

SJAA EPHemeris

VOLUME 3 NUMBER 4 OFFICIAL PUBLICATION OF THE SAN JOSE ASTRONOMICAL ASSOCIATION APRIL, 1992

SJAA OBSERVATORY PROGRESS REPORT #2

by DR Johnson

Jerry Dunmire has volunteered to help out on the proposed (Grant Ranch) Observatory by forming design teams for both the structure and the telescope mount(s). He can be reached at (408) 248-1415 if you haven't already volunteered and would like to be on a team.

By the time you read this, the survey team will have already walked the proposed Halley Hill site [at Grant Ranch]. The County Parks and Recreation Dept. has furnished a detailed topo map of the surrounding area for our reference. A schedule of activities is being developed. In as much as we are involved with a proposal, be sure to read the "Acknowledgement of risk" letter, also appearing in this issue.

Some additional Observatory features have been noted and appended to our earlier list. Here is the new list:

1. The non-rotating [stationary] base of the dome shall have AC and/or DC electrical power.
2. The base of the dome (which includes the door) can vary in height.
3. Provisions for holding eyepieces/filters (e.g., wall-mounted rack).
4. Fold-down chart/writing area with a built-in red and white light.
5. Fold-down bench.
6. Flush door sill (with red safety lights ?).
7. Optional manual or powered dome rotation.
8. Independent (instrument) pier.
9. Internal dome rotation locks.
10. Sized to accommodate a 12.5", f6 Newtonian.
11. Fully rotating observatory (rather

- April 4: Star Party at Grant Ranch w/Halls Valley Group.
April 5: Move Clocks Ahead
April 10: Star Party at Hough Park on Twilight Ave. just off Woodard. See directions - page 5.
April 11: 8:00 p.m. General meeting at Milpitas Library. Board of Directors meet at 6:30 p.m. preceding the program. Speaker: Bill Dellinges - Astronomical Seminars.
April 18: Beginning Astronomy Class - Milpitas Library.
April 26 - May 2: Texas Star Party
April 25: Star Party at Henery Coe SP
May 2: Star Party at Grant Ranch w/Halls Valley Group.
May 8: Star Party at Hough Park on Twilight Ave. just off Woodard.
May 9: Astronomy Day. Bring Solar Scopes to Hough or Milpitas Library.
May 9: 8:00 p.m. General meeting at Milpitas Library. Board of Directors meet at 6:30 p.m. preceding the program. Speaker: John Gleason - Astrophotography.
May 16: Beginning Astronomy Class - Milpitas Library.
- May 2: SJAA's Auction at Hough Park. 2:00 p.m. til done.
- May 22 - 25: Riverside Telescope Maker's Conference at Big Bear.
May 30: Star Party split between Grant Ranch w/ Halls Valley and Fremont Peak.
June 5: Star Party at Hough Park.
June 6: Rest - No activity. Maybe go to The Peak?

- than 1. above)
12. Wheelchair access.
13. Provisions for pass-through CCD/electronic signals.
14. Storage for mops, brooms, etc. [maintenance items].
15. Hat and coat hooks.
16. Battery backup for interior [and safety] lighting (w/charger).
17. 110v & 12v convenience outlets inside the structure.
18. Use a slide-off roof concept instead of a dome.
19. Two scopes [instruments] in one building.
20. Mud scrape/grating at the observatory doors.

What has been over looked? Call me at (408) 448-0239 or Jerry (see above) and give us your suggestions.

. . . Del

The Eyepiece by Ed

This month we will have Bill Dellinges talk to us about astronomical seminars and camps. I have read about these and they sound interesting. Bill wrote about the camp run by the University of Arizona in last months newsletter. I have planned to attend one of these in the near future.

Bill has also written an article about *The Starry Messenger*, a want ad magazine for astronomers. The article is worth reading. If you are looking for some hardware and are satisfied with used items in good shape, be sure to read Bill's message.

