Eugene Astronomical Society

IO - September 2020

Issue 2020-09

Eugene Astronomical Society
Annual Club Dues $25
President: Andrew Edelen 618-457-3331
Secretary: Randy Beiderwell 541-342-4686
Additional Board members:
Oggie Golub, Jim Murray, Ken Martin, Jerry Oltion.

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EAS is a proud member of The Astronomical League

Next Meeting Thursday, September 17th, 7:00 p.m. (via Zoom)

Topic and Speaker To Be Announced

We haven't yet figured out what our program will be for September, but the meeting will be held on Zoom at 7:00 on Thursday, September 17th. A few days before the meeting you will receive an invitation via our club email list, so if you want to attend the meeting but haven't joined the mailing list, do so now. Go to our website at www.eugeneastro.org and click on the "Mailing List" link at the top of the page.

Zoom is easy to use with either its dedicated (free) app or your browser. See you there!

A Changing of the Guard

New Officers for Key EAS Positions

After Bogarting the offices of Secretary, Newsletter Editor, and Telescope Lending Coordinator for the last several years (14 in the case of Secretary), Jerry Oltion has finally decided to share those duties with other EAS members. He's happy to report that we received able volunteers for all positions, so these essential club functions will continue without interruption under new management.

Our new overlords are:

Secretary: Randy Beiderwell, with the able assistance of Annette Brieske. For membership matters and any financial transactions contact Randy at <alpenglow-video@comcast.net>.

Newsletter Editor: Bruce Sackett. <bruce@busymind.net>. See next page for more details.

Telescope Lending Coordinator: Dan Beacham. <beachamd@yahoo.com>.

Many thanks to these new volunteers! Our club is run entirely by volunteers, and things get done only through the generous donation of time and effort of club members who step up to help. By spreading these three offices out among new people, we ensure that our essential club functions are no longer all in one basket and we allow for new ideas and new abilities to take root and thrive. This is how clubs grow, and the EAS is growing stronger every day.

So saying, we're up to 95 paid-up members, which is a record high, and an even 200 members on our email list, also a record high. Despite the lack of star parties or in-person meetings this summer, participation online has been better than ever.

Jerry's not going anywhere, either. He'll still be as active as always on the email list and on outings and at star parties once we start holding them again. He's just taking a break from administrative duties for a while. And he offers a heartfelt "Thank you!" to the able volunteers who have allowed him to do so.

Io Under New Editorship

As mentioned on the previous page, the *Io* has a new editor starting with the October issue. Bruce Sackett, a returning club member after a long absence, has volunteered to take the helm and keep the publication going. Bruce was an active member of the club back in the 1990s, and served as club president for three years. He left to focus on family and work, explaining "When I quit, I had to go all out — sell the scope, leave the club, give stuff away — or I would have never left! I finally had the chance to acquire a scope and come back to the fold this last year. Of course, with Covid, I haven't been able to be as present as we all would like to be, but I've been lurking on the mailing list all this time and trying to soak it all back in."

Editing the newsletter will be a fine way to get back into the thick of the club, but Bruce shouldn't have to do everything himself. Give him some help with articles, observing highlights, and anything else you think would be a welcome addition to *your* newsletter. Ideally Bruce should be the editor, not the sole writer of content. So everyone: get busy and pitch in!

And many, many thanks to Bruce for taking it on. Contact Bruce at: <bruce@busymind.net>.

August Meeting Report

Unusual Telescope Designs
by Jerry Oltion

On August 20th, Jerry Oltion gave a Zoom presentation on the history of telescope development and the odd ideas and quirks that telescope makers came up with along the way. From Galileo's original two-lens design, which we consider unusual today, to the big laser interferometer in the Washington prairie that watches for gravity waves, telescopes have taken some decidely strange forms. Jerry highlighted several dozen of them, including these from telescope makers in just our local area.

The meeting was recorded and can be viewed on YouTube at: https://youtu.be/MxUH1RVtEW8

Craig Daniels's "Dogson"

David Davis's styrofoam "Fuzzy"

Jerry Oltion's 10" Trackball

Mark Yonker's nested cube

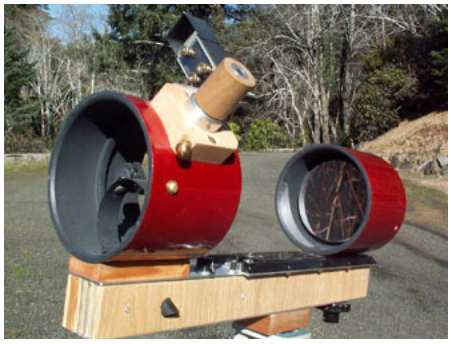
Mel Bartels's 13" f/3 "Zipdob"

Jerry Oltion's 12.5" Binocular

Frank Szczepanski's "Popeye," a binocular scope with 10" and 12" mirrors.

