

Amateur astronomers just get better looking . . .

Volume 22 Number 5

nightwatch

May 2002

President's ADDRESS

I will like to start thanking all of you who participated Astronomy Day activity on April 20th. We had lots of guests and everybody had great time. We had a rare arrangement of the planets and it was a perfect opportunity to explain what ecliptic really means. Many members went beyond that and the guests were enlightened on pretty much everything: from telescopes prices to the effects on the new 210-freeway extension on local astronomers.

We will have the May general meeting in Milliken Planetarium at Pomona College, which generously allowed us to use their resources. Preparing this show was a challenge in many ways. Since the audience is already knowledgeable on the night sky and motion of the celestial bodies I decided to make the show emotionally stimulating, impressive and entertaining. In other words we will have good time as well as refreshing our knowledge.

Planetariums have a very special place in my heart. I could write pages on my personal planetarium experiments. I have actually tried to manufacture one long time ago. After pounds of thin sheets of metal, aluminum foils, cast plaster spheres with pinholes, bulbs and many short circuits, I gave up. I wasn't nearly patient enough. By then and other great projects promised more fun, faster: rockets, catapults and crazy railroad designs.

In the movie "Local Hero" (1983) Burt Lancaster portrays an oil company executive who is obsessed with astronomy. The company decides to start operations in a town named Ferness in northern England. Before sending a representative to buy the land, Lancaster invites him to his magnificent office on top of a skyscraper. Half dome shaped office houses several telescopes and a surprise. Instead of talking business, Lancaster asks him to check the aurora borealis while he is up there. To show the representative what he means he pushes some buttons and a planetarium projector emerges from the floor and rises several feet high. As the lights dim, the stars projected on the dome begin to emerge and with a push of a button, northern lights begin to dance inside the dome. The representative duly impressed promises to keep his eyes open. I will not tell the end of the film, just a word of advice, "watch it"

Finally I strongly recommend following site for those who are interested in planetariums. <u>http://www.griffithobs.org/</u><u>IPSDream.html</u>

See you all in Milliken Planetarium

Alper Ates

Important note: The meeting starts at 7:30 pm and planetarium presentation at around 8:00 pm. To keep the guests concentrated on the show and to keep dark adaptation in our eyes, we will not admit any latecomers.

PVAA Events Calendar

Month	Star Party	General Meeting	Board Meeting
May	11	31	3
June	8	21	14
July	6	26	12
August	10	23	16

Club Announcements

We had two visitors at our April meeting, which was held in a nearby classroom as Galileo Hall had other occupants. The Club would also like to welcome two new members, Bill Vaskis and Brian Kidwell. Welcome to you both!

The Astronomy Day Public Star Party at Cahuilla Park in Claremont was very well attended by 100-200 local residents. Club members enjoyed showing off the sights through their scopes to the enthusiastic crowd. Many attendees also enjoyed a grassy seat and watched Alper's laptop presentation. The planets were definitely the "stars" of the night and gave a spectacular image through the many large scopes that were set up. A -6 magnitude Iridium flare occurred during our visit to the park which gave us another good talking point for us with the public. I'm not sure who had the better time – the public or the PVAA members who were able to share their enjoyment of our hobby with so many.

Roy Schmidt reminded us of a date change for the Club trip to the 200" telescope at Palomar where we will have a behind the scenes tour. The new date is July 20, 2002 at 2pm. He will verify the sign-up list with those listed to make sure they can still attend. June 15^{th} will have an event as well with a trip being planned to the Big Bear Solar Observatory on that day around 2pm. A map to Big Bear will be in the next newsletter.

The Riverside Telescope Maker's Conference (RTMC) is coming up this Memorial Day weekend – May 24 - 26, 2002. Sign up to go if you're in the market for observing tools, views through lots of scopes, or just a relaxing time in a pine forest.

April Meeting

Alper presented a What's Up using the Stellurium program, which is a free download from the Web. Look in the future at our Web site for a link. Alper discussed the many interesting items to be found in the Big Dipper. We discovered the double stars Alcor and Mizar (which is actually two stars itself) were used in ancient times in Turkey as a preemployment test. If you could see the two stars, you were a good candidate for employment watching ships at sea to track what arrivals were imminent and about to hit the local markets with goods. Sort of an early version of our Dow Jones predictors of today.

