

Predictions

- Jul. 27-30 WAA, AANC, ALPO, and ASP Joint Conference at Cal Poly University, San Luis Obispo.
- Jul. 28-29 AANC-sponsored star party at Fremont Peak.
- Jul. 29 Indoor star party, Los Gatos Red Cross, 7:00 pm.
- Jul. 31 Cathy Pinheiro's 20th birthday.
- Aug. 5 Club star party at Henry Coe Park. Dusk to dawn.
- Aug. 11 Board of Directors Meeting, 8:00 pm. Doug Beuttner's house, 6659 Mt. Pakron Dr., San Jose. Planned is a 6:00 barbecue and swim party. Call Doug for info.
- Aug. 12 General Meeting, Rosicrucian Planetarium, 7:30 pm. Park & Naglee, San Jose. Curt Warren, Director of the Planetarium, will give a program on Stonehenge.
- Aug. 19 Indoor star party, Los Gatos Red Cross, 7:00 pm.
- Aug. 25-26 AANC-sponsored star party at Fremont Peak.
- Aug. 26 Indoor star party, Los Gatos Red Cross, 7:00 pm.
- Sept. 2 Club star party at Fremont Peak.
- Sept. 8 General Meeting with the San Mateo County Astronomical Society at Canada College. Dr. William Gilbreath of NASA-Ames will speak on Space Settlements, Satellite Solar Power Stations, and (energy) alternatives. See blurb section for details.
- Sept. 9 General Meeting, Rosicrucian Planetarium, 7:30 pm. Park & Naglee, San Jose. Gerry Rattley will give a chart talk and there will be a slide show. Bring no more than 24 slides per person.
- Sept. 15 Board of Directors Meeting, 8:00 pm. Jim Van Nuland's house, 3509 Calico Ave, San Jose.
- Sept. 16 AANC Board of Directors Meeting, 5:00 pm. Los Gatos Red Cross building. Indoor star party, 7:00 pm.
- Sept. 23-24 Lunar Graze Occultation expedition to observe a double star graze. More information next month and call Jim Van Nuland at 408-371-1307.
- Sept. 23 Indoor star party, Los Gatos Red Cross, 7:00 pm.
- Sept. 29-30 AANC-sponsored star party at Fremont Peak.

President, Gerry Rattley; Vice-President, Douglas Beuttner; Secretary, Cathy Pinheiro; Treasurer, Bob Fingerhut; Editor, Penny Pinschmidt

rattley rattles

The Finest Deep Sky Objects on the Skalnate Pleso Atlas of the Heavens
Chart V

NGC RA (1950) dec Con SP:mag,size,type,dist
6720 18 51.7 +32 58 Lyr pn:9½(*15):1:4x1!0:IV:660pc

M.57: !!"Ring Nebula", Bright, pretty Large, considerably Elongated: this is one of the top show pieces in the sky!, central star very difficult.

6779 19 14.6 +30 05 Lyr gc:8½:1:8:X:14kpc

M.56: Bright, Large, irregularly Round, gradually very much Compressed in the Middle, easily resolvable into stars of mag 11 to 14: use moderate power for this delicate and very pretty object.

... 19 23.0 +20 00 Vul oc:3½:90'-10*:c:100pc

Collinder 399: "The Cannon", Brocchi's Cluster; easily visable as a fuzzy ball to the unaided eye: use lowest power to see the Cannon-shape; contains the stars 4,5&7 Vulpeculae.

6811 19 36.7 +46 27 Cyg oc:9½:15'-50*:d:2880pc

Cluster, Large, pretty Rich, a little Compressed, stars from mag. 11 to 14: use low power; not ready an impressive open cluster but is quite easy.

6819 19 39.6 +40 06 Cyg oc:10:6'-150*:d:5010pc

Cluster, very Large, very Rich, stars from mag. 11 to 15: use low and moderate powers on this very lovely and rewarding object!!

6826 19 43.4 +50 24 Cyg pn:9(*11):0:5x0:4:IIIa:520pc

H.IV 73: Planetary, Bright, pretty Large, Round, central star of the 11th mag: "The Blinking Nebula"; use moderate & high powers on this one and try to observe the blinking effect, its not too difficult and extremely pleasing!

6853 19 57.4 +22 35 Vul pn:7½(*13½):8!0x4!0:IIIa:300pc

M.27: "Dumbbell Nebula", !!!!, very Bright, very Large, biNuclear, irregularly Elongated: use any power on this famous object but moderate power is best.

