-Kresak Closest Approach To Earth (0.950 AU)
12	Asteroid 2000 HB24 Near-Earth Flyby (0.055 AU); Asteroid 2006 HW57 Near-Earth Flyby (0.088 AU)
18	40th Anniversary (1966), Gemini 10 Launch (John Young & Michael Collins)
19	Asteroid 2003 EE16 Near-Mars Flyby (0.039 AU); Comet P/2006 M3 (Barnard) Closest Approach To Earth (0.366 AU)
20	30th Anniversary (1976), Viking 1, Mars Landing
20	July 20-22 Table Mountain Star Party
21	45th Anniversary (1961), Mercury 4 Launch (Gus Grissom, Liberty Bell 7)
28	Asteroid 54509 (2000 PH5) Near-Earth Flyby (0.077 AU)
29	South Delta-Aquarids Meteor Shower Peak; Asteroid 2006 BQ6 Near-Earth Flyby (0.037 AU)

All times Universal Time (UT), U.S. Pacific Daylight Time = UT - 7 hours (May-October) UT-8 (Nov.-April).



 Table Mountain Star Party 2006 is upon us! We look forward to seeing each of you along with special guests David Levy and Dr. Donald Brownlee!

JULY 20-22, 2006

Information Site : http://www.tmspa.com/

 $Registration\ Forms:\ http://www.tmspa.com/PDFDnlds/2006VendorRegistration.pdf$

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Jerry Oltion: Published in Sky & Telescope -July 2006 Issue-



EAS Member Jerry Oltion has come up with a new and innovative telescope design inspired by the old PortaBall & Astroscan designs. Jerry's new design incorporates a 10" f/4 mirror he ground himself. EAS member Mel Bartels put on a Mirror grinding class a couple years ago that many members took advantage of and produced some fine telescopes (Thanks Mel).

EAS members were fortunate to have Jerry's bring and demonstrated his new designed "Track-Ball" 10" f/4 scope at a meeting. Jerry loves to tinker with things and is always looking for new ways to improve his hobby or just find a simpler & more economic way to do achieve his observing goals. Jerry's efforts have paid off with his recognition by Sky & Telescope with a full length feature in their Amateur Telescope Making section, in July 2006's issue. Jerry's success also caught the attention of Eugene, Oregon's "The Registerguard's" City section making front page new on this section on July 4th, 2006. Jerry is offering plans and advise in the spirit of John Dobson and will not seek patents, this design is free to all that want to share in the wonders of the night sky. Way to go Jerry

Accomplished EAS Observer: James Jackson Earns Prestige's AL Observing Awards



Jim's Binoculars from his "Deep Sky Hermitage" site in Central Oregon

James Jackson has been very busy this past year or so doing lots of observing from his "Deep Sky Hermitage" in central Oregon's pristine skies. James has been pursuing many of the Astronomical Leagues Various Observing programs. Last year he earned and was presented his messier certificate and pin. His thirst for those incredible deep sky objects was not quenched. James decided to continue and is currently working on his Herschel 400 certificate.

At the next EAS meeting James will be presented with Certificate # 105 "Caldwell Observing Award" having observed 70 Caldwell Objects. In addition James will be awarded the Prestige's "Caldwell Observing Award-109 Objects" Certificate # 11, for observing all 109 Caldwell Objects. This certificate required observing objects in both the Northern & Southern Hemisphere.

These awards were personally signed by Astronomical League President Robert Gent, Caldwell Club Coordinator Susan Rose & renowned Astronomer Sir Patrick Moore.

We are looking forward to an in depth report from James on his observing pursuits. It has been a privilege to review his written observations of all these objects. I hope James endeavors will cause more EAS members to participate in the various observing clubs offered by the astronomical League.

Congratulations to James Jackson and a job will done.



Urban Club Chair:

Mike Benson 2308 Dundee Lane Nashville, TN 37214-1520 (615) 883-6571 E-mail: ocentaurus@aol.com IO – July 2006 www.eugeneastro.org

Urban Club

Welcome to the Astronomical League's Urban Club!

The purpose of the Urban Club is to bring amateur astronomy back to the cities, back to those areas that are affected by heavy light pollution. Amateur astronomy used to be called "backyard astronomy". This was in the days when light pollution was not a problem, and you could pursue your hobby from the comfort of your backyard. But as cities grew, so did light pollution, and the amateur astronomer was forced to drive further and further out into the country to escape that light pollution. It is not uncommon today for a city dweller to drive 100 miles to enjoy his/her hobby. But many people do not have the time or the resources to drive great distances to achieve dark skies. That is the reason for the heavens in the comfort of their own neighborhoods to do so, and to maximize the observing experience despite the presence of heavy light pollution.

Our crack team of observers observed the objects on this list from the East Coast to Middle America to the West Coast, and from major metropolitan areas like Miami, Baltimore, Dallas, Houston, and Los Angeles. Limiting magnitudes went from a high of 4, down to 2, to a "Geez" as Becky Schultz commented on one particularly bad evening. Instruments ranged from a six-inch reflector to a ten-inch SCT. So as you can see, there is a world of objects out there that can be enjoyed under even poor skies, and it only takes a small to medium sized telescope to enjoy them. We sincerely hope that this club encourages you to continue your enjoyment of this wonderful hobby of ours.