Roy gave us an interesting presentation on the Keck Observatory. Plans and discussions began in 1953 as Walter Steiger of the University of Hawaii studied the area and recommended excellent conditions for observing on either Haleakala or Muana Kea peaks in Hawaii. Due to the lack of roads then on Muana Kea, a solar scope was placed on Haleakala. Time and further observations resulted in the conclusion, however, that seeing on Muana Kea was actually better than on the other mountain. This was due to the lack of stable air as an inversion layer tended to form very close to the Haleakala peak. Muana Kea was the higher peak and its 3000-foot height advantage over the inversion layer gave it much better air. The first observatory on Muana Kea was finished in 1964 and it boasted an 88-inch scope by 1970. About this same time discussions began on the idea of designing and building a 10-meter telescope. The chosen design was for a mirror constructed of 36 separate but co-ordinated segments; a feat made possible by the computers coming into use at this same time. The chosen peak ended up being Muana Kea. Funding for this telescope was finally found in

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http://www.cyberg8t.com/patrick/PVAA.htm

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1984 and Keck 1 was completed in 1993, Keck 2 in 1996. The adaptive optics now being worked on for the pair will let the scope change shape as needed 670 times per second as it strives to remove the distorting effects of our atmosphere. When complete, it should have a

resolution that would enableKeck to directly observe planets in orbit around other stars.

Claire Stover

Trip to the Big Bear Solar Observatory

On Saturday the 15th of June, the members of the club have the unique opportunity to tour the Big Bear Solar Observatory. This is a different observatory in that the observations are limited to one star, namely the Sun. But make no mistake, this is quite an interesting star. Last time we were invited to tour the grounds we got to see the observatory in action. The real time image of the Sun as shown the light of Calcium was very interesting as well as the discussion of the GONG program facilities. To get to the Big Bear Observatory go east on the 10 free way until you reach the 30 freeway, go north. Get off the 30 freeway at route 330 (city creek road) and head up the San Bernardino Mountains until you reach Running Springs. Continue east on route 18 until you get to Big Bear Lake. Take route 38 (the left hand route along the north shore of the lake) to 40386 North Shore Lane in Big Bear City. Please call Roy Schmidt (909-980-1867) or e-mail at weichi1@Earthlink.net to reserve a place on the tour. The reservation is to save you the trouble of going up to the observatory only to find the tour has been canceled as well as letting the staff of the observatory know how many of us are going to show up.

NOTE

The Palomar trip has been postponed to 7/20/02. Please let me know if you are going (same addresses as above).

Roy Schmidt

May 31 PVAA Meeting at Millikan Laboratory, 6th and College, Claremont

The meeting on Friday, May 31 will be a special one. We will meet at the newly-redone Pomona College Planetarium and be treated to a program on the new planetarium projector. This new planetarium projector has just a few weeks ago been put into operation and shown to the Pomona College trustees. It is a real opportunity for us to get to see this new addition to astronomy education in our area. Alper Ates will show us the capability of this machine, present the program, and tell us something of the story of the installation in the building.

Be sure to go to **Pomona College**, not to our usual meeting place in Galileo Hall on the Harvey Mudd College Campus.

Millikan Laboratory is on the northeast corner of Sixth and College in Claremont, about seven or eight blocks from Galileo Hall. From Galileo, go west on 12th street or Foothill past Dartmouth Avenue to College Avenue. This is about a block and a half. Turn south on College Avenue and proceed south to Sixth. Park just before Sixth; Millikan is the building on your left. There should be plenty of parking on College Avenue because the students are gone for the Summer. There will be signs or someone to guide you in the building, but the planetarium is most of the way down the main hall on the ground floor.

Remember, this meeting will start at 7:30 p.m. on Friday, May 31. We will hold off on starting the planetarium program for a few minutes to allow stragglers to drift in. We will put a directional sign on the door at Galileo Hall for those who miss reading this.

Ludd Trozpek

Bob Marvos Moving to Oregon

Unless he changes his mind in the very near future, stalwart PVAA member Bob Marvos is planning to pull up stakes and retire to Oregon. He will be settling in the Bend area, where the night skies are dark and glorious in the summer. Bob has come often to star parties the past few years, adding to the camaraderie at Yesterday Ranch and more recently at Cottonwood Campground. He was frequently the first set up at the last few star parties he attended, sometimes arriving a day early to get in some good viewing before the weekend crowds hit.

Bob has used his considerable artistic talents to support the activities of the club. Among other things, he re-worked the Nightwatch logo so that it was printable—in a technical sense. We trust that he will continue his observing up north and perhaps give us a report on the Oregon Star Party that takes place every summer only a couple of hours from his new home.

Clear skies, Bob!

A Night in April under the Stars

On the pleasant Spring evening of April 20 some two hundred visitors joined the PVAA at Cahuilla Park in Claremont for a public star party. Scarcely had some of the early birds begun to gather and break out the telescopes when groups of attentive guest would begin to ask questions.

