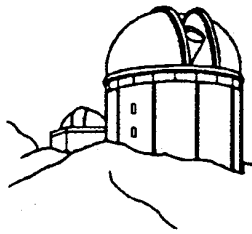

SJAA EPHEMERIS

Show & Tel

Jane Houston

Saturday August 29 was Slide and Equipment night.

Before sundown Akkana Peck set up her 60mm refractor fitted with a solar filter, and the earlybirds watched the sunspots and then sun leaves as it set into the trees! Soon other scopes joined the lineup on the sidewalk in front of Houge Park. Jack Zeiders set up his Solaris and we were able to view the extremely rare red first quarter moon! Thanks Jack!

The action turned indoors for a while.

Chad Moore, ranger at Pinnacles National Monument talked about light pollution issues, and invited SJAA members to bring their scopes on over to his place. The Soledad light dome problem was captured with this quote "You can never escape from Soledad Prison".

On to the Equipment Portion of the meeting...

Dave North demonstrated the set-up of his bargain basement equatorial G-11 Losmandy mount. The good, bad and ugly were discussed, mostly good, and occasional supporting comments were provided by Jay Freeman, who also has one of these. Jay reminded folks that Losmandy regularly offers 30% discounts on it's own pricing.

Bill O'Shaugnessy demonstrated (and offered for sale) his TL Systems equatorial platform.

Jim Van Nuland demonstrated his F/6 8 inch 25 year old "hacksaw" dob - complete with Kevin Medlock vibration feet, his incredible leveling kit, lightweight ladder, and goodwill eyepiece box.

continued on page 5, see **Meeting**

SJAA Activities Calendar

October

2 Houge park star party. Sunset 6:50 pm, 90% moonset 4:27 am.

3 General Meeting at Houge Park, 8 pm. Renowned "meteorite" Peter Jenniskens will speak on observing the Leonids. Open board meeting 6:30 pm.

10 Beginning Astronomy class "CCD Imaging" with Kevin Medlock. Houge Park, 8 pm.

16 Houge Park star party. Sunset 6:29 pm, 5% moonrise 5:37 am.

17 Star parties at Fremont Peak, Coe. Sunset 6:27 pm, no moon.

24 Star party at Fremont Peak. Sunset 6:18 pm, 19% moonset 9:27 pm.

25 Darkness Squandering Time ends. Set clock back, observe another hour.

30 Houge park star party. Sunset 5:12 pm, 78% moonset 2:13 am.

31 Halloween. Set up on driveway. Show Moon next to Jupiter.

September

7 General Meeting at Houge Park, 8 pm. Norm Sperling on "Oxymoronic Astronomy", aimed straight at the funny bone. Open board meeting 6:30 pm.

13 Houge park star party. Sunset 4:59 pm, 21% moonrise 2:33 am.

14 Star party at Fremont Peak, Coe. Sunset 4:57 pm, 14% moonrise 3:26 am.

21 Star party at Fremont Peak. Sunset 4:53 pm, 8% moon sets 7:11 pm.

27 Houge park star party. Sunset 4:51 pm, 8% moon sets 1:03 pm.

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

PLEASE NOTE THAT SJAA INSURANCE COVERS ONLY SJAA MEMBERS AT SJAA SPONSORED EVENTS.

FPOA Starbecue

Jane Houston

Saturday August 22 dawned bright and sunny for my first FPOA Starbecue.

I drove down from Marin County, car loaded to the gills with two of my telescopes, a sleeping bag for later (which was never opened), and 3 dozen additional telescopes ... cookies that is, plus some gingerbread stars, nutmeg spiral galaxies and more moons than can be found in our solar system.

I met my guest Robin Waleski in San Carlos, then we proceeded to Moffet Field to pick up our special guest, Dr. Chris McKay, who was one of the 3 astronomers honored at the Starbecue.

We arrived at the Peak at about 2:00 PM and settled down for some lunch and relaxation. One great thing about the Starbecue is the opportunity to meet and talk to a lot of astronomy folks in the daylight!

Work was being done on the mighty 30 inch Challenger Telescope. I took some great photos of Kevin, Donn, Robert and others atop a ladder squinting down at the 30 inch primary doing a spot of collimating.

In between, we took looks at mighty sol, through the hydrogen alpha filter on a 40 mm Solaris refractor. Rich Neuschaefer took out another little 55 mm F8 fluorite refractor with a solar filter, and we were able to observe the sun in white light too.

