



# SJAA EPHEMERIS

## MOONSTUFF

*This month is, as you may know by now, the prime month for viewing the first quarter Moon. It will be highest in the sky that it gets all year; so it shouldn't be missed. With that in mind, we have a few Moon stories to pass along...*

**Jay Freeman:**

I am not much of a Looney — er, make that “I am not much of a Lunar observer” — but I remember one Friday evening at Chabot Observatory some twenty years ago. I was there for the telescope makers’ workshop, but the planetarium show had gotten out, and Rachel, the 20-inch Brashear refractor, was put to use showing folks the Moon. I wandered over to stare at the guests.

The 20 is a magnificent classic refractor, and Chabot is much in the style of observatories of yesteryear. I could half close my eyes and imagine Edwardian or Victorian times, as well-dressed couples waited in line for a view through the Great Refractor, or stood on the balconies looking at the stars in each other’s eyes. And the learned astronomer is lecturing sagaciously.

“The dark portions of the Moon, that appear flat, are called the Maria. They are believed to be made primarily of basaltic rock. And the higher, more mountainous terrain, such as you see at the top of the eyepiece field, is believed to be made of athornos..., er, anorthon... er...”

“Drat!” he exclaims with frustration. “Who’s got the Moon rocks?” Someone rummaged in a drawer, and the Edwardian fantasy crumbles suddenly to dust and blows away — far, far, away. For Chabot, in its capacity as an educational institution, has taken loan of a hand-size slab of half-inch-thick Lucite, embedded in which are a dozen or so tiny pinches of dust, brought back by the Apollo missions, from the same alien world that we now view through the telescope.



See Moonstuff, p. 2

## MARCH

- 6 Houge park star party. Sunset 6:07 pm, 69% moon sets 2:57 am.
- 7 Beginning Astronomy class “Telescope Types and Mounts” at Houge Park, 8 pm
- 14 General Meeting at Houge Park, 8 pm, Speaker Don Machholz will discuss the Messier Marathon, which is ideally done later in the month. Open board meeting 6:30 pm.
- 20 Houge park star party. 6:20 pm, 52% moonrise 1:19 am.
- 21 Star party at Fremont Peak. Sunset 6:19 pm, 41% moonrise 2:08 am.
- 28 Star party at Fremont Peak, Coe. Sunset 6:25 pm, 2% moon sets 7:26 pm.

## APRIL

- 3 Houge park star party. Sunset 6:32 pm, 53% moonset 1:42 am.
- 4 General Meeting at Houge Park, 12 noon, Swap/Auction.
- 5 Darkness squandering time begins 2 am. Set clock forward.
- 11 Astronomy class at Houge Park, 8 pm. Subject: Star charts.
- 17 Houge Park star party. Sunset 7:45 pm, 66% moon rises 1:05 am.
- 18 Star party at Fremont Peak. Sunset 7:43 pm, 55% moon rises 1:52 am.
- 25 Star parties at Fremont Peak, Coe. Sunset 7:50 pm, no moon.

*Please note that SJAA insurance only covers SJAA members at SJAA sponsored events.*

**24 hour News and Information:**

SJAA Hotline: (408) 559-1221

Web Address: [http://](http://www.seds.org/billa/sjaa/sjaa.html)

[www.seds.org/billa/sjaa/sjaa.html](http://www.seds.org/billa/sjaa/sjaa.html)

## MESSIER MARATHON

### STORIES

*In the spirit of the major deep sky observing event of the month, the Messier Marathon, and the speaker and SJAA member who made this into a tradition, Don Machholz, we're presenting a series of Messier Marathon anecdotes...*

**Jim Van Nuland:**

Years ago, we did a marathon from a site near Mt. Umunhum. There was a small moon in the sky, and I wasn't marathoning very seriously, but was doing lunar occultation timings.

