

SJAA ephemeris

June '80

- June 6 Board meeting at Doug Buettner's, 6659 Mt. Pakron Dr., San Jose'. 8:00 pm. 997-1783. Everyone welcome.
- June 7 San Jose' Chapter of the L-5 Society is presenting the NASA film "Mars in 3-D", covering the Viking Mission on that planet. Also featured will be Stan Kent from the Viking Fund committee. (More about this inside.) 104 Kenna, University of Santa Clara, 7:30 pm.
- June 7 SJAA close-in star party at Sanborn Canyon County Park.
- June 12 New Moon
- June 14 SJAA star party at Fremont Peak State Park, Coulter Camp site.
- June 21 General meeting at the Rosicrucian Planetarium, Park & Naglee, San Jose'. 7:30 pm. This will be general election night for board members and will have a secondary program of one of NASA's astronomical films.
- June 28 Full Moon
- June 28 Indoor star party at the Los Gatos Red Cross building. 7:30 pm. Everyone welcome!
- July 4 No SJAA activities scheduled. Have a safe and happy holiday!
- July 7-12 Western Amateur Astronomers conference in Tucson. More information inside.
- July 12 SJAA star party, site to be announced.
- July 18 Board meeting at Debbie Moore's, 5336 Harwood Rd., San Jose'. 8:00 pm. 269-7466. Everyone welcome!
- July 19 SJAA annual picnic and officers' installation. Information inside!
- July 20 Space Day: the 11th anniversary of Man's landing on the Moon
- July 26 Indoor star party at the Los Gatos Red Cross. 7:30 pm.

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

Observations

Lots of club events to report on this month. The end of April saw Astronomy Day come and go while May was busy with two star parties and the Riverside Telescope Makers' Conference. June will see another two star parties and club elections at the general meeting, while July holds the SJAA annual picnic and Dr. A.B. Gregory recipient. It's because of the many varied activities and the continuous support a high percentage of the membership displays that the SJAA is now one of the largest, strongest, and most active clubs in California today. With this in mind the SJAA SURVEY by Frank Dibbell, which was ran last month is again on the last page of the bulletin. Please take the time to fill it out, and if you're too lazy like me to put it in an envelope and mail it, just drop it in the suggestions box at any general meeting or hand it to Frank Dibbell at any club function. It allows the board to make decisions that the majority of the club members wish to see.

ASTRONOMY DAY

Well, the membership was willing but Mother Nature just wouldn't cooperate April 26. While the three sights were swarming with telescopes and viewers clouds plagued the event throughout the evening making viewing of anything but the near full Moon difficult. Jupiter and Mars popped in and out of the high haze but Saturn didn't show its face until around 9:30pm and Venus retired early into the sunset. At the Rosicrucian Jay Freeman reports that "four telescopes were set up, which seemed to be the right number for the size of the crowd. Perhaps 100 people wandered through the viewing area during the course of the evening. The Planetarium shows may have been better attended, but I don't know--I didn't get inside. Gerry Rattley's narrated slide show of celestial wonders was well received."

At the Minolta Planetarium five telescopes handled the viewing needs of the 450-500 people at that site. With the Laserium show at hand the SJAAers virtually had an enthusiastic captive audience that stayed around for Bobby Fingerhut's 4½ hour long slide show. At the San Jose K-Mart there was the largest showing of telescopes, 10 in all, and the smallest showing of the public, about sixty people who wandered over from the store from time to time. Wolfgang Hanisch and Patty Winter jumped from site to site, giving pep talks, handing out brochures, and taking pictures for the Edmund Scientific Prize, which Shea Pratt wrote up and submitted. Considering the weather the SJAA had a sizeable showing in both the public interest and members willing to share their hobby with others. A job well done.

"Ever try and explain the Milky Way to a drunk?"

Jay Freeman

Jay also reports that the May 17 star party at Fremont Peak had over 100 people and thirty telescopes present during a warm evening with clear, turbulent-free skies. Even though the main AANC star party was being held at Digger Pines that night this one still attracted a number of Sidewalkers and the gang from West Valley, who evidently were finally able to agree upon what direction north was and actually had their Dynamax and Celestrons all pointing in the same direction. Norm Neinchel dusted off his eyepieces and actually did some observational work instead of photography. Bob Fingerhut just enjoyed the warm weather with his C-8.

