



# SJAA EPHEMERIS

## Eye on Everything

Lew Kurtz

In the past SJAA distributed to its members a **membership list** with names, addresses and phone numbers. The board would like to do this again. If you do not want your name included in this list, please kindly tell a board member. This list will only go to other SJAA members, and no one else.

At the January Board Meeting Ed Erbeck offered to rejoin the board, and the Board voted him back. Terry Kahl agreed to fill the other empty board seat

The board approved SJAA joining the International Dark Sky Association (IDA). If you would like to know more about the IDA you can check out their web site (I think [www.darksky.org](http://www.darksky.org)). If you are interested in dealing with light pollution issues, let a board member know, and they will put you in contact with other SJAA members so you can effectively organize your efforts and take advantage of the club's IDA membership. If you want to see some pictures showing the light pollution from Soledad prison, go to url: <http://www.rahul.net/resource/fpoa/soledad/>

At the February board meeting, the problem of frequently listing TBA as the general meeting speaker was raised. The board apologizes for this, and the situation is improving. March's speaker will either be Dan Zuras on Group 70, or Dave Sworin on his AAVSO activities. The **swap meet/auction** is April 19 (time to evaluate what you have and what you need now that you've had some time to play with those new astro toys from the holidays). Paul Mortfield will be back in May to talk more on **Astrophotography**. June

continued on page 3, see Eye

## Activities Calendar

### March

- 1 Star party, Fremont Peak. Sun set 6:01 pm, 50% Moon rises 1:00 am. Also Halls Valley Astronomy Group.
- 8 Star parties, Henry Coe and Fremont Peak. Sun set 6:07 pm, no Moon.
- 14 Star party, Houge Park. Sun set 6:14 pm, 42% Moon set 0:38 am.
- 15 Observational Astronomy class, Houge Park. 8 pm.
- 22 General meeting, Houge Park, 8 pm. speaker probably Dan Zuras on Group 70. Board meeting at 6:30 is open to all members.
- 28 Star party, Houge Park. Sun set 6:27 pm, 77% Moon rise 10:59 pm.
- 29 Star party, Fremont Peak. Sun set 6:26 pm, 66% Moon rise 11:54 pm.

### April

- 5 Star parties at Henry Coe and Fremont Peak. Sun set 6:33 pm, no Moon.
- 6 Begin Darkness Squandering Time: at 1 am move clock to 2 am.
- 11 Houge park star party. Sun set 7:40 pm, 26% Moon sets 0:21 am.
- 12 AANC Astronomy Day. SJAA event is last night's Houge star party.
- 19 Bay-Area Swap Meet and Auction, Houge Park, Noon thru evening.
- 26 Astronomy class at Houge Park, 8 pm.

24 hour News and Information:  
SJAA Hotline: 408-559-1221

## Election of Board of Directors

The election of the Board of Directors was held at the General Meeting on February 22, 1997. Directors serve for two-year terms, with four elected in even-numbered years and five elected in odd-numbered years. Elected (or re-elected) to 2-year terms were:

David North (new this year)  
Bob Elsberry  
Jim Van Nuland  
Bill O'Shaughnessy  
Ed Erbeck

The following Directors have one year remaining in their terms:

Jack Zeiders  
Bob Brauer  
Paul Mancuso  
Terry Kahl

Retiring from the Board is Lew Kurtz, who will continue to assist with preparation of the SJAA Ephemeris. The Board thanks Lew for his two years of Board service, and for his ongoing work on the Ephemeris.

Jim Van Nuland, Secretary, SJAA.

## 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

## The Summer Milky Way in DARK skies!

Mark Wagner

### 4th Annual Mount Lassen Volcanic National Park Star Party

This years event is hosted by Ptolemy's Supper Club. <http://www.seds.org/billa/psc/psc.html>

Dates: Thursday July 3 through Sunday July 6 (new Moon on the 4th)

Mt. Lassen is between 4 and 5 hours easy drive from almost anywhere in the Bay Area. The park is California's unknown treasure. It is a place for astronomers and families... small enough to drive though in an hour, uncrowded enough to feel like you've escaped the crush of humanity.

AND..... As noted by original Lassen Star Party member John Kuklewicz...

"It's so clear, it gets noticeably darker when Sagittarius sets...."

Attendees from prior years have first right of refusal for reservations. If you are a returning Lassen participant, your spot is held until April 1. Get your checks in before then!

