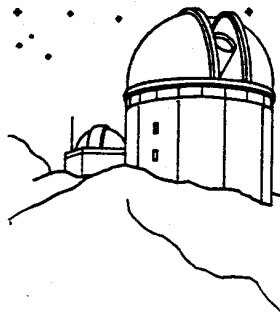


EPHEMERIS

OF THE SAN JOSE ASTRONOMICAL ASSOCIATION.



MAY 1988

* MAY 7TH *
* THE SJAA PRESENTS: *
* THE GREAT BAY AREA ASTRONOMICAL AUCTION *

- MAY 7 8TH ANNUAL ASTRONOMICAL AUCTION. THIS YEAR WILL FEATURE A FLEA MARKET DURING THE AFTERNOON, SILENT AUCTION FOR LARGE OR SPECIALIZED ITEMS, AND THE TRADITIONAL AUCTION IN THE EVENING. LOCATED AT THE LOS GATOS RED CROSS. FLEA MARKET STARTS AT 2:00 PM WITH THE AUCTION STARTING AT 6:00 PM.
- MAY 14 FIELD EXPEDITION FOR ASTRONOMICAL OBSERVATION TO HENRY COE STATE PARK. DUSK TILL DAWN.
- MAY 21 BOARD MEETING AT 6:30, WITH THE INTRODUCTORY ASTRONOMY CLASS TO FOLLOW AT 8 PM.
- MAY 28 NO SJAA ACTIVITY PLANNED. RIVERSIDE TELESCOPE MAKERS CONVENTION AT BIG BEAR LAKE, MAY 27 - 30.
- JUNE 4 GENERAL MEETING, WITH PROGRAM TO BE ANNOUNCED. ANY VOLUNTEERS?
- JUNE 11 FIELD EXPEDITION FOR ASTRONOMICAL OBSERVATION TO GRANT RANCH COUNTY PARK
- JUNE 18 FIELD EXPEDITION FOR ASTRONOMICAL OBSERVATION TO FREMONT PEAK STATE PARK.
- JUNE 25 BOARD MEETING AT 6:30, WITH THE INTRODUCTORY ASTRONOMY CLASS TO FOLLOW AT 8 PM.



FIELD OF VIEW
BY: JOHN GLEASON

THE GREAT ASTRONOMICAL AUCTION

Can you believe it? Eight years have passed since our first SJAA ASTRONOMICAL AUCTION. With so many new members present in the club, I thought it would be appropriate to look back at the roots of the auction.

Eight years ago the SJAA Board of Directors kicked around the idea of having a permanent observing site and telescope for the exclusive use of SJAA members. It would provide a central focus (pardon the pun), for the SJAA to conduct its public programs, as well as having an observatory housing a large telescope. One of our members was building a 30-inch telescope and wanted to find a permanent observatory site for it. To fund the project the astronomical auction was created. The first auction, held in 1980 was an overwhelming success and has seen steady growth in the last eight years. Last year's auction was the biggest ever with record attendance and literally hundreds of items up for bid. Complete telescopes, mountings, tripods, eyepieces, books, star charts, and photography are just a sample of what can be found at the auction.

With so many items available, it was decided this year to have a Swap-Meet between 2:00 and 5:00 PM. The Swap-Meet is designed to handle those items of "limited or highly specialized application". In the past, these items often took up valuable auction time, with the auction running very late into the night. Tables will be made available to display your items during the

Swap-Meet. Big-Ticket items like complete telescopes should be offered in the silent auction. A silent auction is where a sheet of paper is attached to the item and bids are written there. The highest written bid will be made final at a chosen time with the winning bidders announced.

I cannot stress enough the importance to pre-register each of the items to be auctioned with our auction coordinator, Jim Van Nuland. (Please see the pre-registration information on the back of the enclosed auction flier.) Don't get mad at Jim if he gives you the evil eye when handing him your list late on auction day. Each of your items are entered into the computer and a unique item number is assigned.

A \$1 donation is requested during registration. Each registrant is assigned a bidder number that you need to display when you bid on an item. If your bid results in the sale of the item, your bidder number is entered into the computer along with the item sold and the dollar amount. You can see that Jim will be busy guy that day!!!

The auction is also often visited by such celebrities as "One Buck" Freeman, Jim "The Price Slasher" Eiselt, and Tom "The Fastest Check Book in the West" Parker. Kevin Medlock, our auctioneer for the past 7 years will again provide his ubiquitous auctioneering talents. And Oh yes, your editor will make his annual guest appearance!

