

East Valley Astronomy Club

June 2001

www.eastvalleyastronomy.org

Scottsdale, Arizona

The Backyard Astronomer: Mars (again!)

By: Bill Dellinges



I must be getting old. My fourth Mars opposition is coming up. I mean the really close kind that occurs every 15-17 years, when the red planet gets as close as 35 million miles to Earth. Opposition will be on June 13th this year and the closest approach will be 8 days later on the 21st. On that date, Mars will show a disk 20.79" (arc seconds), larger than it's been since September 28, 1988. Actually, when these close approaches happen, they occur in pairs, two years apart. This June's opposition is just a warm up for August 28, 2003 when Mars will grow to a disk 25.11" across, bigger than it has been since...well, let's see, in Jean Meus' "Astronomical Tables" they show 25.10" on August 23, 1924. At 1000 A.D. I gave up looking for something bigger! The Big Red One is near perihelion, so it's displaying an unusually large size (a bit bigger than Saturn, smaller than Jupiter).

Recently, I was thinking wayyyy back to my previous three encounters – with fond memories:

September 10, 1956. 13 years old. Proud owner of a Criterion 4" F11 "Dynascope" newtonian reflector. I observed Mars through an open window of our kitchen! My memory of what I saw is foggy, like those San Francisco nights. But I'm pretty sure I didn't see any canals (!). Distance: 35.16 million mi. Size: 24.76" Declination (Dec): -10 degrees.

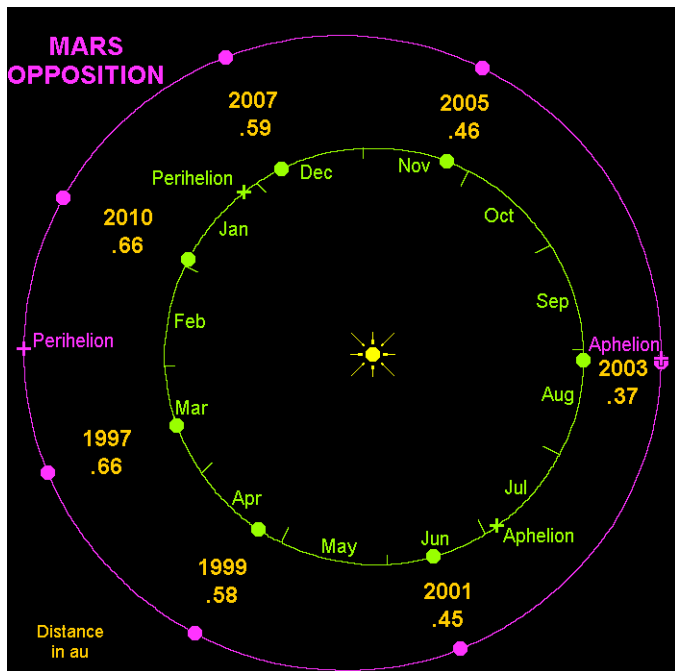
August 10, 1971. 28 years old. The year before, I bought a Unitron 4" F15 refractor. What a monster! I must confess that, again, I can't recall being all that impressed. In those days, I was not a very serious observer. I recall giving neighbors and co-workers a peek through the scope from my San Carlos, California bachelor pad-but no one passed out from the views. Distance: 34.9 million mi. Size: 24.91" Dec: -22 degrees.

September 28, 1988. 45 years old. Married. Newark, California. Moved up (?) to a Celestron 8" Schmidt-Cassegrain telescope. Hey, come on, I needed more aperture! The Unitron did great on planets but M13 was a blur. First time I put the 8" on M13, I almost fainted-resolved to the core. I digress. By this time, I maintained an observer's log. My drawings of Mars at this approach are not memorable: Distance : 36.56 million mi. Size: 23.81" Dec: -2 degrees.

