

Jan. 78

Predictions

- Jan. 6 General Meeting, Olinder Center, William St. Park, 7:30 pm. Erni Piini will talk and show slides of his eclipse trip. Also that night, there will be the vote on adopting the new By-laws enclosed in last month's bulletin.
- Jan. 7 "Star party" Henry Coe State Park
- Jan. 13 Board of Directors Meeting, 8:00 pm. at Bob Fingerhut's house, 340 Rio Verde Pl. #4 Milpitas.
- Jan. 21 Indoor star party, Los Gatos Red Cross, 7:00 pm.
- Jan. 28 Indoor star party, Los Gatos Red Cross, 7:00 pm.
- Feb. 3 General Meeting, Olinder Center, William St. Park, 7:30 pm. Don McGlaulin will give a talk on hydrogen sensitized film and Bob Fingerhut will discuss cold cameras.
- Feb. 3 Board of Directors Meeting, John Rhodes' Motor home, in the parking lot, right after the General Meeting.
- Feb. 11 "Star party" location unknown.
- Feb. 18 Indoor star party, Los Gatos Red Cross, 7:00 pm.
- Feb. 25 Indoor star party, Los Gatos Red Cross, 7:00 pm.

I hate using F.E.A.O. So I'm going to use "star party" in quotes.

Editorial Penny Pinschmidt

So you think you know astronomy?

A basic introductory true/false astronomy quiz
by Bob Therkelson.

The earth is closer to the sun in January than in July.

The length of the day is equal to the length of the night on the date of the Vernal Equinox.

The moon is in orbit around the earth from east to west.

Neutron stars were larger than our sun when they were main sequence stars.

According to theory, black holes are objects that will grow in size until they become "black dwarfs".

The Milky Way galaxy is the largest galaxy in the universe.

Cepheid variables are part of the evolutionary process of all stars.

The galaxy called "Snickers" is in the same cluster as the Milky Way.

Quasars are smaller than galaxies.

According to the Big Bang theory of cosmology, the Universe is infinite in size.

Extraterrestrial life might be most probable on planets orbiting large, hot stars such as Rigel.

The moon orbits the earth on the same plane as the ecliptic.

The sun has a higher temperature on its surface than in the region above the surface.

The stars change in size and color as they progress through their life cycles.

The oscillating theory of cosmology requires the continuous creation of hydrogen.

Comets have tails which trail behind the comet's orbital motion.

The first minor planet found was predicted on the basis of Bode's Law (Titius' Progression).

If a meteor hits the earth, the resultant object is called a Meteoroid.

"Red-Shift" is a function of the absolute magnitude of the light source.

A nebula is a cloud of gas normally found in the space between galaxies.

A solar day is shorter than a sidereal day.

The sun emits radio energy.

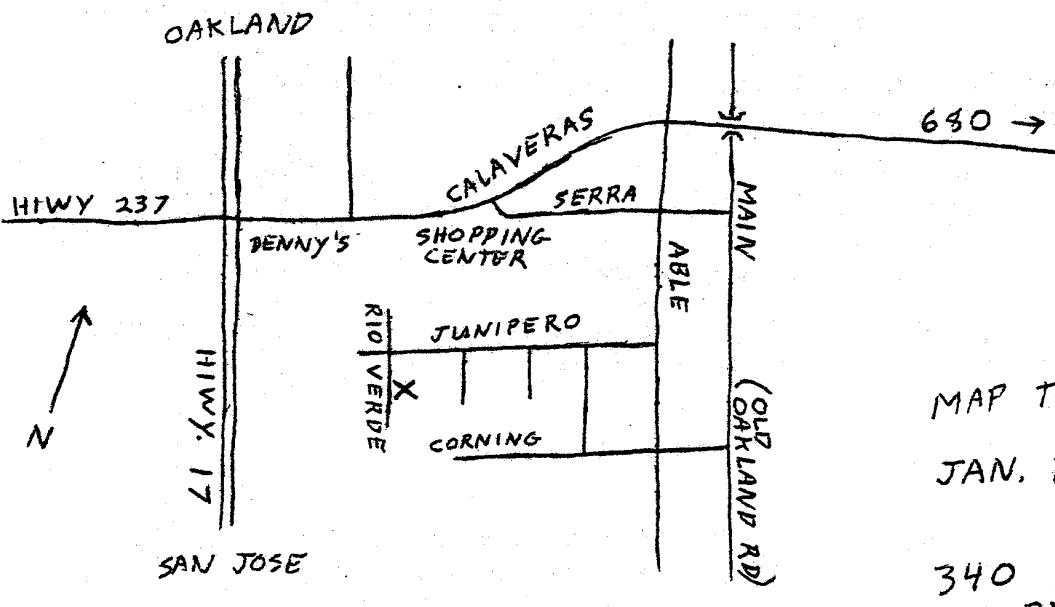
Blurbs

I noticed that the bulletin editor for the San Mateo club noticed my editorial in Dec. It's good to know other clubs have similar problems as well.