We have two reserved campsites at the Lost Creek Group Campground. Each campsite holds up to 25 people. Lost Creek is the only reservable campground in the park. It has potable water, picnic tables, fire/bbq pits, chem toilets. If necessary, we may be able to reserve an additional campsite depending on availability.

Lost Creek is a tent only campground.

Other, more scenic campgrounds with better facilities are available on a first-come first-get basis. These include Manzanita Lake campground and Summit Lakes campgrounds. Other less developed campgrounds are Crags and Southwest. All campgrounds except Lost Creek allow RVs and other non-tent options.

There are cabins and motels within 15 miles of Lassen Park. I will provide information upon request, or it will be posted to a web-page.

This year, our group dinner will be held on Friday afternoon, July 4. As

usual, main courses will be provided. Each participating adult will need to bring a side-dish (which will be pre-arranged with our "dinner committee"). Also, to make the dinner more manageable for the organizers (Pat and Mark Wagner), we will assign small tasks to each diner (a group to move picnic tables, another to set tables, another to help cook the main course, etc.). Last year we had BBQ london broil and salmon as the main course, with wine, home-brewed beer, salads, breads and deserts. It is a fun meal each year!

Saturday night will be our "thank you" to the staff at Lassen, for their enthusiastic support and cooperation in making our yearly visits so enjoyable. We will host our annual Public Star Party from 8:30 pm until midnight. This event is simply unbelievable! The staff loves it, and the public gets to enjoy a night of seeing they never forget (we literally have people drive in to Lassen from nearby towns to come to our yearly star party). After a few hours of very appreciative visitors, the evening reverts back to our usual ecstatic Lassen observing sessions.

We have two observing sites:

- 1) Devastated Area at 6,000+ ft. (primary observing area, limited size)
- 2) Bumpass Hell at 8,000+ ft. (secondary observing area, very large)

Equipment must be taken down each night when your observing session is finished.

Devastated Area is about 5 minutes drive from Lost Creek campground, and no more than 15 minutes from any other campground.

Bumpass Hell is about 15 minutes drive from Lost Creek campground.

Both locations are parking lots just off the main park road. Vehicle headlights will hit both areas, but Lassen is not a high traffic area.

FEES: LOST CREEK GROUP CAMPGROUND & DINNER: \$15 per adult

GROUP DINNER ONLY:

\$5 per adult

No charge for children.

We had \$33 left from Lassen '96 which is being applied to this year's

event. If we have excess funds this year, they will be used for Lassen '98.

Since space at Devastated Area is limited, we will need to assign observers to Bumpass Hell (it is a "great" place) once we've reached maximum at Devastated. Observing sites will be assigned when your reservation is confirmed.

IMPORTANT: NO RESERVATION IS CONFIRMED UNTIL YOUR PAYMENT IS RECEIVED!

We cannot "hold" a place for anyone. To reserve your space (for either the group campground and/or observing site), send a check for yourself or your group (per the fees above) to:

Mark Wagner

100 Albert Ct.

Los Gatos, CA 95032

Please place the words "LASSEN 97" in the check's memo space.

I will confirm your reservation and make with you upon receipt of your payment. Dinner arrangements/assignments will be made by June. If you want to help with arrangements, or have some special dish you'd like to bring, let me know.

With your check, please include your:

Name

Address

Telephone number

E-Mail

Looking forward to hearing you under the black skies of Lassen!



## Henry Coe State Park

Jim Van Nuland

After nearly 20 years observing at Henry Coe State Park, two changes are coming. The SJAA March star party will be the last one to be held on the knoll just north of the campground. The site will soon be the Ranger's residence. The present residence is the old Coe Ranch-house, which will eventually become the museum. The present two-room museum will be part of the visitor's center.

SOOO, starting in April, we will observe from the parking lot 1/2 mile before the buildings, 50 feet past the wood sign at the boundary of the park. This is a gently sloping but flat, large area just south of a sharp hairpin turn. Some of you will recall that this was where we observed in the early '70s.

The gate will be kept closed but not locked, so we can let ourselves in and can also keep control of park visitors. There will be times when the lot will also have other people parked in the lot, but Barry promises to rope off part of the site when that happens.

The new site is open to the light of San Jose, so we must learn to shield one's eyes (observing eye?) when walking around. It is also open to passing vehicles, but I doubt it that will be a big problem, probably smaller than the campground lanterns and lights at the visitor's center. Gilroy is a problem in either place. On the plus side, there is an outhouse at the south end of the site, much more convenient than from atop the knoll.

