SJAA ephemeris Dec '80

Dec. 6 SJAA star party at Henry Coe State Park. Take Dunn Ave. exit off Hwy 101 south at Gilroy. Follow Dunn east to end of road into park (10 miles?). There is a dirt road off to the left just before the ranger's house that has a locked gate on it. The SJAA lock can be opened by dialing in 4565. The observing site is the first level spot up the road. If you arrive after dark please walk up the road first to scout out a parking spot.

Dec. 7 New Moon

Dec. 12 Board meeting at Chris & Shea Pratt's, 474 Safari Dr. San Jose'. 8:00 pm. 629-2994. Everyone welcome! This is a change of locale, so please note!

Dec. 13 General meeting at the DeAnza Community College, Cupertino. 8:00 pm. Our lecturer this month will be Dr. Allan Title of the Lockheed Solar Observatory speaking to the SJAA on "Solar Physics." He will present two films, one on the Sun's magnetic field, and the other on "The 12" Active Secondary for Image Stabilization for Use On the Spacelab." Room S-34 by the Planetarium.

Dec. 20 Indoor star party at the Los Gatos Red Cross building. 18011 Los Gatos-Saratoga Rd. 7:30 pm. Everyone welcome!

Jan. 3 SJAA star party at Fremont Peak State Park, Coulter Overflow Campground. Take Hwy 101 south to Hwy 156 east. Go two miles to yellow flashing light. Turn right and follow road 11 miles to park.

Jan. 3 Aquarid Meteor Shower

Jan. 10 Indoor star party, Los Gatos Red Cross building. This will be the first meeting of the SJAA telescope making class. All interested people are welcome to attend. More details inside.

Jan. 16 Board meeting at Phil Hermsmeyer's, 20900 Alves Dr., Cupertino. 8:00 pm. 252-5529.

Jan. 17 SJAA General Meeting co-sponsored with the South Bay Chapter of the L-5 Society. Rosicrucian Auditorium, Park & Naglee, San Jose, 7:30 pm. The lecturer will be Dr. Geoffrey Cuzzi, a member of the Voyager-Saturn Imaging team from Ames Research Center. This should be an extremely informative talk by an expert on the rings of Saturn.

Jan. 24 Indoor star party, Los Gatos Red Cross building. 7:30 pm.

Jan. 31 Indoor star party, Los Gatos Red Cross building. 7:30 pm. This will be an informal beginner's night for those new members and/or new telescope owners who would like some help with observing techniques. There will be a casual star party in the parking lot (yes, you can see the Milky Way from Los Gatos).

the san jose astronomical association

Observations

Orion, light your lights: come guard the open spaces
From the black horizon to the pillow where I lie.
Your faithful dog shines brighter than its lord and master,
Your jewelled sword twinkles as the world rolls by.
(from 'Orion' by Jethro Tull)

I wanted to use that poem on the front page as a reminder to us observers that in the east after sunset can now be seen Taurus with the Pleiades, the twins of Gemini, and the lights of Orion. But a glance at the SJAA calendar's length should tell the members how many other events are happening this winter for the club. Two excellent speakers have been lined up for the next two months and it would be great to see turnouts of sixty or more at the general meetings. The new meeting place at DeAnza was rated superb by all the showed for the Mars in 3-D movie last November (and to see Kevin Medlock present representative Bill Copeland with a $100 check for the Viking Fund). The Solar Physics lecture scheduled for December should be very well recieved there. (Many thanks to Bobby Fingerhut who did the leg- and phone-work to obtain Dr. Title as our speaker.)

In January, the club's going to get a treat in the form of a co-sponsored lecture (set up by member Doug Buettner and the South Bay Chapter of the L-5 Society) by Dr. Geoffrey Cuzzi, Saturn ring expert, in the only presentation to the public this Ames Research Center scientist will be doing for the next six months because of his extensive investigations on the recent Voyager I data. This timely topic should be of interest to amateurs and lay people alike so bring your friends and family. The Rosicrucian Auditorium is located next to the Planetarium. Call 287-9171 for adequate directions.

