

**DEC. '77**

Future Predictions

- Nov. 26 Indoor Star party, Los Gatos Red Cross,  
7:00 pm.
- Dec. 2 General Meeting, Olinder Center, William  
St. Park, 7:30 pm. The Board is trying to  
get Erni Piini to give a talk. If he can't  
make it, Allen Meyer will give an off-the-  
cuff talk.
- Dec. 2 Board of Directors Meeting, John Rhodes'  
Motor home, in the parking lot, right after  
the General Meeting.
- Dec. 2 Jack Zeiders' birthday.
- Dec. 19 Far-out and close-in F.E.A.O., Henry Coe  
State Park..
- Dec. 17 Indoor Star party, Los Gatos Red Cross,  
7:00 pm..
- Dec. 21 Winter Solstice,. 1524 PST.  
Happy Holidays
- Jan. 6 General Meeting, Olinder Center, William  
St. Park, 7:30 pm. The Board hasn't  
decided yet what the program for this  
meeting is to be. Perhaps Leo C. Henzl.

"If you are very careful, nothing bad or good will  
happen to you."

Quoted by John Rhodes  
at the last board meeting

**The San Jose Astronomical Association**

# Kistory

Nov. 12 F.E.A.O. at Coe Park

The evening started very nicely - watching the moon set as I drove lazily up the hill. When I got there right after dark, the temperature was short-sleeve pleasant with a slight breeze but as the evening wore on, it got rather cold and the wind chill factor didn't help when things started blowing later.

Wasn't many of the old-timers there, just Jim V., Jack Z., Bob F., Jim and the "Boxkite gang." Where was everyone? We did have quite a number of new members there including Chuck S. and Jim J. with some of their families, Carlton P. with Phillip, Bruce and Maria D. (I hope I got the names right - I'm still trying to get them all straight) Larry W. showed up in a new pea-green VW camper that he got to carry the 12 $\frac{1}{2}$ " that he bought from Don McG. It's nice to see that telescope hasn't retired from attending "observing sessions" (We aren't to use star party anymore - bad PR).

I went to bed about 11 and got up at 3 - it was nice then - very clear and the valley was filled in with fog, but I was told later that there had been some problems with high clouds. Bob and Larry may have got some pictures. Jack forgot some of his eyepieces at home.

Even so, Jim, Larry, et al. had some good views of Jupiter, Saturn, Orion, M 1, etc. with a "superb" 8" newtonian. I found a FFN with binoculars that I still don't know what was, but I learned something, so.... Those of you that didn't go just might have missed a good thing.

Ed Schell

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Sanborn Canyon, Nov. 19.

The West Valley public Astronomical Observing Session was very successful. The students deported themselves well, despite the tremendous number of people, way, way over a hundred. Club members encluded John Rhodes, Gerry Rattley, Jack Zieders, Larry Webster, Bob Fingerhut, Jim Vermillion, Brad Carlson, Ed Schell and myself. Suzanne and Ralph Lowd came later in the evening. Members even had time to try to time Jupiter's Red Spot. Oh, and by the way, the big argument of the evening was whether Ed's thermometer read 25 or 26 degrees.

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Welcome to our new members - - - To be added to your list.

Earl Cherne	1794 Whitwood Ln. #3	Campbell	95008	374	9570
Les Delong	2951 Postwood Dr.	San Jose	95132	263	4612
Tony Di Cenzo	790 Ironwood Dr. #A-115	San Jose	95125	266	6545
James Johnson	17010 Holiday Dr.	Morgan Hill	95037	779	9036
Jeffrey Lo	4090 Cranford Circle	San Jose	95124	377	3139
Ronnie Martin	1310 Peralta Ct.	San Jose	95120	268	0544
Carlton Perry	273 N. King Rd.	San Jose	95116	291	9122
Lloyd West	5021 Cribari Vale	San Jose	95135	274	4382
Mark Geoffrey Yatabe	16320 Burton Rd.	Los Gatos	95030	356	5229

## *Editorial*

I believe the Editor should decide what the bulletin contains, not the Board - if we're going to have a separate editor. Perhaps an alternative could be to hold two monthly Board meetings, the second one for the Board members to write the bulletin as a committee.