The other big change: \$\$\$s are now needed. The Ranger's boss says that we are to pay the \$5 day-use fee (includes napping at the star party site). If more than 6 people are there, then the \$30 group fee will apply. Money should be deposited in the Iron Ranger at the stop sign.

The old "free because we're putting on a park event" justification is not accepted by the new management, despite Barry's efforts at keeping it free. OTOH, this means that we are no longer doing a public event! So you may feel free to turn away park visitors at your telescope.

## School star parties

Jim Van Nuland

The schoolyard star party program is an ongoing success! January and February saw two star parties, with a couple hundred customers at each one. These were slack months, due to weather prospects; March and April are shaping up to be very busy!

Mar. 4 -- Briarwood Elementary, Santa Clara

Mar.11 -- Castro Middle, Saratoga/Campbell

Mar.12 -- Evergreen Elementary, east San Jose

Mar.14 -- Norwood Creek Elem, east San Jose

Mar.18 -- Lyndale Elementary, east San Jose

Mar.26 -- Randol Elementary, s.e. San Jose

Mar.27 -- Morrell Middle Sch, N. San Jose/Milpitas

Apr.10 -- Independence High, San Jose

Apr.11 -- Bernal Middle School, s.e. San Jose

Apr.14 -- Ocala Middle Sch, east San Jose

If you can help on any of these dates, contact Jim Van Nuland by e-mail at [Jim.Van.Nuland@sjpc.org](mailto:Jim.Van.Nuland@sjpc.org) (best way), or phone 408.371.1307 from 11 am to 10 pm. He'll tell you what else is going on at the school, and give you detailed directions. If you find that you can go to an event, but have not contacted Jim about that specific school, then phone his house before going over, as there can be cancellations!



Eye, continued from page 1

is tentatively planned as an SJAA picnic at Fremont Peak. July will probably be either Dave Sworin or Dan Zuras (whoever does not speak in March). August has someone tentatively planned, but I forget who. September is Slide and Equipment night.

The **Observational Astronomy Class's** March Speaker will be John Gleason talking on beginning astrophotography. Are there and good, knowledgeable people on Lunar and Planetary observing out there? If so, please volunteer yourself for the upcoming Observational Astronomy Class on this subject. Please call Jack Zeiders.

We have a web page again. the url is <http://www.seds.org/billa/sjaa/sjaa.html>. Thanks Bill Arnet!

Astronomy Day is April 12. Anybody interested in helping SJAA with a public program, please call a board member.

Bob Madden, former SJAA board member and Ephemeris editor passed away January 22 after a brief illness. We extend our sincere condolences to his family.

Sorry this issue is late. I'm running two weeks late on this. Also, I hope this issue is readable, (my laser printer just died, and the output from the color printer isn't quite as sharp. I don't know how well this will copy).

This is my last issue as editor of the Ephemeris. Thank you Dave North for taking over the Ephemeris.

Clear Skies!



## COMET COMMENTS

Don Machholz

**Comet Hale-Bopp** is putting on a fine show in the morning sky. Look for numerous jets near the center of the coma and a tail several degrees long. Joining the comet in the sky is a total solar eclipse on March 9 (from Siberia) and a partial lunar eclipse on March 23 (over most of the U S A). Throughout the March the comet's visibility in the evening western sky improves, while in the morning eastern sky the comet gets more difficult to see. As we reach perihelion (April 1) Comet Hale-Bopp will be a bright spectacular comet in the western sky as darkness falls each evening. Get out to see it, and show your friends, you are not likely to see this large a comet for a long, long time.

This year's first three comet discoveries have taken place. **Comet C/1997 A1 (NEAT)** was found by automated equipment in Hawaii on Jan. 10, it will remain faint. **Periodic Comet P/1997 B1 (Kobayashi)** was found on Jan. 30. It was at first believed to be an asteroid, but has been showing cometary features. It orbits the sun every 26 years and always stays fainter than magnitude 16. Finally, **Comet C/1997 C1 (Gehrels)** was found by Tom Gehrels visually with the Spacewatch 36" telescope on Kitt Peak on Feb. 1. The comet was at magnitude 17 when found, but may reach magnitude 10 early next year.