Phil Hermsmeyer informed the board that Astronomy Magazine has made an offer to the SJAA of reduced rates for members. Starting with the January issue, members may get a year's subscription for $12, half-price of the cover price. If you already subcribe to Astronomy but would like to get the reduced rate the magazine will extend your subscription until January, 1981 when you can be started on a yearly rate. All you would have to do is send Phil Hermsmeyer a check for the remaining months you are not already covered for 1980 at $1 an issue. For example, say your subscription is to run out at August, 1980 but you want to continue it with the club's reduced rates on a yearly basis—just send Phil a check for the remaining four months, i.e., $4. Then, at the end of the year you will be notified through Astronomy of your rates for the next year. All this must be done by December 15, 1980 (no later!) so Phil can get the subscriptions in the mail so you can get your January issue. Phil's address is: 20900 Alves Dr. Cupertino, 95014. 252-5529

"With my knowledge of telescope making I would probably aluminize the tool!"
Gerry Rattley

Starting January 10th at the first IDSP of the year the SJAA will begin a telescope making class for all interested people. It will be an unstructured, on-going type of workshop which will allow people to attend when they wish and still not miss anything. There will be plenty of experienced instructors on hand to startyou out and help you along the not-so-difficult road to building your own scope. At the first meeting Jan. 10 the basics will be talked about for those who don't know which end is up (Gerry?) in a telescope. Things like focal length, f-ratio, aperature, mounting, mirror kits, tools, accessories, etc., will be discussed. This advice will always be available at the classes but the instructors (Frank Dibbell, Kevin Medlock, and yours truly) would like to reserve the first session as a set-up and review of the class. Those who know what they're doing and would like to do a telescope or finish one are welcome to bring their parts to work on from the next meeting on. Two things are requested if you plan on bringing a mirror to work on: 1) newspaper and a roll of paper towels, 2) enthusiasm.

The January 31st IDSP will be a beginner's night for all new members and/or telescope owners. Over the past years the SJAA members have noticed that many new amatuer astronomers can find the hobby difficult to get into. So, if you 1) have a new telescope but have trouble setting up, 2) once you have it set-up, find you don't have anywhere to look, 3) find it difficult to see things because you are shivering and/or starving to death in the dark, then beginner's night is for you. Every amateur astronomer has gone through this difficult stage. (Some of us still are). Bring your 'scopes for an informal star party in the front parking lot, and a lot of helpful advice.

(Astronomy this month has a great article on how to dress for observing. Beats being unconfortable!)

Services for the Astronomer:

A "hotline" service that provides up-to-the-minute recorded information about sunspots, solar flares, and geomagnetic storms is being operated at the Goddard Spaceflight Center in Greenbelt, Md., under the joint auspices of NASA abd the National Oceanic and Atmospheric Administration. By dialing the hotline number (301) 344-8129 astronomers, radio operators, geologists, and others who may have a special interest in the sun's day-to-day activity can obtain data recorded by the Solar Maximum Mission spacecraft which, since last February, has been in equatorial orbit conducting the most comprehensive investigations of solar flares ever made. (Optical Spectra, Oct. 1980)

An up-to-date comet circular, Comet News Service, may be subscribed to by mailing $4 (yearly), check or money order, to CSN, McDonnell Planetarium, 5100 Clayton Road, St. Louis, MO, 63110.

The Astronomical Society of the Pacific is now offering a free directory of national amateur astronomical associations. To obtain a copy send a legal-sized, stamped, self-addressed envelope to: Amateur Guide, A.S.P., 1290-24th. Ave., San Francisco, Ca. 94122.

