

Vandenberg Amateur Astronomical Society  
presents  
**The Sidereal Times**



M45 (see page 5)

**Meeting News:**

The May meeting we talked about our support of AHC science day Discussed the Girl Scout outreach at the observatory. We reviewed the star party schedule for the coming months and watched a video about experiencing the Hubble Telescope (thanks Dave).

**Reminder: VAAS meeting June 12th at 7:00 PM  
Manzanita school, Hope to see you there.**



**Lunar Calendar:**

New Moon 16th  
Full Moon 2nd

**NOTE:** Since *this is the last Newsletter until September*, I decided to include lots of pictures exhibiting club activities and past events. They are in no particular order and can be viewed on pages 3, 6, 7 and 8 of this Newsletter. In addition this is a reminder that the months of July and August is our summer break no club meetings during this time. However, Star parties are still scheduled, and a reminder of same will be emailed to the membership as usual. **Page 2** exhibits the Star Party schedule for July and August (The Editor)

**Presidents Message**

The month of May was another busy month for our club. Vince Tobin set up an astronomy area for the **Allan Hancock Science Night** in Santa Maria on May 1<sup>st</sup>, and Craig Fair and Dave Covey brought their scopes over also to help him out. We thank them all for lending their time to a huge crowd to educate the public about Astronomy. They had the chance to view Venus, and Jupiter, but saw no sunspots that late afternoon. One parent was so pleased with the telescope viewing, that she asked them to travel to **Guadalupe** to show students at Mary Buren School on May 7.

VAAS Members want to convey to Dave McNally and his family our heartfelt sympathy for the loss of his Father this month.

The program for the Month of June will consist of a round table of discussion on "How and when did you get interested in Astronomy?" , and perhaps another DVD on one of the Hubble series. Continue to spread word of our club to your friends and to the public, as we welcome new members, and are quite pleased with those who have joined this year!

**REMEMBER-** We have **NO meeting in July and August, for the summer break!** We will meet back in September, and will continue to hold our star parties in the summer. I wish all members a relaxing and enjoyable summer, and warmer viewing nights.

Wishing for clear skies ! JANA

## Events

**June 2nd** Full Moon this phase occurs at 16:19 UTC. This Moon was known by early native American tribes as the Full Strawberry Moon because it signaled the time of year to gather ripening fruit. It also coincides with the peak of the Strawberry harvesting season. It is also known as the Full Rose Moon and the Full Honey Moon.

**June 6<sup>th</sup>** Venus is at its greatest elongation at 45.4 ° from the Sun. This is the best time to view Venus since it will be at its highest point above the Western horizon in the Western sky, look for it after sunset.

**June 6<sup>th</sup>** *Star party at the observatory.*



**June 13th & 20th** *Star party at Figueroa Mountain site 1.5.*



**June 16th** The new Moon occurs at 14:05 UTC. This is the best time of the Month to observe faint objects such as galaxies, clusters and nebula.

**June 21<sup>st</sup>** The June Solstice occurs at 16:38 UTC. The North pole of Earth will be tilted toward the Sun which will have reached its northern most position in the sky and will be directly over the Tropic of Cancer at 23.44° north latitude. The first day of summer in the Northern hemisphere and the first day of winter in the Southern hemisphere.

**June 24<sup>th</sup>** Mercury will be at its greatest western elongation at 22.5° from the Sun. This is the best time to view Mercury since it will be above the horizon in the morning sky. Look for it in the Eastern sky just before sunrise.

**June 27<sup>th</sup>** *Star party at the observatory.*



### **Star Party Schedule, July and August**

July 11<sup>th</sup> Obs, July 18<sup>th</sup> Figueroa, July 25<sup>th</sup> Obs

August 8<sup>th</sup> Obs, August 15<sup>th</sup> Figueroa, August 22<sup>nd</sup> Obs

## Star Party and Events

**May 1<sup>st</sup>** Science event at AHC.

Last night's Alan Hancock College Friday Night Science event between 6PM to 9PM was successfully supported by Vince Tobin, Craig Fair and Dave Covey.

We were so successful at locating Venus and Jupiter long before the Sun set (no Sunspots) that several individuals asked how we managed to find the planets when they were not visible to the eye. In short, "it was tough" task and we got lucky.



**May 9<sup>th</sup>** Star party at the observatory.

Vahan, Dave and Justin gathered about 6:30PM with mostly cloudy conditions.

