



SJAA EPHEMERIS

Return Of The King Bill Arnett

By about 4am at Fremont Peak, Jupiter (now in eastern Capricornus) was just rising above the tree to my east. I had been watching it rise for a couple of hours and was "saving it for last." -- STAR 905; ENTER; GOTO; Whirrr; Beep; Wow. WOW!

More power! At 256x Jupiter's disk was big and sharp and full of detail. The Great Red Spot was on the other side of the planet but there was a big brown spot in the southern equatorial belt, lots of little irregularities in the northern edge of that belt, granulations in the polar caps, and lots of color.

One of the finest views I've ever had of the King of the Planets. I hope the refractor boys over by Ranger Rick's weren't all asleep.

All four Galilean moons were lined up in typical fashion (with a star nearby to confuse the non-cognoscenti).

I tried to determine which moon was which without consulting my computer. Ganymede is the largest and brightest but a little grey, Callisto is second, Io is smaller and reddish, and Europa is the smallest and pure white (and life-bearing?). To my amazement, when I checked with the computer, I had them right!

After squinting at Mars all winter, what a joy to see Jupiter again! I stared at it for the better part of an hour as the night turned into dawn. It was still gorgeous even when all the other stars were gone.

The longer I watched the more detail that appeared to my eye. In the moments of excellent seeing, it was just fabulous. (Sorry for the hyperbole, but I was really fired up!)

The King has returned!

Activities Calendar

June

- 7 Star parties at Henry Coe and Fremont Peak. HVAG at Grant Ranch. Sunset 8:24 pm, 9% moon sets 10:27 pm.
- 13 Houge park star party, TAC at Fischer Middle School. Sunset 8:29 pm, 59% moonset 1:56 am. PAS meeting at Foothill: "Hot Stuff In Cool Stars", Dr. Robert Stern.
- 14 Beginning Astronomy Class on telescopes. 8pm at Houge Park.
- 21 General meeting 8pm, Al Stern from the ASP. Open board meeting 6:30 pm.
- 27 Houge park star party. Sunset 8:32 pm, 43% moonrise 1:35 am.
- 28 Star party at Fremont Peak. Sunset 8:29 pm, 30% moonrise 2:12 am.
- 27-8 -- SJAA weekend at Yosemite National Park, Glacier Point.

July

- 5 Star parties at Henry Coe and Fremont Peak. HVAG at Grant Ranch. Sunset 8:30 pm, 2% moon sets 9:06 pm.
- 11 Houge park star party, TAC at Fischer Middle School. Sunset 8:30 pm, 43% moonset 12:28 am.
- 12 Beginning Astronomy Class, Craig Wandke's introductory moon talk. 8pm at Houge Park.
- 19 General meeting at Houge Park 8pm; Ernie Piini will describe the Mongolian eclipse trip. Open board meeting 6:30 pm.
- 25 Houge park star party. Sunset 8:21 pm, 57% moonrise 12:15 am.

24 hour News and Information:
SJAA Hotline: 408-559-1221
Web Address: <http://www.seds.org/billa/sjaa/sjaa.html>

The Universe On A First Name Basis Akkana Peck

I don't know about other people, but I find that I'm not always familiar with the common names for deep-sky objects. Someone will say "Hey, I looked at the Ghost of Jupiter last night, and it was wonderful!" and I'll have no idea where that is or whether I've ever seen it, nor even how to look for it since my star atlas doesn't list common names.

Seeking to remedy this embarrassing situation, and reasoning that any object interesting enough to have a common name probably had some attribute which made it an interesting visual object, I resolved that the star party of May 3, 1997, would be a "named object" night.

I started by printing out Hartmut Frommert's web page of "Common Names for Deep Sky Objects" (<http://www.seds.org/messier/xtra/supp/d-names.html>), and, armed with my H-B atlas and an old copy of the Revised NGC, looked up each object and made a list of the ones which were likely to be visible, along with which C-chart they were on in the atlas. Then I listed them in approximate order of appearance, so that I wouldn't miss the early-evening objects.

