

BBAA Astronomy Club October 4, 2018 (TCC JC-13)

Chuck Jagow (President):

Called meeting to order at 7:30 PM.

Members present include: Chuck Jagow, George Reynolds, Jeff Goldstein, Matt McLaughlin, George C. Jarvis, Neill Alford, Jared Austin, Kayla Robinson, “Bird” Lawrence Taylor, Joanna Schud, Bill Powers, Ben Loyola, Curt Lambert, Pat Mangum, Bill Rust, Tom Flatley, Shawn Kelley, Joey Quinn, and Kunio Sayanagi (Guest Speaker).

Chuck opened the meeting announcing that Past President from 2002 through 2004, Rob Schonk, died on October 1st. Chuck became president as he was the outgoing president.

Vice President Events Report (read by George Reynolds):

October:

- 10/04 – 10/07 – East Coast Star Party (Coinjock, NC)
- 10/04 – BBAA Club Meeting at TCC Room JC-10
- 10/05 – Corn Watch (Cornland Park Private) Sunset – Dawn. Bring BBAA ID & Cornland Permit
- 10/07 – Night Sky Viewing (Ft. Monroe) (7:00 – 9:30 PM)
- 10/12 – Corn Watch (Cornland Park Private) Sunset – Dawn. Bring BBAA ID & Cornland Permit
- 10/13 – Science Play Day (10:00 AM) at TCC Joint Use Library (6:00 – 9:30 PM)
- 10/13 – Skywatch NWRP (6:30 – 10:30 PM) only a 4 hour event + 1 hour before for telescope help
- 10/18 – PTA Family Night STEM & M Greenbriar Intermediate School
- 10/18 – Garden Stars at Norfolk Botanical Garden (7:30 – 9 PM)
- 10/20 – Saturday “Sun” Day (Elizabeth River Park, Chesapeake) 10:00 AM – 1:00 PM
- 10/20 – Family Star Gazing at Joint Expeditionary Base, Little Creek Library (7:30 – 9:00 PM)

November:

- 11/01 – BBAA Club Meeting at TCC Room JC-13 (Guest Speaker: Tom Moore on “Dark Matter”)
- 11/02 – Virginia Peninsula Astronomy Stargazers (VPAS) at the GAP (1st and 3rd Friday) from sunset.
- 11/03 – Skywatch NWRP (6:00 – 10:00 PM) only a 4 hour event + 1 hour before for telescope help
- 11/03 – BSA Camp Pipsico Birthday Celebration Star Gaze, Spring Grove Virginia (8:00 – 10:00 PM)
- 11/06 – Stargaze Dayz at Old Donation School/Brickell Academy (6:45 – 7:30 PM)
- 11/09 – Corn Watch (Cornland Park Private) Sunset – Dawn. Bring BBAA ID & Cornland Permit
- 11/10 – Nightwatch Chippokes Plantation State Park, Surry, VA (Sunset – Dawn)
- 11/16 – Corn Watch (Cornland Park Private) Sunset – Dawn. Bring BBAA ID & Cornland Permit
- 11/16 – Virginia Peninsula Astronomy Stargazers (VPAS) at the GAP (1st and 3rd Friday) from sunset.
- 11/16 – Camp Strother Boy Scouts Camping (7:00 – 10:00 PM) 961 West Road, Chesapeake, VA
- 11/17 – Saturday “Sun” Day (Elizabeth River Park, Chesapeake) 10:00 AM – 1:00 PM

Secretary’s Report (Jeff Goldstein)

Jeff started to read the minutes... Moved & seconded to waive reading the minutes.

Treasurer’s Report (Bruce Powers) Not in attendance. No report.

Scholarship Committee Report: (Ben Loyola). No report.

Alcor Report (Bill McLean)

The next ALCOR Convention at Cape Canaveral July 2019, plus a cruise to the Bahamas. Last year’s D.C. Convention was very good. Their keynote speaker was Charles Bolton (“Bird’s” old boss), head of NASA with advice on not becoming an astronaut. Naval Observatory tour.

We are the most awarded astronomy club in the world and visible universe! Bill read several of these awards, including the best web site. Sean and Curt deserve all the credit for this accolade.

