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nightwatch

Newsletter of the Pomona Valley Amateur Astronomers

Amateur
astronomers
just get better
looking . . .

CLUB DUES OF \$27 TO

Volume 22 Number 8

nightwatch

August 2002

Club Announcements

We were all reminded that annual dues should be paid by September 1st to renew our membership in the Club. Only \$27 brings you a whole year of fellowship, star parties, and interesting speakers in the field of Astronomy. Mail your dues to our P.O. Box or bring them to the August General Meeting. We had several visitors at our July meeting, including the following night sky watchers who join us as new members: Bob Brawn, David Kray, Robert Peltz, Alberto Barba, and Vincent Piscopo. Please help make our new members feel welcome and get to know them at our upcoming events.

The Perseid meteor shower should give us a nice show, peaking from August 11th – 13th. Not only may we be able to see the comet dust streaking through our own atmosphere; we may be able to observe the visible flash of impacts on our moon. Please bring your observation stories to share at our next meeting.

Scout Camporee

The Club is planning a Star Party during a Scout Camporee and Show being held from September 27th – 29th at Glen Helen Regional Park (location of Blockbuster Pavilion and the Renaissance Faire). Details are being worked out. We hope to help the Boy and Girl Scouts with some of their merit badge requirements. Last year brought over 4000 campers to Glen Helen so we hope some of you can join us to share our hobby with the youngsters. Contact Claire Stover if you are interested in helping out and I'll keep you posted on the details of the event as it gets closer.

What's Up

Alper gave an interesting presentation on a "star" known as Sheliak, which is actually a three star system. It is known as a close binary. While its members cannot be resolved in an amateur telescope even the non-professional can tell something odd is going on. An observation of this seemingly single star shows it changing an entire magnitude, from 3.4 to 4.4 over a 13-day period. Systems of this type are analyzed by measuring their light curve, which shows the light output from the group over time. Such a system will have a steady output with two distinct dips – one where the brighter star eclipses the dimmer, another even deeper one when the dimmer gets in the way of our line of sight to the brighter star. With careful observation of this item, you may be able to detect the brightness change over a few weeks.

July Featured Speaker

Our speaker for the evening was Jeff Schroeder, JPL astronomer, camera designer and one of the earliest

PVAA Events Calendar

Month	Star Party	General Meeting	Board Meeting
August	10	23	16
September	7	20	6
October	5	18	4
November	2	15	1

members of the PVAA back in 1971 when he was a junior in High School. The meetings have been held in various school, bank, and community rooms around Claremont over the years. 31 years later we are still going strong and meeting at one of the Claremont Colleges!

The widely accepted theory that dinosaurs were wiped out by an asteroid that fell to Earth 65 million years ago, is a fairly recent one. As recently as a few decades ago, such an idea was ludicrous and far-fetched – besides where was the impact crater? Two events occurred which changed the minds of many people. One was the discovery of a possible smoking gun - a 65 million-year old huge impact crater that was found by the Pembex Oil Company near the Yucatan peninsula. The other event occurred in July of 1994. This was the impact of the many fragments of comet Shoemaker-Levy 9 into the planet Jupiter. Suddenly we had dramatic proof of the lasting effect space rocks could have on even the giant planet Jupiter as the scars from the impact were visible from Earth. It was wondered before the impacts of the 21 objects if any signs would even be seen from Earth on the huge planet. Many felt it would be a non-event. While some of the contacts were indeed difficult to detect, 9 created impact sites about ½ an Earth diameter across and 3 of the scars stretched to the diameter of our planet. For reference, the Great Red Spot is about 3 Earth diameters across. Even those with amateur scopes could observe some of these impact sites and evidence of what became known as the dark impact belt persisted for a full year after the impacts themselves. See JPL's Shoemaker-Levy home page for more information and some impressive pictures:

<http://www.jpl.nasa.gov/s19/s19.html>

After these two events, money became available to develop search methods to locate these space objects suddenly recognized as dangerous. Some came to JPL and to a project called NEAT (Near Earth Asteroid Tracking – for details see <http://neat.jpl.nasa.gov/>). Jeff was a member of the JPL team and constructed the CCD asteroid search camera, which is installed on the 48" Oschin Sky Survey Telescope at Palomar. The CCD chips operate at -40 degrees centigrade and the equipment is controlled remotely from a computer located at JPL. JPL's NEAT program began taking pictures in 1999. As of the early 1990s, there were only 5000 known asteroids. Hawaiian telescope hunters had located around 30,000 objects since they began searching in 1996. Then NEAT and LINEAR in New Mexico added their prowess to the search and since spring of 2001 NEAT has found over 250,000 asteroids and 10 comets - LINEAR a similar amount. Of this impressive total one to two near Earth objects are found per week. As many are in the +17 to +22 magnitude range, they are certainly not objects for small amateur

telescopes. As it is, the objects only reach even this small brightness when observed as they are opposite the sun to us and the sunlight is reflected off them towards our instruments. Amateurs can still play a role in locating objects toward the sun, as has been shown with several recent comet discoveries, while the automated programs such as LINEAR and NEAT generally locate those away from our star.

