



# San Francisco Amateur Astronomers

The Randall Museum  
199 Museum Way, San Francisco 94114

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## BULLETIN FOR OCTOBER 1990

Date: WEDNESDAY, OCTOBER 17  
Time: 8:00 PM  
Place: Auditorium, THE RANDALL MUSEUM  
Speaker: LEWIS EPSTEIN  
Topic: "THINKING PHYSICS"

Lewis Epstein: I was born in San Francisco and went to college in Berkeley. I worked on the Saturn (Moon) rocket and the 1965 plan for the original (150") space telescope. I've written a few physics books and teach at City College of San Francisco. But of all things, I am most proud of being a member of the San Francisco Amateur Astronomers since its organizing meeting at the San Remo Restaurant in 1952.

The title of my talk for the San Francisco Amateur Astronomers will be "Thinking Physics". I will give simple explanations of things in physics that relate to astronomy--like why does light go slowly in glass?

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WE'LL BE CELEBRATING 38 years of amateur astronomy with a big birthday cake at the October meeting. And don't forget: the November and December meetings will be held on the SECOND WEDNESDAY of the month, to avoid conflicts with the holidays.

Smile

## NEXT STAR PARTY AT MOUNT TAM OCTOBER 20

The club's star party this month at Rock Springs on Mount Tamalpais begins at sunset on Saturday evening, October 20. At 6:30 p.m. in the nearby Mountain Theater, Dr. Alex Filipenko of UC Berkeley and amateur John Hewitt will be talking about the Hubble Space Telescope.

Saturn will be prominent in the southwestern sky at dusk. Can you find its largest moon, Titan, in binoculars? Mars will be rising a bit later in the southeast. The red planet is growing every larger and brighter as it approaches opposition on November 20. Look out for dust storms! There's a couple of new comets in the sky (see page 8) and this is a great time of year for galaxy-hopping through the rich but little-explored star fields of Pegasus, Pisces and Cetus. Enjoy it!

## BOARD MEETING

The next meeting of the SFAA Board of Directors will be on Wednesday, October 10, at 8:00 p.m. in the library of The Randall Museum. You don't have to be a director to attend the board meetings; all members are invited to bring along their ideas and suggestions.

## ANNUAL PICNIC AND STAR PARTY, SEPTEMBER 15, 1990

It was a beautiful day and evening for the picnic and star party. The picnic, at Bootjack Camp, on Mt. Tamalpais, was enjoyed by all in attendance, with plenty of hamburgers, hot dogs and soft drinks to go round. Later, at the star party, up the road a bit, at Rock Springs, the sky remained clear, no fog over San Francisco, but a bit windy. But with darkness the wind died down and it became comfortable. By dark about 15 telescopes were set up, of all shapes and sizes, and there was plenty to see in the sky. In the meantime, at about 730PM Dr. Michael Criss of San Mateo College, over in the Mountain Theater, gave a most interesting talk entitled "The Martians Are Coming! - The Story of Mars in Fact and Fiction." Following which, his audience trooped over to the star party area and were treated to dazzling views of the sky, particularly of Comet Levy and the planet Saturn, now down in the southern sky in Scorpius and Sagittarius respectively. Also seen were many globulars, open star clusters and galaxies. While "old hat" to the SFAA, many visitors "oohed and ahed" over Alberio, that beautiful blue and gold double star now overhead in Cygnus. Ray Cash-Le Pennec had his 17½" Dobsonian trained for a while on the Great Square of Pegasus with its numerous faint galaxies. Ron Scheldrup also turned up with his "Starport", hooked up to his 6½" Bausch & Lomb scope, showing the ease and facility of this little lightweight, portable, electronic sky atlas, with its red-LED computerized star chart, was able to quickly locate just about anything in the sky. Later in the evening when Auriga began to rise in the east, we could see that the summer sky would not be with us much longer and it was time for us to start thinking about things to come, and how we were going to enjoy those old friends, the fall and winter constellations soon to be with us!

