

Predictions

aug '79

- August 4 General Meeting, Rosicrucian Planetarium, Park & Naglee, San Jose'. 7:30 pm. The speaker for this meeting will be our own Dr. Jay Freeman. Jay received his degree in Physics from U.C. Berkeley in June, '79 and was part of a research group having an experiment on Apollo-Soyuz studying the extreme ultra-violet. As of this writing it is unknown what the subject of the talk will be, but knowing Jay it should be interesting.
- August 7 Full Moon
- August 10 Board meeting at Norm Neinchel's, 190 Rose Ct., Campbell. 7:30 pm. 378-4488.
- August 11 Indoor Star Party, Los Gatos Red Cross. 7:30 pm.
- August 16-19 ASTRO*NORTHWEST '79, a joint WAA, ALPO, & AL conference at the University of Portland, Or. Due to a mix-up regarding last month's bulletin the registration forms were not inclosed as planned. Those people wishing more information on this should contact Gerry Rattley of the editor. We have a limited number of registration forms and are planning on attending.
- August 22 New Moon
- August 25 SJAA star Party at Sanborn Canyon Park.
- September 1 The SJAA annual equipment and slide night. This general meeting is to be held at the Los Gatos Red Cross building instead of the Rosicrucian Planetarium. 7:30 pm. Map will be inclosed. All members are welcome to bring any astronomy related slides and/or equipment.
- September 6 Full Moon and total lunar eclipse starting 12:21 am.
- September 7 Board meeting at Jim van Nuland's, 3509 Calico Ave, San Jose'. 7:30 pm. 371-1307.
- September 8 Indoor Star Party, Los Gatos Red Cross. 7:30 pm.
- September 22 SJAA Star Party at Henry Coe State Park.
- September 29 Indoor Star Party, Los Gatos Red Cross, 7:30 pm.

"I don't want to be president—I want to be king!"
Frank Dibbell at the July Board meeting

Gerry Rattley, pres. 732-0202

Denni Medlock, ed. 278-8475

Observations

During the July board meeting at Debbie Moore's house the SJAA's vice-president John Rhodes announced that he is being transferred to Vancouver, Washington and as a result must resign his officership and board position. As past president and long time board member John has been active in many decisions that helped shape the club and was responsible for organizing many of the star parties for children held at local schools. The SJAA will miss John and we wish him and his family the best of luck in their new home.

Because John's resignation left open a position on the board and the job of vice-president the board accepted nominations at the meeting and voted Frank Dibbell in as replacement board member and Bobby Fingerhut in as vice-president.

Another new appointee, even though admittedly railroaded into it, is our new executive secretary Martha Hanisch. Gerry Rattley was looking for someone to write letters to perspective speakers and everyone volunteered Martha. (She wasn't even at the meeting but Wolfgang confirms she's accepted.)

If you are an unusually alert SJAA member you probably noticed that the speaker listed in last month's bulletin for the September meeting is not listed as the topic in this month's bulletin for the same meeting. The reason is that the intended speaker, George Gabor, is out hiking the John Muir Trail and won't be back until the week following the September meeting. There is a good chance the club can obtain him for a speaker later on in the fall. Meanwhile, equipment and slide nights at the Red Cross building are always fun and are usually held in September anyway. It should give the photographers in the group a chance to show off their late developed Riverside Conference slides, pictures of the picnic, (I hope someone took some), and astronomical objects from star parties throughout the summer.

You didn't even have to be an alert SJAA member to notice how blotched last month's bulletin was. I've named it the blooper-bulletin and for awhile there was contemplating having a contest to see how many mistakes could be found. Fred Braniff tells me the Sky Word puzzle had five alone but I can only take credit for three of those. I only print what people give me (never edit, just correct spellings), and even then miss on the proofreading. The problems with July's bulletin started early with a mix-up at the printer's when pages where matched wrong, which is why the questionnaire, which wasn't supposed to have anything on its backside, had Gerry's deep-sky article there. It is also why the Riverside article and picture where not back-to-back as planned. The reason the Sheila X. MacDougal eclipse article got eclipsed by the question-of-the-month was that the bulletin was assembled at an indoor star party where chaos reigned and I didn't catch the problem soon enough. Matter-of-fact, I didn't catch it until after I had walked next store to the post office and mailed them. Well, that situation has a solution and from now on out the pages will be numbered!

