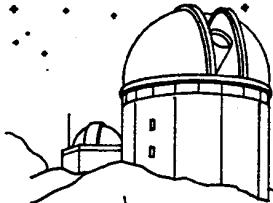


EPHEMERIS

OF THE SAN JOSE ASTRONOMICAL ASSOCIATION



MARCH 1988

* MARCH 5TH 8 PM *
* DR. JACK MARLING *
* "FILTERS FOR OBSERVATION *
* AND ASTROPHOTOGRAPHY" *

- MARCH 5 GENERAL MEETING 8 PM LOS GATOS RED CROSS BUILDING.
"FILTERS FOR OBSERVATION AND ASTROPHOTOGRAPHY" WILL BE
PRESENTED BY DR. JACK (LUMICON) MARLING.
- MARCH 12 FIELD EXPEDITION FOR ASTRONOMICAL OBSERVATION TO FREMONT
PEAK STATE PARK. DUSK TILL DAWN GALAXY HUNTING
- MARCH 19 MESSIER MARATHON AT UUAS RESERVOIR. SEE DETAILS INSIDE.
- MARCH 26 BOARD MEETING AT 6:30 PM WITH THE INTRODUCTORY ASTRONOMY
CLASS FOLLOWING AT 8 PM. LOS GATOS RED CROSS BUILDING.
- APRIL 2 GENERAL MEETING 8 PM. DR. MARTIN WALT, DIRECTOR OF
RESEARCH AT LOCKHEED'S PALO ALTO RESEARCH LABS: PROSPECTS
FOR THE U.S. SPACE PROGRAM.
- APRIL 9 FIELD EXPEDITION FOR ASTRONOMICAL OBSERVATION TO FREMONT
PEAK STATE PARK. DUSK TILL DAWN.
- APRIL 23 ASTRONOMY DAY. WE HOPE TO HAVE ONE OR MORE PUBLIC
OBSERVING SESSIONS, TO PUBLICIZE ASTRONOMY AND OBSERVING.
- APRIL 30 BOARD MEETING AT 6:30 PM, INTRODUCTORY ASTRONOMY CLASS AT
8:00. NOTE THAT IS THE 5TH SATURDAY; THE CLASS WAS MOVED
DOWN TO ACCOMMODATE ASTRONOMY DAY.
- 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. MORE DETAILS INSIDE.

FIELD OF VIEW BY: JOHN GLEASON

MARCH 5TH GENERAL MEETING



Please join me in welcoming as this evenings speaker Dr. Jack Marling. Jack is a noted astrophotographer who is best known for his popularization of hypersensitized films and light pollution blocking filters for photography and observation. This evening Jack returns to the SJAA to specifically discuss the current state of filters as used by today's amateur astronomer. Learn how the incorporation of a filter into your regular observations can greatly improve the viewing of celestial objects, not to mention the photographic applications.

FORGOTTEN BOARD ELECTIONS!

Elections for board members should have been held at the February General Meeting, but somehow it was overlooked until too late!

Nominations and elections will be held at the March General Meeting. It is necessary to point out that the SJAA Board of Directors is not run by a clique.

Often we see the same people running for election/re-election because these are members who have a real interest in the operation of one of the largest astronomical organizations in California. However, new, fresh faces are needed. Directors are elected for two-year terms; four in even-numbered years, five in odd years. The present Board, and the candidates are:

ONE YEAR TO GO	TERM EXPIRING	RUNNING	(status)
Steve Greenberg	Joe Sunseri	Joe Sunseri	(inc)
Jim Van Nuland	Gene Cisneros	Gene Cisneros	(inc)
Tom Ahl	Bob Fingerhut		(exiting)
Paul Mancuso	Jack Peterson	Jack Peterson	(inc)
Duncan Munro		=====	(new)
		=====	(new)

Bob Fingerhut has declined re-nomination. The SJAA wishes to thank Bob for his many years of dedicated service. Bob will continue as an active SJAA member at meetings and star parties.

Nominations from the floor

If you wish to nominate someone, please ask first for their permission to do so. If you wish to run for the Board, contact any of the election committee (Ahl, Mancuso, Van Nuland (chair)); or have a friend nominate you at the election. Requirements for the Board are (1) one year of membership in the SJAA, or (2) attendance at six board meetings.