Watch for the May issue to be very early OR very late! I'll be going to the Texas Star Party followed with a short vacation in the South West. I hope it won't inconvenience any of you. This trip will also be followed by Riverside Telescope Makers Conference. Its a busy spring.

The Starry Messenger

by Bill Dellinges

There's a great astronomical resource out there called *The Starry Messenger* (*S/M*). Are Association members aware of its existence? You may have seen their ad in *Sky and Telescope Magazine*. It's a monthly newsletter of classified ads loaded with goodies grouped into categories of reflectors, refractors, catadioptrics [SCT's], books and charts eyepieces and accessories, telescope parts, mounts and drives, binoculars, cameras and lenses, and miscellaneous.

The really fantastic thing about it is, I've sold **EVERYTHING** I've advertised in it this past year - and that's a lot, from a complete telescope down to a lonely eyepiece. I think I moved about twenty items so far to people all over this country. About the time I receive

my *S/M*, I'm literally besieged by phone calls if I have an ad running. Case in point: the 7.4 mm Televue eyepiece I've advertised in the *Ephemeris* for two months now failed to generate one call. About an hour after I received my March *S/M*, a guy from Seattle called and bought it. Later that day, I took three more calls! Then two calls the next day. They all wanted it! By the way, if you are wondering how you handle payment in a situation like this, you work it out between the two of you the best way you can. What I've always done in the past situation, be it *S/M*, *Sky and Telescope*, or whatever, is simply to trust the other guy and send your item for sale to them, while they mail their check to you about the same time. That may sound scary to you, but I've never had a problem with that arrangement - yet.

The magazine is small, yet contains

typically over 300 ads. It's run by two amateur astronomers in Ithaca, NY as a mostly non-profit operation. They do charge \$20 for a years subscription and recently instituted the policy of charging a 4% commission on any item sold over \$25.00. I have no problem with that as it's plain to see a lot of time and work goes into this enterprise.

It's interesting to pursue the ads in the *S/M*, learning the resale value of things and just getting insight into how much equipment is out there. After looking over an issue, you might not want to buy anything from a retail outlet again. I think this magazine does a great service to amateurs by providing a huge source of discounted merchandise - a nice alternative to high store prices. I heartily recommend *The Starry Messenger*.

Public Services Agency,
Parks and Recreation Department
298 Garden Hill Drive
Los Gatos, CA 95030

Attn: Lisa Killough

Acknowledgement of Risk

As described in section 3.7 of the proposed Master Plan for the Joseph D. Grant County Park, the San Jose Astronomical Association (SJAA) will provide an astronomical observatory to the Park, equip it with a telescope, and furnish both personnel and materials to supplement the interpretive programs of the Park.

As of this date, the objectives are considered, by all parties, to be proposed only in as much as the Master Plan is not yet approved.

The SJAA, in order to bring the facility on-line at the earliest possible moment, has initiated civil and facility design studies. These activities have been initiated with the full knowledge that:

1. The proposed Master Plan is not approved and is subject to further revision and/or cancellation.
2. Neither the Parks and Recreation Department, nor its' personnel, can express or imply approval of the current SJAA activities in as much as the proposed Master Plan is not approved.
3. Any related activities of the Parks and Recreation Department (ie: furnishing of documents, observing/reviewing activities, and/or receiving SJAA documents) can not be considered approval, tacit or otherwise, of the activities of the SJAA.

The SJAA has elected to proceed, as stated above, with certain tasks. These activities are being performed by volunteer members of the SJAA using equipments which have been made available at no cost. The design of the observation facility is site-independent and will continue regardless of where the facility is located. The civil engineering tasks are concerned with profiling Halley Hill, the proposed location of the facility within the Park. Whether the facility is approved or not, the civil engineering data will be given to the Park.

