SJAA ephemeris FEB '80

January 26 General meeting at the Rosicrucian Planetarium, Park & Naglee, San Jose'. 8:00 pm. The speaker will be Marvin Vann on "The Living Maya." This will be a travelogue of a visit to Lacandones in the jungle of Chiatas. Mr. Vann is quite familar with the astronomical aspects of the Mayan ruins so this lecture should be both informative and colorful.

January 31 Full Moon

February 1 Board meeting at Frank Dibbell's, 710 Georgia Ave., Sunnyvale. 8:00 pm. 733-7208

Febraary 2 Indoor star party, Los Gatos Red Cross building. 7:30pm

February 9 Indoor star party, 7:30 pm.

February 16 Far-out star party, Kenya, Africa (Directions inclosed)
Close-in star party, Henry Coe State Park
Total eclipse of the Sun
New Moon

February 23 General meeting at the Rosicrucian Planetarium. 8:00pm The speaker this month will be the internationally known comet finder Don Machholz, who will present a lecture on this year's upcoming Messier Marathon. The planetarium facilities will be utilized to fully illustrate this enjoyable talk.

March 1 Full Moon

March 7 Board meeting in the Artic Circle (the Medlock's), 16105 Via Paro, San Lorenzo. 278-8475. 8:00 pm.

March 8 Indoor star party, 7:30 pm.

March 15 Star party, Fremont Peak State Park

March 16 New Moon

March 22 General meeting at the Rosicrucian Planetarium. 8:00 pm. This will be solar eclipse slide night. Participants are asked to refrain from more than three slide trays each.

March 29 Indoor star party, 7:30 pm.

Gerry Rattley, pres. 732-0202 Denni Medlock, ed. 278-8475

the san jose astronomical association

Observations

Having a month off from any 'official' SJAA activities because of the holidays appears to have been beneficial to that normally untiring club spirit. At the January 12th. indoor star party an enthusiastic group of about thirty-five people showed up and got 1980 off to an astronomical start talking about upcoming eclipse trips, new equipment, new members, and the doughnuts Gary and Jackie Rice brought. Guest of the evening was Walter Scott Houston, author of Deep Sky Wonders for Sky and Telescope magazine and a well known observer on the Eastcoast. Frank Dibbell got a chance to interview him and that will appear in February's bulletin.

Since the December 7th board meeting was canceled due to the opening night showing of Star Trek the indoor star party also doubled as a board meeting, one with the largest attendance I've ever seen! A number of things were talked about but the major topic was Astronomy Day 1980 and what the SJAA was going to do about it. This year there is an added incentive for participation of club members. Because the event is going nation-wide (see S&T, January, page 64) Edmund Scientific Co. is offering a prize for the club that sponsors the best planned activities. The criteria for this prize has yet to be announced but the prize itself is $500 cash or $750 worth of goodies out of the Edmund's catalogue. The SJAA non-existent observatory fund could certainly use that type of boost!

What to do about Astronomy Day? Well, at the board meeting it was decided to put stations up at at least the Rosicrucian Planetarium and DeAnza's Planetarium. I'm sure more places can be handled as more people volunteer to bring their telescopes and their enthusiasm April 26. For those of you that hesitate at spending the evening with the public just ask yourself two questions: how many times has someone seen the Moon or Saturn for the first time through your telescope and how did you feel the first time you saw those objects in someone's telescope?

Well, enough of that propaganda for this month....As station plans solidify more information will be available. If you want to volunteer a station contact Gerry.

Also determined at the board meeting was the SJAA's nomination for the Western Amateur Astronomers' G. Bruce Blair gold medal for 1980. Selected was Paul Zurakowski, fearless leader of the Telescope Makers' Workshop at Chabot Observatory for the last ten years. Many SJAA members have benefited from Paul's expertise in the telescope making field. (80% of the workshop are now SJAA members. We're spreading.)

Because of a new job situation Bruno Benassai has had to resign his club position as publicity chairman, leaving this vital (especially with Astronomy Day approaching) job open. If anyone of you would like to volunteer please contact Gerry Rattley or any board members

The SJAA would like to thank Bruno for a job well done.