THE PLANETARY CORNER: LAST FAVORABLE APPARITION OF MARS IN THE 20TH CENTURY

Joel W. Goodman

Mars reaches opposition in late November, when its reddish disk attains an angular diameter of about 18" of arc. The apparition of 1990 is appreciably less favorable than the previous approach of the planet two years ago, but it nonetheless represents the best viewing opportunity we will have until early in the 21st century. Although we pass by Mars every two years, the high eccentricity of the Martian orbit causes its maximum apparent diameter to vary from about 25 to only 14 arc seconds. Thus, the perihelic opposition of 1988 brought the two planets close to their minimum possible separation (about 35 million miles), whereas the succeeding several cycles will be successively less favorable until an aphelic opposition occurs, following which the planets will make successively closer approaches. The full cycle takes 15-17 years, putting the next perihelic opposition in the year 2003. The bottom line, then, is to get out there and see Mars while the seeing is still good.

If you didn't view Mars in 1988 you missed a fine opportunity, because, in addition to the perihelic opposition, the surface contrasts on the planet were excellent, offering unusually good telescopic views of the Martian features. This is a matter of luck, because dust storms frequently occur on Mars as it approaches perihelion, obscuring surface detail just when the planet is most favorably positioned for observing, a frustrating situation for Mars watchers. Mars is the only planet besides Mercury, which is extremely elusive and difficult to observe because of its proximity to the sun, whose solid surface can be viewed through telescopes. Instruments of 6 inches aperture or larger are recommended for detailed views of Mars, although the most prominent features can be distinguished with smaller telescopes. These include brilliant polar caps, composed of carbon dioxide and water, dark maria and reddish "deserts". The polar caps enlarge and recede with the Martian seasons, which was largely responsible for the commonly held view that the earth and Mars were very similar. This hypothesis was strengthened by observations of linear "canals" connecting larger dark "oases" on the surface, made primarily by Percival Lowell during the early part of this century. Lowell popularized the idea that the canals were constructed by an advanced civilization of Martians, in order to carry scarce supplies of water from the polar regions to more temperate parts of the planet. Of course, with the abundant data from the Mariner and Viking missions, we now know that liquid water cannot exist on Mars due to its weak gravity and very low atmospheric pressure. In addition, the infamous canals are nowhere to be found on the detailed images from the Mariner and Viking spacecraft. Not only are there no Martians to be found, there appears to be no evidence of even simple organic matter on the Martian surface, which has a more lunar than earth-like appearance. However, without the tremendous advances of the past few decades, it is interesting to reflect while viewing Mars through a telescope how easily one's imagination might construct elaborate earth-like scenarios for the planet.

More about Mars next month.

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Congratulations to very long-time SFAA member and former Director Ken Wilson, now Director of the Universe Planetarium of the Science Museum of Virginia in Richmond, Virginia, and Betty Harris on their upcoming marriage on October 6. Betty is an amateur astronomer of the Richmond Astronomical Society so this appears to be a match made in heaven. We wish them a long and happy life together.

## NOTES ON AQUARIUS - by Gordon Ridley

We often wonder how constellations, as well as individual stars, were named by the ancients. For example, presently in the evening sky is Aquarius, with its beautiful deep sky objects of M2, M72, M73, the Saturn Nebula and the Helix Nebula. Three of the "bright" stars there (bright for Aquarius, that is!) are 34-a Sadalmelek, which means "lucky star of the king," 20-B Sadalsuud, "luckiest of the lucky," and 2-ε Al Bali, "the good fortune of the swallower." What great events took place that caused these particular stars to receive these names? Somewhere, someplace, buried in history is probably the answer. We do know that thousands of years ago when these stars rose with the sun, winter had passed and the season of gentle rains had begun. Reason enough to feel lucky! As well, the figure of Aquarius, the "Water Carrier" can be found on many Babylonian artifacts. He was the celestial symbol of the significance of water in the lives of the people who lived in the river valleys of the Near East. To the Egyptians Aquarius signalled the annual season of the floods, and to the Chinese the coming of the rainy season. Now is the time of year to give this constellation a closer look and enjoy what it has to offer.