D R Johnson
Director, SJAA

cc: Ephemeris

Russian Astronomy

By Alex Filipenok

[from USENET dated 2/16/92, and illustrates the difficulty ex-Russian astronomers are having in the new confederation of states]

Colleagues,

The astronomy funding situation in the former Soviet Union is rapidly becoming desperate. I am serving on an American Astronomical Society (AAS) committee to help out. Below is an appeal that is being sent to the US astronomical community; please contribute what ever you can. Note that some senior scientists are donating up to \$1000 each, but a large number of \$25 donations would be just as useful — typical salaries of astronomers in the Former Soviet Union (FSU) are \$3 - 10 per month. We are trying to enable good scientists to continue to do their work, just as you or I would want in a similar situation. Thanks.

Alex Filipenok

University of California, Berkeley

[the following is a letter from Nikolai Bochkarev, President Soviet Astronomical Society (SAS)]

Dear Prof. Bachall,

I would like to inform you about bad news on the status of science in Russia and the former USSR. Last summer I had sent to AAS executive office a letter with information about problems in Soviet astronomy. Now the problems are getting a dramatic development.

Governments of republics of late USSR, including Russia, have no money for real support [of] sciences including astronomy. On behalf of SAS Congress we have sent an open letter on the topic to magazine *Nature*. Astronomy is a small science and therefore very sensitive to variations of conditions, and situation becomes really dramatic now.

Russian government has not paid any hard currency subscription on 1992 for all Russian libraries. So we get a chance to be without ApJ, AJ, BAAS, AAp, MNRAS, ApSpace Sci. etc in all Russia in 1992! Therefore from the name of SAS I would like to ask AAS to help with free-of-charge subscription of at least principal astronomical and astrophysical journals for several main astronomical libraries in Russia.

From Jan. 10 we have not got airline prices for international flies which 40-50 times higher then a year ago; and corresponds market relation between US\$ and Rubles. From Feb. 1 we'll probably get dollar prices for telephone and fax; e-mail is also commercial in our country. Month salary of scientists between 3 and 10 US\$, which one among lowest in our country. Taking into account average budget of our institutions (about 100 US\$ per year for a collaborator) it means strongest economical isolation of our scientists.

In such situation our scientists, science groups and institutions have very strong necessity in active cooperation with Western science as soon as possible (cooperative observational and theoretical projects). But as I know NSF can give grants for cooperative programs with foreigners only after initiation of proposals by american astronomers. It would be very important and humanitarian help for our scientists and institutions, including e-mail support, PCs, telecommunications equipment (fax machines, modems), light receivers etc., at least second hand equipment.

We would like to ask you to help us in distribution this sad information in Western community as well as to help us in contacts with possible sponsors, including Russian community and persons with Russian roots.

Any small donations in real money could be very useful also, e.g., our institutions have no money for inner buseness trips. But 1000 - 2000 US\$ are enough for arrange large all-country scientific meeting with grants for many scientists.