SJAA PICNIC will be July 19th at Portal Park, Cupertino. Directions will be printed in the July bulletin. There will be no preregistration this year so don't hesitate in bringing yourself and your family to enjoy a (hopefully) warm, sunny, summer's day in the park. Events include slow pitch baseball, frisbee, and all the food you can possibly eat. It's going to be hamburgers and hot dogs this year, for a slight on the spot fee, but if you want to bring your own steaks I'm sure the master chef (Wolfgang Hanisch himself) will be happy to cook them up for you. The club itself will provide charcoal, paper plates and utensils, and all the condiments. Members attending are urged to bring a potluck dish that can be shared. Doesn't have to be big and fancy, just eatable. Bring your own drinks, preferably soft, and don't forget the SJAA logo contest will be held at the same time, too. (See May's bulletin.) Many, many more details will be available next month but mark your datebooks now! Picnic hours will be 12 noon till dusk.

SJAA members in the news: In the June issue of Griffith Observer Ernie Piini has an article entitled "The Stonehenge Replica at Maryhill," an honorable mention in the Hughes-Griffith Observer contest. Ernie also has two beautiful color eclipse photos in June, 1980's Astronomy magazine. Patty Winter also graced Star & Sky magazine in the May issue with a eclipse photo from Kenya.

Because of the public response to the SJAA's appearance at Minolta Planetarium during Astronomy Day the people who run the facility have asked if the club would be interested in scheduled public viewing nights every Tuesday evening. The board agreed wholeheartedly but realizes this must be done on a volunteer basis. So if you're

interested in putting in even one Tuesday evening appearance at DeAnza college with your telescope and knowledge of the sky both the club and many, many people will benefit. For further information on the times and places call Phil Hermsmeyer at 252-5529. Give this a thought; one or two hours a month is not a lot of time to donate and, like Astronomy Day, it can be fun and a great way to meet other people who want to share an interest.

ASTRONOMY 80

is a joint conference of the Association of Lunar and Planetary Observers, the Western Amateur Astronomers, and the Astronomical Society of the Pacific, to be held on the University of Arizona campus at Tucson July 7-12, 1980. There will papers by amateur astronomers and non-technical lectures by professional astronomers (including speakers from the Steward Observatories at the University of Arizona, Kitt Peak National Observatory, the University's Optical Science Center, and Mount Hopkins Observatory). The ASP will provide evening lectures for the general public on Wednesday, July 9th and Friday, July 11th. There will be three days of bus and walking tours...July 9th, 10th, and 11th. Included will be visits to Kitt Peak National Observatory, Mount Hopkins Observatory (The MMT), and on campus tours of the Flandrau Planetarium and the Optical Science Center. Tours are open to all on a first come, first served basis. No private cars will be allowed on any tour. Registration, which includes a luncheon on Tuesday and the awards banquet on Saturday, is \$33 per person. Dorm housing is \$5.25 per person per day, double occupancy, and \$8.25 per person per day, single room. If you've never been to a W.A.A. conference this is definitely the one to attend. The tours and the lectures have all the appearance of being some of the best ever offered. If you wish a registration form and more complete information contact either Gerry Rattley at 732-0202 or myself at 278-8475.

RIVERSIDE TELESCOPE MAKERS' CONFERENCE

"I'm dreaming of a green Riverside,
just like the one I used to know,
where the days are warmer,
the nights are clearer,
and my telescope isn't covered with
snow."

Such was the common lament heard from many of the 800 people who showed up at Big Bear for the 12th annual Riverside Telescope Makers' Conference held on Memorial Day weekend this year. High winds on Friday drove the temperatures to a low of around 17° at night, freezing everything in sight: telescopes, clock drives, and an occasional astronomer. My first sight upon falling out of the van Saturday morning was of Jack Zeider's 10" scope with two inches of snow on it!

The trip had started out well enough with a 5 car caravan leaving Chris & Shea Pratt's early Friday morning. After meeting Patty

Winter and Steve Greenburg along the way the 12 of us continued south, expecting the typical hot Mohave temps as we drove across the desert. Instead, we were met with a dust storm and heavy winds that stayed with us nearly the whole weekend. There was general concern among club members that Norm Neinchel, who was flying into Big Bear City with Ernie Piini and John Gleason, wouldn't have a chance. We were hardly able to keep the vans grounded.