As an event approached, I turned on the radio with WWV. A voice in the dark said: “There goes that song again!” Second voice: “I dunno how that station stays in business, playing one dumb tune all the time.” Third voice: “Well — I hear they get a lot of requests for it!”

**Jack Zeiders:**

Many years ago, before the first comet Machholz, there was a Messier marathon up at his comet hunting site at Loma Prieta. I was one of the early arrivals and selected a spot near the northern end of that particular wide spot in the road. Bob Fingerhut set up his C-8 near my old 10" f/5 homebrew fork mounted Newt.

It was a cold March and observing started soon after dusk. I was using Don's suggested observing order and making great progress. After midnight it started to get real cold and damp, Bob's corrector plate was frosting over and he could not see anything through his scope.

I was taking a break and warming up with a propane catalytic heater in my van when he came over complaining about having to give up having been unable to clear it. The heater offered a good chance to warm



See Messier, p.3

**Moonstuff**, from p. 1

"Anorthosite!" he continues triumphantly, reading the label for one pinch of dust.

"That's it — anorthosite! This stuff" — he pointed at the Lucite — "came from up there." — back to the eyepiece field. "And this came from over there, and this from way off in the corner, and..." He gestured enthusiastically, pointing first at the plastic, then into the distant heavens, then back to the palm of his hand.

I walk away, laughing at the discontinuity between the style and mannerisms of nineteenth-century science and the reality of twentieth-century space exploration, and thinking about the odd and false world view that astronomy sometimes engenders. People somehow seem to think that up there is up there, and down here is down here, and never the twain shall meet.

It ain't so. It never was.

**Jim Van Nuland:**

Back in high school in a small town in Wisconsin, a buddy and I would look at the Moon with our spyglasses. When I tried it on a street corner, it was met with outright hostility on the part of some of the local bigots. They considered it wieceerrrd! I get a whole lot better results now, with my public astronomy.

**Don Machholtz:**

In the summer of 1994 I borrowed my dad's videocamera and used it to tape the moon through my 6" reflector. I placed the camera on a tripod and pointed it through the low power eyepiece with the clock drive off. A slice of the moon drifted across the field, and then I reset the telescope and camera to get an adjacent slice further north. By doing this each night I produced an almanac for the moon. Camera settings: Auto-focus turned off and set at infinity, zoom near 1x, the automatic exposure took care of itself.

**The Editor:**

Late at Fremont Peak one sparsely attended shortish darksky night, I ended up behind the Ranger's house with my 4.5-inch, surrounded by new telescope owners. It was fun listening to them compare views of "the usual suspects" (Messier objects mostly) and struggle through finding them for the first time, and the oohs and ahs of seeing things through their very own scopes. With my modest little toy, I posed no threat...

Suddenly a bright glow started taking shape on the eastern horizon around 12:30 am or so (I had actually been sorta looking forward to it)... and after a few minutes, our intrepid beginners noticed it — and for a few precious moments, had no idea what this strange phenomenon could be. Of course, being in "dark sky" mode, they had simply forgot the Moon existed, and would be coming up. Once they realized it (hushed tone: "it's the Moon!") the embarrassment was palpable.

I didn't say a word during their moments of trial and doubt, nor afterward.

I hate to admit it, but it's just the kind of mistake we can all make now and then (anyone else ever gone into shock after a long rainy period when the whole sky has changed since you last saw it? Sometimes I get lost...)



## **NEW DIRECTORS ELECTED**

The four open slots on the Board of Directors were filled Saturday night, February 7, by the four candidates previously announced: Terry Kahl (running for reelection), Bill Arnett (our web page master), Mike Koop (who runs the loaner program now that Paul Barton is assisting rather than running it himself) and Mark Taylor. There were no nominations from the floor, so they were elected unanimously by acclamation with no dissent. Ballots had been prepared, but as it turns out, they were not needed. We expect Ed Erbeck will use the backs of them to scribble notes on by his telephone.

Paul Mancuso and Bob Brauer, after distinguished service, left office.