Officers

At the first board meeting following the election (March 26), the Board will elect the four officers, who will serve for one year. Officers are chosen from the newly-constituted Board.

Board Meetings

At the monthly board meetings, planning is done for meetings, star party locations, and activities such as the Auction and Picnic. Meetings of the Board are open to all who are interested, and to all who have business with SJAA. Presently, the meetings are being held just before that Introductory Astronomy class. Please feel free to attend board meetings to see how the club is run. This is a good way to learn whether you would like to be a Board member. It's also a way to get onto the Board, as vacancies are filled by appointment; typically from those who have been attending the Board meetings.

8TH ANNUAL ASTRONOMICAL AUCTION

The 8th annual Astronomical Auction will be held on May 7th at the Red Cross building in Los Gatos. To accommodate the increasing amount of good stuff, and hopefully finish before midnight, we will have a Flea Market or Swap Meet during the afternoon from 2:00 to 5:00. Silent-bid sales will be available too. Then from 6:00 until we finish, material will be auctioned. Winners of silent bids will be announced just before the break, possibly around 8:00. Building will be open by 1:00.

Flea Market or Auction?

Items having a (realistic) minimum bid of \$5 or less probably should be offered during the flea market, rather than the auction.

Very specialized items, even if valued above \$5, should also be sold at the flea market, as auction time is limited. A silent bid sale could be used. Items of general interest should be entered in the auction. The \$5 minimum is a guideline, but if the item is of wide interest, it could be auctioned. Pre-registration is urged; forms will be published next month.

Other thoughts

Procedures are still being discussed, so things may not be just as described here. We feel that it is not reasonable to put a limit on the number of items that may be entered, or to try to define just what is of astronomical interest. One person's junk is another's treasure! The flea market will permit specialized items without causing the auction to run into the wee hours. Please remember that everything is subject to prior sale. As before, SJAA's sales commission will be 10%, and a donation of \$1 is requested when registering to buy or sell. You could also donate the entire sale proceeds to the SJAA if you like. The auction is the SJAA's only fund-raising activity. If you sell something afterward in the parking lot, it seems only right to come in with the 10% commission.

ASTRO ADS

NOVICE ASTRONOMER is looking for a used Schmidt-Cassegrain telescope with tripod, wedge, and standard accessories. Must be at least 8" in aperture and in mint condition. George Falotico, 408-438-2142 evenings and weekends.

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.

WANTED: Did you photograph comet Bradfield in October during its close encounter with M10? If so, I would like to speak with you about obtaining a copy of your photographs. Please call George Falotico at 408-226-5575 evenings and weekends.

76MM REFRACTOR with 1250MM focal length, equatorial mount, 4.6,& 20mm eyepieces with sun & moon filters, tripod, barlow lens, erecting prism, storage box. Asking \$90. Contact: Byron Ryono (415) 949-4470

FIRST SCOPE 80 Refractor. 80mm aperture, 910mm focal length (39 inches long). 26mm 1.25" ocular with diagonal. Sturdy wooden tripod with alt-azimuth adjustment. Like new! Asking \$299 or best offer. Phone: "A1" 408-267-9432 or leave message. (San Jose)

MINT CONDITION CELESTRON Super C8 Plus with Starbright coatings and all factory accessories, including wedge and field tripod, carrying case, 8 x 50 polar alignment finder scope, two eyepieces, piggyback mount, etc. Additional accessories include: Celestron quartz dual axis drive corrector, declination motor, dew shield, counterweight set, off-axis guider and Jim's Mobile electric motofocus. Asking \$1500. Contact: Bob Mein (408) 373-1965 days, (408) 649-0758 eves, weekends.

CELESTRON RPC5 5-inch Newtonian reflector on regular Polaris mounting. With single-axis drive corrector, built in polar alignment scope, 80 mm finder scope, 26 mm Plossl, 16 mm Erfle. \$400 Contact: Jim 408-374-5491

MEADE 8-inch f/6 reflector in good condition. Accessories include: Motor drive, eyepieces; 40mm, 25mm, 12mm (illuminated w/variable intensity power supply), 9mm. Moon filter, Barlow-2X, Eyepiece extender. Recently culminated, so optical alignment is excellent. \$675 Contact: Jesse Blount (408) 336-5770.