However! One thing about this apparition I'll never forget. At a club starparty, a guy had his 4" TeleVue refractor on Mars. I took a look. Holy cow!! Mars looked absolutely stunning. I couldn't believe how big and crisp the image was in this "little" scope which is what, three feet long? He must have had just the right power (and maybe

filter?) and great seeing going for him. I had a lot more respect for refractors after that night! (I recall he later upgraded to a Astro-Physics 6"). (Weird thing: My log shows nicely detailed drawings of Mars through my C8 during the March 31, 1982 opposition when the planet was 59 million miles away, with a disk size of 14.74"! How do you figure that? Maybe the Dec of -1 degree, 21' helped? They say you can begin getting acceptable views of Mars at about 10". Possibly a freak night of excellent seeing, I don't know).

OK, I'm 58 now and living in Apache Junction, AZ. I'm ready to attack Mars at my fourth close opposition. I'm armed with a C14 and Astro-Physics 5" F8. It will be interesting to compare the two scopes' performances on the mystery planet this time around.

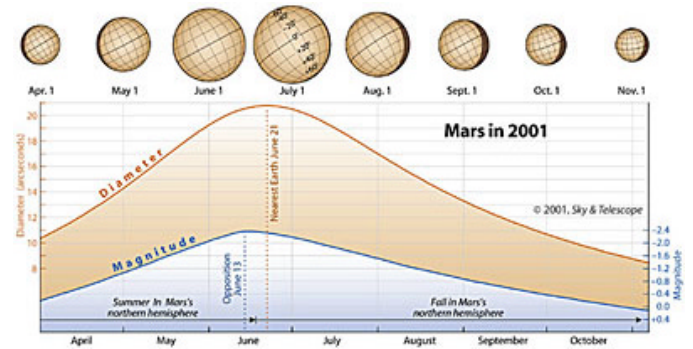


Remember, this is the first of two close passes:

- Opposition: June 13, 2001,
- Closest approach: June 21. Distance: 41.86 million miles. Size: 20.79" Dec: -26 degrees. (would be nice if it were higher).
- Opposition: August 28, 2003,
- Closest approach: August 27, 2003 Distance: 34.6 million mi. Size: 25.11" Dec: -15 degrees, 49' (better than in 2001).

I'll be 60 years old for the latter, how long can this go on? Well, I note the next close pass will be July 27, 2020. IF I can hold on that long

and still have eyes that work, I will see my fifth Mars opposition at age 77! God of War, we must stop meeting this way!



For more information go to:
<http://www.skypub.com/sights/moonplanets/0105marsreturn.shtml>

Library Focus

by Joe Orman

This month's review: *Pronunciations, Derivations, and Meanings of a Selected List of Star Names* by George A. Davis, Jr.

Next time you go to a star party and point out a



few stars, wouldn't you like to make sure you're pronouncing them correctly? If so, this booklet, a reprint of a 1944 article from *Popular Astronomy*, is for you. The pronunciation is given for the names of dozens of the brighter stars, along with the Arabic,

Persian, Greek, or Latin roots. And you will be on firm scholarly ground; the author was "an expert on ancient constellations and their mythology" and states in his introduction "... the entire paper is the result of original research, and every statement that I have made is based on documents which would be received as legal evidence in any court of competent jurisdiction." Unfortunately, a pronunciation key is not included, so I've had to interpret the diacritical marks to generate the following phonetic equivalents.

I found this booklet to be informative and humbling at the same time; I learned that I've been mispronouncing the names of several stars! For instance, Altair, from the Arabic for "the flying eagle or vulture," is pronounced Al-TAIR. Similarly, Vega (VEE-gah) comes from the Arabic for "the *falling* eagle or vulture." Merope, referring to both a blue star in the Pleiades and the beautiful nebulosity around it, is pronounced MARE-oh-pea. I knew that Antares is from the Greek for "the rival of Mars," but didn't know it's pronounced ant-AIR-ease. And I was proud of the fact that I could name all three stars in Orion's belt -- until I learned that I've been mispronouncing them! For the record, east to west they're Alnitak (Al-NYE-tack), Alnilam (Al-NYE-lamb), and Mintaka (MIN-tah-kah).

