

SJAA EPHEMERIS

VOLUME 3 NUMBER 5 OFFICIAL PUBLICATION OF THE SAN JOSE ASTRONOMICAL ASSOCIATION MAY, 1992

Directions to Houge Park Site of SJAA Public Star Party

[sounds like *Hogie*]

From Highway 17: Take Camden Ave. traveling east to Bascom Ave. Turn right. 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 three blocks to Sunset and Houge 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 three blocks to Sunset and Houge Park.

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

PLEASE NOTE: the above are the correct directions to Hogue Park. I apologise for not knowing my right from my left, but maybe it is because I have three mirrors in my optical system [mind]. The map is correct however! . . . ed

Also my apologies to Syd Goldstein. Syd has a want ad for his C-8. I inadvertently transposed digits in his telephone number. Check out his ad, because it looks like a good deal. . . ed

Only 12 people heard Shilo Unruh speak at our general meeting. Too bad! Come and listen to John Gleason talk about astrophotography. John, we think, is the best around at this part of astronomy. . . ed

May 2: SJAA's Auction at Houge Park. 2:00 p.m. til done.

May 2: Star Party at Grant Ranch w/Halls Valley Group.

May 8: Star Party at Houge Park on Twilight Ave. just off Woodard.

May 9: Astronomy Day. Bring Solar Scopes to Houge or Milpitas Library

May 9: 8:00 p.m. General meeting at Milpitas Library. Board of Directors meet at 6:30 p.m. preceeding the program. Speaker:

John Gleason - Astrophotography.
May 16: Beginning Astronomy Class - Milpitas Library.

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 Houge Park.

June 6: Rest - No activity. Maybe go to The Peak?

June 13: 8:00 p.m. General meeting at Milpitas Library. Board of Directors meet at 6:30 p.m. preceeding the program. Speaker: Dr. Roger Romani, Dept. Physics, Stanford - Neutron Stars, Black Holes, Cosmology.

June 14: Partial eclipse of the moon

June 20: 8:00 p.m. Beginning Astronomy Class - Milpitas Library.

June 27: Star Party at Grant Ranch w/Halls Valley Group.

June 30: Total eclipse of the sun - \$2700 to the south Atlantic will get you a view. Maybe there will be less expensive photographs in *Sky and Telescope*.

Star Parties

by ed

This month's star parties at Fremont Peak and Grant Ranch had a large amount of **FOG**. In addition to the fog the temperature was quite chilly. At both places the wind was also a factor. At Fremont Peak, I believe the wind was what drove the fog up over the peak. It was so thick the red light on the TV tower would flicker in and out. Later in the evening the fog created a considerable amount of dew.

Bob Elsberry did get Jupiter in his eyepiece once or twice. His little home made telescope is a short focus 5-1/2" mirror. I had thought his mirror would make a nice Leniess Wright camera (see ATM Book 2), but Bob was happy with what he had done. To be truthful though, there is some fuzziness with it. I suggested to Bob before we left for the Peak that he cut a mask to stop his scope down, from about an f3.8 to a f5 or 6. To make a Lenless Wright the mask must be placed at the focal point - a very convient location on his scope. It really seemed to work as described. The image sharpened considerably. However, more expirementation and use is needed to be sure.

Grant Ranch had 15 telescopes set up by dark, however **FOG** again played havoc along with wind and temperature! I'll tell you, to me it was bitter cold in the wind and we weren't in the fog as we were at the Peak. It was interesting to return into the valley as there was no fog cover. Jim Van Nuland measured the temperature at 48° F around sun-down. Jim had a nice 2 day old moon in his Scope. We missed seeing Paul Barton. Jim Van Nuland and Bob Brauer stuck around until about 2:00 am and spotted Comet Tanaka-Machholtz. Jim said, "You could actually see it move!"

COMET COMMENTS

by Don Machholtz

One new comet has been discovered recently, it should be visible for the next few weeks. Comet Shoemaker-Levy (1991d) has faded in the morning sky, but another comet by the same name- Comet Shoemaker-Levy (1991a) brightens in our morning sky. Meanwhile, comet Mueller apparently did not survive perihelion.

Periodic Comet Howell (1992c): S. Larson and J. Scotti recovered this comet from Kitt Peak on Mar. 5 at magnitude 21. It should brighten to magnitude 15 by early next year.

Comet Tanaka-Machholz (1992d): This comet was photographed by Z. Tanaka of Japan on March 24 as a tenth magnitude object moving at an apparent speed of >4 degrees/day. Due in part to poor weather, the Tokyo Observatory did not follow up on it. On Mar. 31, while sweeping with a homemade 5" refractor at 21X, I picked up an object some seven degrees away and moving in the same direction, but <1 degree/day. It now appears that both are the same object with earlier reported speed in error.