The weather at Fremont Peak looked unpromising. High clouds had plagued northern California all week, and Saturday didn't look much better. But just after sunset, most of the clouds and wind disappeared, making for better conditions than we'd seen in a month.



continued on page 3, see Names

My first playpen was Monoceros. I had a new 'scope out, a little 6" f/4 (actually a little faster than that) which I'd recently built up out of a mirror purchased at a swap meet. First light for this telescope had been Hale-Bopp, the previous (mostly cloudy) weekend, and I was looking forward to seeing how well it did on the Rosette (NGC 2237/9/46). Unfortunately, I hadn't had time to rig a finder or sight tube on the new RFT, so I wasn't quite clear where I was pointing at any given time.

I pointed toward Monoceros and swept for a while at low power with a UHC filter, looking for the Rosette. Eventually I noticed a fairly obvious nebula, and called a friend over to check the identification. He didn't think it was the Rosette, and drew a ladder pattern for me to look for. I swept again, and immediately saw the ladder, just like my friend's picture -- and around it, the dim glow of the Rosette. Hardly impressive; I guess I'll have to wait until fall to see what this little RFT makes of the Rosette when it's high in a dark sky. I'm still not sure what the first nebula was --presumably either the Cone or Hubble's Variable (probably the latter), both of which were also on my list, but without knowing quite where I was pointing, it's hard to be sure.

Now it was dark enough for more serious observing, and I switched to my other 6" Newtonian, the f/8 Cave.

My next target was the "Antenna" or "Ringtail" galaxies, NGC 4038-9. I'd seen pictures of them many times, but had never seen them in person. My RNGC listed their magnitudes as 12 and 12.5 respectively, and so wondered whether they'd be possible in a 6", but since then I've heard other sources list them as mag 10.

In any case, whatever their true magnitudes, they were quite easy in the 6", and it was very easy to see the notch where the two galaxies met. The long "antennae" were not visible (no surprise), so I wandered over to some nearby big iron and tried it in a 12" LX200, an 18" Obsession, and a 20".

All three showed much more nuclear detail than my 6", including the "black eye" on one of the two nuclei, but none, to my eye, showed the antennae. Later that evening, I had a chance to try the view through the 30" in the observatory; even then, I could not see the antennae, but could see the barest beginnings of the base of the brighter antenna (rather like the short-exposure image in Burnham's).

As long as I had the chart open to Corvus, I explored some of the other sights in that area -- 4361, 4027, 3887, M68, and 3962. Unfortunately, I lingered too long in Corvus; the next object on my list, the Clown nebula (2392) in Gemini, was already too low, and I wasn't able to find it.

Next was the Ghost of Jupiter, NGC 3242. I'd seen this object before, in an 18", but had never found it myself. Finding the bright green disk of the planetary was easy, but seeing detail was not. At 181x I could see that the outer edges were fainter than the central area, but it was nothing like the delicate shell-within-a-shell that I had seen a few months earlier through the 18". A UHC filter increased its contrast with the background sky, but hurt the detail in the object.

I took a break for a while, to wander around and look through other telescopes. Several (four?) Dobs were seeing first light that night, including a lovely blue/green homebuilt 16". (It's a wonder the skies were so clear, with so much virgin glass present.) A small group hiked across the park to the observatory, where we convinced the people running the 30" to look for Omega Centauri (a vast disappointment -- huge, but too low in

the sky, unresolved even in the 30") and were unable to find NGC 5128 (Centaurus A) in a 10" set up outside the observatory. The seeing overhead was relatively steady, and Mars was showing well in several telescopes.

Then it was back to my named-object list. I discovered that I had missed any chance at the "Eight-burst Planetary" in Vela; I don't know what an "eight-burst planetary" is, but the name sounds sufficiently dramatic that I intend to keep trying for it. I found the Blinking Planetary (6826), which was challenging to find because of its size.

I needed 181x to see it as a disk (normally I use 48x to locate objects). The planetary didn't perform its "blink" trick very well in my 6" at 181x, for some reason (the nebula has two shells of different colors, one perceived better by rods, the other by cones; look at the nebula directly and the outer parts disappear; look away and they wink into place). One observer noted that the effect seemed very sensitive to magnification; I didn't try a range of magnifications to test this theory.