This means the new officers will be elected by the board as the first order of business next month. Departing President Jack Zeiders will preside over the vote as his last action before retirement. All three are to be congratulated and thanked for their contributions to the club in difficult times.

## **THE SHALLOW SKY**

**David North**

It's showtime for the Moon: the first half of the lunation, centering around the first quarter, is at its peak. Even moderately good seeing nights will yield remarkably good views. Don't miss it.

The Moon reaches its greatest northern declination (+19°) on March 6, the day after first quarter Moon. Curiously, this is also its day of greatest eastern libration, so it will be a very good opportunity to view the eastern Maria. It should also be an amazingly good night to hunt the rills in the area of Mare Vaporum (near the center of the disk). Unfortunately, the librations at the full Moon offer nothing special, but it is always worth a glance to see what edge-on craters are near the terminator.

The Moon will be near Saturn on the first, for a bit of an aesthetic view, and there will be a slight southern penumbral eclipse on the 13th starting at about 8:20 pm.

For an idea of where to look, and if you have web access, check out Akkana Peck's excellent Hitchhiker's Guide To The Moon at <http://www.best.com/~akkana/moon/hitchhiker.html>.

On the 19th, Mercury will be at its greatest elongation (furthest from the Sun) in the evening sky. This will be one of the best chances you'll ever get to sight this planet, as it will be higher than usual. It will also be very near Saturn for the next few days, making for quite a view. As a bonus, it will also be close to Mars on the fifth.

Saturn and Mars, alas, are not really good hunting objects any more, being too low in the sky at sunset. Though they can be seen, there's little chance of getting detailed telescopic views. Jupiter is low in the dawn sky; nothing to see, really. Better luck later this year!

Venus is approaching greatest elongation in the morning, so if you get up early, you'll see it bright in the east.

The Sun has been amazing lately, so break out your solar filters. I got one view of filamentary faculae recently that was about the best I can remember. And, of course, on the 20th the Sun crosses the equator and spring begins... Again, you might consider attending a PAS Solar Observation sessions 10-12am Saturday mornings at Foothill College. Our own SJAA solar scope is also coming back into commission.

Messier, from p. 1

his hands before starting to tear down. We decided to try using it to clear his scope.

Placing the heater beneath the scope with it turned corrector down to allow the warmed air to flow over it, it soon cleared and he was back in business. The corrector stayed clear for about an hour then we had to fire up the heater and repeat the process. This continued about once an hour through the remainder of the morning until the brightening dawn ended our efforts.

The hillside directly to my West had blocked some sky in the evening and I missed a couple in the dawn's glare and ended up with 101, Gerry Rattley and Don Machholtz got all available as I recall.

**Mark Wagner:**

Several years ago, I was at Fremont Peak on the night of the Messier Marathon. I had set up along Coulter Row with (appropriately) my 10.1" Coulter f/4.5 Odyssey. I was new to amateur astronomy, relatively speaking, having done most of my observing from the driveway of my home in Los Gatos. I had been to Fremont Peak a handful of times, and was by no means "comfortable" with the location, and a bit wary of being out in the big outdoors all night atop a lonely mountaintop, where all the world's dangerous criminals undoubtedly go looking for potential victims. The sounds and feel of the unfamiliar location were, at that time, daunting, whereas now the place feels like my second home. I was having a wonderful night, cruising along through the bright objects Charles had logged as non-comets. I got through Virgo, and finally had an opportunity to sit down and rest a bit.... after the early "sprint" to get those objects that dropped below the western horizon, and then keeping up with the turn of the sky. I reclined my beach chair and sat back, looking at the naked eye splendor of the darkness of Fremont Peak in the early 90's. Suddenly, I became aware that I was groggily awakening. I was thoroughly disoriented, not realizing at first where I was.... looking frantically to the left and right. I was ALONE! How could I sleep in a chair on a lonely mountain road, exposed to wild animals and worse! I must have looked frantic, when I noticed across the road, directly in front of me, Rich Neuschaefer, sitting on his ladder, chuckling to himself at my reaction. I have learned not to sit down

in a comfortable chair on Messier night. As a result, subsequent Messier Marathons have been less traumatic.