This comet came 760 hours following my previous find in August 1988. Despite the excitement of the discovery, the most significant event of the week was the arrival of our new infant son, Mark, the following day. To top this off, I received an offer for a better job the next day.

Comet 1992d will be closest the sun at 1.26 AU on Apr 22. It moves north, under the North Pole, into the evening sky by mid-June, never being more than 50 degrees from the sun.

21 March Astronomy Class

Milpitas Library

Reported by Paul Barton

Jack Peterson gave his usual fine presentation to a dozen or so very attentive students - - - in spite of heavy rain! Subjects covered were Earth's precession over the years, double stars, size of nearby stars compared to our

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Ephemeris Contributors

Don Machholtz - 916-346-8963
Pat Donnelly - 408-778-2741
Richard Stanton - 408-662-0205
Steve Gotlib - 415-525-7968
Bill Dellings - 510-792-9206

Editor

Bob Madden - 408-264-4488

EPHEMERIDES

DATE (UT)	RA (2000)	DEC	ELONG	SKY	MAG
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COMET SHOEMAKER-LEVY (1991a₁)

05-03	00h56.8m	+40°43'	34°	M	11.6
05-08	01h01.3m	+42°22'	36°	M	11.3
05-13	01h06.1m	+44°14'	38°	M	11.0
05-18	01h11.4m	+46°19'	41°	M	10.7
05-23	01h17.3m	+48°41'	43°	M	10.4
05-28	01h24.2m	+51°22'	45°	M	10.0
06-02	01h32.5m	+54°28'	48°	M	9.7
06-07	01h43.3m	+58°04'	50°	M	9.3

COMET TANAKA-MACHHOLZ (1992d)

04-23	23h15.3m	+40°31'	46°	M	8.2
04-28	23h36.3m	+45°31'	47°	M	8.2
05-03	00h00.8m	+50°18'	47°	M	8.2
05-08	00h29.9m	+54°43'	47°	M	8.3
05-13	01h04.3m	+58°35'	47°	M	8.4
05-18	01h44.2m	+61°43'	47°	M	8.5
05-23	02h29.3m	+63°59'	46°	M	8.6
05-28	03h17.4m	+65°18'	45°	M	8.8
06-02	04h05.1m	+65°40'	44°	M	8.9
06-07	04h49.7m	+65°16'	43°	M	9.1

Don Machholz (916) 346-8963

sun, Leo and other constellations near to Leo. Attendees were:

Bob Madden
Mark Brenizer
Diana Brenizer
Dan Finley
Alice Finley

Richard Paw
Jerry Lovelace
Alex Calderon
Leon Jones
Garry Mitchell
John Bettencourt
Paul Barton

TIME AGAIN FOR THE GREAT SJAA AUCTION

MAY 2ND AT HOUGE PARK - 2:00PM TIL DONE

BRING YOUR GOOD STUFF AND WHITE ELEPHANTS 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

Flashing Telrad - by Richard Green

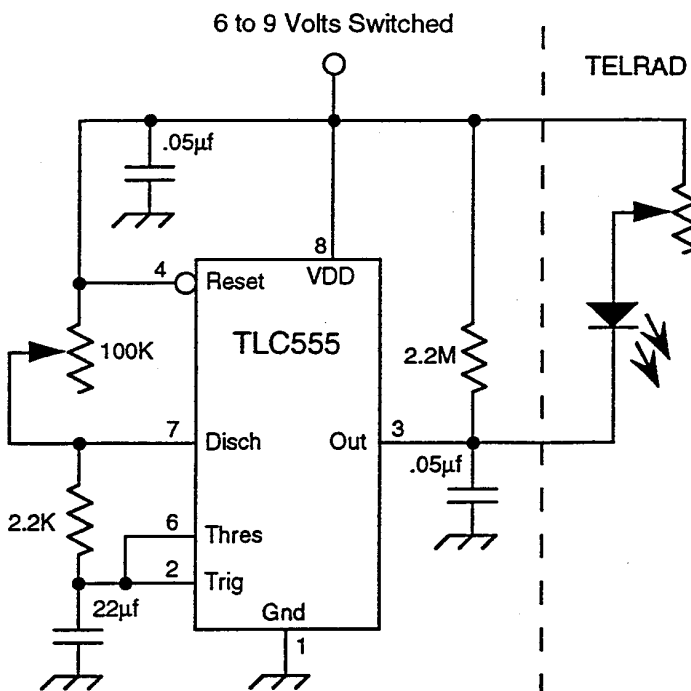
This circuit shows how to modify a TELRAD so that it may be used on very faint objects.

