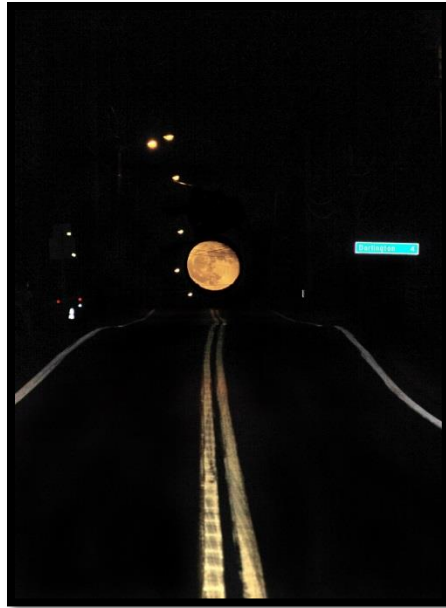


# HCAS



The Road to Darlington, 11/19/2013, Full Moon

## Harford County Astronomical Society

*Newsletter Volume 40 Issue 12 December 2013*

### **PUBLIC OPEN HOUSE**

SATURDAY, DECEMBER 7 AT 7:00PM

&

### **NEXT MEMBERS' OBSERVING NIGHT**

JANUARY 4, 2014

HCAS OBSERVATORY

### **NEXT BOARD OF DIRECTORS MEETING**

THURSDAY, JANUARY 16<sup>TH</sup>, 6:30PM

&

### **GENERAL MEETING**

THURSDAY, DECEMBER 12<sup>TH</sup> AT 7:00PM

HCAS OBSERVATORY CLASSROOM

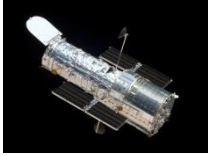
Please check our website for possible schedule updates and changes at <http://www.harfordastro.org>  
and our Facebook page at <http://www.facebook.com/HarfordAstro>



<http://astroleague.org/>



<http://nightsky.jpl.nasa.gov/>



### EDITOR'S NOTE

It is with deep regret that I announce that I am resigning as the Vice-President of HCAS and as the Editor of the Monthly Newsletter. I have accepted a new job in Maine and will be relocating to the Bar Harbor area at the end of this month.

I want to express my sincerest appreciation to every member of HCAS, past and present, for the most valuable gifts anyone could bestow – friendship, companionship and a passion for the glories of the night sky. You have all taught me so much over the past almost 30 years – everything from how to see in the dark to star hopping to fixing that damnable collimation on my 8" Dob – that I can never even begin to say enough "Thanks!!"

It has been an honor and privilege to part of this group of dedicated folks who have shown me the way to the stars.

And especially...

to Leo Heppner – thank you for teaching me why it works

to Mark Kregel – thank you for explaining it all so I could understand it

to Larry Hubble - thank you making the photos so I could see it even more

to Bill Geertsen – thank you for showing me how to use the tools

and, as always, to Warren Hoover - thank you for teaching me how to find my way among the stars...

*Lucy*



### GENERAL MEETING MINUTES & INFORMATION

#### MINUTES OF THE AUGUST 22, 2013 GENERAL MEETING

The meeting was called to order by President Gary George at 7pm. The minutes for the October meeting were published in the November Newsletter and were approved as published.

Treasurer's Report: Tim provided the information to Gary for the meeting, and it will be published on the Member's Only Page of the HCAS Website.

Newsletter Issue: Another great Newsletter by Lucy. Please submit articles and photos to [hcasnewsletter@gmail.com](mailto:hcasnewsletter@gmail.com) by the first of the month to be included in the newsletter. The Newsletter will be issued by the 10th of the month. *(Ed: please see editor's note, above)*

Lucy has asked to put the Speaker Program on hold until we can get better attendance at the monthly meetings. It has also been suggested that we partner/advertise with other Astronomy Clubs in Maryland for better turnout. Lucy will work on this.