"Whose's got the SJAA sign?"
Jack Zeiders

"I do. It's behind the door in my room."
Jim van Nuland

"Lot of good it's doing there."
Jack Zeiders

"Yes, it's keeping the door from banging into the wall."
Jim van Nuland

From Science News, Nov. 8, 1980, p.295:

"Asteroid Satellites: Social Acceptability"
One of astronomy's controversies in the past years has been the idea that some asteroids may have their own natural satellites—moons. Much of the cited evidence has come from observations of stellar occultations, when an asteroid would briefly block the light from a star, in some of which cases there have been reports of "secondary occultations" as though lesser objects near the asteroid in question were making their presence known. But the data have been inconclusive whether for want of sufficient number of appropriately located observers, or the lack of adequate instrumentation, or because the secondary occultations themselves were uncertain. In addition, same researchers have been criticized by the more conservative colleagues for giving too much weight to the inconclusive data, which may have had the effect of "burning off" some potential contributors to the project of the rather exotic notion. As recently as a year ago, the idea was not a popular one.

"At the annual meeting in Tucson of the American Astronomers Society Division for Planetary Sciences the climate for discussing asteroids with moons seemed considerably less hostile. R.L. Millis of Lowell Observatory, noting the total lack of reported secondary events among 23 photoelectric observations of a stellar occultation by the asteroid Juno, found it worth mentioning that (because of the geometry of the occultation path), "I don't think we've ruled out satellites." (Four days earlier two seperate visual observors had noted secondaries close to an occultation by the asteroid Kleopatra.)"

Those two visual observers were SJAA members Gerry Rattley and Bill Cook, as reported by Jim van Nuland in last month's bulletin!

More SJAAers in the media: Did you catch the article on CID cameras by Pete Manly in Sky & Telescope last month?
Patty Winter has an interview with Sandra Faber about the 10 meter telescope in December's Astronomy magazine.
Steve Greenberg also has an article in December's issue of Space Age Review on the Voyager-Saturn flyby at JPL. There will also be an article in the January-February issue of Mercury.

The American Institute of Aeronautics and Astronautics is offering two $5,000 prizes to two winning proposals submitted by a team of undergraduate AIAA Student Members. To compete in this competition write Mr. David W. Lund, Director of Student Programs, AIAA, 1290 Avenue of the Americas, New York, New York. 10104. The prize money must be used to purchase payload space from NASA aboard the Space Shuttle.

Because the Los Gatos Red Cross has done so much to support the SJAA in its many activities, i.e., they let us have free use of their building, the board agreed that it would be more than appropriate to announce that they are having a blood drive on Monday, Dec, 29th, from 2-6 pm, at the Los Gatos Red Cross building, 18011 Los Gatos-Saratoga Rd. Giving blood is not difficult, is only a little time consuming, and helps out in so many ways towards saving lives. Consider donating, please.

Two last little notes before I sign off here:

The book "North Star to Southern Cross" that was found at the last Sanborn Canyon star party is still in this editor's possession and will be until January 1st. when I will turn it over to the club's library. If it's yours please contact me.

When SJAA star parties are held in public places like state parks, etc., they are open to other amateur astronomers. We do not reserve entire campgrounds for the exclusive use of the club. It would be hostile to chase away other amateurs and their telescopes just to keep a star party 'private'. We have other sites for that purpose. The board would like to ask the members to be mindful of this sharing relationship we have with the numerous other clubs in the Bay Area and to welcome other people who share your hobby to also share the public sites. Thanks.

If you're noticing how small the bulletin is this month it's because I DIDN'T GET VERY MANY ARTICLES TO PRINT! So send me something. Everyone has something to say. Many thanks to Don Machholz, Jay Freeman, Patty Winter, and Steve Greenberg (with an 'e') for the articles that were contributed. Bulletin deadline for **January** will be December 20th. Kevin and I are moving around that time so bear with us in the confusion! Thanks.

Denni

New Addresses

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Suite 229
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(408) 244-1304

Tom A. Palmer
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Kevin Medlock, president 278-8475
Frank Dibbell, vice-president 733-7208
Denni Medlock, editor 278-8475

COMET COMMENTS

As we approach the end of 19080, teo periodic comets head south and out of our view, one periodic comet remains, and a newly discovered comet is in the evening sky. Additionally, a comet once thought to be ——isn't.

Comet Helin-Dunbar (1980p): The comet that isn't. This object was reported by Eleanor Helin and R. Dunbar on a photograph taken with the 48" Schmidt at Palomar on Oct. 18 and 19 at magnitude 18 with a 3' tail. It was designated 1980p, but later observations show that it is a ghost image from the star Regulus some five degrees away.

