

January 2016  
Vol. 43, Issue 1

# January Newsletter

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

## January Special Interest

- **Open House:**  
Saturday Jan 16  
@ 6:30 pm
- **BOD Meeting**  
Thurs. Jan. 21  
@ 6:30pm
- **General Meeting**  
Thurs. Jan 21  
@ 7:00pm



## Table of Contents

Message	1
Club 20	2
Teachers Day	3
O.H. 12-2015	5
Solar System	6
Back Page	7

## President's Message for 2016

Well, another year is in the books, and what a year it was.

In addition to all the very cool things happening in the world of Astronomy and Space like those images of (former planet) Pluto at the end of a ten year journey, the ESA landing on a Comet, Super Nova's, Launches in preparation for a Mars visit, Comets, Asteroids... **HCAS** was very active as well.

Thanks to awesome members we were able to conduct very successful Open Houses for the community, we had another successful Astronomy Night at Southampton Middle School, conducted a second HCPS Professional Development Day and have embarked on an effort to build a 20" Dobsonian Telescope!

So, thank you to members who willingly contribute to HCAS and those who volunteer to set up telescopes and show people of all ages and walks of life how wondrous and exciting the night sky can be if you take time to stop and look up at night!

# Club Project – 20” Dob



**I** wanted to update you all on the progress we are making on the design, fabrication, and assembly of the new Dobsonian Telescope which will house the 20" High Efficiency Mirror given to HCAS by former member Sam Spicer.

**Mark Kregel** has actually started the fabrication of the mirror housing assembly and will be making it ready to receive the mirror very soon. We are so lucky to have Mark take on this project and help us get underway.



**T**he next step is to ask HCAS members to join in and help produce additional parts to fit into Marks design. Do we have any volunteers? I have a wood shop in Jarrettsville and we can use that to make, nail, screw, glue, saw, shape, rout, clamp and or assemble wood parts to exactly fit into the plan Mark has developed. *"Starting to sound like a Home Depot commercial"*

**A**fter we have identified a few volunteers to help us move ahead, we will get our Dob Team together and sit down with Mark to understand exactly what he needs us to fabricate. Hopefully we can start to see some real progress soon and maybe some photos of the work completed



**S**o, if you want to help, let me know, send me an email ( [harfordastro@yahoo.com](mailto:harfordastro@yahoo.com) ) letting me know that you want to join our **“DOB TEAM”** Should be a fun project for HCAS. After all, how often do you get the chance to work on such a unique project?

Regards, Bob



## Teachers Professional Day

**T**he Second Annual Teacher Professional Development Day was held at the Harford Community College Observatory on Tuesday, November 24<sup>th</sup>. It was a full day starting at 8am and finishing up at 3:35pm. The day was divided into two sessions with 16 teachers in the morning and 9 afternoon sessions.

**HCAS** members present were; **Tom Rusek**, **Bob Auburger** and **Gary George**, also included were **Rommel Miranda** and **Dr. Karen Schaefer**, who represented the **Department of Physics, Astronomy & Geosciences at Towson University**, coordinated the **Project ASTRO** and comet demonstrations.

**E**ach session started out with a short introduction of the HCAS and a brief outline of the day's events by Tom Rusek. The first session started out with the Pocket Solar System (PSS) presented by Bob Auburger. His very informative slide show explained distances in our solar system followed by a hands-on session of making the PSS. Everyone followed Bob's instructions and ended up with a nice PSS to take back to their respective students. Bob also handed out packets containing CD's and other very informative information (obtained from NASA) on astronomy.

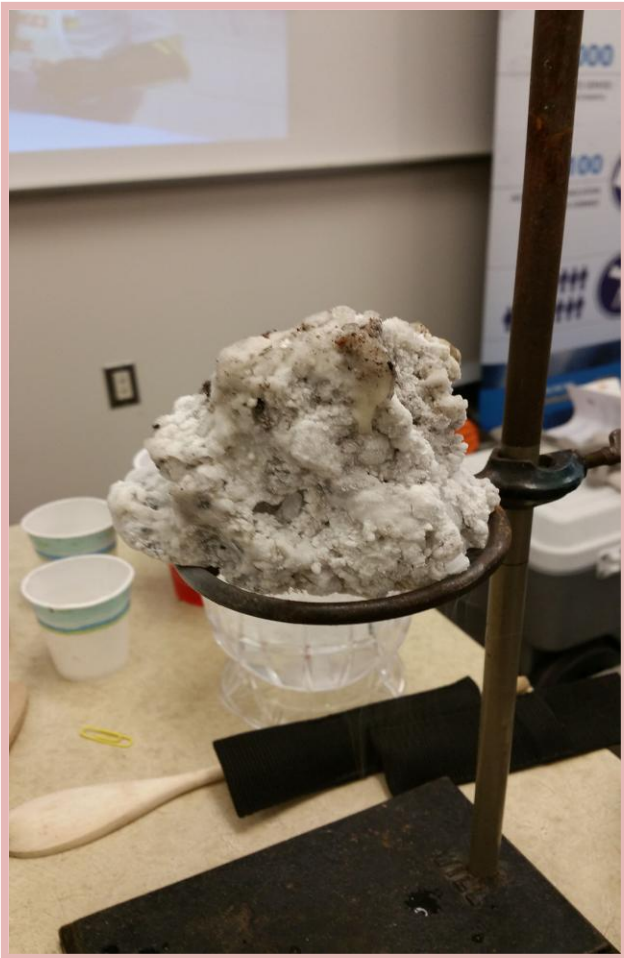
**T**he next set was a slide presentation on "**Project ASTRO**" and what a comet is made of by **Rommel Miranda** and **Dr. Karen Schaefer**. This was again followed by a workshop that involved making a comet with; water, dirt, syrup, Windex, and dry ice (obtained by Bob Kesler). Everyone truly enjoyed this workshop including Bob A. and Tom who successfully made a comet. Gary George took many a picture of this event.