## VACATIONING WITHOUT A TELESCOPE?

Have you noticed how astronomy is becoming more popular with the general public. For example, you may have noticed the ads in both Sky & Telescope and Astronomy inviting you to spend a few days at Star Hill Inn, an "astronomers retreat" in New Mexico, where you either can bring your own telescope to their dark skies, or rent one from them. Now comes an article in the current Travel & Leisure magazine extolling a new \$40,000.00 observatory with a 16" reflector plus computer, available nightly at the Hyatt Regency on Maui. What's next? Hopefully we will see a lot more like these in the future.

## BULLETIN CONTRIBUTIONS

The SFAA Bulletin is a forum in which club members may share their ideas and experiences in astronomy. We encourage you to participate and welcome your letters to the editor, announcements and articles on astronomical topics. Please send them to SFAA Bulletin, C/O Jim Shields, 190 Chilton Avenue, San Francisco 94131. Deadline is the 18th of the month.

## SFAA MEMBERSHIP BENEFITS

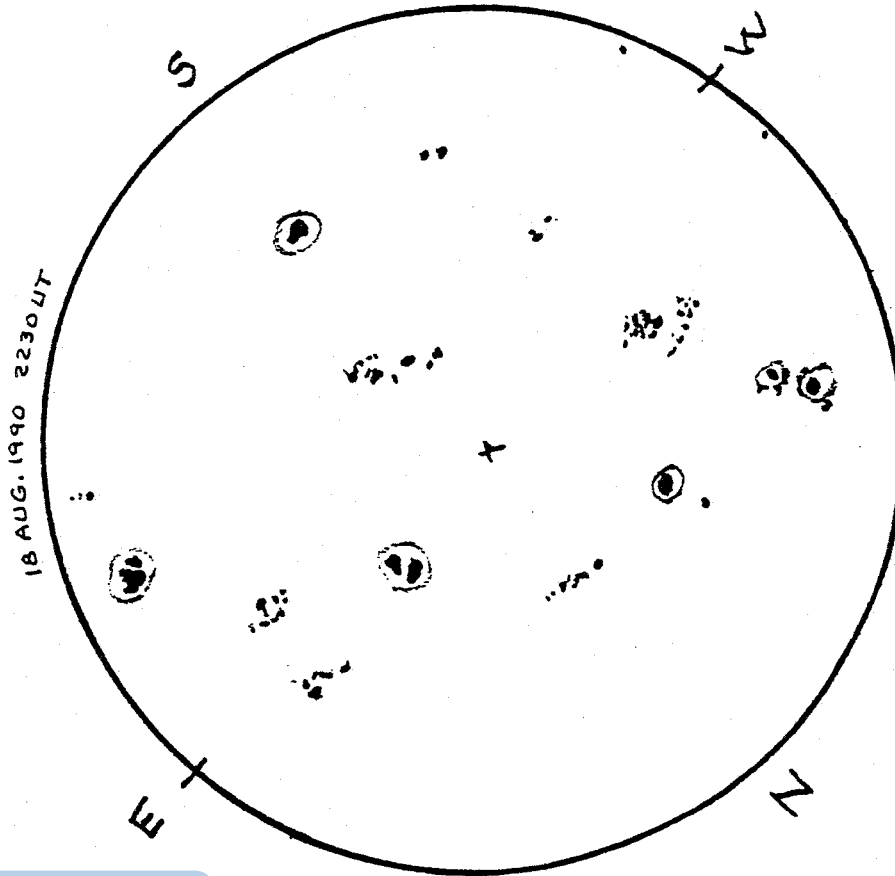
Membership dues are \$20 per year. In return, SFAA members receive the monthly Bulletin and free admission to club activities including monthly lecture meetings and star parties, field trips and the annual picnic. In addition, they may subscribe to various astronomy magazines at greatly-reduced rates. For more information, contact Chelle Beard, 32 Penhurst Avenue, Daly City 94015. Telephone 878-4965 evenings.

Counting sunspots on our Sun isn't a matter of simply counting the black blemishes we see; it's a combination of the number of spots and the number of regions (groups). We'll use as our example this sketch of the magnificent display Sun gave us August 18. This day shows the second highest sunspot count of this cycle. Check all those tremendous black areas - the umbrae - with their lighter surrounding areas - the penumbrae.