6885 20 09.9 +26 20 Vul oc:9:20'-35*:e:1150pc

H.VIII 20: Cluster, very Bright, very Large, Rich, a little Compressed, stars from mag. 6 to 11: use low power.

6888 20 10.7 +38 16 Cyg gn: - :18'x12':*7½:910pc

H.IV 72: Faint, very Large, very much Elongated, double star attached: use lowest power and a very dark sky; the double is O Σ 401:7½-10½:14":60°.

6910 20 21.3 +40 37 Cyg oc:6½:8'-40*:d:790pc

H.VIII 56: Cluster, pretty Bright, pretty Small, Poor, pretty Compressed, stars from mag. 10 to 12: use low power.

6913 20 22.2 +38 21 Cyg oc:7:12'-20*:d:950pc

M.29: Cluster, Poor, a little Compressed, stars Large and Small: use low power.

6940 20 32.5 +28 08 Vul oc:8:20'-100*:e:2880pc

H.VII 8: Cluster, very Bright, very Large, very Rich, considerably Compressed, stars pretty Large: use lowest power; easy binocular object.

6960 20 43.6 +30 32 Cyg gn:(12):70'x6': - :400pc

H.V 15: !!!, pretty Bright, considerably Large, extremely irregular Figure, 52 Cygni involved: Western half of the "Veil Nebula"; use low power and dark skies for a good view; easiest part is north of the bright star!

6992-5 20 54.3 +31 30 Cyg gn:(10):78'x8': - :400pc

H.V 14: !!!, extremely Faint, Extremely Large, extremely Elongated, extremely irregular Figure, bifructated, nebulosity & stars in groups: use lowest power and dark skies; Eastern half of the "Veil Nebula"; not difficult in binoculars!

Blurbs

DUES ARE OVERDUE. For those of you who have not renewed, this is your last Bulletin and you have already missed a month or two of Sky and Telescope. Please contact Bob Fingerhut, Treasurer (263-4455) to renew your membership.

I have started something new in the Bulletin. It's called, Question of the Month. This month's question is, "What is a star?" This is only for club members and bulletin subscribers and must be answered in 25 words or less. Next month's question is, "What does a Black Hole look like?"

The San Mateo club has asked us to come to their Sept. 8th general meeting. It will be held at Canada College (off Hwy 280) on 4200 Farm Hill Blvd. in Redwood City. Go to the Multi-Purpose Room below the Bookstore in Building #8 at 7:45 pm. If you can make it, please come.

John Rhodes will be going into the hospital for his back operation the 6th or 7th of August. (I forgot which day.) As before, the phone is by his bed, 415-969-2615. So please give him a call sometime soon.

Phil Hermsmeyer promised he would write on the Banquet for the Bulletin. He didn't. So, if you want to know what happened, ask him. Maybe next month he will, will write about it. Won't you, Phil!

I have the club photo albums. They are at all meetings. If you have any pictures concerning astronomy or the club, they are welcome.

Will the person who has the metal, blue and white SJAA signs, please let the Board know.

I need articles for the Bulletin, tons of them. Interviews of long-time club members and new, guest editorials, word puzzles....almost anything. And don't worry, it's not as hard as Phil Hermsmeyer thinks it is!

Cathy Pinheiro, Secretary, is starting a club scrapbook of newspaper and magazine articles about astronomy. Give all your clippings to her.

I would like to thank my mother for typing 90% of this Bulletin. It's only seven pages this month, but it's a lot.

EDITORIAL

I was very disappointed in last month's banquet. The formal atmosphere was completely out of character for most of the people there. Flashes of the board meeting only two days before at Debbie Moore's house kept coming back to me: Gerry Rattley jumping feet first into the swimming pool with only a pair of blue jean cut-offs on, Phil Hermsmeyer draped over the corner of a pool table on one leg, attempting to make an impossible shot, especially since he was laughing so hard with all of Ed Schell's provocative comments. At the banquet, the girls wore dresses, some of the men wore ties, and besides wondering if my slip showed, the biggest excitement was figuring out which fork to use. Next year, let's make it barbecued hot dogs and hamburgers at a local, uncrowded park!

Perry E. Fingerhut

R A M B I N G
R H O D E S

How did you first learn about the SJAA? Chances are excellent it was a friend who brought you to your first meeting or star party! We have acquired new members through school instructors and referrals from instrument dealers, but usually we meet our new members through their friends. And probably for a very good reason; many astronomy-oriented people tend to be a bit shy (though I can think of a few counter-examples) and personal contact is most convincing.