UNIQUE OPPORTUNITY! Long Focus (f=101") 6" f/17 achromatic lens mounted in a machined collumating cell. The lens was made in the 1950's by Witherspoon, and is said to be equal or out perform the refractors at Chabot Observatory. The tube is 7.0" aluminum fitted with anti-reflection diaphrams and has a cork lined dew cap. The focuser is 2" chrome and brass rack and pinion. Also included is a sturdy machined aluminum saddle, finder rings, and very solid (free from play) equatorial mount with ball-bearings on both axes. Tube weight w/o saddle is 60 lbs incl. objective. Only a stand or pier is needed for the equatorial mount to be ready for viewing. \$1900 The refractor is housed at LUMICON. Contact: Jack Marling, 415-447-9570 (day), or 415-443-7579 (evenings), P.O. 495 Livermore, CA. 94550

FOR SALE: 4" Meade Telescope Model 2040A including: Schmidt-Cassegrain assembly, fork mount with motor drive and 6' power cord, manual slow-motion controls, eyepiece holder for 1.25" OD accessories, 5X24mm viewfinder, table tripod of astronomical observing and photography. Also includes the following accessories: Porro prism, T-adapter, Erecting prism, (2) polarizing lenses, Tele extender, T-ring for Olympus 35mm camera, Eyepieces (research grade Erfle) 40mm, 20mm, 10mm and 7mm, Foam lined carrying case, Instructional manual. Sale price: \$900. Contact: George, (415) 941-2681

MARCH STARRY NIGHTS BY: RICHARD STANTON



PARTIAL UMBRAL ECLIPSE OF THE MOON - On Thursday, March 3rd, at 05:46 PST the Full Moon will begin to pass through the Earth's penumbral shadow. The entire event will last 5 hours. Only the early penumbral phase will be visible from the western U.S. The central Umbral Phase will be visible from eastern Europe through Alaska, Hawaii and the Pacific

Ocean. Given good atmospheric transparency, the southern half of the moon will appear slightly darker than a few hours earlier. Anybody for last minute travel plans?

TOTAL SOLAR ECLIPSE - On March 18th the Moon will totally eclipse the Sun. Unfortunately the only place in the U.S. where you can go to view it is Fairbanks, Alaska. At that location the eclipse begins at 02:27 UT, reaches maximum at 03:22 UT, and ends at 03:59 UT with the Sun at an altitude of 3 degrees. When you convert the times to "Local Eskimo Standard", it come out "Sunset". Why only talk about spectacular sunset photos? Hop to it... there's no limit to how many times you can be divorced.

METEORS - The month of March contains no shower maximums this year. However, there are two small streams that may put on a show this month. My research has not turned up any hard data on either of these streams. First we have the Camelopardalids within a reference period of march 14 thru April 17. This is a great opportunity for you meteorphiles to get out there and record some useful data. Don't forget to send it in to the Editor so it can be published.

MINOR PLANETS - March will again show some fairly good asteroid views for those who have the patience to track them down.

14 IRENE - diameter 158 km, magnitude 8.9, opp. Mar. 19

MAR. 10	R.A.	12:03.8	DEC.	+ 17:45.
20		11:55.3		+ 18:44
30		11:46.9		+ 19:17

10 HYGIEA - diameter 450 km, magnitude 10, daily motion .17°

MAR. 10	R.A.	10:09.8	DEC.	+ 06:27
20		10:03.3		+ 07:03
30		09:58.6		+ 07:33

04 VESTA - diameter 538 km, magnitude 7.3, daily motion .27°

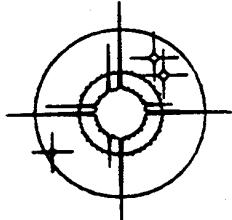
MAR. 10	R.A.	07:42.5	DEC.	+ 26:19
20		07:44.0		+ 26:19
30		07:48.5		+ 26:10

The secret to successfully locating an asteroid is to plot or photograph the location on different evenings and see which "star" is moving among the reference stars. Good Observing!