Question: Where is the club's 2.4" refractor?

News notes: A new astronomer is born!
David Steven Neinchel
Born December 22, 1979
8 lbs. 13 oz.
Height laying down 22"
Nancy, Norm, and David are all doing fine!
(Norm's just slightly more spacey than usual)

Found: At December 15th star party at Loma Prieta, a beat-up copy of HANDBOOK OF THE HEAVENS by Bernhard, Bennett, and Rice. Contact Frank at (408) 733-7208 after 6 pm.

Why is everyone so good to me about contributing to the bulletin? (Just ignore the jokes about arm twisting....) Many thanks again to those who helped this month.

As always, I feel I have forgotten something of major importance. Probably, after thinking about it for a month, I'll remember what.

Bulletin deadline for March will be Feb. 17.

Thanks again.

Denni

WANTS ADS

C-8 w/tripod, full aperature sun filter, drive corrector (r.a. and dec.), camera adapters for Nikon and Olimpus, 8X50 finder, enhanced coatings, 3 RKE eyepieces. Asking $1200 or best offer.

Gene Ackman
6363 San Benito
Rohnert Park, Ca. 94928
(707) 585-1291

****

Wanted: Mount for 6" Newtonian scope. Would like to have mount with clock drive. Also looking for a pedestal. If it's used and needs cleaning, that's o.k. Can we talk trade?

Please call: Richard Pascarelli
731-6429 (home)
391-5828 (work)
a message will always get through at my work number.

****

For sale: 6" reflector , f/8, homemade, aluminum tube, very sturdy altazimuth mount, two eyepieces (22 mm, 6.25 mm). Mirror is in excellent condition. $135.00

12-3/8" reflector , f/8. Mirror from Coulter optics. Home made collapsable tube- ½ heavy plastic, ½ steel. Very sturdy altazimuth mount. Timken spindle for horizontal moving. Easy to take apart and store in trunk of car. Three eyepieces (25mm, 12mm, 7 mm). Mirror is in excellent condition. $400.00
Call Doug at 997-1783

****

For sale: 10 ", f/5.6 Newtonian telescope. Home built with Coulter optics. Light weight equatorial mounting.

Ron Cotton
1135 Dwyer Rd, S.J. 95120
268-4938

"The meek shall inherit the earth. The rest of us shall escape to the stars."
OMNI, Jan. 1980

COMET COMMENTS

Three more comets (two faint recoveries and one bright discovery) have been picked up recently. This brings the year's total to twelve. This is eight less than last year. In addition to these recent discoveries, I am also listing all the discoveries and recoveries of 1979.

Periodic Comet Reinmuth I (1979j): With a period of 7.23 yeaars, this comet was recovered on October 22 by G. Schwartz and C-Y Shao of Harvard. At 20.5 magnitude, it is expected to remain a very faint object. It was discovered by Reinmuth on Jan. 26, 1928 while photographing an area for a minor planet program—it was magnitude 12 then.

Periodic Comet Schwassmann-Wachmann 2 (1979 k): This comet was recovered on Dec. 14 by G. Schwartz of Harvard as a 20.5 magnitude object. Originally discovered on Dec. 8, 1928 on a photographic plate at 11 magnitude, its orbital period is 6.42 years. It is not expected to get very bright.

Comet Bradfield (19791): William Bradfield of Australia had discovered his tenth. It is his brightest discovery—magnitude 5, on Christmas morning. With a two degree tail it remains below our southern horizon-morning sky. It is now pulling away from the sun, but might still be magnitude 5 or 6 as it becomes visible to us in the northern hemisphere in late January.