Comet Meier (1980q): Rolf Meier of Canada has discovered his third comet in three years. About 6 degrees NW of Vega, this comet was discovered Nov. 6 with the 16" reflector in Ottawa. He observed it magnitude 10.5, the next evening I observed it at 10.6 and a 2' dia. Charles Morris of Harvard rated it at magnitude 9.8. At 1.5 AU from both the sun and earth at discovery, it is moving towards the sun and away from the earth. It reaches its closest point to the sun on Dec. 4 (1.52 AU) and is not expected to get much brighter.

Comet Meier (1980q)

Date	R.A.	Dec.	Mag.
11-12	18:01.4	+38°40'	
11-17	17:58.7	36 04	10.5
11-22	17:56.7	33 49	

This comet is moving SW and will be in the twilight in a few weeks. Try for it late Nov. after full moon. These are all the positions I have now.

And our three periodic comets....

P/Comet Stephen-Oterma (1980g)

Date	R.A.	Dec.	Mag.
11-17	05:26.4	+12°39'	8.6
11-27	05:30.3	17 24	8.3
12-07	05:31.8	22 49	8.2
12-17	05:31.8	28 21	8.3
12-27	05:32.1	33 24	8.6
01-06	05:34.4	37 31	9.0

This comet is moving almost due N through Orion and into Taurus. On the evening of Dec. 4 it passes very close to (or even over) M1. (Both rise at dusk). These mag. ests. are about right, I observed it at mag. 8.7 and 3½' across on Nov. 15.

P/Comet Tuttle (1980h)

11-17	10:24.1	+22°01'	9.4	7.4
11-22	10:32.1	11 59	9.1	7.1
11-27	10:40.1	00 20	8.8	6.8
12-02	10:48.3	-12 23	8.7	6.7
12-07	10:56.9	25 08	8.6	6.6
12-12	11:06.2	36 52	8.7	6.7
12-17	11:16.5	47 01	8.8	6.8

This comet slips quickly into the Southern sky and out of view for us. The second mag. listed is probably the more accurate of the two. I observed it at mag. 7.4 and 8' across on Nov. 15.

P/Comet Encke

11-17	14:13.0	+01°50'	6.4	7.1
11-22	14:29.3	-04 54	6.6	7.3
11-27	14:45.7	10 28	6.8	7.5
12-02	15:05.5	15 22	7.1	7.8

Going fast, this one is sinking into the morning twilight. I saw Encke as mag. 7.0 and 8' across on Nov. 10. The second mag. ests. may be more true.

Comets in Your Eyes: Reporting a comet discovery.
Should you come across a fuzzy object which is not plotted on your

star atlas, is not in the most detailed catalogue you can find, is not a ghost image of a near-by star or planet—you may have discovered a comet. A sure check is to see if it moves in relation to the stars—a comet will appear to move in under two hours (make a sketch showing near-by stars under high power.) Plot it on your atlas and measure its position. Estimate its magnitude and appearance. Determine its daily motion, if possible. Then check Sky and Telescope or this column to see if there are any known comets in the area.

It's best to send the message by telegram (cost about $8) to the telex machine at the Smithsonian Astrophysical Observatory in Cambridge, Mass. To do this, call Western Union (249-9150 in San Jose) and tell them you want to send a message to (telex) "TWX 710 320 6842, ASTROGRAM CAM." (that is the "address"). Then send the following information:

Object (comet or nova)
Date and time of discovery (to the nearest minute U.T.)
Position: R.A. and Dec.
Magnitude estimate
Appearance (diffuse, condensed, tail or no tail)
Daily motion (R.A.: E or W and distance in minutes (R.A.); Dec: N or S in arc minutes)
Your name, address, and phone number.