LUNAR FEATURES - During March we will find the Lunar Sunset Terminator falling upon the Straight Wall on the 11th at 04 hours and on the crater Plato at 06 hours. The Sunrise Terminator will march across (I couldn't help myself) the Straight Wall on the 25th at 22 hours. Plato will rise to the morning light on the 26th at 05 hours. The times are Pacific Standard.

LUNAR APPULSE - On Saturday, March 26th, the 8 day old moon will have an appulse (close approach) or perhaps even occult the minor planet Vesta. The coordinates for Vesta on this date for 07:49:25 +26:06:51. This event will be a fairly demanding observation as the moon will be about 60% illuminated and Vesta will be around magnitude 7.5. The coordinates are Epoch J2000-0.

COMET COMMENTS
BY: DON MACHHOLZ



One comet has been discovered. It should be easily visible to us for the next few months. Meanwhile, three other comets dim in our northern sky, but they are all well-placed for our observation.

Comet Liller (1988a): Dr. William Liller of Chile discovered this comet on photographic plates taken Jan. 11. He was using an 8" Schmidt Camera in conjunction with the PROBLICOM survey. At that time the comet was magnitude 10 in Sculptor, and moving northward at one degree a day. As with the case of Robert McNaught, Dr. Liller is a professional astronomer who was working on his own time to find the comet, therefore this is considered an amateur find. Three of the last four comets found by amateurs have been found photographically.

Comet Liller will be closest the sun on March 31 with a perihelion distance of 0.848 AU. It should be well-placed for Northern Hemisphere observers thorough August and may attain a brightness of magnitude 6 in April. Incidentally, five of the last ten comets found by amateurs have had perihelion distances between 0.841 and 0.921

EPHEMERIDES

DATE	R.A. (1950)	DEC	ELONG	MAG	NOTES
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Comet McNaught (1987b₁)

02-24	21h 14.5m	+53°00'	65°	9.5	The high inclination of this comet's
02-29	21h 44.7m	+56°20'	66°	9.8	orbit results in the circumpolar
03-05	22h 17.3m	+59°08'	66°	10.0	positions listed here. The comet also
03-10	22h 51.5m	+61°20'	66°	10.3	continues its travel through the Milky
03-15	23h 26.8m	+62°58'	65°	10.6	Way. We now know that Comet McNaught
03-20	00h 02.1m	+64°06'	65°	10.8	is in an elliptical orbit, it will
03-25	00h 36.5m	+64°47'	63°	11.1	return in about 16,576 years. Don't
03-30	01h 09.2m	+65°06'	62°	11.3	wait that long to see it, get one last
04-04	01h 39.6m	+65°07'	60°	11.5	look before it fades from view.

Comet Bradfield (1987s)

02-24	03h 09.5m	+22°48'	77°	10.0	This comet resides rather high in our
02-29	03h 21.6m	+22°31'	75°	10.2	western sky after evening twilight.
03-05	03h 33.0m	+22°16'	72°	10.5	Rapid recession from both the earth and
03-10	03h 43.9m	+22°02'	70°	10.7	sun this month causes it to dim very
03-15	03h 54.2m	+21°50'	67°	11.0	quickly. As with Comet McNaught, this
03-20	04h 04.2m	+21°38'	64°	11.2	object also passed roughly 0.85 AU from
03-25	04h 13.8m	+21°26'	61°	11.4	the sun late last year. Comet Brad-
03-30	04h 23.1m	+21°15'	59°	11.6	field travels two degrees south of
04-04	04h 32.1m	+21°05'	56°	11.8	the Pleiades on March 9.