On the plus side, I was reassured to learn I've been pronouncing most of the names correctly all along, for example Rigel (RYE-jell), Polaris (poe-LAIR-iss), Spica (SPY-kuh), and Regulus (REG-yoo-luss). But when it comes to the red giant Betelgeuse, I purposely risk the wrath of the pronunciation police: "Beetle Juice" may not be quite correct, but it's just so much fun to say! And I really don't need to know that the name is from the Arabic for "armpit of the white-belted sheep" -- a little knowledge is impressive, but let's not get carried away!

Any astronomer knows that looking out into space is looking back in time, due to the finite speed of light. But there is another sense in which this is true: when we look at the stars and speak their names, we get a fascinating glimpse of the ancient cultures who first gave them those names.

This and many other books may be checked out free of charge to EVAC members. Browse the library at the next meeting, or contact club properties manager Rick Scott at rmscott@home.com or (480) 821-5721.

2001: Six Months of Sky Events

by Joe Orman

Mark your calendar for these interesting planetary alignments, conjunctions & meteor showers in the year 2001. Times are calculated for Phoenix; other locations may differ. Most

will be easy to see with the unaided eye, some very challenging -- take a look!

June 17 (morning): Venus 6 degrees to left of crescent moon, in E before sunrise. Saturn very low in ENE.

July 12 (morning): Mercury 2 degrees to lower right of Jupiter, very low in ENE before sunrise.

July 15-18 (mornings): July 15: Saturn 3/4 degree to upper left of Venus, Aldebaran 3 degrees to lower right of Venus, in E before sunrise, Jupiter 3 degrees above Mercury low in ENE. July 17: Moon 1 degree to right of Saturn. July 18: Moon between pairs of planets.

July 17 (daytime): Occultation of Venus by crescent moon, very high in sky (disappears 10:33am, reappears 12:02pm).

July 19 (morning): Mercury only 9 arcminutes to lower right of moon, very low in ENE before sunrise. Jupiter, Venus and Saturn to upper right.

July 25 (morning): Jupiter-Venus-Saturn equidistant alignment, each 10 degrees apart, in E before sunrise.

August 5-6 (mornings): Jupiter 1 1/2 degrees to left or upper left of Venus, in ENE before sunrise. Saturn 20 degrees to upper right.

August 13-16 (mornings): Venus-Jupiter-Saturn alignment, moon in different position along line each morning, before sunrise.

August 15 (daytime): Occultation of Jupiter by crescent moon, in W (disappears 1:35pm, reappears 2:37pm).

September 10 (morning): Occultation of Saturn by last-quarter moon, very high in sky (disappears before sunrise 5:01am, reappears in daylight 6:29am).

September 12 (morning): Jupiter 1/2 degree to right of crescent moon, very high in E before sunrise.

September 15-21 (mornings): Sep 15: Crescent moon, Venus & Regulus make triangle in E before sunrise (moon 5 degrees from both). Sep

20: Regulus 3/4 degree to lower right of Venus.
Sep 21: Regulus 3/4 degree to upper right of Venus.

September 22: Fall equinox (4:04pm MST). Sunrise straight east (6:16am, azimuth 89.2 degrees), sunset straight west (6:25pm, azimuth 270.6 degrees). Always use proper eye protection when viewing the sun.

September 24 (evening): Mars 2 degrees below first-quarter moon, in S after sunset.

October 15 (morning): Venus 6 degrees to upper right of crescent moon, low in E before sunrise.

October 23 (evening): Mars 3 degrees to right of first-quarter moon, high in SSW after sunset.

October 29 - November 4 (mornings): Mercury 1/2 degree to left of Venus, very low in E before sunrise.

November 3 (evening): Saturn 3 degrees to upper right of gibbous moon, rising in E after sunset.

November 5 (evening): Neptune 2 degrees to upper right of Mars, high in SSW after sunset.

