the san jose amateur astronomers

sjaa

John P. Gleason
Editor
241-1058

may '11

CALENDAR OF EVENTS:

May 6: Olinder Center, 7:30 P.M.
The general meeting this month will feature James Vorderbrueggen, who will speek about an amateur built observatory in Oregon. This is also the night that the membership will vote on the constitutional amendment to change the clubs name from the San Jose Amateur Astronomers, to the San Jose Astronomical Association.

May 7: Los Gatos Red Cross, 8:00 P.M.

May 13: Board Meeting, Jim Van Nuland's home, 8:00 P.M.

May 14: Henery Coe State Park, dusk till dawn F.E.A.O.
This months field expedition for astronomical observation. See map for location. The club now has its own lock in use during scheduled observing sessions. To gain access to the sight a club member may open the gate with the combination. The lock has gray tape around it, and the combination is 4565.

May 21-22: Big Bear Weekend
The Ninth Annual Riverside Telescope Makers Conference.

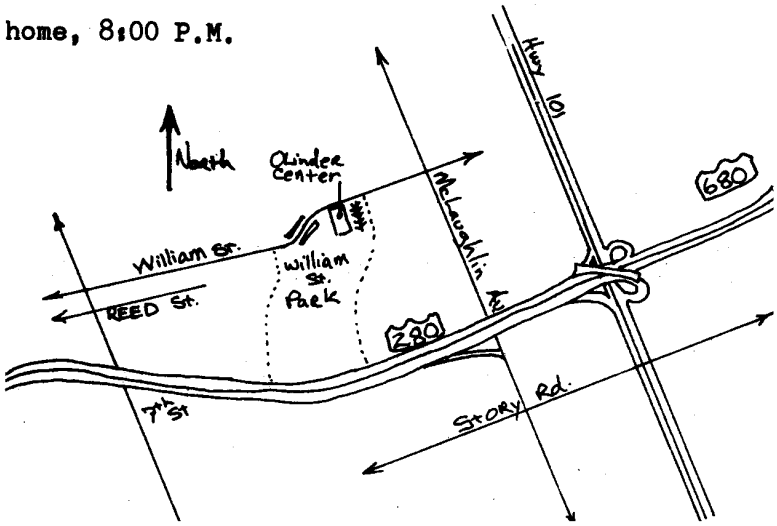
May 28: Saratoga High School
The in valley star party for those who do not wish to attend the field expeditions in the mountains. Observers will use the North parking lot. Arrangements have been made to have the lights turned off.

June 3: Olinder Center, 7:30 P.M. Elections and Slide Night
This is the annual meeting where board members are nominated and elected. If you are interested in a board position, please contact the nominating commity. The members are: Bob Malm 941-1343, John Rhodes 969-2615, Dr. Gregory 258-6095. This is also the club's spring slide and print exposition. This will give you a chance to show off all the astronomical slides and prints you have acquired recently.

June 10: Los Gatos Red Cross, 8:00 P.M.

June 11: Board Meeting, Ed Schell's home, 8:00 P.M.

The San Jose Amateur Astronomers meet on the first friday of every month at 7:30 P.M., Olinder Center, William's Street Park, San Jose, California.



PAST EVENTS

April 2 was Astronomy Day-1 at the McKee and Jackson K-Mart. 10 telescopes were set up for public viewing, but only a few shoppers ventured over to our poor parking lot location. It was like being inside an open star cluster, with dozens of mercury vapor lights blazing in the night around our telescopes. Several students from Dr. Gregory's Astronomy class were there and were impressed with views of Saturn, double stars, and the Moon. Where were the rest of the club members?

April 3 was Astronomy Day-2 at the Rosicrucian Museaum. This was also the evening of the partial lunar eclipse. Although only a handful of club members were represented, the evening was an overall success. About 500 interested people arrived to view the eclipse. The amateur astronomers were kept busy answering questions and directing the lines of people around the 4 telescopes. Lines of 45-50 people were not uncommon at each telescope during mid-eclipse.