**Jay Freeman:**

As for Messier marathon stories — well, there's a problem. I have been through the Messier list eighteen times, with apertures from 50 mm to 356 mm, but I have never done a Messier marathon, or tried to. Perhaps that's a Messier marathon story in itself...



## ORONTIUS SUNRISE

**Bill Arnett**

Jan 4 I set up my 12" LX200 and had a nice long look at the Moon. I have a Ziess/AstroPhysics/Baader binoviewer which makes observing the Moon an almost aeronautical experience. With a pair of 19mm Panoptics you really do feel like one of the Apollo astronauts flying over that cold and barren but oh so beautiful landscape.

With some difficulty I drew my attention away from the Mare Imbrium area and scanned down the terminator to see if I could find a "sunrise ray". And sure enough, there was one shining along the NW rim of Orontius (see Rukl chart 65). After a while it started to illuminate the rim of the little crater Orontius D. At one point it looked to me just like a connecting rod with a big bearing and no piston just hanging there in space.

Last night (with my little Pronto) I had my first real look at Rima Hyginus and Rima Ariadaeus. But I got a little confused because not enough of it was visible. And I looked for Rima Boscovich with no success. Today (with the bigger scope and more favorable illumination) they were all easy. Boscovich was dramatically so; last night it just wasn't there despite some hard looking; tonight it was totally obvious. And tonight I also got my first look at Rima Triesnecker. Wow! I think I could spend a whole night tracing out all those fine little lines.

I'm slowly learning my selenography. But it is hard to study when just gawking is so much fun.

## THE CELESTIAL TOURIST SPEAKS

**Jay Freeman**

On John Glenn:

I don't begrudge Glenn a second ride. After all, he has certainly paid his dues. It was rather a gutsy thing to ride an Atlas into orbit, in a spacecraft not much more bulky than a big Dobson...

On Drug Store Scopes:

Many simple refractors sold in drug stores and department stores do not have achromatic objectives.

These models are inadequate even as toys; parents should be warned away from them. One should expect to see some words such as "achromatic objective" on the box, or should look through a set-up version of the telescope and not see exotic colored fringes around distant objects.

I expect that a child given one of these would be very disappointed.

On The Brightness Of The Sun At Pluto:

One source I have gives the visual magnitude of the Sun as -26.8, and of the full Moon as -12.7. Thus the Sun, seen from Earth, is 14.1 magnitudes brighter than the full Moon. Since five stellar magnitudes is a factor of 100, that makes the Sun some 437,000 times as bright as the full Moon. So to bring its brightness down to full-Moon-equivalent, one would have to be at a distance of square-root (437000) times as far from the Sun, as the Earth is, or 661 times as far away.

Pluto's rather lopsided orbit averages only about 40 times the Earth's distance from the Sun. At that distance, the Sun is still 270 times as bright as the full Moon.

Finding M1 (A Perennial Beginner's Problem):

I have seen M1 in a 10x50 binocular from a suburban location (Palo Alto, California). I have also seen it, in a variety of different locations, with 10x70 and 11x80 binoculars, and with refractors of apertures of 50, 60, 63, 75, and 80 millimeters, as well as with diverse larger instruments, most often observing from Fremont Peak, California (between Salinas and San Juan Bautista).

I expect that with any binocular or telescope 50 mm or larger, in similar sky conditions, M1 would be visible. It is by no means either the faintest Messier object, or the one with lowest surface brightness.

## JANUARY BOARD NOTES

### Bill Arnett

This month's meeting of the SJAA board of directors was called to order at 6:40. All in all it was pretty boring, but that's better than a acrimonious.

Jim's recital of the upcoming calendar events was mercifully shorter than usual.