Speaking of solutions to problems: Gerry Rattley informs me that the volunteers he asked for in the last bulletin have been found. Debbie Moore and Rita Miram have agreed to take care of the refreshments for the general meetings. If you'd like to help them out occasionally give Debbie (269-7466) or Rita (797-9916) a call. Starting this month Frank Dibbell will be writing "SJAA Members' Corner," an article designed to introduce members to members and to help people find others who just might be that expert they've been looking for for help on a project.

A long time ago, 1968 to be exact, the SJAA's Secretary was Walt Schoendorf. Walt left the club for a few years, mainly because of school I believe, but recently has returned to attend a few of the indoor star parties and the picnic. Welcome back, Walt. With him have come a number of club scrapbooks, including the notes from the first three years the club met. How many of you knew the SJAA started Dec. 6, 1954? We're coming up on our twenty-fifth anniversary this year and perhaps an appropriate celebration is in order....Any suggestions? By the way, three of the original club members are still in the SJAA: Richard Barrett, Gene Cisneros, and John Delaney.

The indoor star parties lately have been reflecting the summer mood everyone seems to be in. Pete Manly brought film clips of popular movies to the last one in June and we sat watching excerpts of Flash Gordon (the original), Star Wars, and Silent Running. The July 7th indoor star party was more outdoors with frisbees, toobies, and an occasional firework flying through the air. (The food fight came later at Sambo's and was not SJAA sanctioned!) This was all mentioned at the July board meeting and I was asked to remind those who attend the indoor star parties that there are a few rules and regulations we should go by. (The movies were great, Pete, so don't worry about that.)

- 1) There is an 11 pm time limit to activities.
- 2) All trash must be cleaned up and tables replaced in order. This has not been a problem. Most everyone has been cooperative in cleaning up.
- 3) Lost frisbees are one thing but the neighbor's bushes have the right-of-way. (I know one of them tried to eat you, Jack, but it still has the right-of-way!)

Ernie Piini reports that his new book, "An Eclipse Over America's Stonehenge", should be out the middle or end of August. He has offered copies to be sold through the club to members so I'll try to get more information on this for the September bulletin.

Ernie also reports that long-time SJAA member and eclipse chaser Wes Kendall passed away on April 25, 1979 after a lengthy illness.

The promised membership list will be included in next month's bulletin. Bob Fingerhut reports that membership renewals are still coming in and instead of excluding some procrastinators I'll wait a bit longer.

Deadline for articles to go in September's bulletin is August 19th if they are mailed or August 14th if they're handed to me. This difference is caused by the fact that I will be in Portland for the WAA conference over that weekend and will need everything handy when I get back. I realize this is on the short side time-wise and I appreciate any articles written under this time boundary.

Last but not least: Congratulations to John and Norma Gleason on their June 23rd. wedding!

Editor

COMET COMMENTS

Since the last week of June, comet activity has picked up. Three comets have been discovered, two by professionals (and therefore faint) and one by an amateur. Additionally, Comet Meier is still visible in the morning sky as an 11th magnitude object.

Comet Bradfield (1979c): William Bradfield of Australia, discovered this, his ninth comet in eight years, on the evening of June 24 at R.A.: 08hr 37.5 min, Dec: $-1^{\circ}20'$, about 40 degrees from the sun. It was magnitude 10 at its discovery. It is a small comet, and will reach it's closest approach to the sun on July 23 at 0.39 AU. At this writing, I only have a rough estimate of it's future positions. In early August it will be observable from our hemisphere at approximately R.A.: 08hr., Dec: 40° , at magnitude 8-9. Then, in mid-September, it will be about magnitude 10 in dark skies opposite the sun.

Comet Russell (1979d): This comet was discovered on a photographic plate taken July 16 at Siding Springs, New South Wales by P. R. Standen. It was first noted, however, by Kenneth Russell, henceforth the name. Discovered at magnitude 17, it is not expected to get brighter as it now pulls away from the sun.