Even though the SJAA does not yet have a permanent observing site or observatory, the auction continues to be the only source of revenue into the observatory fund. It's a lot of fun, and I suggest that you get there early for easy parking and a good seat.

APRIL 16TH GRANT RANCH STAR PARTY

I failed to get the April 16th Grant Ranch star party listed in the last bulletin. Realizing this too late, I was successful in persuading an old friend to conjure up a little precipitation via the old rain dance technique. I think things got a little out of hand, with clouds wiping out the entire new moon week! Sorry about that!

THE 1988 MESSIER MARATHON

Don Machholz reports, "Despite high clouds, five members of the SJAA came out to Uvas Reservoir on March 19 for the SJAA Messier Marathon. Over 50 Messier Objects were observed by one team, while a few individuals observed a couple of dozen objects. Next year March 11 would be perhaps the best time for the Marathon, which will be held at a different location. Uvas Res. has a high SE horizon, this made some of the morning objects impossible to observe."

At my home in Newark on the night of the 20th, your editor was successful in finding 523 NGC objects with the computer controlled Celestron 11 in a 5 hour period. That's over 100 objects an hour! What a great advertising opportunity!

20TH ANNUAL RIVERSIDE TELESCOPE MAKERS CONFERENCE

If BIG events are your cup of tea, then you will not want to miss the 20th annual Riverside Telescope Makers conference. Held this Memorial Day weekend, May 27 - 30, the conference is held at Camp Oaks, which is located 5 miles east of Big Bear City, Big Bear Lake, on Highway 30 at Lake Williams Road. This location is 50 miles northeast of Riverside, high in the San Bernardino mountains. The YMCA camp is located at an elevation of 7300 feet. The Special event this year is the 20th anniversary celebration. The conference organization committee is looking for people who have attended all 20 conferences to participate in a special program. Despite the fact that this years conference is held close to a full moon, there are usually hundreds of telescopes on display as well as many commercial exhibitors. The RTMC allows you the unique opportunity to see what's new in amateur astronomy, all in one location. I swore last year that I wouldn't go back, but I always seem to suffer from Riverside Syndrome (RS) around this time of year. RS is that burning, itching feeling you get in your wallet as you begin to think about those bargains at the Celestron tent!

IT'S BACK TO COE PARK

Henry Coe park is on the venue this month for our May 14th field expedition for astronomical observation. To get to the park take Hwy 101 south towards Morgan Hill then take the East Dunne exit. Continue east towards the hills (around and past Anderson Reservoir), for about 12 miles to the park. Past the park entrance you will see old ranch type buildings on your right and a horse trough. The gate to the observing site will be on your left. It will be

locked, but use the club combination 4565. Always lock the gate after you enter. If arriving after dark, please park outside the gate and hike in first to find an observing spot, please. Just a short distance up the hill beyond the gate is where the SJAA sets up telescopes. This is not one of my favorite sites.

JUNE 4TH SPEAKER NEEDED

We are currently looking for a speaker to present a program for our June 4th General Meeting. How about one of the members volunteering? This is your chance to become a big-time celebrity. Telescope making, deep-sky observing, planet watching are just a few topics that we have not heard about in a long time. Perhaps someone would like to talk about the upcoming prospects for observing the planet Mars this August and September. In case you didn't know, this year's Martian opposition could be the best in our lifetimes. Observing and photographing Mars in '88 would cover the techniques to get the most out of your telescopic observations no matter what size your telescope is. Maybe several members could team-teach a nice presentation? Please give Tom Ahl or Jim Van Nuland a call if interested. (see back page for telephone numbers)

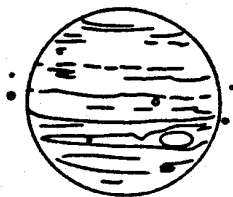
GROWING PAINS

As I enter into my 5th year as your Editor, work and my celestial photography are taking a better part of my free time. Producing the Ephemeris is sometimes less than exciting. With the rush to get the Ephemeris into the hands of the members on the first of the month a number of mistakes and typos get by my proof reading.

Last month over 300 bulletins were mailed to SJAA members. This month there were over 325 mailings. In addition, I have been receiving a number of member contributions to the Ephemeris, resulting in 5 and 6 page issues.