The only time I get any feed-back on the bulletin is from the Board at Board meetings. I find this somewhat intimidating. I would like to hear some opinions or ideas from the general membership. Please let me know what you think and tell the Board as well.

*Penny E. Pinschmidt*

### NEWS NOTEZ

Ed doesn't have any News Notez this month, but that doesn't mean that nothing happened this month - you should read the Science section of the November 21 issue of TIME magazine.

Instead, something better:

An abstract from The Astrophysical Journal by Allen Meyer.

### THE PLEIADES

The Pleiades reflection nebulosity is one of the most beautiful and, at the same time, curious nebulae that we can see. At a distance of only 126 pc we have an unprecedented opportunity to observe the fine structure that occurs in interstellar clouds. The nebula has extremely fine filaments that lie in organized structures across most of the nebula.

Lynds (1968) has called attention to the often "windswept" appearance of interstellar clouds, some of which are strikingly similar to terrestrial cirrus clouds. In this paper we will explore the possibility that the striations in the Pleiades nebulosity arise from a mechanism such as that which produces terrestrial cirrus clouds. Cirrus is formed when clumps of ice crystals settle into a layer of different wind speed. The resulting shear then stretches the clumps into long plumes. In the Pleiades the clumps are of interstellar grains, and the shearing is due to radiation pressure which drives grains through the background gas. The general picture suggested is that an interstellar cloud is approaching the cluster from the east side and is traveling through it. Dust particles in the cloud are decelerated by the stellar radiation pressure, but the gas, unaffected by the radiation field, drags the grains around the stars, forming a thin dust shell.

by Thomas Arny

## The Graze Expedition - November 4th and 5th

Jim Van Nuland, Dave Ambrose, Ed Schell and I were the first to meet at the secondary site on the corner by the "cow" sign at about 4:00 p.m. Jim used John Rhodes' measuring bike to plot stations, the rest of us gabbed away, watching the sun go down in and around the clouds, and wondered in traditional astronomical fashion the big question, "Will it rain?" The only catastrophe so far was that Ed's trusty C.B. died. He spent only about three hours, most of which were after dark, trying to fix the thing. Never did get it to work.

At 9:00 p.m. Jim called the general meeting. The message: come at your own risk. A 50-50 chance of rain and/or clouds. Excitement over, we congregated at the schoolhouse for a nap. Dave and his sleeping bag found the play yard tanbark almost as comfortable as a good bed!

At midnight nearly all of the 23 people who came crowded into John Rhodes' motor home. Jim assigned stations, 16 of them, including the one with the skunk smell. When class was dismissed and the arguments over, the sky was clear and the stars were shining!

Run for your cars! Go to your stations! A graze is coming!

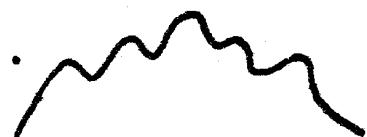
1:30 a.m. - 16 telescopes out and ready, WWV blaring away. One rain drop, another, and another. 2:00 a.m. - 16 dripping telescopes still out and ready. 46 still hopeful eyes watched it pour. 2:15 - 2:30 - and one by one, telescopes were taken in out of the drenching rain.

3:00 a.m. - inside John's motor home an electric video game was well under way. People were laughing, joking, and wet as drowned rats. Some went home, others stuck the night out at the school yard parking lot. Others stayed at their station, watched the lightning, the rain, the hail, and a very cold, wet telescope plus worrying about getting stuck. (If you want to know who these particular people are, ask Jack Zeiders and Cathy Pinheiro.)

According to Sam Stoughton, the evening was a total success. Enthusiasm was high, humor was plentiful, and willingness and stick-to-it-ive-ness were ever present. How can so many people go out in the middle of nowhere, set up telescopes under dark, threatening skies and still stay with it? Even when lightning strikes and rain pours! Crazy? Maybe just a little bit.

(The next morning at the school house it was nice, warm and sunny.)