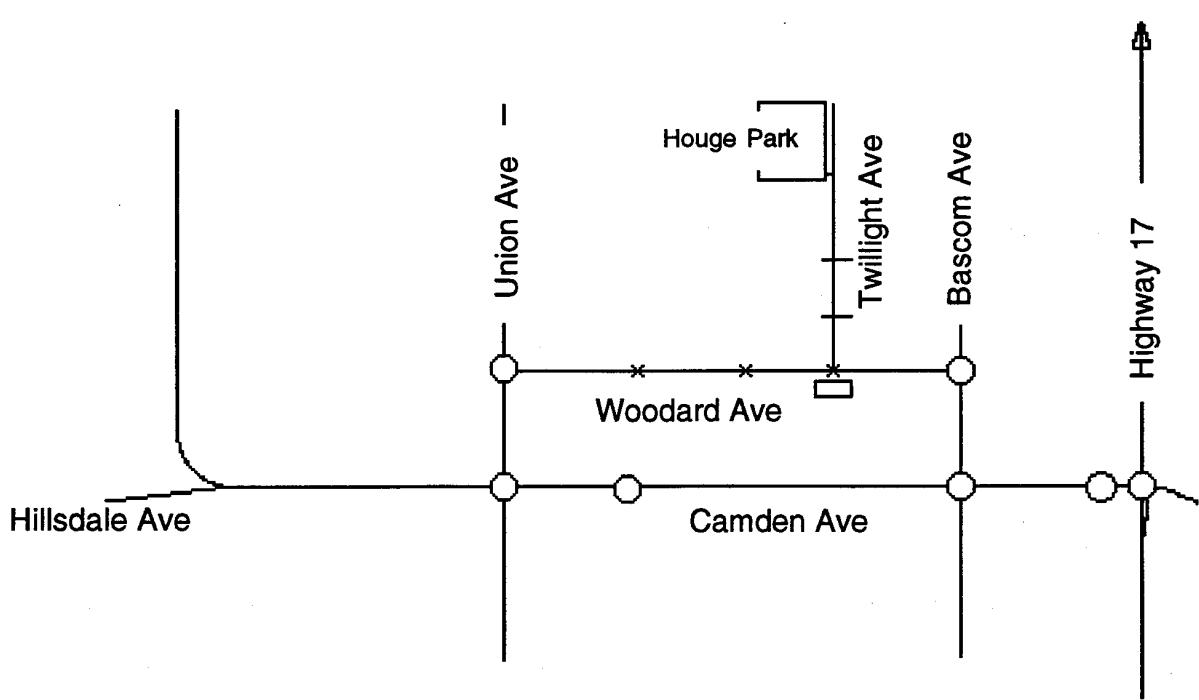
Looking forward to hear from you as soon as possible

Yours sincerely

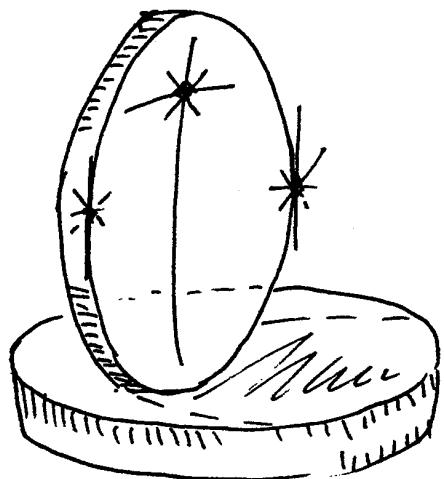
Nikolai Bochkarev,
SAS co-chairman

Donations Should be sent IMMEDIATELY in the form of checks payable to the:

"AAS FSU Astronomy Program"
2000 Florida Avenue, NW, Suite 300
Washington, DC 20009



SJAA Public Star Party Site



**SJAA AUCTION
ASTRONOMICAL ITEMS
MIRRORS - LENSES - EYE-
PIECES - MOUNTS - AND
COMPLETE TELESCOPES**

10% OF YOUR SALE WILL GO TO THE SJAA
**BRING YOUR STUFF. SELL
AND BUY NEW ITEMS
FOR YOUR SHELVES AND
GARAGE.**

May 2nd 2:00 pm - Hoge Park

Grant Ranch Star Party

7 March 1992

by Paul Barton

It's Saturday and the weather was marginal most of the day, but the overcast partly cleared up late in the afternoon. Although it became mostly overcast till about 10:00. We were able to get in two or three hours of good observing after 9 or 10 pm (moon went down about 10 pm or so). As usual it was very wet.

Present:

Jim and Bob Baggot	C-8
Paul and Lady Barton	6" Vega
John Hales	C-8
Ron Bricmont and Family (including Eric)	
Paul Mancuso	16" Dobsonian
Alan Neims	9" SC
Denise Hutson	Eyeballs
John Bettencourt	Eyeballs
Leon Jones	10" Odyssy
John Zubkoff	Astro Scan
Chris Jewell	C-8
And others.	