After waiting until about 8:30PM the skies started to become partly clear conditions. Joined by Justin's father at about 9PM. "Dutch" Holland joined us about 10PM. Skies became mostly clear after about 10:30PM. Justin and Dave viewed Venus, Jupiter, Saturn and M13 in their 4.5" Newtonians and Justin's 8" Dob. Left about 11:30PM with dew forming on all scopes, eyepieces and finders. Not bad for a very dubious night..



**May 16<sup>th</sup>** Dave Covey arrived at Figueroa Mountain site sometime after 6PM. No other individuals arrived on site that night. The sky condition was a mix of thin overcast and scattered clouds with an almost solid overcast to the South. Winds were light to calm most of the night. Dave setup his new CGEM/ 8" SCT to give the combination a test under fair sky conditions. All visual observations were done with low power, 24mm to 40mm eyepieces. Higher power did not produce good quality images due to atmospheric. Viewed the planets Jupiter, Venus and Saturn along with several deep sky objects such as M13, M03, M05, M81/82 and NGC 5139 (Omega Centauri). Saturn and NGC 5139 viewing was affected by cloudy conditions to the South. Left the site at about 10:45PM, calm winds and 45 degree temperature. A reasonable first test of the new mount/scope combination.

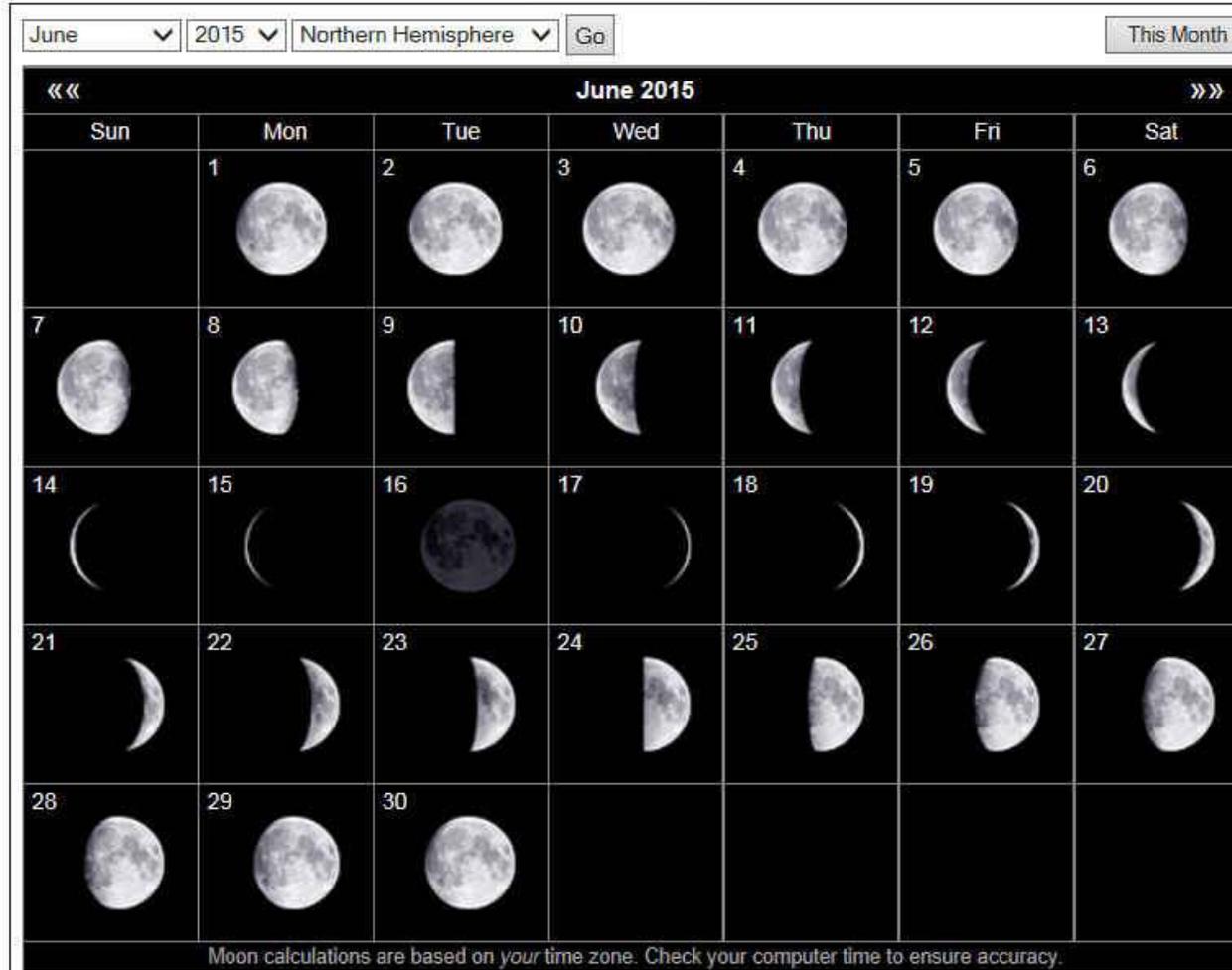


**May 23<sup>rd</sup>** Star Party results Craig Fair, Dave Covey gathered at the observatory around 7PM. Justin and his wife joined us a little later for a brief visit. Craig setup his 8" SCT and Dave opened the observatory but not the shutters. Dave noticed a live lizard inside and started giving chase; but it hid under the carpet and all attempts to chase it out failed.

The sky condition at first was 2/3 clear with mainly the East and part of the South cloudy. The weather gods were playing with us because shortly before it got dark, a solid over cast rolled over us shutting down any hope of a star party for the rest of the night. Vince called and we informed him that it was totally overcast and there was no sense in coming to the observatory that night. Craig and Dave left the observatory about 8:30PM. Star party foiled again by the weather.