## Ephemerides – Epoch 2000, 0h UTC

## C/1995 O1 (Hale-Bopp)

Date	R.A.	Dec	EL	SkyMag
00 UT 2000				
03-03	21h34.1m	+34°57'	46° M	-0.4
03-08	22h06.8m	+38°40'	46° M	-0.6
03-13	22h45.8m	+41°58'	46° M	-0.9
03-18	23h30.8m	+44°28'	46° M	-1.0
03-23	00h20.2m	+45°46'	45° E	-1.1
03-28	01h10.4m	+45°38'	44° E	-1.2
04-02	01h57.5m	+44°11'	42° E	-1.1
04-07	02h38.9m	+41°43'	41° E	-1.0

## 46P/Wirtanen

Date	R.A.	Dec	EL	SkyMag
00 UT 2000				
03-03	01h40.9m	+07°59'	44° E	10.4
03-08	01h59.2m	+10°32'	44° E	10.4
03-13	02h18.3m	+13°04'	44° E	10.3
03-18	02h38.1m	+15°32'	45° E	10.3
03-23	02h58.6m	+17°55'	45° E	10.3
03-28	03h19.9m	+20°10'	46° E	10.4
04-02	03h41.9m	+22°16'	46° E	10.5
04-07	04h04.5m	+24°10'	47° E	10.6

## 81P/Wild 2

Date	R.A.	Dec	EL	Sky Mag
00 UT 2000				
07h47.1m	+21°37'	132° E	10.2	
07h49.0m	+21°49'	128° E	10.2	
07h52.1m	+21°57'	123° E	10.1	
07h56.3m	+22°00'	119° E	10.1	
08h01.7m	+21°59'	115° E	10.1	
08h08.2m	+21°54'	112° E	10.1	
08h15.6m	+21°43'	109° E	10.1	
08h23.9m	+21°28'	106° E	10.1	

## Orbital Elements – Epoch 2000.0

Object	Hale-Bopp	P/Wirtanen	P/Wild 2
Peri. Date	1997 04 01.135	1997 03 14.143	1997 05 06.62789
Peri. Dist (AU)	0.9141030	1.0637469	1.5826156
Arg/Peri (2000)	130.59083°	356.34322°	041.77000°
Asc. Node (2000)	282.47069°	082.20387°	136.15458°
Incl (2000)	089.42936°	011.72255°	003.24276°
Eccen	0.9950969	0.6567490	0.5402220
Orbital Period (yrs)	~4700 years	5.46 years	6.39 years
Reference	MPC 28052	MPC 27080	MPC 28272
Epoch	1997 03 13	1997 03 13	1997 04 22
Absol. Mag/"n"	-1.5/4.0	9.0/6.0	7.0/6.0

## Celestial Calendar - Mar 1997

Richard Stanton

Lunar Phase	time (pst)	date	rise	trans	set
LQ	01:38	02	01:05	06:21	11:35
NM	17:16	08	06:10	12:05	18:08
FQ	16:07	15	11:05	18:19	00:41
FM	20:46	23	18:11	00:10	05:54
LQ	11:38	31	00:52	06:05	11:19

Mercury	Dist: 1.31 AU			Mag: -2.4	
date	rise	trans	set	RA	Dec
07	06:30	12:09	17:49	23:00.1	-08:29
17	06:34	12:39	18:47	00:10.0	+00:07
27	06:33	13:08	19:45	01:18.6	+09:20

Venus	Dist 1.71 AU				Mag -3.9	
07	06:21	11:57	17:34	22:49.1	-09:01	
17	06:12	12:04	17:56	23:35.5	-04:13	
27	06:03	12:10	18:18	00:21.1	+00:47	

Mars	Dist 0.66 AU				Mag -1.3	
07 18:57	01:15	07:28	12:08.2	+03:15		
17 17:59	00:22	06:39	11:54.2	+04:39		
27 17:01	23:23	05:05	11:39.7	+05:56		

Jupiter	Dist: 5.77 AU				Mag: -2.1	
07 06:23	11:12	16:21	20:25.5	-19:39		
07 04:53	09:57	15:02	20:51.1	-18:07		
17 04:20	09:26	14:33	20:59.5	-17:34		
27 03:46	08:54	14:03	21:07.3	-17:02		

Saturn		Dist: 10.4 AU		Mag: +1.1	
07	07:30	13:36	19:42	00:30.6	-00:55
17	06:53	13:01	19:09	00:35.0	+01:24
27	06:17	12:26	18:35	00:39.6	+01:53

SOL Star Type G2V	Intelligent Life in System ?
07	06:29 12:19 18:09 23:11.5 -05:12
17	06:14 12:16 18:18 23:48.3 -01:16
27	05:59 12:13 18:27 00:24.7 +02:40

Astronomical Twilight	Begin	End
JD 2,450,514	07	05:03 19:35
JD 2,450,524	17	04:48 19:45
JD 2,450,534	27	04:31 19:56

