

## **West Jersey Astronomical Society**

### **Meeting Minutes for January 20, 2017**

At the Moorestown Virtua facility.

Members in attendance at start: 14, other attendees: 1

Meeting start time 7:50 pm

Officers present:

President: Roger Cowley  
Vice President: Jim Fusco  
Treasurer: Wade Evans  
Secretary: Bernie Kosher

JimF started the meeting at 7:50 with some info on Wharton Forest, specifically with regard astro access. Waiting for finalization with the state dept. which handles this.

They are working to add to the existing agreement with all members having access with call ahead and ID plus vehicle ID. Subject was discussed on and off this evening, mostly regarding how to keep the guards and rangers happy. Exploring access to Atsion Lake area during season. Carranza may be a problem due to endangered reptile habitat.

WAS will have to make our insurance and policies match what is required for Wharton and Coyle. This is being followed through by Wade.

Coyle Field is being looked into for access. We are awaiting their word. Any club can try the same procedure to license the field.

We will need exact instruction on which areas are accessible and which are not.

There is no definite anything as of now.

Mention was made of the amount of work done by Wade in organizing and interfacing with the people at both locations.

Mail boxes were discussed and our current mail box may be unneeded. Gary has volunteered his mail box. It appears this would be okay. Various aspects are being investigated.

Roger says Bernie H has submitted a list of star parties.

A daytime star party which is being considered for the August eclipse.

Astro topics. An image of the Flame/Horsehead nebulae by Dan McCauley from in H-alpha was shown. Lots of detail, especially

considering it was from light-polluted sky in Palmyra. Other shots from Coyle. Nice photos on his Flickr page accessible from WAS home page. Filters were discussed to some extent.....how to get them removed for max sensitivity to Ha.

Gary had some calendars to sell.

Roger had a presentation on Kepler equations which are used to calculate orbits. Examples of ellipses as the orbits of the planets. Methods other than calculus were discussed by Roger for areas swept in an ellipse and velocity, "Kepler's Famous Equation."

It was asked how the ancients predicted eclipses and transits. Also if they were aware of Venus transits. Kepler was primarily a mathematician and worked with data from Tycho Brahe observations.

Distances of bodies were measured in AU until about 200 years ago when a separation of 93 million miles was derived.

Old time clock accuracy was discussed.

Some original Harrison clocks are still running. They used oily woods as a self-lubricating mechanism.

Jim brought up the Antikythera device as an Orrery and predictor of astronomical events.

A photo of a gravity wave on Venus was shown.

Venus has just passed greatest eastern elongation.

Jupiter rises at 11:00 pm EST on February 1.

Some telescope making was discussed, and why not to. Especially the use of fiberglass.

Roger called the end of the meeting at 9:35 pm