## June Moon



Full 2nd, New 16th, 1<sup>st</sup> Quarter 24th, Last Quarter 9th

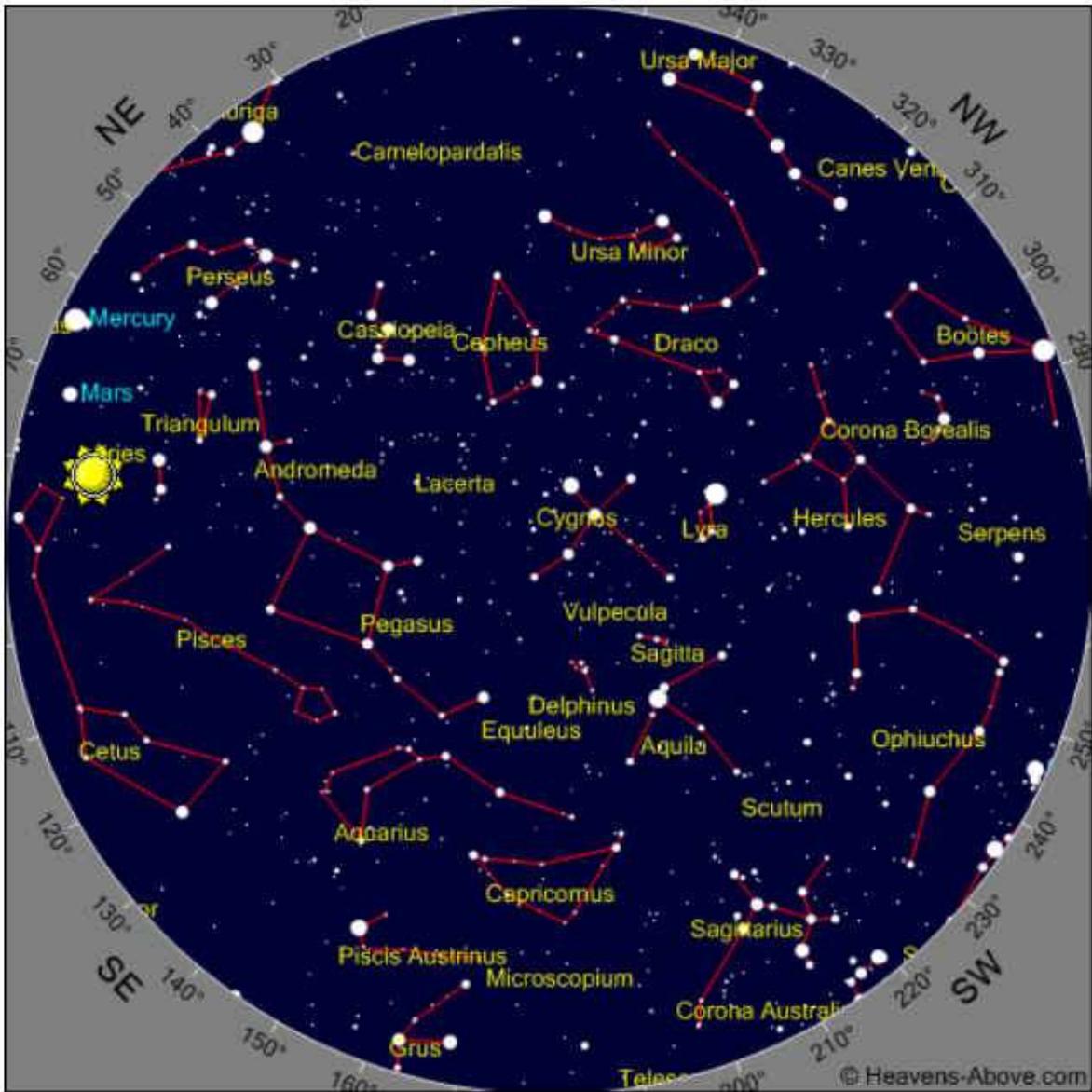
### Moon Folklore

There is a British legend that if Christmas fell on a Dark Moon the following years harvest would be a bountiful one. In some parts of the Isles it is believed that a Waning Moon on Christmas meant a good crop next fall but a Waxing Moon meant a bad crop.



## June Sky

Some Objects of interest, Mars, Venus, Mercury, M57, M27, M31, M13



### Time

Year	2015	Month	5	Day	1	Hour	15	Minute	21
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Photo Courtesy David McNally



**Messier 45:** The Pleiades also known as the Seven Sisters is an open cluster in the constellation of Taurus. It lies at a distance of 130 parsecs, 424 light years and is 13 light years across. The cluster is composed of hot and extremely luminous stars. Around the bright stars there are reflection nebula caused by dust clouds. Gravitational interaction with other stars in the galactic neighborhood will eventually disperse the cluster in about 250 million years. M45 contains 332 stars and has an estimated age of 100 million years. Some of the stars are rapidly rotating at velocities of 150 to 300 Km/sec at their surface, which is common of main sequence stars of certain spectral class type (A-B). M45 holds a prominent place in ancient mythology. Atlas and Pleione are not Pleiades but rather the parents of the Seven Sisters. Atlas is already busy holding the heavens up on his shoulders and myths vary as to whether or not Pleione was placed in the sky with her daughters.

The main Star nebulas are; Merope NGC1435, Maia NGC1432, Pleione 28Tau, Atlas 27Tau, EtaTau, Sterope 21Tau, Taygeta 19Tau, Electra 17Tau and Celaeno 16Tau. The cluster contains many brown dwarfs that are objects with less than 8% of the Sun's mass. They are not heavy enough for nuclear fusion reactions to start in their cores and become proper stars. They may constitute up to 25% of the total population of the cluster but constitute less than 2% of the mass.