The only really official act was to vote \$400 for prepaid postage for mailing the Ephemeris. This won't save money, just a bit of trouble for those that manage the mailing.

Mike Koop <koopm@best.com> suggested that an "owners handbook" for the loaner scopes (perhaps in the form of a WWW page that could be printed) would be a good idea. All agreed but no good material is immediately at hand. If you have suggestions, contact Mike or me.

There was also a discussion of the proper policy for loaning out the club's solar scope. Obviously, there is a potential for serious injury if it is not used correctly. Several ideas were floated ranging from "just warn the user about the dangers" to "make the user sign a release of liability". No specific action was taken, however. For now it is in Mike Koop's capable hands.

Some concern was raised that the club's observatory fund is not properly invested. If I heard correctly, it is in a regular passbook savings account. The board members agreed to investigate potentially superior investment vehicles and report back next month.

Rich Neuschaefer suggested that we might have a fund raiser to collect money to enhance the club's equipment (e.g. a G-11 mount for the club's C-11). Obviously, more money would be good but no specific goal was set. Rich will investigate the matter further.

Next month is the annual meeting and election. After the election there may be a show of astronomy software if enough folks can be convinced to bring in their laptops. Contact JVN if you can help.

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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](mailto:Timocharis@aol.com). Articles received by the tenth will be put in the following month's newsletter. Please include your name and phone number.



### 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  
San Jose, California 95111-1846

## PROJECT ASTRO IN 1998-99

*Few of us know that Project Astro is what Bob Ashford was doing on his own. When Andy Fraknoi got wind of it, he made a formal program out of it, got some funding, and started publicizing it. It lives on after Bob is gone, in many places far from San Jose.—Jim Van Nuland*

The Astronomical Society of the Pacific is seeking amateur and professional astronomers and advanced astronomy students to participate in Project ASTRO, an innovative program that matches amateur and professional astronomers with 4th-9th grade teachers in Bay Area schools and community centers.

Project ASTRO helps astronomers form an ongoing partnership with a teacher. Astronomers with an interest in education and some experience working with children or teens or presenting astronomy to the public are encouraged to apply. Astronomers attend a two-day summer training workshop with their partner teacher, receive a wide variety of activities and resource materials, work together to plan school year activities and programs and commit to make at least four daytime visits during the school year.

During the school year, visiting astronomers (depending on their interests) can help to lead hands-on activities, serve as a resource for teachers, organize evening observing sessions, create a school astronomy club, present auditorium programs, arrange field trips, or assist with science fair projects. The project's emphasis is on a hands-on, inquiry-based approach that research has shown is most effective in helping students learn the process of science.

The 1998-99 training workshop is scheduled for Friday, August 14 through Saturday, August 15, 1998 at the San Mateo County Office of Education, Redwood City. Participating astronomers are required to attend all or most of the workshop. Visits will begin in fall 1998.

The first application deadline (for preferred placement) is April 11, although applications will be accepted after this date. To request an application call (415)337-1100 ext. 101 or e-mail [astro@aspsky.org](mailto:astro@aspsky.org). For more information contact Nicole Taddone, Bay Area Coordinator, at the Astronomical Society of the Pacific: (415) 337-1100 ext. 101 or check out our web site at [www.aspsky.org](http://www.aspsky.org).

Project ASTRO is funded by the National Science Foundation.

## COMET COMMENTS

Don Machholz

Only a couple of comets remain in our sky this month. Comet Hale-Bopp fades in our southern sky. Comet Meunier-Dupouy travels through our morning northern sky. The only new finds this past month was by the SOHO satellite, which monitors the solar vicinity. It discovered four more comets, it has now found forty in less than two years. Like most of the others, these four comets disappeared after going behind the sun.