Sidereal Time					
Transit Right	07	00:00	=	10:52	
Ascension at	17	00:00	=	11:32	
Local Midnight	27	00:00	=	12:11	

Darkest Saturday Night:	08-Mar
Sunset	18:10
Twilight End	19:36
Moon Set	18:09
Dawn Begin	05:02



## Astro Ads

(unchanged from February)

**Celestron Pro 9x63 binocular** with case. \$160

Rich Neuschaefer 408-285-0730(day)  
408-446-0975(evening)

Brand new **Celestron C90** spotting scope model 81011 with special coating, 45 degree erect image diagonal, 25mm sma wide angle lens, and a celestron hard case \$250. Also a **20" by 2 1/8"** astronomy pyrex glass mirror blank from Newport Glass \$650  
Loran 408-733-1110

**Celestron Firstscope 60 EQ:** "like-new" condition (less than 3 months old). Recently bought a larger scope. 60 mm equatorial refractor. Includes 20 mm, 12.5 mm, and 2X .96" Barlow lens. Asking \$90.

Mike (w)408-256-0881

**Takahashi FS-102 4 inch F8 APO** (E.D. + Fluorite), stunning images, 6x30 finder, 2.7 inch focuser, superpolaris mount with quartz motor drive & more. Brand New. Save \$1000. Sacrifice for \$2,600.

Edward 209-892-8926(evening)

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Members are encouraged to submit articles for publication in the SJAA Ephemeris. Send articles to Dave North (via e-mail to North SJSU@aol.com (if that does not work send them to lewkurtz@aol.com and I'll forward them). 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

Paul Barton

No.	Scope Description	Borrower	Due Date
1	4.5" Newt/P Mount	<b>available</b>	
2	6" f9 Dob	John Paul De Silva	never returned
3	4" Quantum S/C	Stephen Shoop	01/23/97 note 4
4	60mm refractor	Del Johnson	indefinite
5	60mm refractor	<b>available</b>	
6	8" Celestron S/C	Rudy Norvelle	03/11/97
7	12.5" Dobson	Tim Sanstrom	02/09/97 note 4
8	14" Dobson	<b>available</b>	note 1
9	C-11 Compustar	Paul Barton	note2
15	8" Dobson	<b>available</b>	
16	Solar Scope	Jack Peterson	indefinite note 3
18	8" Newt/P mount	Ram Saxena	02/12/97 note 4
19	6" Newt/Polar mount	Steve Wurzburg	12/03/96 note 4
21	10" Dobson	Ravi Tembhekar	01/23/97 note 4
23	6" Newt/P mount	Mike Bennett	01/06/97 note 4
24	60mm refractor	Sridhar Lakshmikanthan	01/25/97 note 4
26	11" Dobson	Alex Crichton	03/01/97
27	13" Dobson	Bob Bart	01/26/97 note 4
28	13" Dobson	Doug Snyder	02/04/97 note 4
29	C8 Super Polaris	Robert Dannels	02/09/97 note 4
30	7" f/9 Newt/pipe mount	<b>available</b>	

### Notes:

1. Upgraded, easier to assemble
2. Need a regular operator able to go to two or three SJAA star parties per month.
3. Available for special occasions, call.
4. Call In. Report how you are doing. Date extended.

### Waiting List:

Gary Flint #19, 6" Newt/Polar mount

All scopes are available to any SJAA member. Call Mike at 446-0310.

## Officers and Board of Directors

<b>Pres</b> Jack Zeiders	281-0220
<b>VP</b> Ed Erbeck	379-5413
<b>Sec</b> Jim Van Nuland	371-1307
<b>Tres</b> Bob Elsberry	281-3559
<b>Dir</b> Bob Brauer	292-7695
<b>Dir</b> Terry Kahl	629-0563
<b>Dir</b> Paul Mancuso	946-0738
<b>Dir</b> Dave North	297-5257
<b>Dir</b> Bill O'Shaughnessy	984-3985

### Editor

Lew Kurtz 739-7106

### Mentoring Program Chairman

Ed Erbeck 379-5413

## Observational Astronomy Teacher

Jack Zeiders 281-0220

### Observatory Committee

Bob Brauer 292-7695  
David North 297-5257

### School Star Party Chairman

Jim Van Nuland 371-1307

### Telescope Loaner Program

Mike Koop 446-0310



## 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: \_\_\_\_\_

**SAN JOSE ASTRONOMICAL ASSOCIATION  
5380 PEBBLETREE WAY  
SAN JOSE, CA 95111-1846**

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