Comet Torres (1979e): This 18th magnitude comet was discovered on June 26 by Carlos Torres of the National Observatory in Chile. It will be closest the sun on October 8, 1979, at 4.6 A.U. This is one on the most distant perihelion distances I have ever seen. It will not get brighter than magnitude 17.

Comet Meier (1978f): Discovered last year and now leaving the solar system, this comet remains about magnitude 11 as given below.

Comet Meier (1978f)

Date 1979	R.A.	Dec.	Est. Mag.
7-16	23hr 47.6m	-17deg 33'	11.3
7-26	23 40.9	-17 46	11.4
8-05	23 32.4	-18 03	11.5
8-15	23 22.5	-18 21	11.7
8-25	23 11.9	-18 34	11.8
9-04	23 01.3	-18 40	12.0

Comet Tails: Comet tails usually do not develop on comets until they are within about 2 A.U. of the sun. They can be up to 200 million miles long, and they usually point more-or-less away from the sun. There are often two types of tails: dust and gas. The dust tails are usually curved because the material is slow and lags a bit. It is best seen in red light. The gas tail is usually straight and is best seen in blue light.

Don Machholz

356-7727

SJAA Members' Corner

by Frank Dibbell

This is a brand-new column, and it is based on a suggestion which appeared in last month's bulletin. It's basic purpose is to provide a forum in which SJAA club members can talk about themselves and their hobby, and to give members a place where they can either offer, or ask for, help on special projects. My basic plan for this column is to talk to two or three members each month, and publish the resulting "interviews" in the column. Also, if you wish to be interviewed and you can't wait for me to get around to you, please feel free to call me (after 6 pm) at 733-7208. Or just grab me at any of our club functions and bend my ear.

My first and most logical choice for an interview is, of course, myself. My own interest in Astronomy goes back over a quarter of a century. I didn't really become a serious amateur (I used to be a funny amateur) until I was in college at Berkeley. At that time I wanted to build a telescope, but I didn't know who to talk to for guidance. Fate led me to the East Bay Astronomical Society and the Chabot Telescope Makers, where I received much help in building my first telescope. After graduation I found a job in the Santa Clara Valley and moved from Berkeley to Sunnyvale. At the same time I more or less dropped out from my hobby. A friend at work introduced me to the San Jose Astronomical Association a few years ago, and I picked my interest back up in astronomy.

Currently I am interested in telescope making, and I would be willing to lend assistance to anyone wishing to build a scope. I can be reached at home at the above phone number, or at work (746-7542)

The other club member spotlighted this month is Bruno Benassai. Bruno told me that he got started in astronomy when he was in the 6th grade; he had an excellent teacher who was able to stimulate his interest in the subject.

Originally from Argentina, Bruno belonged to the "Friends of Astronomy," a local club in Buenos Aires. Here he built several telescopes, and practiced astrophotography. Bruno mentioned that they were very inventive in building telescopes, because glass was very scarce, and oculars even more so. Astrophotography was a trick, too, because their clock drives were pendulum-driven as opposed to electric.

Currently Bruno is an "electronics whiz." His current projects involve electronics application for his Celestron 14; he is currently working

on an automatic star tracker. Previous projects include crystal-controlled telescope drive correctors, and sidereal clocks. If you are interested in building a sidereal clock, or have a general question concerning some electronics application, call Bruno during the day at work (739-7700 ext 4575). He will be more than happy to assist you.

This was received in the mail and might be of interest to a number of members:

Dear Advanced Amateur Astronomer and Meteor Observer:

This July-August we have a chance to do some very new and exciting work in Astronomy on the Upsilon Pegasid Meteor Shower. Because of our numbers, we have an immense advantage of the professional. This new meteor shower may be a major one just beginning.

To do effective meteor work at unusual hours it is better to work with someone as a team. You must be comfortable to do good work. Use Kodak-Tri X or Kodak 2475 recording film and develop triple the normal time. Use 4 minute exposures.

Keep very careful data on the exposure beginning and ending times and magnitudes and other unusual characteristics.

If you are willing to try using a defraction grating on your 35mm camera, I will send you instructions.

Please start shooting as early as July 18 until the moon interferes and then again until Aug 26. Shoot directly at the Radient in the Square of Pegasus.