The Comets of 1979

Comet	Name	Country	Disc. date (U.T.)	Disc. mag.
1979c	Bradfield, William	Australia	June 24	10
1979i	Meier, Rolf	Canada	Sept. 21	12
19791	Bradfield, William	Australia	Dec. 24	5
	Professional Discoveries			
1979a	Kowal, Charles	U.S.A.	Jan. 27	17
1979d	Russell, Ken	Australia	June 16	17
1979e	Torres, Carlos	Chile	June 26	18
1979h	Kowal, Charles	U.S.A.	July 24	19

Professional Recoveries of Returning Comets

Comet	Comet Name	Recoverer's Name(s)	Country	Date	Mag.
1979b	Daniel	Pickup, A.	England	Feb. 2	19
1979f	Holmes	Schwartz, G & Shao, C-Y	U.S.A.	July 20	19.5
1979g	Schwassmann-Wachmann	Johnson, J Buhagiar, J	Australia	Aug. 13	13
1979j	Reinmuth **L**	Schwartz, G; Shao, C-Y	U.S.A.	Oct. 22	20.5
1979k	Schwassmann-Washmann 2	Schwartz, G.	U.S.A.	Dec. 14	20.5

COMETS IN THEIR EYES:

Edmund Halley(1656-1742) Halley never did discover any comets, but he did do some observing of the sun and stars. In 1705 he published orbits of 24 comets. Noticing the comets of 1682 had a similar orbit of the comets of 1607 and 1531, he predicted it would return in late 1758. He died in 1742, but the comet was recovered on Christmas night and named after Halley. The comet is due back in early 1986, and should be recovered 1981-83. While not the brightest comet known, it is the longest known comet, observed since at least 86 B.C.

Charles Messier (1730-1817): Messier is probably one of the best known comet discoverers, but he's not known for the comets he discovered. Born in France, and observing in Paris, Charles discovered 12 comets and recovered one more. He used serveral telescopes, but

perhaps his most common was a 2¼", 5X refractor. He also kept a catalogue which bears his name—and that is what he is best known for. Is it surprising that his comets were discovered from magnitudes 5.0-7.0 (average 5.9 mag.) while his catalogue lists objects to magnitude 11?

William Bradfield (1928-): William had discovered more comets than any other amateur in the 1970's (10) and is the most successful active comet hunter alive today. Living in S. Australia, he uses a 6", f/5 refractor at 26X and a 2° field. All of his discoveries were discovered only by him (so they bear only his name) and all were discovered south of the equator. He does about 220 hours a year and each discovery takes between nine and 360 hours. (ave. 200 hours). He does not cover the whole sky each month, but only thise areas within 120 degrees of the sun. Before he began comet-hunting in 1971 he was involved in the Moonwatch (Satellite tracking) program in the 1950's and 1960's. A comprehensive but somewhat out-dated article about him appears in the April, 1977 issue of S & T.

(This is the first installment of the "Comet in their eyes" series. Each month I will feature two comet hunters (or more)——one from the past and one from the present.)

Don Machholz
246-5274

Ephemeris for Comet Bradfield (19791):
This comet is swinging south of the sun, moving from the morning sky to the evening sky. Then, moving close to the Earth (16 mill. on January 26) it moves rapidly north.

Date U.T.	R.A.	Dec.	mag.
Jan 26	02h 14.09min	-58deg 05.9min	3.7
28	02 48.28	-37 23.8	
30	03 03.28	-21 11.5	4.6
Feb 01	03 11.71	-09 59.8	
03	03 17.20	-02 21.2	5.7

The 1980 MESSIER MARATHON

It's nearly time for the Second Annual Messier Marathon! The best time, weather permitting, would be March 14-15 and 15-16. These are weekend nights near the new moon.
The Messier Marathon is a particular star party set aside toobserve the Messier Objects. Every year, between March 12 and 19, and between March 30 and April 3, it is possible to observe 109 and the 110 Messier objects on one night. All one needs is a nearly-moonless sky, a weekend (as one os usually awake all night), and cloudless skies.
The new moons this year are March 16.4 and April 14.8. Full Moon is March 31.3 The weekends near the March new moon is March 15 and 16. This suggests the Fri-Sat (Mar. 14-15) and Sat-Sun (Mar 15-16). Should weather appear to interfere, I will be at Loma Prieta a few nights previous, and should the weekend be clouded out, I will be there on the first clear night until about the 20th. of March. Before the 12th and after the 20th I think the moon will interfere.
Loma Prieta seems to be the site again this year. Last year it handled the crowds well, and it has fairly dark skies for being just 45 minutes south of San Jose. We can begin observing at about 7:20 P.M. and mornining twilight is about at 5:15 A.M. (continued on back)