Website Issues: Inventory of loanable items has been published to the HCAS Member's Only section of the website. It has been discussed and further expounded that the HCAS Member's Only calendar also be included on the Members Only section. This will prevent non-members showing up to closed outreach programs and Members Only viewing nights. Bob and Larry to partner together to achieve.

Old Business: Dates for Open House Star Parties, Meeting nights and Member's Only viewing nights has been set and will be published in the Newsletter. Refurbishing old telescopes - it is believed that the parts have not yet been ordered to fix old club telescopes. Gary to follow-up.

Thank you to Tom Rusek for your presentation about Spectroscopy.

New Business: Jeremy's picture of the partial Solar Eclipse was published on [spaceweather.com](http://spaceweather.com) and [atmosphericOptics.com](http://atmosphericOptics.com). Well done, Jeremy! It was a truly awesome picture! Please visit his personal FaceBook page for about 10 more pictures from the eclipse.

The meeting was adjourned at 7:55 pm



#### **MEMBERS NIGHT & OPEN HOUSE REPORTS**

##### **OPEN HOUSES**

No report

##### **MEMBERS NIGHTS**

No Report



#### **OBSERVING NOTES, STAR PARTIES, ASTROPHOTOGRAPHY AND OTHER FUN STUFF**

NOTE: Because of the unpredictable weather conditions, we cannot set a specific date and time to observe. Sometimes the decision to go to our observing area at Broad Creek or at the Observatory is made within a few hours before sunset. In any case, all club members will be notified by email.