By this time, both the sky and my alertness had deteriorated to alarming levels. I tried to find the Cateye nebula (6543) but kept failing to see it. Eventually someone else found it for me, I determined that I had been using the wrong two pointer stars, tried again, and still failed to find it. Eventually I did see it in the 6" (quite bright, no problem) but decided that I was obviously past my observing prime and it was time to pack up. A nice 8x42 binocular view of the Veil nebula rising over the trees concluded an excellent evening of observing.

Lick Lid Update

Bill Arnett

A brief followup article on the condition of the Lick Observatory's roof: They will be starting repairs this summer.

Apparently they got much more response and support than they ever expected (and nearly twice as much money), and note that postings on the internet (made by caring individuals, rather than by Lick officials) had a great deal to do with the response level.

There were contributions from all over the USA. The extra money will be used to make further safety improvements to the dome.

First Annual SJAA Resource Directory

This is a collection of clubs, organizations, observatories and other information that may be of interest SJAA members, placed on inside pages so it can be removed and kept as a reference.. Mostly, they're included because they're nearb. Some interesting sites (Palomar Observatory or Griffith Park) are not included simply because of distance, though there may be interest in contacting them as well. If there is enough curiosity, we could also publish a national/international listing as well. The first listing, AANC, is given its own category as a "blanket" organization; SJAA is a member. Comments in *italics*, errors and omissions are entirely the editor's.

Astronomical Association of Northern California

A group of astronomy clubs, astro businesses, planetaria and observatories dedicated to the promotion of astronomy in Northern California. The A.A.N.C. is the originator of Astronomy Day, and provides a resource list of astronomy related organizations, sponsors conferences, workshops, and events such as the annual "Star-B-Que" at Fremont Peak each summer. They have a BBS, "Eye on the Sky" at 510-443-6146. The AANC can be e-mailed at AstroAssn@aol.com.

Clubs

Amateur Astronomers Group (MIRA)

Stewart Hobson, P.O. Box 1551, Monterey, CA 93940; 408-375-3220. 32 members.

Cabrillo Stargazing Society

Karl von Ahnen, Cabrillo College, 6500 Soquel Dr., Aptos, CA 95003; fax: 408-864-5643. E-mail: vonahmen@admin.fhda.edu. 24 members.

Chabot Telescope Makers Workshop

An extraordinary resource for any Bay Area ATM, and considered to be among the best groups in the USA, if not the world. Paul Zurakowski, 4917 Mountain Blvd., Oakland, CA 94619; 510-447-6837. *Directions to get there are on the voice-mail system at 510-530-3480.*

Eastbay Astronomical Society

Carter Roberts, Chabot Observatory, 4917 Mountain Blvd., Oakland, CA 94619; 510-524-2146. E-mail: eas@cosc.org. URL: <http://chabot.cosc.org/~EAS/>. 200 members.

Fremont Peak Observatory Association

Administers the 30" Challenger telescope built by Kevin Metlock, and the entirely amateur-built observatory that houses it.

Rick Morales, P.O. Box 787, San Juan Bautista, CA 95045; 408-623-2465.

Group 70 -- Large Amateur Telescope Project

Currently building a 70" amateur telescope; expected to be the largest such in the world upon completion.

1689 Abram Ct., San Leandro, CA 94557; 510-351-1288, fax: 510-351-1289. URL: <http://www.hpl.hp.com/astro/group70/>. 200 members.

Halls Valley Astronomical Group

Holds monthly star parties at Grant Ranch County Park; club can only be joined by attending one of these events.

Ron Bricmont, 1127 Sierra Ave., San Jose, CA 95126-2641; 408-287-9486. E-mail: info@hvag.sbay.org; URL: <http://www.snapnet.com/HVAG/>. 37 members.

Hercules Public Stargazing Program

David L. Harris, 6102 Sacramento Ave., Richmond, CA 94804; 510-526-5974. 15 members.