Penny



Great Red Spot  
on Meridian PST

	da	mo	d	h	m	
Th	12		1	1	13	AM
Th	12		1	9	4	PM
Sa	12		3	2	51	AM
Sa	12		3	10	42	PM
M	12		5	4	29	AM
Tu	12		6	0	20	AM
Tu	12		6	8	11	PM
Th	12		8	1	58	AM
Th	12		8	9	49	PM
Sa	12		10	3	36	AM
Sa	12		10	11	27	PM
Su	12		11	7	18	PM
M	12		12	5	14	AM
Tu	12		13	1	5	AM
Tu	12		13	8	56	PM
Th	12		15	2	43	AM
Th	12		15	10	34	PM
Sa	12		17	4	21	AM
Su	12		18	0	12	AM
Su	12		18	8	3	PM
Tu	12		20	1	50	AM
Tu	12		20	9	41	PM
Th	12		22	3	28	AM
Th	12		22	11	19	PM
F	12		23	7	10	PM
Sa	12		24	5	6	AM
Su	12		25	0	57	AM
Su	12		25	8	48	PM
Tu	12		27	2	35	AM
Tu	12		27	10	26	PM
Th	12		29	4	13	AM
F	12		30	0	4	AM
F	12		30	7	55	PM

Jim Van Nuland

(Jim needs to know if you look for the Spot, even if you don't see anything. He wants to know if these are working or if they are of any use.)

ADS

ADS

ADS

For Sale

TASCO 4 1/2"  
Reflecting Telescope  
f/8

German mount with  
setting circles and  
a wooden tripod.

Call Bob Fingerhut  
263-4455

For Sale

8 inch Newtonian f/7  
\$289.00

included: car top rack  
4 eyepieces  
finder

Brad Carlson (408) 268-1580

Adoption of new By-laws

The new By-laws, bearing our new name, are included in this issue. The document is basically the same as before but with the errors in grammer, numbering, etc. corrected. The last page lists the sections in which more extensive work was done. Please study it a bit; it will be discussed at the December meeting, then the vote for ratification will be cast at the January, 1978 meeting. A 2/3 majority will be needed to pass, so vote early and vote often!!