The sunspots in white light were magnificent. The prominences and loops and granularity were gorgeous in the Solaris.

continued on page 4, see **Starbecue**

Volume 9 Number 10 Official Publication of the San Jose Astronomical Association, October 1998

The Celestial Tourist Speaks

Jay Freeman

Baffled:

There is an interesting test for adequate baffling, which few telescopes can pass: Set your telescope up outside on a bright, clear day, pointed at the sky (well away from the Sun, of course). Look through the focuser with no eyepiece installed. You should see a sky-colored disc (blue, white, or gray, depending...), possibly crossed by the silhouettes of diagonal or secondary support structures, possibly with a secondary or diagonal mirror in the middle. Within the secondary or diagonal may well be an image of your own eye, staring back at you. But ALL ELSE SHOULD BE PITCH BLACK.

On a decently baffled refractor, it may well be true that all else is pitch black. Cassegrain systems with careful attention to baffling may also meet this criterion, though not necessarily. Many Newtonians are ludicrous -- you may well see green grass, looking through the gap between primary mirror cell and tube. You may see the neighbor's house across the street, if the telescope has a truss tube with no baffle installed. You will very likely see lots of disturbingly bright grazing illumination from the sides of the tube.

Some of these problems can be fixed with careful design and construction, but even so, this simple test will point out baffling failures in many telescopes.

On Small Aperture and Milestones:

Refractor Red (his 55mm Vixen Fluorite) does yeoman duty. It is very portable and easy to set up and take down, so at a recent gathering I kept it set up longer than anybody else, so we could watch the Moon rise -- half hidden by horizon clouds, an interesting combination of the kind of Moon you might associate with Hallowe'en, with the rugged, cratered terrain that we all know.

Then I spotted Saturn just clearing the clouds north of the Moon, and pointed the little telescope at it. My friends were charmed and delighted at the tiny ringed image, lying like a piece of enameled jewelry against the black background of the night sky.

How wonderful that a few tens of diameters magnification in a two-inch refractor can create such enchantment! What fun to introduce newcomers to such delights!

And when I entered my observations for the evening in my logbook, I was bemused to note that I wasn't quite a newcomer myself any more -- that observation of Saturn was the ten thousandth in my current run of logbooks, which I have been keeping since 1978.

And that's kind of fun, because it was a low-magnification view of Saturn in a two-inch refractor that started my own career as an amateur astronomer, long before I started keeping logbooks, when I was an eight year old fascinated with the sky and the things in it.

I wonder if my friends will make it to ten thousand observations, too.

"September" Board Notes

Bill Arnett

Editor's Note: The quotes in the title are because this was the September board meeting, though it took place on August 29. This happens every now and then.

The meeting was called to order 6:35 pm August 291998 at Houge Park.

All directors were present (eventually) except Ed who was excused (Happy Birthday, Ed!); VP Dave North presided.

Jim gave the usual recitation of the upcoming calendar. No surprises.

Mark reported that work on the APD is proceeding apace. It turned out to be more work than anticipated to delete the objectionable entries but Mark is forging ahead anyway.

There was considerable discussion of the club's liability insurance. We get it through the Astronomical League. The total cost for AL membership including insurance is about $1000/year. As it seems unlikely that we can get comparable insurance for that much money elsewhere, the board decided to take no action and continue with the AL.

Despite the fact that no big show is expected we can expect considerable public interest in the Leonids this year. Unfortunately, our meteor expert, Mike Koop, is probably going to be out of town. We need volunteers to be at Fremont Peak and/ or Coe on the night of Monday/ Tuesday November 16/17. If anything is to be seen it will probably be just before dawn. When we have a more definite plan we will publish something on the Web site and perhaps elsewhere so the public can at least get an explanation of why they didn't see anything.

Terry agreed to speak to the Parks Department about the trees at Houge.

Bob will send the financial report separately.

The motion to adjourn passed unanimously at 7:40.

The Shallow Sky

Akkana Peck

The real news is Jupiter and Saturn are both presenting themselves at nearly their best this month, and should be the focus of attention.

Mercury is not visible in October for us, though anyone in Australia who gets the Ephemeris will be able to see it.

Venus is in superior conjunction with the sun on October 30, and will not be visible again until January.