November 17-18 (nights): Leonids meteor shower. Just past new moon. Shower radiates from constellation Leo, which rises in E around midnight. Best time to look between midnight and dawn.

November 21 (evening): Mars 4 degrees to right of first-quarter moon, high in SW after sunset.

November 26 (evening): Uranus 1 degree to right of Mars, high in SW after sunset.

November 30 (evening): Occultation of Saturn by full moon in twilight, just after rising in ENE (disappears 5:44pm, reappears 6:08pm).

December 3 (morning): Jupiter 1 1/2 degree from gibbous moon, high in W before sunrise.

December 13-15 (nights): Geminids meteor shower. New moon. Shower radiates from constellation Gemini, which rises in NE around 7pm. Best time to look between midnight and dawn.

December 14 (afternoon): Partial solar eclipse, starts 1:22pm, maximum 2:25pm (25%), ends 3:28pm, in SW. Always use proper eye protection when viewing the sun.

December 20 (evening): Mars 5 degrees to upper right of first-quarter moon, high in SSW after sunset.

December 28 (early morning): Occultation of Saturn by almost-full moon, high in W (disappears 1:29am, reappears 2:41am).

December 30 (morning): Jupiter 1/2 degree to left of full moon, low in WNW before sunrise.

President's Comments

By Martin Bonadio

First, I want to thank Chris Schur for being our guest speaker last month. Chris, you did an outstanding job and you are to be commended on your efforts. The pretty pictures you keep showing us aren't bad either!! (haha). I hope you will continue to keep us up to date on your progress and your findings. I'm sure that many of our members have benefited from your excellent expert advice. I am thrilled to have you as a member of EVAC.

Well, I want to thank those people who braved the dust and rain and still went out to the Boyce Thompson Star Party on May 12th. I had my truck all loaded when a huge dust storm rolled in. My fiancé notified me, and I rushed out just in time to save my dob. After such a traumatizing event, I decided to stay in the safety of my home. However, apparently some of our group went out there and hoped for clear skies. Unfortunately, from what I'm told this never happened. Hopefully, Boyce will reschedule and invite us back again soon.

But fear not troops, because plenty of other EVAC star parties and activities abound. Probably because it's spring and everyone wants to get their events in before the summer monsoon. So let me briefly recap what's going on:

1. On Thursday, June 7th (probably short notice for this newsletter) the Girl Scouts have asked if anyone is interested in going to their

campsite in Payson to teach these girls about very basic astronomy (the constellations, stars, etc) and to setup a telescope to let them view objects from a dark sky site. Food and a place to sleep will be provided.

2. Next, we have a terrific opportunity to host a star party on Friday evening, June 15th for an exclusive community in N. Scottsdale - Greyhawk. It is located on N. Scottsdale Road just past the Princess Resort. They have asked us to help them host an outdoor affair they are having that night for some 150+ people. This will be a paid event for the club, and the proceeds will go toward adding more resources to the club library (such as books, eyepieces, etc.). If this goes well, there may be an opportunity to do this 3-4 times each year. I'm encouraging you to participate if you can. I think this is a great chance for us to show a large crowd our hobby, and to share some of the wonderful things we look at through our telescopes. I hope you can share your support of EVAC with us on this night.

3. On the following night, Saturday, June 16th at the Florence Junction Star Party, the Boy Scouts of America will be joining us to look through the telescopes and learn the sky. Please show your club spirit and join us on that night.

4. Finally June 16th – 24th marks the annual Grand Canyon Star Party. The Tucson Astronomy Club organizes this event, and it's always a blast. Randy Peterson and myself are planning to head up on Jun 22nd, and return on Sunday the 24th. If you want to join us send me an email @ mabastro@aol.com or call me at 480-926-4900. Otherwise, maybe we'll see you up there.

5. I want to ask the membership if there are a few volunteers who wish to help the club. I am currently seeking the help of some people to act as chairmen for the special interest groups. The idea here is to put small groups of people together offline to talk about and work together on common observing activities. Silvio Jacanelli has volunteered to do the double star SIG, and I'll have more details at next month's general meeting. Contact me if you have an interested.