Mount Diablo Astronomical Society

Ginger Todd, 1302 Roseann Dr., Martinez, CA 94553-4730; 510-229-3914. E-mail: dmay2124@aol.com. 85 members.

Mt. Diablo Observatory Assn.

Jon Wilson, Mt. Diablo State Park, 96 Mitchell Canyon Rd., Clayton, CA 94517. E-mail: dmay@chevron.com. URL: <http://www.ccdemo.org:80/NaturalScience/MtDiabloObsAssn/MtDiabloObsAssn.html>. 32 members.

Mount Tam Observers

Tinka Ross, 89 Dominican Dr., San Rafael, CA 94901-1337; 415-454-4715. E-mail: tinka@marin.cc.ca.us.

Peninsula Astronomical Society

Outstanding presentations of the science behind amateur astronomy. Attending meetings is free, but two dollars in quarters are required to feed the parking meter.

The club meets the first Friday of the month in Room F-1, The Forum Bldg. at Foothill College in Los Altos, CA. The club also operates the Foothill College Observatory on meeting nights. In addition the club also owns and operates a 16-inch reflector telescope. A monthly newsletter is sent to members. For more information contact Bill Sorrells 408-370-1215 or William Phelps 415-493-4742.

San Francisco Amateur Astronomers

Morrison Planetarium, Golden Gate Park, San Francisco, CA 94118; 415-566-2357. The club of about 160 members meets on the 3rd Wednesday of every month at 8 PM at the Morrison Planetarium in Golden Gate Park. If you have any questions please E-Mail chelleb@aol.com. URL: <http://members.aol.com/chelleb/sfaa.htm>. 200 members.

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San Francisco Sidewalk Astronomers
John Dobson, 1801 Golden Gate Ave., San Francisco, CA 94115; 415-567-2063. URL: <http://members.aol.com/raycash/sidewalk.htm>.

San Jose Astronomical Assn.
Jim Van Nuland, 3509 Calico Ave., San Jose, CA 95124-2536; 408-559-1221. E-mail: jim.van.nuland@sjpc.org. URL: <http://www.seds.org/billa/sjaa/sjaa.html>.

San Mateo Astronomical Society
Ron Cardinale, P.O. Box 974, Station A, San Mateo, CA 94403; 415-594-9686. 75 members.

Santa Cruz Astronomy Club
Star parties meet in the Santa Cruz-Monterey-San Juan Bautista area on weekends and monthly meetings feature speakers from nearby universities and research facilities. Call 408-335-2423 for the latest recorded information. Paul W. Preto, L-2 San Carlos Lane, Santa Cruz, CA 95065; 408-335-2423. 60 members.

Sonoma County Astronomical Society
G. Ed Megill, P.O. Box 183, Santa Rosa, CA 95402; 707-795-7829. 250 members.

STARS -- Students Taking Astronomy-Related Subjects
Darryl Stanford, Dept. of Astronomy, City College of San Francisco, MS S-95, 50 Phelan Ave., San Francisco, CA 94112; 415-239-3242. E-mail: dstanfor@ccsf.cc.ca.us. P (Seats 50) 10 members.

Stockton Astronomical Society
Jeff Baldwin, P.O. Box 243, Stockton, CA 95201; 209-957-3331. 100 members.

TAC -- The Astronomy Connection

TAC is a unique local internet resource and observing group. The following information was submitted by former SJAA director Rich Neuschaefer: TAC was formed by people from a number of clubs who often met at Fremont Peak State Park to observe the night sky with their telescopes and generally have a good time.

TAC is a great way to find out when and where people will be observing. The information is sent out via email on the announce list where just notices of star parties are sent, or the general email list which includes all the chatter over where to go, the weather, equipment info, etc.

Since TAC is free there's no need to budget your dollars between TAC and "full service" astronomy clubs, you can do both. is a collection of amateur astronomers, beginners and experienced observers whose primary interest is getting out and observing.