I want to take this moment to personally thank those of you who have been patient and understanding toward the amount of effort that goes into producing the Ephemeris. Each month I receive several letters from members describing how much they enjoy the Ephemeris. This has certainly encouraged me to continue my role as Editor of what I consider to be one of the best astronomy club newsletters. Because of my own personal schedule, I do not always find it possible to attend every SJAA function. One of the problems with accepting any position in the SJAA, is that every weekend the SJAA has something scheduled. Four weekends out of the month devoted to amateur astronomy is a little too much for me. Therefore I am looking for an individual(s) who would be interested in acting as a "Reporter(s) at large" for the Ephemeris. Star party reports, General Meeting recaps, and Board Meeting news would greatly enhance the Ephemeris. I hope that one of our new members would be interested in this opportunity. Please give me a call. You will find my number on the last page of the bulletin.

Oh yes, does anyone have Page Maker software that they would like to donate? I have direct access to a laser printer to generate an all new Ephemeris format.



THE PRETORIA EYEPIECE BY: JIM VAN NULAND

A new ocular design was presented some months ago in Telescope Making number 29. Called the Pretoria eyepiece, it deliberately introduces coma corresponding to an f/4 parabola, but of opposite sign, thereby eliminating the largest and most troublesome aberration in fast telescopes. It has now been put into production by University Optics, Inc. University is to be commended for putting a specialized eyepiece into production, given that it may not be useful in the majority of telescopes -- Schmidt Cassegrains.

At 28mm focal length, it provides a 3 degree field in my 4.25 f/4 with 7mm exit pupil and 15 power. The Pleiades never looked so fine! The Beehive hummed! Orion's sword was never so sharp! Comparisons with a 28mm Orthoscopic and 20mm Erfle showed the clear superiority of the Pretoria. Coma and astigmatism are totally absent. Contrast is excellent, as the ocular is multi-coated. In a 10 inch f/3.8, it gave superb images across the field; the owner was quite favorably impressed. Another observer simply made gasping noises.

Compared to some other highly-advertised oculars, the Pretoria has no exit pupil aberrations, is relatively light weight, and is much less costly. It is totally comfortable to use; beginners had no difficulty with it. The >50 degree apparent field is most pleasant without need to reposition one's eye to look around. It has sufficient eye relief to accommodate most eyeglasses. It gives the largest true field, and lowest power, that is practical at f/4.

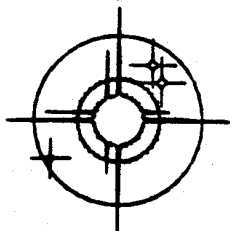
One would expect "reverse" coma in slow telescopes, but a quick comparison in a 100mm aperture f/10 (Meade S-C spotting scope) on the Pleiades and Venus was very favorable to the Pretoria. More rigorous comparisons are needed.

The eyepiece is built in 2-inch format with a 1.25 inch adaptor (included) threaded into the bottom. It differs from the prototype shown in T.M. in that the prototype was 1.25" as far up as is possible (the Barlow portion). Thus the production version needs more in-travel than might have been the case. In fact, when I tried it in a standard Odyssey-I, I could not rack-in far enough to obtain focus. This is a pity, as there's no real advantage to the larger barrel. Perhaps this Odyssey has a short mirror?

The other difference from the prototype is that the production version has a 7mm eye cup at the top -- the prototype was flat. What adds to the mystery is that three other University oculars have a threaded, removable eye cup! I decided not to machine it off -- it is really helpful to have the eye cup if you don't need your glasses. I made up a corrector lens that fits into the eye cup, and that works very well.

So catch me at a star party and we'll make some more comparisons. As I (nearly) always say, try before you buy. I'm glad that I ignored my own advice on this one. It might be whether it's somehow bizarre to put a \$195 ocular in a \$40 telescope. My own answer is, yes it's bizarre, and also well worth it. The field has never been so sharp wall to wall. I love it! Anyway, the \$40 was in 1978 dollars (still bizarre).

COMET COMMENTS BY: DON MACHHOLZ



Comet Liller remains in our morning northern sky, slightly brighter than predicted. One new comet has been discovered, but it is now fading and beyond reach of most small telescopes.

Comet Levy (1988e): David Levy of Tucson, Arizona discovered this, this fourth comet, on March 19. He was using his 16", f/5 reflector when he found this object, not far from the globular cluster M 15. This is David's third comet in 15 months, coming 162 hours after his previous find last October.