Fremont Peak State Park was the sight of another A.A.N.C. star party on April 16. Many of the club's members were there along with others from the Chabot Telescope Makers Workshop, San Mateo Astronomical Society, and the San Francisco Sidewalk Astronomers. John Dobson's 24" telescope was there which provided us with breathtaking views of galaxies, star clusters, and nebula. The highlight of the evening was the observation of the planet Pluto by Pete Arebalo with his 3½" Questar. This observation was confermed by Jerry Ratliey, Jack Zeiders, and myself. I wouldn't have believed it if I hadn't seen it. The 14th magnitude planet was winking in and out during periods of good seeing. Many new club members were at the peak for the first time and were impressed with the sky conditions. Hope to see you there again in the summer months ahead.

The club's Skyline star party fell victim to bright skys and poor seeing. Jim Van Nuland reports that because of the sky conditions few galaxies were seen but the globular and open star clusters were quite fine, especially M 22. Jim was finally driven out by wind and cold at 2:30 A.M.

News Flash!

The State Park District likes our Skyline observing site so well, they have decided to turn it into a roadside park. Club members have found that the area where we have set up in the past has been dug up and will be replaced by picknick tables. This will cut off access to our cars and telescopes, making the site impossiable to use. The new parking lot will be paved, but this will no doubt prove to be unsuccessful as an observing area due to the often heavy traffic on highway 9 at night. This is a most unfortunate situation since the club has used this site for many years and has provided us with many memorable observations.

