East Valley Astronomy Club

August 2002 www.eastvalleyastronomy.org **Scottsdale, Arizona**

Backyard Astronomer

By Bill Dellinges

Grand Canyon Star Party (North Rim)

As I rotate north and south rims each year for the G.C.S.P., I found myself at the North Rim for this event June 9-12. All four nights were clear. Though I really enjoy checking out the huge array of scopes at the South Rim, it's a real zoo there in the summer. So it's a delight to avoid the chaos of Yavapai Point and return every other year to the relative tranquillity of the North Rim (plus it's a 1000' higher). The penalty you pay is an additional 166 miles of travel, based on road miles from Flagstaff to these two points.

I was lucky to arrive after high winds had terrorized northern Arizona. Deloy Pierce, who anchors the star party here, had his Astroscan and 13" Dob blow over the day before. The Astroscan was destroyed and the Dob somewhat damaged. He used his 10" Dob as a back up.

See Grand Canyon cont'd on Page 2

EVAC EVENTS CALENDAR - 2002

			< -- Members only -- >				
	New Moon	Meeting	Local	Deep Sky	Gilbert	Other Events	Club Meeting Speaker
Aug	8/8	8/14	8/3	8/10	8/9	EVAC Board Meeting 8/16	Steve Coe (Deep Sky)
Sep	9/6	9/11	8/31	9/7	9/13	Northern AZ Star Party 9/6 Beginners Lab 9/14	
Oct	10/6	10/9	9/28	10/5	10/11	All AZ Star Party 4 & 5 Adopt A Hwy 10/26	
Nov	11/4	11/13	11/9	11/2	11/8		

NOTE : The Local and Deep Sky parties are for members and by invitation only.
The public are welcome to attend the Gilbert Star Parties which are held at the Gilbert Library at Greenfield/Guadalupe, and which start at dusk on the dates shown.

Events for Aug
8/1/2002 Remains of comet Honda-Mrkos-Padusakova
8/12/2002 Perseid Meteor Shower
8/20/2002 Kappa Cygnid meteors
8/31/2002 Andromedid Meteors

The first night, we had 10 scopes set up, more than I've ever seen there before. Usually we have anywhere from 3-5. One was a 20" Dob in which M51 looked like a black and white photograph of that object! Steve Dodder and Rosy of SAC (recall he gave EVAC a talk on Gamma-Ray Bursters) had his C8 and 4" un-aluminized solar scope there which every day they set up for the public in very hot weather. He was most enthusiastic and generous with his time. Jim Mahon from L.A. brought his Nexstar 11, Tele-Vue 4" refractor with a 60mm Coronado H-Alpha sun filter and Takahashi 22x60 Fluorite binoculars-now there's some big bucks. I liked the binos but wished they had a bigger field than two degrees. He had them mounted on one of those large parallelogram mounts which I thought was overkill, plus I didn't think it worked all that well. A regular photo tripod with a nice head would be fine for these bad boys. It was cool to check out the prominences in the solar filter but I was a tad disappointed in the lack of surface detail on the Sun's disk-even with adjustments with the tilt wheel. Based on what I saw in it, I'm not sure I'd be ready to drop $2200 on it.

Night two: We set up scopes for the partial solar eclipse in the late afternoon and had a ton of people, the longest line being behind the H-alpha scope naturally! Oh yeah, I had brought my Questar 3.5 for this event and venerable 1974 C8 for night viewing.

Yikes! Just three scopes tonight! Some of the others had decided to take their cannons out to the Cape Royal (7685') view point, a 25 mile drive, where clear horizons and no light pollution provided them with an astounding gazing session-hmmmm, that's not a bad idea!

