SJAA ephemeris

OCT ~~NOV~~ '80

Oct. 4 Saturday morning grazing occultation expedition to Patterson. More information in Observations.

Oct. 4 Saturday night SJAA star party at Sanborn Canyon County Park, upper parking lot.

Oct. 8 New Moon

Oct. 11 SJAA star party at Henry Coe State Park. To get there take Dunn Rd. exit off south 101 and follow Dunn until you reach park. The club sets up up the dirt road just before the ranger's house. The gate should be locked with the club's combination lock. Dialing in 4565 should get you in. If you arrive after dark please walk up the hill first before driving up just to warning a few people and scout out a place to set up.

Oct. 18 General meeting at the Los Gatos Red Cross building. 8:00 pm. 18011 Los Gatos-Saratoga Rd. Our speaker this month will be Ron Potter who will speak on the amazing results obtained from "Astrophotography with an Automatic Guider." This will be a beautifully illustrated lecture.

Oct. 23 Full Moon

Oct. 24 Board meeting at Chris & Shea Pratt's, 474 Safari Dr. San Jose'. 629-2994. 8:00 pm.

Oct. 25 Indoor star party, Los Gatos Red Cross building. 7:30 pm. Everyone welcome!

Oct. 26 End of Daylight Savings Time! Set clocks back one hour.

Nov. 1 Indoor star party, Los Gatos Red Cross building. 7:30 pm.

Nov. 7 New Moon

Nov. 8 SJAA star party at Fremont Peak State Park.

Nov. 12 Voyager 1 reaches Saturn

Nov. 15 General meeting, site to be announced. Our speak this evening will be Stan Kent of the Viking Fund and he will be showing the fantastic "Mars in 3-D" movie.

Nov. 21 Board meeting at Wolf Hanisch's, 1815 Cleveland Ave., San Jose'. 8:00 pm. 998-0861.

Nov. 22 Full Moon

Emphasizing the point that space exploration to date has barely dented man's great store house of ignorance on the subject, rocketeer Wernher von Braun once quipped: "About all we know about space is that it's bigger than Alaska."

Kevin Medlock, president 278-8475 Denni Medlock, editor 278-8475

the san jose astronomical association

Observations

As promised, I'm pleased to announce the winner of the SJAA logo contest and one year's free membership. The honor goes to Jack Zeiders, creator of #6, which has been the club's rather unofficial logo for quite some time. Congrats to Jack! We'll be taking orders for T-shirts soon. A close second was #1, belonging to Robert Hatcher, who confesses he only had a straight edge on hand at the time of inspiration! The board would like to thank all of you who entered the contest and to the 42 of you who voted. It was by far the best response to any club survey/questionaire/ contest I can remember!

Astro News Worthy of Attention: The University of Berkeley Extension Department will be offering a weekend seminar entitled, "Space Over Time," November 1 & 2, (Saturday 9-5, Sunday 9-2). Drs. Allan Friedman and Andrew Fraknoi will talk on everything from early Stonehenge to Black Holes and the End of Time. This series is open to the public but registration through the Extension Center is required. For brochures call (415) 642-4111. This sounds interesting. Both lecturers are animated, entertaining, and quite able to get across to an audience the subject matter being covered. Anyone who saw Andy Fraknoi at the AANC conference Sept. 13th will agree with that.

Speaking of the AANC conference: Over 400 people attended and were treated to a very well presented affair. The lecturers and the subject matter were some of the best the AANC has ever presented and I found myself quite satisfied with everything. Lectures included talks on almost all the planets and NASA's latest information concerning them, an update on the space shuttle, the detection of other planetary systems, the Mars in 3-D movie (a must to see when the SJAA hosts it in a coming month), machine intelligence, and a great talk by Dr. Helen Michael on a astronomical theory for the extinction of the dinosaurs. A job well done by the AANC. (Gerry Rattley was papers chairman.) Plaudits.

Plaudits also to two SJAA members and their luck at the AANC conference: Chris Pratt, for winning a book on the Moon, and Jerry Jones, for holding the winning ticket for the C-90 spoterscope.

Astro News Worthy of Trivia Department: Jay Freeman has made national attention in the current issue of Telescope Making with his cartoon of a frozen astronomer opening up the Riverside Telescope Makers' Conference 1980 report. Jay also had the recent experience of taking delivery on his new C-14 only to find that the case containing the fork assembly had two forklift tine holes through one side! Only damaged the case—missed the telescope completely.