Last year many people came up for only a few hours, some without telescopes, and some looked for only a few of the Messier Objects. That's good, and I would encourage observers to become involved in these ways again this year.
At the February meeting I will preview the upcoming Marathon. I will also have the revised observing order.

Don Machholz

Jupiter was well up in the predawn sky on the morning of Nov. 12 as I fitted the 4mm eyepiece and apodizing filter to the 8" newtonian.

Seeing, quite excellent; and in only a moment I had detected the Great Red Spot!! Differing little in coloration from the enclosing belts, but distinctly outlined and readily seen.

After provisionally estimating 45 min. until transit on Jupiter's central meridian, I turned my attention to Mars -- tiny, misshapen due to the large phase angle, and showing a dusky smudge across its middle.

I sought Saturn -- how dim it is with the Ring closed! But it did not elude my setting circles, and I beheld an amazing sight -- the ball of Saturn, but no ring whatever! The shadow of the ring, crossing the planet, pretending to be a belt, but betraying itself by its shape and the very distinctness! The culmination of seven years of Saturn watching. I was so enthralled by it that I forgot to look for satellites.

Eventually returning to Jupiter, I timed the transit of the Spot, only five minutes later than predicted over six months ago.

Dawn had lightened the sky when I slipped back into bed for a few more winks. Quite a night!

Jim van Nuland
3509 Calico Ave.
San Jose, Ca. 95124
371-1307

Great Red Spot on meridian PST

Da	date	h	m
W	Jan 23	5	02 AM
Th	Jan 24	0	49 AM
Sa	Jan 26	2	27 AM
Sa	Jan 26	10	25 PM
M	Jan 28	4	10 AM
Tu	Jan 29	0	03 AM
W	Jan 30	5	45 AM
Th	Jan 31	1	41 AM
Sa	Feb 2	3	13 AM
Sa	Feb 2	11	06 PM
M	Feb 4	4	50 AM
Tu	Feb 5	0	48 AM
Tu	Feb 5	8	35 PM
Th	Feb 7	2	20 AM
Sa	Feb 9	4	02 AM
Sa	Feb 9	11	49 PM
M	Feb 11	5	36 AM
Tu	Feb 12	1	26 AM
Tu	Feb 12	9	23 PM
Th	Feb 14	3	11 AM
Th	Feb 14	11	02 PM
Sa	Feb 16	4	46 AM
Su	Feb 17	0	33 AM
Su	Feb 17	8	26 PM
Tu	Feb 19	2	19 AM
Tu	Feb 19	10	02 PM
Th	Feb 21	3	49 AM
Th	Feb 21	11	42 PM
F	Feb 22	7	38 PM
Su	Feb 24	1	17 AM
Su	Feb 24	9	14 PM
Tu	Feb 26	3	00 AM
Tu	Feb 26	10	52 PM
Th	Feb 28	4	40 AM
F	Feb 29	0	26 AM

"What did Phil burn?" Kevin Medlock
"Oh, nothing. He just broke the rings on their Saturn." Patty Winter

Rattley Rattles

This Rattley Rattles will be devoted to the results of the questionaire which was run in the bulletin last fall. I have so far recieved back 17 of these, which represents only about 15% of our club's membership. Even though this response seems low, I do feel that it represents the general attitudes of the membership at large. I base this on the names of those that turned them in (not all were signed as that was not required) and on past conversations with various members.

I would like to thank three catagories of people for their interest and concern in the running of this club: (1) those that filled out the questionaire and returned it, (2) those that have verbily chatted with myself and other boardmembers about club matters, and (3) my fellow boardmembers and others who show up at the board meetings. By substituting for catagory (1) above the SJAA suggestion box, you have a list of the ways you too can be influential in the running of the club now nad in the future.