DATE	R.A. (1950)	DEC	ELONG	MAG	NOTES
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Periodic Comet Borrelly (1987p)

02-24	04h 12.6m	+50°06'	96°	9.6	This comet is circumpolar for many of
02-29	04h 29.2m	+51°12'	94°	9.8	us, and, like the previous two comets,
03-05	04h 46.6m	+52°05'	93°	9.9	it continues to fade from view. This
03-10	05h 04.5m	+52°45'	91°	10.1	will probably be the last month I'll
03-15	05h 22.8m	+53°13'	90°	10.3	carry positions for these three comets.
03-20	05h 41.3m	+53°29'	88°	10.5	They have each been impressive in
03-25	05h 59.9m	+53°34'	87°	10.7	their own way. Periodic Comet
03-30	06h 18.4m	+53°30'	85°	10.9	Borrelly will return in 1993.
04-04	06h 36.7m	+53°15'	83°	11.0	

Comet Liller (1988a)

02-24	00h 12.6m	+02°45'	30°	8.0	This comet remains in our evening sky
02-29	00h 16.4m	+06°35'	28°	7.8	until early April. Until then Northern
03-05	00h 20.5m	+10°31'	26°	7.5	Hemisphere observers will be able to
03-10	00h 24.7m	+14°34'	25°	7.3	follow it despite small elongations.
03-15	00h 29.2m	+18°44'	25°	7.1	Look for it shortly after twilight, low
03-20	00h 34.1m	+23°03'	25°	6.9	in the western sky. By mid-April,
03-25	00h 39.5m	+27°32'	27°	6.8	Comet Liller will be up all night.
03-30	00h 45.6m	+32°11'	29°	6.7	During March and April it should dis-
04-04	00h 52.8m	+37°02'	32°	6.6	play a tail pointed northward.

SEEKING COMETS

I had mentioned last month that press coverage for a comet discovery lasts only a few days. That is not always the case. William Bradfield, who became the century's Number One comet hunter with his thirteenth find last Aug. 11, is still being interviewed, photographed and asked to give speeches.

There is nothing in the hobby of comet hunting which trains the comet hunter to face the press. Some are able to verbally explain their hobby well. Others, and I'm one of them, are a bit shy of the camera and microphone. Following a comet discovery, I spend a fair amount of time mentally preparing for some of these questions:

Most-asked question: "With all the big observatories in the world, how is it that you found this comet and they didn't?"

Second most-asked question: "What is a comet?"

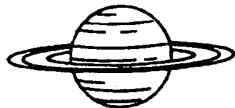
Third most-asked question: "Is the comet going to get brighter?"

Fourth most-asked question: "How did you get started in this hobby?"

Dumbest question: "What significance does this comet discovery play in world affairs?"

Most unexpected question: "Did your girlfriend break up with you because you spent too much time looking at the stars?"

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



Mt. Hamilton Rd., also known as Hwy. 130, winds past Grant (Ranch) County Park and up past Lick Observatory. What kind of observing sites do we find between the Park and the Peak? We found that the Peak is closed to amateurs, but you can get permission to observe from both the western and eastern slopes of the mountain.

Grant Ranch Park was reviewed here last July. From here you drive 10.8 miles up Mt. Hamilton Rd. to Lick Observatory. Along the way you'll find numerous turn-outs, most of these are small and not shielded from car lights. Kincaid Rd., 5.7 miles past the Park, is narrow and has fairly high horizons-one place we'd consider is quite small, down this road 1.2 miles. But we suggest you avoid this road and aim for the Peak.

Perhaps the best place to observe from is the large lot known as "The Brickyard". It is 9.3 miles past the Park and 1.5 miles before you get to Lick. It's located on the left side of the road, and consists of a large lot measuring 250' by 150'. The surface is hard packed dirt, level, but with some depressions will fill with water after a rain. A line of trees runs along the north, this cuts off about 20 degrees. There are some trees to the W. and S., you can usually work around these for viewing specific objects. To the east you see Lick Observatory; this is about 15 degrees high and 0.5 air miles away.

From the Brickyard you can see city lights, they are at least six miles away, but stretch from the north through the west and to the south. The light pollution is moderate up to 20 degrees high in the NW to SSW. This elevation, 3690', is usually above the inversion layer so the haze and (occasional) fog below can give you a first-class night. It can get windy here with dry, blowing dust a problem.