Bay Area Planetarium Guide

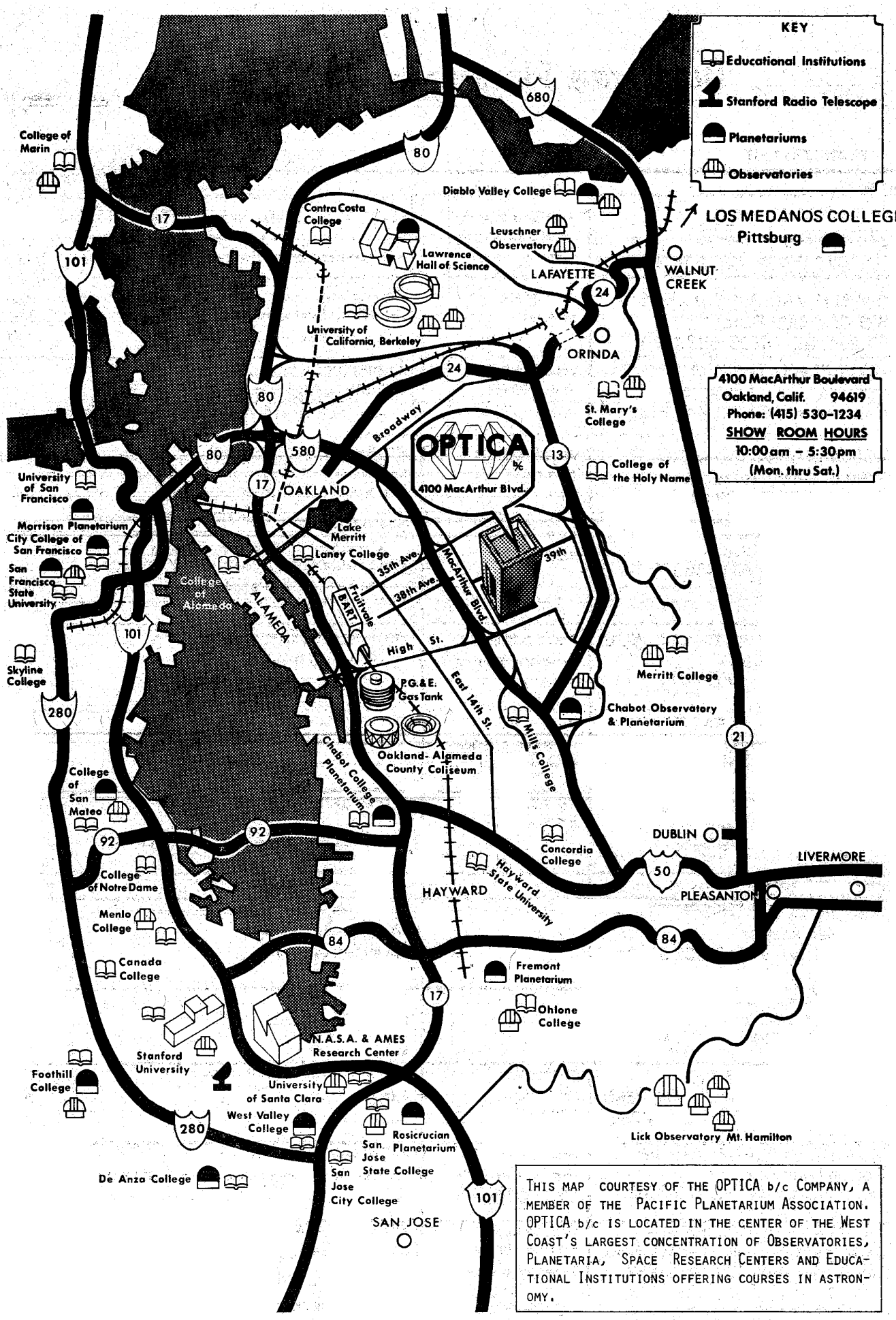
Spring 1977

PLANETARIUM	TIMES	PROGRAM TITLES & DATES	
East Bay			
CHABOT COLLEGE 25555 Hesperian Blvd. Hayward 94545, 782-3000 x 417	Fri 7:30 & 8:30 PM Sat 2 & 3 PM Free, res.	STARS OF THE SPRING SKY - Fri 7:30PM, Sat 2PM THE LONELINESS FACTOR - Fri 8:30PM, Sat 3PM	April 8 to June 18
DIABLO VALLEY COLLEGE 321 Golf Club Road Pleasant Hill 94523, 685-1230	Fri 7:30 PM Free, res.	POETRY AND THE STARS THE EXPANDING COSMOS Also telescope viewing	April 1 - 29 May 13 to June 10
HOLT PLANETARIUM Lawrence Hall of Science U.C. Berkeley 94720, 642-5132	Sat & Sun, 1:30, 2:30, 3:30 PM $.75-1.75	FINDING YOUR STAR; STONEHENGE; THE RED PLANET MARS Also "Star Games" - an interactive exhibit	In rotation each day
LOS MEDANOS COLLEGE 2700 E. Leland Road Pittsburg 94565, 439-2181	Sat 2 & 3:15 PM Free, res.	MOTHER EARTH - Sat, 2 PM THE MOON - Sat, 3:15 PM	March 5 to April 30
ROTARY CHABOT 4917 Mountain Blvd. Oakland 94619, 531-4560	Fri & Sat, 7:30 PM $.25-.50, res.	THE LEGACY (closed April 15-16, 22-23) THE LONELINESS FACTOR Also telescope viewing and museum	Mar 4-May 28 June 3 to July 30
South Bay			
MINOLTA - DE ANZA COLLEGE 21250 Stevens Creek Cupertino 95014, 996-4814	Thurs. 7:30 PM Sat & Sun, 3:00 PM $.75-1.50	THE FINAL JOURNEY EYE SEE THE LIGHT SHOW --Call for time and price -- 255-3333	
ROSICRUCIAN PLANETARIUM Park Avenue and Naglee San Jose 95191, 287-9171	Fri 7:30 PM Sat & Sun, 1, 2:30, 4 PM, $.50-1.00	THE BRILLIANT UNIVERSE	Apr 14 to May 30
WEST VALLEY COLLEGE Allendale at Fruitvale Saratoga 95070, 379-9415	Fri, 7:30 PM $.50, res.	SPACESHIP EARTH THE PEOPLE--Legends of the American Indians	Apr 15 to May 20 May 27 to June 17
Penninsula and San Francisco			
CITY COLLEGE OF S.F. 50 Phelan Avenue San Francisco 94112, 239-3242		Monthly star parties with planetarium program, telescope, and guest speaker. Call for time and date.	
COLLEGE OF SAN MATEO San Mateo 94402 574-6256 or 6268		Phone for information.	
FOOTHILL COLLEGE 12345 El Monte Road 948-8590 Los Altos Hills 94022, x 288	Fri 7:30 PM Sat 12 Noon $.75-1.50	THE MOON TO DATE - Fri & Sat Stargazer	Thru June
MORRISON PLANETARIUM Golden Gate Park San Francisco 94118, 752-8268	Daily, 2 PM Wed. & Thurs. 8 PM Sat & Sun 12:30, 2, 3:30, $.50-1.50	A UNIVERSE OF COLOR LASERIUM -- Call for times and price, 835-3849	Mar 25 to Jun 12
S.F. STATE UNIVERSITY 1600 Holloway Avenue-Phys. Sci. San Francisco 94132, 469-1852	Wed., 12 Noon Free, res., Phone for Ticket Information	THE EMPEROR'S HEAVENS (Chinese Astronomy)	Apr 20 to May 25