I have been involved with this club since March of '76. I have been a member since April a year ago. I have been editor for four months. Jack, do you think you can finally manage to get a name tag for me?

Speaking of Jack - his birthday party at the last General Meeting was very successful. Hopefully it was a surprise to him if he didn't notice the more than usual amount of whispering going on. We all sang Happy Birthday and Jerry, Don and Cathy brought in two birthday cakes with lots of candles. Jack blew them all out on the first try! Cake eating and gabbing continued until 10:00 when the building turned into a pumpkin and we had to leave.

There is a good chance that the February General Meeting will be moved to another location. I just heard from John Rhodes that we have approval to use Mark Twain High School in Los Gatos as a meeting place. The reason for a possible change is that we will have more flexibility as to the meeting times, translated, no 10:00 curfew. Don't worry, it's easy to get to, centrally located near Vasona Park. More information, a map and directions next month.



MAP TO BOB
FINGERHUT'S
JAN. BOARD MEETING

340 RIO VERDE #4
MILPITAS

An abstract by Allen Meyer paraphrasing a summary from the October 15th issue of The Astrophysical Journal.

1. The Canis Major RI association of young stars is located on the outer edge of a ring of optical and radio emission centered at R.A. $7^{\text{h}}00^{\text{m}}$, Dec. -12° . The emission ring has a diameter of 3° .
2. Evidence of an expanding shell of neutral hydrogen coincident with the optical ring is present in the 21 cm. radio maps by Weaver and Williams.
3. These optical and radio features can be explained as a supernova remnant 500,000 years old, with an explosion energy of 5×10^{50} ergs.
4. The H-R diagram and other measurements of individual members of the CMa RI association indicate they are pre-main sequence objects of about 500,000 years age.
5. "HD 54662 is a runaway star in the CMa OBI association and may be associated with the event that produced the observed supernova remnant."
6. "The consistency of the age of the supernova remnant with the ages of the CMa RI stars, as well as their location on the edge of the shell; provide strong support for the hypothesis that the supernova explosion triggered the star formation."

by Herbst, Assonza of Carnegie Institute of Washington

Board Meeting news as reported by Debbie Moore.

Preliminary forms were filled out on the possible use of another meeting place for the club, Mark Twain High School in Los Gatos.

The Board discussed appropriate location and dates for board meetings in relation to "star Parties" and general meetings.

Membership of the club is around 90. A fair jump from the 65 it was four months ago.

Also discussed was an increase in budget for the bulletin.

See the President's message for an update on the situation at Ricard Observatory, University of Santa Clara.

(John Rhodes didn't get a chance to write his President's Message this month. He'll be sure to have one next.)

Penny

ODD BITS

Ed Schell

Comet Kohler (1977m) is predicted to fade from mag. 6.8 as reported in mid-Dec. to mag. 10 on the 1st of Feb., and mag. 13 in April.

IAU Circular 3137

Methane has been detected in interstellar space.

IAU Circular 3146

Infrared observations indicate that Neptune emits about 3.5 times as much heat as it takes in from the sun. Considerably warmer than was formerly believed.

Science News, Nov. 12

Changes in the sun's period of rotation appears to be related to the number of sunspots. The more the spots, the slower the rotation.

Science News, Dec. 3

A new meteor shower** with a radiant near alpha Circini was noted on June 4th.

**Lasting about 1 hour

IAU Circular 3146

AD

AD

AD

For Sale

8 inch Newtonian f/7 included: car top rack, finder and 4 eyepieces. \$289.00 Brad Carlson 408-268-1580
AANC - NASA Conference award winner



Calico Observatory

3509 Calico Avenue
San Jose, Calif. 95124

December 16, 1977

A few notes as I promised. The Red Spot predictions are attached.

Red Spot Predictions - a change

In order to avoid biasing timings of the Red Spot, a random amount, ranging from zero to 10 minutes, has been subtracted from each time. This is done so that one is not tempted to "call" a passage at the time that is expected. The effect will be to get you there ahead of time (sometimes). Those of you who are making timings please contact Jim to get the precise equations to be used in comparing theory with observation.

Henry Coe Cloud/Star Party

The outing at Coe was a partial success. Although clouds occupied part of the sky, many fine sights were seen, especially in Cassiopeia and in the eastern sky.