Mars, in Leo, will rise around 2 am and be fairly high by dawn (though no detail will be seen at such a distance). This is just a promise of things to come next year.

Jupiter is prominent in the southeast after sunset (in eastern Aquarius), and will not set until the early morning. For most observers, this will be an ideal month, in that it will be high in the sky (and as free as possible from turbulence) fairly early in the evenings. Prime time! Recently, the Great Red Spot has shown signs of turning red again, so it may be a bit easier to spot for those new to Jupiter observation.

It will make a close approach to the 6.3-magnitude SAO 146652 on the evenings of the 26th & 27th, making it appear to have a fifth moon. Expect a lot of confused reports around then.

Saturn will not be far behind and will be well placed for observing this month (it comes to opposition the 29th). If you haven't seen Saturn since last year, be sure to check it out -- the rings are much more open than they were when the haloed planet disappeared from our evening sky last year, and they make for a beautiful sight in any size telescope. Look for Cassini's division between the outer (A) and inner (B) rings, and the translucent C ("Crepe") ring inside the main B ring. With larger telescopes (8" or larger), see if you can see narrower gaps in the A ring.

Uranus and Neptune are still well placed for observation.

Pluto is getting very close to the sun, and is effectively off the observation list for a while.

Mooning

David North

We begin October well into a lunation, with Copernicus aging and Mare Humorum just coming into its own. Don't forget to do a little rille hunting while you're there.

This month's librations are largely unfavorable for searching out rare features, so we needn't concern ourselves about that. On the other hand, for folks who like to get up early (or stay up really late) the Moon's greatest elevation comes on October 11, when the early third quarter moon is in view. In fact, all the third quarterish views should be very good this month.

Near the Saturday/Sunday midnight on the 3rd Jupiter will be just slightly north of the nearly full moon -- occulted in some Pacific locations (but not us). A similar view will occur on Saturday Oct 31.

Then, early in the morning on Friday the 9th, there will be another occultation of Aldebaran, which I think will be visible for those who stay up late enough.

Overall, the "easy access" moon will be starting to get a little higher in the sky over the next few months (the nadir for first quarter is in September), so your average view will be getting better when the sky is clear. Also, since dark will set in earlier (way earlier after Darkness Squandering Time ends on the 25th) it will be easier to get a casual view of the moon without having to stay up late.

For those who are amused by such facts, the greatest apogee of the year takes place on October 21 (406,669 kilometers).

Meteor Watch

There are two showers to follow this month.

First up are the Draconids, a periodic shower. This radiant produced two brief but spectacular meteor storms in 1933 and 1946.

Detectable activity has only been seen in years when the parent comet, 21P/Giacobini-Zinner, returned to perihelion, which it is expected to do again in November 1998.

Whether or not a storm or high rates will be observed is anybody's guess, but it would be worthwhile to look on the nights of October 8th, 9th and 10th. The fly in the ointment will be a waning gibbous moon a few hours after sunset.

The radiant is near Draco's "Head" and will be circumpolar from many locations. Due to possible strong activity, observe for this shower from sunset to sunrise. Any meteors seen will appear very slow.

Later in the October, the Orionids are the incoming (pre-perihelion) particles from Halley's comet. This shower is active throughout the month and reaches maximum between October 17 and 25th. This year's October New Moon occurs on Oct 20th... smack in the middle, creating a very opportune time to observe.

The highest hourly rates average near 20 but occasionally reach 40. Most Orionid meteors are faint.

Editor's Extras

David North

First, we got a scare when Paul Barton had to be hospitalized with a stroke, but at last report he was on the road to recovery and we hope for the best and a quick return to SJAA events.

Paul was the mainstay of the Loaner Program for many years, and is a tireless helper at star parties locally, distant, and at schools.

You've probably noticed the utter domination of Page One by Jane Houston, one of our newer but definitely more active members.

Some of you may know her from the years of effort she put into the San Francisco scene, including travel partnering with John Dobson all over the globe.

We'd like to think our dynamic club was the major reason for all this activity, but the public announcement of her affair d'amour with another phenomenally active member, Morris Jones (announced via internet) has us suspicious that there were other motives.

SJAA, and astronomical events in general, are threatening to become the romance story of the nineties, and maybe the next millenium.

Be careful out there!

Unfortunately, Jack Zeiders had to miss the September class because of the passing of his father.

Our sympathies are with you, Jack.