Mel Bartels's 25" f/2.6 secope with "Alt-Alt" mount modification. Note how Mel has to hunker down to the eyepiece even with the scope pointed near the zenith. This is a 25-inch telescope!

Jerry Oltion's star-testing telescope, showing how minimalist a telescope can be and still function.



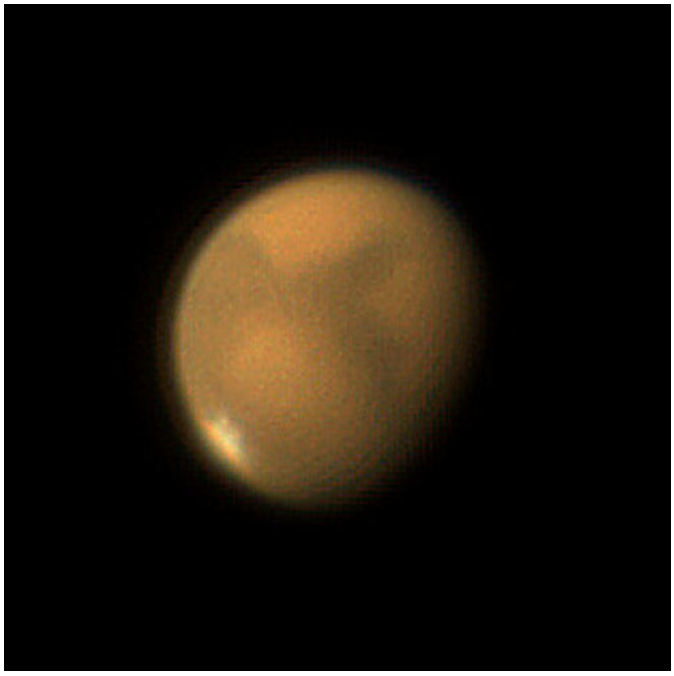
Chuck Lott's typewriter scope (uses a typewriter carriage as a focuser)

Jerry Oltion's double-scale Astroscan

The EAS's "Hippie Dob," true to John Dobson's original design from the 1970s

Gallery

August was another great month for astrophotography. EAS members took some great long-exposure shots of deep-sky objects and some nice shots of the Moon and planets and starscapes. Enjoy!



Mars 8/4/20. Photo © by Jeff Phillips

Mars 8/8/20. Photo © by Jeff Phillips

The Moon, Venus, and Orion at dawn 8/15/20. Photo © by Alan Gillespie

The Full Moon on 8/4. Photo © by Alan Gillespie

M16, the Eagle Nebula. Photo © by Ronald Perez.