There are likely several hundred people in the South Bay who would find astronomy and the SJAA an interesting hobby, but they don't know we exist or what sort of fascinating activities we have. So tell them! The next time you visit a friend who likes to stay up late, enjoys gab sessions, likes to keep up to date on science topics, (and maybe is just a little bit shy) tell them about that neat organization you belong to and bring them down - to a Red Cross meeting, a star party, a graze, or whatever. Share some of your excitement and enthusiasm for our pet hobby - TELL A FRIEND!

"A star is an object that nobody really knows about except that it radiates energy."

Ed Schell

COMET COMMENTS Don Machholz (356-7727)

While Comet Meier (1978f) sets in the West, a much fainter comet is rising in the East, near the Pisces-Cetus border. It is known as Periodic Comet Ashbrook-Jackson, (1977g). It was discovered on August 26, 1948 as an 11.0 mag. object on photographic plates taken for a minor planet program. It was then known as 1948i, and with a period of 7.48 years, it was recovered several months ago. Comet 1977g will be closest to the sun on August 19, and for the next few months will be around mag. 12.

Comet Meier is now within 20 degrees of the sun and is no longer visible to us because it is at mag. 8. It will pass behind the sun and will then be visible from the Southern Hemisphere.

The only comet to be recently picked up is Comet Shajn-Schaldach (1978i); it was recovered as a 20 mag. object with the Harvard 61" reflector. It will remain beyond the reach of our instruments.

Comet Tails: Remember Comet Bennett, a naked-eye object in the spring of 1970? It was discovered by Jack Bennett of Pretoria, South Africa, after 333 hours of searching. Since then, Jack discovered 1974H on November 13, 1974, and then some 27 days later, the comet disintegrated. Jack is now 63 years old and continues his comet hunting, covering only the Southern Hemisphere. He uses a 5" refractor and augments it with an 8" Celestron. And yes, light pollution is a problem, even in South Africa.

"A star is a sun that's visible at night."
Jim Van Nuland

July Star Parties - Bob Fingerhut

There were two weekend star parties at Chews Ridge last month and one private one at Fremont Peak.

Following the graze expedition on Sunday, July 2, Jack Petersen and myself joined Norm Neinchel on Chews Ridge. Due to high fog and extreme fatigue, no observing was done. The following day we were joined by Gerry Rattley, Jeff Lo, and Gary and Jackie Rice. Monday night was very dark, and much was seen and photographed. Shortly after midnight, a launch from Vandenberg was observed. All three stages of flight and the stagings were easily observed by the naked eye. Gary Rice followed the flight with his telescope.

The next week I spent Friday night photographing from Fremont Peak. Around midnight, the slight breeze that had been blowing disappeared, leaving behind only an eerie silence. The next day I joined Norm Neinchel and Jeff Lo at Chews Ridge. Gerry Rattley and Gary Rice showed up later in the day. The sky was not as dark as the week before, but a good time of observing and photographing was had by all.

"A star is a heavenly body which many astronomers find exciting when viewed naked or with the aid of a telescope."

John Rhodes

First Impressions of the July 22 Indoor Star Party - Wayne Johnson (Tucson Astronomical and Aeronautical Association)

Being from the Tucson, Arizona vicinity with its fabled clear, dark skies, the idea of an "indoor" star party was completely foreign to me.

When I first arrived, Ed Schell was straightening up inside the Red Cross building, while two women were hugging each other outside. Needless to say, I was not sure what to expect from the SJAA! (I later found out that the women had nothing to do with the astronomy club.) Next entered Penny Pinschmidt, who, in spite of her diminutive stature, let it be known that she had arrived and immediately put Ed to work.

I was really becoming concerned about this group that I had come to visit, because along came the former president of SJAA, John Rhodes, who was having back problems. To alleviate this problem Ed expropriated a hospital bed from the Red Cross building, and John laid on it discussing his cold camera design all night long with things appearing to be normal. Penny's parents dropped in for a visit, and we all wished them a happy 34th anniversary, complete with cupcakes. (By now I had become involved in the zaniness of the group and accepted it as normal, everyday behavior.)

Seriously though, the diversity and proficiency of the various members to their respective interests was very informative. I gleaned good amounts of information on photographic techniques, star drive design, grazing occultations, and Proposition 13! The informal nature of the

meeting was most enjoyable, and I felt right at home immediately.

The only thing I regret is that I did not find out about the SJAA sooner than I did. Since my stay in San Jose is only for the summertime, I want to experience as much of this association as possible. There should be a better way for this group to advertise its presence. Telescope shops are not immediately apparent as a way to find an astronomy group (also, they were not listed in the phone book) and the planetaria in the area seems to have no knowledge of the SJAA. I found out about the association through Sky and Telescope when it reported on Jim Van Nuland's graze expedition.