Next was a slide presentation by Tom Rusek on the moon, the solar system, Pluto, the analysis of an alien, angular momentum, and other various slides including what the early solar system was like and how planet resonance shaped its current configuration. Everyone was extremely attentive and took plenty of notes.

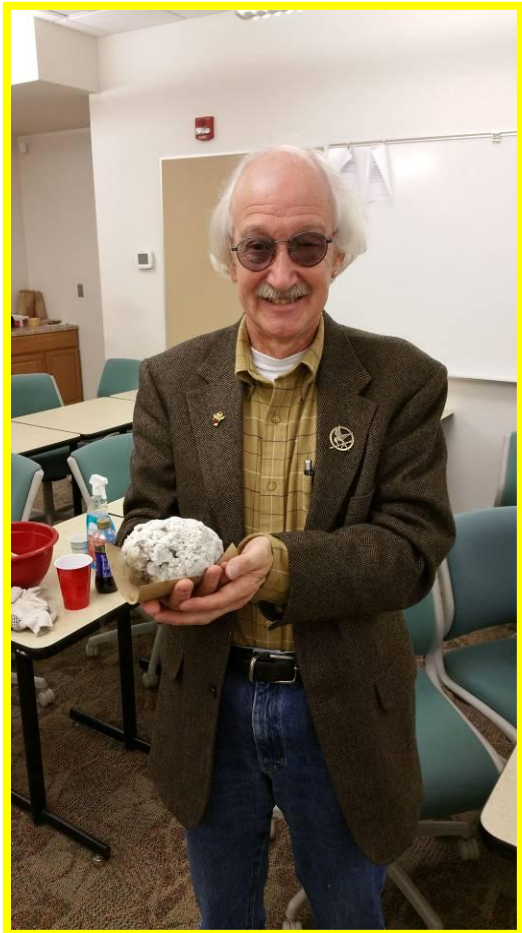
**T**he final segment was constructing a Pin Hole Camera presented by Bob Auburger with the assistance of Gary and Tom. Materials were supplied by Bob Kesler. The teachers, or in this case students, were excited and worked meticulously to finish their cameras.

**T**hanks to Bob Auburger, Tom Rusek, and Gary George for their time, patience and a wonderful effort to support this annual event. Special thanks go out to Rommel Miranda and Dr. Karen Schaefer for taking time out of their hectic schedules to be with us and to share their expertise and knowledge.

**W**e look forward to another special event next year.



Look whose having fun ..



Project Astro Instructors:  
Dr. Karen Schaefer and Rommel Miranda  
A hearty and grateful "THANK YOU "



## Open House / December 2015

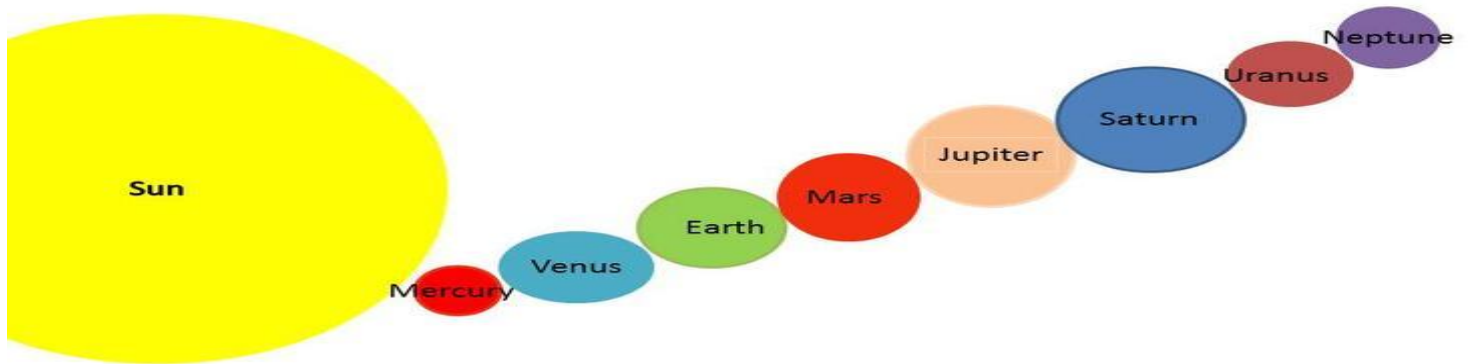
The **Sun** was setting early but we managed to get the 10" Meade LX200 out of the dome storage area and plugged in and started up before it got too dark.