Jim Van Nuland

OΣ	156	Gem	06	44.5	+18	15	6.8-	7.0	A	242	0.5	1058	4
OΣ	157	Mon	06	45.2	+00	24	7.4-	7.9	A	205	0.3	265	4
A	2731	Mon	06	46.0	+07	41	8.7-	9.5	G	60	1.0	180	4↑
Σ	963,AB	14 Lyn	06	48.7	+59	31	5.9-	7.1	G+A	251	0.4	480	4
A	513,AB	Gem	06	49.7	+25	02	9.6-	9.7	G	235	0.5	305	4
Σ	982,AB	38 Gem	06	51.8	+13	15	4.7-	7.6	F+G	147	7.0	3190	5
B	706	CMa	06	52.6	-27	30	9.0-	9.2	K	297	0.4	153	4
I	65	Pup	06	55.6	-35	26	6.9-	6.9	F	- close -	-	17	1
Σ	1037,AB	Gem	07	09.7	+27	19	7.2-	7.2	F	320	1.3	117	2
β	575,AB	CMa	07	12.5	-15	23	7.8-	7.8	F	271	0.7	512	4
I	7	Pup	07	16.0	-46	54	7.2-	8.0	K	211	0.9	84	3
Σ	1066	δ Gem	07	17.1	+22	05	3.5-	8.1	F+K	221	6.1	1200	5
Σ	1093	Lyn	07	26.5	+50	05	8.8-	8.8	F	189	0.8	381	4
Σ	1104,AB	Pup	07	27.1	-14	53	6.2-	7.6	F	14	2.1	1091	5↓
Hu	1244	Gem	07	29.4	+14	12	11.2-11.2	-	-	261	0.2	75	3
Σ	1110,AB	α Gem	07	31.4	+32	00	2.0-	2.9	A+A	95	2.2	420	3↑
Shaeberle		α CMi	07	36.7	+05	21	0.5-	9.5	F	329	4.9	41	1
		-- Procyon will next be widest in 1990; θ=10°; ρ=5".2.											
OΣ	177	Lyn	07	38.4	+37	33	8.0-	9.0	A	175	0.5	201	3↑
Hu	710	Pup	07	40.6	-16	57	6.3-	7.3	G+G	- close -	-	116	3
Ho	247	Gem	07	43.2	+21	15	8.0-	8.5	F	235	0.3	169	4
Hu	1247	Cam	07	43.7	+60	25	7.6-	7.6	F+F	- close -	-	19	2
β	101	9 Pup	07	49.5	-13	46	5.9-	6.2	G	44	0.2	23	1
		-- β 101 will next be widest in 1991; θ=294°; ρ=0".6.											
OΣ	185	CMi	07	54.7	+01	16	7.2-	7.2	F+F	- close -	-	57	2
Σ	1175	CMi	07	59.8	+04	18	8.5-10.4	-	G	272	1.2	1590	4
A	1581	Mon	08	00.7	-06	16	10.0-10.0	-	K	297	0.8	267	4
OΣ	187	Gem	08	01.0	+33	10	7.1-	7.7	A	- close -	-	217	3
β	581,AB	Cnc	08	01.6	+12	26	8.7-	8.7	K	254	0.5	45	1
Σ	1196,AB	ζ Cnc	08	09.3	+17	48	5.7-	6.0	F	280	0.8	60	1↓
Σ	1196,AB-C	ζ Cnc	08	09.3	+17	48	5.1-	6.0	F+G	81	5.9	1150	4
Σ	1196,Cc	ζ Cnc	08	09.3	+17	48	6.3-	7.8	G	- close -	-	18	2
Hu	115	Pup	08	10.8	-13	45	9.7-10.7	-	M	160	0.8	54	2↓
Σ	1211,AB	Lyn	08	15.0	+39	09	9.1-	9.6	-	288	0.2	295	4
A	1745,Cc	Lyn	08	17.6	+47	34	10.2-10.9	-	-	300	0.5	181	4
Σ	1216	Hya	08	18.8	-01	27	7.0-	7.3	A	275	0.6	435	4
Rst	321	Vel	08	23.5	-48	59	8.7-	8.9	G	- close -	-	24	2
A	1746,BC	Cnc	08	23.7	+24	42	8.4-	8.4	F	- close -	-	22	2
A	550	Hya	08	25.2	-04	15	7.4-	7.5	F	- close -	-	40	2
B	1606	Vel	08	25.6	-52	32	7.3-	7.3	F	- close -	-	15	2
A	551,AB	Hya	08	26.0	-02	21	7.0-	7.1	F	- close -	-	53	2
Hu	716	Lyn	08	28.4	+35	08	7.6-	8.6	G	44	0.2	33	2
		-- Hu 716 will next be widest in 1995; θ=120°; ρ=0".5.											
β	205,AB	Pyx	08	30.9	-24	26	6.8-	6.9	A	3	0.6	159	3
β	208,AB	Pyx	08	36.9	-22	29	5.4-	6.9	G	239	0.5	145	3↓
I	314	Pyx	08	37.5	-36	26	6.3-	7.8	F	235	0.7	67	3↓
B	1624	Vel	08	40.7	-52	34	8.2-	9.2	G	320	0.2	76	4
Hu	120	Hya	08	43.8	-14	11	8.8-	9.1	F	169	0.4	205	4
Sp	-,AB	ε Hya	08	44.2	+06	36	4.1-	4.4	G	- close -	-	15	1
Σ	1273,AB-C	ε Hya	08	44.2	+06	36	3.5-	6.9	G	286	2.8	890	4
A	1584	UMa	08	49.4	+55	08	8.2-	8.2	G+G	158	0.3	74	3
Σ	1280,AB	UMa	08	51.0	+71	00	9.3-	9.4	K	126	1.2	1200	5
A	2131,AB	Cnc	08	52.0	+26	24	7.0-	8.1	G+K	- close -	-	45	2
φ	316	Vel	08	52.2	-47	20	6.1-	6.1	A	- close -	-	7	2
Hu	628,BC	1 UMa	08	55.8	+48	14	11.4-11.7	-	M	205	0.9	40	2↓
Kui	37,AB	10 UMa	08	57.4	+41	59	4.3-	6.2	F	27	0.7	22	2↓
Σ	1306,AB	σ² UMa	09	06.0	+67	20	4.9-	8.5	F+K	3	3.2	1067	4
Σ	1321,AB	UMa	09	11.4	+52	55	8.1-	8.1	M+M	87	17.5	687	5
Kui	39	Cam	09	12.3	+77	28	10.2-10.5	-	M	149	0.5	50	3↓