Recent discoveries at a drained swamp near Mesopotamia show evidence of a 200-mile wide impact crater formed around 5000 years ago, coincidentally at the time of the failure of the first Babylonian culture there. So the examples grow of the impacts of these fiery space visitors – we can only research and search for proof as we speculate on the cause of the demise of both the dinosaurs and of the ancient Babylonians. The 1994 visitor to our neighboring planet gave us a vivid real-time demonstration of the cataclysmic possibilities and the very real danger to our small planet should we not search out, locate, and try to prevent another such visit from the heavens to the Earth.

Claire Stover

..PVAA 24 HR. Hotline.

Get the latest news on the star party, club meetings, special events and astronomy happenings.call **909/596-7274**

Visit or website at:

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

PVAA Officers and Board

Officers

President.....Alper Ates.....909/626-0653
 Vice President..Joe Hillberg.....909/985-5617
 Secretary.....Claire Stover....909/988-9747
 Treasurer.....Ludd Trozpek..909/624-3679
 VP Facilities.....Bob Akers.....909/946-0228

Board

Ron Hoekwater..... 909/391-1943
 Ray Magdziarz.....909/626-8303
 Bob Branch.....909/982-8015
 Jeff Felton..... 909/946-1728

Directors

Nightwatch....Ray Magdziarz....909/626-8303
 Membership...Ludd Trozpek.....909/624-3679
 Publicity.....Dorene Hopkins..909/983-5584
 Programs.....Roy Schmidt.....909/980-1867

NEWS FROM OREGON

The Oregon Star Party was held this year, August 8th, 9th and 10th. They have a great site at Indian Trail Springs, about an hour's drive east of Prineville 7,000 Ft. in the Ochoco (accent on the first O) National Forest. The last five miles to the site is dirt, but well graded. Indian Springs is a beautiful location with an unobstructed horizon in all directions. About 700 people attended this year from as far as Washington, D.C. and North Carolina. Many people arrive several days early to get extra observing time.

It was an extremely well organized event with a very friendly crowd. Vendors provide food and remain open until 2 in the morning each night. The organizers even hauled a large truck equipped with hot showers for those who want them. These folks put on a pretty nice party.

Part of your registration packet includes a Guide to OSP filled with suggestions to make your week-end enjoyable. It is packed with star charts created specifically for the dates and location of OSP. Many presentations and activities were

scheduled throughout the day hours. Presentations included topics such as cosmic background radiation, observing in the Australian outback, video astro-imaging, sky identification, constellations, constellation lore, and visual meteor observing. There was also well-attended children's activities each day, including a popular Annual OSP Mars Rover Race, where the kids compete with model solar-powered rovers.

We had beautiful transparent skies both evenings. The highlights of the week-end for me was seeing M17, and the central star in M57 through a 25 inch telescope set up by a group from San Francisco and the presentation about video astro-imaging. Video imaging is much less expensive than CCD imaging. The pictures were very detailed, especially those of our Moon.

Next year's Oregon Star Party will be held August 28-30, 2003. They have a web site, (www.oregonstarparty.org) where you will be able to get more information. You can also register on line if you wish. I highly recommend the OSP for an enjoyable short vacation in some beautiful country. It is about a 16 hour trip from Pomona, but well worth it.

Bob Marvos

ELECTION OF PVAA OFFICERS

Once again it's election time for the Pomona Valley Amateur Astronomers. The board asks that you mark your ballot in the prescribed manner so that it might be counted. Your ballot is important as it will help decide the next slate of officers. Select the nominee of your choice by marking an "X" in the appropriate box, and on unopposed nominees mark each office with an "X" in the yes box to elect the nominee or a n "X" in the no box to reject the nominee. Remember every ballot carries the same weight in this election.

Rules for voting

Please follow the rules accordingly so that your ballot is validated and counted in the election. Ballots will be distributed in the August newsletter to the membership eligible to vote (according to paid dues). Additional ballots can be obtained at the general meeting of August 23rd. In the event that a member submits more than one ballot, the last ballot received by the treasurer prior to "closing of the polls" will be counted with all previous ballots being destroyed. Any ballots submitted at the August 23rd meeting will supercede any mailed ballots with the mailed ballots being destroyed prior to counting.

Each ballot must be returned to the treasurer of the P.V.A.A. either by mail (as described below) or by personal delivery at the August 23rd meeting. Nothing is to be written on the ballot other than selection markings. Do not sign the ballot or add any additional notes or comments or the ballot will be declared invalid.

Ballots returned by mail must be sent to: P.V.A.A.

Attention treasurer
P.O. Box 162
Upland, California 91786

Mailed ballots must be received at the post office by August 22, 2002 in order to be valid. Mailed ballots must be signed on the **FACE OF THE ENVELOPE** in the lower left hand corner to establish eligibility.