Image capture was using a 400mm telephoto lens coupled to a Baader modified Canon T3i DSLR coupled to a Celestron CGEM hypertuned mount. Frames 20x120" total integration time 0.7 hours. Software processing DSS 3.3.4,

## For What its Worth

Anastigmatic: An optical system with at least three elements that is completely corrected for Spherical aberration, Coma and Astigmatism.







## *Club Officers*



**President**  
Jana Hunking



**Vice President**  
Dave Covey



**Treasurer**  
Vince Tobin



**Newsletter Editor**  
Vahan Yeterian

*“Astronomy compels the soul to look upward,  
and leads us from this world to another”.*  
(Plato)



## Club Meeting

**Reminder** Club meeting June 12th 7 PM  
Manzanita school.  
Hope to see you there.....

## Star Parties (as always weather permitting)

## Other Astronomy Club Meetings

### Central Coast Astronomical Society

Link to web site...

<http://www.centralcoastastronomy.org/>

### Santa Barbara Astronomical Unit

Link to web site...

[http:// www.sbau.org/#AU\\_EVENTS\\_Calendar](http://www.sbau.org/#AU_EVENTS_Calendar)

## Night Time Bright Objects (no scope required)

Link to “Heavens Above” web site

[http:// www.heavens-above.com/](http://www.heavens-above.com/)

(Iridium Satellite)

(ISS Visible Pass)

Be sure to set the nearest location from their  
pull-down menu.

The web site link below will take you to some  
Great Milky Way interactive images and how  
It was developed. (Type it in the search box.)

<http://skysurvey.org/>

VAAS.

Dave McNally is the VAAS Web Site Serf/Minion