Please inform me quickly of you get good results or have a problem or question. My telephone number and address are included, but please, no collect calls, since this project is funded out of my pocket.

This year's results will be published possibly in hardback. All significant contributors will be acknowledged in print. If interested in the results, please let me know. Call if you have any questions.

Good Shooting and Clear Skies

(signed)

Harold Povenmire
Assistant Director
American Meteor Society
1040 Museum Blvd.
Daytona Beach, Fl 32014
AC 904 255-0285
AC 904 255-6475 x-219

PICNIC!

Over 50 SJAA members and their families enjoyed the annual picnic at Sanborn Canyon Park July 15. Food was the main order of business with Wolfgang Hanisch handling custom prepared steaks over the barbecue pit while Martha dished out as much bender beans as could be eaten. Most everyone brought some type of side dish and there were salads of every kind, cookies, and at least one still frozen Boston cream pie brought by Fred Braniff and eagerly passed down the long picnic table. (Wolf complains it never made it as far as the barbecue pit!) This was all topped off with a chocolate with raspberry filling going-away cake for John Rhodes and his family. ERP!

And to work up an appetite there were plenty of things to do. While the little kids played with paper airplanes down in the picnic grounds the big kids ended up in the parking lot playing with frisbees and toobies and (unsuccessfully) trying to get the many kites to fly. Too hot and no wind. A few, like Debbie Moore and Bob Fingerhut tried their hand at horseshoes (with unknown results) and Dave Ambrose and Bob found out abruptly from the ranger that archery is not permitted at Sanborn Canyon. No harm done, though, and everyone returned to other activities such as eating. Gerry didn't have much trouble getting everybody together after dinner to make the officer installation announcements—we were all too stuffed or too tired to move! (I moved fast enough, though, when I found out that the green vine plant I was stepping in was not blackberry but poison oak!)

Kevin and I had to leave before it had gotten dark but I noticed a few telescopes gathering in the parking lot as we were going so evidently there was a star party later on as planned. It's not often that the club's events draw out whole families so it was great to see such a good turn out with everyone involved. I'll support a picnic over a formal installation dinner anytime as long as Wolf does the steaks!

Observing the Total Lunar Eclipse

On Monday, 6 September 1979, there will be a total lunar eclipse. Lasting 5 hours, the eclipse begins at 12:20am and ends at 5:28am about an hour before moonset. For the first time in recent memory, west coast observers will be able to view the entire eclipse. In addition to just watching the eclipse, you can make valuable observations simply by recording what you see and when you see it. The following should act as guide for what to observe and how to report it.

Danjon Estimates

Danjon estimates are easily made. The only optical equipment required is an operating eyeball. Most of us have two or three of these laying around anyway. Though with mid-eclipse at 3:00 am there there may be a problem with the lens cap drooping back onto the lens. Fortunately there are several preparations available to help prevent this. Below is the Danjon scale. It is very important that all the observations are done independently. Otherwise systematic errors could creep in. So please don't discuss your estimate with other observers prior to making it.

The Danjon Scale

- 0 Very dark eclipse, the moon is almost invisible at mid-eclipse.
 - 1 Dark eclipse, grey to brownish color, details on the lunar surface are difficult to distinguish.
 - 2 Deep red or rust color with a very dark central part in the shadow with the very outer edge relatively bright.
 - 3 Brick red color with possibly a bright yellow edge or rim on the shadow.
 - 4 Very bright copper red or orange color, with a bluish, very bright rim to the shadow.

Magnitude Estimates

Magnitude estimates are nearly as easy as the Danjon estimates. In addition to our operational eyeball(s), you will need either a Christmas tree ornament, or a pair of binoculars (look through them backwards). The idea is to compress the moon's image to a small point. A negative lens should also work for this. Beta Ceti (mag. 2.2) and Fomalhaut (mag. 1.3) should be good comparison stars. The star should also be viewed by the same method to compensate for any light loss.

Crater Timings

Crater timings require the most equipment of anything mentioned thus far. For this you will need a telescope, lunar map, WWV radio, and a tape recorder. I'm assuming that if you own a telescope, you keep at least one eyeball with you at all times. By timing the contact of the shadow with the walls of the crater, the oblateness and expansion of the umbra due to the earth's atmosphere can be determined. I have a list of

craters with predicted times and additional notes. Anyone who wants to time craters can set a copy from me.