Thanks for a good time, and I hope the men in the white suits never come to a meeting - they may haul the whole bunch away to the funny farm where "life is beautiful all the time. . .".

"A star is a mass radiating, usually in the visual but possibly in other (ir) regions, by a mechanism driven by nuclear gravitational energies."

Pete Manly

Secretary's Library - Cathy Pinheiro

Just as I had promised in last month's bulletin, here is my continuing list of books, magazines, and pamphlets from the club's library which are available to all club members. If you see one that catches your interest and would either like more information on it or to check it out, feel free to get hold of me at any of the club meetings or call me in the evenings at home at 265-4824.

The Finest Deep-Sky Objects by Mullaney, James, and McCall.

The Falkau Atlas by Hans Vehrenberg.

The Wider Universe by Paul Coudere.

The Nature of the Physical World by Sir Arthur Eddington.

Exploring Space With a Camera by Edgar Cortright.

Strange World of the Moon by V. A. Firsoff.

Splendor in the Sky by Gerald S. Hawkins
Astronomy, A History of Man's Investigation of the Universe by Fred Hoyle.

"A star is a highly compressed massive ball of burning hydrogen."

Gerry Rattley

Another Graze Coming! Double Star!!!

Jim Van Nuland 371-1307

September 23/24, a Saturday/Sunday, the third-quarter moon will graze a double star at about 1:25 AM PDT, 7 deg from the northern cusp. The stars are 6.2 mag each, 0.27" at 137 deg. This should be pretty spectacular to see. Circumstances are good except that the elevation of the moon will be only 14 degrees, rather low. This increases

the chances of a cloud-out, as slight ground fog or poor seeing may wipe it out. Take your chances.

We are planning an expedition somewhere west of Fresno or north of King City, the site as yet still unchosen. We'll hold a linear star party during the early evening. More details will be in the September bulletin.

Occultation of star by Hurculena

Don Machholz and I observed 532 Hurculena as it missed a 6th-mag star a few weeks ago. Observers farther south observed an occultation, with the startling result that a possible satellite of the asteroid was discovered by two observers. I'll tell more when I learn more.

"A star is a star is a star."
unknown

At Sanborn Canyon on July 8th we had quite a large number of people show up despite it being a close-in, light-sky star party: Charles Bahl and his wife, Jim Vermilion, Emmet Murphy, Scott Graham, and Dave Ambrose to name a few.

Ed Schell spent a good part of the night reclining in a chair equipped with a large shade umbrella to view the sky with his trusty binoculars. Norm Wild talked to my parents about the difference between Los Gatos and Saratoga. Ed, Pete Manly, and Jack Zeiders argued about the Red Cross policy concerning Seeing Eye Dogs in a disaster shelter.

Phil Hermsmyer brought a 6" reflector from Foothill College and sadly discovered he didn't even know where the Big Dipper was! Yes, master of the white-domed planetarium had to be taught the constellations from Ed. Poor Phil, he'll never live it down.

Other than that, the main problem was a few cars with brights on driving through the parking lot. Jack has a loud booming voice and soon had the situation well under control. At 1:30, when I left, many astronomers were still there.

Penny Pinschmidt

"Comet hunting is 5 percent perspiration, 45 percent persistence, and 50 percent insomnia."

Don Machholz

The Hidden Occultation of Aldebaran
Penny Pinschmidt

As Ed and I traveled down Clay Station Road at a mere 90 miles per hour, John Rhodes' voice came through loud and clear over the CB. He was reclining in the back of Jim Van Nuland's van manning the radio. He said Jim was out on his bicycle laying out stations and to watch for him. Ed slowed down to 70. Jim was spotted in the distance down the clear, straight, graze-perfect road. He had 26 stations to lay out, A through ZZ (he forgot J). The day was cloudless and warm, and when we slowed to a stop beside Jim, he was wearing only a pair of shorts. His hopes were high. Prospects for a successful expedition looked encouraging.

A week before, Ed had talked to a ranger at a nearby park. The man said that the weather had been clear for the last month and was predicted to remain so for weeks ahead. Jim was very familiar with Murphy and one of his Laws, but there was always the chance that Mr. Murphy would be looking the other way the morning of July 2 on Clay Station Road.

By 6:30 - 7:00, quite a number of grazers had arrived. All the cars were parked on the side of the road in the bicycle lane while we stood around in groups and talked. Ed had to prove to everybody that his rickety old car actually did go 90 miles an hour. He raced by us at top speed without a tail wind and on the level - not a downhill road. Some children never grow up!!!!

