East Valley Astronomy Club

June Newsletter 1997

EVAC MEETING HIGHLIGHTS

by Aaron McNeely

President Sheri Cahn started the meeting at 7:43 pm. Including the main speaker, there were 77 persons present, 66 members and 10 guests. Sheri discussed the following events:

Local Star Party: May 31 at Florence Junction
Deep Sky Star Party: June 7 at Vekol Road
EVAC Meeting: June 11 at SCC

New Business

Riverside Telescope Makers Conference - The California-based RTMC runs from May 23-26.

Grand Canyon Star Party - The GCSP will occur on June 7-14 at Yavapai Point on the South Rim. The Moon will achieve First Quarter on the 13th. Contact Bernie Sanden (756-0652) for more information.

All Arizona Star Party - The details for the All AZ SP will be hammered out during the next EVAC Board of Directors meeting. The event is scheduled for October 4.

Name Tags - If you want an EVAC name tag talk to Silvio Jacconelli (926-8529), the EVAC Treasurer. These name tags are helpful for everyone that attends the club meetings.

EVAC Newsletter and Copier - Ken Spruell reported that the copier is doing well. We save a substantial amount of money each month with the use of the copier for the newsletter.

SAC 20th Anniversary Banquet - Steve Coe (789-7786) announced that the Saguaro Astronomy Club's 20th Anniversary banquet will be held on Friday, May 30th at Bud Brown's Barn. The cost is $20 per person with a choice of chicken or beef.

New Business

Astronomy Novice Meeting - Steve Coe and Linda Ross are hosting this event on Thursday, June 12 from 7:30-10:00 pm. Steve will demonstrate astronomical observation for newcomers, he requests that only novices show up! For more information call 789-7786.

July 11 Star Party - Contact Don Wrigley (982-2428) if you are interested in helping with this public observing session.

Telescopes for Sale - Pierre Schwaar (256-5533) announced the following telescopes for sale: A 6-inch, F5 Newtonian with 2 eyepieces for $450; A 10-inch Coulter Odyssey Dobsonian for $325. Pierre also compared fine vs. large grain slide film plus other aspects of astrophotography.

Member Show & Tell - Steve Coe began with his saga to capture the perfect Hale-Bopp photograph. He started near Buckeye, but clouds forced him to drive to Gila Bend. Steve set up on the site of an abandoned strip club and shot some slides using Kodak Elite 200. During the next weekend, Steve drove out to Sentinel in hopes of capturing Hale-Bopp within the same field as a multi-arm cactus. The slides were a success, as everyone at the meeting can attest. Steve is also selling individual Hale-Bopp prints.

Tom Polakis started by reading some e-mail generated by his "Comet Trivia" web page. Next he showed some slides of Hale-Bopp over the Gillespie Dam bridge. This site is located about 50 miles west of Phoenix. Tom

UPCOMING EVENTS

- **Deep Sky Star Party, June 7, Sunset -7:36 pm**
  Vekol Road site
- **EVAC Club Meeting, June 11, 7:30 pm**
  SCC, Physical Science Bldg., Room 172
- **Local Star Party, June 28, Sunset -7:41 pm**
  Florence Junction site
- **Deep Sky Star Party, July 5, Sunset -7:41 pm**
  Vekol Road site
- **EVAC Club Meeting, July 9, 7:30 pm**
  SCC, Physical Science Bldg., Room 172
- **Local Star Party, July 26, Sunset -7:32 pm**
  Florence Junction site

also took a shot of Hale-Bopp over the Desert Rose tavern. The glare from a street light created the spurious appearance of three "flying saucers" in contact with the comet. This image will surely raise some eyebrows for people perusing Tom's web page.

Chris Schur displayed the following slides: Hale-Bopp near the Andromeda Galaxy; Hale-Bopp sporting a 25° tail; Hale-Bopp taken with a Schmidt camera, Hale-Bopp through Chris' living room window; A comet rise sequence; Hale-Bopp reflected in the water of a pond. Chris commented that he has longed wished to observe a comet that rivaled the Andromeda Galaxy. The comet rise sequence was shot on one frame while Chris opened and covered the lens at regular intervals.