## OBSERVING REPORT 1

PETER NERBUN

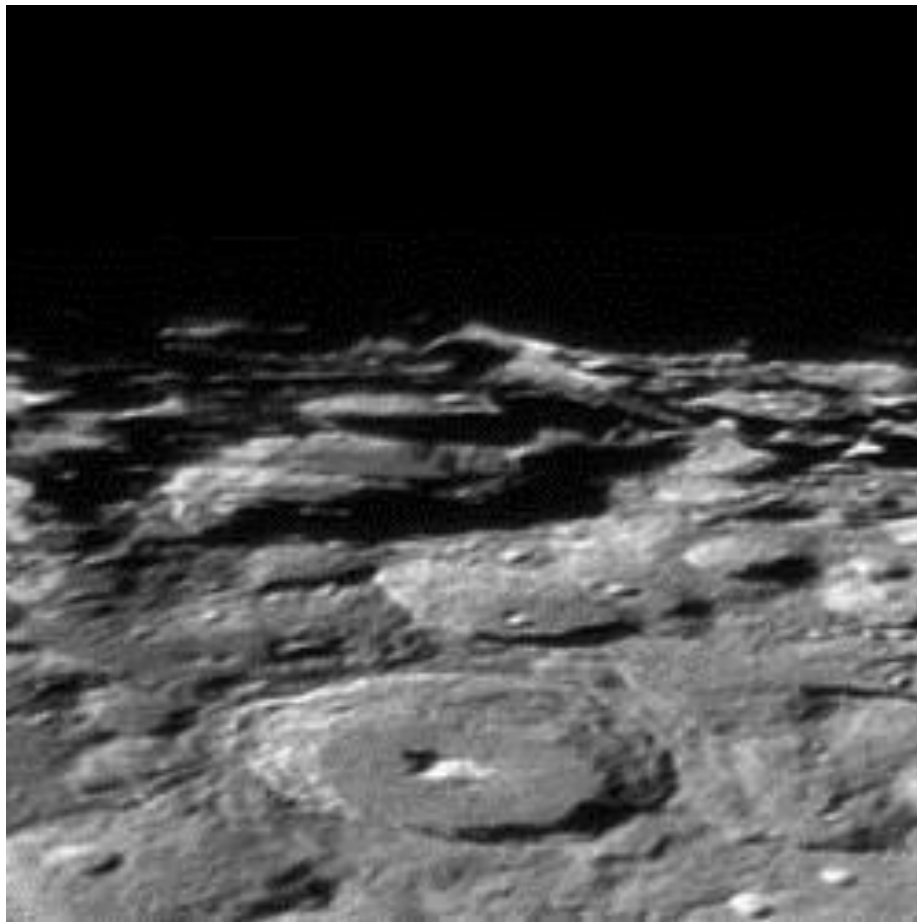
NOVEMBER 14, 2013

### MOUNTAIN M1 AND PETAVIUS CRATER ON THE MOON

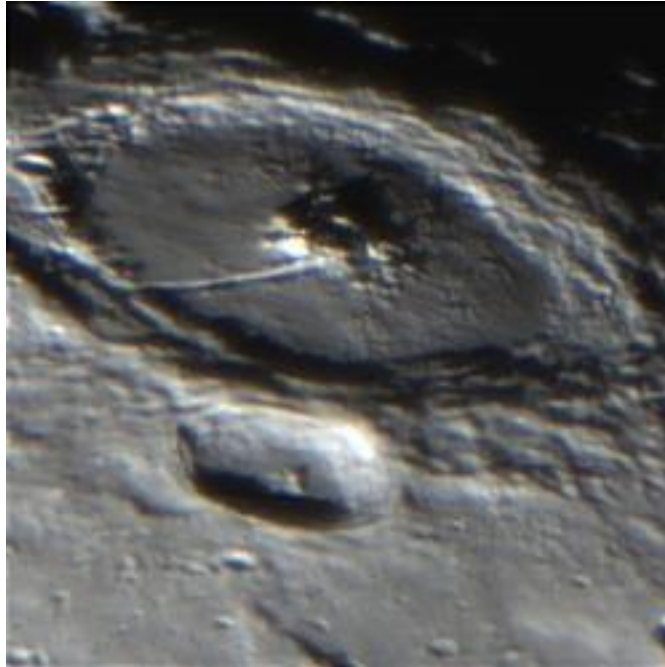
The first image shows Mountain M1 along the lunar horizon. Rising about 5 miles above the surrounding plain this is the tallest mountain along the Moon's edge. Moretus Crater appears in the foreground of the image which I captured on Nov 14 2013 at 12:43 AM EST.

The second image shows Petavius Crater on Oct 21 2013 at 6:39 AM EST; note the fracture that extends along the floor at the 8 o'clock position. Current theory suggests that volcanic magma pushed the floor of the crater upward which caused the floor to fracture; the crater however did not flood completely so the fracture was never covered. Also note the bright sunlit peak near the center of the crater; this structure rises about 1 mile above the crater's floor.

I captured these images with a C11 SCT, a 2.2x barlow and a CMOS webcam.



M1 Mountain & Moretus Crater, 11/14/13, 12:43PM



Petavius Crater with 1 mile high central peak, 10/21/1

## OBSERVING REPORT 2

**LARRY HUBBLE**

**WALLOPS ISLAND MINOTAUR I ROCKET LAUNCH**

**OBSERVING FROM BROAD CREEK**

**NOVEMBER 19, 2013**

I got a call from Cathy telling me they decided to go to BC for the launch after all.

I said, "I may or may not show-- it's really cold out." After thinking about how she described her last observation, I decided not to wimp out after all. We all met as some of you already know, Bill, Cathy Lucy, and myself. I started out down Rt. 1. When made a right on to 440 I saw the Moon sitting right on top of the road in front of me. I could not believe my eyes! My camera this time was sitting out on my front seat. (It had the CF card installed this time). I almost wrecked the car pulling over in such a hurry!

I took a few shots in between traffic, standing under the street lights in the middle of the road. Hey-whatever it takes to get the shot, right. I only had one redneck try to run me over in a pickup truck, so not too bad. As you can see in the image, the Moon is so low you can see the electric wires crossing the road in front of the Moon.

I call this photo: 'This Moon leads to Darlington' (*Ed. Note: photo is on front page*) or maybe 'Darlington and the Moon 4 Miles'.