When found the comet was magnitude 11 and more than 2 Astronomical Units (AU) from both the earth and sun. We now know that it was closest the sun late last November at 1.15 AU. It was discoverable, but not found, from the Southern Hemisphere last Autumn, traveling from 38 degrees south of the sun on Sept. 15 down to 33 degrees south of the sun on Oct. 30. Meanwhile, it brightened from mag. 10 to 8.5 during that time. Escaping detection in the southern morning sky, Comet Levy continued northward but remained in the solar glare until shortly before discovery.

Comet Liller (1988a)

DATE	R.A. (1950)	DEC	ELONG	MAG	NOTES
04-24	01h 48.8m	+58°55'	46°	6.8	This comet is so far
04-29	02h 20.5m	+64°40'	50°	6.9	north that it should
05-04	03h 11.4m	+70°02'	54°	7.1	be up all night long.
05-09	04h 34.9m	+74°04'	58°	7.3	But the evening sky
05-14	06h 31.2m	+75°11'	62°	7.5	is favored over the
05-19	08h 18.2m	+72°42'	65°	7.7	morning sky. The
05-24	09h 28.5m	+67°53'	68°	8.0	orbital period is
05-29	10h 11.8m	+62°13'	70°	8.3	3880 yrs. Its mov-
06-03	10h 40.2m	+56°24'	71°	8.6	ing at a speed of
06-08	11h 00.2m	+50°47'	72°	8.9	24 miles per second.

SEEKING COMETS

Since the early 1800's there have been times when comet discoverers were financially awarded for each find. Such programs usually lasted only a few years each.

In 1831 Fredrick VI, Kind of Denmark, began giving a gold medal for each telescopic comet find. About thirty medals were so awarded during those 18 years.

Later the Vienna Academy of Sciences offered a gold medal, but this was discontinued about 1880.

In 1881 the American H. H. Warner offered a \$200 cash prize for each comet discovery. E. E. Barnard found 14 comets in the first decade during which this award was offered, and he is often quoted as saying that his house payments were made with the comet money. This could very well be true, for in the 1880's a "little frame cottage" could be built in Nashville, Tennessee for under \$2000. Incidentally, in today's economy that \$200 award would be worth \$2600, according to the reference desk of the San Jose Library.

From the 1890's through the 1950's the Astronomical Society of the Pacific awarded the Donohoe Comet Medal for both visual and photographic comet discoveries.

In 1977 Roger Tuthill instituted the Tuthill Comet Award to any American who visually discovered a comet. Merlin Kohler was first to receive the \$250 prize with his find in Sept. 1977. I was the next person in line: for my comet discovery of Sept. 1978 I received not only the cash but also a fine plaque.

In 1979 it was also made available to Canadian observers so Rolf Meier of Canada, who had not received the prize for his 1978 comet, was given the cash and the plaque awards for his 1979, 1980, and 1984 finds. Michael Rudenko and David Levy received plaques in 1984, as I did in 1985 and 1986. Levy received what may be the final plaque for his comet discovery of Jan. 1987. A recent change in the qualifications now state that the comet must become brighter than mag. 6.9 before the plaque is awarded and brighter than mag. 3.9 before the \$250 cash is given.

As in sports, so in comet hunting, the dividing line between amateur and professional is debatable. What determines whether a discoverer is an amateur or a professional? This question has never been easy, but the answer depends more upon the discoverer's activities at the time of discovery than his occupation.

If a person who is paid to study the sky photographs and recognizes a new comet, or if he (or she) visually finds one through a telescope while working on a project, this is a professional comet discovery. However, if during off hours the professional astronomer uses the same instrument, or his own from his backyard and finds a comet, this would probably be recognized as an amateur find. Not everyone would agree along these lines, so let me present some other views.

"Intent" is sometimes used as a dividing line, with accidental finds being made by professionals and intentional finds by amateurs. This is generally true, but the Shoemakers (professionals) are specifically seeking comets and some amateurs aren't.

"Method" can also be the criteria - photographic vs. visual finds. But now we're seeing amateurs making photographic finds.

"Equipment" has become a difficult judge since some amateurs have better equipment than the professionals.

"Ownership of equipment" doesn't work since many amateur comet hunters, especially in the past, used instruments lent to them by others.

Retirement and unemployment give some amateurs an advantage over those of us who work to support families, yet they are still considered amateurs.

MAY STARRY NIGHTS BY: RICHARD STANTON



METEORS - The month of May brings us only one meteor shower, the Eta Aquarids. This event is considered a major shower with a single observer hourly count rate of 20 meteors. The predicted maximum for this shower is May 4th. The Eta Aquarids has a duration of 3 days during which period the hourly count should hold to at least 1/4 strength of the maximum. Unfortunately the shower occurs very near the full moon which will reduce the fainter meteors visibility.