Also in this Summer's issue of Telescope Making is a letter from Pete Manly on CID cameras, mentioning his involement with the SJAA's. Evidently, Pete's still alive and active in Tempe, Arizona, searching for the perfect chocolate chip cookie and charting pixells. Hi, Pete.

Congratulations to two new SJAA members of the AANC Messier Club: Gerry Rattley and Jack Zeiders. The SJAA now has more members of the Messier Club than any other society. If you are interested in joining the club (you have to have seen all the Messier objects during a two year period to qualify) see or call Gerry (732-0202) for a registration form. It's open to everyone and you get a great little brass plaque for your scope saying "I've seen M'all!" when you complete the list. See 75 of them and you get a certificate stating so.

Notes of interest on the Space Program: According to Defense Daily (Sept 8, 1980), "NASA's Five-Year Program Plan for Space Transportation Systems (STS) has been extended out to more than fifteen years.... and projects the development of a continuously manned space platform by the end of this decade and the development of a manned geo-synchronous platform before the end of the next decade.

"A total of twelve major new initiatives are proposed in the fiscal year '82-85 period in support of the STS program goals. The goals and objectives of the STS program are to:—complete development of the Space Shuttle, Spacelab, Inertial Upper Stage, Spinning Solid Stages, and all required STS ground facilities.
—Develop unmanned, large, multifunctional, low-Earth-orbit, Shuttle-tended free flying spacecraft.
—Develope a manned permanent facility for research, construction, and operations in low-Earth-orbit."

Other new starts proposed were: Gamma Ray Observatory, Solar Electric Propulsion System, National Oceanic Satellite System, Upper Atmospheric Research Satellite, Power Extension Package, and a Venus Orbiting Imaging Radar. ?I wonder what a Power Extension Package is? Thanks to Bob Fingerhut for passing on that news.

Because the bulletin subscribtions are ran on the system that renewals may come due in June or January Phil Hermsmeyer and I just recently sat down and figured out who was overdue. Would you believe some people are over due a few years. (Our fault, really, for not notifying you). Anyhow, the following list of bulletin subscribers have one month to renew. Subscribtions are $7 a year and subscribers are not considered members of the SJAA. (No S&T or voting priviledges).

S.A. Aspey	Jack Petersen
John Clement	Dan Smith
Marshall Diehl	James Snyder
Herman Fast	Sam Tinnerell
Jay Freeman	Paul Travis
Charles Ingebretsen	Charles Turner
Peter Manly	

If there appears to be any discrepancy (like you've already paid) please contact Phil Hermsmeyer, 20900 Alves Dr., Cupertino95014, (408)252-5529. He's the person to send the money to, also. Thanks.

Many thanks to this month's contributors. Deadline for November's bulletin will be October 19th.

Denni

GRAZE INFORMATION

Date: Oct. 3-4, 1980, Friday-Saturday (early Sat morning). All times are PDT.

Circumstances: Excellent. Flattish profile should yield multiple events for many observers. Cusp should not interfere. Come down Friday for a linear star party; see times in table.

Location: Near Patterson, Stanislaus County, about 80 miles from 101/17. Hy. 17 to 680 to 580 to I-5; exit onto J17 (Sperry Ave), then look for "SJAA" signs. Site is probably Baldwin Rd. (1 mi. further) or Elm Ave. (continue on J17, thru town, then 2 miles). Best to call Florence before you leave. See below.

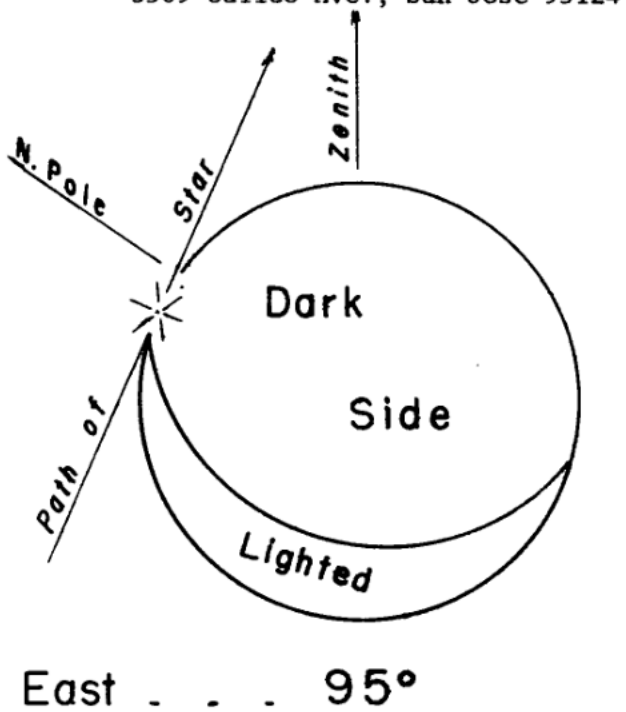
Site/Weather update: I will call Florence just before 7:00 PM, and again if there are any late updates. Call her at 371-1307 after 7, but not later than 11:00, to learn of weather and changes. Call her anytime before 6:45 to pass information to me, especially that you can or cannot come. I will also call her earlier if there is a site change.