Other Observations

In previous eclipses, several observers have seen color bands at the leading and following edges of the umbra. These colors are in the reverse order from what would be expected from refraction. Two observers also reported Transient Lunar Phenomena (TLP). This was a bright speck on one of the maria. Location, exact timing, and duration of any TLP's observed should be reported.

Photography

The following exposure guide comes from KODAK.

		ASA	Film Speed	
		64	125	400
Full moon clear skies	t	1/250	1/250	1/250
	s	f/8	f/11	f/22
Moon deep in Penumbra	t	1/50	1/50	1/50
	s	f/8	f/11	f/22
BEGINNINGS OF TOTALITY	t	1	1	1/2
	s	f/2	f/3.5	f/5.6
TOTALITY	t	4	4	2
	s	f/2	f/3.5	f/5.6

Photographs should be recorded so that the time of observation is known and all pertinent parameters recorded. Photos of TLP's are particularly valuable and should be reported.

Reporting Results

Again this year, Byron Soulsby and David Herald of the Canberra Astronomical Society (Canberra, Australia) have requested that interested observers forward their results to them. For their previous results, see *Sky and Telescope*, Dec '78 and Jan '79. You can either mail your observations directly to them or you can send them to me and I will forward all the ones I receive at one time. This should help save postage for those on tight budgets.

Send results to:

David Ambrose Byron W. Soulsby
1720 Walnut St. 21 Folinsby St.
El Cerrito, CA 94530 Weston A.C.T. 2611
(415)233-5468 home Australia
(415)233-8220 work



"There's a cat in the fishbowl! I'll talk to you later!"

Phone conversation with Dave Ambrose

!!!QUESTION OF THE MONTH!!!

As you remember question of the month for August was:

"Given unlimited access to the 200" and its equipment on a night of perfect seeing, what would you do with it?"

Dave Ambrose: "Look at the Orion Nebula and the usual favorite objects. I'd spend a good night of looking around. Definitely need an NGC catalogue."

York Gorzolla: "I'd most likely take pictures through it of objects that are hard to take through a C-8."

Marian Crespo: "Look at the Coma Bernenices group of galaxies, Saturn for sure, and in Sagitarius, the Lagoon and Trifid."

Ernie Piini: "I would probably take a close look at the Crab Nebula. It has always fascinated me."

Les Delong: "Everything!"
or alternate answer
"Spend all evening looking at the 200"!"

Rob Vorderbrueggen: "Sell time on it!"
(Spoken like a true amateur astronomer....)

And for question of the month for September:

"If you could go anywhere you wanted to in this galaxy, where would you go?"

For Sale

"Questar 3½", originally owned by Paul Shenkle (marketing manager for Optical Techniques). Drive system recently overhauled by Questar. Price: best offer in \$900-1050 range."

call Les Delong
263-4612 after 6 pm

New Address

John Rhodes
18312 NE 25th Street
Vancouver, Washington 98664

(John is now SJAA's northern representative and is second only to Trudy Bell in distance away from the South Bay.)

(This is a reduced, but valid, copy of the registration form)



2nd AANC/NASA JOINT CONFERENCE ON ASTRONOMY SEPTEMBER 15th and 16th 1979

The ASTRONOMICAL SOCIETY OF NORTHERN CALIFORNIA and NASA invites you to attend the second AANC/NASA JOINT CONFERENCE ON ASTRONOMY to be held Saturday and Sunday, September 15th and 16th at the NASA Ames Research Facility, Mountain View, California.

Included in the conference will be amateur papers, professional talks, telescope and photographic displays and competition, door prizes, tours, swap meet and much, much more.

NASA speakers, visuals and handouts will bring late reports on the Saturn probe and other exciting topics. A slide copier will be available for your convenience. Tours of the spectacular and important Ames Research facility will be guided by NASA/Ames staff. What you see will be determined by what is new, available and not flying that weekend.

Anyone, commercial or amateur, may have free table space at various conference locations to display equipment, photographs, swap meet materials, telescopes, accessories, etc.