Now let's look at the questionaire results:

Question 1) Do you like the general meetings? 16 yes; 0 no; 1 no answer.

Question 2) What night would you prefer the meetings be held on? 4 Friday; 10 Saturday; 3 either.

Question 3) What kind of meeting programs do you like? 2 wanted only professional speakers; 15 want a mixture of amateur talks, professional speakers and equipment & slide nights. Note: 4 people mentioned that they liked having equipment nights at the Red Cross building.

Question 4) Do you like the indoor star parties? Do you like their loose format? 11 like them loose; 1 would like them formal; 4 would like them a little more organized; 1 said that he had never attended one; 1 would like to see them held in a more central location (any suggestions?).

Question 5) Why do you feel people are not attending close-in star parties? 2 said apathy; 3 poor seeing & light pollution; 5 feeling of alienation; 1 distance; 3 family & TV; 3 low participation; 2 location; 1 wanted more star parties; 2 had no comments. Note: there are more than 17 responses as some persons listed more than one reason. This is also true for questions 6 and 7.

Question 6) Where would you like to see more star parties held? 4 Loma Prieta; 4 Fremont Peak; 2 Henry Coe; 2 all our locations; 1 Chews Ridge; 1 any site with bathrooms; 3 no comments.

Question 7) Do you have any suggestions or comments about the bulletin? 9 said that Denni is doing a fine job; 4 said it needs more technical articles; 4 articles on equipment; 3 a members column (Frank Dibble is now doing this); 2 a novice corner; 1 an astrophotography corner; 1 new product reviews; 1 said he didn't like reduced-size print.

Last question) Are there any additional comments? The following comments, suggestions and critisms were made: How about holding more Sanborn Canyon star parties in lue of indoor star parties. The club does not do much/enough for the new or novice member. There are a lot of special interest groups in the club which should open up more to the new member. Not enough astronomy is being done at club functions.

The board has been considering and trying to work on each of the above problems. We appreciate and thank you for your participation.

Astronomically Yours;

Ronald W. Rattley

Directions to the alternate star party on February 16 (for those who are bored with Henry Coe State Park).

From San Jose take Hwy 17 north to I-680 north, take I-680 north to I-80 north, take I-80 north to I-505 north. Take I-5 north to the Canadian border. Proceed north to Vancover, then to Prince Rupert, and then into Alaska. Connect with the Alaska Highway to Fairbanks. From Fairbanks continue due west to the Seward Peninsula. At the town of Wales hire a dog sled to take you across the ice to Uelen on the Chukotskiy Peninsula. From there continue south around the Sea of Okhotsk until you hit Vladivostok. There, catch the Trans-Siberian Railroad west to Novosibirsk. From there take the train south to Tashkent. There take the road south to Ashkhabad. At that point change into a caftan, cross the Iranian border and travel incognito south west, through Tehran, until you reach Bagdad. From Bagdad continue west across Iraq, crossing into Syria and continuing onto Damascus. From there go south through the Golan Heights, through Jerusalem, across the Gaza Strip, across the Sinai, over the Suez Canal, and into Cairo. From Cairo take the Cape-Cairo Highway south thrugh Sudan, Ethiopia and on into Nairobi. From Nairobi travel southeast towards the coast through the Royal Tsavo National Park. On the southern border of the park is the town of Voi. The star party will be on the outskirts of Voi. It is best to have left for this star party by last November. There will be a special additional star party on the 16th. at approx. 11 am. The moon will be new and so will not interfere with out observations. A few people are also talking about doing some solar observing that day.

Patty Winter & Denni Medlock

DECEMBER STAR PARTY AT LOMA PRIETA

On the evening of December 15, 1979, some twenty or thirty people convened on the upper ridges of Loma Prieta mountain for the scheduled star party of the San Jose Astronomical Association. The evening was one of the warmer ones in December, and the sky was clear. Telescopes ranged from a sixteen-inch Newtonian on down.