$\Sigma$	3121	Cnc	09	14.9	+28	47	8.0-	8.1	K+K	172	0.2	34	1
$\Sigma$	1338,AB	Lyn	09	17.9	+38	24	6.5-	6.7	F+F	254	1.1	389	4
A	1342	Hya	09	20.4	-09	37	7.3-	7.3	A	- close	-	22	3
$\Sigma$	1356	$\omega$ Leo	09	25.8	+09	17	6.0-	6.7	F	20	0.5	117	1
Copeland		$\psi$ Vel	09	28.7	-40	15	4.2-	4.7	A	115	1.0	34	1+
B	780	Car	09	39.2	-57	45	6.1-	6.1	A	- close	-	11	1
$\phi$	326	$\theta$ Ant	09	42.0	-27	32	5.7-	5.9	F	- close	-	19	3
$\Omega\Sigma$	208	$\phi$ UMa	09	48.7	+54	18	5.2-	5.3	A	100	0.2	105	2
AC	5	$\gamma$ Sex	09	50.0	-07	52	5.8-	6.1	A	80	0.5	76	2
I	173	Vel	10	04.2	-47	07	5.4-	7.1	G	353	0.8	232	4+
Kui	47	Dra	10	06.5	+75	22	10.6-10.7		K	102	1.2	200	4+
A	2145	Leo	10	06.6	+20	35	7.4-	7.4	F+A	- close	-	60	3
$\Omega\Sigma$	213	Leo	10	10.3	+27	40	8.4-10.4		G	128	0.8	157	4+
$\Omega\Sigma$	215	Leo	10	13.6	+17	59	7.2-	7.4	F	183	1.4	552	4
Hu	1597	Car	10	14.3	-59	39	7.2-	7.2	A	315	0.3	124	4
$\Sigma$	1423	Leo	10	16.5	+20	49	9.3-10.0		K	11	1.1	460	4
$\Sigma$	1424	$\gamma$ Leo	10	17.2	+20	06	2.6-	3.8	K+G	123	4.3	619	5
$\Omega\Sigma$	216	Leo	10	20.1	+15	36	7.5-	9.7	G	251	1.4	260	3+
$\Omega\Sigma$	217	Leo	10	24.2	+17	29	7.9-	8.4	F	355	0.1	166	4
Hu	879	$\beta$ LMi	10	25.0	+36	58	4.6-	6.3	G	229	0.6	38	3+
$\beta$	411	Hya	10	33.7	-26	25	6.6-	7.5	F	322	1.1	210	3+
$\lambda$	119	p Vel	10	35.2	-47	58	4.6-	5.1	F+A	- close	-	16	1
$\Omega\Sigma$	224	Leo	10	37.1	+09	06	8.1-10.1		F	170	0.5	214	4
R	155	$\mu$ Vel	10	44.6	-49	09	2.8-	7.0	G	52	2.0	116	3+
$\beta$	1076	55 Leo	10	53.1	+01	00	6.1-10.3		F	65	1.0	128	3
A	1590	UMa	11	00.6	+54	49	9.2-	9.7	G	343	1.2	145	3
$\beta$	1077	$\alpha$ UMa	11	00.7	+62	01	2.0-	4.8	K	317	0.8	44	2+
A	676,BC	Leo	11	02.2	-03	57	10.6-10.6		-	- close	-	24	3
$\phi$	47	$\chi^1$ Hya	11	02.9	-27	01	5.8-	5.8	F	- close	-	7	2
$\beta$	220	$\psi$ Crt	11	10.0	-18	14	6.6-	7.2	K	275	0.1	233	4
$\Sigma$	1523	$\xi$ UMa	11	15.5	+31	49	4.4-	4.8	G+G	105	2.9	60	1+
$\Sigma$	1527	Leo	11	16.4	+14	33	7.0-	8.1	F	30	1.5	1148	5+
I	879	$\pi$ Cen	11	18.7	-54	13	4.7-	5.5	B	- close	-	39	2
$\Sigma$	1536	$\iota$ Leo	11	21.3	+10	48	4.1-	4.7	F+F	163	1.3	205	3+
BrsO	5	Cen	11	22.6	-61	22	7.7-	8.9	K	237	5.4	421	3
$\Sigma$	1540,AB	83 Leo	11	24.2	+03	17	6.2-	7.2	K	140	27.1	32000	5
Hu	462	Crt	11	24.8	-15	22	8.4-	8.6	K	345	0.5	48	2
$\Omega\Sigma$	234	UMa	11	28.1	+41	34	7.6-	7.9	F	116	0.3	86	2+
$\Omega\Sigma$	235	UMa	11	29.5	+61	22	5.7-	7.1	F	195	0.4	73	1+
$\beta$	456	Crt	11	34.3	-12	04	9.9-10.2		G	142	0.7	297	4
$\beta$	603	Leo	11	46.1	+14	34	6.0-11.0		A	350	1.0	122	3
Hu	731	UMa	11	49.4	+48	22	9.6-	9.8	K	138	0.4	108	3
$\beta$	794	Dra	11	51.0	+74	02	7.3-	7.9	F+G	185	0.3	77	2
A	75	Dra	11	51.4	+72	12	8.1-	8.5	F	- close	-	79	3
I	215	Hya	11	59.3	-34	23	7.3-	8.0	G	336	0.4	108	4+
$\lambda$	143	89 Cen	12	01.1	-38	27	7.3-	7.5	F	89	0.9	109	3+
$\Sigma$	3123,AB	Dra	12	03.5	+68	59	7.9-	7.9	F	- close	-	120	3
Rst	1658	Hya	12	12.8	-30	49	10.1-10.7		K	283	0.7	67	4+
$\beta$	920	Crv	12	13.2	-23	05	7.0-	7.5	F	26	0.5	175	5+
$\Sigma$	1621	Vir	12	13.5	+05	55	10.2-11.7		K	314	0.5	359	4+
$\Sigma$	1639	Com	12	21.9	+25	52	6.7-	7.7	A	326	1.5	678	4
$\Sigma$	1643	Com	12	24.7	+27	19	9.2-	9.5	K	319	1.9	2200	5
$\Omega\Sigma$	251	CVn	12	26.6	+31	57	8.3-10.0		F	53	0.6	600	4
$\beta$	28	Crv	12	27.5	-13	07	6.5-	9.2	F	322	1.8	162	3+
$\Sigma$	1647	Vir	12	28.0	+10	00	8.5-	8.8	F	237	1.4	1140	5
h	4539	$\gamma$ Cen	12	38.7	-48	41	3.1-	3.2	A	358	1.6	85	1+
$\Sigma$	1670	$\gamma$ Vir	12	39.1	-01	11	3.6-	3.6	F+F	297	3.9	172	1+
A	1851	Com	12	39.7	+26	39	10.2-10.6		K	225	0.4	62	2
R	207	$\beta$ Mus	12	43.2	-67	50	3.9-	4.2	E	30	1.4	383	4