What will happen is that within two hours the telex machine in Cambridge will print out your message. One telex machine is in the Central Bureau, and the other is in the home of director Brian Marsden. Although they want you to confirm the discovery yourself (by checking for further motion), they will get others to search in your position for the object. You should also write the Smithsonian describing how you found the object and any follow-up information you migt have. The address:

Central Bureau for Astronomical Telegrams
Smithsonian Astrophysical Observatory
Cambridge, Mass. 02138

If you wish to call them, the phone number is (617) 864-5758. This is a recording machine on which you can leave a 30-second message, but don't use it to report discoveries—it's too slow and inaccurate—they might not check it for a day or two and you might not get everything on it. If you wish to talk to Dr. Marsden directly, dial his office at (617) 495-7244, but once again, use this only to follow-up the telegram. Incidently, you can send the discovery information to the Smithsonian using a special number code. Should you become involved in comet-hunting you may want to use this (more refined) method. Write the Smithsonian and ask for info on sending the code.

If you need anymore help or information on this, feel free to give me a call.

Don Machholz
(408) 448-7077

Overheard at a indoor star party:

Question: "How do you get a 12" Dobsonian into a Mazda?"

Answer: "Use a shredder."

****

"That must have something to do with something."

Kevin Medlock

NOVEMBER 8 STAR PARTY AT FREMONT PEAK

The November 8 star party at Fremont Peak was poorly attended, notwithstanding pretty good skys and bearable temperatures. I did not make any attempt to take attendance, but the only SJAA members besides me whom I saw were Frank Dibbell, Bob Fingerhut, John Gleason, and Jeff Lo. The fog did not roll in over the coastal plain so the sky was not as dark as it can be, but the weather was clear, the dewing was managable, and the poor seeing in the early evening improved later on.

Quite a number of non-club-members were there: The San Mateo group was going visual work behind the ranger's house, a couple of the folks from Orion Telescope Center in Santa Cruz were there, and a handful of others. The telescopes ranged from three- or four-inch Newtonians up through two C-14's. I did not see any big Dobsons, though I did not get over to the San Mateo area: they have several, and may have brought them out.

I spent nearly all the time playing with my new Celestron 14 and so did not get around to find out what other people were doing. However, lots of aperture makes for lots of friends -- many of the other people came to me! Bob Fingerhut and I looked at lots of Messier globular clusters and saw the ansae ("rings") of the Saturn Nebula. Several people got a view of colorful wisps and filaments in the Orion Nebula. I was able to see at least one star inside the Ring Nebula, and to detect the Merope Nebula in the Pleiades.

At one point Bob Fingerhut noticed my unclutched telescope tube starting to swing, caught it, and remarked, "Jay, you're out of balance." Always one to admit to my faults, I agreed; and added that what's more, my telescope needed counterweights! Later in the evening, a borrowed anti-dew hot air blower experienced a failure that may be of interest to the Nuclear Regulatory Commission: Following catastropic loss of cooling, it underwent core meltdown and started China-syndroming its way through my observing chair. Fortunately, I was standing at the time.

After I had packed the C-14, the dewing stopped and the sky got darker. Several people were able to suspect the Horsehead Nebula at 48X in an eight-inch Newtonian. Enough people had gone home early the serious astrophotography was possible from Coulter Camp.

As I was leaving, I noticed that on my car, the brake lights do not flash when I engage the hand brake. By this means, I was able to pull out of the area showing no lights, and still maintain the ability to stop the car when necessary. This trick might save a lot of people's night vision and astrophotographs.

Winter star parties can be fun. If you are not already in hibernation, why not come to the next one?