CB: Channel 14. The group handle is "Graze Chasers". My own handle is "Sunspot". Bring ch. 14 Handy-Talkies; they can talk to a car from half a mile or so.

Time: Start continuous record at 5:31 AM. Central graze time is 5:41 AM. End record at 5:47 or when star is well clear of moon. Be ready by 5:00 AM. Allow time to find station, and plenty for setting up, testing equipment, finding star, trying eyepieces, etc.

Graze Position Angle:	11 deg
Vertex Angle:	66 (left)
Cusp Angle:	+8N
Watts Angle:	351
Limit:	Northern
Sun Elevation:	-17 deg
Moon Elevation:	32 deg
Azimuth:	96
Illumin:	-4 days, 18%
Moon RA, 1980, 5 AM:	9h33m
Declination:	+14.7 deg
Star:	11 Leonis ZC1420
Magnitude:	6.6
Spectrum:	Yellow, F2
RA (1950):	9h35.2m
Declination:	+14.6 deg
Sunset:	6:44 PM
Civil Twilight:	7:13 PM
Astro. Twilight:	8:10 PM
Moonrise:	2:53 AM
Astro. Twilight:	5:36 AM
Sunrise:	7:04 AM
Site Longitude:	121 10'
Latitude:	37 29'
Elevation:	125 ft.

Jim Van Nuland, (408) 371-1307
3509 Calico Ave., San Jose 95124



COMET COMMENTS

In the past month one comet has been discovered by a professional astronomer and one has been recovered. In addition, three returning (periodic) comets are rounding into position and brightening up for observation in the next few months. Ephermeris follow for these comets.

Comet Russell (1980L): Discovered by Kenneth Russell on a photographic plate exposed Sept. 6, this 17th magnitude object is not expected to get much brighter. Discovered in the constellation Fornax, this comet will be closest the sun (2.4 AU) on Feb. 17th of next year.

Periodic Comet Harrington (1980m): This comet was recovered by P. Jekabsons of Perth Observatory. Close to it's predicted position in the constellation Ophiuchus, this 18½ magnitude object is not expected to get much brighter.

P/Comet Stephen-Oterma (1980g)

Date	R.A.	Dec.	Mag
09-28	04:29.6	+01°01'	11.8
10-08	04:44.8	02 10	10.9
10-18	04:58.5	03 44	10.3
10-28	05:10.3	05 53	9.6
11-07	05:19.7	08 48	

These magnitude estimates are most uncertain for this comet. I was unable to see it on Sept. 16 when the magnitude should have been about 12.6. During this time it moves through S. Taurus, eastward into Orion, then it curves northward. In early Dec. it passes within a degree of M 1.

P/Comet Tuttle (1980h)

Date	R.A.	Dec.	Mag.
09-28	08:17.4	+64°07'	10.9
10-08	08:53.4	60 07	10.4
10-18	09:22.9	54 47	9.9
10-28	09:47.0	47 31	9.5
11-07	10:06.9	37 13	9.0

I was unable to see this comet on Sept. 16 when it should have been mag. 11.6. By the end of Oct., it should be an easy object. It is moving into Ursa Major from its Western end, then it will curve southward into Leo Minor annd Leo.

P/Comet Encke

Date	R.A.	Dec.	Mag.
09-28	04:13.0	+42°26'	11.5
10-08	05:01.6	50 12	9.8
10-18	07:06.9	59 51	9.3
10-28	11:21.9	51 22	7.7
11-07	13:25.5	21 56	7.2

This comet brightens rapidly and becomes a binocular object as it passes near earth (0.27 AU) in late Oct. Moving westward from Auriga through Lynx, then arching southward into Ursa Major and just south of the Big Dipper, it will be within 20 degrees of Comet Tuttle all month.