I love new experiences in life and this rocket launch was one of them. Not knowing where it was going to come up exactly, I had no idea where to set up a tripod, so I opted for hand held imaging. I took a few test shots at the Moon through the trees at ISO 6400 with a quick shutter.

It was very cool as Cathy had promised. We saw it as soon as it came up over trees. It had a glow due to the thin clouds, and was very bright. As it climbed we could see a long tail cone of fire. After about twenty degrees or so, it turned into a perfectly round ball.

Before that we could see it drop two stages leaving a smoke cloud and a con trail. It arched across the sky until it disappeared behind the Earth's shadow -or maybe it was done firing.

What my image shows is exactly what we saw after about twenty degrees, just a bright round ball.

Using the fast shutter and the crazy high ISO this image is untouched. All I did was remove the background noise. The color and brightness was not altered in any way. This is exactly what we saw and exactly what the camera captured. Next time I will use a tripod, knowing where it will be coming up at BC.

Thanks for looking!



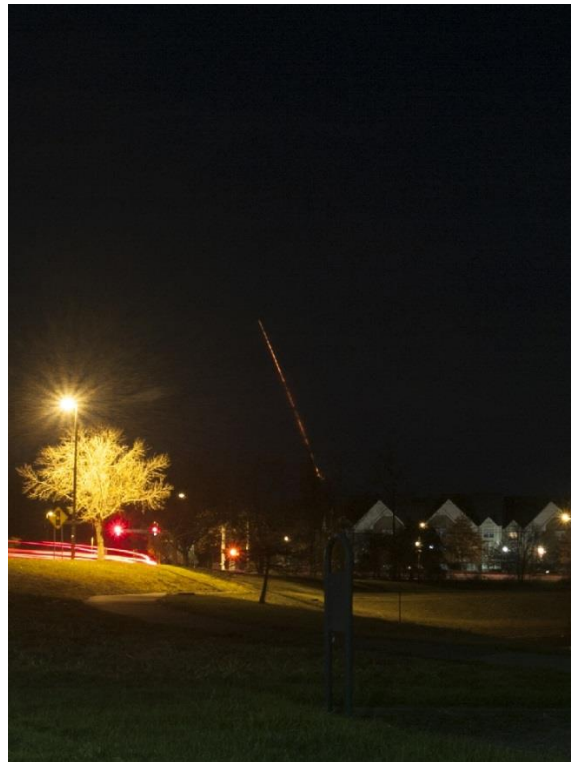
The full moon through the trees at Broad Creek



Red dot in the sky – single frame shot of the launch



Selfie - Bill, Lucy, Larry (with full moon overhead) & Cathy – intrepid & very cold voyagers to Broad Creek to observe the Minotaur launch from Wallops Island, 11/19/2013 (photo with Lucy's camera)



Jeremey Kirkendall's photo of the launch, seen from Bowie MD, 11/19/2013

## HCAS MISSION STATEMENT

### WHAT IS HCAS?

HCAS is a group of people from varied backgrounds of all ages, men and women, with a common bond – a love for astronomy. HCAS is associated with Harford Community College and has use of the HCC Observatory and meeting rooms.

Our members are friendly and welcome anyone with an interest in astronomy – a beginner or an advanced observer and/or 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

- \* Promote the interest and love of astronomy for the people of Harford County, Maryland.
- \* Advocate for dark skies and fight light pollution and light trespass.
- \* Engage with schools, churches, scouts and other groups to expand knowledge and interest in astronomy.
- \* 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 the official publication of

**HARFORD COUNTY ASTRONOMICAL SOCIETY**  
**P.O. Box 906,**  
**BEL AIR, MD 21014**

Items for the newsletter are due to the editor by the 10th of the month of publication.

Please send all contributions (electronic format is strongly encouraged) to:

**Editor: TBD**    [hcasnewsletter@gmail.com](mailto:hcasnewsletter@gmail.com)

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**Webmaster: Larry Hubble** [lkhubble@verizon.net](mailto:lkhubble@verizon.net)

**...and our Facebook page at:**    <http://www.facebook.com/HarfordAstro>