The smaller dots are also sunspots, but they don't have any visible penumbrae. (We're hoping for similar activity in September.)

This picture represents our count of 262 spots; here's the formula:

$$(10 \times \text{number of regions} + \text{number of spots}) \times k = \text{sunspot number.}$$



First we must count the regions (or groups) - 15. However, some of these regions were spread so far across the face of the sun that several may actually be counted as two regions apiece rather than one. In our case here, four of the regions are probably actually eight regions. Let's say there are about 19 regions instead of our original 15. These groups, then, will each be worth ten points or 190 ( $10 \times 19$ ).

Next we must count the individual spots and add them to that 10 x number-of-regions count.

As best we can, from our sketch, we find something like 72 spots. Added to our 190, we are able to say that our sunspot count on August 18 must have been somewhere around 262 ( $190 + 72$ .) Note that a region with only one spot - no matter what its size - will have a spot count of 11.

Sadly, we must wait four months for the official figures published in SKY & TELESCOPE. However, in preparation for checking our figures with the professionals, let's take a closer look at page 447 of this last (Oct.) issue of S&T. Also, it's here that I'll explain the use of the "k" (in the formula) which is the last step in calculating the Wolf (sunspot) number.

You will note that there are two sets of numbers; the top set is the AAVSO report (the Amateur Astronomers' Solar Organization) and the bottom set is from the Sunspot Index Data Center located in Brussels, Belgium.

Now, when we look closely at these daily sunspot numbers, we note further that the top set shows figures slightly higher than does the lower set. Why? And, additionally, we have found that our jam-jar counts have in the past agreed quite well with the lower number reported from Belgium. And we didn't even use any "k" figure. Again, why? A little research shows us that we don't need any additional multiplier. Here's why.

It so happens that when people started seriously to record sunspots, they used very small telescopes - about the size of our own 3.5 inch. In order to keep the study consistent throughout history, the official numbers, observed by many differently-sized telescopes, the observed sunspots are multiplied with a correcting "k" number to approximate the numbers calculated by Richard Wolf in that original 3.2 inch scope he used back in 1850. At present, those "Wolf" numbers are officially recorded by A. Koeckelenberg at the Data Center in Brussels. The amateur astronomers who send their data to AAVSO use many different-sized telescopes for their observations which must then be adjusted with the "k" figure to jibe with that standard 3.2 inch.

Another interesting example of the use of "k" concerns the observations made by the 5 inch telescope at our U.S. NOAA solar division in Boulder, Colorado. Those numbers are multiplied by its own special "k", usually around 7/10, meaning the 5 inch sees a bit more than we do in our 3.5.

Although this above procedure accounts for our daily numbers, there is a final number to be calculated. This number is called the "smoothed monthly" and it is incorporated in a set of figures to show what Sun is doing now in relation to his past activity.

This is found by adding the monthly averages (the sum of each day's sunspot number for a month divided by the number of days of that month) for each month 5-1/2 months on each side of the month we want, plus the average sunspot number of the month in question. Then divide by 12. The answer is your "smoothed monthly" sunspot figure.

For example: Suppose we want to find the "smoothed number for Jan. 1990. We must have the mean (average) sunspot numbers for six months before and after Jan. 1990. All the figures for each month back through Aug. 1989, 1/2 of the month of Jul. 1989, all of the averaged daily numbers up through June 1990, and 1/2 of July 1990 must be added to the central Jan. 1990. This, then, constitutes 12 months added together which must then be divided by 12.

This smoothed sunspot figure is the figure used in determining how Sun is acting - whether the cycle is going up, down or sideways.

Next time will be a good time to show you some graphs of these smoothed numbers which give us a concise idea of what Sun is up to.

No. 2 in the series on High Altitude Sierra Observation Sites  
(Two articles does constitute a series doesn't it?)

After my rather successful trip in July to the White Mountains, I decided to scout around for other potentially good high altitude observation sites/campgrounds. With my trusty California campground guide in hand I searched for the highest campground to start off with.