The long track of planets in the western sky was the attraction, with Mercury down low, then Venus, Saturn and Mars, and Jupiter above. The first quarter moon was near the zenith and was a popular object. By dusk, every one of the half-dozen or so scopes had a line of people. Everyone, even the restless kids, took time to wait their turn

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and enjoy the rings of Saturn, bands and moons of Jupiter, the red dot that was Mars or the bright glare of Venus. Of course, of this list, the view of Saturn was always the most breathtaking for the new astronomer. We had a dozen or so telescopes of all types, ranging from Ron Hoekwater's 22-inch reflector down to a little Meade 60mm refractor and even a short-tube refractor set up down low for the kids. Some of the visitors brought their own equipment.

Although the transparency was not that great, and we were down among the lights of the town, park, and—later—tennis courts, it didn't matter to the planetary and lunar views. The seeing was actually quite decent, even for Venus and Mercury which were a good bit closer to the horizon than the rest, and therefore viewed through more and more turbulent atmosphere.

John Jacobs treated the participants to a great view of the moon from the equivalent of less than 2000 miles up. His wide-view Nagler eyepiece scanned the surface as if in orbit over it. It was literally like looking out the window of the lunar module. Ray and Irene Magdziarz brought refreshments and presided over a popular telescope. Claire Stover and her family were at times everywhere, helping out with information and lending a hand where necessary. Alper Ates, our enthusiastic president, brought a video projector and a screen and treated visitors to an illustrated question and answer session on astronomical objects.

Late in the evening, as the crowd thinned out, a couple of us tried to view M13 in the east. Here, the difficulty of a city star party was apparent: M13 was about as faint as the Whirlpool Galaxy normally is under dark skies, and made nothing like its usual scintillating appearance. Jeff Felton, with his large refractor, impressed some of us, though, with the most excellent views of Jupiter. He summarized the appearance of the Great Red Spot by telling someone it wasn't great, wasn't currently red, and was barely a spot at this time.

This excellent club event benefited from the fine publicity arranged by Dorene Hopkins as well as from the "buzz" in the news media about the planetary alignment. We had a great crowd, everyone had fun, and we may have generated a little interest both in astronomy and in the club. Everyone was saying afterwards that "we ought to do this again..."

Ludd Trozpek

June Star Party The June 8th star party will be held at Joshua Tree National Park, at loop B of Cottonwood Springs campground

May Star Party

For the second consecutive month we were fortunate to be joined at our club star party by a local institution of higher learning. Last month Mount San Antonio College faculty and students joined us up at Cow Canyon Saddle. This month we found ourselves sharing the mountain and the sky with folks from the University of La Verne. There was plenty of mountain and more than enough sky for everyone. Besides the conveniently short drive, the pleasant surprise of the company of like minded others has been one of the truly enjoyable things about the Cow Canyon Saddle star parties. Who knows, we may even have attracted a few new members at these outings.

Observing conditions this month were good. The sky was clear and the night was not too chilly. The steadiness of the seeing was not great, but we were still able to split some double stars with Jeff Felton's 6-inch Astro-Physics refractor. Some close doubles were no problem. But one pair (I forget which) was separated by less than an arc second. Jeff trained his telescope on this duo, but splitting them proved to be more than the seeing would permit. The Astro-Physics telescope is a fine instrument for observing the planets as well. Some detail in the cloud structure of Jupiter could be seen whenever the atmosphere settled enough to allow it.

For the second month in a row Chris Hoekwater (my brother) brought his 13-inch Coulter Odyssey out of mothballs and up the hill. Both months he provided a steady stream of visitors with views of the planets and some deep sky objects too. I hope he had time to do some observing himself.

Claire Stover and daughter, Lucy made the rounds visiting each telescope and Lucy made some helpful suggestions of objects to observe. Claire brought PVAA club information packets to give to the University of La Verne people and a few others that just stopped to see what was up.

Joe Hillberg helped me to find an object or two and Lee Collins talked astronomy with some of our neighbors from La Verne. The relatively near by star party site brought out some people who haven't been regulars at the star parties. Ken Allen was a welcome surprise attendee. I know there were a few other club members present, but I've forgotten who all was there. Anyway it appeared that all had a good time. I know I did.

The June star party will be at Cottonwood Springs in Joshua Tree National Park. Cottonwood Springs is one of the closest star party sites with a reasonably dark sky. The temperature may get a little warm during the day, but it should be very comfortable at night. I hope to see many of you there.

Ron Hoekwater