NOTES:

The LED that illuminates the TELRAD is polarity sensitive. Mark the wires coming from this device (+/-) before disconnecting.

The TELRAD switch/control has a 50 Ω resistor connected to it. This resistor should be removed as it is no longer necessary.

The Radio Shack part number for the TLC555 device is 276-1718. Total cost for all parts should be less than \$5.00.



SJAA OBSERVATORY STRUCTURE DESIGN TEAM REPORT

by Jerry Dunmire

A team has been formed to consider structures for the SJAA observatory at the proposed Grant Ranch site. The members are Andy Guidas, Mike Ficco, Marty Hutchison and myself.

We have met twice. During our initial meeting, we discussed the priorities for the observatory. Our second meeting was at the proposed Grant Ranch site to review the physical layout of the site.

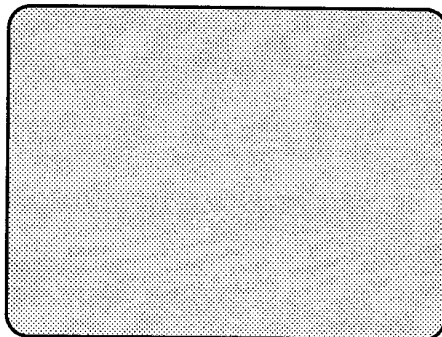
Various features are being considered, including those on the list printed in the April Ephemeris. Trade-offs are being made between the features by applying the following priorities and assumptions:

- The facilities primary purpose is public service.
- Groups of 20 to 40 will attend the public observing sessions. Though the observatory itself need only have room for 3 to 4 people at a time. There must be provisions for flow of foot traffic with staging areas to deal

with large groups.

- Handicap access must be provided.
- The telescope will be a Schmidt-Cass of 10 or 11".
- The structure should be designed to allow for simple expansion or duplication to support a second telescope.
- The structure should fit the "Park" environment.
- The structure should be designed and built for low maintenance.
- Keep it simple.

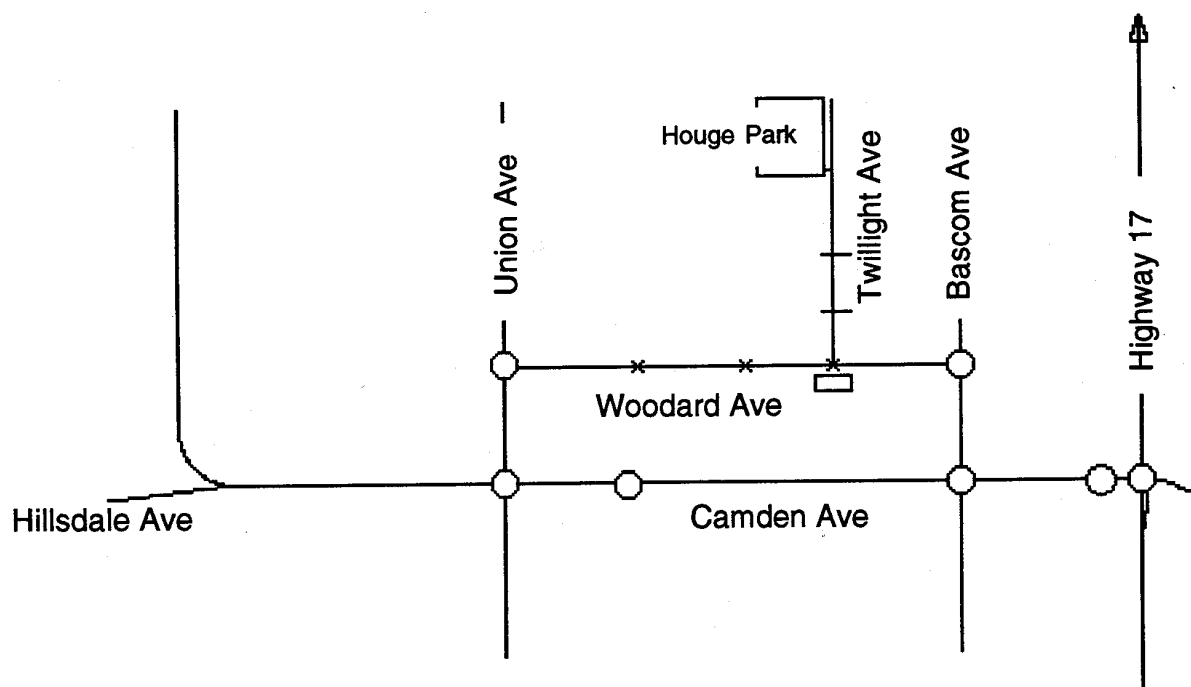
The design team will continue to consult with and solicit advice and suggestions from all interested parties. Please feel free to call me at (408) 248-1451.