Paul Dickson presented video from the Thunderbird Park Mega-Star Party for the public last March 23rd. This was the night proclaimed by the local media as the "cosmic trifecta" due to the deep partial eclipse of the Moon, the apparition of Hale-Bopp, and the opposition of Mars. Paul displayed footage of the eclipsed Moon and the Pleiades. One news crew, Channel 15, was present along with approximately 600-1000 people.

FEATURED PRESENTATION

Amanda Bosh is an astronomer with the Lowell Observatory in Flagstaff, and she spoke about her research concerning occultations by Saturn's rings. Dr. Bosh obtained her doctoral degree from MIT in 1994.

Amanda began with a discussion of the basic techniques and observations concerning occultations in general. Astronomers monitor the light emitted by a distant star as it interacts with various solar system bodies. A photometer and CCD chip can be used, also many amateur astronomers observe these events through telescopes. The light of a star undergoes two major changes during an occultation: Extinction and Refraction. Extinction results when a star is covered by an airless body such as an asteroid and appears as a rapid drop in the stars light. Refraction results when a star is covered by an object possessing an atmosphere, such as a planet, and appears as a more gradual drop in intensity. Some objects can produce both effects.

For a valid interpretation of results, a professional observer must collect the following information: The precise location on Earth of the observer; The star's proper motion; An ephemeris of the occulting body, The mass of the occulting body (to predict relativistic effects). An ephemeris is a list of predicted positions for a solar system object. This information is used in conjunction with instruments such as the Kuiper Airborne Observatory (KAO) and the Hubble Space Telescope (HST).

The following are some specific examples of how occultations are useful in astronomical data collection.

The occultation of a star by a planet helps astronomers to collect information concerning the planet's atmosphere. For example, the KAO was used to observe the occultation of a star by Pluto which first showed that Pluto had an atmosphere. A 1995 occultation by Saturn resulted in detailed temperature and pressure measurements of Saturn's atmosphere. The 1976 occultation of Epsilon Geminorum resulted in the observation of a "central flash", the brief appearance of a ring of light encompassing Mars' atmosphere.

The occultation of a star by a planet can be used to discover planetary rings. The rings of Uranus were discovered in 1977 by the observation of a stellar occultation using the KAO.

Occultations can be used to discover planetary satellites and their properties. Occultations have gathered information on the size and atmospheres of satellites Titan and Triton. An occultation of satellite Io by Jupiter (Io was observed emerging from behind Jupiter's disk) revealed surface detail on the satellite when observed in the infrared portion of the spectrum.

Although never successfully observed, the occultation of a star by the nucleus of a comet would reveal much information concerning the physical characteristics of the comet. The strange object Chiron, seemingly a hybrid between an asteroid and a comet, revealed the size of its nucleus and the presence of jet structures in its cometary coma during a stellar occultation.

The occultation of a star by the Moon, although displaying that the Moon is without an appreciable atmosphere, tends to provide information concerning the attributes of a star such as size, duplicity, and characteristics of the orbits of companions.

After this overview of occultation research, Amanda launched into a discussion of planetary rings and her research with the Hubble Space Telescope.

Ring data can be obtained through stellar occultations, and the use of the HST to observe such events can result in 1 kilometer resolution of ring detail. For example, Amanda's observation of the occultation of a star by Saturn's rings using the HST resulted in data concerning the pole position and radius of the rings, the rate of precession (approximately 2 million years), and "gravitational harmonics" that provide a measure of a planet's sphericity. Saturn is the most non-spherical body in the solar system. Hubble occultation data has revealed the semi major axis, eccentricity, and inclination of Saturn's F-Ring. Amanda used this data to create an accurate computer model of the ring system that predicted the observed position of the F-Ring.

Amanda concluded by answering questions from the audience. She began to relate details of Saturn's ring system. The width of Saturn's ring is equal to 100 Earth-diameters with a thickness of 100 meters. We know that the rings are at least as old as Galileo's 1610 observation, and astronomers hypothesize that the rings are on the order of 1 million years old. It is unlikely that we are in a special time to observe ring systems and more likely that they are stable and replenished through time. Astronomers theorize that they survive due to resonances with outer satellites.