BLUE MOON - May the 31st will be the second Full Moon in one calendar month ... a blue moon. The period between blue moons ranges from less than 2.5 years to about 3 years. The last blue moon was in July of 1985. The moon actually only appears blue if seen through something like volcanic dust or sand storms or the smoke of a forest fire and even then may show almost any color. While researching various mythologies I have discovered only one that related to a

blue moon. If two moons occur in a single calendar month, especially May, there will be floods and other calamities." The epistemology of this particular omen was not given. Anybody out there planning to get married this month?

MINOR PLANETS - Three of the brighter asteroids will achieve opposition during May. In order of opposition date they are:

27 Euterpe, Opp. May 01, Mag. 10.2, diam. 108 km

May 09 ... R.A. 14:24 Dec. -12:12

19 14:16 -11:34

29 14:09 -11:08

15 Eunomia, Opp. May 11, Mag. 9.7, diam. 272 km

May 09 ... R.A. 15:14 Dec. -33:40

19 15:04 -32:51

29 14:55 -31:50

43 Ariadne, Opp. May 27, Mag. 9.5, diam. 85 km

May 09 ... R.A. 16:33 Dec. -25:04

19 16:25 -24:26

29 16:16 -23:37

Vesta also continues to be available for early evening viewing as it rides along in the constellation Cancer.

May 10 ... R. A. 08:33, Dec. +23:51

20 08:47 +22:59

30 09:02 +21:57

On May the 15th Vesta will be about 3.5 degrees north of M44, the Beehive. Anybody want to try for a wide-field astrophoto?

LUNAR GRAZES & OCCULTATIONS - On May 3rd the 4.8 magnitude 1 Scorpio, ZC No. 2263, will reappear from occultation on the lunar dark limb at position angle 323 degrees. The predicted time is 11:22 U.T. Also, there is a possibility of a lunar graze visible in our neighborhood on May 25th at 05:58 U.T.. The 6.2 magnitude star ZC No. 1660 will be participating in this lunar dance.

VENUS - May is a wonderful month to do some observing with Venus. The planet will begin the month at it's brightest magnitude of -4.5 and will dim in the last week of the month down to -4.2. May will find Venus at it's highest Northern track at +27.7 on May 6th. This is the highest Venus will have been in several decades. It will start the month with a disk diameter of 33.58" and will end the month at a diameter of 53.08". The time it takes for light to travel from Venus to the Earth will reduce from 4.01 minutes on the 3rd to 2.61 minutes on the 31st as the distance between the two planets shrinks from 46,073,640 miles down to a mere 29,142,236 miles. The planetary disk will be thinning down to a crescent by the end of the month, from 32% to 6% phase. Try observing Venus through various filters to help diminish the brilliance or observe during the twilight period. Don't miss the opportunity to show your neighbors what that bright "star" really looks like. It might even motivate them to turn their lights out when they see you out with your telescope.

Good observing until next time.

(Thank you Richard for your continuing contribution to the Ephemeris - JG)

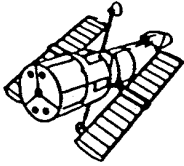
ASTRO ADS

10-INCH COULTER F/4.5 Newtonian reflector. With Novak spider and secondary, massive German equatorial mounting (portable), very solid with setting circles, felt lined, spring loaded saddle rings, 40lb hardened steel counter weight, modified DS-16 RA drive. Dec motor on modified tangent assembly. Complete with Telrad finder, Celestron 8 x 50 right angle illuminated polar finderscope, 32 mm Televue Plossl, 18mm Kelnor eyepieces, telextender for projection photography, 12.5 mm cordless illuminated eyepiece, low profile Lumicon easy guider, light pollution filter, Lumicon dual-star dual-axis drive corrector. A outstanding, very stable telescope for astrophotography. All components break down into easily transportable pieces. \$2000 Contact: Dan Beck, Day: 408-438-2900 M - Th, Home after 7 pm: 408-338-3001. 5/88

C90 SPOTTING SCOPE (orange) in mint condition with case. Included with scope are star diagonal, 12, 18, and 30mm eyepieces. Also; porro prism, barlow lens and 9-21mm zoom lens eyepiece. Plus: Celestron photographic tripod. Best Offer! Contact: Hal Zangari, 415-365-1843. 3/88