6. Next, Jim Kline and I are asking for a few people to help make the newsletter even better.

If someone would volunteer to keep Jim informed of calendar events that would be wonderful. This benefits everyone in the club when announced events are listed on the newsletter calendar. These are just really hard to keep track of sometimes. Also we are always looking for newsletter articles, and people to help with printing and mailing of the newsletter. These jobs will not take more than 1 hour a month to complete and will really make a difference.

7. My last effort is to try and organize an EVAC-sponsored family night at the Arizona Science Center. I've had a sign-up at the meetings for the past few months, and have received a few names. What I'm looking for are people to help organize this event, set a date, and start inviting people to the meeting. It will be a lot of fun, and a great addition to the club for some of our younger members and those who have families and want to get them involved with EVAC. The AZ-Science Center environment will make it even more fun. Once we have enough volunteers, we can start discussing what we want to do at this meeting (workshops, speakers, etc.). I hope you will join me on this effort!

If you are interested in any of these activities or events, or want more information please feel free to contact either David Coshov (jdcoshov@qwest.net) or myself (mabastro@aol.com).

Whew, well that's it for June; I'm off to the high-country this month for deep sky observing. Randy Peterson and I are talking about a weekend trip to the Camp 613 site NE of Payson on the rim at 7300ft. I'll let you all know what we find and how our observing goes in my next report.... I hope to hear from you as well. Clear skies.

EVAC Meeting Minutes

by Tom Mozdzen

7:30pm: Martin Bonadio called the meeting to order. There were again ~50 people in attendance with several guests present. Most of the guests heard about the club from the web-site.

Martin started off the meeting with a little humor - cartoon and a top 10 list.

Upcoming star parties and events were discussed:

- Several May Star Parties.
- Grand Canyon Star Party June 16th to 23rd.
- June 20th AZSC solar eclipse live feed sleep-in. Contact Silvio Jaconelli for more information.
- Dinner with the speaker @ 5:30pm at Blackeyed Pea – Scottsdale Pavilions shopping center (Pima & Indian Bend).
- Next beginner's lab – June 2nd at Martin's house.
- Volunteers needed for:
 - EVAC Family meeting organizers
 - SIG group leaders
 - Calendar Coordinator
 - Newsletter Article collector
- Girl Scout Ranch – Payson, AZ June 7th
- Arizona Explorer Magazine – Article Collaborations
- Grayhawk Star Party – June 15th.

Thanks to those who volunteered for the SCC star party. One small way to say thanks to the college who lets us use their classroom once per month.

Also thanks to those who helped out at the AZSC. It was a great educational experience as over 1800 people visited the displays and telescopes.

Tom Polakis has a published article in Astronomy Today about the objects to view in Ophiuchus – congratulations again to Tom.

8:00 Break

8:10 Show and Tell

Laurice Dee – Talked about SOHO (Solio and Helio Observer). SOHO monitors our solar activity from the interior of the sun to the edge of the earth. An informative array of posters was on display to provide additional information about the sun and SOHO.

8:30 Main Speaker

Our main speaker was Chris Schur. Chris is a member of EVAC. A once film-only photographer for 25yrs, he is now discovering and exploring

the many advantages of CCD imagery. Once only used by professionals, affordable CCD cameras have become available to amateurs in the last 5 yrs.

Some CCD advantages:

- Film records 2/100 photons, CCDs record 80/100 photons.
- Film brands change spectral response signatures at will and without warning.
- CCD spectral response is even over the visible spectra.
- CCDs are available instantly after the exposure, while film still has to be developed.
- Format already set up for digital processing techniques (DIP).
- 65,000 gray shades vs 500 for film
- 19th mag in 5min.
- Can copy originals without degradation.

Virtually all professional astrophotographers have abandoned film, and are completely sold on CCDs.