--Jay Freeman

Behind the Scenes at Voyager-Saturn

by Patty Winter

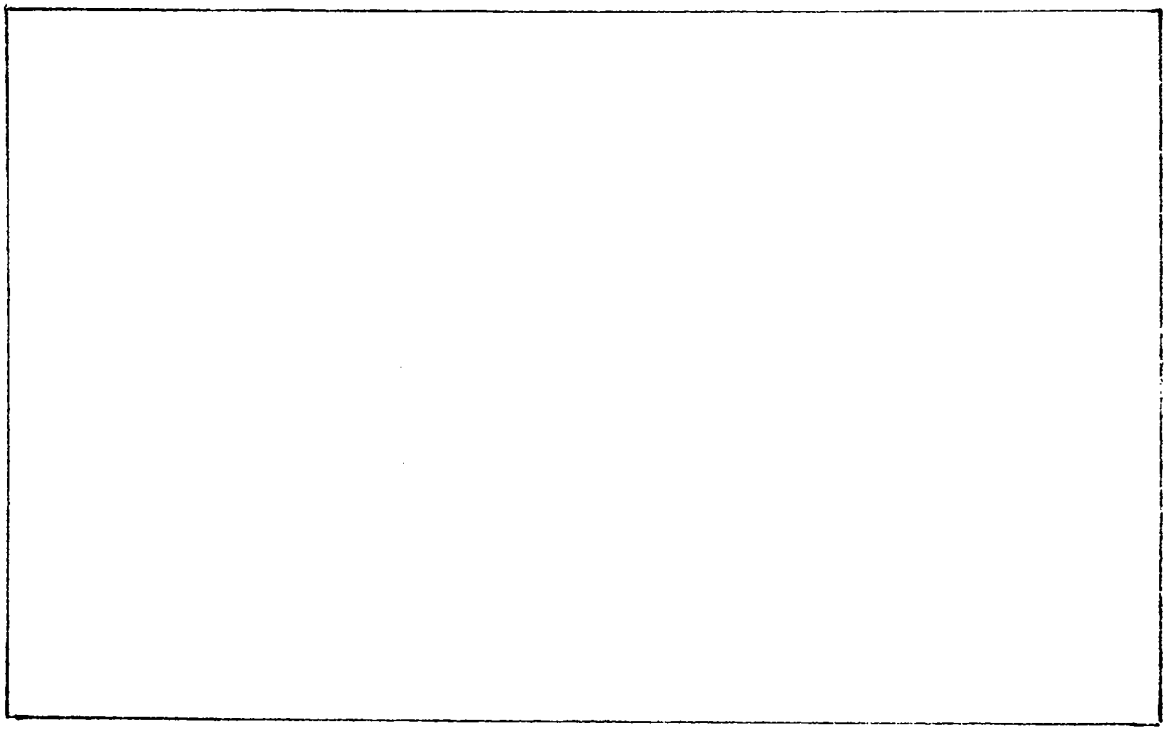
Not all of the entertainment at JPL this November was provided by Saturn. Here are some highlights from the Press Room:

As the theme music from ABC's nightline newscast begins, science writers flock around the TV to watch a pretaped program of Carl Sagan discussing Voyager. Press people performing Sagan imitations are interrupted as the man himself is spotted outside—trying to make it past the night guard. He searches through his pockets, finding his credentials, and is finally admitted—although most of the press people continue to

watch the "canned" Sagan. On his way out Sagan smilingly flourishes his badges to the guard.

A national TV reporter, wondering how the public can help the space program, asks NASA official whether picketing the White House (and "or maybe the ranch?") would help.
The NASA response: "No——don't help us. Please don't help us!"

Steve Greenburg, upon informing a member of the afore mentioned reporter's staff that adding 273° to Kelvin gives Celsius, not Fahrenheit——as has just been erronously stated to a national audience——suggests that the network hire a science editor to check the scripts, and is told that the reporter "IS our science editor."
Steve's response:" Oh?"



This Voyager image, transmitted at the instant of closest approach to Titan when the spacecraft passed within 2,500 miles of the 3,600 mile diamter moon, faithfully records the enigmatic nature of the solar system's largest satellite. Beneath the tenous pall of photo-chemical smog, a small gathering of Titanian life-forms may be seen, huddled together on the pale surface of an extensive equatorial plane. After some debate, life-science team members are agreed that these beings are very probably clad in fur of a color similar to their surroundings and that their eyes are closed to shield their retinas from the ill-effects of the acrid methane-rich atmosphere.

"The data in Spain stays mainly in the rain."
Steve Greenberg
(with an 'e')

"Denni's spies are everywhere!"
Ken Wilson, when asked if he could be quoted at JPL