This month's class is destined to be a classic: Kevin Medlock will be making a return with his discourse on CCD Astronomy. This is not to be missed under any circumstances!

The Ephemeris will likely be a little late next month due to vacation schedules of our circulation department. Sorry, but that's what you get for free...

Starbecue, continued from Page One

I sketched, so did Pat Donnelly and maybe Ron Toebe, whose gorgeous sketches can be found in Robert Garfinkle's Starhopping book. One of my bibles, that book.

It was a nice and friendly star savvy group next to the observatory. Mojo brought some comfy chairs, strawberries and coffee, and entertained and educated some of the crowd. Down behind Ranger Mike's house, more scopes were set up, including fellow AANC director and FPOA Director Carter Roberts. It was time for the games to begin!

The crowd was enjoying the burgers and hot dogs, and all the pot luck goodies. I brought vegetarian mystery tofu, cheese and tomatoes. And for later, decadent chocolate covered homemade marshmallows. I thought Jody's Texas buttermilk pie was the yummiest thing I ever tasted!

The AANC presented awards to three notable astronomers. Planetary Scientist Dr. Chris McKay, from NASA-Ames Research Center was awarded the Professional Astronomers award. If you haven't heard Chris speak to your group, book him soon - you won't be disappointed.

It was a real treat to spend the afternoon with Chris, and a thrill to show him the majestic planets later in the evening through all those superb telescopes set up outside the observatory. A professional astronomer having a blast with all us amateurs.

The amateur astronomer category was awarded to my frequent observing partner up in Marin County - Steve Overholt. Steve is a tireless promoter of amateur astronomy, spending night after night outside bookstores, off or on sidewalks near grocery stores, and behind cafes, or through Utah's National Parks.

The Commercial Award was given to Tectron Telescopes owners Tom and Jeannie Clark of Sarasota Florida for their collimating tools, and the special award was given to SETI. Seth Shostak was on hand to receive the award on their behalf.

Some other awards were given, including the excellent selection for the Astronomical Gastronomical competition. I think the judges, whoever they were had a hard but sweet time performing their tasks. Modesty prevents me from telling you who won! Hint - m&m side bearings.

Dennis Tye made all the awards for the AANC.

Well darkness was setting in and it was time to set up our scopes. Steve set up down by the picnic tables. His thirty inch 198 pound "Starship" and his new 17.5 inch 58 pound two truss tube scope named "the Owl" were his companions. He had quite a crowd as he drove his little Ford Festiva into the driveway loaded with these two scopes!

The lines at the Challenger 30 incher were long and steady until the wee hours.

Fremont Peak was jam packed with astro folks all having a great time. There were scopes all over Coulter and all over the SW lot too. It was an astro night of nights. I wish I had gone around and counted them.

This was a Starbecue all-star night. Weather and people made it perfect!

I even sat in Mojo's comfy chair with three kids cuddled on my lap and we read about the constellations together as we looked up and found them. Later the two young girls were still sitting in the chair, with my red flashlight reading, looking up, reading, looking up. After a while Mojo took the kids on a stellar journey to Albireo, asking the each to whisper what they saw into his ear. Then the next kid, and the next kid looked and saw what we all love about astronomy, those magnificent views that never cease to thrill and amaze us, even after thousands of viewing sessions. Topaz and turquoise jewels in this case.

By the end of the night, little Elizabeth told me she wasn't old enough to stay up till 11:00, and that her eyes were stinging. I gave her my red flashlight to keep. And two astro books. and they walked down the hill wrapped in blankets and stardust.

Meeting

From Page One

Jane Houston demonstrated her 6 inch Pierre Schwaar body shop cherry red newt, as a great beginner scope.

Jay Freeman brought the incredible Refractor Red, his 55mm lean, mean DSO machine. Jay also entertained the crowd with a Pillar and Claw mounted, um, libation holder, and the newest member of his deep sky observing toolkit, the Walking Binos. No star party should ever be without this marvelous piece of equipment.

Jack Brindle showed his Black Celestron work-in-progress project, a highly sophisticated alt/az goto&tracking telescope mount. A great deal of trouble and innovation is going into the design, and we re all looking forward to next year s report (perhaps it will be done!)

Jack Zeiders assisted a visitor set up and test a vintage Questar, inherited from his father. The Questar is for sale.

Slides were next.