In summary, Dr. Bosh presented a clear and concise summary of the state of occultation research including details of her personal research.

JUNE'S GUEST SPEAKER

June's speaker will be Peter Wehinger of ASU, who will talk about the ASU/MCCC student observatory program.

FINDING PLUTO

by Silvio Jaconelli

Gaining confidence in my observing skills, I challenged myself to find Pluto after the two big national magazines both ran articles on how to track down this elusive planet. Words like "elusive" and "small" did not alert me to the challenge ahead, and what a challenge it turned out to be! The planet is about one third the size of our moon, and is approximately four and a half light hours distant, which means that the target that I was after was light that had travelled nine hours to reach me, reflected from a tiny body half way through its journey.

The first step was to print out the star field area from my computer. Pluto showed up as a tiny "x" amid the stars. That evening, I went out to the desert with my 13" f/4.4 Dob and a friend, Sam, brought his 20" f/5 Dob. After about 30 minutes we ended up disagreeing over whether or not we had located Pluto. I thought that I saw a faint point of light where the "x" on my star chart was located but Sam had doubts for two reasons; firstly, Pluto, Sam thought, was not that dim, and, secondly, he was having difficulty matching all the stars in the eyepiece to the star map that we were using. We ended up agreeing to disagree!!!

The next day brought me back down to earth - Sam called and asked me what Epoch I had used for my star map and whether I had selected the program to display "non-stellar objects". I answered "Epoch 2000" to the first question and "no" to the second question. These were not the right responses!! So I ran off a new star map with the current Epoch and with non-stellar objects displayed. Did that change the star field - wow!

It was back out to the desert a few nights later but this time I got quite confused. The first night I was sure that I had found Pluto and subsequently had conceded that I had been wrong, but now, with my corrected star chart, I just could not get a match. How confusing !

I went home and checked my star map against Sky & Tel's star field for Pluto and found that Pluto's position was about a degree apart. Strange. I then checked with Astronomy Magazine's star field for Pluto and that correlated with Sky & Tel's star field, thereby confirming where Pluto actually was.

Then Sam came up with a good suggestion that I download the Palomar Sky Survey Plates (POSS plates) to help in my search. These are actual photographs of the sky which I estimate show objects down to 18th magnitude. He printed the star field for me and that evening I went out into my light polluted Phoenix back yard, this time with my 10" f/8 Dob. And what a difference a dark sky makes - I must have lost 2 to 3 magnitudes between the light pollution and the smaller mirror size. I was able to locate the star field very quickly but had difficulty making a positive ID due to the limited light grasp of my 'scope. Where Pluto should have been was dark at first, but switching from a 7mm Nagler to a 12mm Nagler (and back and forth several times !!) along with averted vision did cause a very (and I mean "very") faint point of light to blink into and out of view. If I had actually spotted Pluto, then the limiting visual magnitude of my 'scope in my back yard is 13.7 - Pluto's magnitude!! But still I wasn't sure .....

My next observing session was 2 nights later, this time back out to the desert with the 13". Also, I had meticulously hand drawn the star field to a large scale from the POSS plates and marked out exactly where Pluto should be. Within 3 minutes (yes, practice does make perfect!) I had a positive ID. There was no trace of any object at the spot of the "blinking" object from two nights previously, and yes, there was a "star" that was not in the POSS plates at the spot where I calculated that Pluto ought to be.

Two nights later, I tracked yet even more movement in this object. Success! Before I totally concede to Sam (he was a terrific help), I must add that Pluto is very, very faint - for me it was about the faintest thing in the eyepiece most of the time that I was looking for it. And I was most impressed by the POSS plates - what detail! Later, I pulled up the Ring (Lyra) and while the image was hopelessly overexposed, it showed up a tiny (16th mag ?) galaxy about an arc minute to the north west that I have never seen in any star charts. The sort of stuff to impress rookies like me!