COMET HUNTING NOTES: Forty-eight of the last 100 visual comet discoveries were made by amateurs using reflectors. They range in size from 4" to 19.5". The most popular size (16" aperture) was used in 16 finds. They were also efficient, averaging 231 hours per find compared with 391 hours for all visual comet discoveries. All five accidental comet discoveries (Berger, Milon, Hale, Bopp and Tillbrook) were made with reflector telescopes

### Ephemerides

#### C/1995 O1 (Hale-Bopp)

Date	R.A. (2000)	Dec.	El.	Sky	Mag.
02-11	05h03.3m	-60°33'	88°	E	8.5
02-16	04h59.8m	-59°45'	87°	E	8.6
02-21	04h57.3m	-58°57'	86°	E	8.7
02-26	04h55.6m	-58°08'	85°	E	8.8
03-03	04h54.7m	-57°20'	84°	E	8.9
03-08	04h54.6m	-56°33'	83°	E	9.0
03-13	04h55.1m	-55°48'	82°	E	9.0
03-18	04h56.2m	-55°04'	82°	E	9.1
03-23	04h57.8m	-54°22'	81°	E	9.2
03-28	04h59.9m	-53°43'	80°	E	9.3
04-02	05h02.4m	-53°06'	79°	E	9.3
04-07	05h05.3m	-52°32'	78°	E	9.4

#### C/1997 J2 (Meunier-Dupouy)

Date	R.A. (2000)	Dec.	El.	Sky	Mag.
02-11	20h43.9m	+34°38'	50°	M	11.6
02-16	20h52.3m	+34°08'	49°	M	11.6
02-21	21h00.3m	+33°41'	48°	M	11.6
02-26	21h08.1m	+33°17'	47°	M	11.7
03-03	21h15.5m	+32°56'	46°	M	11.7
03-08	21h22.7m	+32°37'	46°	M	11.7
03-13	21h29.5m	+32°21'	46°	M	11.7
03-18	21h36.0m	+32°07'	46°	M	11.7
03-23	21h42.2m	+31°54'	46°	M	11.7
03-28	21h48.0m	+31°44'	47°	M	11.7
04-02	21h53.6m	+31°35'	48°	M	11.7
04-07	21h58.8m	+31°27'	50°	M	11.7

### Orbital Elements

Object:	Hale-Bopp	Meunier-Dupouy
Peri. Date:	1997 04 01.1347	1998 03 10.4365
Peri. Dist (AU):	0.914008 AU	3.051015 AU
Arg/Peri (2000):	130.5787 deg.	122.6755 deg.
Asc. Node (2000):	282.4653 deg.	148.8429 deg.
Incl (2000):	089.4268 deg.	091.2731 deg.
Eccen:	0.995085	1.000760
Orbital Period:	~2500 years	Long Period
Ref:	MPC 30738	MPC 30738
Epoch:	1997 12018	1998 03 08
Absol. Mag <sup>pn</sup> :	-1.0/4.0	4.0/4.0

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CC234XT 01-07-98 Don Machholz (530) 346-8963

## CELESTIAL CALENDAR MARCH 1998

Richard Stanton

Lunar	Phases	Time	Date	Rise	Trans	Set
	FQ	00:41	05	11:40	18:52	01:07
	FM	20:34	12	18:02	00:26	06:13
	LQ	23:38	20	00:24	05:39	10:52
	NM	19:14	27	05:54	12:01	18:16

(all times PST)

Mercury		0.98 A.U.		Mag. -1.4	
<u>Date</u>	<u>Rise</u>	<u>Trans</u>	<u>Set</u>	<u>R.A.</u>	<u>Dec.</u>
07	07:01	13:03	19:07	23:53.7	-01:06
17	06:52	13:20	19:49	00:51.0	+07:18
27	06:22	13:02	19:41	01:14.5	+11:25

Venus		.59 A.U.		Mag. -5.2	
<u>Date</u>	<u>Rise</u>	<u>Trans</u>	<u>Set</u>	<u>R.A.</u>	<u>Dec.</u>
07	04:08	09:21	14:35	20:13.5	-15:45
17	04:01	09:17	14:34	20:48.8	-14:52
27	03:55	09:17	14:39	21:27.4	-13:13