The LRGB technique is used to reduce exposure time. Four separate shots are required, since CCDs need color filters to provide color information. The unfiltered luminosity shot can be the longest exposure time. The other shots with the color filters can be done at lower resolution and shorter exposure times because the eye is less discerning when it comes to color. This is also a technique used in digital television sets. Four overlays (B/W, plus RGB) are also used by printing companies.

Chris then showed us slides comparing film and CCD images as well as other shots illustrating various CCD techniques.

9:30 pm Meeting Adjourned.

If it's clear...

by Fulton Wright, Jr.
Prescott Astronomy Club
for June 2001

Shamelessly stolen information from Sky & Telescope magazine, Astronomy magazine, and anywhere else I can find data. When gauging distances, remember that the Moon is 1/2 a degree or 30 arcminutes in diameter.

Between May 24 and 28, (May? Sorry, I just found out about this.) you can see a fast moving asteroid. Fast means 1 arcsecond per time second. Its name is 1999 KWsub4 and its peak brightness should be mag 10.6. You can read all about it in Sky & Telescope, June 2001, p. 100.

On Friday, June 1, after 8:44 PM, you can observe Mars for the first time this month. This is when Mars rises. It is at its highest at 1:33 AM the next morning and is 19.4 arcseconds across. All this month Mars will be at its best (biggest).

On Friday, June 8, between 2:55 AM (Venus rises) and 5:17 AM (Sun rises) you can see Venus at its greatest elongation from the Sun. It will be at "last quarter" phase.

On Wednesday, June 13, after 7:43 PM (sunset) you can view Mars all night. It is at opposition tonight, reaches its highest altitude at 12:25 AM, and is 20.6 arcseconds across.

On Thursday, June 21, if you are in southern Africa, you can see a total eclipse of the Sun. I'll be there, how about you?

On Thursday, June 21, after 7:01 PM (Mars rises) and after 7:46 PM (sunset), you can observe Mars at its closest. It will be highest (29 degrees) at 11:42 PM and 20.8 arcseconds across.

On Wednesday, June 27, after sunset and before midnight, you can see the southern part of the first quarter moon at its best. Libration tips that part toward us. A few days before and after will also be good.

On Saturday, June 30, after sunset (7:47 PM) you can see Mars for the last time this month. It will be highest at 10:55 PM and 20.5 arcseconds across.

For Sale:

For Sale: **DS90-EC with the electronic autostar.** It has never been taken out of the box. The reason I have this telescope and not used it, is because I bought it thinking we were moving into a new house with a balcony but the house fell through. I bought it for \$450.00 and will take \$400. Like I said I never took the scope out of the box. I did however play with the Autostar software. I live in Awhatukee and my home email address is http:bren.paula@home.com



TELESCOPE MODEL: DS-90EC Optical Design Achromatic Refractor **Optical Diameter** 90mm (3.5") **Focal Length; f/ratio** 1000mm f/11.1 **Resolving Power (arc secs)** 1.3 **Optical Coatings** Multi-coated **Limiting Visual Magnitude** 11.8 **Maximum Practical Visual Power** 300X **Optical Tube Dimensions (diameter x length)** 3.5" x 38" **Focuser: eyepiece barrel dias.** 1.25" and 2" **Mounting Type** Altazimuth **#492 Dual-Motor Electronic Control (EC) System** Included; 4-speed Included; **EC Slew Speeds** 8x, 32x sidereal; 0.75°/sec; **Batteries (user-supplied)** 10 x AA **Battery Life (approx.)** with **Electronic Controller** 45 hrs. with **Autostar** 20 hrs. **Viewfinder** 6 x 30mm **Tripod** Heavy-duty Aluminum; full-length; **Compatible with optional Autostar Computer Controller** Yes **Total Telescope Net Weight (lbs.)** 15

For sale: **Meade 6" Starfinder Equatorial** with the Magellan II computer - corrector. Comes with the original eyepiece. The optics on this scope were checked out by Ed Ting in NH and found to be very fine. Price is \$700 Call Mike at 480-288-1109.