TAC doesn't have a board of directors either so there's none of the usual club politics. It's a fun form of anarchy. Email id: TAC@Astronomy-Mall.com Web page: <http://Astronomy-Mall.com/TAC> Phone: (408) 356-1125 (Mark Wagner). *Requires internet email access.*

Tri-Valley Stargazers
David Anderson, P.O. Box 2476, Livermore, CA 94551; 510-661-4249, fax: 510-455-9466. E-mail: tv@shooked.net. URL: <http://www.hooked.net/~tv/s/>. 189 members. L

Valley of the Moon Astronomical Society
Al Heppe, P.O. Box 999, Glen Ellen, CA 95442; 707-996-1246, fax: 707-996-2773.

Western Amateur Astronomers
Jack Borde, 4135 Pickwick Dr., Concord, CA 94521-2735; 510-827-9716. Stewart Hobson, P.O. Box 1551, Monterey, CA 93940; 408-375-3220. 32 members.

Wragg Canyon Stargazers
Judy Spears, 5200 Wragg Canyon Rd., Lake Berryessa, Napa, CA 94558; 707-966-0579. 10 members.

Online Organizations

AOL Astronomy Club
Keyword: Astronomy. *Sponsored by Sky Publishing and hosted by Sky & Telescope associate editor Stuart Goldman. Offers various files for downloading, breaking news, and two discussion boards (Observer's Outpost and Cosmic Discussions). Requires AOL.*

Compuserve
Maintains an astronomy discussion area. Compuserve required.

Sci.astro and/or Sci.astro.amateur
Unmoderated usenet newsgroups. Locate usenet on your ISP and search for either title. Requires ISP access.

Observatories

Chabot Obs. and Science Center
4917 Mountain Blvd., Oakland, CA 94619; 510-530-3480. URL: <http://www.cosc.org/>. G, L, P (Seats 90)

Foothill College Observatory
William Phelps, Foothill College, 12345 El Monte Rd., Los Altos, CA 94022; 415-949-7334. E-mail: pasinfo@usa.net. URL: <http://www.mauis.fhda.edu/foothill/astronomy/fhobs.htm>.

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Fremont Peak Observatory
Houses the 30" Challenger Telescope with public access some nights.
Rick Morales, P.O. Box 787, San Juan Bautista, CA 95045; 408-623-2465. URL: <http://www.rahul.net/resource/tpoa/>.

James Lick Observatory
Offers regular tours of the 30" refractor.
P.O. Box 85, Mount Hamilton, CA 95140; 408-274-5061. URL: <http://www.ucolick.org/>.

Monterey Institute for Research in Astronomy
900 Major Sherman Lane, Monterey, CA 93940; 408-375-3220, fax: 408-375-3406.

Ricard Observatory
Dept. of Physics, Santa Clara Univ., Santa Clara, CA 95053; 408-554-4314, fax: 408-554-6965. E-mail: pkesten@scuacc.scu.edu.

San Francisco State University Observatory
Dept. of Physics and Astronomy, San Francisco, CA 94132; 415-338-1852, fax: 415-338-2178. E-mail: rogers@stars.sfsu.edu.

Sonoma State University Observatory
Dept. of Physics and Astronomy, Rohnert Park, CA 94928; 707-664-2267. E-mail: ggs@charmian.sonoma.edu. URL: <http://yorty.sonoma.edu/observatory/>. L

Planitaria

Cabrillo College Planetarium
Richard Nolthenius, 6500 Soquel Dr., Aptos, CA 95003; 408-479-6506. E-mail: rinolthe@cabrillo.cc.ca.us.

Chabot College Planetarium
Scott Hildreth, 25555 Hesperian Blvd., Hayward, CA 94545; 510-786-6882, fax: 510-782-9315. E-mail: shildret@ed.clpccd.cc.ca.us. Seats 54

George Clever Planetarium and Earth Science Center
San Joaquin Delta College, 5151 Pacific Ave., Stockton, CA 95207; 209-474-5110. E-mail: cleverplanet@sjdccd.cc.ca.us. Seats 66.