BY-LAWS  
of the  
SAN JOSE ASTRONOMICAL ASSOCIATION

ARTICLE I -- CORPORATE STRUCTURE

Section 1. The name of this corporation shall be the San Jose Astronomical Association.

Section 2. This shall be a non-profit corporation dedicated to astronomy and the allied sciences, through research and education.

Section 3. The principal office in the State of California shall be in the County of Santa Clara, and shall be located at such address as may be fixed by the Board of Directors.

ARTICLE II -- MEMBERS

Section 1. Classes of Membership. There are hereby established the following classes of membership: (a) Active Members, (b) Contributing Members, and (c) Honorary Members. The qualifications of each class are hereinafter set forth:

(a) Active Members. All Active Members shall pay dues to the Corporation, shall receive Sky and Telescope magazine, and have the right to one vote at any meeting of the corporate membership. Any person may become an Active Member upon acceptance of an application for membership by the Board of Directors.

(b) Contributing Members. The Board of Directors, by a majority vote, may confer for a period of one year the title of Contributing Member upon a person who shall have made a substantial contribution to the Corporation. Contributing Members shall have all the rights and privileges of Active Members.

(c) Honorary Members. The Board of Directors shall have the power in its discretion, by a majority vote, to confer the title of Honorary Member upon any person. Honorary Members shall have all of the rights and privileges of Active Members other than the right to vote and to receive Sky and Telescope.

Section 2. Dues. The Corporation shall operate on a fiscal year beginning July 1 and ending June 30.

(a) Annual dues shall be paid at such time before June 30 as the Board of Directors shall determine. The amount of annual dues shall be decided by the Board of Directors.

