

February 2016
Vol. 43, Issue 2

February Newsletter

Harford County Astronomical Society Est. 1970 Celebrating 45 yrs. Continuous Service to the County

February Special Interest

- **Open House:
Saturday
February 13th
@ 6:30 pm**
- **General Mtg:
Thursday
February 18th
@7:00pm**
- **BOD Meeting:
Thurs. March 24th
@6:30 pm**



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WELCOME NEW & RETURNING MEMBERS 2015 / 2016

Our "Newbie" members that joined the club in
January 2016

Erin Deeb
Gerald Godwin and family
Brad Glass
Robert Maslin

I know it's been a long time since my last report to the newsletter, and I need to keep up to date on this, so I do apologize for this, I have compiled a list of our returning members from November 2015 and our newest members who have joined as of January 2016, so let's WELCOME them to our group.

Tim Kamel / Membership Chairman

Please welcome back members
that joined the club on 2015

Christos Ampatzis and family
Ladonna Burleigh and family
Doug Heeter
Ed Karnicki and family
David Schenck

Jason Mills and family
Mark Matysek
Brian Hall and family

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Outreach November 2015

Tim Kamel

On November 13th, we were invited by one of our members, Jason Mills, Planetarium Director for Southampton MS to participate in a joint session that involved the use of the planetarium along with an observing session outside. It turned out to be a beautiful night, though a bit on the cold side, and we had good participation by the school as well as by HCAS.

The school attendance was for 3 sessions, each of 30 students to sit through a planetarium session and also do some observing outside. Sessions were rotated to make best use of the facilities in the time allotted. Participation was good with parents and siblings joining the students. All were enthusiastic and had many questions. Participating for the club besides me were Larry, Bob, Paul, Tim P. and Tom. I had my ETX-70 and primarily focused on the Pleiades. Other members with larger scopes were able to bring in other objects to the thrill of the students and parents.

It was a very enjoyable event.

Open House October 2015

Tim Kamel

Well, summer is over and we are into fall, Our open house event this day started off mostly cloudy, with a forecast of clearing at 7 PM. It did not. It became partly cloudy and not scheduled to clear till after 10, by then the event would be over. I am sure the weather was a factor in the low turnover we experienced with visitors and members.

None-the-less, we did have a scout group attend and Tom put on a presentation for them, this was followed by an observing session where we were catching peeks at what we could between cloud banks. Rick and Tim P set up in the parking lot and I was in the dome. We could not see the moon from the dome this night as it was a four day moon, low and behind the trees. I was able to bring in some bright objects, including M-13, M-27 and M 57. M-31 was also pretty bright. No hope for the planets (Uranus and Neptune were out but Uranus was too close to the moon and Neptune was behind the clouds.

The cub scouts left early, as was expected. However, we were joined by several members of the Bel Air H. S. Astronomical Society. They stayed till about 9:30 and then went off to do what high schoolers do on a Saturday night. In all, we had about 30 guests.

Participation by club members was good for this event, including Tom, Bob, David, Tim P and Rick.

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Open House November 2015

Tim Kamel

Our session for November was an interesting one. We had a scout group scheduled but the weather was not cooperating. It was partly cloudy for most of the session but we still had a pretty good turnout. The scout troop did attend, along with parents and siblings. We also had several students from the astronomy class at the college, plus we had several students from the Bel Air HS Astronomy class attend. In all, we had well over 50 persons attending the session. We basically stayed focused on the moon, catching it between banks of clouds that kept rolling in and intensifying as the night wore on. Tom then provided a presentation to a standing room only crowd in the large class room. After that, the sky was pretty much socked in and the session ended.

Participation for the club was modest. Besides me and Tom there was Bob K, Bob A and Paul as well as a Bel Air Astronomy club member who set up a scope in the parking lot.

Open House December 2015

Tim Kamel

Our December open house was full of promise. It was a clear night and we were scheduled for a scout troop which did attend. They were joined by a few non-affiliated guests who stayed after the scouts left. These included a young couple who had recently bought a scope and were looking for pointers. Overall attendance was about 20 guests; I guess this being the Saturday before Christmas was somewhat limiting. We viewed the moon as well as some Messier objects including the Pleiades, Alberio, a globular, Uranus, and the star clusters in Auriga - M-36, -37 and -38. The 8-day old moon limited viewing and we could not bring in any nebulas.