Start the mornings with coffee and fresh baked goodies. Box lunches on Saturday will let you take a guided tour of NASA or picnic on the grounds. The Saturday night banquet will feature New York Steak, a no host bar and optional wine with your dinner. The Saturday night program, highlighted by the keynote speaker and the presentation of AANC and Messier club awards, will continue after dinner in the main auditorium. Sunday, the cafeteria will be open for brunch and limited menu service.

Due to popular demand, we will again be holding a swap meet so remember to bring all your good, old stuff and swap it for someone else's.

Papers on any subject given by amateur (and professional) astronomers are a very important part of any AANC conference. The conference committee encourages you to give a paper at the conference. However, the papers chairman must have a short abstract by September 1 so that we may schedule you in properly and so that we know what projectors, etc. you will need. Send you abstract to the papers chairman:

Papers Chairman, Terry Teerman, 1450 Todd St., Mountain View, CA. 94040

IMPORTANT NOTICE: REGISTER EARLY. ATTENDANCE IS LIMITED. THE REGISTRATION DEADLINE IS WEDNESDAY, SEPTEMBER 5th. THERE CAN BE NO LATE REGISTRATION BECAUSE OF NASA SECURITY REGULATIONS.

Print name(s) _____

Address _____ Zip _____

Citizenship USA _____ Other _____ Phone _____

Society of affiliation _____

Registration Fee @ \$4.50 per person # () \$ _____

Box lunches Saturday @ \$2.25 # () _____

New York Steak Dinner @ \$9.50 # () _____

Rare _____ Medium _____ Well done _____

Date registration sent _____ Total: \$ _____

I will display a telescope for exhibit or competition. _____

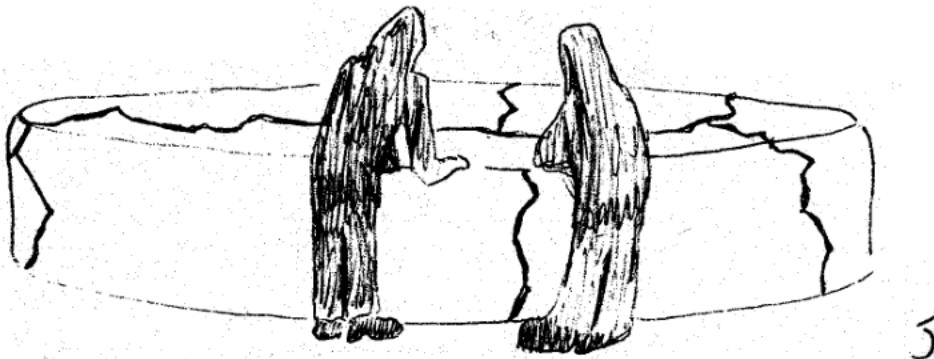
I will display astrophotographs for exhibit or competition. _____

How much table space do you need for display of commercial exhibits, swap meet material, etc.? _____

Do you plan on giving a paper? _____ (Send abstract)

Please send registration form and check to:

AANC Conference Registrar
c/o Dennis LeClerc
222 West Highlands Avenue
Tracy, CA. 95376



5

-- WELL, WE COULD MAKE AN MMT... .

Here's another chance to fill out the basic questionnaire that was erroneously printed in last month's bulletin. You can give it to any board member at any club function, put it in the suggestion box at a general meeting, or mail it to Gerry Rattley at 185 Homestead Rd. #2, Sunnyvale, Ca. 94087

1. Do you like the general meetings? (meeting place, programs, etc?)
2. Do you like the meetings on Saturday night? Would you prefer them on Friday night?
3. What kind of a program schedule would you like to see set up for the general meetings? Do you like talks geared to what you can do, lectures about what the professionals are doing or equipment and slide shows? Do you like it as it is with a mixture of the three?
4. Do you like the indoor star parties? Do you like their loose structure or would you prefer a more formal atmosphere?
5. I know people like star parties, so, in your opinion, why do you suppose people are not participating more in the close-in type star parties?
6. Where would you like to see the club hold more star parties?
7. Do you have any suggestions for or comments about the bulletin?

Use the back of this questionnaire to make any additional comments.

Thank you!