(See Ballot on page 4)

August Star Party

For several members attending the August PVAA star party, the usually quick trip to Cow Canyon Saddle was unexpectedly delayed. Mt. Baldy Road was closed for about 40 minutes because of a car fire. Fortunately, the ill-fated sports car didn't crash and burn; it just burned. As far as I could ascertain no one was even slightly injured, but it was quite a fire. Had we not known, at times, it would have been difficult to determine that the intense conflagration before us concealed an automobile. Fire trucks from Mt. Baldy Village, San Antonio Heights, and L.A. County eventually put out what had once been a Pontiac Firebird. It is surprising (to me at least) how well those things burn!

After the blaze was extinguished and the road reopened, it was just a few more minutes before we arrived at the star party site to find it jammed with people. This was a great turnout! The parking area contained not only telescopes and vehicles, but quite a few new faces along with some familiar ones as well. After a little visiting we got down to some stargazing!

The crescent moon, preparing to settle in for the evening, behind Mt. Wilson, was a big hit with observers. And later, so were the many meteors, a few of which brightly blazed while others dimly streaked through the early morning heavens. The star party took place just about one day before

the peak of the Perseid meteor shower and three days after the peak of the Delta Aquarids North. At least two other showers, the Iota Aquarids South and the Kappa Cygnids, were also active. Our own galaxy, the Milky Way was a delightful sight to those of us (city dwellers) who for a month or more hadn't seen it softly sweeping across the nocturnal canopy.

As a star party site Cow Canyon Saddle has much to recommend it. The sky is remarkably dark considering its proximity to the cities below. At an elevation of 4500 feet, the summertime temperature is comfortable, not so hot as in the valley, but not at all chilly either. The horizon is partially obstructed by the surrounding mountains, but plenty of sky remains open to enjoy. And the neighboring mountains help cut down the suburban lights

By about 3:30 AM everyone had departed to return home. This is another nice thing about the Cow Canyon star party site: at the end of the night you can find slumber, snug in your own bed. For comfort it beats the back of a pick-up truck, van, or the hard ground.

The September star party is on Saturday the 7th at a site to be announced. I hope many of you can make it.

Ron Hoekwater

**Official ballot of the Pomona Valley Amateur Astronomers
for the term of officers 2002-2003**

	YES	NO
President		
Shall Ron Hoekwater be elected President of the P.V.A.A.——	<input type="checkbox"/>	<input type="checkbox"/>
Vice President		
Shall Joe Hillberg be elected Vice President of the P.V.A.A.——	<input type="checkbox"/>	<input type="checkbox"/>
Secretary		
Shall Claire Stover be elected Secretary of the P.V.A.A.——	<input type="checkbox"/>	<input type="checkbox"/>
Treasurer		
Shall Ludd Trozpek be elected Treasurer of the P.V.A.A.——	<input type="checkbox"/>	<input type="checkbox"/>
V P Facilities		
Shall Bob Akers be elected V P of Facilities——	<input type="checkbox"/>	<input type="checkbox"/>
Board members at large serving a two year term		
Shall Lee Collins be elected as a board member at large——	<input type="checkbox"/>	<input type="checkbox"/>
Shall Alberto Barbo be elected as a board member at large——	<input type="checkbox"/>	<input type="checkbox"/>
Shall Ray Magdziarz be elected as a board member at large ——	<input type="checkbox"/>	<input type="checkbox"/>

President's Message

In his book "Bokes of curtesye" (1150AD) Thomas Becket laid out the table manners expected of a polite dinner guest. A gentleman was permitted to pick out tasty morsels with his fingers and offer them to his companion, but he was discouraged from buttering bread with his thumb, poking his finger in to eggs, to spit across the table or wiping his teeth on the tablecloth.

It took quite some time to reach current civilized society we are living in. In this society everything we do has to be well calculated. We are living in a world political correctness. This time I will put this fact aside and ask a simple question "What type of a person becomes an amateur astronomer?"

Why would someone skip that big social event with that excuse related with the "new Moon"? What type of a person spends tons of money to buy a telescope that needs to be carried hard to reach places and requires at least an hour to setup and align and worst of all needs to be constantly maintained? Why would someone spend all that money for all those star maps, which are practically blank pages, filled with dots? Who in the world goes in to deep desert or mountaintops to get a glimpse of an object far away? Let's say you spotted NGC223 in your eyepiece then what? Will

that fill your valet or refrigerator? Is it really worth the 100miles trip in to the wilderness and losing a good nights sleep?

My answer to these questions is simple: amateur astronomers are special people. This is not a hobby for everyone. A person who calculates rising and setting times, field of views, comparing star colors, analyzing nebular details, measuring magnitude variations or angular separations cannot be an ordinary person. This is a hobby for smarter people. My experience in PVAA strengthened my views.

As I stated in July message it is my ultima forsan now. I support Ron Hoekwater as our new president and Joe Hillberg as the vice president. They are both dedicated and knowledgeable people with a lot of experience.

I will like to thank all of you for your support during my presidency. Last year the club and the board worked harmoniously and everything went smoothly. The club made a big progress towards the publicity with Doreen's tireless efforts.

May peace be upon you

Alper Ates



The PVAA on recent tour of the mount Palomar observatory