Now is the time to plot all three of these paths and then get out and observe these comets!

Comets In Their Eyes:

George Alcock (1912-): Residing in England, this retired school teacher started as an avid meteor observer. In 1953 he began comet searches with a 4" telescope, in early 1959 he switched to 25x105 binoculars. In August of 1959, after 646 hours of sweeping, he discovered a comet. Within the week he found his second, followed by two more—one in 1963 and one in 1965. For the past 20 years he has also been searching for novae—he has discovered four thus far.

The Czechoslovkia Group (1946-1959): Organized at the Skalnate Pleso Observatory, this team of observers discovered 19 comets using 25x100 binoculars. Anton Mrkos discovered nine of these. This team averaged about 100 hours for each discovery.

Don Machholz (448-7077)

Tehachapi Teroubles

Wanting to spend another clear night observing the stars from 7500 feet, Patty Winter and I decided to attend the ninth annual Tehachapi Telescope Togetherness Night. The trip downstate was quite uneventful, until we fell victim to the great Bakersfield highway robbery. (Note to CalTrans: what the h___ happens to Highway 58, once Bakersfield gets ahold of it?) After the usual unplanned detour in and around scenic suburban Bakersfield, we were back on our way again. (Perhaps next year's Tehachapi flier could devote a corner to this problem?)

About twenty miles from beautiful downtown Tehachapi, the doubter amoungst us noticed cirrostratus clouds streaming across the mountians. As we approached the great downtown Tehachapi freeway exit, visions of my Perseus double cluster vanished into the misty netherworld of might-have-been. With the assistance (?) of the map on the flier we cautiously entered the dreadful downtown Tehachapi street maze. Since the street signs were correct (as opposed to the map), and we <u>had</u> been to the star party last year, <u>this</u> time we only made one wrong yurn. (Perhaps next year's flier could fill in the missing street name, insert the correct street names, and delete the incorrect ones, for the less adventurous attendees.

Onward and upward we went, right (or rather, wrong) into the Tehachapi Mountain County Park campground. Turning around with a cloud of dust and a hearty, "HI-HO SYZYGY!", we continued huffing up the mountain in a cloud of dust to the Antelope Canyon Ranch.

On reaching the observing site, we chose a sheltered spot in some trees to pitch our tent and binoculars. (Note to ATM's binoculars are two telescopes for the price of one. Also, they keep one eye from wandering randomly around while the other is engaged in stargazing, or whatever.) By dinnertime, roughly 30 observers were spread over the mountain top; with perhaps a dozen on the southwest rim, where the wind was just beginning to pick up. By eight o' clock, almost everyone had moved to the more protected eastern side, where we formed a defensive circle against the wind, telescopes pointing outward. Clouds covered three-quarters of the sky by nine P.M. The seeing through the holes was good, though unreliable, since objects tended to disappear and reappear at random. Around ten P.M. the last patch of scattered fuzzy sky disappeared into the cloud, and it was sleepy-bye time for yours truly. The bull sessions died out around midnight, their blast of hot air being unable to dissipate the other wind. However, sleep wasn't in the cards quite yet, due to the loud flapping noises from our tent's attempt to fly away into the night. The sky cleared completly at about two A.M., but viewing was still not possible due to the wind, which didn't stop until around four o' clock. Finally able to get to sleep, I was gently awakened at the crack of dawn by the melodious sound of a large, cold, oxygen-starved van engine trying to resuscitate itself while being violently and repeatedly prodded in the accelerator pedal by Bigfoot.

After breakfast, Steve Edburg, solar astronomer extraordinaire, eclipse expedition leader, J.P.L. Astronomy Club members, (and my business partner) set up an H alpha prominence viewer, and a white light solar telescope, for some daytime stargazing. Those of us who hadn't left, and were still able to prop open an eyelid or two, were rewarded with an excellent view of a beautiful diffuse prominence. In white light we could also see two lines of small sunspots, in a "vee" shape, almost symmetrically arranged; one line above, and the other below, the solar equator.