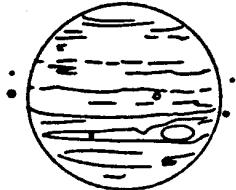
Lick Observatory, sitting at 4209', is closed to the public after 5 PM. But Hwy 130 is open, so keep driving over the top and down the other side. Here the Lick property extends another 2.2 miles, ending near a turnout with a "wagon wheel" gate to a side road, elevation here is 3785'. (Hwy. 130 continues past this to the Central Valley and Livermore, but you lose elevation quickly.) Along these 2.2 miles you'll find four turnoffs offering a variety of horizons and wind patterns. These offer perhaps the darkest skies in the county.

If you intend to use the Brickyard, the sites on the far side, or anywhere on Lick property (running from 4.8 miles west of the Peak to 2.2 miles east) call them in advance (408-274-5062 anytime) to let them know that you'll be there. The area is patrolled by a security person and they favor advance notice.

Several more observing sites are in this area. The Halls Valley Astronomy Group (the astronomical branch of "Friends of Grant Ranch") is a club you can join for the cost of \$3.00 and 50 hours of work a year. Members have access to areas in the park normally closed to the public. One such site is along Smith Creek Ridge, a fire road 3.3 miles past the Park gate. For information about joining, or to here more about the observing site they are building in the

park, call Ron Brickmont (408-287-9486)

GREAT RED SPOT BY: JIM VAN NULAND



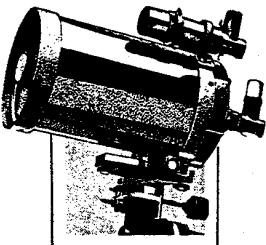
With the earlier Jupiter-set and later sunset, the Spot-watching season ends with March. The planet will be visible in the evening sky through April, but will be too low for beneficial observation at higher magnifications. So this column will take a vacation, to concentrate on other things, until September or so. My thanks to those who told me of their own observations.

On Feb. 5th, the Spot was a definite orange, more so than for many years! The dark material surrounding the Spot is less distinct to the south, but the dent in the South Equatorial Belt is distinct, so the Spot is easy to find.

At the tabular time, the Spot faces directly toward Earth, and thus appears central on the apparent disk of the planet. Observations may be made for about an hour before and after that time, darkness and elevation permitting. I've widened the selection limits to include some event for which Jupiter will be rather low, when seeing may be a problem, to allow last-ditch efforts. Good luck!

'Great Red Spot on Meridian PST

da	mo	d	h	m	da	mo	d	h	m	da	mo	d	h	m			
W	3	2	8	24	pm	Sa	3	12	6	44	pm	Th	3	24	6	52	pm
M	3	7	7	34	pm	Sa	3	19	7	38	pm	Tu	4	5	6	49	pm



1988 MESSIER MARATHON BY: DON MACHHOLZ

A new moon on March 17 offers us a fine opportunity for this year's Messier Marathon. This year the weekend night of March 19/20 is best placed for the Marathon. If there is clear weather, I'll be at Uvas Res., a site reviewed here last month. I invite you to join me. You can "marathon" from one of several sites. In the past we've tried Loma Prieta, but that is now closed to the public. Grant Ranch Park and Fremont Peak are both good sites. The "Brickyard", near Lick Observatory, has good potential too.

Because of the locations of the galaxies, clusters and nebulae in Charles Messier's Catalog, mid-March through early April is the best time to hold the dusk-to-dawn observing session. Between March 5 and 20, 109 of the 110 objects can be seen, with only M30 missing. From our latitude, we lose M74 around March 21, meaning we'll see 108 objects until March 30. On March 31 we can pick up M30 in the morning sky, this gives us 109 objects again. After April 3 we lose several objects in the evening sky, decreasing the count. Observers in the southern United States may be able to observe all 110 of the Messier Objects, from our latitude the limit seems to be 109. Other factors include the moon phase, which can't be too bright, and picking a weekend, since we're usually awake all night long.

The SJAA began the Marathon in March 1979, and we've been holding it every year since then. In some years the moon has given us trouble, while sometimes the weather fails us. Many other active clubs across the nation also "Marathon".

Contact me for observing order sheets which can be used with almost any star chart. And after the Marathon, please let me know how it went.