SPACE PROGRAM UPDATE BY: BOB FINGERHUT

SHUTTLE TESTING CONTINUES



A short duration test of the shuttle solid motor joint was conducted on March 21. The successful test had intentional flaws in the joints which were heated to 120 deg. F. A shuttle liquid main engine recently completed a test series designed to demonstrate SSME design life. The tests included 55 engine starts on some components and 7.5 hours on the powerhead, lines, ducts, valves, and most of the avionics. A escape system for the shuttle has been selected. It consists of a curved pole that the astronauts can slide down in level flight after solid motor burn out. The escape system will be installed in Discovery in July. Problems with debonded insulation on the shuttle solids for the next launch has eaten up all contingency time for the Aug. 4 target launch date. NASA is expected to set another date soon.

WHICH SPACE STATION WILL BE APPROVED?

As reported last month, under the new national space policy, NASA was ordered to lease space on a commercial man tended orbiting space facility. This month Congress has blocked NASA from issuing a request for proposals. They say that NASA must chose between the space station, the leased commercial space platform and the Spacehab shuttle module and justify their decision to congressional satisfaction. This is shaping up to be the make or break year for the space station program.

NASA'S PLANS TO REVITALIZE SPACE SCIENCE

First, NASA wants to launch the payloads already under way, the Hubble Space Telescope, Galileo to Jupiter, Ulysses to explore the Sun's poles, the Mars Observer mission, and Magellan to radar image Venus. Second, NASA wants a new start each year. In Fy 1989 NASA is asking for the Advanced X-ray Astrophysics Facility, in Fy 1990 the Comet Rendezvous/Asteroid Flyby, and the Cassini mission to Saturn. In Fy 1992 a large Earth-viewing platform, and in Fy 1993 a lunar geoscience orbiter. The comet chosen for flyby is Wild-2. The launch would be in Oct. 1994 and arrival at Wild-2 would be Feb. 2001.

HERMES SPACEPLANE DEFINITION PROGRAM BEGINS

The full-scale definition phase for Europe's Hermes began in April. Two flight models are to be built. The initial unmanned flight is planned for mid 1997 with manned flights to start in the first half of 1998.

PRESIDENTIAL CANDIDATES TAKE SPACE PROGRAM POSITIONS

Some of the candidates have answered my requests for their positions.

George Bush:

1. Would re-establish the national Space Council.
2. Endorsed Mission to Earth goal of the Ride report.
3. Endorsed development of an unmanned heavy lift launch vehicle.
4. Supports the space station program.
5. Said that the Lunar base and manned exploration of Mars might be too expensive.
6. Has not taken a position on the new National Space Policy.

Jessie Jackson:

1. Called for continued unmanned exploration of the solar system.
2. Urged a joint study with the Soviets to determine the need for a space station.
3. Favors discussions with the Soviets regarding the feasibility of sending a international crew to Mars.
4. Wants to stop the militarization of space.
5. Wants to share U.S. space technology with other nations for the benefit of all humanity.

Michael Dukakis:

1. Wants a commitment to an imaginative well-designed space policy that will promote the competitiveness of American industry.
2. Wants to explore space for the benefit of all mankind.

3. Wants to reinvigorate the space science program. Supports already approved programs.
4. Against the "Orient Express" (X-30) program.
5. Wants to determine if there is a lower cost alternative to the space station. Favors a technologically sophisticated space science and engineering laboratory.
6. Supports a replacement orbiter for the Challenger and the development of new expendable launchers.

Albert Gore:

1. Made space the theme of a major campaign speech. Called for a major expansion of our civil space efforts.
2. Favors two of the Ride Report goals. Mission to Earth and manned exploration of Mars.
3. Wants NASA to have a larger budget for space than the Department of Defense.
4. Served on the House Science and Technology committee from 1977 to 1984. Has been a member of the Senate Commerce, Science and Transportation committee since 1985.

AN OVERVIEW OF OBSERVING SITES BY: DON MACHOLZ AND RICH PAGE



This month we review the three Vista Points which sit along Hwy 280 in the San Carlos area. The concept of using these sites is not our own, it was suggested by Russ Kirk of the San Mateo Astronomical Society. He often uses the southernmost site, the one we'll call Site #1.