Diablo Valley College Planetarium
Astronomy Dept., 321 Golf Club Rd., Pleasant Hill, CA 94553; 510-685-1230. Seats 50. L

Exploratorium
Palace of Arts and Science, 3601 Lyon St., San Francisco, CA 94123; 415-563-7337. URL: <http://www.exploratorium.edu>.

Independence Planetarium
Gail Chaid, Independence High School, 1776 Educational Park Dr., San Jose, CA 95133; 408-729-3911, fax: 408-926-6785. Seats 65.

Lawrence Hall of Science
Univ. of California, Berkeley, CA 94720-5200; 510-642-5362, fax: 510-642-1055. E-mail: agould@uclink4.berkeley.edu. URL: <http://www.lhs.berkeley.edu/>. G, L, M, P (Seats 27)

Los Medanos College Planetarium
2700 E. Leland Rd., Pittsburg, CA 94565; 510-439-2185, ext. 800. Seats 88. L, M

Minolta Planetarium
DeAnza College, 21250 Stevens Creek Blvd., Cupertino, CA 95014; 408-864-8814, fax: 408-864-5643. E-mail: vonahnen@admin.fhda.edu. URL: <http://planetarium.fhda.edu/pltwww/ghome.html>. Seats 170.

Morrison Planetarium
California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118; 415-750-7127, fax: 415-750-7129. E-mail: planetarium@calacademy.org. URL: <http://www.calacademy.org/planetarium/>. Seats 309.

Rosicrucian Planetarium
Park and Naglee Aves., San Jose, CA 95191; 408-947-3640. E-mail: egyptmus@best.com. Seats 100. G, L, M

Santa Rosa Junior College Planetarium
1501 Mendocino Ave., Santa Rosa, CA 95401; 707-527-4371. Seats 87. M

S.F.S.U. Planetarium
Dept. of Physics and Astronomy, San Francisco State Univ., San Francisco, CA 94132; 415-338-1852. E-mail: cool@stars.sfsu.edu. Seats 50.

West Valley College Planetarium
14000 Fruitvale Ave., Saratoga, CA 95070; 408-741-2565. E-mail: tom_bullock@wvmccd.cc.ca.us. Seats 74.

Periodical Publication Statement

SJAA Ephemeris newsletter of the San Jose Astronomical Association, is published monthly, 12 times a year, January through December.

San Jose Astronomical Association
5380 Pebbletree Way

SWAP Team Results Good

Treasurer Bob Elsberry supplied the following results for the SJAA Swap Meet and Auction last month:

Swap Meet	\$610.35
Auction	\$160.90
Soda Sales	\$24.90
TOTAL	\$796.15

Attendance was good, and this was a slightly better financial result than last year. It's a strong indication of the continuing success of this popular event.

Congratulations to everyone who participated both in preparing the event and attending, with a special thanks to Jay Freeman for his entertaining auctioneering, so enthusiastic that he convinced himself to bid on (and purchase) several items.

Please Note David North is now the Ephemeris Editor. Lew's wife doesn't want any more mail...

Astro Ads

Full Time Position Open at Lumicon

Send resume to: Lumicon, Attn. Jack Marling, PO Box 495, Livermore, CA 94551-0495

Seeking 8" SCT(Meade/Celestron) LX-10 type (no computer) with or without tripod. Mike Bennett (408/275/6437).

Astro Ads are free to all noncommercial advertisers selling astronomically related products or services. Please send your ad directly to the Editor, (via e-mail to northsjsu@aol.com or a letter to 549 Arleta Ave, San Jose, CA 95128). Ads will run for one month and be automatically deleted unless you request an extension (hasn't sold yet) by the 10th of the previous month.

Submit

Members are encouraged to submit articles for publication in the SJAA Ephemeris. Send articles to Dave North (via e-mail to NorthSJSU@aol.com). Articles received by the 10th will be put in the following month's newsletter. Please include your name and phone number.