And Susan Hall with her 5" Clark all polished and shiny. She handles it with gloves . . . on a beautiful custom made mount. Every one had to take a peep. The mount was too high for little people, even with a small ladder. Some observers went 2.1 miles up the hill toward Mt. Hamilton. On the left there is a wide spot. It was much dryer up there.

Houge Park Star Party

13 March 1992

by Paul Barton

The first public outing at Houge Park was a huge success. Six telescopes set-up with others in reserve. 40 to 50 people were there with others coming and going . . . greeted by Lady of course. For several hours the seeing was good, broken overcast: Orion, Sirius, M41, Jupiter, Pliedes, Moon, etc.

Paul Barton set up at Branham Lane Park to direct people to Houge Park. But, it was dark and lonesome there, so left early for Houge Park and friendlier company. (Frankly, the company at Branham was scary, tho Lady didn't seem to mind)

Present and working hard:

Rich Neuschafer	6" Starfire
Ed Erbeck	10" Coulter
Paul Graves	C-90, C-8
Jim Van Nuland	8" Newtonian
Del Johnson	80 mm
Paul Barton	Refractor
	6" Vega
	(back-up)

and

Bob Elsberry with a 5-1/2" home made Dobson, neat, beautiful, w/one of Bob Madden's RTMC purchased mirrors in it. Bob was trying to see the Horse Head Nebula with it, but the moon was too bright. Let's see more of Bob Elsberry!

Help needed for the Observatory Site

I received a call from Del Johnson as I was putting the finishing touches on this news letter. Like most at the last minute, he wanted to add some more material. My usual response after the 12 th of each month is, I have it all done and I'm ready to head for the printers and I don't take information over the telephone. But, in this case I'd waive the rules. Del is trying to get Halley Hill surveyed, has a team set up to do it too. It seems there are survey stakes, metal I think, already there, but can't be found because they are hidden by mud and dirt. They have an idea within 100 square feet where they are.

A good way, and quick too, is to use a metal detector. What we need is some one with a good instrument, who knows how to operate it, will go to Grant Ranch with Del and locate those stakes. . or . an instrument which could be borrowed, with instructions given to Del on how to operate it. It will be well cared for and returned promptly. If you have an interest in supporting this effort, call Del. His telephone number is in the Board of Directors Listing on page 7.

Membership Dues to increase the first of July

ED.

The cost of doing business is continually increasing, for example, publication of the news letter. As it is now your editor hand folds and staples each and every one each month. It would be nice to have a printer do it. There are other costs such as the Postage. Although it isn't excessive.

Other projects we're working on which have depleted the treasury; for example, is our 11" Celestron computer driven SC, our Solar Telescope project and the Observatory. At the March Board Meeting it was proposed and passed, to increase the yearly dues to \$12. The last increase in membership dues was 10 years ago. We are still getting a bargain at this new rate. You can get a reduced rate of subscription for **Sky and Telescope** and books published by them.



The Group 70's 1.8 meter back being flattened. Grit is tossed by Dave Enos.
Photo by Bob Keller

CELESTIAL CALENDAR

Lunar Phases Date Rise Tran Set
NM 21:01hr 02-04 0613 1232 1856
FQ 03:06hr 10-04 1214 1918 0304
FM 21:42hr 16-04 1918 0040 0601
LQ 14:40hr 24-04 0147 0652 1155

Nearer Planets

Mercury 07-04 0546 1146 1743
0.75 AU 17-04 0530 1121 1717
Mag +0.5 27-04 0523 1118 1717

Venus 07-04 0603 1154 1743
1.64 AU 17-04 0501 1204 1812
Mag -3.9 27-04 0555 1214 1837

Mars 07-04 0459 1029 1555
1.96 AU 17-04 0441 1020 1555
Mag +4.1 27-04 0422 1011 1556