These locations are easy to get to; Vista Point #1 is 1.5 miles north of Edgewood Rd., Site #1 is 1.0 miles north of #2, and Site #3 is another 1.5 miles further north. Sites #1 and 2 are reachable only from the south, while Site #3 is accessible from both north- and south-bound travel along Hwy 280. Those from the north who want to use the first two sites will have to head south to Edgewood Rd., exit the freeway, and then enter northbound. From San Jose they are a 40 minute drive, if there isn't much traffic.

Let's discuss the things these three sites have in common. None have night lighting, but we find, at every area, several cars of "parkers". These people usually stay inside their car and do not bother the astronomers. But their headlights can be difficult. We found that the CHP and County Sheriff drove by often, but they did not even stop. Astronomy is allowed here. There are no restrooms at these Vista Points. Low clouds and fog can also be a problem, as can the wind.

Site #1 sits at 700 feet elevation, about a hundred feet above the freeway. It has twelve parking spaces (facing NW) and a small hilltop extending north from the parking lot. If you have hand-carry equipment you might want to walk up the path to the hilltop, but the few trees there might limit your views. For heavier equipment you would probably want to set up on the large sidewalk south of the parking lot.

From here the horizons are all less than 15 degrees high, with the WNW being the highest and a flat horizon NE-E-S. A few large shrubs just south of you might block portions of the southern sky. This site is the darkest of the three. Even though you can see city lights from the NE through the SE, the Milky Way is easily visible overhead.

Site #2, the highest (800') and the largest, has 28 parking spaces in a ring around a grassy crown measuring 100' across. The horizons are flattest from here, but cars entering the lot will be bothersome. Parking your vehicle on the outside of the ring and setting up beyond that exposes you to car lights from Hwy 280, a half mile away. Of the three sites, this is the brightest and windiest, but for good views of Venus rising or a bright comet setting this the place to be.

Site #3, unlike the other two, is west of the freeway. It sits at 600' elevation and has the highest horizons, 5-15 degrees all the way around. There are 16 parking spaces here and a paved trail running to the west, then splitting north and south-good locations for handheld equipment. The overhead Milky Way is visible, but light pollution climbs to perhaps 25 degrees high in the N-E-S, even though no city lights are seen directly.

It might seem strange to travel to a highway Vista Point to view the stars, but give these a try. One might become your favorite site.

The
San Jose Astronomical Association's

8th ANNUAL
**Bay Area
Astronomical
Auction**

Will be:



Saturday May 7th

at the Los Gatos Red Cross bldg.

16011 Los Gatos-Saratoga Rd.

Doors will open at 1:00 PM

Swap-Meet 2:00 - 5:00 PM

Auction 6:00 pm -10:00 PM

Please pre-register all items to be auctioned

The 8th annual Bay Area Astronomical Auction is approaching, so now is the time to start looking around for those items not earning their space, or brought back from Riverside, or whatever is astronomical or telescope-making related that you would like to earn some \$ from.

Pre-registration makes it easy. Just fill in the form below or a copy of it. List each different item you have. If there are several of one item, use a single line with the quantity shown. Indicate a minimum bid, even if you wish to let it go really cheap. Indicate the % of the selling price going to the SJAA (minimum 10%). If you wish you may make an outright donation which is now TAX DEDUCTABLE. All proceeds go to further public education in astronomy.

Next, and most important, MAIL the completed form to Jim Van Nuland at 3509 Calico Ave., San Jose, Ca. 95124. You may wish to keep a copy for your files. Jim will assign you a bidder/seller and item numbers, and return the form to you promptly. If you omit a SASE Jim will assign numbers but hold the form for your pickup at the auction. There will be little time to number everything then, so please send a SASE with your pre-reg form.

You will now have the numbers to label each item before the day of the auction. Use self adhesive labels and please indicate the minimum bid on each item.

To accommodate the increasing volume of "good stuff" we will have a Flea Market or Swap-Meet in the afternoon from 2:00 to 5:00 pm. The auction will run from 6:00 pm until we finish.

Items having a realistic minimum bid of \$5 or ^{less} ~~so~~ probably should be swap-meet material rather than the main auction as time is limited.

Items of limited or highly specialized application, even if valued above the \$5, should be considered for the swap-meet. A silent bid option will be available, where a sheet is attached to the item and bids are written there. A higher bid is entered and the previous deleted. Results of the silent auction will be made final at the break and the winning bidders announced. The high ticket items such as complete telescopes should be entered in the silent auction.

DIRECTIONS TO THE AUCTION

Take HWY 17 (880) South towards Santa Cruz. Take the Los Gatos-Saratoga Rd (HWY 9) exit and continue West about 6/10 Mi. Turn right on Rose Ave. then another immediate right into the parking lot. The address is 16011 Los Gatos-Saratoga Rd.