Participating for the club were Bob, Paul, Tom and yours truly. It was an early session and I was home by 8:30

Observing Session Jan.2016

Tim Kamel

The reader may recall that we had an awful bout of cloudy nights during the three last weeks in December. It was cloudy every night and we had about 4" of rain during that period. I had forgotten what sun light looked at. January 2nd and 3rd were the first clear nights after that and a note went out that we would meet at Broad Creek. Only three members participated, myself, Paul and Bill.

It was a very clear night, and I set up my 8" f/4 Newtonian on my LXD-75 mount. Bill set up a 9.25" SCT and Paul had a 15" Dob. We had several highlights that included Alberio, M-27, M-36, M-37, M-38, M-42, M-31, the Double Cluster and I was also able to bring in M-33 in a pair of binoculars. Our scopes all worked well and I was happy with the goto's of my mount.

Unfortunately, it was also a bit on the cold side and made the worse by the breeze. We all got cold, and basically ended the session shortly after 8 PM with only two hours of observing.

None-the-less, it was nice to get out under the stars and see some old friends for the first time this winter.

First open house for the new year and it was a cloudy day with a forecast for clearing. It did eventually clear almost as our function ended, and then for the rest of the night. For our function, however, it was partly cloudy with thin to moderate clouds. We were always able to see the moon and could also see the Orion Nebula on and off, mostly off.

Participating tonight were Tim K, Larry, Gary, Paul and new member Gerry with a friend. Larry, Gary and I were in the dome and Paul and Gerry set up scopes in the parking lot. Guest participation was light, likely attributed to several football playoffs, and we did have about 20 people show up, mostly later in the evening. This event was problematic. During the December 17th open house, the wind screen for the dome was not closed. We subsequently had 3 weeks of clouds that included 4 inches of rain and a couple of nights where it was below freezing. Water did get into the dome and ran down into the storage room. The floor in the observatory is toast, with most tiles peeling and I am expecting the rest will also go. Otherwise, there was no damage to the electronics of the scope nor damage to scopes stored in the storage room.

However, moisture did get into the C-14, and it manifested itself as the evening cooled and the moisture condensed on the corrector plate. We used a heater to warm up the plate and the moisture did evaporate, only to condense on the mirror. As the night progressed, the moisture came up off the mirror and back on the corrector plate. I have ordered some desiccant and hope to be able to clear up the issue by the next open house. Needless to say, views through the scope were not very good.

Western Veil Nebula NGC 6960

Peter N.

The first image shows 1/5th of the Western Veil Nebula (NGC 6960) which I captured on Dec 5 and Dec 15 2015 using a C11 SCT, an F/6.3 reducer, an ATIK 460EX main imaging camera and a 3nm Astrodon H-alpha filter. The total integration time for this image was 92 minutes. Here my C11 SCT produced a more highly resolved view of this section of the Western Veil Nebula than did the 92mm refractor I used on December 17 2014. For example, please note the thin filament structure above the bright star 52 Cygni in this image; my 92mm refractor did not resolve this structure when I captured an image of this portion of the nebula a year earlier.



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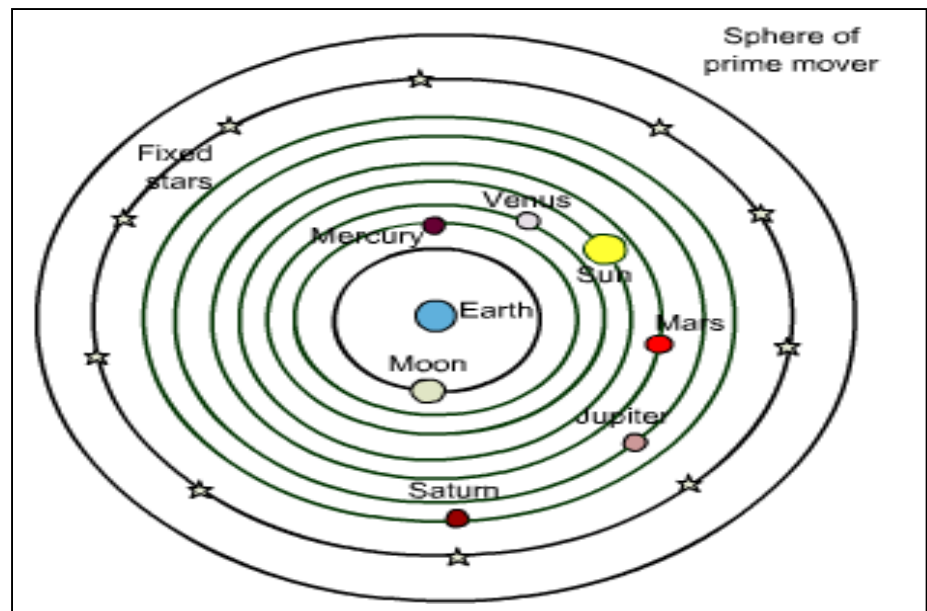
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The second image shows the same 1/5th of the Western Veil Nebula however in this instance I represented color by assigning red to the H-alpha wavelength of 6563 Angstroms and blue-green to the O-III wavelength of 5007 Angstroms. The total integration time for this image was approximately 3 hours.