The big attraction of the evening was an apodizing filter attached to a superb 8" newtonian, which had been constructed as outlined by Allan Meyer at the previous general meeting.

The filter definitely improved definition on Jupiter and Saturn, as Allan explained. But in addition, numerous diffraction spikes were added to the field, in the form of spectra radiating outward from each bright object in the field. The effect on the Pleiades was absolutely stunning.

The filter is highly recommended. See Jim or Allan for more details.

Great Red Spot
on Meridian LCT

	da	mo	d	h	m	
Su	1	1	1	4	49	AM
Su	1	1	1	9	35	PM
Tu	1		3	3	19	AM
Tu	1		3	11	17	PM
W	1		4	7	6	PM
F	1		6	0	50	AM
F	1		6	8	44	PM
Su	1		8	2	33	AM
Su	1		8	10	24	PM
W	1	11		0	2	AM
W	1	11		7	55	PM
F	1	13		1	39	AM
F	1	13		9	26	PM
Su	1	15		3	13	AM
Su	1	15		11	12	PM
M	1	16		6	55	PM
W	1	18		0	46	AM
W	1	18		8	37	PM
F	1	20		2	26	AM
F	1	20		10	11	PM
Su	1	22		11	54	PM
M	1	23		7	48	PM
W	1	25		1	36	AM
W	1	25		9	19	PM
F	1	27		11	6	PM
Sa	1	28		6	53	PM
M	1	30		0	41	AM
M	1	30		8	34	PM

Jim
Jim Van Nuland.

rattley rattles

Our organization, the San Jose Astronomical Association, as all of you should already be aware, is a member of the Astronomical Association of Northern California (AANC for short). The following is a list of the other member organizations and institutions along with current phone numbers of who you can contact if you have any need to get in touch with any of these other groups. This list was compiled by the AANC as a service to its member organizations many of whom requested that such a list was needed and desired.

Membership of the AANC including institutional organizations as of October 1977. P=President E=Editor D=Delegate A=Alternate

San Francisco Amateur Astronomers, Inc. (SFAA)

Al Daggit (D)	1339-34th Ave, S. F., Ca.	94112	(415) 664-5884
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Richard Hansen (P)	1295 Sloat Blvd, S. F., Ca.	94132	(415) 664-0184
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Leon Salanave	2047-17th Ave, S. F., Ca.	94122	(415) 661-6680
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Eastbay Astronomical Society (EAS)

Doug Berger (D)	879-D 143rd Ave, San Leandro, Ca.	94578	(415) 352-4689
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Terry Galloway (P)	6833 Charing Cross Rd, Berkeley, Ca.	94705	(415) 841-2390
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Jim Ferriera (E)	4678 Bianca Dr, Fremont, Ca.	94536	(415) 791-0532
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Betty Neill	1680 Hailler Ct, Concord, Ca.	94520	(415) 825-3906
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San Mateo Astronomical Society (SMAS)

Mike Ryan (P)	1679 Beach Park Blvd, Foster City, Ca.	94404	(415) 349-4182
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Stosh Groner (D)	271 Greenfield Ave, San Mateo, Ca.	94103	(415) 341-9660
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Fred Jacobs (A)	321-29th Ave, San Mateo, Ca.	94403	(415) 345-7390
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Peninsula Astronomical Society (PAS)

Mark Goheen (D)	110 Escondido Village, Stanford, Ca.		(415) 328-1244
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Ron Jones (P,A)	500 W. Middlefield Rd, Mountain View, Ca.	94043	xxxx
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Terry Terman	1450 Todd St, Mountain View, Ca.	94040	(415) 968-8066
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San Francisco Sidewalk Astronomers, Inc. (SFSA)

John Dobson (D)	1600 Baker St, S. F., Ca.	94115	(415) 567-2063
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Herman Fast (A)	144 Eddy St, S. F., Ca.	94102	(415) 441-9504
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Stockton Astronomical Society (SAS)

Frank A. Miller (D)	496 Drake Dr, Santa Rosa, Ca.	95405	(707) 539-9684
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Dennis LeClert (E)	1425 W. 12th St, Tracy, Ca.	95376	(209) 836-0567
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Dorothy Tye	3504 Grange Ave, Stockton, Ca.	95204	(209) 463-0875
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Telescope Makers Workshop (TMW)

Paul R. Zurakowski (D)	342 Harding, Livermore, Ca.	94550	(415) 447-6837
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Robert Schalck (A)	2751 Monument Blvd, Concord, Ca.	94520	(415) 682-6302
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Astronomical Society of Nevada (ASN)