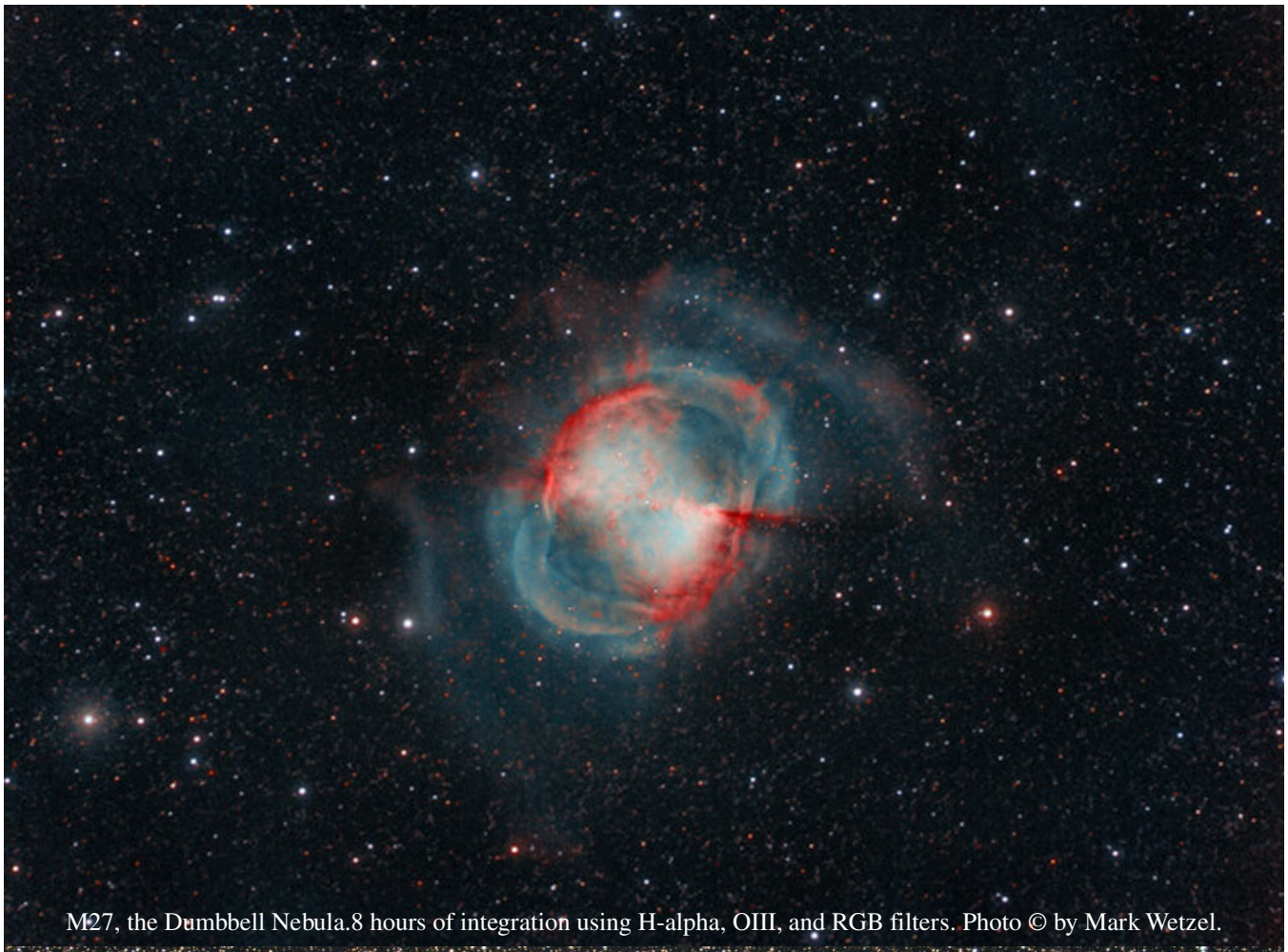
The Eagle Nebula (top) and Swan Nebula.
Photo © by Karmin Peterson.

M16, the Eagle Nebula. 12.25 hours with H-alpha, OIII, Sulfur II, and RGB filters. Photo © by Mark Wetzel.

Moon and Venus on 8/15/20. Photo © by Alan Gillespie.

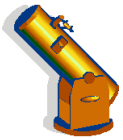
Sharpless 2-86 in Vulpecula. The cluster at center is NGC 6823. Photo © by James Pelley.

Altair and Tarazed with the Milky Way background. Note Barnard's E, the dark nebula below Tarazed.
Photo © by Karmin Peterson



M27, the Dumbbell Nebula.8 hours of integration using H-alpha, OIII, and RGB filters. Photo © by Mark Wetzel.

M27, the Dumbbell Nebula wide-field. 5.7 hours of inegration using UV IR block filter. Photo © by James Pelley.



Observing in September

Full | Last Q | New | 1st Q

Sep 1, 10:22 PM	Sep 10, 2:26 AM	Sep 17, 4:00 AM	Sep 23, 6:55 PM
Mercury Set: 8:20 PM	Mercury Set: 8:09 PM	Mercury Set: 7:59 PM	Mercury Set: 7:49 PM
Venus Rise: 2:51 AM	Venus Rise: 3:02 AM	Venus Rise: 3:14 AM	Venus Rise: 3:24 AM
Mars Rise: 9:45 PM	Mars Rise: 9:10 PM	Mars Rise: 8:41 PM	Mars Rise: 8:15 PM
Jupiter Set: 2:13 AM	Jupiter Set: 1:37 AM	Jupiter Set: 1:10 AM	Jupiter Set: 00:47 AM
Saturn Set: 2:56 AM	Saturn Set: 2:19 AM	Saturn Set: 1:50 AM	Saturn Set: 1:26 AM
Uranus Rise: 9:57 PM	Uranus Rise: 9:21 PM	Uranus Rise: 8:53 PM	Uranus Rise: 8:29 PM
Neptune Rise: 8:06 PM	Neptune Rise: 7:30 PM	Neptune Set: 6:30 AM	Neptune Set: 6:06 AM
Pluto Set: 2:36 AM	Pluto Set: 2:00 AM	Pluto Set: 1:32 AM	Pluto Set: 1:08 AM