Off highway 395 between Mammoth Lakes and Bishop are a series of campgrounds located on the eastern slopes of the Sierras. By Rock Creek are three campgrounds with elevations between 9700' and 10,200'. These looked like a good choice to start with.

So during the new moon period in late August I headed up to the Sierras with my trusty Celestron. There are several ways to reach this area. Since I was stopping off in the Lake Tahoe area first, I then took hyway 395 south for the last 170 miles. Shorter routes directly from the bay area are via hyways 4, 108 or through Yosemite, south on hyway 395 past Mammoth Lakes for another 15 mile to Tom's Place, then west 9 miles up the road to the Rock Creek campgrounds.

The Rock Creek camps are part of the state park system and sport the usual list of amenities (pit toilets, piped water, BBQ pits and picnic tables). The fee was \$8, but should be going up after Sept. to \$12-14. The entrance station is just off hyway 395 where you can check the status and availability of sites and pay your fee. You then drive up to the end of the 9 mile dead-end road to the various camp sites. For those of you who don't wish to rough it, there's a lodge up there with rooms and various items of supplies in case you forgotten anything.

Of the three camp sites I chose Mosquito Flats since it was the highest one (by 500'). Fortunately it was not too aptly named as there were not too many mosquitos. There are about 50 camp sites in all as well as a parking lot at the trailhead for backpackers.

The drive up was picturesque with the setting sun illuminating the mountain slopes to the east as we drove the last few miles. Even at 10,000' we were still below timber line so there were quite a few trees around. The road runs in a bit on a canyon between the mountains and the camp sites are stretched along the road. What with the trees and the mountain slopes the camp sites themselves were not very good for observing.

Instead I chose to set up my C-8 in the parking lot at the trailhead. Even then my horizon was at about +30 deg in all directions except north due to the hills and trees. Observation conditions were not ideal - there might have been a trace of dew, but I did manage to add three new Messier objects to my growing list. The faintest were M74 and M76 at 10.2 & 12.2 mag. I also revisited about a dozen previously observed Messier objects and was able to spot M31 (Andromeda) with my naked eye for the first time.

All in all I would rate this location as a good to very good observation site. The sky was certainly clear and dark. However the high horizon line did limit much of the observable sky area. It was also puzzling that people would drive up to the end of this road (headlights) and turnaround and head back down throughout the night.

# COMET COMMENTS

09-10-90

By Don Machholz

No new comets have been discovered recently, but Comet Levy, an easy naked-eye object for these past few weeks, heads into our southern evening twilight sky. We'll see it in our morning sky late this year at about magnitude 7. Comet Tsuchiya-Kiuchi is now emerging into our morning sky, it should be visible in binoculars.

Let me take a moment to mention the passing of two well-known comet discoverers. On May 30, John Bennett of South Africa, discoverer of two comets, passed away. Then on August 26, Minoru Honda of Japan, who discovered 12 comets and 11 novae, also passed away.

## EPHEMERIDES

DATE (UT) RA (1950) DEC RA (2000) DEC ELONG SKY MAG

### Comet Levy (1990c)

09-26	15h50.6m	-37 <sup>o</sup> 31'	15h53.9m	-37 <sup>o</sup> 40'	63 <sup>o</sup>	E	5.3
10-01	15h36.7m	-38 <sup>o</sup> 23'	15h40.0m	-38 <sup>o</sup> 33'	56 <sup>o</sup>	E	5.4
10-06	15h25.4m	-39 <sup>o</sup> 01'	15h28.6m	-39 <sup>o</sup> 11'	50 <sup>o</sup>	E	5.4
10-11	15h15.7m	-39 <sup>o</sup> 29'	15h18.9m	-39 <sup>o</sup> 40'	45 <sup>o</sup>	E	5.6
10-16	15h07.1m	-39 <sup>o</sup> 50'	15h10.4m	-40 <sup>o</sup> 02'	39 <sup>o</sup>	E	5.7
10-21	14h59.8m	-40 <sup>o</sup> 06'	15h02.7m	-40 <sup>o</sup> 18'	35 <sup>o</sup>	E	5.8