Sally Allan	P.O.Box 13827, So. Lake Tahoe, Ca.	95702	
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Jesse Huntsman (E)	1325 Castle Way, Reno, Nevada	89502	
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Morrison Planetarium (Member, California Academy of Sciences)

Dr. Lee Simon (D)	Golden Gate Park, S. F., Ca.	94118	(415) 221-5100
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Tamalpais Astronomical Society (TAS)

Nan Tunison (D)	10 Hawthorne Ln, Corte Madera, Ca.	94925	(415) 924-3023
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Ralph Parlette (A)	27 Morning Sun, Mill Valley, Ca.	94941	(415) 383-0507
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City College of San Francisco

Don Warren (D)	Ocean & Phelan Aves, S. F., Ca.	94112	(415) 239-3242
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RATTLEY RATTLES ON! . . . continuation

Holt Planetarium/ Lawrence Hall of Science
Dr. Alan Friedman (D) LHS, U. C. Berkeley, Ca. 94610 (415)642-0552
Mark Gingrich (A) 2927 Northwood Dr, Alameda, Ca. 94501 (415)522-8164
Sonoma County Amateur Astronomers (SCAA)
Frank A. Miller (D) (already given - see SAS)
Tom Tyndall (A) 1126 Sunset Ave, Santa Rosa, Ca. 95401 (707)542-0143

Commercial, non-voting memberships

Space Microwave Laboratories, Inc.
1110 Petaluma Hill Road, Santa Rosa, Ca. 95404 (707)528-8114
Frank A. Miller (already given - see SAS)
Optica b/c
4100 MacArthur Blvd, Oakland, Ca. 94619 (415)530-1234
Raymond F. Barbera (Same as above)
George B. Carvalho (Same as above)
Geophysical Labs & Research
701 Panoramic Way, Berkeley, Ca. 94704 (415)843-7567
Judd Boynton (Same as above)
SPACE: The Final Frontier
1450 Todd St, Mountain View, Ca. 94040 (415)969-9859
Terry Terman (Same as above)

Those listed for our organization, SJAA, were:

Debbi Moore (D)
John Rhodes (P)
Gerry Rattley (VP)
Penny Pinschmidt (E)

You can refer to your SJAA membership roster for the address and phone numbers of our organizations contactees.

Since Rattley Rattles is taking two pages this month, I will only publish one page of my double star list. Column headings in my binary lists have been omitted, except on the very first page, in order to cram two more stars onto each page. Once this double star list is completely published I will make available a complete copy for those who have missed these monthly installments.

Well, that's enough for now.

Astronomically Yours;