Anybody out there care to share their experiences with Pluto?

TEXAS STAR PARTY 1997 REPORT
by Tom Polakis

There was a time when a few people from the Phoenix astronomy clubs made the 11-hour drive to the Texas Star Party annually. The attraction was not only the largest star party in the country, but dark, Southwestern skies - the same kind of dark we experience at the Grand Canyon. A recent dispute over costs with the owner of the West Texas site required a move, and left the organizers with a site that is anything but high and dry. The new location is in the Texas Hill Country, about 80 miles West of San Antonio. A quick glance at any of the obvious climate indicators - rainfall, dew point, flora - suggested that this is not going to be nearly the site that the Prude Ranch was. Knowing all this, I decided to make the trip anyway. It's an easy two-hour flight into San Antonio followed by a two-hour drive to the site. Why not meet some fellow amateur astronomers and see what's new in the hobby firsthand?

The first hour of the commute from San Antonio was not encouraging. The scenery, while lush next to Arizona, is an expanse of endless plains - hardly a place where you want to spend several days, especially under that overcast sky. After an hour of driving, a range of small hills approaches, and the highway narrows. The largest town, Uvalde, is bypassed diagonally by a beautiful rural route that connects to the road to the site. As this was a year of healthy rains, the carpeting of wildflowers was spectacular. Another half hour takes you to Leakey, a village of a couple hundred only a few miles from the site.

This year's Texas Star Party was held at the Alto Frio Baptist Encampment. A half mile of eight-foot light fences block the telescope fields from the passing headlights, leaving passers by to wonder if the baptist camp has sold its soul to nudists for the week. Everything at this facility, from the vendor area to the meeting hall to the telescope fields is oversized next to other astronomy conferences. The conference runs like a machine, with good talks, plenty of accommodation space, and a cafeteria. Unfortunately, none of this makes the sky any clearer.

The first person I ran into in the vendor area was Bob Kepple. From 1987 through 1992, Bob edited the bi-monthly "Observer's Guide" with his partner Glen Sanner. Bob indicated that this constellation survey has been much improved, and should be released by Willmann-Bell in book form this Fall. As with other vendors, Bob indicated that business for the past four days was brisk, since everybody was well rested on those cloudy nights. He said he would have preferred clear skies.

Next, I met Emil Bonano, author of MegaStar, the cream-of-the-crop sky charting program for PC's. Although his product is devoid of frills, the careful user will find the least errors in his object data, and the largest number of obscure objects. By the time the star party is over, Emil will have sold an unprecedented 23 copies of this specialty item. Next, I met Barbara Wilson, who would qualify as an observer that can appreciate Emil's product. She has an ambition to observe all of the galactic globular clusters in the sky, and has now logged all but three. Some of these globulars have been discovered only recently, and she is visually observing them in her 20-inch scope. Larry Mitchell, Barbara's observing partner for many years, owns a 36-inch Obsession that dominates the field. It is one of only three that have ever been built. With Larry and Barbara, I toured the south telescope field, where we were treated to a full description of a 30-inch telescope whose mirror is cooled by a jacket of circulating ice water.

Dinner was a refreshing alternative to Prude food - so much so that the kitchen help received a standing ovation. I sat with Astronomy Magazine's Patti Kurtz and Kurt Vanderhorst of JMI, who builds NGT scopes. The two of them were in from a night at Star Hill Inn, and a diversion through Roswell, whose economy is burgeoning due to the "X-Files" mentality that is sweeping the nation.

On the cloudy night that followed dinner, the refreshment booth became the meeting area. I met up with three very bummed looking individuals, who I remembered from my last TSP trip of two years ago. All the way from Belgium, Tom Gyssens and his two friends were hoping to enjoy those dry Southwestern skies, and had been shut out for five straight days. I did my best to try to convince them to give up on TSP, and I'll lend them a telescope to use in northern Arizona.