For Sale: **13.25" truss-tube Dobsonian. Starsplitter** compact mount. Pierre Schwaar figured primary mirror @ f/4.4 (focal length =1497mm) with enhanced coatings. Has 2" JMI focuser, dielectric secondary, cooling fan, and secondary shroud. Excellent optics, in great shape, great balance, smooth bearings, and very portable - one man setup in five minutes. A great deep sky telescope. \$1400 or best offer. Contact Martin Bonadio @ 480-926-4900 if interested.

EVAC & Other Events: 2001					
	New Moon	Meet	Local	Deep Sky	Other
June	6/21	6/13	6/16	6/23	6/16 to 6/23 Grand Canyon Star Party
July	7/20	7/11	7/14	7/21	
Aug	8/19	8/8	8/11	8/18	
Sept	9/17	9/12	9/15	9/22	
Oct	10/16	10/10	10/13	10/20	
Nov	11/15	11/14	11/10	11/17	
Dec	12/14	12/12	12/8	12/15	

Deadline for June Newsletter
Submissions is **June 20th, 2001.**
 Send articles to JKLINE29@HOME.COM

EVAC on the Internet:

EVAC Homepage: www.eastvalleyastronomy.org

E-mail Mailing Lists:

EVAC-mls is a mailing list for club announcements and quick notification of astronomical events.

To join, send E-mail with the "Subject: subscribe" to EVAC-mls-request@psiaz.com

EVAC-Board is for EVAC business. All club members are welcome to participate.

To join, send E-mail with the "Subject: subscribe" to EVAC-Board-request@psiaz.com

AZ-Observing is a fairly general mailing list about observing in Arizona. Included are star party information, who is going, as well as the latest observations and astronomical events.

To join, send E-mail with the "Subject: subscribe" to AZ-Observing-request@psiaz.com

Although EVAC is a private club not open to the public, we do encourage potential new members to initially join us at our club meetings and/or star parties to help them determine the suitability of the club to meet their needs.

East Valley Astronomy Club

Membership Form

Please complete the information requested. Return at the next club meeting or to the address below, with a check made payable to EVAC for the appropriate amount due. **IMPORTANT:** Please note that ALL memberships expire on December 31 of each year.

1. Check one of the following: () New Member () Renewal

2. Select appropriate dues options: **Send To:**

New Member select month joining:

() \$20.00 January - March

() \$15.00 April - June

() \$10.00 July - September

() \$ 5.00 October - December

EVAC Treasurer

P.O. Box 2202

Mesa, Arizona 85214-2202

Member Renewals (current Members ONLY!)

() \$20.00 Annual Renewal (January - December)

Magazines: Provide renewals notices with payment.

() \$29.00 Astronomy Magazine

() \$30.00 Sky & Telescope

Name Badges

() \$7.00 Each

_____ Total Enclosed

3. Complete requested information below. Please Print.

Name: _____

Address: _____

Phone #: _____ E-mail: _____

URL: _____

4. Newsletter delivery option: () U.S. Mail () E-mail

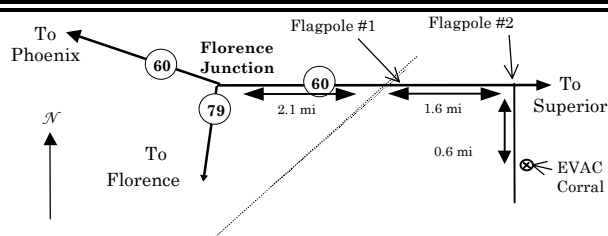
EVAC Star Parties

Local Star Party: Florence Junction Site

General Information: The Florence Junction site is the official site for the East Valley Astronomy Club's Local Star Party, typically held on the **Saturday closest to Last Quarter Moon**. Florence Junction offers reasonably dark skies within a short drive of most east Valley locations. (Report gunfire or illegal activity: 800/352-3796; Land use permit number: 26-104528.)