Because of the cold the conference took on a whole new dimension. Observing was forgotten—I never looked through a telescope at night the whole time—simply because it was below freezing from early afternoon on. Sitting in the lodge listening to the speakers took on a new meaning. Many stayed up past midnight watching "The Day the Earth Stood Still" and "War of the Worlds" simply because it was warmer in the hall. However there were many brighter and oftentimes humorous sides to the unique situations: Jack Zeiders, unable to light his Hibachi because of damp matches, finding Jack Peterson doing the job with an acetylene torch; the look on Chris Pratt's face, when, after posing happily for pictures of him holding the new 8" corrector-less Schmidt telescope he just bought "real cheap", having it fall about before our very eyes; the stampede of people Friday night in the hall when "there's hot chocolate available" was yelled; Debbie Moore and Phil Hermsmeyer soaking wet after their canoe floundered in the lake; the steady stream of glass and equipment from Celestron's table to the SJAA camp; Gerry Rattley proudly toting back to his van one of the many space paintings for sale in the hall; the ear to ear grin on Frank Dibbell's face when his door prize ticket was the winning one for the new Meade 4" schmidt cass, especially great after having spent the weekend without a sleepingbag in the not-so-warm dorms.

Different—the one word to describe accurately how Riverside was this year.

Tales of the Great Red Spot

This is the final chapter in the Saga of the Spot. Although the Spot has remained difficult, it has provided some fine sights when all the conditions were right. A single event in July has been included here. Recovery will be attempted in late October in the morning sky; volunteers are being sought. Thanks to all who called to discuss observations, techniques, equipment, etc. Keep up the good work!

	da	mo	d	h	m
Su	6	1	11	4	PM
F	6	6	10	18	PM
W	6	11	9	27	PM
W	6	18	10	8	PM
Jim van Nuland	M	6	23	9	19 PM
Sa	7	5	9	18	PM

And thanks everyone who contributed to a great bulletin to write! Deadline for July's will be July 20th. (I could use some technical articles, brains.) Thanks again.

Denni

"I don't believe it!"

Wolfgang Hanisch

"With this club you don't believe it!?"
Kevin Medlock

MAY 10 STAR PARTY

Attendance at the May 10 SJAA star party at Henry Coe State Park was poor, possibly because of cloudy afternoon skies and chilly winds. Only half a dozen people, including Jim van Nuland, Dave Ambrose, and myself, showed up to gamble with the weather. The gamble was in part rewarded, however, for the puffy afternoon cumulus clouds that hung over most of the higher terrain in the Bay Area all went away after sunset. Chills and wind remained. It wasn't really that cold — people just get hopeful for summer and aren't prepared for temperatures in the forties in May.

Sky conditions were pretty good for awhile, though I have seen them better at Coe. Perhaps there was a trace of haze or thin cirrus. Telescopes with fixed mountings seemed to be bothered a bit with dew — Dave Ambrose commented that since water was dripping off somebody's Celestron 8 he wouldn't even bother to set up his C-90. Van Nuland repeatedly shifted his Microbus around, trying to find a position that blocked the wind from his telescope; while I spent fair amounts of time in my car with the engine and heater running, emerging to observe only when optics, hands, and feet were sufficiently warmed. After a few hours the temperature seemed to rise, or perhaps we were all just numb.

Higher clouds rolled in a little past eleven, prompting van Nuland to go home and Ambrose and myself to repair to Cindy's Restaurant to discuss sailing. After an hour's conversation, it looked as if the clouds had gone away again, but I decided it was time to go home, and did.

Jay Freeman

"Seasickness is when, in a time span of a few minutes, you go from being afraid you're going to die to being afraid you're not."

—Dave Ambrose

Important Upcoming Meteor Showers

Date	Name	Constellation	R.A.	Dec.
June 10-21	June Lyrids	Lyria	18h 32m	+35°
July 10	Capricornids	Capricornus	21 00	-15
July 15	Northern Iota Aquarids	Aquarius	22 04	-06
July 25	Perscids	Cassiopeia	3 04	+58
July 29	North. Delta Aquarids	Aquarius	22 36	0

COMET COMMENTS

So far this year no comets have been discovered by the amateur comet-hunters. Meanwhile, two comets have been discovered by professional astronomers and they have recovered two additional comets, too. The two latest are noted below.

Periodic Comet Honda-Mrkos-Pajdusakova (1980C): This periodic comet was recovered on May 1st by T. Seki of Japan, at magnitude 15 near the star Aldeberan. With a period of 5.28 years, it was discovered in 1948.

Comet Wild (1980d): Discovered in mid-April, but not confirmed until early May, this 15.5 magnitude comet was first recorded on a photo by Paul Wild of Switzerland. At this time it is not expected to get much brighter.