### Comet Tsuchiya-Kiuchi (1990i)

10-06	11h02.9m	+02 <sup>o</sup> 33'	11h05.4m	+02 <sup>o</sup> 17'	26 <sup>o</sup>	M	7.8
10-11	10h58.2m	+00 <sup>o</sup> 36'	11h00.7m	+00 <sup>o</sup> 19'	32 <sup>o</sup>	M	7.8
10-16	10h52.9m	-01 <sup>o</sup> 32'	10h55.5m	-01 <sup>o</sup> 48'	37 <sup>o</sup>	M	7.8
10-21	10h46.9m	-03 <sup>o</sup> 53'	10h49.4m	-04 <sup>o</sup> 09'	43 <sup>o</sup>	M	7.7
10-26	10h39.8m	-06 <sup>o</sup> 29'	10h42.3m	-06 <sup>o</sup> 45'	49 <sup>o</sup>	M	7.7
10-31	10h31.4m	-09 <sup>o</sup> 25'	10h33.9m	-09 <sup>o</sup> 40'	56 <sup>o</sup>	M	7.7
11-05	10h21.0m	-12 <sup>o</sup> 44'	10h23.5m	-12 <sup>o</sup> 59'	62 <sup>o</sup>	M	7.7
11-10	10h08.1m	-16 <sup>o</sup> 31'	10h10.5m	-16 <sup>o</sup> 45'	69 <sup>o</sup>	M	7.6

### Periodic Comet Encke

09-26	09h01.5m	+29 <sup>o</sup> 40'	09h04.6m	+29 <sup>o</sup> 28'	54 <sup>o</sup>	M	9.1
10-01	09h47.9m	+25 <sup>o</sup> 02'	09h50.8m	+24 <sup>o</sup> 48'	47 <sup>o</sup>	M	9.0
10-06	10h31.4m	+19 <sup>o</sup> 26'	10h34.2m	+19 <sup>o</sup> 11'	41 <sup>o</sup>	M	8.9
10-11	11h11.3m	+13 <sup>o</sup> 18'	11h13.9m	+13 <sup>o</sup> 01'	34 <sup>o</sup>	M	8.9
10-16	11h48.2m	+06 <sup>o</sup> 58'	11h50.7m	+06 <sup>o</sup> 41'	28 <sup>o</sup>	M	8.9

(It's fun and easy to use these ephemerides to plan your next observing session. Just plot the coordinates on your star atlas and connect the points with a smooth curve. Then you'll be able to find the comet quickly and easily in binoculars or a telescope.--ED.)



# SKY CALENDAR OCTOBER 1990

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CURRENT SKY INFORMATION:  
Call (517) 332-STAR