Night three: the guy with the 20" was back along with his 4" AP Traveler (why do I keep thinking about pushing these guys over the cliff and taking their equipment?). The 21mm Pentax XL eyepiece in the 4" was giving superb low power views (29x) in the AP. I noted with its cup completely screwed down, I could see the full field with my glasses on. The ISS made a glorious pass almost overhead tonight to the delight of the crowd. ALSO! A very special sight! Someone asked if a certain light up there was a plane or satellite. Upon closer examination, we with binoculars were shocked to see it was a military plane refueling a B2 bomber ! I could clearly make out its distinctive bat like shape. It passed almost overhead. Then a minute later another B2 flew by following them. Pretty cool. Tonight I attacked nu Scorpii, just n.e. of beta Scorpii, one of my favorite doubles. It's actually a "double-double". Here's the deal. The two doubles (AC) are separated by 41.5", no problem. The CD pair are 2.3" apart. No problem at 83x in the C8. But the AB pair are only 1.3" apart and at home my C14 usally can't split them. Tonight the C8 at 254x split them fairly cleanly.

Night four: I gave the slide show tonight. Six scopes tonight. Good crowds as usual. Late that night someone from the south rim was flashing us with a green laser. It was a very bright green light. I returned fire with my million candle power spotlight (I use it to point out constellations to people). So we had a little Star Wars duel. I was surprised to be able to see their beam pointing down into the canyon at times. The ones I've seen look very faint when only a few yards away. They were 10 miles away as the crow flies and Dean Ketelsen tells me it was just one of those small pen-like things (?). He did see my light flashing back.

The next day we headed back to toilet town like condemned people going to the gallows. God, we hate to leave that place! (6/28/02).

If it's clear... by Fulton Wright, Jr.
Prescott Astronomy Club for August 2002

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.

On Monday, August 5, between 1:00 and 4:00 AM you will probably see a variable star at its maximum. With your unaided eye look above the east or southeast horizon for Mira, Omicron Ceti. Its maximum could be a week or two earlier or later and should last a week or two. The max is usually between mag 4 and 2. The min is usually mag 9.

On Sunday, August 11 and on into the morning of August 12, you can see the Persied meteor "shower". With your unaided eye look toward the northeast. The moon will have set by 10 PM and the best show (maybe one meteor a
minute) will come after midnight.

On Sunday, August 11, at 11:01 PM, you can see an asteroid very near a star. With a medium telescope (6 inch) look 40 degrees above the southeast horizon for 7 Isis (mag 8) only 10 arcseconds from a mag 9 star. The asteroid is moving quickly. About 20 minutes before or after this time it will be 15 arcseconds away from the star. The star's coordinates are RA: 22h 22m 23s, Dec: +0d 5m 5s.

On Thursday, August 29, about 9:00 PM, you can see an asteroid near a star. With a medium (6 inch) telescope look 60 degrees above the southeast horizon for Kappa Delphini (mag 5). 6 arcminutes down and to the right is 2 Pallas (mag 9).

On Saturday, August 31, about 8:00 PM, you can see a planet near a star. With your unaided eye or binoculars look 8 degrees above the west southwest horizon for Venus (mag -4) and Spica (mag 1), less than a degree apart.

July EVAC Meeting Minutes
Tom Polakis, Secretary

The meeting opened with president Martin Bonadio's tips for observing Pluto. Martin discussed two occultations of stars by the most distant planet. Marliyn Unrah from the Prescott Astronomy Club announced the Northern Arizona Star Party, slated for September 6 and 7 at Mingus Mountain. Their Web site is www.pacorg.net. She is also beginning a company named Star and Space Books, and is looking for astronomy-related publications.

Following were announcements of upcoming star parties, which are listed on the club's Web site. Martin mentioned members in print, including Chris Schur, Joe Orman, Rick Scott, and Tom Polakis.

In member presentations, Chris Schur showed images of such subjects as the Mice galaxies

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and the Tadpole galaxy as well as an H-alpha image of M27. Tom Polakis showed slides from a moonlit hike of the Grand Canyon. Next up was Pat Gleason, who described his Vesta Pro Web cam that will be useable as a cheap CCD camera.