(b) New members' dues shall be pro-rated on a monthly basis of 1/12 the annual rate, unless joining in the last quarter of the fiscal year; in which case dues shall be paid for the forthcoming year in addition to the pro-rated amount for the current fiscal year.

(c) If there is more than one Active Member in the household, such additional members shall be entitled to all the privileges of membership other than the subscription to Sky and Telescope by paying annual dues decreased by the amount charged the Corporation for the subscription to the magazine.

### ARTICLE III -- MEMBERSHIP MEETINGS

Section 1. Place of Meetings. Meetings of the membership shall be held monthly at a time and place selected by the Board of Directors.

Section 2. Annual Meetings. The regular monthly meeting held in June shall be designated as the Annual Meeting. At said Annual Meeting, Directors of the Corporation shall be elected with nomination being accepted from the Nominating Committee and the floor. Twenty-five percent of the active membership shall constitute a quorum for this meeting.

Section 3. Special Meetings. Special meetings of the membership may be called at any time by order of the President or upon demand by a majority of the Board of Directors.

Section 4. Notices of Meetings. Written notice of Special Meetings and Annual Meetings shall be given to all Active and Contributing Members not less than five (5) days prior to the meeting date. Notice of regular meetings is mandatory only to notify the membership concerning a change in time and/or place of meeting.

Section 5. Quorum at Membership Meetings. At Membership meetings, other than the Annual Meeting, the attending Active Members shall constitute a quorum, and a majority vote of those present shall be sufficient for the transaction of business.

### ARTICLE IV -- DIRECTORS

Section 1. Powers, Prerogatives, and Promulgation. The corporate powers, business, and property of the Corporation shall be vested in and exercise controlled and conducted by a Board of Directors consisting of nine (9) members.

Section 2. Terms of Directors. Directors shall be elected by the Active Membership for a term of two (2) years. Five (5) Directors shall be elected in odd-numbered years and four (4) Directors shall be elected in even-numbered years. Terms shall be effective on completion of balloting at the Annual Meeting.

Section 3. Vacancies. The Board of Directors shall fill vacancies on the Board by selecting a qualified member from the membership at large, to serve only during the unexpired term of the directorship vacated.

Section 4. Meetings of the Board. The Board of Directors shall meet either monthly or bi-monthly, at the Board's discretion, at a place specified at the preceding board meeting. Special meetings may be called by the President, or by any two Board Members, at any time.

Section 5. Notices of Board Meetings. Notices of Regular and Special Meetings of the Board of Directors shall be mailed, telephoned, or personally delivered to all Directors not less than three (3) days prior to said meeting.

Section 6. Quorum. Except as elsewhere stated, five (5) members of the Board of Directors shall constitute a quorum for the transaction of business.

Section 7. Qualification for Board Membership. To be qualified for nomination to the Board, a person shall be an Active Member, and must have one (1) year active membership or attend three (3) board meetings if bi-monthly or six (6) board meetings if monthly. Termination of board membership shall be automatic if member misses three (3) consecutive Board meetings without notification to the Board.

#### ARTICLE V -- OFFICERS

Section 1. Scope. The officers of the Corporation shall consist of a President, Vice President, Secretary, and Treasurer, who shall be chosen by the newly-constituted Board of Directors at the first meeting of the Board following the Annual Meeting of the membership. Said officers serve a term of one (1) year. Terms shall be effective at the Installation of Officers ceremony.

Section 2. Eligibility for office. Officers shall be elected from the Board's membership. Should an office be impossible to fill from the Board, the Board shall have the option to nominate a qualified person from the Active Membership. For election, a two-thirds (2/3) vote of the total Board shall be required. This person will become an active Board Member in addition to the normal nine (9) members.

Section 3. Duties of the President. The duties of the President are:

(a) To preside at all membership meetings and Board of Director's meetings.

(b) To call special meetings of the membership, and of the Board of Directors, as he deems necessary.

(c) To affix the signature of the Corporation to all papers unless otherwise directed by the Board of Directors.

(d) To supervise and control, subject to the Board of Directors, all other Officers of the Corporation.

Section 4. Duties of the Vice President. The Vice President shall have the power to act and shall act in the absence of the President, or at the request of the President.

Section 5. Duties of the Secretary. The duties of the Secretary are:

(a) To keep full and correct records of the proceedings of all meetings of the Board of Directors and of the membership.