Please take some “Sky at Night” video disks I have from Sir Patrick Moore (now diseased) . I have several copies for you to keep.

RRRT Report (“Bird” Lawrence Taylor & Ben Loyola) Bird mentioned that a new camera mount was recently made that adapted the refurbished camera. Ben mentioned that the digital focuser is manually focused twice a year. One club member mentioned that there were still “donuts” in some of the images.

Old Business:

- BBAA Luncheon will be held at Noon, December 15th at Stripers (in Norfolk). Thank you, George Reynolds.

New Business:

- Bird mentioned that Virginia Air and Space Museum is holding an advanced screening of the “First Man” (Neal Armstrong Story). Hors’ D’ourves start at Saturday evening at 6:30 PM. The movie starts at 7:30.
- Chuck, George, and several others went to the VAAS meeting in Richmond. Their attendance was about three times our attendance probably due to their more central location. An interesting talk was done on the “Chesapeake Crater” that formed the Chesapeake Bay. 1,000 years of death and destruction resulted from this impact object (the size of the White House).
- November is our election month for new officers: Treasurer, Secretary, and President will be open for nominations.

Observing Reports & Announcements: None.

Program: “The Jupiter Impact Project” presented by Dr. Kunio Sayanagi. (Introduction by Ben Loyola)

Dr. Sayanagi is Chairman, Department of Planetary Science, Hampton University. Ben reported that (5th of April to 7 September) there were 172 hours of photography of Jupiter. Approximately 3.9 TBytes of data.

99 days of data has been collected (world-wide). Longest person collected 15 days of data, Ben Loyola collected 7.1 days of data.

Historically we have seen 7 impacts so far (however, not recorded in this project). The first one was recorded from the Voyager Spacecraft in 1978 (estimated 11 Kg object). 1989 had a significant impact reported.

In July 1994 the Schumacher-Levy impact was a single comet that broke up into about 20 fragments into the back side of Jupiter. There were impact scars visible on the side that the Hubble telescope made. Since it’s a gas giant, it didn’t leave a crater, but rather left scars. The scars are presumed to be made by shock waves that resulted on the impact of the fragments into the Jupiter atmosphere.

Generally, comets would be visible due to their coma and gassing, but asteroids impacting would not necessarily be visible unless they were very large.

One of the highlights of the presentation was that Dr. Sayanagi may fulfil his dream of one day becoming an Amateur Astronomer. (great laughter happened after this comment)

Dr. Sayanagi showed several (non-impact) images of Jupiter made by amateurs with very modest equipment such as 4” telescopes and web cams.

He did show several other videos with impacts on Jupiter. Although some images were black and white, these were impressive. He included an image captured on St. Patrick’s Day. This is what we’re trying to achieve with all the data being gathered on this project.

Jupiter has influenced and perturbed Halley’s Comet’s previous orbits in history, such that now it is locked into a 76 year period around the sun.

Dr. Sayanagi showed an old impact crater on Ganymede with newer impact craters above it. Using this and other impacts you can calculate the impact rate. Therefore, there should be between 30 to 100 bright impacts on Jupiter visible using relatively smaller telescopes.

Dr. Sayanagi mentioned you need at least 10 frames per second or faster to capture these impacts.

Ben Loyola mentioned that automated the atmospheric disturbance software helped with imaging. Dr. Sayanagi recommended that Ben should publish this, since he thought no one else was doing this.

Analysis is being done by the “deTeCt” software (developed in France). Batch processing is done, so when there is a gap, the software stops processing the data. This works by taking the difference in pixels between each frame. It generates a message that is sent to the French Society of Amateur Astronomers (Marc Delcroix). The reference for this is: http://www.astrosurf.com/planetessaf/doc/project_detect.php

The BBAA Secretary attempted to make the presentation “Live” on Facebook. Approximately, 30 minutes of video was placed on our Facebook website. Shawn and Chuck Dibbs were watching our presentation on “Live” Facebook.

The presentation was well received, and a question and answer period followed the presentation.

Meeting adjourned at 9:16 PM.