The main speaker was David Brown, who gave an extremely concise discussion of EVAC's history. Minutes later, Joe Orman showed his slides from this Spring's planetary configuration.

Tom Polakis
Tempe, AZ
Arizona Sky Pages
http://www.psiaz.com/polakis/

Treasurer's Report for the First Half of 2002

By Randy Peterson – EVAC treasurer

Income taken in during the first six months of the year consisted of $2335 in membership fees, $474 in shirts sold, and $192 from sales of the 2002-year calendars.

Our expenses during this time include:
Newsletter postage and printing costs (snail mail)- $603
Speakers Honorariums - $300
Dinner with guest speaker - $35
Messier Marathon awards - $52
General meeting refreshments - $54
Board meeting refreshments - $72
IDA dues - $100
Properties - $171 (two lasers)
Shirts (long-sleeved, pre-sold) - $272
Incorporation/Land use fees - $60
Christmas Party (1991) costs - $133
Adopt a Highway lunch - $93
P.O. Box yearly rent - $38
Insurance - $231
Calendars (1992) - $143

Our ending funds at the end of June were $5327.53, and $290 in shirt inventory.

Through June this year, we have 196 members. This is significantly ahead of last year, when we had 168 members at mid-year. You may recall that we ended up with just over 200 members by the end of the year in 2001.

The Wonder of Space Exploration:

Ears vs Eyes

By By Laurice Dee, Ph.D. JPL Solar System Ambassador

Did you know that you do not have to "hear" to enjoy the vastness of space that envelopes us living on Earth? If our ears are not being used as a sensory mode, how can we find out exactly what space is like? In other words, which sensory mode can help us know "what's out there" beyond the atmosphere of our planet? Can you guess exactly what it is? Sight! All it takes is a pair of good eyes for many of us to look up at the sky to observe our closest star, the Sun, during the day and all kinds of celestial objects at night. Reliable visual aids, such as binoculars and telescopes, allow us to enjoy close-up views of various objects: richly-textured surface of our Moon; the dark bands of Jupiter; Saturn's expansive ring system; fuzzy comets; nebulae; star clusters; distant galaxies; and, of course, our Milky Way, one of the numerous galaxies where our solar system is located. Peering through powerful lens, we'd be able to see multiple moons that orbit Jupiter and Saturn, as well as Venus and Mars in detail when they move closer to Earth. Aside from skywatching, we'd come across breathtaking images and awesome data that are brought back from space by "robotic explorers" (spacecraft) that study our solar system, as well as the universe. We are constantly peppered with videos, slides, and printed materials that never cease to enrich our knowledge of the cosmos.

Why is it necessary for me to mention that we do not have to hear to fully appreciate Space? First of all, I am profoundly deaf and have to rely heavily on vision to communicate and receive information. After dealing with numerous "professional detours," I finally found my niche--robotic solar system exploration! I became interested in space when a spectacular image of the Mars Landscape on the front page of the Arizona Republic caught my eye. The article appeared the day after the Pathfinder lander and Sojourner rover arrived at Mars on July 4, 1997. Excitedly, I read the entire story with awe, and from then on, my interest in robotic solar system exploration blossomed. I spent a lot of time following the Pathfinder and Sojourner missions via the internet and learned of the other robotic solar system missions via their websites. While growing up I knew absolutely nothing about space other than the Apollo missions to the Moon in the late '60s. So now whenever I come across the cool images of our celestial neighborhood, I have a hard time keeping my eyes off of them. What our robotic explorers do in space never ceases to amaze me!

I am currently involved with the JPL Solar System Ambassadors Program. As an ambassador representing Arizona, I have been providing numerous slide and poster presentations to unveil the excitement of robotic solar system exploration with the public. I have been doing my outreach work since the beginning of 1998, and have been enjoying every minute of it! I will look forward in continuing to be part of the program, as well as providing the public with new and interesting information about robotic missions that explore our solar system and beyond.