Location: N 33° 14' 40" W 111° 20' 16"

How To Get There: Take US 60 east to Florence Junction. Go past Florence Junction. 2.1 mi past FJ are railroad tracks, and on the right will be a flagpole. Do not turn there. Continue on for another 1.6 miles until you find the second flagpole on the right. This is your turn. Turn right, and continue on the dirt road for 0.6 miles. The corral is on the left right before a gas-line sign.

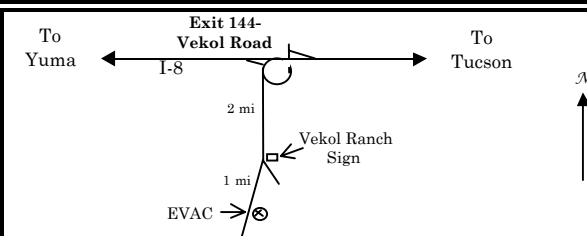


Deep Sky Star Party: Vekol Road Site

General Information: The Vekol Road site is the official site for the East Valley Astronomy Club's Deep Sky Star Party, typically held on the **Saturday closest to New Moon**. Vekol Road offers dark skies despite prominent sky glow from Phoenix to the north. The site is within 1½ hours drive time from most east Valley locations.

Location: N 32° 47' 55" W 112° 15' 15"

How to Get There: Take I-10 south and exit onto Maricopa Road. Continue through the town of Maricopa to SR 84, about 25 miles from I-10. Turn right on SR 84, after about 5 miles the road merges with I-8. Continue west and exit I-8 at Vekol Road—Exit 144. Turn left and cross the highway overpass. Before looping back onto I-8 take the dirt road to the left. Go south for 2 miles. At the Vekol Ranch sign bear right and continue south for another mile until reaching a large, open area on the left.



EVAC Officers

PRESIDENT
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PROPERTIES
Rick Scott
(480) 821-5721

NEWSLETTER
Jim & Chris Kline

East Valley Astronomy Club—2001
Scottsdale, Arizona

EVAC Homepage—<http://www.eastvalleyastronomy.org/>

Membership & Subscriptions: \$20 per year, renewed in December. Reduced rates to *Sky & Telescope* and *Astronomy* available. Contact Randy Peterson. PO Box 2202, Mesa, AZ. 85214-2202. (480) 947-4557 Email: rgp14159@aol.com

Club Meetings: Second Wednesday of every month at the Scottsdale Community College, 7:30 pm. Normally Room PS 170 or PS 172 in the Physical Sciences Building. See map below.

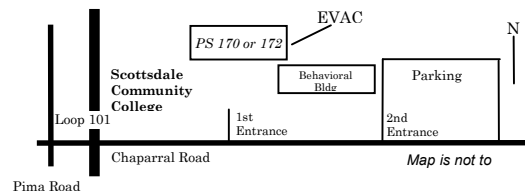
Address Changes: Contact Randy Peterson. PO Box 2202, Mesa, AZ. 85214-2202. (480) 947-4557. Email: rgp14159@aol.com.

Newsletter: Contact Jim & Chris Kline. 1209 W. Palo Verde Dr., Chandler, AZ 85224. Email: jkline29@home.com Contributions may be edited. The Newsletter is mailed out the week before the monthly Club meeting. An electronic version is available in Adobe PDF format in lieu of a printed copy. Please notify Jim & Chris of your delivery your preferences.

EVAC Library: The library contains a good assortment of books, downloaded imagery, and helpful guides. Contact Rick Scott for complete details, (480) 821-5721

Book Discounts: Great savings through Kalmbach and Sky Publishing. Contact Randy Peterson, rgp14159@aol.com

EVAC Party Line: Let other members know in advance if you plan to attend a scheduled observing session. Contact Stan Ferris, (480) 831-7307.



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Contents:

- The Backyard Astronomer: Mars (again!)
- Library Focus
- 2001: Six Months of Sky Events
- President's Comments
- EVAC Meeting Minutes
- If it's clear...
- For Sale

**Reminder: Next EVAC Meeting
Wednesday, June 13, 2001**