



Harford County Astronomical Society

2015 Monthly Newsletter

Vol. 42 Issue 10--- October

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

This is an official publication of the Harford County Astronomical Society

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

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submit articles to the newsletter at : hcasnewsletter@gmail.com



Harford County Astronomical Society Executive Committee and Board Members

Please feel free to contact these members at anytime with your concerns.

Executive Committee:

Robert (Bob) Kesler..... President

OPEN Vice President

Tim Kamel..... Treasurer

Rick Fensch Secretary

Sitting Members of the Board: 2 OPEN POSITIONS

Tom Rusek Larry Hubble Mike Talbard

Dave Jayroe Tim Phelan

Technical Advisor to the Board: (Lifetime Standing)

Mark Kregel

Astronomical League, Night Sky Network coordinator:

OPEN

HCAS MISSION STATEMENT

- HCAS IS A GROUP OF PEOPLE FROM VARIED BACKGROUNDS OF ALL AGES BOTH MEN AND WOMEN WITH A COMMON BOND, THE LOVE OF ASTRONOMY. HCAS IS ASSOCIATED WITH THE HARFORD COUNTY COMMUNITY COLLEGE (HCC) AND HAS THE EXCLUSIVE USE OF THE OBSERVATORY AND ASSOCIATED MEETING ROOMS.
-
- HCAS MEMBERS ARE FRIENDLY, AND WE WELCOME ANYONE WITH AN INTEREST OF ASTRONOMY TO JOIN OUR RANKS. A BEGINNER OR ADVANCED OBSERVER AND OR AN ASTRO-PHOTOGRAPHER. HCAS IS COMMITTED TO THE PEOPLE OF HARFORD COUNTY TO ASSIST AND AUGMENT LEARNING AND INTEREST IN ASTRONOMY, AS WELL AS PROVIDING STRONG, ALL VOLUNTEER OUTREACH PROGRAMS TO SCHOOLS, CLUBS, AND OTHER INTERESTED ORGANIZATIONS



Goals for HCAS

- 1.- PROMOTE THE INTEREST AND LOVE OF ASTRONOMY FOR THE PEOPLE OF HARFORD COUNTY, MARYLAND.
- 2.- ADVOCATE FOR DARK SKIES AND FIGHT LIGHT POLLUTION AND LIGHT TRESPASS.
- 3.- ENGAGE WITH SCHOOLS, CHURCHES, SCOUTS AND OTHER GROUPS TO EXPAND KNOWLEDGE AND INTEREST IN ASTRONOMY.
- 4.- ESTABLISH AND MAINTAIN AN ATMOSPHERE AT THE OBSERVATORY WHERE EVERYONE IS INCLUDED AND INVITED TO JOIN AND SHARE ASTRONOMY BY VISUAL OBSERVING AS WELL AS ASTRO PHOTOGRAPHY, REGARDLESS OF SKILL LEVEL OR EDUCATION.



This newsletter is an official publication of :

Harford County Astronomical Society

P.O. Box 906

Bel Air, Maryland 21014

For any articles and or pictures you would like to submit to the newsletter for consideration for publication

Please read the following :

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.

All pictures in each newsletter are copyrighted by the photographer, any duplication of the pictures need permission from the photographer, for permission please forward all inquiries to the newsletter and your request will be forwarded to the photographer, and permission will be granted by the photographer and only the photographer.

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

Please visit our website at : www.harfordastro.org

Visit us online at [www.facebook.com](https://www.facebook.com/Harfordastro) / Harfordastro

*Upcoming Club
Events this Month*

HCAS Open House:

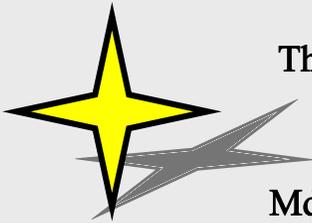
Saturday, October 17th @ 7:00 pm At the Observatory ,
St. Margaret's Bear Den

HCAS General Meeting:

Thursday October. 22nd@ 7:00 pm in the classroom

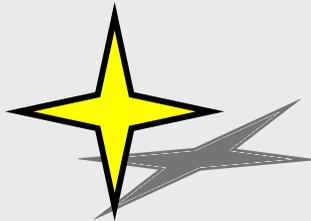
Guest Speaker Mr. Jim O'Leary

Md. Science Center, Chief Scientist , Astronomer



HCAS Board of Directors Meeting :

Thursday November 26th@ 6:30 pm in the classroom



Oak Ridge Associated University

Tom Rusek

A request to the Harford County Astronomical Society (HCAS) President Bob Kesler was sent by Lisa A. Meinke, the Program Specialist with Oak Ridge Associated Universities (ORAU) in Belcamp, Maryland for a special open house to help accommodate a group of 40 high school students and up to 6 teachers from across the U.S., Hawaii, Germany, Italy, Guam and Japan. The observation session was arranged and took place on Thursday evening July 23, 2015.