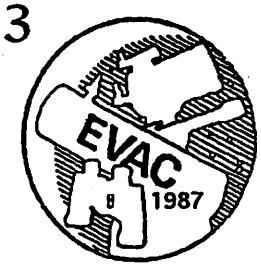
Another repeat meeting from the last trip was with Houston's Todd Hargis, who humbly showed off his drawings. Along with notes that appear as fine calligraphy are stunningly detailed drawings of his favorite objects. He typically does only several per night, but has amassed a nice sketchbook after years of drawings. Not only is it great astro-art; it is also very accurate. The dust lane in NGC 4565 is perfectly placed; and shows the mottling that would be visible in a medium-aperture telescope. Todd has had two drawings published in "Astronomy", but really needs to get material of this quality together in a feature article.

On the field, I met with Jay "The Kid" McNeill, whose

East Valley Astronomy Club

June

prepared by Sam Herchak

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 °< 4:00 AM Saturn/Moon Conj °< 12:30, 1:46, 2:47, 4:03 AM Gal Moons # °ALL MONTH NOTES	2	3 °< 4:45 AM Difficult Mercury/Moon Conjunction	4	5 ● °< 1:15 AM SZ Herculis Minimum #	6 °8:15 PM Venus/Moon Conjunction	7 Deep Sky S Party °< 2:45 AM Europa Eclipses Io #
8 °< 2:24, 3:36, 4:41 AM Gal Moons	9 °< 3:25 AM SZ Herculis °11:03 PM SZ Herculis Sunset 7:37 PM	10 Sunrise 5:18 AM	11 EVAC Meeting °11:00 PM Close Mars/Beta Virginis Conjunction	12 ◐	13 °8:00 PM Mars/Moon Conjunction	14 °< 12:42 AM Ganymede occults Io °< 1:49, 2:23, 4:40 AM Gal Moons °< 1:14 AM SZ Herculis
15	16 °8:01 PM Occ #	17 °< 1:03, 1:15, 2:08, 2:10 AM Gal Moons	18 °< 3:24 AM SZ Herculis °11:02 PM SZ Herculis	19 °< 12:55 AM Io Eclipses Europa	20 ○ °Excellent SW Lunar Libration °7:30 PM SAC Mtg	21 °Summer Solstice
22	23 °< 1:12 AM SZ Herculis Sunset 7:42 PM	24 °< 12:40, 1:36, 1:40, 2:57, 3:58 AM Gal Moons Sunrise 5:19 AM	25 °Mercury in Conjunction with Sun	26	27 ◑ °< 3:23 AM SZ Herculis °11:01 PM SZ Herculis	28 Local S Party °< 4:30 AM Saturn/Moon Near Miss
29	30	1	2 °< 1:31 AM SZ Herculis	3 	4 ●	5 Deep Sky S Party