All times Pacific Standard Time (November 1, 2020 - March 14, 2021 = UT -8 hours) or Pacific Daylight Time (March 8 - Oct 31, 2020 = UT -7 hours)

Date	Moon Rise	Moon Set	Twilight Begin	Sun Rise	Sun Set	Twilight End
9/1/2020	20:06	05:48	04:53	06:36	19:47	21:30
9/2/2018	20:30	06:52	04:55	06:37	19:45	21:28
9/3/2020	20:52	07:55	04:56	06:39	19:44	21:25
9/4/2020	21:12	08:56	04:58	06:40	19:42	21:23
9/5/2020	21:33	09:57	04:59	06:41	19:40	21:21
9/6/2020	21:56	10:58	05:01	06:42	19:38	21:19
9/7/2020	22:21	11:59	05:02	06:43	19:36	21:17
9/8/2020	22:50	13:01	05:04	06:44	19:34	21:15
9/9/2020	23:24	14:04	05:05	06:45	19:33	21:13
9/10/2020		15:05	05:07	06:47	19:31	21:10
9/11/2020	00:06	16:04	05:08	06:48	19:29	21:08
9/12/2020	00:57	16:57	05:09	06:49	19:27	21:06
9/13/2020	01:58	17:44	05:11	06:50	19:25	21:04
9/14/2020	03:07	18:24	05:12	06:51	19:23	21:02
9/15/2020	04:22	18:59	05:14	06:52	19:22	21:00
9/16/2020	05:40	19:29	05:15	06:53	19:20	20:58
9/17/2020	06:59	19:58	05:16	06:55	19:18	20:56
9/18/2020	08:19	20:25	05:18	06:56	19:16	20:54
9/19/2020	09:38	20:54	05:19	06:57	19:14	20:52
9/20/2020	10:57	21:25	05:20	06:58	19:12	20:50
9/21/2020	12:15	22:00	05:22	06:59	19:10	20:48
9/22/2020	13:30	22:42	05:23	07:00	19:09	20:46
9/23/2020	14:38	23:32	05:24	07:01	19:07	20:44
9/24/2020	15:38		05:26	07:03	19:05	20:42
9/25/2020	16:28	00:28	05:27	07:04	19:03	20:40
9/26/2020	17:09	01:30	05:28	07:05	19:01	20:38
9/27/2020	17:42	02:34	05:30	07:06	18:59	20:36
9/28/2020	18:10	03:39	05:31	07:07	18:58	20:34
9/29/2020	18:35	04:44	05:32	07:08	18:56	20:32
9/30/2020	18:57	05:46	05:33	07:10	18:54	20:30

All times are for Eugene, Oregon Latitude 44º 3' Longitude 123º 06'

Items of Interest This Month

9/1 (night of 8/31) Europa shadow transit 12:32 AM – 3:22 AM.

9/4 Jupiter's moons pair up on opposite sides of the planet.

9/5 Moon very near Mars from Moon/Mars rise (9:40 PM) onward.

9/6 Io shadow transit 9:23 – 11:40 PM.

9/10 Algol at minimum brightness at 8:19 PM, brightening over next ~5 hrs.

9/13 Io shadow transit 11:19 PM – 1:36 AM. Callisto shadow transit 11:55 PM – 4:18 AM. (Very rare, don't miss this one!)

9/18 Europa shadow transit from sunset to 9:54 PM.

9/21 Io and Callisto both occulted by Jupiter. 9:06 for Io, 10:54 for Callisto. Red spot transits 10:32.

9/22 Autumnal equinox 6:31 AM. Io shadow transit 7:43 – 10:00 PM.

9/24–9/25 Moon near Jupiter and Saturn. 9/24 offers good chance to find Jupiter by day.

9/25 Europa shadow transit 9:39 PM – 12:31 AM

9/26 Ganymede shadow transit 7:33 – 11:01 PM.

9/29 Io shadow transit 9:38 – 11:55 PM.

9/30 Callisto shadow transit 6:03 – 10:30 PM. Callisto and Europa pass one another ~8:45 PM.