Mars		2.36 A.U.		Mag. +1.1	
<u>Date</u>	<u>Rise</u>	<u>Trans</u>	<u>Set</u>	<u>R.A.</u>	<u>Dec.</u>
07	07:12	13:16	19:21	00:08.7	+00:13
17	06:51	13:05	19:20	00:36.8	+03:22
27	06:30	12:54	19:18	01:05.0	+06:25

Jupiter		5.94 A.U.		Mag. -2.1	
<u>Date</u>	<u>Rise</u>	<u>Trans</u>	<u>Set</u>	<u>R.A.</u>	<u>Dec.</u>
07	06:12	11:45	17:18	22:37.9	-09:36
17	05:38	11:14	16:50	22:46.8	-08:44
27	05:05	10:44	16:22	22:55.6	-07:52

Saturn		10.2 A.U.		Mag. +1.0	
Date	Rise	Trans	Set	R.A.	Dec.
07	07:59	14:19	20:39	01:13.0	+05:16
17	07:23	13:44	20:05	01:17.3	+05:43
27	06:47	13:09	19:32	01:21.8	+06:11

### SOL Star Type G2V Intelligent Life in System?

(HOD = Hours of Darkness)

HOD	Dt	Rise	Trans	Set	R.A.	Dec.
09:29	07	06:30	12:19	18:08	23:10.6	-05:18
09:03	17	06:15	12:16	18:18	23:47.3	-01:22
08:36	27	05:59	12:13	18:27	00:23.8	+02:34

Astronomical Twilight	Begin	End
JD 2,450, 879 07	05:04	19:35
889 17	04:48	19:45
899 27	04:32	19:55

### Siderealttime

Transit Right	07	00:00 = 10:51
Ascension at	17	00:00 = 11:31
Local Midnit	27	00:00 = 12:10

### Darkest Saturday Night

Sunset	18:26
Twilight End	19:55
Moon Set	19:29
Dawn Begin	04:31

## ACTIVITIES THROUGH OTHER CLUBS

TAC has reserved the Montebello site for every Wednesday, more or less indefinitely (weather permitting). 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.

First quarter Friday star parties have become a "mobile" event, and checking their web page <http://www.rahul.net/resource/TAC/> is the best way to get times. Third quarter Friday star parties are at Van Meter school when the skies cooperate.

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.

### March

- 13 PAS General Meeting  
"Member's Night"
- 18 PAS Board Meeting 7:30 Foothill Observatory
- 28 HVAG star party at Grant Ranch

### April

- 10 PAS General Meeting "Total Solar Eclipse" 7:30 pm at Foothill College
- 15 PAS Board Meeting 7:30 pm Foothill College Observatory
- 25 HVAG Starparty at Grant Ranch.

## EDITOR'S EXTRAS

### David North

No votes were taken at the February 7 board meeting, so there are no official actions to report. There was some review of the star party calendar and the planned revisions of the club bylaws, but nothing particularly significant at this point. Any actual revisions will be submitted to the membership at large for approval before changes are made.

It was noted that Ephemeris expenses were climbing a bit, so we will be trying to hold that down in the future, when possible.

There are two major themes for this month edition: the Messier Marathon and the ideal presentation of the first quarter moon. This basically means when the moon is up, you should take advantage of this opportunity to get in prime viewing (weather permitting, which it hasn't been), and when it has finally left us we all get a very good shot at doing the Messier Marathon.

It's worth noting that this month's speaker is Don Machholtz, Mr. Messier Marathon along with being our foremost comet finder.

We also have a very good Beginning Astronomy class this month, with exhibitions and explanations of various telescopes and their mounting systems (alt/az, equatorial, etc). See the front page schedule for times and places.