All Times are Local - add 7 hrs for Universal Time

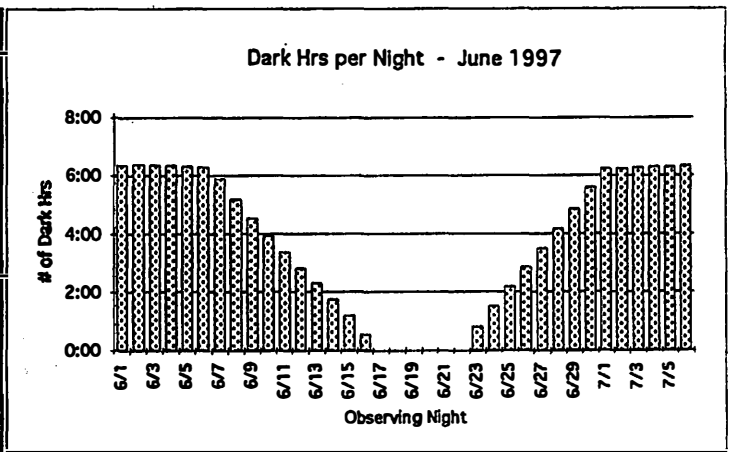
More info on back

Date	Start	Title	Description
6/1/97	12:00 AM	ALL MONTH NOTES	CALENDAR NOTES: An arrow (<) preceeding an event indicates it occurs during the darkness that begins the night before. See the Feb 1997 Newsletter for details on "Occ" events. "Gal Moons" refers to at least 3 events of Jupiter's satellites. Check Sky&Telescope (S&T) and Astronomy (ASTRO) magazines for more info. Planetary "Marathon" possible early in the month–see all nine planets in one night's observing. PLANETS: MERCURY heading toward superior conjunction with Sun, but visible early in month. On the 3rd, it rises at 4:10 AM and by 4:45 is 6 degrees high and 2 degrees N of the crescent Moon. VENUS low in W-NW at sunset, but easy to spot at -4 magnitude. MARS sets after midnight and shrinks to 8 arcseconds and +0.5 mag. this month. JUPITER rises about midnight, and dominates the SE sky. SATURN rises in the SE mid-morning, but is still low at dawn. URANUS and NEPTUNE rise before midnight. PLUTO is up all night, but can only be confirmed by detecting movement over several nights. See detailed finderchart in May ASTRO pg74 or May S&T pg 84. OBJECTS OF INTEREST: Grand Canyon Star Party (Jun 7-14): SZ Herculis.
6/5/97	1:15 AM	< 1:15 AM SZ Herculis Minimum #	Predicted minimum of this intriguing telescopic variable. Changes 2 magnitudes in only 90 minutes! See the Jun S&T, pg 76 for all the details.
6/7/97	2:45 AM	< 2:45 AM Europa Eclipses Io #	Somewhat rare mutual event of Jupiter's satellites. See Jun S&T, pg 78 and Jun ASTRO, pg 69 for the details.
6/20/97	7:30 PM	7:30 PM SAC Mtg	Saguaro Astronomy Club meeting, Grand Canyon University, Fleming Bldg, Rm 105. Camelback and 33rd Ave.

Dark of the Moon Table -- June 1997

OBSERVING NIGHT	START OF DARK		END OF DARK		TOTAL DARK
SUN/MON	6/1 9:14 PM	EOT	6/2 3:35 AM	MR	6:21
MON/TUES	6/2 9:15 PM	EOT	6/3 3:38 AM	SOT	6:23
TUES/WED	6/3 9:15 PM	EOT	6/4 3:37 AM	SOT	6:22
WED/THURS	6/4 9:16 PM	EOT	6/5 3:37 AM	SOT	6:21
THURS/FRI	6/5 9:17 PM	EOT	6/6 3:36 AM	SOT	6:19
FRI/SAT	6/6 9:18 PM	EOT	6/7 3:36 AM	SOT	6:18
SAT/SUN	6/7 9:42 PM	MS	6/8 3:36 AM	SOT	5:54
SUN/MON	6/8 10:25 PM	MS	6/9 3:36 AM	SOT	5:11
MON/TUES	6/9 11:03 PM	MS	6/10 3:35 AM	SOT	4:32
TUES/WED	6/10 11:39 PM	MS	6/11 3:35 AM	SOT	3:56
WED/THURS	6/12 12:13 AM	MS	6/12 3:35 AM	SOT	3:22
THURS/FRI	6/13 12:45 AM	MS	6/13 3:35 AM	SOT	2:50
FRI/SAT	6/14 1:17 AM	MS	6/14 3:35 AM	SOT	2:18
SAT/SUN	6/15 1:50 AM	MS	6/15 3:35 AM	SOT	1:45
SUN/MON	6/16 2:25 AM	MS	6/16 3:35 AM	SOT	1:10
MON/TUES	6/17 3:02 AM	MS	6/17 3:35 AM	SOT	0:33
TUES/WED	none	--	none	--	--
WED/THURS	none	--	none	--	--