Jupiter 07-04 1540 2215 0452
4.75 AU 17-04 1458 2134 0411
Mag -2.3 27-04 1417 2053 0331

Saturn 07-04 0354 0901 1405
10.2 AU 17-04 0316 0824 1330
Mag +0.8 27-04 0239 0747 1253

SOL Star Type G2V Mag - 26.72
0108+0655 07-04 0645 1306 1930
0148+1038 17-04 0633 1305 1942
0227+1401 17-04 0621 1305 1953

Astronomical Twilight

JD 2,448,719.5 07-04 0509 - 2105
,729.5 17-04 0454 - 2120
,739.5 27-04 0439 - 2134

Siderial Time

Transit Right 07-04 0000 PDT=1156
Ascension at 17-04 0000 PDT=2101
Local Midnight 27-04 0000 PDT=1314

Darkest Saturday Night Apr 04
Sunset 1927
Twilight End 2101
Moon Rise 2122

TIMES AND DATES ARE PACIFIC DAYLIGHT

The members of the Board of Directors Selected Association Officers at the March Board Meeting. They are:
President: Jack Zeiders
Vice Pres: Paul Mancuso
Secretary: Jim Van Nuland
Treasurer: Jack Peterson

ASTRO ADS

ASTRO ADS are free to all noncommercial advertisers wishing to sell astronomically related products or services. Please send your ad directly to the Editor:
Bob Madden
1616 Inglis Lane
San Jose, Ca. 95118

NO LATER THAN THE 12TH OF EACH MONTH! Your Astro Ad will run approximately 3-months.

Lumicon 1-1/4 enhanced aluminum coating mirror star diagonal; few months old, will sell for \$69 firm. Edward Hillyer, 4900 N. HWY 99 SP. 238, Stockton, CA. 95212. Call (209)-931-0486 evenings.

2/92

Celestron SC 10", f13, w/Celestron 4" SC, Two erecting diagonals, Eyepieces - 6,10, 16 mm Cave, 12.5, 25, 40 mm Celestron, two ultra-rigid mounts - one portable one fixed. Plus 2 1/ x 3 1/2 cut film Nikon Photographic accessory. Extra film holders. \$2,700 - Call Jack Connolly Tele/Fax (415)-592-7236

2/92

For Sale. 15 mm, 19 mm Teleview Widefield, 95\$ ea. 32 mm, 2" OD, Mead Super Widefield, \$130. CAT (Computer Aided Telescope system) for C-11, \$495. Astro Master digital setting circles for Super Polaris mount, \$240. 30 mm, 1-1/4" OD Orion Ultrascopic, \$58. Tuthill Polar Axis finder, \$45. C-11 Motodec declination drive motor, \$35. Orion Moon filter, \$6. All items are in excellent condition. Jim Molinari (408)-255-7030

2/92

IBM PC computer, w/8087 math chip, V-20 cpu, 135 power supply. 20 meg hard disk, two 360k floppy drives. Xebec controller. Monochrome and CGA displays (IBM), APL character set on mono (hardware switch). Two extra 64k memory boards. Memory: 768 main, 1472k EMS 3.1 (configurable) Two printer ports, two serial ports, two-stick game port. Software: PC DOS 3.3, w/BASICA, drivers for memory management, SKYGLOBE 2.5, misc utilities. Fast boot software with source. No printer. Original shipping boxes. \$350 takes all, or what have you? Call Jim Van Nuland, (408)-371-1307 11 AM to 11PM.