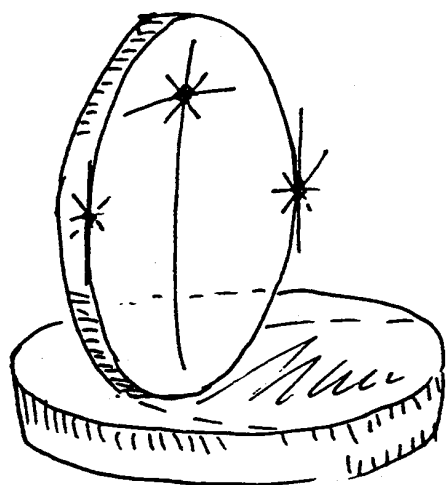
RAISIN BREAD

by Bob Madden

I was talking to Jack Z at the last General Meeting (4/11) and lamenting how our membership displays low attendance at these meetings. Jack said we should provide a little write-up of the talks. Let me say this, you miss some really informative discussions when you fail to attend. Ethan Clifton's talk about his closed aperture dome started considerable discussion over what the SJAA wanted and needed. Dr. Schramn's discussion using raisin bread clarified my perception of the Big Bang. Bill Dellenges' discussion about astronomy seminars was very interesting. This month we will have John Gleason telling us about astrophotography. John is well recognized in this field and has his photographs published in Sky and Telescope. Don't miss him! Dr. Romani from Stanford will tell us about Neutron Stars, Black Holes and Cosmology in June. This has been a very impressive line up. To get these folks back we need to show interest and support.



SJAA Public Star Party Site



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10% OF YOUR SALE WILL GO TO THE SJAA

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AND BUY NEW ITEMS
FOR YOUR SHELVES AND
GARAGE.**

May 2nd 2:00 pm - Houge Park

CELESTIAL CALENDAR

Lunar Phases Date Rise Tran Set
 NM 10:44hr 02-05 0605 1232 2016
 FQ 08:44hr 09-05 1246 1919 0153
 FM 09:03hr 16-05 2036 0121 0606
 LQ 08:53hr 24-05 0129 0716 1301
 NM 20:57hr 31-05 0528 1245 2007

Nearer Planets

Mercury 07-05 0524 1130 1740
 1.21 AU 17-05 0532 1201 1833
 Mag -1.1 27-05 0538 1242 1951

Venus 07-05 0550 1224 1902
 1.71AU 17-05 0545 1234 1927
 Mag -3.9 27-05 0542 1244 1950

Mars 07-05 0408 1002 1600
 1.83 AU 17-05 0348 0952 1601
 Mag +1.0 27-05 0329 0942 1601

Jupiter 07-05 1338 2014 0252
 5.19 AU 17-05 1301 1936 0214
 Mag -2.1 27-05 1225 1859 0136

Saturn 07-05 0201 0709 1216
 9.73 AU 17-05 0122 0631 1138
 Mag +0.7 27-05 0043 0552 1059

SOL Star Type G2V Mag - 26.72
 0306+1659 07-05 0610 1305 2003
 0344+1927 17-05 0601 1304 2011
 0423+2122 27-05 0553 1303 2017

Astronomical Twilight

JD 2,448,749.5 07-05 0423 - 2149
 ,759.5 17-05 0410 - 2201
 ,769.5 27-05 0358 - 2211

Siderial Time

Transit Right 07-05 0000 PDT=1354
 Ascention at 17-05 0000 PDT=1433
 Local Midnight 27-05 0000 PDT=1513

Darkest Saturday Night May 02
 Sunset 1958
 Twilight End 2141
 Moon Rise 2016

**TIMES AND DATES ARE
 PACIFIC DAYLIGHT**

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

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 Bob Madden

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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 Televue Wide-field, 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 assention. 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)-923-6706 (H)

5/92

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 Coultter 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 Dellinges (510) 792-9206

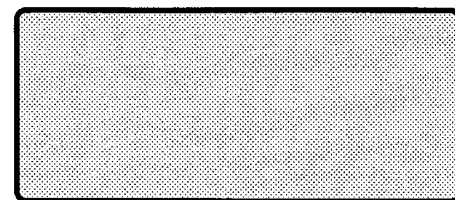
3/92

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

Meade 10" SC, GE mount, 8X50 quick removeable finder, 26mm & 10 mm eyepieces, Tuthill heated dew shield. Mount has RA drive, polar axis scope and digital setting circles. Astro Physics 5" triplet refractor, f4 field flatener/reducer for astro photography, 2" diag, mtg rings, 5" type II solar filter. Both \$2500/OBO Dave Enos (408) 263-5624



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