res. = reservations advisable
children under 6 generally not admitted

PUBLISHED BY THE PACIFIC PLANETARIUM ASSOCIATION

For further information contact
Larry Toy, 782-3000



THIS MAP COURTESY OF THE OPTICA b/c COMPANY, A MEMBER OF THE PACIFIC PLANETARIUM ASSOCIATION. OPTICA b/c IS LOCATED IN THE CENTER OF THE WEST COAST'S LARGEST CONCENTRATION OF OBSERVATORIES, PLANETARIA, SPACE RESEARCH CENTERS AND EDUCATIONAL INSTITUTIONS OFFERING COURSES IN ASTRONOMY.

Membership Renewals

Your yellow Sky and Telescope renewal cards will be in your mail box soon. Be sure to give them along with your $15 membership fee to John Rhodes, Treasurer. $10 for junior membership, under 18. Make checks payable to "San Jose Amateur Astronomers".

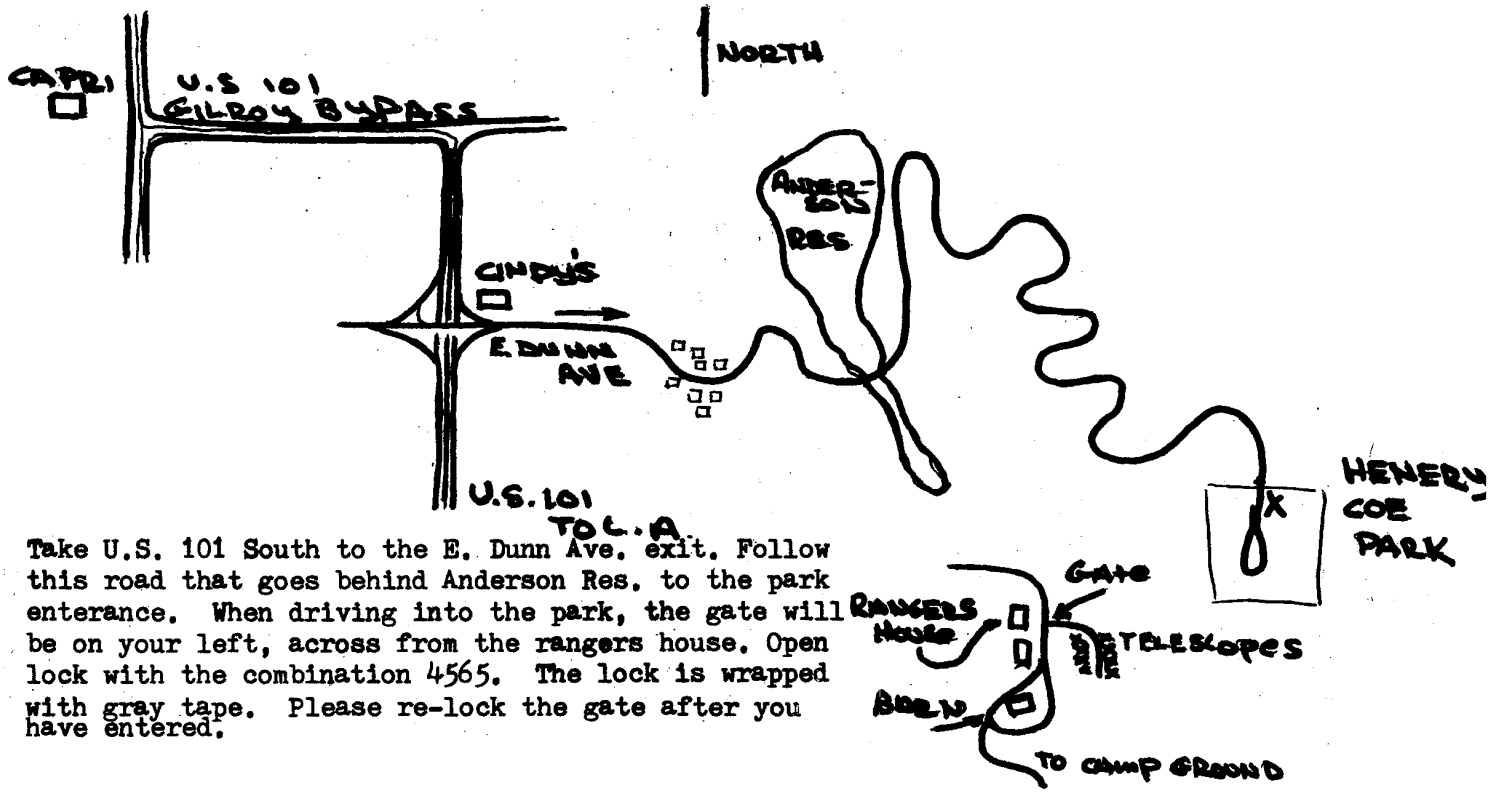
News Notz
Prepared by Ed Schell

Only three Meteorites have had their orbits before impact calculated and all three orbits were within Jupiter's orbit, suggesting they were from the Asteroid Belt. Science News, Apr. 2

First observational evidence of support for the theory that shockwaves from supernovas trigger the birth of new stars.
Science News, Apr. 2

Nova Sagittarii 1977 was discovered on March 27 at a magnitude of 9.3 . (1950 R.A. 18h 35m, Dec. -23° 25') Brightened to magnitude 8.8 on March 31. Reported as magnitude 8.8 on April 4.
IAU Circular 3055, 3057

The Space Telescope has been redesigned to a 2.4 meter f/24 cassegrain with a predicted cost of $435 million. It is due to be launched sometime in the fourth quarter of 1983 into an orbit 300 nautical miles above the Earth.
Physics Today, Apr. 77



Take U.S. 101 South to the E. Dunn Ave. exit. Follow this road that goes behind Anderson Res. to the park enterance. When driving into the park, the gate will be on your left, across from the rangers house. Open lock with the combination 4565. The lock is wrapped with gray tape. Please re-lock the gate after you have entered.

Rattley Rattles

As most of you are already aware, our organization is currently in the process of requesting from the University of Santa Clara the use of and operation of its observatory. The prospects of being granted this request look favorable at the present time, but actual use and/or operation of the observatory may not be realized for another six months. Anyhow, this should not postpone our thoughts as to what this will mean to our society and to the Observatory of the University of Santa Clara.