2/92

Celestron C8 Schmidt - Cassigrain. Drive system with Joy stick with declination and right ascension. Has starbright coating, 28 mm ER eyepiece. Also optional field tripod with wedge and 8X50 finder scope. The optical system is perfect! For \$1,000. Call Syd Goldstein (408)-932-6706 (H) 3/92

8-Inch Celestron Schmidt Camera. F/1.5, field 4.5X6.5. Two cut-film holders for 35 mm. Excellent optical condition, minor scratch on exterior. Makes great comet photos when attached to your telescope and mount! \$1750. Dale Cruikshank (408)-446-2935. 3/92

2 Coulter Mirrors 10" f/5.6 - Matched focal lengths, new in the box. \$300 for both. Ed Allen (408)-438-1014 3/92

C-5 Orange Optical Tube assembly on a Tasco-like German Equatorial mount. 6X30 Finder, special coatings, visual back, 1-1/4 diagonal, No eyepieces. Same mount pictured on Orion Telescope Center's "Space Probe 4.5" in their catalog, but w/o motor hook-up linkage. Nice slow motion controls. Ideal for travel and quick set up gazing sessions. Super RFT when used with Celestron F6.3 reducer/corrector. Tube assembly in near mint condition. **Price Reduced!** - \$650 firm. Bill Dellings (510) 792-9206 3/92

Lumicon 1-1/4 Newtonian Easy-Guider \$100. Celestron Cometron 60 mm RFT w/tabletop tripod, diagonal, 1-1/4 focuser w/extension tubes, 6X finder, 25 mm Kellner (12X), case, plus camera adapter: use for first scope, telephoto, or big finder, \$100. Celestron 1-1/4" Barlow, \$20. Meade 1-1/4" prime e.p. projection camera adapter \$18. Orion prime focus camera adapter and eyepiece projection tube for S-C's, \$14 each. Tony Americh (408) 985-6978. 4/92

Members Please Take Note: Membership dues will increase to \$12- on July 1st This is the first increase in 10 years

A plea for assistance

by Ed

As many know SJAA sponsors public education. This can be seen in our efforts to hold star parties at Branham Lane and local schools. Jack Peterson and Jim Van Nuland can usually be seen at local school star parties. Occasionally the session will be weathered out. What to do? A slide party showing students the planets and our universe can and is a great method to supplement a regular star party. What would be desirable is a set of slides, not like our introductory astronomy class, but, one that is more fundamental and suitable for younger students. What would fit the bill is satellite photographs, ones which would illustrate our solar system, and planetary photographs. Essentially what is needed are slides which will inspire young students to understand our solar system and universe. WE HAVE NO SUCH SET! Therefore, we are asking for slide photographs which could be assembled into a full slide show. That way, when school star parties are weathered out we still could put on a show of sorts. To discuss the needs contact Jack Zeiders, Jack Peterson, or Jim Van Nuland at any regular meeting or by telephone.

Directions to Hougé Park Site of SJAA Public Star Party [sounds like Hogie]

From Highway 17: Take Camden Ave. traveling east to Bascom Ave. Turn left. Continue to next stop light which will be Woodard Ave. Turn left on Woodard and continue to the first stop sign which will be Twilight. Take a right on Twilight for several blocks to Sunset and Hougé Park. There is parking available. Telescope w/vehicles only will be permitted onto the basketball court. Park lights will be turned off.

From Blossom Hill: Take Union Ave heading north. Turn left onto Woodard Ave. at the stop light. At the third stop sign turn left onto Twilight for several blocks to Sunset and Hougé Park.

From Hillsdale: Continue until it becomes Camden Ave. heading west. At Union turn Left to Woodard Ave. (the first stop light). Turn left onto Woodard. At the third stop sign turn left onto Twilight. Continue several blocks to Sunset and Hougé Park.