For autoguiding I used a new kind of autoguider accessory called an "On Axis Guider" (ONAG). The ONAG has a beam splitting dichroic mirror that reflects visible light to the main imaging camera perpendicular to the longitudinal axis of the telescope while passing near infrared light straight through to the guide camera. Like the Off Axis Guider (OAG) that I used previously the ONAG enables one to use the same telescope for both the main imaging camera and the guide camera. However, the ONAG enables the user to choose from many more guide stars than does the OAG since most stars are of the cool Red Dwarf variety which emit most of their energy in the near infrared wavelength band between 7500 and 8500 Angstroms.

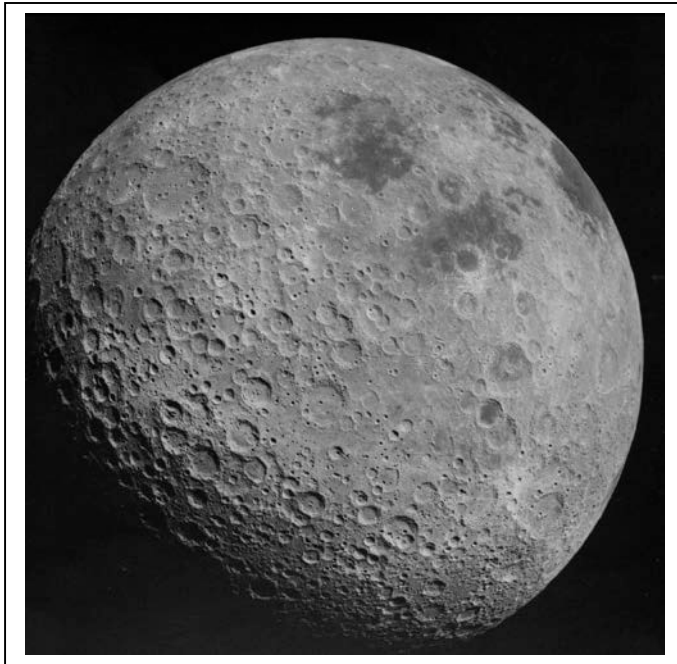
SOLAR SYSTEM HAPPENINGS:



Seems that we have a lot of things happening this month so let's start out with the 5 visible Planets starting on Wednesday January 20th and entertaining us all the way up till Saturday February 20th. Head outside about 45 minutes prior to SUNRISE, this will allow your eyes to get use to what's up in the sky, look South the planets will line up in a line Mercury, Venus, Mars, Jupiter, and finally Saturn

And speaking of the alignment, it's the first visible alignment since 2005 and the next one will happen in 2018, so get out there and have some fun trying to find them, and remember it's cold too...

Jupiter is rising in the East approx. 8:13pm starting on Saturday February 6th, and transiting at 02:34 am at elevation 55 degrees, making it coming into prime time for picture taking... (hint, hint.)



MOON Phases this month
Lunation period 1152
Feb 8 – Mar 1, 29d 11h 08m

NEW MOON	Mon	Feb 8	@	0938
FIRST QTR	Mon	Feb15	@	0246
FULL MOON	Mon	Feb 22	@	1319
LAST QTR	Tues	Mar 1	@	1810

Other notables this month:

Mercury – very low in the ESE in the mornings twilight
Mars – rises in the ESE at approx. 0100, transits S at dawn
Venus – VERY LOW in the SE
Saturn – rises in the SE approx. 0300
Jupiter – rises in the E at 2000 and transits at 0200

Astro's Newsletter

This newsletter is an official publication of :

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Back Page Newsletter Notes:

It is strongly suggested that all articles be submitted in a "Word" document and sent to the newsletter email address at: hcasnewsletter@gmail.com

Articles and pictures will need to be submitted by the deadline. The deadline for each monthly issue is **NO LATER THAN *the third week of each month.***

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Any address changes and or complaints concerning any content of this newsletter should be brought to the attention of the editor promptly.

About Our Organization...



HCAS is an affiliated member of both the Astronomical League and the Night Sky Network

Please visit our website for the latest updates for viewing schedule changes, and Public Outreach Events



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