Doors open at 1:00 pm. a \$1:00 donation is requested for registration to buy or sell. Refreshments will be available.

1988 SJAA AUCTION PRE-REGISTRATION FORM

BIDDER # _____		NAME: _____ CLUB: _____		
		ADDR: _____ CITY: _____ ZIP: _____		
ITEM #	QTY	MIN BID	SJAA %	DESCRIPTION (40-50 CHARACTERS...)

GENERAL MEETINGS

Once a month the SJAA holds a General Meeting at the Red Cross building in Los Gatos California. Guest speakers are invited to give talks on a wide range of astronomical topics which have included equipment and slide presentations. This is also the location for the SJAA's "Indoor Star Parties", informal sessions where members gather to share their astronomical interests. Whatever your interest, astrophotography, deep sky observation, telescope making, or just arm chair observing, you'll find a friendly atmosphere at all of our meetings.

The Red Cross building is located at 18011 Los Gatos-Saratoga Rd. From Hwy 17 take the Hwy 9 (Saratoga) exit and continue west up the Los Gatos-Saratoga road for about 0.6 miles. Turn right at Rose Ave. Then turn right immediately into the parking lot of the Post Office and Red Cross building. Doors open at 7:45 PM, with General meetings beginning at 8 PM. General Meetings are currently held on the 1st Saturday of each month.

INDOOR STAR PARTIES

Occasionally there are a few Saturday evenings set aside for informal gatherings of amateur astronomers to share their common interest in astronomy, to "talk shop", or to simply enjoy the company of friends. Members are encouraged to bring in telescopes and accessories to share with the group. Typically there will be several telescopes operating in the parking lot or there will be a slide show of recent astrophotography and star party events in progress in the meeting hall. The SJAA also holds its board meetings during this time as well as an introductory astronomy workshop that is conducted once a month.

FIELD EXPEDITIONS

On the Saturdays closest to the New Moon, the SJAA will conduct a "Star Party" for astronomical observation at a designated location. Several times a year these star parties are held close to San Jose while others are held as far away as Yosemite national Park. Watch the EPHEMERIS for star party locations.

FREMONT PEAK STATE PARK

The most popular of locations for bay area amateur astronomers is Fremont Peak State Park. Located 70 miles south of San Jose near the town of San Juan Bautista, Fremont Peak rises nearly 3000 ft. above the valley floor. For two decades amateurs have gathered at the "Peak" during New Moon weekends for serious deep sky observing and astrophotography. To get to Fremont Peak for San Jose, take Hwy 101 south towards Salinas. Then take Hwy 156 east (San Juan Bautista exit) for 3 miles to a yellow flashing light. Turn right and go about 1/4 mile to where the road reaches a "Y". Veer left for about 25 yards and then go right. (Watch closely for the Fremont Peak sign) Follow the Canyon Road for about 11 miles up into the park. The SJAA sets up in Coulter Camp. It's visible on your right as you first drive onto the main area of the park. Expect to find a lot of astronomical activity here every clear New Moon weekend. Arrive early if you are setting up equipment. 50 to 100 telescopes are not uncommon at Fremont Peak during the summer months.

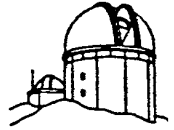
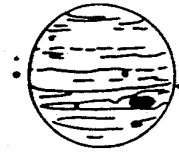
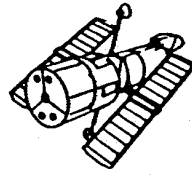
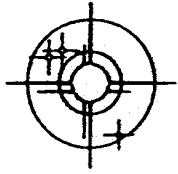
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* Gleason, 5361 Port Sailwood Dr. Newark, CA. 94560. *
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SAN JOSE ASTRONOMICAL ASSOCIATION MEMBERSHIP APPLICATION

MEMBERSHIP ONLY: \$10 MEMBERSHIP/S&T: \$26 JUNIOR (UNDER 18): \$18

Name: _____

Please bring this form to any SJAA meeting, or send to:

Address: _____

Jack Peterson, Treasurer
San Jose Astronomical Association
1840 Yosemite Dr.
Milpitas, CA. 95035

Telephone (____) _____

MAKE CHECKS PAYABLE TO "SJAA"

Telephone: (408) 262-1457

Please check type of membership and if New or Renewal

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