

MINUTES

Cape Cod Astronomical Society
Minutes of January 4th, 2012 Meeting
Attendance: 24 Members 19 Guests 4

Call to Order

President Tom Leach called the meeting to order promptly at 7:30PM and invited to new guests to introduce themselves. Tom welcomed back member and Trustee Werner Schmidt who had been under weather since before the holidays. He also called attention to members to find the latest January issue of the Society newsletter FIRST LIGHT which is published and available only from the website and welcomed everyone to read last months minutes that detail Dr. Jon Greenberg' s most interesting talk about Galileo and the Catholic Church.

Presentation

“ Discovering Planet Earth: HIKING THE PACIFIC CREST TRAIL”

This was a rare opportunity for society members to follow a 2,650 mile virtual hike retracing the steps of Julie Guibord and Rick Paulus along the Pacific Crest Trail. Julie and Rick began their long walk through the wilderness at the U.S. – Mexico border in early May and after four months, six climatic regions and countless mountain ascents, finished their trek up the U.S. western most mountain range. Their adventure they admit was not for the faint of heart, with a requirement of pushing more than 20 miles per day in rough terrain in order to complete the trail before autumn. This challenge is an attraction for most people half their age, many whom they would lap or be re-lapped often as they had to go off trail for provisions which they would prepare and mail ahead general delivery. In a celestial connection, one notable young hiker was named ‘ Comet’ who they frequently encountered. They admit that even “ cowboy camping” under the stars left them little time for observing due to exhaustion and need for sleep. Meanwhile, cloud cover often left them with close out observing. Rick chuckled that because they were camped in a narrow canyon on a clear night during the Perseids, they caught only a small piece of the action.

This was no easy hike, in fact at times almost brutal, where a misstep on a rocky trail might mean a wrenched knee or twisted ankle, and where fording rushing streams and looking for dry ground while bivouacking in the Sierras and northward were required along the crest trail. The couple frequently ran low on drinking water as hikers count on replenishing at “ rail angel” stops (places

where volunteers stash water during the season). At one point in a high hot desert they reached one of these stops and all the water was gone! They were forced to recycle the only putrid water they could find in 50 miles. Their images taken along the Pacific Coast Trail and its many wonders of geologic formations were breathtaking as they described in detail how they cleared challenging peaks and ridges and ventured switchback trails.

By late August they reached into Washington State and faced a month of rain and chilly nights as they rushed along to the Canadian border trying to beat the first snows. This was one of the most interesting talks on the extremes of planet earth, and planning and managing a challenge to succeed that we have heard, and told in perfect agreement by soul mates.

Rick Paulus is an avid kayaker, cyclist and adventurer with a background from the US Navy that included work as a Farsi interpreter and later as a member of protocol in the State Department and White House under presidents Clinton and G.W. Bush. Julie Guibord is a registered nurse and shares Rick's enthusiasm. The couple live in Nauset Heights.

Burbank in Space

Peter Kurtz presented some cool photos that the CCAS received from CCAS member astronaut Dan Burbank currently onboard the ISS which he had taken of comet Lovejoy over Australia in an email to a very selective group. The images and movie have since been released by NASA so Peter was free to share them. In the video we see a lightening storm from above as the space station approaches the gray line of sunrise the vertical spike of the comet becomes evident. The whole scene is quickly washed out by the brightness of the rising sun. Dan Burbank wrote " From our vantage point in low earth orbit we have the perfect view and completely unobstructed by intervening atmosphere, the dust (curved) and ion (straight) tails are spectacularly bright and easy to see against the backdrop of black space. Talk about being at the right time in the right place!" Dan is a former editor of FIRST LIGHT.

Werner Schmidt Observatory

Mike Hunter and Bernie Young discussed a recent failed effort to film an occultation due to imposing cloud cover that hampered the effort at two other observatories the same evening. Bernie outlined plans to record the predicted fly by of a nine kilometer asteroid** on January 14th at 11PM when the Werner Schmidt Observatory will be within one km of its " path" . He has other dates planned for January as well and these will all be announced [by email via Peter to members](#). Routine Saturday Star Parties at the Schmidt Observatory will take

place each month on the Saturday evening "closest to date of the New Moon". Each event begins at 7:30pm. All are welcome. The dates are as follows: 1/21, 2/18, 3/24, 4/21, and 5/19. Mike said that he believes that with the new wide screen TV recently purchased and other equipment there will be plenty of material to make these events interesting come rain or shine.

Larry Brookhart announced that the Harwich School Observatory learned this week that it is the recipient of two grants totaling \$900 from the Harwich arts council and Cape Cod Five Bank. The money will pay for teaching tools and props such as an armillary celestial star transparent globe, a solar telescope, a marine sextant and other items to make teaching astronomy during daytime more enjoyable and interesting.

February Speaker

Tom Leach announced the speaker for February 2nd will be Lt. Col. Shawn Smith on "The use of phased array antenna technology to track Earth Orbiting satellites and other objects". The United States Air Force Space Command radar system is operated by three 21st Space Wing squadrons for missile warning and space surveillance. For 32 years, it has protected the East Coast of the United States from sea and land strikes by enemy missiles but it can do much more. Please join us to learn more.

Adjournment

Meeting was adjourned at 9:30PM

Tom Leach

****Important note from Bernie Young, WSO (1/7/12):**

Members & Friends of the Cape Cod Astronomical Society,

I just sat down to alert you to an occultation of an 8.6 magnitude star in Orion by a 9km diameter asteroid on Sunday Jan 15th at 11:13pm. New predictions came out this morning showing the path of the shadow has moved 33km and no longer passes over the Werner Schmidt Observatory. Bah, humbug!

The next interesting event is a pass of the near earth asteroid 433 Eros on January 31st at 8.55 magnitude, and moving at 2.77 arc seconds per minute. It rises to 12 deg above the horizon at 9pm, making it a good target for the 18" obsession. The obsession tracking software has been upgraded and it should now be able to track the major asteroids like Eros. By 10pm it will be above the sill of the dome and can be observed by the 16" Meade.

This should be a good target for the STV astronomical video camera feeding our new flat screen TV. It allows us to record the event as VHS video and digital video.

Eros is an interesting target. NASA photographed it extensively before landing the NEAR-Schoemaker probe on it about 10 years ago. The attached pdf file from Wikipedia is interesting reading, and it gives many links to photos, movies, and other detailed information.

I will open the observatory at 7:30 to get ready for this fly-by if the sky looks good. Any staff member who is willing to help should let me know. As usual, if in doubt about the viewing, call the observatory at 508-308-4765.

There are special viewing opportunities coming up and I will alert you later.