Pete Manly brought his Celestron 8, but instead of setting up the club's TV camera as he had frequently done in the past, he had his new Celestron 90 mounted piggyback for deep-sky photography. It will be interesting to see how his exposure of the Orion Nebula turns out--the C-90 is a bit smaller than most of the equipment that club members usually use for deep-sky work.

Debbie Moore and Phil Hermsmeyer brought Debbie's ten-inch f/5 Newtonian, which works beautifully, notwithstanding that its diagonal mirror--left over from a previous ten-inch with a longer focal length--is a size or two too small. Debbie had a new set of Skalnate Pleso charts, and was busily drawing circles around the charted positions of every object she found. I believe she wants a set of charts as marked-up as Gerry Rattley's.

When I ran into Rattley, he was looking at Hubble's Variable Nebula (NGC 2261 in Monoceros) with somebody else's telescope--- I think Frank Dibbell's eight-inch Newtonian. I asked him to look for the Horsehead Nebula with me. Jack Zeiders and I had both just failed to see it in my six-inch Newtonian, hand-held at 36X, though we had been able to suspect IC 434, the bright nebula against which the Horsehead is silhouetted. Gerry and I swung the eight-innch to Zeta Orionis, then moved it off to the south. Sure enoguh. there was the Horsehead, faint but detectable at 70X. I had thought this elusive object might be undetectable from a site so close to city lights as Loma Prieta, and was glad to be proven wrong.

Loma Prieta cont.

I was not volunteered to write up the star party for the Bulletin until after the fact, so I did not make anyrecord of who was and was not there. I shall not risk embarrassing myself or anybody else by attempting to construct a roster of attendees from memory. However, the event was well-attended and quite successful. There were perhaps five or six newcomers there---surely these people deserve a gold star (how about Capella?) for enthusiasm, for driving all the way up Loma Prieta on what for all they knew was going to turn out to be a cold and blustery night.

Most everybody struck camp by midnight or so, and a few of us reconvened at the traditional watering hole--the Los Gatos' Sambo's---where we talked to all hours.

See! You can too be an active amateur astronomer in the dead of winter!

Jay Freeman

"I know it's supposed to look like a telescope and not like a hot water tank on top of a pole."

Charles Turner

ANSWERS TO SKYWORD #5 by Fred Braniff

Across: 1)telescope, 6) pupil, 9)librations, 10)XI, 12) Swan 13)angstrom, 17)opposition, 20)Moon, 23)image, 24)Taygeta 25)Mu, 26)Neptune, 30)Sidereal, 33)Mare, 34)Maksutov 35)planet

Down:1)Telescopium, 2)Libra. 3)star, 4)Orion 5)Eon, 6)Pi, 7)prism, 8)Eri, 14)stony, 15)asteroid, 16)Io, 18)planets, 19)Titan 21) Nebula, 22)Venus, 27)eye, 28)Eta, 29)Ram, 31)Rho, 32)Lep

Thanks, Fred!

Blurbs that didn't make it into the observations page:

The Astronomical Society of the Pacific has a Black Hole Hotline to answer all the questions you have about black holes but were afraid to ask. A black hole packet can also be obtain by writing the ASP at the address provided from the hotline. (415) 661-0500.

****

There will be a space symposium featuring a lecture by Gerald o'Neill with a panel discussion Jan. 29 at 7:30 pm. in the Memorial Auditorium, Stanford University.

Also, on Feb. 6 at 7:30 pm there will be a film "Reach for the Stars," to be shown in the Turman Hall, Stanford University.

Both events are sponsored by the L-5 Society and more information can be had at 223-2463.

****

If you've looked at the grazing occultation map provided in January's iisue of Sky and Telescope you've probably noticed that there isn't one graze hitting Northern California at all in 1980. Jim van Nuland is working with David Dunham to see if this really is true. If it is what are the farm community police going to do for excitment? No more amateur astronomers disturbing everyone at two A.M.

SJAA's Astronomy Day, Rosicrucian Planetarium →