



## Willingboro Astronomical Society

Meeting Minutes – December 5, 2014

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**The meeting was called to order at 7:58 PM by President Drew Maser**

### **New guests**

Brian M

### **Attendance**

Was Members: 13

Was Officers: 2

### **Introductions and astronomical events of interest update**

#### WAS business meetings and events

1. December 5<sup>th</sup> formal meeting – elections
2. December 13<sup>th</sup> Holiday Party
3. Dec 19 non-formal meeting

#### List of Area Astronomy Events for 2015

1. Winter Star Party: 2/16 to 2/22
2. NEAF: 4/18 & 19
3. Texas Star Party: 5/10 to 5/17
4. Cherry Springs: 6/11 to 6/14
5. Mason Dixon: 7/15 to 7/19
6. Stellafane: 8/13 to 8/16
7. Black Forest: 8/14 to 8/20

#### List of Events Viewable in the Night Sky

1. Lunar Eclipse: April 4, 2015
2. Lunar Eclipse: September 29, 2015
3. Provided overview of what is available for the month of December 2014 (moon phase, meteor showers and planets) - Add this list and future lists to WAS website.

4. Discussed when Saturn and Jupiter and the moons of each will be visible in December 2014

### Deep Sky Objects

Picked Pegasus and Andromeda, what can be observed: Andromeda Galaxy, M15 - story, mythology, Gamma Andromedae is nice double as is nearby Gamma Arietis. M15 has a planetary nebula (about mag 14) and a neutron star. NGC7331 spiral galaxy, Stephan's quintet, Einstein's cross – gravitationally bent image to give what appears to be four galaxies, 51 Peg B is an exo-solar planet – first discovered orbiting a sun-like star.

## **Old Business**

### Holiday Party December 13<sup>th</sup>

- WAS will provide the food (stuffed shells, meat balls, roast beef, cheese, potato salad, coleslaw, macaroni salad, rolls, and soda)
- Cost: \$5 per attendee, will have a sign-up sheet
- No door prizes
- So far no responses for the pollyanna
- Ask members to bring desserts

### By Laws and Articles of Incorporation

Beginning of year will start working with the adapted by-laws

### Budget

Treasurer's report:

- Income reported
- Holiday party is next expenditure
- Deadline for DUES is Next Month

## **New Business**

- The 2015 WAS meeting schedule was provided to members. This will be posted on the website
- Products of the month – Alan D: Spion Binos, 70 mm and goes from 7x to 140x; \$30 for 25 piece telescope and microscope

### Propose to change the name of WAS to something generic

- The goal is to get rid of the location.
- Next month or so provide a list of names.

### Elections (no ballots in the mailbox)

- President: Drew Maser
- Vice President – Jerry Lodriguss
- Treasurer – Joe Stieber
- Secretary – Jim Foy

As per by-laws elected by consensus (all officers were unopposed)

### 2015 Calendars and RASC Handbooks were distributed

### Comic interlude

## **Observations and General Discussion**

- Bernie K: Favorites in Pegasus: NGC 7206 Blue Snowball, and Water Jar; Equuleus nearby
- Bernie K: Favorites in Pisces – in the cord of the eastern fish –Eta Piscium (Kullat Nunu) and Omicron Piscium (Torcularis Septentrionalis).
- Steve: Showed picture of a glory shadow of a plane – refraction in water droplets – near take-off and landing.
- Roger: Showed a table from an article on the origin of the moon. with seismic velocity (km/s) of cheeses and lunar rocks and terrestrial rocks
- Brian: Periscopic sextant – 1961 C141 – had to get a digital watch and a light. Find three bright stars 120 apart – make a reading – gave you longitude and latitude. Former navigator use celestial navigation method. Strategic airlift. Coleman instruments. 10 min to take a reading. One reading every about 20 minutes

Meeting adjourned at 9:47 PM.

*Submitted by Jim Foy, WAS Secretary.*