The main dome of this observatory, located on the University grounds in Santa Clara, houses a 16-inch Alvan Clark refractor, which is currently standing idle due to lack of anyone to provide for continuing use of it. An article on the history of this instrument prior to 1941 when the University of Santa Clara bought it can be found in the June 1972 issue of Sky & Telescope, pages 364-6, however I know next to nothing except rumors about its history after it was placed in its present home. Our society has used this observatory for a meeting and an observing session, April 5, 1974, which proved to be a very successful event. The telescope was quite impressive and preformed very well optically even though mechanically it was showing signs of disuse. It is a fine instrument, and needs to be used.

Our society has proposed to use this observatory for three main purposes: (1) for a meeting place for our societies events, (2) for public and educational observing sessions, and (3) for special programs and projects in astronomy. Repair and restoration of the telescope to usable condition as well as certain modifications, such as electric drives, have been proposed and not as yet denied. The University so far seems to like or favor all of the afore mentioned proposals. We have only been warned that if we are granted use of the observatory, we will be expected not to use it for strictly personal use and we are to to not misuse or disuse the facilities and that our society should always clean up after itself. We already operate in this way, so this should present no immediate problem.

One thing that I personally would like to see our society do right from the start of our use and operation of the observatory is to maintain a journal. I would also like to see all observatory correspondance go out on observatory stationary and possibly an observatory bulletin of some kind, but these can be discussed later. The journal should be a must though. Some of the programs and projects that have been discussed as possibilities so far are astrophotography, double star measures, variable star brightness estimates, planetary observations, occultation and eclipse timings, comet observations, and education. Also a darkroom may be possible and maybe even a mirror making class.