Members present were

**Paul Sokolowski**, **Bob Kesler** and **Tim Kamel** were on hand to provide outstanding outreach to visitors while **Tom Rusek** offered a power point presentation to a group of scouts who had prearranged to attend. It was a very clear and very cold night, which gave us views of, **M45**, **M31**, **Alberio**, **M15**, **M42** and the **Moon**.

There was a visitor named **Jerry** who has telescopes and set his small refractor up in the parking lot. It was great to have him there talking to us about astronomy.





**Mercury:**

Very low in the WSW in the evenings twilight, by the end of the month look to the morning twilight in the ESE

**Venus:**

Extremely low in the skies of the SE

**Mars:**

Rises in the ESE late at night approx 2am and will transit in the early morning dawn

**Jupiter:.**

Rises in the East around 10pm and will transit high in the South around 4am

(editor's note: all you astrophotographers get your cameras ready)

**Saturn:**

Very low in the morning twilight in the SE,

**Moons Phases:**

**Last Quarter:**

Jan. 2nd

**New Moon:**

Jan. 9<sup>th</sup>

**First Quarter:**

Jan. 16<sup>th</sup>

**Full Moon:**

Jan. 23<sup>rd</sup>

**Last Quarter:**

Jan. 31<sup>st</sup>

Earth is at Perihelion on Jan 2<sup>nd</sup> at a distance of 147.1million km  
Or 91.4 million miles from the Sun

.....

This month's full moon is known as the "Wolf Moon"



# Open House – November 2015

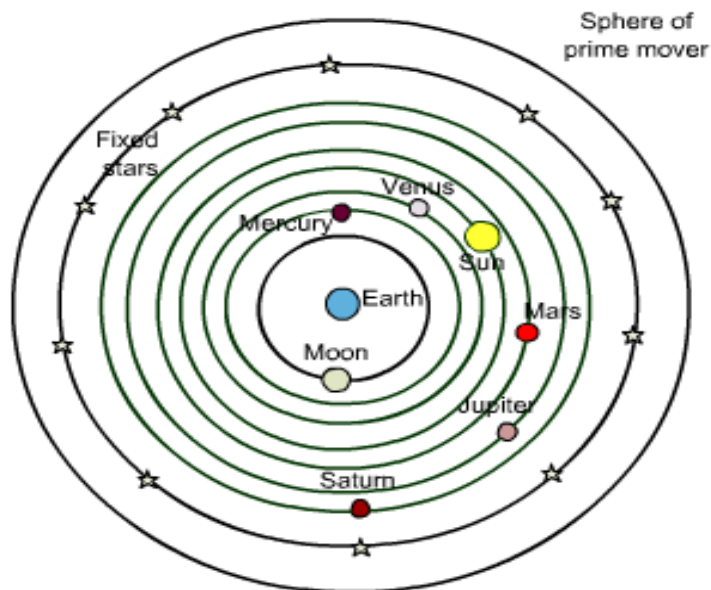
*Tom Rusek.....*

It was the HCAS Open House for this past November. Judging from how the skies changed throughout the day, it could have been another clouded out evening- a viewing disaster. But it was not to be. Even though the skies were somewhat murky, the clouds did indeed part on occasion to allow some decent viewing for the somewhat 60 to 65 very enthusiastic guests who attended.

Represented was a girl's Brownie troop, a class from Homestead Wakefield Elementary School, HCC astronomy class students, and an 11<sup>th</sup> grader who was truly excited about astronomy.

As the evening began, President, Bob Kesler led his mighty team of astronomy warriors into battle. Outside scopes were manned by Bob K., Paul Sokolowski, and Bob Auburger who thrilled the growing crowd by viewing the 9 day old moon, Andromeda Galaxy (M31) as well as the Pleiades (M45), and Albireo. A thorough explanation of each object was also given. Guests wandered from scope to scope with great anticipation for what they were going to see next.