COMETS IN THEIR EYES:

In the late 1800's, three Americans discovered almost all the comets of that time. They are:

Dr. William Brooks (1844-1921): A draftsman and photographer by trade, this man discovered at least 22 comets between 1883 and 1912. Living in New York, he used a 10 $\frac{1}{4}$ " reflector at 40 power with a 1.3° field. He is often known as the greatest American comet-hunter.

E.E. Barnard (1857-1923): A good friend of Brooks, this American discovered some 21 comets, all between 1881-1921. He used a 5" refractor. In 1892 he made the first photographic comet discovery. Residing also at Yerkes and Lick Observatories, he also worked with double stars and stellar photography.

Lewis Swift (1820-1913): Very little is known of him. We do know that, living in central New York State, not far from Brooks, he discovered 15 comets between 1862 and 1899.

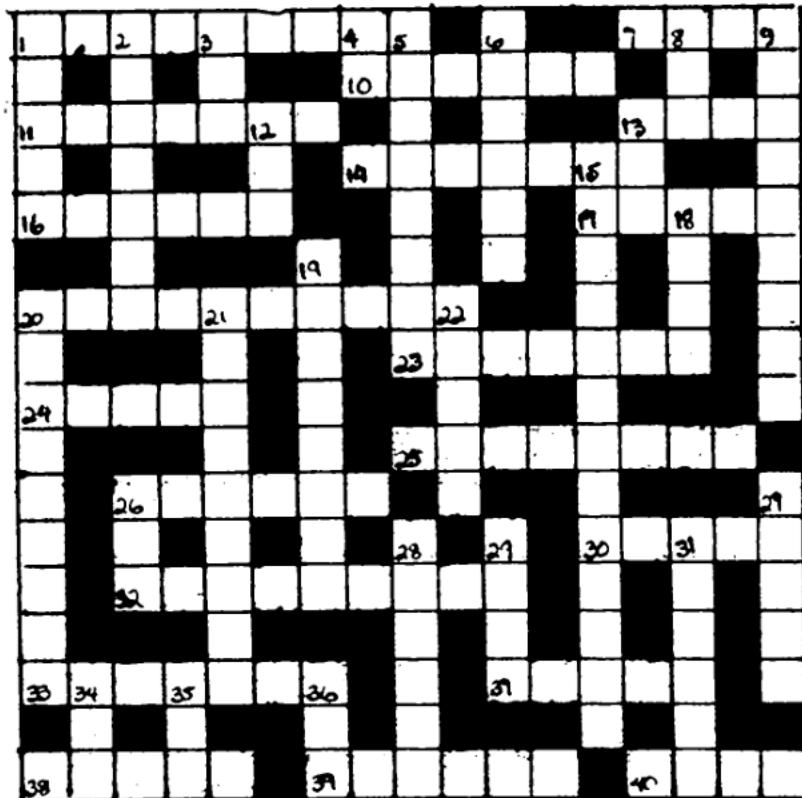
S. Fujikawa: One of Japan's most active comet-hunters, this observer sweeps for comets about 150 hours/year. Beginning this activity in the mid-60's, he has found three comets. One of his comets, discovered October 9, 1978, turned out to be a previously known comet (Comet Denning) on an unexpected return.

Tago: This comet-hunter also began in the mid-60's and has found three comets too. He uses a 6" reflector for his searches.

Jose da Silva Campos: This South African discovered a comet in late 1978. It took some 116 hours of searching to find it.

Don Machholz
448-7077

SKYWORD PUZZLE # 6 by Fred Braniff



(note: this is one of the biggest crosswords Fred's done for the bulletin!)

ACROSS

1. Galileo Gallile was first to use one on the sky
7. 6th Greek letter
10. An asteroid
11. Alpha Canis Minoris
13. See 34 down
14. Nebula where stars are formed
16. Galaxy type
17. ____ focus
20. Celestial "M" or "W"
23. Group of stars
24. Moon
25. Eyepieces with several lenses
26. The Swan
29. Has a tail
32. The Fox
33. The Lizard
37. 1323 -1100
38. The Ram
39. Draco
40. Moon of Saturn