If any of you has any ideas that you feel should not wait, or have an outstanding interest in this matter, feel free to contact myself or any other board member after the general meetings oraat star parties, but your best opportunity to discuss this topic at any length will be at our Red Cross gatherings. Now is the time to have your ideas voiced and heard.

Next topic; our next meeting is going to be designated as a special called meeting for the purposes of voting an a proposed change to our constitution. This bulletin is to serve as the 5 day prior written notice to such a special meeting as required by our constitution, art.3, sect.4. The proposed change is as follows:

delete: title; "BY-LAWS OF SAN JOSE AMATEUR ASTRONOMERS INC."
add: title; "BY-LAWS OF SAN JOSE ATRRONOMICAL ASSOCIATION INC."
delete: article 1, section 1; "The name of this corporation shall be the San Jose Amateur Astronomers."
add: article 1, section 1; "The name of this corporation shall be the San Jose Astronomical Association, hereinafter to be refered to as SJAA."

Our primary reason for requesting this name change at this time is to get rid of the word amateur from our name because in recent years the word amateur has picked up some slightly negative connotations, and we feel that we need to present ourselves in a more organized and semi-professional manner when we are dealing with such organizations as the University of Santa Clara. There are other arguments for and against the proposed constitutional change which will be presented at the next meeting, then you will be given a chance to voice your opinions. A 2/3 vote of those present is required in order to pass the propossal.

Last topic; the ninth anual Riverside Telescope Makers Conference. This event is going to take place on May 21,22 this year . . Saturday noon until Sunday noon . . at Camp Oakes, located east of Big Bear City on Highway 38 at Lake Williams Estate Road, 50 miles northeast of Riverside in the San Bernardino Mts (7300 ft elevation). There is a dining room, a dormatory(bring your own bedding), and a camping area (for camping and telescopes). There are hotels and such in nearby towns, I have some phone numbers if you need them. The cost of the conference this year is as follows:

Camping with 4 meals per person	$ 16.50
Camping(no meals) 2 persons	4.00 per night
50¢ for each additional person(limit: 2 add. persons)	
Dormatories with 4 meals per person	16.50
Outside lodging persons wishing to have the 4 meals	16.50
Registration, per person	1.50

There are no hook-ups at the camp. $4.00 camping fee is per night, so if you want to get there a day early, it may cost you extra to stay there. No meals will be served in the dining room other than lunch and dinner Saturday and breakfast and lunch Sunday. All reservations for Camp Oakes and the Conference will be handled by the Riverside Astronomical Society and full payment must be in by May 10, 1977. The address to send payment to is:

Clifford W. Holmes
8642 Wells Avenue
Riverside, Ca. 92503
(714) 689-6893

Several members from our society are planning to attend this one. Lets hope we all get some good pictures, both astronomical, and of the telescopes and the conference for showing at our June slide night.

Astronomically Yours;

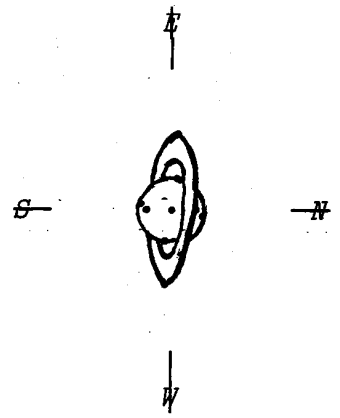
Stuart W. Kirby

occulting zone

LUNAR OCCULTATIONS

Apr	PDT*	Mag	Ill	El	CA	PA	Star, Notes
29	10:41:42D	4.5	85+	51	49N	69	
May							
20	9:50:53D	5.7	8+	6	81S	108	ZC0944
21	9:57:18D	8.8	14+	13	38N	50	
	10:12:46D	8.3	15+	10	75S	118	
22	9:18:11D	8.0	22+	29	62S	132	Deep twilight
23	11:15:47D	5.7	31+	13	81N	98	
24	9:17:25D	8.5	40+	43	74N	94	SAO117767
	11:10:11D	8.6	41+	22	84N	104	
	11:48:18D	8.5	41+	14	45N	65	
27	8:41:57D	6.5	72+	50	41N	64	Twilight
28	0:17:25D	6.9	73+	28	39N	61	A.M. Time
31	1:28:23D	5.3	97+	31	70S	129	A.M. Time
June							
4	0:39:49D	4.0	91-	21-	72S	95	ρ Sgr
	1:53:32R			30	86S	252	

* Times are PM except as noted.