As you can see, you do not have to hear to enjoy space exploration immensely! Since there is always something new and exciting going on in robotic solar system exploration and beyond, be sure to keep your eyes out for latest updates and just-released images. In the case of sky watching, be sure to look for incredible sights at night!

For Additional Information:
If you have any questions or would like to comment, please email Dr. Dee at jplssambassador@wyndtell.com or FAX to (480) 890-7878.
Visit the website for the JPL Solar System Ambassadors Program at www.jpl.nasa.gov/ambassador/

Communication and Automation

By Dave Kelley, EVAC Webmaster

When I volunteered to take over the EVAC web site, I had a caveat. I'd do a lot of work up front so that I wouldn't have to do any when I was done. The goals were to automate the web site to allow the members to maintain their own information, to allow the events coordinator to post events and have them automatically disappear when they were over, to give the officers a way to post a message to all members, and create a list server so the members could communicate with the entire membership as easily as sending a single email. That's a tall order, but in my opinion, it's the only way to have a web site. Static pages are boring and why come back? Dynamic pages are neat because it gives YOU control over your own information and the pages change with each visit.

The new home page (check it out if you haven't lately) is an example of making it simpler so it's easier to use, faster to load, and at the same time dynamic. Each time you visit the site (or refresh) the picture changes. This adds interest.

The list server is by far the most important feature. Web sites are for research and lists are for communication. Lists also use email as its transport…and face it, most people check their email at least once a day. Web sites are visited only when needed.

The EVAC list server is very simple to use and as I pointed out above, YOU maintain your information, or subscription in this case, and not me or anyone else. I love putting people in control of their own information and participation.

So, how do you subscribe? You simply visit the web site at www.eastvalleyastronomy.org and just below the picture there is a place to enter your Email address. Just make sure your email address is entered EXACTLY like your return address. If you enter me@mail.msn.com and your actual return address is me@msn.com then you may get the messages but will not be able to post. The list server always double checks the return address of any poster to make sure they have subscribed. Why is this important? Well, it keeps out the emails for Russian Brides and good deals on Viagra. If you are like me, you already get enough of that in your inbox. The list won't have ads (except members selling wonderful scopes) and there will never be a subscribers list sold or otherwise distributed. (unlike Yahoo lists)

So, take some time to visit the home page and if you aren't a subscriber to the list, give it a try. It's a fun way to communicate between club meetings.

Things are look'n up!

For Sale

I must sell my **Televue 101** with Ash Gibralter Alt-Az mount, Televue sky-tour computer (digital setting circles and object database), JMI electric focuser, hard case, 1x quick-point finder, and an everbrite 2" diagonal. This scope is in like new condition and has super-excellent optics. At f5.4 and a 540mm focal length with a 4" aperture this scope affords rich fields and pin-point stars, yet has enough aperture to pick up galaxies and detail in the planets. It is an APO refractor design with 4-element special dispersion glass optics. I would like to offer it at $2750 OBO.

Contact: Martin Bonadio: mbonadio@cox.net or at 480-926-4900 for more information.

President's Comments

By Martin Bonadio

Happy summer everyone. As the clouds start to roll in I find myself spending more time catching up on reading past magazine articles, and books, and other documents and web articles that I have amassed over the past several months. Personal and work stresses have also really taken me away from time out in the field observing, so I always enjoy an hour here and there staying current on what's going on. The advances from Hubble's new camera still amaze me, and the pictures in the past few months in S&T and Astronomy have left my drooling.

I must apologize that I haven't had as much time to organize and direct EVAC activities this year as hoped. I have had to face some really big projects at work, and a personal crisis that left me with no time for anything. Things are starting to slow down and I look forward to closing my last months as EVAC President with some fun activities. I'm actually heading to Korea for 2 weeks in October and will miss that month's meeting, but other than that after September I'm exiting to be at some star parties 1-2x each month. I'm also having a little star party in my backyard in a few weeks for some friends at work. This should prove fun.