OBSERVING NIGHT	START OF DARK		END OF DARK		TOTAL DARK
THURS/FRI	none	--	none	--	--
FRI/SAT	none	--	none	--	--
SAT/SUN	none	--	none	--	--
SUN/MON	none	--	none	--	--
MON/TUES	6/23 9:25 PM	EOT	6/23 10:13 PM	MR	0:48
TUES/WED	6/24 9:25 PM	EOT	6/24 10:56 PM	MR	1:31
WED/THURS	6/25 9:25 PM	EOT	6/25 11:37 PM	MR	2:12
THURS/FRI	6/26 9:25 PM	EOT	6/27 12:17 AM	MR	2:52
FRI/SAT	6/27 9:25 PM	EOT	6/28 12:55 AM	MR	3:30
SAT/SUN	6/28 9:25 PM	EOT	6/29 1:35 AM	MR	4:10
SUN/MON	6/29 9:25 PM	EOT	6/30 2:16 AM	MR	4:51
MON/TUES	6/30 9:25 PM	EOT	7/1 3:00 AM	MR	5:35
TUES/WED	7/1 9:25 PM	EOT	7/2 3:40 AM	SOT	6:15
WED/THURS	7/2 9:25 PM	EOT	7/3 3:40 AM	SOT	6:15
THURS/FRI	7/3 9:24 PM	EOT	7/4 3:41 AM	SOT	6:17
FRI/SAT	7/4 9:24 PM	EOT	7/5 3:42 AM	SOT	6:18
SAT/SUN	7/5 9:24 PM	EOT	7/6 3:42 AM	SOT	6:18
SUN/MON	7/6 9:23 PM	EOT	7/7 3:43 AM	SOT	6:20



EOT = End of Astronomical Twilight MR = Moonrise SOT = Start of Twilight MS = Moonset NOTE: Applies to Phoenix area (Mtn Std Time)

Bernie Sanden

memory makes me feel senile. I made the mistake of saying that I'm slowly going through some large planetaries, and names of planetary nebulae discoverers such as Purgathoffer, Longmore, and Kohutek rolled off of Jay's tongue for the next hour. I wished I could have kept up.

Back in the room, I talked with my roommates, Emil and Ken Drake. Ken's very casual knowledge of many subjects impressed me as much as his non-monopolizing conversation style. He knows Texas in a way that fanatic friends of mine know the Grand Canyon. There are plenty of nooks and crannies, as long as you are not averse to huge drives. He described going to Big Bend National Park to observe one weekend. It was an eleven-hour commute! Ken and I compared astronomy clubs. Houston has a club with a budget - they actually fly speakers in to speak a couple times per year.

Friday saw an interesting meeting about the future of Texas Star Party. TSP co-founder Dave Clark gave a presentation that could not be doubted for honesty. Nobody wanted things to escalate, but it looks bleak for getting back to the Ranch for 1998. Several suggestions were made for sites, and this led into an Oprah-style open forum, with the microphone being passed around the crowd. After several comments that were missing the point about "it's the people, not the skies", Mike Planchett set it straight by pointing out that people drive literally thousands of miles for the skies. At this point, room was pretty well polarized, but this Arizonan can't see how anybody but Texans would put up with this humid site in years to come. Would anybody in this club with Rim access two hours away drive 18 hours to soak in dew?

Friday night, it was kind of clear, but quite hazy. The San Antonio glow was as expected, looking like Phoenix from Sentinel, and the oppressive light of nearby Leakey all but vanished in the absence of the low reflection nebula of clouds. The sky completely closed again after an hour or so of murky conditions.

Saturday morning, there were some good amateur talks, including one by Ana Reyes about observing in Central America, specifically at her home in El Salvador.

After the Saturday night talks and giveaways was the first clear night of the week. Arizona observing makes one forget about eyepieces glazing over with dew as the observing eye approaches, as if by some practical joke. After a few hours of the continuous drone of dew heaters and very few views that compared to even a 13-inch in Arizona, I opted for six hours of sleep instead of three. The report was that it had clouded over again by 3 a.m.

On the way back to the airport, Patti told me about her first year as assistant editor at Astronomy magazine, including a lot about the business of keeping a magazine afloat, and the compromises that need to be made. There is no rise and fall of the work schedule with publication dates. It is simply non-stop hectic, and pressure packed. When I saw Patti off, I immediately missed her enthusiasm and sense of humor. Like Patti, I wish a lot of people at TSP were not so far away. Perhaps if TSP moves back where it belongs, I'll see them again.