ZC0944: 6.2, 6.2 mags, 0.27" @ 137 deg.
SAO117767: I've no information on this Aitkin star.

Once again you'll need to save this article until late in the month for some fine occultations, esp. ZC0944 on the 20th. This disappearance should be a pretty step. It's low in the sky, so try low or medium power if seeing isn't good. Let me know how you like it.

TABLE HEADINGS: Time: The times are for my station; actual time will vary several seconds, and more for small cusp angles. Mag: The composite magnitude of the star. Ill: Percent illumination of the moon. + indicates waxing; -, waning. El: Elevation of the moon. CA: Cusp Angle. Measured at center of moon, from the indicated north or south cusp, along the limb to the star. Always less than 90 deg. Negative indicates star is on lighted limb. PA: Position Angle. Measured from north point on the disk, toward east, to the star. 90 deg = east limb, etc.

SATURN

The tables of Saturn's moons are calculated using a constant scale, that at mid-month. That's why there are slight differences between the months. The figure of Saturn is also to scale, and is slightly smaller than last month.

VIII often falls off the page, but I included it so you can compare with the figure in Sky & 'Scope.

The scope sizes are guesses; if your sky is dark a smaller aperture will suffice. Satellites close to the planet are more difficult. Advise me of your findings and I will update the table.

Jim Van Nuland, 371-1307

Num.	Name	Mag.	Scope	Period
I	Mimas	12.1	10"	0.94d
II	Enceladus	11.6	8-10"	1.37
III	Tethys	10.6	6-8"	1.89
IV	Dione	10.7	6"	2.74
V	Rhea	9.7	3"	4.52d
VI	Titan	8.2	2"	15.97
VII	Hyperion	13.0	10"	21.32
VIII	Iapetus	10-13	6-8"	79.92