The Oak Ridge Associated Universities manages the Joint Science and Technology Institute (JSTI) for the US Army Defense Threat Reduction Agency (DTRA). The 2015 JSTI, a 2-week residential institute, was held in Edgewood, MD again this year from July 18-31. There were over 300 applicants for this program and only 40 were selected. The participating students and teachers worked on research projects with DTRA mentors. Most of the students did their research at Harford Community College every day beginning on Monday, July 20. The remaining students and teachers did their research at the Edgewood Chemical and Biological Center (APG-ECBC). As part of their educational itinerary, it was suggested that a visit to the Harford County Community College Observatory be arranged for the team one evening during their stay.

The weather for the observing session was accommodating with clear skies. The group arrived at 8:00 PM, and was greeted by HCAS President Bob Kesler. They were interested, and eager to learn about astronomy, equipment, and the HCAS. The HCAS members were impressed with their understanding and grasp of astronomy. It was a great experience for the students as well as for the HCAS members who were able to attend.

The evening started off with a slide presentation by Tom Rusek who was surrounded by the students after the event. Topics included the Moon, the New Horizon's Mission to Pluto, Trans-Neptunian Objects, and the Kuiper Belt, the Kepler Mission, the James Webb Telescope and the history of the universe.

After the presentation, the skies were dark enough for the observing phase to begin. The enthusiastic students and teachers spent their valuable time viewing through the outdoor scopes of all types and sizes provided by HCAS members: Karen Carey, Tim Kamel, Bob Kesler, and Tim Phelan. Everyone enjoyed views of the Moon, Saturn, Albireo, the Hercules Cluster, and Mizar & Alco, two stars in the handle of Ursa Major.

The HCC Observatory dome houses a 14 inch Celestron (Schmidt–Cassegrain) telescope. Larry Hubble worked his magic with the dome scope explaining its functions while allowing for fabulous close-up views of Saturn and its rings, and the moon.

All-in-all there were 49 visitors and judging from their comments, photos, and overall excitement, everyone had a very enjoyable evening at the observatory.

The Harford County Astronomical Society members extend their thanks to the visiting students and teachers along with the Harford Community College. It is truly a rewarding feeling when everything falls into place, including the weather, for an event that so successfully demonstrates learning and cooperation of everyone involved.



Open House Sept. 19, 2015

Larry Hubble

I applaud the members who showed up to the Open House last night!!!!

We had our normal open house guests show up along with over 100+ kids, parents, and teachers of "Youth Benefit" STEM program. I must say we had very limited help and still pulled off this great outreach event.

We did not have a speaker so Gary gave an 'in prompt to' outdoor presentation on, no other than the Moon, Karen, God bless her was left stranded with her 10" DOB and about 60+ kids gathered around while I was attending to 15 to 20 guests at a time under the dome. After Gary's talk, he set up his scope and let children take images of the Moon, how great was that.

Dave took photos of the event that will be nice for the newsletter and set up his camera and was also taking image of the Moon. I will post the photos of the event on our website when they become available.

So thanks goes out to Karen Carey and Maggie, Gary George, Dave Jayroe, and Tim Phelan who only had one hour to help out but gave that hour to the club.