There were some fun comments and incidents from various folks this month:

### Jim Bartolini:

I accidentally located a geosynchronous satellite up at FPeak. I spent about 30 minutes watching it

and showing it to others. It's a rather weird feeling to look through a non-driven DOB and remain stationary on an object while the rest of the universe drifts past your field of view.

### Bill Arnett:

Mark Taylor, Dave, Akkana and I happened to get together for dinner this evening. I remembered that tonight was the night for a nice appulse of Mars and Jupiter. So we brought a couple of scopes and set them up in the parking lot in front of the restaurant. I had my Pronto and Akkana had a 90mm f/5.6 Maksutov.

Miraculously, the clouds disappeared just in time and we had a nice view. I was able to go as high as 140x (7mm Nagler with TV Big Barlow (which looks really silly; Dave said "Which end do I look into?") but it was better at 100x (4.8 Nagler). Jupiter and the Medicean stars were in their usual neat line with the Red Planet off to the side only 11 minutes away (only slightly farther than Callisto). I love these little astronomical "events".

We had a couple of visitors, too. It's always nice to be able to show people that their world doesn't end at the edge of the parking lot.

(Bill forgot my binos, darn it).

**Jim Van Nuland**, on sunrise/set times:

The USNO definition of rise/set takes into account the actual apparent diameter of the body, and also refraction due to the atmosphere. Their definition is that the upper limb of the body is tangent to the refracted horizon. This will be a few minutes later (setting) than a simpler computation.

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## **TELESCOPE LOAN PROGRAM STATUS**

**Mike Koop**

### 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.

<u>No.</u>	<u>Scope Description</u>	<u>Borrower</u>	<u>Due Date</u>
8	14" Dobson	Steve Sergeant	2/7/98
16	Solar Scope	Mike Koop	3/13/98
23	6" Newt/ P Mount	Steve Wanamaker	3/13/98
29	C8, Astrophotography	Dean Sala	3/13/98

### 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.

<u>No.</u>	<u>Scope Description</u>	<u>Borrower</u>	<u>Due Date</u>
1	4.5" Newt/ P Mount	Mark Cousins	2/24/98
2	6" f9 Dob	John Paul De Silva	?
3	4" Quantum S/C	David Manley	3/1/98
4	60mm Refractor	Del Johnson	Indefinite
6	8" Celestron S/C	Paul Barton	Indefinite <b>Note 1</b>
7	12.5" Dobson	Nick Tucci	2/11/98
9	C-11 Compustar	Paul Barton	Indefinite
15	8" Dobson	Alexander Koczur	3/14/98
18	8" Newt/ P Mount	Cecelia Yarnell	4/18/98
19	6" Newt/P Mount	Madhava Kidambi	2/15/98
28	13" Dobson	Gennaro Sorrentino	5/1/98

### Available Scopes

These are scopes that are available for immediate loan, stored at other SJAA members homes. If you are interested in borrowing one of these scopes, please contact Mike Koop by email or at (408) 473-6315 for a scope pick up at any of the listed SJAA events.

<u>No.</u>	<u>Scope Description</u>	<u>Stored At:</u>
21	10" Dobson	Nathan Hill
24	60mm Refractor	Ravi Tembhekar
26	11" Dobson	Steve Sergeant
27	13" Dobson	Dean Sala
30	7" f/9 Newt/Pipe Mount	David Manley

### Waiting List

<u>No.</u>	<u>Scope Description</u>	<u>Standby</u>
6	Celestron S/C	Ravi Tembhekar
29	C8, Astrophotography	Michael Lagae
3	Quantum S/C	Lew Kurtz

Note 1: Scope #6 is in the shop for repairs. The secondary mirror has been resurfaced. Just need a clear night to collimate the scope.

Do you have some space to store a scope or two? Please email or call me. Thanks

All scopes are available to any SJAA member. To reserve a scope, please contact Mike Koop at (408) 473-6315 or email at [koopm@best.com](mailto:koopm@best.com).

## 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

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