Telescope Loaner Program Status

Mike Koop

No.	Scope Description	Borrower	Due Date
1	4.5" Newt/P Mount	Nick Tucci	6/2/97
2	6" f9 Dob	John Paul De Silva	never returned
3	4" Quantum S/C	Michael Lagae	6/11/97
4	60mm refractor	Del Johnson	indefinite
5	60mm refractor	available	
6	8" Celestron S/C	Bob Bootz	7/13/97
7	12.5" Dobson	Out of Service	Note 1
8	14" Dobson	Robert Duvall	7/15/97
9	C-11 Compustar	Paul Barton	Indefinite
15	8" Dobson	Jack Kellythorne	6/2/97
16	Solar Scope	Jack Peterson	indefinite
18	8" Newt/P mount	Ram Saxena	6/12/97
19	6" Newt/Polar mount	Gary Flint	4/19/97 note 2
21	10" Dobson	Clyde Janick	5/24/97
23	6" Newt/P mount	available	
24	60mm refractor	Ravi Tembhekar	5/24/97
26	11" Dobson	Alex Crichton	7/1/97
27	13" Dobson	Lee Courtney	6/5/97
28	13" Dobson	Ramin Ghafouri	6/19/97
29	C8, Astrophotography	Scott Wade	6/11/97
30	7" f/9 Newt/pipe mount	Brian Ambrose	7/1/97

Waiting List

29 C8, Astrophotography Mike Bennett 5/13/97

Notes:

1. Mirror on the 12.5" Dob was just realuminized and the tailgate was just replaced. Just needs a new coat of paint, and she'll be ready to roll!
2. Please call and tell us how things are going with the scope

Officers and Board of Directors

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Web Page

Bill Arnett	billa@znet.com
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COMET COMMENTS

Don Machholz

Celestial Calendar - June 1997

Richard Stanton

Comet Hale-Bopp is now visible in the Southern Hemisphere after putting on a fine show that will be studied for years. Periodic Comet Wild 2 remains in our evening sky. Periodic Comet Encke is close to the Sun now, but in late June it emerges into the southern sky.

I'll provide those positions next month.

Two faint comets were recently discovered by Joe Montani at Kitt Peak.

Found on plates taken April 9 and April 12, Comets C/1997 G1 (Montani) and C/1997 G2 (Montani) will remain faint. Meanwhile, Jean Mueller has made her 12th photographic comet find, this as part of the Second Palomar Sky Survey. Comet C/1997 J1 (Mueller) has reached perihelion (2.3 AU) and is now dimming.

Ephemerides -- Epoch 2000, 0h UTC

C/1995 O1 (Hale-Bopp)

Date	R.A.	Dec	EL Sky	Mag
00 UT 2000				
06-01	05h54.4m +10°05'	22° E	2.2	
06-06	06h03.2m +07°59'	22° E	2.5	
06-11	06h11.5m +05°58'	22° E	2.7	
06-16	06h19.4m +04°00'	22° E	2.9	
06-21	06h27.0m +02°06'	22° E	3.2	
06-26	06h34.0m +00°14'	23° E	3.4	
07-01	06h41.3m -01°37'	25° M	3.6	
07-06	06h54.6m -03°27'	26° M	3.8	

81P/Wild 2

Date	R.A.	Dec	EL Sky	Mag
00 UT 2000				
06-01	10h29.6m +12°55'	84° E	10.7	
06-06	10h42.3m +11°43'	82° E	10.8	
06-11	10h55.0m +10°27'	81° E	10.9	
06-16	11h07.7m +09°09'	80° E	11.0	
06-21	11h20.3m +07°50'	78° E	11.2	
06-26	11h32.9m +06°29'	77° E	11.3	
07-01	11h45.4m +05°07'	75° E	11.4	
07-06	11h57.8m +03°45'	74° E	11.5	

Orbital Elements -- Epoch 2000.0

Object:	Hale-Bopp	P/Wild 2
Peri. Date:	1997 04 01.13800	1997 05 06.62789
Peri. Dist (AU):	0.9141405 AU	1.5826156 AU
Arg/Peri (2000):	130.58915 deg.	41.77000 deg.
Asc. Node (2000):	282.47069 deg.	136.15458 deg.
Incl (2000):	89.42943 deg.	3.24276 deg.
Eccen:	0.9951172	0.5402220
Orbital Period:	~2500 years	6.39 years
Ref:	MPC 29568	MPC 28272
Epoch:	1997 06 01	1997 04 22
Absol. Mag/"n":	-1.0/4.0	7.0/6.0