Ernie Piini showed his incredible solar eclipse slide from the recent Caribbean trip. He has designed a blackout filter for the sun which yielded an image more than one attendee described as the best photo they ve seen to get across what it was like to really be there. Beautiful image, Ernie.

Jane Houston showed just a few star/constellation slides, and offered the use of them for an appropriate beginner observing class or for school star parties or other educational programs. The 40 slide set comes with an explanatory booklet, covering important stellar information, constellation mythology and messier objects found within the constellation boundary. An actual photo of the constellation is placed side-by side with a drawing, for easy of identification. Jane also showed some of SF Chronicle Photographer Fred Larson's magnificent moon shots taken at SF landmarks. These are available as greeting cards from Fred. Contact Jane for more information.

The indoor program ended with Terry Kahl's Eclipse video, narrated by Sir Patrick Moore! Personally I liked Griffith Park Observatory's own Dr. E. C. Krupp's wild blowing strands of hair and Elvis sideburns! Too bad we didn't glimpse the bell-bottoms!

Then we all took our star toys outside and enjoyed the moon and Jupiter for a couple hours.

Activities Through Other Clubs

TAC has reserved the Montebello site for every Wednesday, more or less indefinitely (weather permitting). It's a good idea to check TAC's web-page at http://www.rahul.net/resource/TAC/ (mailing list archives) before going. There must be a permit holder present to use the facility. To get there, take Page Mill Road off 280 (or get to it via El Monte Road) until you're near the top. Montebello's sign will be visible on the left.

PAS opens Foothill Observatory for public viewing every clear Friday evening from 8:30 p.m. until 11:00 p.m. PAS operates a 16-inch reflector and a 6-inch refractor. Solar viewing is also held every clear Saturday morning from 10:00 a.m. until noon with a very nice filter setup. Both of these programs are outstanding, and all SJAA members are encouraged to check them out.

October

9 PAS General Meeting 7:30 pm at Foothill College

14 PAS Board Meeting 7:30 pm Foothill College Observatory

November

13 PAS General Meeting 7:30 pm at Foothill College

18 PAS Board Meeting 7:30 pm Foothill College Observatory

Celestial Calendar

Richard Stanton

Lunar Phase	time (pdt*)	date	rise	trans	set
FM	13:12	05	19:07	00:34	06:48
LQ	04:11	12	23:57	07:11	14:24
NM	03:09	20	07:28	13:17	19:00
FQ	03:46	28	13:19	18:39	00:04

*Note: Pacific Daylight Time ends 10/25

Mercury	Dist: 1.36 AU				Mag: +1.4
date	rise	trans	set	RA	Dec
07	07:51	13:29	19:05	13:22.7	-08:25
17	08:32	13:48	19:02	14:21.5	-15:02
27	08:09	13:06	18:02	15:19.2	-20:20

Venus		Dist 1.71 AU			Mag 3.9
07	06:38	12:36	18:34	12:31.2	-01:51
17	07:01	12:43	18:25	13:17.3	-06:49
27	06:23	11:51	17:17	14:04.5	-11:34

Mars		Dist 2.14 AU			Mag +1.2
07	03:29	10:14	16:58	10:09.8	+12:46
17	03:20	09:58	16:35	10:33.1	+10:38
27	02:11	08:41	15:11	10:55.8	+08:25

Jupiter		Dist: 4.1 AU			Mag: -2.8
07	17:41	23:28	05:19	23:27.2	-05:13
17	16:59	22:45	04:35	23:23.5	-05:35
27	15:18	21:03	02:52	23:20.8	-05:51

Saturn		Dist: 8.29 AU			Mag: +0.6
07	19:29	02:05	08:38	02:01.1	+09:24
17	18:47	01:23	07:55	01:58.2	+09:07
27	17:06	23:37	06:12	01:55.2	+08:51

SOL Type G2V Intelligent Life in System ?

Hours of Darkness:

07	07:08	12:55	18:43	12:50.9	-05:27
17	07:17	12:53	18:28	13:27.8	-09:12
27	06:27	11:52	17:16	14:05.9	-12:45

Astronomical Twilight		Begin	End
JD 2,451,093	07	05:41	20:09
103	17	05:51	19:55
113	27	05:00	18:43

Sidreal Time	Ascension at Local Midnight
07	00:00=23:55
17	00:00=00:34
27	00:00=02:14

Darkest Saturday Night:	17 Oct
Sunset	18:28
Twilight End	19:55
Moon Set	17:30
Dawn Begin	05:51
Hours Dark	09:56

Comet Comments

Don Machholz

Periodic Comet Giacobini-Zinner continues to brighten in the evening sky, while the fainter Comets Meunier-Dupouy and LINEAR linger nearby. Meanwhile two new comets have been discovered, one remains bright.