SUAA 1987/1988 MEMBERSHIP ROSTER

SJAA 1987/1988 MEMBERSHIP ROSTER

GEORGE		SUNNYVALE	
HARRY O.	389 SPOSITO CIRCLE	1071 FUCHSIA DRIVE	CA 94086-8347
LETTNER	425 HAZELWOOD DRIVE	365 INDIAN BROOM DR	CA 95111
LEO	132 MAGNESON TERRACE	1300 CAPRI DRIVE	CA 92008
LIEU	195 BUTLER STREET	1840 YOSEMITE DRIVE	CA 95035-6621
LIST	5629 LAGUNA SEA WAY	3809 MIDDLEFIELD RD	CA 94303
JAMES L.	778 COFFEEWOOD CT	2625 SONOMA PLACE	CA 95051
LOHMANN	344 2ND LANE	1382 SPOONBILL	CA 94087
LONG	12221 VIEWDAK DRIVE	1356 LONGFELLOW WAY	CA 95129
LONGO	13480 ROSSMERE COURT	2341 DORVAL DRIVE	CA 95130
JOSEPH	8158 WHITED ROAD	1842 PERRONE CIRCLE	CA 95116
JIM	5234 CANDEN AVENUE	1200 DALE AVENUE #72	CA 94040
ART	5090 BELA DRIVE	494 IRVING AVENUE	CA 95128
DON & LAURA	299 LANGTON AVENUE	2211 ARLEEN WAY	CA 95130
PAUL	1665 ARIZONA AVENUE	4158 ROSENBAUM	CA 95136
ROBERT S.	1755 PINE HOLLOW CTR	1309 KARHEN COURT	CA 95051
PAUL	1939 MONTENAR WAY	1018 HARLAN COURT	CA 95129
ROLAND C.	14876 HEATHER DRIVE	236 MANLEY COURT	CA 95139
MARTIN	1533 W 7TH STREET	A2 65281	AZ 85234
CHARLES F.	891 LAGUNA STREET	GERALD W.	CA 95130
PETER L.	3333 METHLHAVEN LN	NATT	LOS GATOS
JACK	1108 HOLMES AVENUE	JOHN D.	VANCOUVER
GARY N.	400 E RENNING A103	THOMAS	WA 98884
BOB	P.O. BOX 487	CONNIE M.	CA 95132
MARK A.	P.O. BOX 28587	DAVID	CA 94539
LEONARD	484 JEFFERSON STREET	ROEMER	CA 95051
S.	19810 MERRIBROOK DR	ROSE	CA 95112
MC ALEESE	15435 BLACKBERRY HILL	ROSENBLATT	CA 95037
MC CLELLAND	684 S BARLAND TERR	ROTH	CA 95030
MC CORMACK	15022 BROADWAY TERR	RUSS	CA 94339
MC KELVEY	3312 DUKE COURT	MICHAEL T	CA 95054
MEDLOCK	3040 DRYDEN AVENUE	FRANCISCO	CA 95156
MONIKETTI	7724 HAZELNUT PLACE	THOMAS W.	CA 93905
MILLER	123 VILLA TERRACE	RICK	CA 94538
MIRAM	8149 PARK VILLA CIR	SCHIFFMANN	CUPERTINO
MITCHELL	6476 CEBU COURT	SCHOENDORF	CA 94010
MOLINARI	14380 E LA CHIQUITA	SCHONERT	CA 95117
MOLNAR	3217 GOLDRIDGE COURT	SCOTT	CA 95125
MONROE	350 WAYLAND STREET	ROBERT T	CA 95030
MOORE	622 IROQUOIS COURT	SHAFER	MONT SERENO
MICHAEL W.	11391 ENCHANTED VISTA	THOMAS P	CA 95125
RICHARD G.	965 BRANCHAN LANE	WALTER J	CA 94040
AL	NEWARK	JOSEPH B	MOUNTAIN VIEW
BYRON	3217 GOLDRIDGE COURT	RICHARD A	CA 95121
JAMES D.	350 WAYLAND STREET	FRED	CA 95121
WILLIAM F.	SAN JOSE	ROBERT T	CA 95125
KIM	SAN JOSE	SCOTT	CA 95125
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DAVID & JILL	SAN JOSE	WALTER J	CA 94618
ROBERT	SAN JOSE	JOSEPH B	CA 95030
RITA	SAN FRANCISCO	JOSEPH B	LOS GATOS
ROGER	CUERTINO	JOSEPH B	SARATOGA
JAMES R.	SAN JOSE	BRUCE	APTS
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BYRON	SAN JOSE	SPERLING	CA 95013
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ANTONIO	SAN JOSE	STAFFORD	CA 95130
RICARDO	SUNNYVALE	STANLEY	CA 95070
NORMAN	CAMPBELL	NEWMARK	CA 95111
MICHAEL J.	NEWARK	THOMAS	CA 95130
DUNCAN/SCHARLENE	10670 N STELLING 27H	STANLEY	SANTA CRUZ
GREGORY J.	1060 TEKA NOBLE WAY	THOMAS	392 ANN DARLING DR
MUSHIAL	1921 PONDEROSA AVE 73	STEVEN & DIANA	4949 ENGLEWOOD DRIVE
NAFARATE	190 ROSE COURT	EDWIN R	5677 ROTTERDAM LANE
NEGRETTE	965 BRANCHAN LANE	BART	731 CAMINO RICARDO
NEINICHEL	NEWARK	M.P.	2289 DATONO DRIVE
O'BRINE	10670 N STELLING 27H	RICHARD	3915 SEVEN TREES BLVD
JAMES B.	1049 GREENTREE WAY	THOMAS	16945 ROBERTS RD #17
ALAN	SAN JOSE	STEPS	5916 ORCHARD AVENUE
RICHARD	SANTA CLARA	STOKE	3625 WOODLEY DRIVE
LAWRENCE	SAN JOSE	DONALD	SANTA CRUZ
BEN	SANTA CLARA	PAUL	2941 PLEASURE PT DR
DAVID F.	SAN JOSE	JOSEPH	CA 95118
THOMAS H.	SANTA CLARA	MARIA	CA 95030
LAWRENCE W.	SANTA CLARA	ALLEN	CA 94804
VINCE & DEANNE	SARATOGA	JOHN J.	CA 95148
STEPHEN	SAN JOSE	DR. ROBERT	CA 95062