Rules and Regulations.

To qualify for the A.L.'s Urban Club Certificate and award pin, you need only be a member of the Astronomical League, either through an affiliated club or as a Member-at-Large, and observe 100 objects on the Urban Club list in light polluted skies. Light polluted skies are defined as any area where you cannot see the Milky Way with the unaided eye. You may observe the objects with the naked eye, binoculars or any size telescope. However, telescopes from six- to ten-inches in aperture are recommended since a larger aperture helps pull out fainter objects in non-contrasty skies. Previous observations of these objects may be used toward this club as long as they were done in light polluted skies. Previous observations from dark sky sites may not be used. All observations made in achieving the certificate for the Urban Club may be used toward certificates of other A.L. observing programs.

To record your observations, you may use log sheets similar to those found in the back of the Astronomical League's manual *Observe: A Guide to the Messier Objects*. You can order the *Observe* manual through Astronomical League Sales. If you use your own log sheets, they should include: object, date, time, power, seeing, type of instrument, and observing notes.

The List

There are actually two lists, one for deep-sky objects, and another for double and variable stars. All objects are listed in Right Ascension order so that you can view them as they rise in the East and set in the West. Information provided on each deep-sky object includes: Catalog Number, Right Ascension, Declination, Magnitude, Messier Designation (if any), Type of Object, Size, Constellation, and what chart it is located on in both the Uranometria or Tirion's Sky Atlas 2000. Information provided on double and variable stars includes: Object, Right Ascension, Declination, Magnitude, and Separation of the components.

I hope you enjoy this list of objects to observe, and that it helps increase your satisfaction in observing from a light polluted area. I will look forward to your sharing your observations with me. Until then, good luck, clear skies, and good observing! - John Wagoner

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Oregon Star Party 2006 Aug. 24-27

After July 28th all Registration is On Site http://www.oregonstarparty.org/

The Oregon Star Party is an astronomy adventure featuring quality deep sky viewing. It attracts intellectually curious outdoor lovers who enjoy the romance of a renaissance gathering. All ages enjoy camping among ponderosa, juniper, mountain mahogany, and sage. Past attendees have told us emphatically how much they have enjoyed the camaraderie and dark skies of Indian Trail Spring, and that they will return again!

In the evening, a forest of telescopes and bustling observers grows on the high prairie. Beauty and quality are apparent in personally engineered and constructed instruments. Large telescopes, personal computers, and sophisticated tracking systems promise power and ability. But high technology does not overshadow the great personal satisfaction of using small telescopes, binoculars, and naked eye viewing. Many who attend are astro-imagers, others are logging Messier, Herschel I & II objects, or the objects found in their OSP Observers' packet. Still others may just enjoy the clear dark skies from the comfort of a lawn chair.

Almost everyone welcomes a polite request to share a telescopic view; this is the spirit of our star party. All of us thrill at the glitter and soft glows of starlight mixed with friendly whispers punctuated by the shouts of success. It's emotionally unforgettable. We invite you to join us in 2006!

Remember: sunset at this time of year is around 8:00 PM. Please try to arrive before dark, but if unable to do so, be cautious of deer or other animals on the roads, particularly around dusk or dawn. Anticipate an hour's drive from Prineville to the site. Roads are paved except for the last four miles, which are gravel, and in decent shape. Before leaving home, please check our web site for any possible detours.

OSP Weather and Site Conditions - Since the OSP site is located on Forest Service lands; we do need to adhere to their conditions for use. The hill and prairie the site is located on is treeless, so there is limited shade. It can be hot during the day, but pleasant at night (light jacket). However there have been monsoon type downpours, lighting strikes inside the site and dust devils powerful enough to lift tents, ice chests and telescopes. There are some camping restrictions. However these restrictions change from year to year and you'll need to pick up the latest information from a volunteer at the registration tent.

For clothing, bring warm and cool weather clothes and rain gear. Do bring sunscreen, sunglasses and head covering. If you have a special medical condition or needs, there are volunteer medics on hand to help; primarily they just provide first aid help. The nearest medical facility is in Prineville.

Usually there is a severe fire risk warning for the area, so there are no open fires, electric generators are (generally) restricted to medical needs, food vendors and main activities tent. It is a good idea to pack extra water and food.

Cell phone access is spotty at best. There is no guarantee that your cell phone will work at OSP. There is a satellite Internet access provider on site for a fee.

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Long time EAS member Frank Casebolt has recently acquired an SBIG ST7 CCD. Since his new acquisition his medium format camera & 20" Dob have been gathering dust. Even though he has captured some gorgeous shots of the night sky on film, the CCD bug has bitten. Frank has captured the following images with his new camera attached to an Orion ED80 scope mounted on an Astro Physics 1200 Goto mount. Below are some of Frank's first images!!



M57 Ring Nebula taken By Frank Casebolt



M20 Trifid Nebula taken by Frank Casebolt