On August 10 Peter Williams of Australia visually discovered a new comet near the south polar region. He was using a 12" reflector (f/6) at 72 power for the find. Williams was not comet hunting, but instead was examining the variable star EK TrA. He then started sweeping northward to another variable star when he spotted the comet. Comet Williams has a retrograde orbit that places it near the far side of the sun when at perihelion (Oct. 18). Northern Hemisphere observers will have their first chance to observe it in December when the comet will be visible in the southern morning sky at magnitude nine.

The LINEAR project found a new comet on August 24. C/1998 Q1 is quite small and will remain faint.

A study of Periodic Comet Tempel 1 by the Hubble Space Telescope indicates that its elongated nucleus measures about 6 by 4 miles in diameter. The observations were conducted in late 1997 when the comet was about 400 million miles from the earth. It is assumed that the nucleus reflects only 4% of the light striking it.

COMET HUNTING NOTES: Williams' comet discovery on August 10 brings the total number of Australian visual comet discoverers to five, this is now half the number of Americans (10) who have visually found comets since 1975. There are only two other Southern Hemisphere comet discoverers: Austin of New Zealand and Campos of South Africa. All 24 comets found by these seven men were discovered south of the celestial equator, 23 being found by only one discoverer.

Peter Williams is the first person to qualify for the Edgar Wilson Award: a cash sum of about $20,000 to be divided up among all the amateurs who discover comets before June 11, 1999.

Ephemerides -- Epoch 2000, 0h UTC

C/1997 J2 (Meunier-Dupouy)

Date	R.A.	Dec	EL	Sky	Mag
10-04	21h00.1m	-05°03'	125°	E	12.0
10-09	20h58.9m	-06°34'	119°	E	12.1
10-14	20h58.2m	-07°58'	114°	E	12.2
10-19	20h58.0m	-09°15'	109°	E	12.3
10-24	20h58.3m	-10°26'	104°	E	12.4
10-29	20h59.0m	-11°30'	98°	E	12.5
11-03	21h00.1m	-12°29'	94°	E	12.6
11-08	21h01.7m	-13°22'	89°	E	12.7

21P/Giacobini-Zinner

Date	R.A.	Dec	EL	Sky	Mag
10-04	17h28.1m	+08°42'	73°	E	10.5
10-09	17h41.1m	+06°44'	72°	E	10.3
10-14	17h55.4m	+04°40'	71°	E	10.0
10-19	18h11.0m	+02°28'	70°	E	9.8
10-24	18h27.8m	+00°11'	69°	E	9.6
10-29	18h46.3m	-02°13'	69°	E	9.4
11-03	19h06.1m	-04°43'	68°	E	9.2
11-08	19h27.4m	-07°16'	68°	E	9.1

C/1998 P1 (Williams)

Date	R.A.	Dec	EL	Sky	Mag
10-04	13h31.3m	-30°44'	29°	E	8.6
10-09	13h30.5m	-29°24'	25°	E	8.6
10-14	13h29.7m	-28°10'	20°	E	8.6
10-19	13h29.0m	-27°00'	17°	M	8.7
10-24	13h28.4m	-25°53'	15°	M	8.7
10-29	13h27.7m	-24°48'	16°	M	8.8
11-03	13h26.9m	-23°44'	18°	M	8.8
11-08	13h26.1m	-22°40'	21°	M	8.9

C/1998 M5 (Linear)

Date	R.A.	Dec	EL	Sky	Mag
10-04	19h33.5m	+39°32'	103°	E	10.3
10-09	19h23.2m	+39°01'	99°	E	10.3
10-14	19h14.5m	+38°29'	95°	E	10.2
10-19	19h07.1m	+37°56'	91°	E	10.2
10-24	19h01.0m	+37°26'	87°	E	10.1
10-29	18h56.1m	+36°59'	83°	E	10.1
11-03	18h52.3m	+36°36'	80°	E	10.0
11-08	18h49.4m	+36°19'	77°	E	10.0