(b) To sign, in conjunction with the President, all instruments in writing as directed by the Board of Directors.

(c) To publish and distribute all notices which may be necessary and proper. In case of the failure of the Secretary to make publication of any notice, then such notice may be signed, published and distributed by the President, Vice President, or other person authorized by either of them or by the Board of Directors.

(d) To generally do and perform all such duties as pertain to the Office and as may be required by the Board of Directors or by the President.

Section 6. Duties of the Treasurer. The duties of the Treasurer are:

(a) To be custodian of the books and papers of the Corporation.

(b) To supervise and control the keeping of accounts and of the books of the Corporation, and generally do and perform all such duties as pertain to his Office and as may be required by the Board of Directors or by the President.

(c) To have custody of the corporate funds and securities, and to keep full and accurate account of all receipts and disbursements in books belonging to the Corporation.

(d) To deposit all monies and other valuable effects in the name and to the credit of the Corporation, in such depositories as may be designated by the Board of Directors.

(e) To disburse the funds of the Corporation as may be ordered by the Board of Directors, and to take proper vouchers for such disbursements.

(f) To render to the President and to the Board of Directors, whenever they require, an account of all his transactions as Treasurer and of the financial condition of the Corporation.

Section 7. Vacancies. In the event of a vacancy in the offices of the Corporation, a successor shall be elected from the Board of Directors, by the Board, to serve the unexpired term of the vacancy.

ARTICLE VI -- COMMITTEES

Section 1. Nominating Committee. One month prior to the Annual Meeting, the President shall name three (3) members to serve on a committee to be known as the Nominating Committee. It shall be the duty of the Nominating Committee to submit to the members attending the Annual Meeting the names of at least one candidate for each Director to be elected under these articles.

Section 2. Board of Director's Committees. The Board of Directors may establish committees whose powers and terms of service are specifically controlled by the Board of Directors.

Section 3. President's Committees. The President may establish committees whose powers and terms of service are controlled by the President. Actions and findings of such committees shall be subject to ratification by the Board of Directors, if the Board so desires.

#### ARTICLE VII -- DISSOLUTION

Section 1. Procedure. Upon a proposal concurred with by three-fourths (3/4) of the Active Members present and voting at a regular membership meeting the Corporation may be dissolved; and upon such dissolution the funds and properties of the Corporation shall be distributed by a majority vote of the Board of Directors, subject to the approval of the active members.

Section 2. Limitations. The property of this non-profit corporation is irrevocably dedicated to charitable and/or scientific purposes, and on dissolution none of its assets shall inure to any individual, but shall be distributed to a fund or foundation whose property is dedicated to exempt purposes as specified in Revenue and Taxation Code Section 214 of the State of California.

#### ARTICLE VIII -- AMENDMENTS

Section 1. Majority. These By-Laws may be repealed or amended, or new By-Laws adopted, by a two-thirds (2/3) vote of the Active Members present at a Membership Meeting, an Annual Meeting, or a Special Meeting called for that purpose.

Section 2. Notice. Notice of any such repeal, amendment, or adoption shall be submitted to all Active Members one month before such proposal or proposals may be voted upon.

Circa 1955 Original By-Laws adopted

Prec. 1969 Art IV Sec 1 Amended Change to nine Directors

Circa 1969 Art II Sec 2 Amended Change to Fiscal Year

Possibly other changes prior to 1973. Records lost.

Sep 5 1975 Art IV Sec 4 Amended Allow bimonthly meetings

Art IV Sec 7 Added Board Member qualifications

Art V Sec 1 Amended Officers elected from Board

Jan 6 1978 By-Laws rewritten and re-adopted. Major changes:

Art I Sec 1 Revised Change name of corporation

Art II Sec 2 Revised Broken into sub-sections

Art IV Sec 2 Amended Specify when terms begin

Art IV Sec 3 Amended Filling vacancies now required

Art V Sec 1 Amended Specify when terms begin

Art V Sec 2 Revised Broken into sub-sections

Art V Sec 5 Revised Broken into additional sub-sections

Art VI Sec 3 Added Provide for President's committees

Art VII Sec 2 Added Restriction re. Articles of Incorp.

Art VIII Sec 1 Amended Eliminate early reading