Regardless things seem to be moving ahead nicely. It's just too bad that a part of our early summer observing was affected by the AZ wildfires. The Florence Junction site remains closed as of this writing, but because of the monsoon rains, I am hopeful that by the next local star party night it will be reopened.

Rick Scott and I had a great conversation on the phone a few weekends ago and decided that while we had all our star charts and charting programs warmed up that it would make a great show-n-tell "special" presentation. I hope you can make it to the August meeting when we go through all this. It should prove interesting.

We also have a Board Meeting planned for August 16th at 7:30pm at my house. At this meeting the board will continue to talk about topics related to EVAC projects, SIG's, growth, and special activities. One big topic will be the fall elections. As I have mentioned in a past article, there are going to be some big positions opening up soon, and it's a great chance for you to step forward and help us take the club forward into the next few years. Let me know if you are interested. Starting in September we'll start the official nominations and in November we'll have an election.

I personally have really enjoyed participating as an officer in the club. Both as Newsletter Editor, and President I feel that I have gotten to know a lot of people and have been part of some growth and some expansion. During Dave Brown's talk, "A brief history of EVAC", last month, I found myself thinking about how thankful I am that this club exists and that I have met such great people with a common interest!

Just looking at our club library is testimony that we are growing. Now we have a laser pointer, a new setup of nice eyepieces, and a laser collimator just to name a few things.

On a final note we have the All-Arizona Star Party coming up in October, and I need some volunteers to help coordinate this event. If we're going to notify the magazines, we'll nee to do that really soon because they are already planning their October editions. As well, if you have some great stories, equipment reviews, observing notes, or other related astronomy information, please submit your articles to Don Wrigley @ djwrigley@earthlink.net. I enjoy reading my newsletter each month.

Safford cont'd from Page 6

Take a Sirius Trip

Have you ever wanted to see a total solar eclipse? Are you a veteran eclipse chaser? Whether a first-timer or a veteran, a total solar eclipse of the sun still has the power to awe anyone fortunate enough to be standing under the Moon's shadow as it races over the Earth.

Traveling round trip from Los Angeles, CA, Sirius Travel will lead up to 30 people to Australia's Outback on December 4 for this incredible event! If you have ever wanted to see one of nature's most spectacular shows – this could be your best opportunity for a long time to come. At the bottom of this note you will find a list of dates and locations for the next solar eclipses, up to the USA eclipse of 2017.

Total solar eclipses are rare and often difficult to see based on the location of their passage and the climate of the location. This year we are fortunate enough to have an eclipse fall on the continent of Australia, a unique destination on its own, and to view that eclipse from the Outback, where observing conditions are reliably dry and clear! Australia is an easy destination for English speaking travelers, with a stable government and an environment that feels similar to America, with more than a trace of frontier attitude.

Sirius Travel stands distinct from the other operations leading tours in that we are exclusively owned and operated by astronomers. We offer only astronomy related tours. All of our guides are astronomers and experienced travelers and an astronomer is involved in every stage of planning for our tours. This means that we have asked all of the questions and considered all of the astronomical pitfalls well in advance. We have studied the climate of the region and selected our viewing area based on historical climate data and accessibility by road. One of our guides worked in the Woomera area for five weeks in 1995 and is intimately familiar with what there is to do in the vicinity. Based on experience, we booked all of the actual hotel-style rooms at Woomera's only hotel, the Eldo, 2 years in advance (the remaining rooms are barracks style with the shared use of a coed bathroom). We have fully pre-paid for all of the rooms and other tour companies are, unfortunately, now forced to use the barracks.

We encourage all travelers to bring their portable telescopes. We will be under the dark Outback skies for 3 nights – warm, clear, and dry conditions will make for excellent star parties and a perfect time to explore the southern sky!

If you are contemplating traveling to see this eclipse we invite you to consider Sirius Travel. Please visit our website (www.siriustravel.com) for details about this tour or email us anytime at: eclipse2002@siriustravel.com .