Pillars of Creation

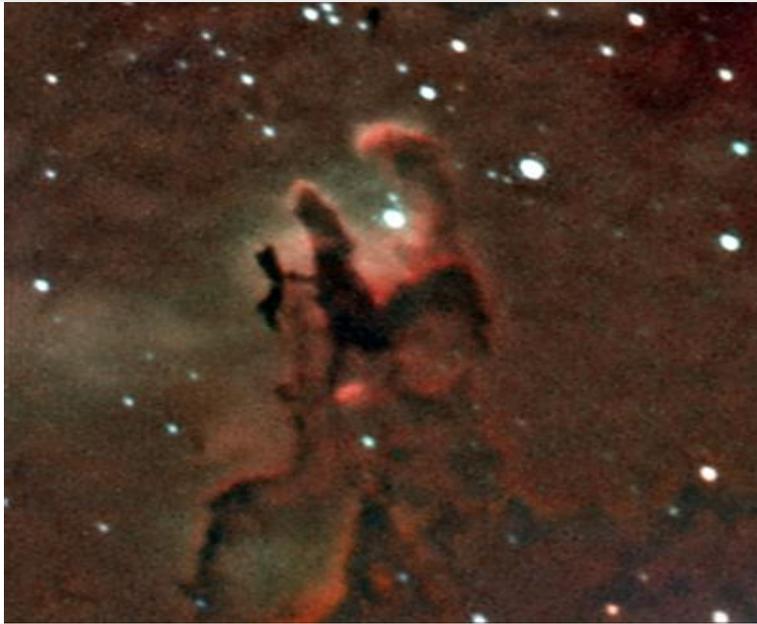
Peter Nerbun

The first image shows the Pillars of Creation and surrounding region in M16. Please note the green-blue gas cloud structure in the upper left section of the image. The two main pillars are located near the center of the image. I captured the subframes for the first image on Sept 15 2015 using an ATIK 460EX cooled monochrome CCD camera on a C11 SCT with an F/6.3 reducer. The total integration time for this image was 2 hours comprising 5 minute and 10 minute subframes in the H-alpha and O-III channels. I used 3nm H-alpha and O-III narrowband filters. The Pillars of Creation were made famous by a Hubble Space Telescope image in 1995.

The second image shows a close-up view of the Pillars of Creation which I captured on Sept 8 2015. The total integration time for this image was 1 hour and 8 minutes including captures ranging from 4 to 15 minutes in the H-alpha and O-III channels.

For autoguiding I used an 80mm guide scope and color webcam. I had been using an Off-axis guider for autoguiding but I experienced some problems in locating suitable guide stars so I went back to using an external guide scope.





Sept. 2015 Super Moon and Lunar Eclipse

Dave Jayroe

The eclipse was a real challenge for me. As the time drew near the clouds were growing darker so I decided to stay home. I kept looking out my east facing window and to my surprise there was the moon peeking thru breaks in the clouds just after the start, . My camera was ready so I went out to start shooting. As the red phase was begging the clouds thickened again overhead till at one point you could not see the moon with your eyes, but to my surprise with an exposure of 8 – 13 seconds I could get a shot. One was a 30sec shot that was very fuzzy. Then as the eclipse neared the end the clouds began to open up more. I cannot say how long that lasted s I called it quits at 01:15hrs.



8 sec. f-14, ISO 5000 @ 20:36 hrs



1/60 f5.6 ISO 400 @ 19:44 hrs.

Lunar Eclipse

Bob Kesler

There was much interest in the Super Moon Eclipse this week and I was excited to have the opportunity to witness this rare event. Collected my equipment, charged batteries, planned my camera settings... wait the clouds did not get the email! Socked in early but later around 10:00PM there were some gaps in the clouds and out popped the Eclipsed moon. It was very difficult to focus through the clouds so I did the best I could which I would say is about 80%. Got a few images and then called it a night. It was fun to be out even though the results were not great! The orientation is a bit off as well but I will rotate later.



An Evening under The Stars

Exelon Generation / Rittenhouse Astronomy Society

Friday October 2, 2015

“AN EVENING UNDER THE STARS”

Exelon Generation and the Rittenhouse Astronomical Society will be hosting “An Evening Under the Stars,” Friday, October 2, 2015 at the Muddy Run Recreation Center, 172 Bethesda Church Road West, Holtwood, PA 17532.

The event will begin at 6:30 p.m. with presentations from nationally known astronomy experts, Dr. Derrick Pitts, Chief Astronomer at The Franklin Institute in Philadelphia and Coralie Jackman, who has worked on NASA’s New Horizons spacecraft project that recently completed a journey to Pluto.

Following presentation members of the Rittenhouse Astronomical Society will have telescopes available for viewing the night sky.

Muddy Run Park located in Lancaster County is an ideal location for an unobstructed view of the night sky.

You are more than welcome to bring your own telescope and view the sky with fellow astronomers. Hope to see you on Friday, October 2nd!

Solar System this Month

The following information is for viewing the Solar System this Month

Any and all feedback on this, or if you would like to add to it for next month

Then your input will be appreciated. Just send your info over to the Editor at the newsletter.

Planets this month October :

Mercury – Very low in the *E* after the first of the month / very hard to observe

Venus ----- Very low in the *E*, in morning twilight

Mars ----- Low in the *E* in the morning twilight

Jupiter -- Low in the *E* in the morning twilight

Saturn ----- Very low in the *SW* after sunset

Moon Phases this month:

Last Qtr. ----- Sunday October 4 th @ 5:06 pm

New Moon ---- Monday October 12 th @ 8:06 pm

First Qtr. --- Tuesday October 20 st @ 4:31 pm

FULL MOON – Tuesday October 27 th @ 8:05 pm

Other notable events for the month:

Tuesday October 20th – The *Straight Wall* is visible tonight



..... *Till we meet Again*

Visit our website at: www.harfordastro.org

Visit us on Facebook at: **Harford County Astronomical Society (HCAS)**