Orbital Elements -- Epoch 2000.0

Object:	Giacobini-Zinner	Meunier Dupouy	Williams	LINEAR
Peri. Date:	199811 21.32107	1998 03 10.4365	1998 10 17.836	1999 01 24.2786
Peri. Dist (AU):	1.0337095 AU	3.051015 AU	1.14678 AU	1.745425 AU
Arg/Peri (2000):	172.54569 degrees	122.6755 degrees	294.466 degrees	101.1088 degrees
Asc. Node (2000):	195.39930 degrees	148.8429 degrees	156.376 degrees.	333.4049 degrees
Incl (2000):	031.85856 degrees	091.2731 degrees	145.729 degrees	082.2683 degrees
Eccen:	0.7064344	1.000760	1.0	1.0
Orbital Period:	6.61 years	Long Period	Long Period?	Long Period?
Ref:	NK 629	MPC 30738	MPEC 1998-Q10	MPC 32169
Epoch:	1998 11 21	1998 03 08	1998 10 17	1999 01 24
Absol. Mag/"n":	9.0/6.0	4.0/4.0	6.5/4.0	5.5/4.0

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Telescope Loaner Program

Mike Koop 446-0310

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Submit

Members are encouraged to submit articles for publication in the SJAA Ephemeris. Send articles to Dave North (via e-mail to Timocharis @aol.com).

Finding Fremont Peak

Fremont Peak State Park is south of the village of San Juan Bautista.

From Hwy.101, about 11 miles south of Gilroy, take the eastbound Hwy.156 exit. Run for 3.0 miles, to a traffic light, and turn right onto county Hwy.G-1. Take the second left, then a quick right to stay on the road! Follow G-1 for 12 miles into the park. Be careful to note the "left/right jog" about 1/4 mile after the turn; signs are posted. The park charges a $3 entrance fee.

Telescope Loaner Program Status

Mike Koop

Available to any SJAA member; contact Mike Koop at (408) 473-6315 .

Current Scope Loans

These are scopes that have been recently loaned out. If you are interested in borrowing one of these scopes, you will be placed on the waiting list till the scope becomes available after the due date.

#	Scope Description	Borrower	Due Date	Note
3	"4"" Quantum S/C"	Eric Anderson	10/31/98	
6	"8"" Celestron S/C"	Bud Wittlin	11/28/98	
7	"12.5"" Dobson"	Morris Jones	10/18/98	
15	"8"" Dobson"	Robert D. Hogan	11/14/98	
16	Solar Scope	Nick Tucci	11/1/98	
19	"6"" Newt/P Mount"	Ran Talbott	10/31/98	
26	"11"" Dobson"	Raymond Brinson	10/11/98	
27	"13"" Dobson"	George Cooper	11/16/98	
28	"13"" Dobson"	Mark Stalions	8/3/98	
29	"C8 Astrophotography"	Alexander Koczur	12/1/98	

Extended Scope Loans

These are scopes that have had their loan period extended. If you are interested in borrowing one of these scopes, we will contact the current borrower and try to work out a reasonable transfer time for both parties.

#	Scope Description	Borrower	Due Date	Note
2	6" f9 Dob"	John Paul De Silva	?	
4	60mm Refractor	Del Johnson	Indefinite	
8	14" Dobson"	Ralph Seguin	9/23/98	
9	C-11 Compustar	Paul Barton	Indefinite	
18	8" Newt/ P Mount	Cecelia Yarnell	9/18/98	
21	10" Dobson	Ann Hastings	10/3/98	

Stored Scopes

These scopes are available for immediate loan, stored at other SJAA members homes. If you are interested in borrowing one, please contact Mike Koop at (408) 473-6315 for a scope pickup at any listed SJAA events.

#	Scope Description	Stored At
1	4.5" Newt/ P Mount	Mark Cousins
23	6" Newt/ P Mount	Alexander Koczur
24	60mm Refractor	Akkana Peck
30	7" f/9 Newt/Pipe Mount	David Manley
31	8" f/8 Dobson	Mark Taylor

Waiting List

29 "C8 for Astrophotography" (Alexander Koczur)
A Large Dob (George Cooper)

Do you have some space to store a scope or two? Please call Mike Koop at 446-0310.

Periodical Publication Statement

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San Jose Astronomical Association
5380 Pebbletree Way

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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
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San Jose Astronomical Association,
5380 Pebbletree Way
San Jose, CA 95111-1846
Telephone: (408) 226-4483

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