CLASSIFIEDS

For Sale:
TeleVue 19mm Wide Field eyepiece, great condition, $90.
Meade 4mm Research Grade Orthoscopic, 20 years old, but in excellent condition, $15.
Contact Robert Kerwin at 837-3971.(9-97)

For Sale:
Meade 2045D SCT 4"
with field tripod,wedge, carrying case.
Also included Series 4000 26mm eyepiece,
Series 3000 9.5 and 6.7mm eyepieces.
Skylight filter and Barlow lens.
Like New! Asking $850 or best offer.
Olympus OM-1N camera
with 50mm f1.4 lens
Mint condition. Asking $350 O.B.O.
Must Sell!! Call 990-1569 eves/wknds
Ask for Steve Roquemore.(9-97)

Telescopes for Sale:
A 10" f4.5 Coulter Odyssey Dobsonian.
Good optics, new rack & pinion focuser, Telrad.
No eyepieces. Good condition. $325 o.b.o.
A 6" F5 Newtonian with 2 eyepieces.
(12.5mm Meade Ortho, 26mm Sirius Plössl)
1 Yr old - like new, metal focuser,
Red with oak stand. $450 o.b.o.
20" f/4.5 mirror - $1900.
- Pierre Schwaar (256-5533)
363 E. Windsor Avenue
Phoenix, AZ 85004-1212(10-97)

BE ON THE CUTTING EDGE,
Be the first to know! Be the first to receive the newsletter. Help wanted! Help put the newsletter together. Volunteers are needed to help staple, fold, label and stamp the newsletter.
See Ken Spruell (264-5847).

Editor Note: Aaron McNeely will be editing the July newsletter. See the back page info box on how to contact him. I'll be attending the 50th anniversary Astronomical League Convention. Thank You.

IN THIS ISSUE
•THE NEW TEXAS STAR PARTY
•FINDING PLUTO
•SATURN'S RINGS
•HALE-BOPP MANIA

Valued member since 3/16/97.
Hope to see you at the meeting June 11th!

EAST VALLEY ASTRONOMY CLUB
Robert G. Kearney, Jr., Editor
2120 W. 8th Ave.
Mesa, AZ 85202

EAST VALLEY ASTRONOMY CLUB—1997

EVAC Homepage—-http://www.psiaz.com/polakis/EVAC/evac.html

President:	Vice-President:	Treasurer:	Secretary:	Properties:
Sheri Cahn	Tom Polakis	Silvio Jaconelli	Aaron McNeely	Ken Spruell
841-7034	967-1658	926-8529	954-3971	264-5847

MEMBERSHIP&SUBSCRIPTIONS: $20.00 per year; renewed in Dec. Reduced rates to *Sky&Telescope* and *Astronomy* available. Contact Silvio Jaconelli, 1700 E. Lakeside Dr. #59, Gilbert, AZ 85234 (602) 926-8529.

CLUB MEETINGS: Second Wednesday of every month at the Scottsdale Community College, 7:30 PM. Normally Room PS 170 or 172 in the Physical Sciences Building.

NEWSLETTER: Mailed out the week before the monthly Club meeting. Send your thoughts and stories to: Bob Kearney, 2120 W. 8th Ave, Mesa, AZ 85202, (602) 844-1732. Email to—starjb@idt.net

CHANGES: Address, Phone Number, or Email: send to Sam Herchak, 145 S. Norfolk Cir, Mesa, AZ 85206, (602) 924-5981. Email to— 76627.3322@compuserve.com

EVAC LIBRARY: The library contains a good assortment of books, downloaded imagery, and helpful guides and is usually brought to the Club meetings. Contact Ken Spruell for complete details, (602) 264-5847.

BOOK DISCOUNTS: Great savings for members through Kalmbach and Sky Publishing. Contact Aaron McNeely, 4402 N. 36th St. #22, Phoenix, AZ 85018, (602) 954-3971. Email to—amcneely@primenet.com

EVAC PARTY LINE: Let other members know in advance if you plan to attend a scheduled EVAC observing session. Contact Robert Kerwin, (602) 837-3971. Email to—p24493@email.mot.com