As one of my favorite solar astronomers (who shall remain nameless unless a fee is paid) often exclaims, it was a one finger day. In this case, I was able to cover the disk of the sun with my little finger held out at arm's length, with no bright aureole peeking around it. After packing up, we rolled back down the mountain <u>into</u> a cloud of dust. At the base (about 3700 feet), four fingers held at arm's length were barely able to shield my eye from the glare of the dust-scattered sunlight. After completing this lengthy scientific study (note to Senator Proxmire: no federal funds were expended) we spent a highly enjoyable (and recommended) afternoon at the Fantasy Haven Airport, just outside of lovely downtown Tehachapi. At one point, about 20 members of an L.A. ski club had eight gliders lined up on the runway for the three tow planes to take up. (Note to R/C glider model builders/fliers: the wingspan of gliders with people <u>in</u> them are only about four to five times those of your models! How about all of you guys and gals building one like <u>that</u>?) After bidding sumptuous downtown Tehachapi a sad farewell as it sank slowly into the sunset, we headed on to further smog-filled adventures in L.A.

by Steve Greenberg

The September SJAA Star Party

While we're on the subject of star parties the September 6th club one at Mt. Umunhum was very well attended both by club members and the wind. Arriving at sunset and busy setting up my 8" before it became too dark I didn't get a chance to count heads or scopes but I did see a lot of new members and faces which was quite encouraging. People I did recognize were the Pratts, Jack Zeiders, Robert Scott, Charles Turner, Jay Freeman, Bob Fingerhut, William Dillinges, George Taylor, Rita Miram, Jeff Horne, Bruce Swayze, Gerry Rattley, Brad Carlson, the Hanischs, Frank Dibbell, Jim van Nuland, and the Machholzs and Ambroses.

I was impressed with the site. The combination of an old deserted military base with the sweeping view adds quite alot. I mean, where else can you have a star party where the nearest restroom is in a fallout shelter?

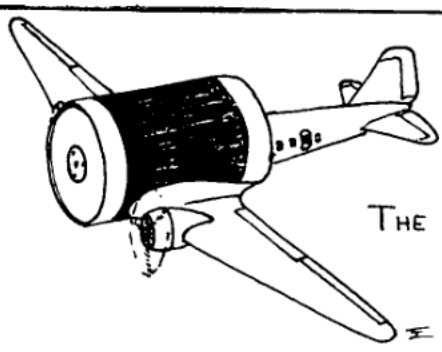
The sky wasn't half bad with the fog down below though M 51 was definitely a FFN and most planetaries next to impossible. Before the wind picked up around 10 pm quite a bit of nebula and cluster observing was done. Maybe we'll get back up there sometime this winter.

Denni

"What was that buzz that just went by?"
Don Machholz

"I think it was a caffeine high that resembled an Ambrose." Jack Zeiders

(Mt. Umunhum Sept. 6 star party)



SJAA PROFILES by Frank Dibbell

The subject of this month's interview is Antonio Ticiano Bueno VII, or as he is known by his friends, Tony Bueno. Tony's interest in Astronomy began during the Sputnik era, while in his native homeland of Cuba. His uncle, upon recognizing his astronomical inclination, gave him a 5" refractor which had belonged to the brother of Antonio Bueno III or IV (I forget which), and which had just been gathering dust for 75 or 80 years. He became extremely interested in planetary observing, witnessing both the 1960 transit of Mercury and the 1961 conjunction of Jupiter and Saturn.

Shortly thereafter, he emigrated to Miami, Florida, leaving his 5" refractor behind. Tony tells me that he went without a telescope for 11 years, until he moved to Washington state and became friends with a fellow amateur who owned a couple of scopes.