5 2 Mon.	
II	5S, 13W
III	6N, 19E
IV	5S, 27W
V	5N, 29W
VI	24S, 73W
VIII	15S,162W

5 3 Tue.	
II	3N, 11W
III	6S, 16W
IV	2S, 23E
V	10S, 31W
VI	28S, 47W
VIII	15S,145W

5 4 Wed.	
II	4N, 15E
III	7N, 13E
IV	8N, 3W
V	8S, 18E
VI	28S, 15W
VIII	16S,128W

5 5 Thur.	
III	7S, 10W
IV	8S, 19W
V	7N, 38E
VI	24S, 20E
VIII	16S,109W

5 6 Fri.	
II	3S, 17W
III	7N, 6E
IV	3N, 28E
V	11N, 4W
VI	17S, 52E
VIII	15S, 90W

5 7 Sat.	
I	1N, 12W
II	5N, 2W
III	7S, 2W
IV	4N, 18W
V	3S, 39W
VI	7S, 76E
VII	30S, 1E
VIII	15S, 70W

5 8 Sun.	
I	1S, 14W
II	2N, 18E
III	7N, 2W
IV	9S, 4W
V	12S, 10W
VI	4N, 90E
VIII	15S, 50W

5 9 Mon.	
I	2S, 13W
III	6S, 6E
IV	7N, 24E
V	1S, 36E
VI	14N, 90E
VIII	15S, 29W

5 10 Tue.	
II	1S, 17W
III	5N, 10W
IV	1S, 27W
V	12N, 23E
VI	22N, 76E
VIII	14S, 8W

5 11 Wed.	
III	4S, 13E
IV	6S, 12E
V	5N, 27W
VI	27N, 51E
VIII	13S, 13E

5 12 Thur.	
II	1S, 16E
III	3N, 16W
IV	9N, 11E
V	10S, 33W
VI	27N, 17E
VIII	13S, 34E

5 13 Fri.	
I	3S, 3E
II	5S, 10W
III	2S, 19E
IV	6S, 27W
V	9S, 16E
VI	23N, 20W
VII	15N,121E
VIII	12S, 54E

5 14 Sat.	
I	2S, 8E
II	2N, 13W
III	0N, 21W
IV	1S, 25E
V	7N, 38E
VI	15N, 53W
VII	22N,117E
VIII	11S, 74E

5 15 Sun.	
I	1S, 12E
II	5N, 14E
III	1N, 22E
IV	7N, 6W
V	11N, 2W
VI	4N, 78W
VIII	10S, 94E

5 16 Mon.	
I	0N, 14E
II	3S, 9E
III	2S, 22W
IV	8S, 17W
V	3S, 39W
VI	7S, 90W
VIII	10S,114E

5 17 Tue.	
I	2N, 14E
II	4S, 16W
III	4N, 22E
IV	4N, 28E
V	12S, 12W
VI	17S, 88W
VIII	8S,132E

5 18 Wed.	
I	3N, 12E
III	5S, 21W
IV	3N, 20W
V	2S, 35E
VI	24S, 72W
VIII	7S,150E

5 19 Thur.	
II	3N, 17E
III	6N, 19E
IV	8S, 1W
V	12N, 25E
VI	28S, 46W
VIII	6S,167E

5 20 Fri.	
I	4N, 3E
II	5S, 1E
III	6S, 16W
IV	8N, 22E
V	6N, 26W
VI	28S, 14W
VII	26N, 30W
VIII	5S,183E

5 21 Sat.	
I	4N, 2W
II	2S, 18W
III	7N, 13E
IV	2S, 28W
V	9S, 34W
VI	24S, 21E
VII	18N, 59W
VIII	4S,197E

5 22 Sun.	
III	7S, 9W
IV	5S, 15E
V	9S, 14E
VI	17S, 53E
VIII	3S,212E

5 23 Mon.	
II	0N, 17E
III	7N, 6E
IV	9N, 8E
V	6N, 39E
VI	7S, 77E
VIII	2S,224E

5 24 Tue.	
I	0S, 13W
III	7S, 2W
IV	6S, 26W
V	11N, 1E
VI	4N, 90E
VIII	1S,236E

5 25 Wed.	
I	1S, 14W
II	1N, 15W
III	7N, 2W
IV	0S, 26E
V	2S, 39W
VI	14N, 90E
VIII	1N,245E

5 26 Thur.	
I	3S, 12W
II	5N, 12E
III	6S, 6E
IV	7N, 9W
V	12S, 14W
VI	22N, 76E
VIII	2N,254E

5 27 Fri.	
II	3S, 12E
III	5N, 10W
IV	9S, 14W
V	3S, 33E
VI	27N, 50E
VIII	3N,260E

5 28 Sat.	
I	4S, 4W
II	4S, 15W
III	4S, 14E
IV	5N, 28E
V	11N, 26E
VI	27N, 16E
VII	31S, 14W
VIII	4N,267E

5 29 Sun.	
III	3N, 16W
IV	3N, 22W
V	7N, 24W
VI	23N, 20W
VIII	5N,270E

5 30 Mon.	
II	3N, 17E
III	2S, 19E
IV	8S, 2E
V	9S, 35W
VI	15N, 54W
VIII	6N,273E

5 31 Tue.	
III	0N, 21W
IV	8N, 20E
V	10S, 11E
VI	4N, 78W
VIII	7N,273E

6 1 Wed.	
I	0S, 13E
II	2S, 18W
III	1N, 22E
IV	3S, 28W
V	5N, 39E
VI	7S, 90W
VIII	8N,273E

6 2 Thur.	
I	1N, 14E
III	2S, 22W
IV	5S, 17E
V	12N, 3E
VI	17S, 88W
VIII	9N,271E

6 3 Fri.	
I	3N, 13E
II	1N, 17E
III	4N, 22E
IV	9N, 5E
V	1S, 38W
VI	24S, 72W
VIII	10N,268E

6 4 Sat.	
I	3N, 10E
II	6S, 6W
III	5S, 20W
IV	7S, 24W
V	12S, 16W
VI	28S, 46W
VII	18N,120E
VIII	11N,263E