Gerald W. Rattley

Hu	640	Com	12	48.2	+20	48	10.1-10.1	K	147	0.6	124	4+
Σ	1687,AB	35 Com	12	50.8	+21	31	5.3- 7.3	G+F	175	0.8	674	4
I	83	Cen	12	53.8	-47	25	7.5- 7.7	F	221	0.7	294	3+
β	1082	78 UMa	12	58.6	+56	38	5.0- 7.4	A	44	1.4	116	3
Hu	572	Com	13	06.7	+21	43	8.7- 9.7	G	178	0.2	114	4
Σ	1728	α Com	13	07.6	+17	48	5.2- 5.2	F	192	0.5	26	1
		-- Σ	1728	will next be widest in	1984;	$\theta=192^{\circ}$	$\rho=0.^{\prime\prime}6$					
λ	170,AB	Cen	13	09.2	-59	39	5.3- 5.7	B	- close -	-	27	4
Hu	644	CVn	13	17.6	+48	02	9.0- 9.8	M	271	0.5	49	2
Ho	260	CVn	13	21.3	+29	29	9.6- 9.8	M	72	1.0	600	4
A	1609,AB	CVn	13	23.6	+44	45	9.0- 9.0	K	168	0.2	44	2+
λ	179	d Cen	13	28.1	-39	09	4.6- 4.8	K	- close -	-	79	3
$\Omega\Sigma$	269,AB	CVn	13	30.6	+35	10	7.5- 7.7	A	- close -	-	55	2
A	1095	CVn	13	31.3	+29	59	8.9- 9.4	G	258	0.4	317	4
Σ	1757,AB	Vir	13	31.7	-00	04	7.7- 8.7	K	115	2.2	334	4+
β	932,AB	y Vir	13	32.0	-12	58	6.5- 6.8	A	46	0.3	198	3
I	365,AB	Cen	13	33.8	-61	26	6.3- 6.4	F	- close -	-	35	2
Σ	1768,AB	25 CVn	13	35.2	+36	33	5.1- 7.1	A	104	1.8	240	3
β	612	Boo	13	37.1	+11	00	6.3- 6.3	A+A	- close -	-	22	1
Σ	1781	Vir	13	43.6	+05	22	7.8- 8.2	G	135	0.4	300	4+
Σ	1785	Boo	13	46.8	+27	14	7.8- 8.3	K+K	159	3.4	155	2
Hwe	28	y Cen	13	50.6	-35	25	6.4- 6.4	F	305	0.8	258	4
I	234	Cen	13	54.3	-27	17	8.7- 9.5	G	252	0.6	458	4
A	1614	UMa	13	55.8	+52	14	9.4- 9.5	G	135	1.3	1047	4
β	1270	Boo	14	01.2	+08	44	8.5- 8.6	F+F	- close -	-	39	1
$\Omega\Sigma$	278	Boo	14	10.3	+44	25	8.3- 8.5	F	- close -	-	203	3
β	224	Boo	14	11.0	+12	48	8.7- 9.1	G	218	0.2	219	4
Σ	1820	UMa	14	11.4	+55	33	8.8- 9.1	K	111	2.3	813	5
Σ	1819	Vir	14	12.8	+03	22	7.7- 7.8	F+F	252	1.1	359	4
Hu	138	Vir	14	13.4	-06	50	9.4- 9.5	K	1	0.4	148	3
Σ	1834	Boo	14	18.5	+48	44	7.9- 8.1	F	104	1.2	321	3
β	1111,BC	Boo	14	20.9	+08	40	7.4- 7.4	F+F	- close -	-	39	1
A	2069	Boo	14	24.4	+16	38	8.4- 8.6	F	- close -	-	42	2
A	570	Boo	14	30.1	+26	54	6.6- 6.7	A	- close -	-	30	1
A	347	Boo	14	35.2	+48	26	8.5- 8.5	F	278	0.6	323	4+
Richaud,AB	α Cen	14	36.2	-60	38	0.3- 1.7	G+K	210	21.7	80	1+	
Σ	1865,AB	ζ Boo	14	38.8	+13	57	4.6- 4.6	A	305	1.1	123	2+
Hu	575	Boo	14	40.3	+19	42	10.1-10.6	M	358	0.6	52	2
ϕ	309	17 Lib	14	43.3	-20	58	7.1- 7.2	F	- close -	-	25	2
$\Omega\Sigma$	285	Boo	14	43.6	+42	35	7.9- 8.1	F	347	0.2	88	2+
Σ	1879	Boo	14	43.8	+09	52	7.7- 8.3	G	93	1.7	292	3
Σ	1883	Vir	14	46.4	+06	10	7.0- 7.0	F	298	0.4	228	3+
I	529	Cen	14	48.0	-36	54	9.6- 9.9	G	37	0.6	220	4
Σ	1888,AB	ξ Boo	14	49.1	+19	18	4.8- 6.9	G+K	333	7.2	151	1
$\Omega\Sigma$	287	Boo	14	49.6	+45	08	8.5- 8.6	G	346	1.1	400	4
h	4707	Cir	14	50.1	-66	13	7.9- 8.5	G	333	0.6	288	4+
$\Omega\Sigma$	288	Boo	14	51.0	+15	54	6.9- 7.6	F	171	1.3	215	4+
I	227,AB	Cen	14	53.4	-34	26	8.1- 8.2	F	92	0.5	40	2+
β	239	59 Hya	14	55.7	-27	27	6.4- 6.4	A	16	0.3	339	5
Σ	1909	44 i Boo	15	02.2	+47	51	6.0- var	G+G	29	0.9	246	3+
A	2385	Boo	15	05.0	+18	38	6.7- 6.8	A	- close -	-	8	4
λ	219	λ Lup	15	05.5	-45	05	5.0- 5.4	B	- close -	-	73	3
Σ	3091,AB	Lib	15	13.4	-04	43	7.9- 7.9	F	223	0.5	144	4
Σ	1932,AB	CrB	15	16.2	+27	01	7.3- 7.3	F	250	1.4	203	2+
h	4757	γ Cir	15	19.4	-59	09	5.2- 5.3	B	316	0.4	180	5+
Σ	1937,AB	η CrB	15	21.1	+30	28	5.7- 6.0	F	321	0.4	42	1+
		-- η CrB			will next be	widest in	1991;	$\theta=31^{\circ}$	$\rho=1.^{\prime\prime}0$			
Σ	1938,BC	μ^2 Boo	15	22.6	+37	32	7.2- 7.8	G	16	2.2	260	3
λ	238,BC	Lib	15	30.2	-24	19	7.7- 7.8	K	- close -	-	54	2