An aid to enjoying the changing sky

Use this scale to measure angular distances between objects on diagrams below.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<p><b>Tues Oct 2,</b> 1½ hours before sunrise: Find bright Jupiter well up in east. Look 0.3° to its south for 4th-mag δ Cnc. This star is also named <i>Asellus Australis</i>, the southern of two asses feeding from <i>Prosepe</i>, the Manger or "Beehive" star cluster. Use binocs to resolve the cluster into stars.</p> <p><b>Sunday &amp; Monday mornings, October 7 &amp; 8:</b> High SW to W</p> <p>Mars * Aldebaran Pleiades Hyades</p> <p>Monday 8 Pleiades Hyades</p> <p>Sunday 7 Moon</p> <p><b>Morning:</b> * Jupiter</p>	<p>Monday through Friday evenings, October 1-5: Harvest Full Moon Thursday 4</p> <p>Friday 5 ENE</p> <p>Sunday &amp; Monday, Oct 7 &amp; 8, 3 hours after sunset: Monday's moonrise is northernmost of month.</p> <p>Pleiades Sunday 7 ENE Moon</p> <p>Monday 8 Mars Moon</p> <p><b>Morning:</b> Moon</p>	<p>Monday 1-5: Tuesday 2 Wednesday 3 Thursday 4</p> <p>Friday 5 ENE</p> <p>Sunday &amp; Monday, Oct 7 &amp; 8, 3 hours after sunset: Monday's moonrise is northernmost of month.</p> <p>Pleiades Sunday 7 ENE Moon</p> <p>Monday 8 Mars Moon</p> <p><b>Morning:</b> Moon</p>	<p>Monday 1-5: Tuesday 2 Wednesday 3 Thursday 4</p> <p>Friday 5 ENE</p> <p>Sunday &amp; Monday, Oct 7 &amp; 8, 3 hours after sunset: Monday's moonrise is northernmost of month.</p> <p>Pleiades Sunday 7 ENE Moon</p> <p>Monday 8 Mars Moon</p> <p><b>Morning:</b> Moon</p>	<p>Monday 1-5: Tuesday 2 Wednesday 3 Thursday 4</p> <p>Friday 5 ENE</p> <p>Sunday &amp; Monday, Oct 7 &amp; 8, 3 hours after sunset: Monday's moonrise is northernmost of month.</p> <p>Pleiades Sunday 7 ENE Moon</p> <p>Monday 8 Mars Moon</p> <p><b>Morning:</b> Moon</p>	<p>Monday 1-5: Tuesday 2 Wednesday 3 Thursday 4</p> <p>Friday 5 ENE</p> <p>Sunday &amp; Monday, Oct 7 &amp; 8, 3 hours after sunset: Monday's moonrise is northernmost of month.</p> <p>Pleiades Sunday 7 ENE Moon</p> <p>Monday 8 Mars Moon</p> <p><b>Morning:</b> Moon</p>	<p>Monday 1-5: Tuesday 2 Wednesday 3 Thursday 4</p> <p>Friday 5 ENE</p> <p>Sunday &amp; Monday, Oct 7 &amp; 8, 3 hours after sunset: Monday's moonrise is northernmost of month.</p> <p>Pleiades Sunday 7 ENE Moon</p> <p>Monday 8 Mars Moon</p> <p><b>Morning:</b> Moon</p>
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**Motions of Planets in October**  
Venus is 8° W of Sun on Oct 1, and can still be seen very low due east about half an hour before sunup. From lat 40° N, Venus rises 40 min before Sun on Oct 1, 20 min before Sun on Oct 16. On what date will you last see it with naked eye? with binocs?

Mercury on Oct 1 is 15° W of Sun and 6° up in morning twilight (about ¾ hour before sunup). By Oct 7 Mercury is only 11° W of Sun and 2° up. See Oct 22.

Mars goes less than 3° E Oct 1-20, then reaches stationary point and turns west. See Oct 18 and chart showing Mars' motion on September calendar.

Jupiter passes close to a 4th-mag star in early October. See first box on calendar.

Saturn goes 1.2° E in Sagittarius.

Uranus goes 0.8° E in October, and passes 1.8° due north of 3rd-mag λ Sgr on Oct 24; see finder chart on August calendar.

Neptune goes 0.4° E, remaining about 6° E of Uranus. Neptune passes 9° S of 31 Sgr on Oct 15-16; see finder on August calendar.

Vesta passes within 1.2° S of λ Tauri on night of Oct 12-13. This star is plotted on Mars chart on Sept calendar.

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The Randall Museum  
199 Museum Way, San Francisco 94114

## San Francisco Amateur Astronomers



### OUR 38TH ANNIVERSARY - by Bill Cherrington

This is how it all began at the San Remo Restaurant in San Francisco in September of 1952. Outside, the sky was clear except for some streaky, cirrus clouds, and stars were everywhere. Many enthusiastic people gathered inside, responding to a newspaper ad appealing to those people interested in amateur astronomy. At this dinner, 30 to 40 people signed up to form a club which would be known as the San Francisco Amateur Astronomers.

A date was set for an October meeting which was held at the Josephine D. Randall Junior Museum. The following officers were elected at that meeting: Bert Wallace, President; Betty Neall, Secretary; Jack Garriott, Treasurer. In the ensuing months and years, the San Francisco Amateur Astronomers prospered and grew. Many thanks go to all those people who devoted their time and efforts through the years, so that we could be here today. We, therefore, in our turn, express that same enthusiasm as did the amateurs at San Remo some 38 years ago.