Offices and Board of Directors

Pres: Jack Zelders -	408-281-0220
Vice Pres: Paul Mancuso	408-946-0738
Treas: Jack Peterson-	408-262-1457
Sec: Jim Van Nuland-	408-371-1307
Dir: Gene Cisneros-	408-923-6800
Dir: Del Johnson-	408-448-0239
Dir: Steve Greenberg-	209-239-2154
Dir: Paul Barton-	408-377-0148
Dir: Bob Madden-	408-264-4488

Ephemeris Contributors

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Pat Donnelly -	408-778-2741
Richard Stanton -	408-662-0205
Steve Gotlib -	415-525-7968
Bill Dellinges -	510-792-9206

Editor

Bob Madden -	408-264-4488
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Comet Comments

by Don Machholz

No comets have been discovered or recovered recently, but two comets may be visible in our morning sky. Comet Shoemaker-Levy (1991d), about 2.5 astronomical units from both the earth and sun, remains within telescopic view. Comet Mueller, if it survives a March 21 perihelion of 0.20 AU, will appear in our morning sky, dimming rapidly.

EPHEMERIDES

DATE (UT)	RA (2000)	DEC	ELONG	SKY	MAG
COMET SHOEMAKER-LEVY (1991d)					
03-24	20h31.6m	+42°06'	64°	M	11.0
03-29	20h39.3m	+42°17'	65°	M	11.1
04-03	20h46.3m	+42°29'	65°	M	11.1
04-08	20h52.6m	+42°41'	66°	M	11.2
04-13	20h58.2m	+42°54'	67°	M	11.2
04-18	21h03.1m	+43°07'	68°	M	11.3
04-23	21h07.4m	+43°20'	70°	M	11.3
04-28	21h11.9m	+43°33'	72°	M	11.4
05-03	21h13.7m	+43°45'	74°	M	11.4
05-08	21h15.7m	+43°56'	76°	M	11.4

COMET MUELLER (1991h₁)

03-24	23h36.3m	-05°23'	12°	M	3.7
03-29	23h18.5m	+04°54'	18°	M	5.6
04-03	23h12.8m	+15°04'	26°	M	7.0
04-08	23h12.3m	+24°27'	33°	M	8.1
04-13	23h14.8m	+33°02'	39°	M	9.0
04-18	23h19.0m	+40°49'	44°	M	9.7
04-23	23h24.6m	+47°51'	48°	M	10.4
04-28	23h31.4m	+54°12'	52°	M	11.0
05-03	23h39.3m	+59°55'	55°	M	11.5
05-08	23h48.5m	+65°03'	58°	M	11.9

Don Machholz (916) 346-8963

TIME AGAIN FOR THE GREAT SJAA AUCTION

MAY 2ND AT HOUGE PARK - 2:00PM TIL DONE
BRING YOUR GOOD STUFF AND WHITE ELEFANTS FOR SALE

ALSO YOUR POCKET BOOKS AND CHECK BOOKS

Call the SJAA hotline or Jim Van Nuland for more information
or call one of your Board of Directors

EPHEMERIS is published monthly by the San Jose Astronomical Association - 3509 Calico Ave., San Jose California 95124. Members are encouraged to submit articles for publication. These should be typed and submitted no later than the 12th of the previous month. All submissions should be sent to the editor, Bob Madden, 1616 Inglis Lane, San Jose, California 95118

SAN JOSE ASTRONOMICAL ASSOCIATION MEMBERSHIP

Membership only: \$12 Membership / S&T: \$30 Junior (under 18): \$20

Name: _____

Address: _____

Telephone: _____

Please bring this form to any
SJAA Meeting or send to
Jack Peterson, Treasurer
San Jose Astronomical Assoc.
1840 Yosemite Drive
Milpitas, CA 95035
Telephone: (408) 262-1475

MAKE CHECKS PAYABLE TO "SJAA"

Please check type of membership and if New or Renewal

Membership Only Membership/S&T Junior (under 18)
New Renewal

**SAN JOSE ASTRONOMICAL ASSOCIATION
1840 YOSEMITE DRIVE
MILPITAS, CA. 95035**

FORWARDING AND ADDRESS
CORRECTION REQUESTED

**NON-PROFIT ORGANIZATION
U.S. POSTAGE PAID
PERMIT NO. 5381
SAN JOSE, CALIFORNIA**

SJAA HOTLINE
24 HOUR INFORMATION
408-559-1221