Tim Kamel manned the SCT in the dome area. He thrilled the viewers with views of the moon and other attainable objects. His remarks along with his vast knowledge of the scope and the heavens were appreciated. On one occasion, the dome had to be rotated so he told the guests to hold on because he had to rotate THE FLOOR!!! When the dome rotated instead, everyone laughed. All had a wonderful experience in the dome area



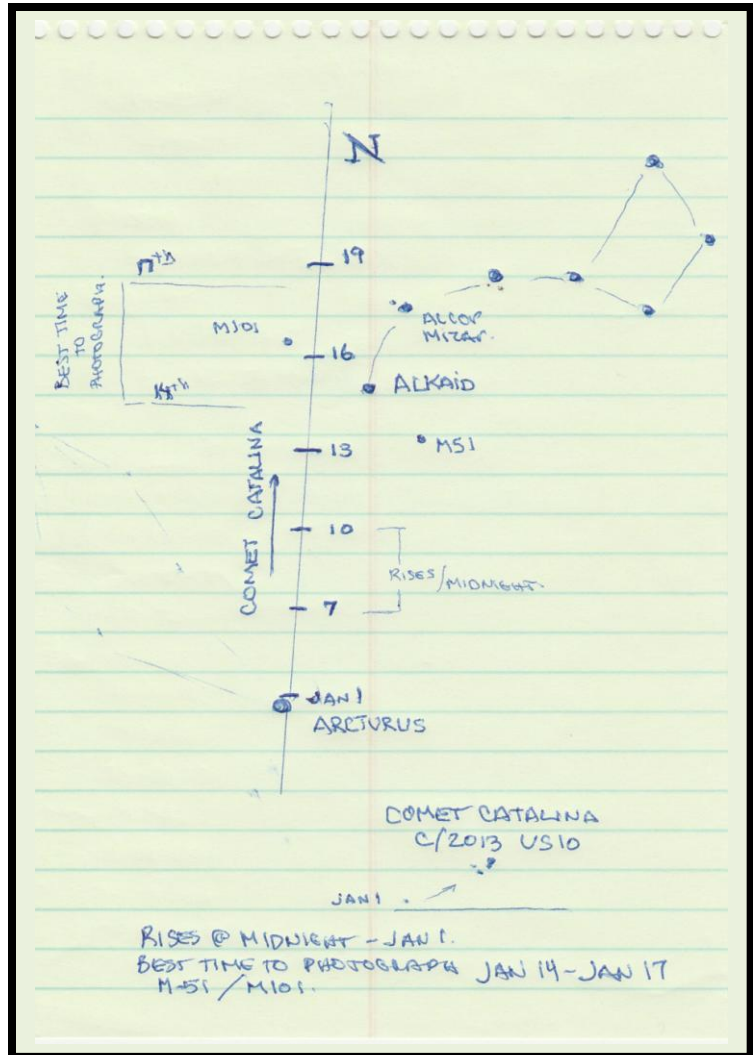
Tom Rusek gave a 30 minute slide presentation on the moon, the solar system, Pluto and other various slides. When Tom walked into the classroom, it was filled with enthusiastic guests from all ages. He was somewhat overtaken. All the chairs were filled, the back of the room was standing room only and the young scouts were seated on the floor ready to quiz the speaker. It was a challenge to keep everyone's attention at all times but the guests were enthusiastic and extremely attentive. Everyone laughed and challenged Tom to explain "Infra-red light" to the young members. When it was all over, Tom commented that it truly was an extraordinary evening enjoyed by all.

Bob Auburger handed out packets containing CD's and other very informative information (obtained from NASA) on astronomy. Bob did all this "on his own accord". Thank you Bob!!!

And so it was-an extremely successful open house evening at the HCC Observatory. And so as the saying goes, "...the odds WERE even in our favor..."

Comet Catalina  
 C / 2013 US10  
 Jan, 1<sup>st</sup> / 19<sup>th</sup> 2016

Best times to photograph  
 Comet Catalina is  
 between the 14<sup>th</sup> and the  
 17<sup>th</sup> when it will be close  
 to M-51 and M-101



*Tid- Bit times:*

### 3 Moon transit Jupiter

The exciting times of this month will be in the early morning hours of **January 10<sup>th</sup>** and **the 11<sup>th</sup>**. Starting on the night of the 10<sup>th</sup> at approx. **11:37 pm** the moon **Europa** will start to transit the face of **Jupiter** and last till **2:33am**, then less than an hour later the moon **Callisto** will begin *its 2 hour transit* of the **North Polar Region** at **3:04 am** and last till approx **5:04 am** But then we have the moon **Io** that will begin its transit shortly after **4:22 am and last till 5:27 am** giving us not only 3 transits but a **double transit** happening at the same time..... are your camera out and ready ?



## Astro's Newsletter

*This newsletter is an official publication of :*

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We're on the Web!

See us at:

[www.harfordastro.org](http://www.harfordastro.org)

And on Facebook at:

/Harfordastro

## 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](mailto: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