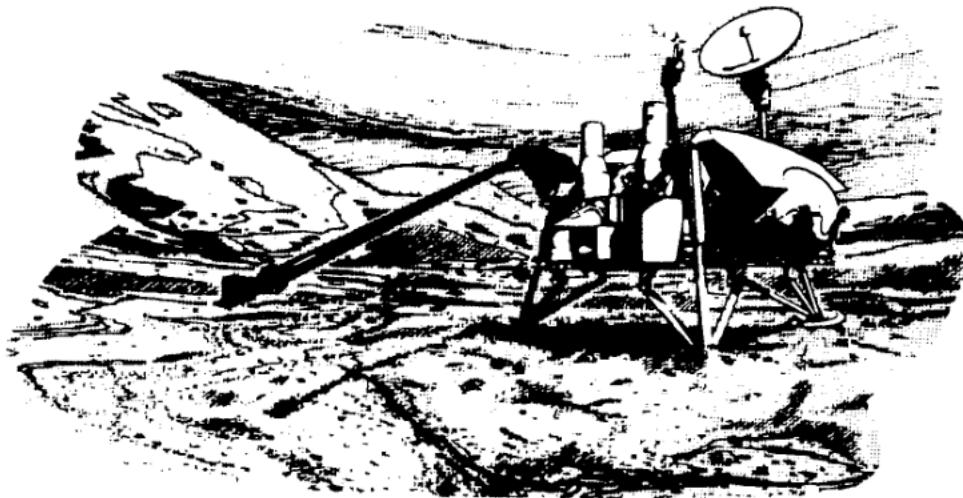
DOWN

1. Eclipsing, visual, binary —
2. Mid-November meteor shower
3. And 1 across. What you read
4. 16 Greek letter
5. Sun's path
6. Nebula in Sagittarius
8. Short for little horse
9. Alpha Andromedae
12. M 97
13. Short for Perseus
15. Binary type
18. Epsilon Bootis
19. The telescope opening
20. Heavenly
21. Type of galaxy
22. 306 +4051
26. Corvus
27. Heavenly bodies
28. The Charioteer
29. The red one
31. 108 +3527
34. And 13 across. Antlia
35. Has a lid
36. A constellation when short is plus

"A classical cassegrain telescope is nothing more than a parabolic plane intersecting with a hyperbolic dimension and ending up at nothing. Einstein eat your heart out."

Kevin Medlock

WANT TO EXPLORE MARS?



The Viking spacecraft is exploring Mars, and for as little as \$1 million of private funding, its robot intelligence can provide a wealth of information on which to base further explorations, and perhaps solve the riddles of Earth's weather.

Private funding is the key, and in an era of rampaging inflation and competing budget pressures, the sharing of costs between the government and private sources is desirable as a means to greatly increase the scope of explorations such as Viking. NASA intends to bring back Viking's valuable data through 1990, and a fund has been established by the San Francisco Section of the American Astronautical Society to help share this responsibility, and directly fund both private and government research into the mysteries of Mars on a year to year basis through the mechanism of a trust fund. By contributing to the Viking Fund, you can show your support for these programs, as well as help set a precedent for private funding of such space activities. The Viking Fund has as its goal the raising of \$1 million for Viking operations by July 20, 1980.

And not to be overlooked in an election year are the political implications of such a graphic demonstration of public interest in the space program. Privately raising \$1 million for a space project would be a tremendous signal to Washington D.C. of the public willingness to support space activities. The time for talking is over; it is literally time to "put your money where your mouth is," and unequivocally demonstrate your support for the space program.

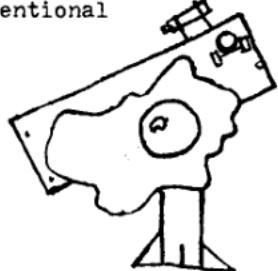
If you want to explore Mars and support your space program, do not delay in making your contribution. Donations (minimum amount \$1 — made payable to the Viking Fund) should be mailed to: THE VIKING FUND, P.O. BOX 735, SAN PABLO, CALIFORNIA 94806. All contributions are tax deductible, and all contributors will receive acknowledgement of their gift, and regular up-dates on the Fund's and Viking's progress. Also, all contributors will receive an invitation to the dedication of the Fund to NASA, in Washington D.C., during July 1980.

SCHEMINGS FOR ATM'S

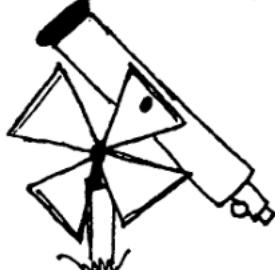
by

Kenneth Wilson
(with slight additions by Denni)

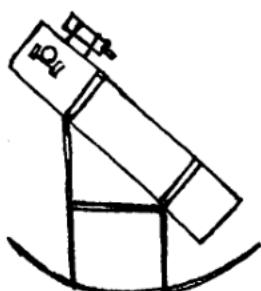
Because of general lack of technical articles this month it was decided to include this paper originally published in the Warren (Kich.) Astronomical Society bulletin. One of the biggest decisions that the amateur telescope maker must make is that of choosing a mounting for his telescope. There are many conventional mountings to choose from, but the true ATM is never satisfied with the conventional.