PAUL E	TREJO	2750 ALDWORTH DRIVE	SAN JOSE
JAMES	VAN NULAND	3509 CALICO AVENUE	SAN JOSE
FRANK	VANSLAGER	7213 RAINBOW DR #14	SAN JOSE
CHUCK	VAUGHN	4387 OTHELLO DRIVE	FREMONT
SERGEI N	VOINESKY	459 KIELEY BLVD	SANTA CLARA
STEPHEN R.	WALDEE	3914 LEIGH AVENUE	SAN JOSE
DONALD	WALLACE	387 HEDGE ROAD	MENLO PARK
RONALD A.	WALTON	1621 VIA RANCHO	SAN LORENZO
EARL	WATTS	26638 JAMAICA LANE	HAYWARD
DANIEL L.	WEISENSTEIN	324 ENGLERT COURT	SAN JOSE
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W. DALE	WILLIAMS	787 WOODGATE DRIVE	SAN LEANDRO
P. BRIEN	WILSON	16336 LA CHIQUITA AV	LOS GATOS
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ORION TELESCOPE CENTER	BOX 1158	SANTA CRUZ	CA 95061
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SJAA MEETING AND STAR PARTY LOCATIONS

GENERAL MEETINGS

Once a month the SJAA holds a General Meeting at the Los Gatos 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 it 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 from 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.

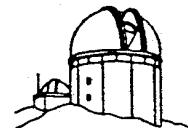
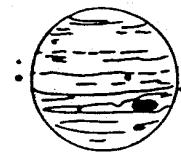
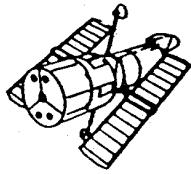
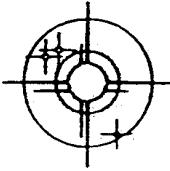
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