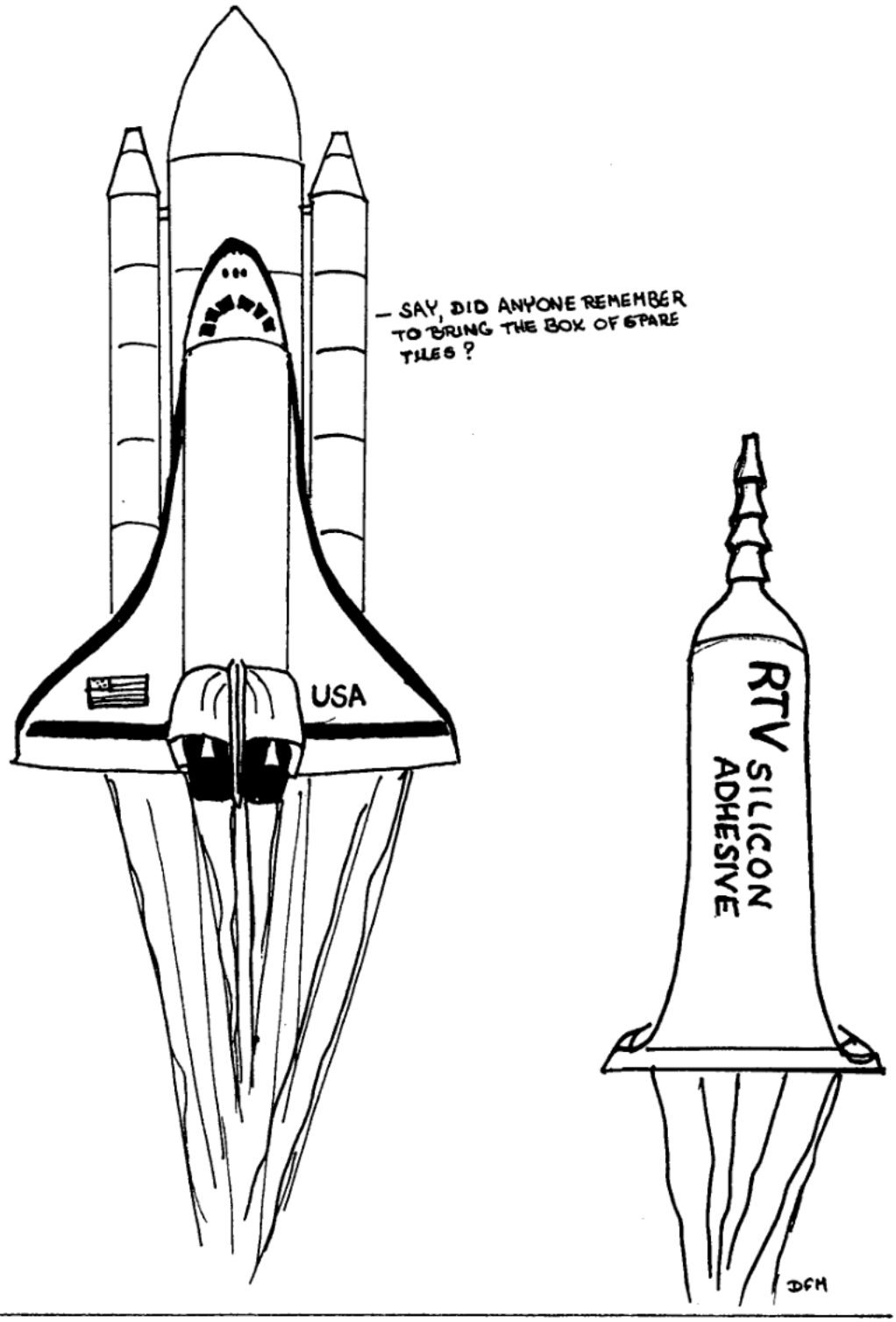
After reading about variable stars and the publicity that AAVSO generated in Sky & Telescope for its conventions, Tony developed a lasting interest in variable star work. He likes doing variable star work because he feels that it is an area where an amateur can make a contibution. He told me numerous stories about his beginning observations, such as watching the wrong star for a few nights, and suddenly noticing that one of the comparison stars was gradually getting fainter!

Tony has volunteered to be our club's variable star program coordinator. He is currently setting up an information package for those people who may be interested in becoming involved, and plans to hold a team meeting at his house in the near future. I might add that Tony has a fantastic sliding roof observatory in his back yard, which houses a 6" refractor and a 12½" reflector. For those of you who indicated that you would be interested in being on a variable star observing team in last summer's survey, be prepared! Tony now has your name and number, and will be contacting you shortly. If you didn't respond to the survey, but you would be interested in the team, please give Tony a call at 378-4716. Do not be afraid if you are a beginner. He is prepared to help anyone who is interested.

* *

NOTES ON THE CLUB 6" REFLECTOR

The club's 6" f9 newtonian reflector is currently undergoing renovation. It is getting a brand new paint job (fire engine red and maintenance gray), and the mounting is completely rebuilt. A standard 45° pipe mount, it has been modified to incorporate the "Dibbell Wedge", which will make it truly equatorial. When complete, the scope will be paraded at all club star parties, available for any club member to use. ---Frank Dibbell



WANT ADS

Wanted: 12" or larger parabolic mirror, f-ratio open. Call Marty Hemmerling at (415) 328-8983.

The Astronomical Society of the Pacific is offering (free) a handy guide to national amateur astronomy organizations. To obtain a copy, please send a legal-size, stamped, self-addressed envelope to: Amateur Guide, A.S.P., 1290-24th. Avenue, San Francisco, Ca. 94122