Lunar Phase	time (pdt)	date	rise	trans	set
NM	00:03	05	06:27	13:38	20:51
FQ	21:51	12	12:45	19:09	00:56
FM	12:09	20	20:28	00:44	05:57
LQ	05:42	27	00:59	07:12	13:33

Mercury	Dist: 1.26 AU	Mag: -2.3
date rise	trans	set RA Dec
07 04:49	15:22	22:29 03:41.4 +22:46
17 05:05	12:27	19:50 04:59.1 +22:29
27 05:52	13:22	20:52 06:33.2 +24:35

Venus	Dist: 1.58 AU	Mag: -4.1
07 06:59	14:23	21:46 06:16.9 +24:23
17 07:11	14:36	22:02 07:10.3 +23:46
27 07:31	14:49	22:07 08:02.7 +22:00

Mars	Dist: 1.15 AU	Mag: -0.0
07 13:37	19:46	01:59 11:43.4 +02:34
17 13:15	19:21	01:29 11:57.6 +00:45
27 12:58	18:58	01:00 12:13.7 -01:14

Jupiter	Dist: 4.43 AU	Mag: -2.7
07 00:27	05:43	10:58 21:38.3 -14:53
17 23:43	05:03	10:18 21:38.1 -14:57
27 23:03	04:22	09:36 21:36.7 -15:07

Saturn	Dist: 9.76 AU	Mag: +0.9
07 02:57	09:13	15:30 01:09.7 +04:53
17 02:17	08:37	14:56 01:12.6 +05:09
27 01:40	08:00	14:20 01:05.1 +05:21

SOL Star Type	G2V	Intelligent Life in System ?
07 05:49	13:07	20:26 05:01.8 +22:46
17 05:43	13:09	20:34 05:43.3 +23:23
27 05:46	13:11	20:36 06:24.9 +23:19

Astronomical Twilight	Begin	End
JD 2,450, 575	07	03:51 22:23
616	17	03:49 22:28
626	27	03:52 22:30

Sidereal Time		
Transit Right	07	00:00 = 15:55
Ascension at	17	00:00 = 16:34
Local Midnit	27	00:00 = 17:14

Darkest Saturday Night:	07-Jun
Sunset	20:26 PDT
Twilight End	22:23 PDT
Moon Set	22:32 PDT
Dawn Begin	03:52 PDT

TAC June Schedule

Some flexibility will be needed on weeknights to allow for weather conditions, so Wed may end up being Tue or Thu on occasion.

All events should be checked via TAC's mailing lists, available from the web page at: <http://www.rahul.net/resource/TAC>

- 04-Jun Post 3rd Q Wed Montebello / Skyline / Castle Rock (one of)
- 11-Jun Post NM Wed Montebello / Skyline / Castle Rock (one of)
- 13-Jun 1st Q Fri Fisher Middle School public night
- 14-Jun 1st Q Sat FP or Henry Coe lunar observing
- 18-Jun Post 1st Q Wed Montebello / Skyline / Castle Rock (one of)
- 21-Jun Full Moon Sat Many local astronomy clubs meet - go support yours!
- 25-Jun Pre 3rd Q Wed Montebello / Skyline / Castle Rock (one of)
- 28-Jun 3rd Q Sat TAC star party at FP or Henry Coe

San Jose Astronomical Association Membership Form

New ___ Renewal ___

Membership - \$15

Junior (younger than 18 years old) - \$6

Sky and Telescope - add \$27 to membership

(Sky & Tel will not accept multiyear subscriptions)

Make checks payable to "SJAA"

Bring this form to any SJAA Meeting
or send (along with your check) to

Bob Elsberry, Treasurer

San Jose Astronomical Association,

5380 Pebbletree Way

San Jose, CA 95111-1846

Telephone: (408) 281-3559

Name: _____

Address: _____

Phone: _____

e-mail address: _____

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