THE YOKE MOUNT-For the observer who likes to "have his mount and eat it too". We suggest that you get someone else to buy the egg for you- that way, and I quote, "The yoke won't be on you."



THE GERMAN EQUATORIAL MOUNT-It's rumored that the design for this mounting was smuggled into this country along with plans for the V-2 by a colleague of Wehner Von Braun.



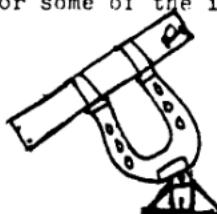
THE ROCKER MOUNT-The design most favored by arm chair astronomers. A superb design for comet sweepers also.



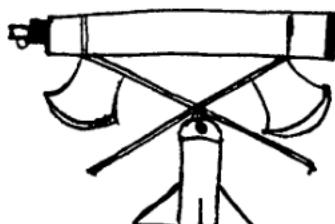
THE FORK MOUNT-A real "meat and potatoes" mounting. You might have to buy the fork in a set; in which case, the spoon will make a fine RFT mirror and you can hack the knife up into flats and knife edges for Foucault tests.



THE PIPE MOUNT-Once you try this mount, you'll never want to quit. "Prince Albert" causes the least convection currents but watch out for some of the imported stuff.



THE HORSESHOE MOUNT-A favorite of many blacksmiths, this mounting will take a lot of horsing around. It was originally designed by Porter, Sidney, not Russell. (Sidney was Russell's weird brother.)



THE ENGLISH CROSS-AXIS MOUNT-The perfect mount for those who like a design with sharp lines and symmetry. History has it that this mount was one of the first used by the American frontiersmen.

SJAA PROFILES by Frank Dibbell

The SJAA consists of a large group of individuals with a vast range of Astronomical interests. As a board member, I am interested in seeing that the club as a whole can meet the expectations of its membership. To achieve this goal I have been on a campaign of interviewing club members, and profiling them in the bulletin. I plan on continuing this exercise, however it is a very slow method of collecting information for a total club profile. Therefore I have put together a short survey which will help me gather the information I need for a club profile. Please take a few minutes to complete this survey. You may send the completed survey directly to me at 710 Georgia Ave., Sunnyvale, 94086; you may call me (after 6 pm) at 733-7208 and give me your response verbally; or you may give the completed survey directly to me or any other board member at any club function. Thank you for taking the time to respond.

SJAA SURVEY

1. Do you own a telescope? _____ (If not, proceed to question 2.)

Since many members own more than one telescope, space has been provided for up to 5 instruments:

	<u>SCOPE#1</u>	<u>SCOPE#2</u>	<u>SCOPE#3</u>	<u>SCOPE#4</u>	<u>SCOPE#5</u>
A. Aperture	_____	_____	_____	_____	_____
B. Bought or Built	_____	_____	_____	_____	_____
C. Optical configuration	_____	_____	_____	_____	_____

2. What is your principal interest(s) in Astronomy? (Fill in as many as apply)

<u>PRINCIPAL INTEREST</u>	<u>YES/NO</u>	<u>NO. OF YEARS</u>
A. Variable star work	_____	_____
B. Occultations and/or grazes	_____	_____
C. Deep sky observing	_____	_____
D. Lunar and planetary observing	_____	_____
E. Astrophotography	_____	_____
F. Telescope making	_____	_____
G. Other (please specify)	_____	_____

3. If a formal workshop were offered in telescope making, would you:

A. be interested in attending? _____
B. be interested in teaching? _____

4. If a formal workshop were offered in astrophotography, would you:

A. be interested in attending? _____
B. be interested in teaching? _____

5. If a formal workshop were offered in learning the night sky, would you:

A. be interested in attending? _____
B. be interested in teaching? _____

6. Would you be interested in being on an occultation or graze team? _____

7. Would you be interested in being on a variable star observing team? _____

8. Is there some program you would be interested in that hasn't been mentioned?

If you answered yes to any of questions 3 thru 8, please enter your name and a place/number where you may be reached.

NAME:

NUMBER:

Thank You