As the sun set and the mosquitoes continued to bite, Jim assigned stations and the astronomers gradually drifted to their posts. Ed and I drove up and down the graze line, stopping at all 18 occupied stations to see if anything was needed, check up on them, and blind them with Ed's powerful flashlight simply for the sake of being a nuisance!

All during the night, up until 4:00 AM, hopeful astronomers kept coming, some of whom we had never seen before. By 4:30, Ed and I were once again driving down the graze line, this time to play alarm clock. Using the flashlight, a cow bell, and a few pounds with a fist on each person's car door, we had no trouble awakening the yawning, tired-eyed grazers.

By then, Jim was holding his breath, hoping for the sky to remain as clear as it had been all night. In the southeast, smoke (actually steam, but I call it smoke) from the nuclear power plant cooling towers billowed out into the cloudless sky. As the moon moved closer to Aldebaran, spirits soared. There was even time to have a little fun, like trying to take pictures of inquisitive calves in a nearby pasture before they were spooked

away by sounds of the CB radios.

Across the street and down a way from my station was the only house on the three-mile stretch of road. Imagine what the farmer who lives there must have thought if he glanced out his front window, seeing all those crazy people staying out all night on a deserted road, pointing their cannon-like instruments toward the rising sun. Boy, oh, boy, did he have a story to tell down at the general store!

Suddenly, as WWV filled the air, an ominous band of low, dense clouds blew in quickly from the southwest. They were localized, covering only a few miles in each direction. Fifteen minutes before the predicted time of central occultation, tape recorders began to roll as telescopes and binoculars tried to pierce the billowy mass where the moon was thought to be.

Only a few timings were made, and, scientifically, the expedition was a failure. Poor Jim, Mr. Murphy was watching all the time!

Afterwards, some of us drove over to Rancho Seco Park to cook and eat breakfast. Jack Peterson gave Jeff Lo and Gerry Rattley a lesson on how to throw a boomerang, and we all took a couple of group pictures. We learned that it's hard to freeze a smile long enough for the timer to release the shutter!

This graze, to me, was a big success. We had a lot of people there, some of whom were strangers. Next time, I think we should try and get a lot more people to turn out. It was a learning experience as well as a fun one, and more than worth the trip.

Board Meeting at Debbie Moore's, July 14.

By 6:00 PM, Gerry Rattley, Jim Van Nuland, Bob Fingerhut, Phil Hermsmeyer, Debbie and myself were already taking a dip in the pool. Phil and I had a real honest-to-goodness splash fight. Bob made a grand entry by diving into the pool and then coming up from the deep to dunk the unsuspecting person who occupied the half-filled inner tube. Phil, of course, tried to throw Cathy in, clothes and all, unsuccessfully. And Jim enjoyed himself by bobbing his RC Cola bottle up and down in the water!

In order to get everyone out of the pool, Chef Edward had to start barbecuing the hot dogs and hamburgers. Just for the record, he cooked them faster than we could eat them! With full stomachs, the "Board Meeting" convened inside the house for a few serious games of billiards. It was quite interesting seeing all those male bathing beauties poking each other with their cue sticks and getting themselves in the most peculiar positions!

Finally, hours after 8:00, the board did get down to business. Jim Van Nuland made some announcements about the graze results, Bob Fingerhut talked about the upcoming banquet on Sunday, and the calendar was reviewed. This was the best board meeting I've been to.



ASTRONOMICAL ASSOCIATION OF NORTHERN CALIFORNIA

AANC Messier Club

Initiated with the idea of encouraging observational astronomy among amateurs, the AANC will provide recognition to the observer who goes beyond the celestial show objects to find each of the Messier clusters, nebulae, and galaxies.

A plaque suitable for mounting on the telescope will be presented to any individual who observes all 107 Messier objects. A parchment will be given as an intermediate award to those who spot 75 or more.

RULES:

- 1) Before starting the program, each observer must first register with the AANC using the attached form, indicating the beginning date and the telescope to be used.
- 2) Two years are allowed to see the objects.
- 3) All observing must be done using the individual's own instrument.
- 4) The observer is expected to make a record for the time, date, and place at which each object is viewed. This should be presented to the AANC board at the completion of the project.

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NAME _____
 last first

MAIL TO:

AANC Messier Club
c/o Debrah Moore
5336 Harwood Road
San Jose, Cal. 95124

ADDRESS _____
 street city state zip

TELEPHONE () _____

STARTING DATE _____

CLUB AFFILIATION _____

INSTRUMENT TO BE USED _____

GOOD LUCK!