Future total solar eclipses (landfalls):

November 23, 2003 – Antarctica (passes over Russian base of Mirny)

March 29, 2006 – Africa, Turkey, Russia

November 13, 2012 – Australia (rainforest region)

March 20, 2015 – skims Iceland

March 9, 2016 – Indonesia

August 21, 2017 – USA!!!

We hope to hear from you soon,
Clear Skies!

Sirius Travel

East Valley Astronomy Club
Membership Form

Please complete this form and return to the club treasurer at the next club meeting OR mail to EVAC, P.O. Box 2202, Mesa, AZ 85214, with a check or money order made payable to EVAC.
IMPORTANT: ALL memberships expire on December 31 of each year.

New Member Only - select month joining:
( ) $20.00 January – March
( ) $15.00 April – June
( ) $10.00 July – September
( ) $25.00 October – December & next year

Membership Renewals:
( ) $20.00 January – December

Name Badges:
( ) $7.00 each Name:_____

Magazines: if renewal, customer #_____
(New) (Renewal)
( ) ( ) $29.00/yr Astronomy Magazine
( ) ( ) $30.00/yr Sky & Telescope

Newsletter delivery option, check one:
( ) E-mail (saves club postage/printing)
( ) U.S. Mail

Total enclosed $_____

Name:_____

Address: _____
_____

Phone # (___)_____

E-mail _____

URL: _____

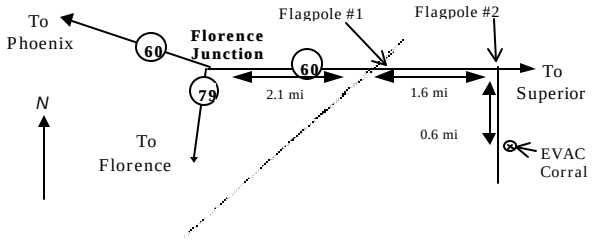
EVAC Star Parties

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, just before a gas-line sign.

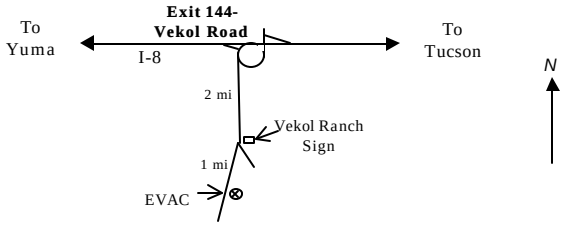


Deep Sky Star Party: Vekol Road Site

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.



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East Valley Astronomy Club—2002 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. Email: rgpeterson@cox.net

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

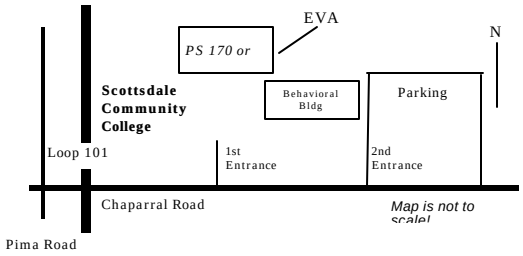
Address Changes: Contact Randy Peterson. Email: rgpeterson@cox.net or PO Box 2202, Mesa, AZ. 85214.

Newsletter: Contact Don Wrigley or Kathy Woodford, 423 W. 5th Ave, Apache Jct, AZ 85220. 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 send your contributions to Silvio Jaconelli SilvioJ@msn.com or Don Wrigley DJWrigley@earthlink.net. Contributions may be edited.

EVAC Library: The library contains a good assortment of books, downloaded imagery, and helpful guides. Contact Gary Finnie for complete details gfinnie@kam-az.com

Book Discounts: Kalmbach and Sky Publishing offer a 10% Discount to EVAC members on books and other items from their catalogs! When ordering, notify the person on the phone that you would like the "Club Discount." When ordering by mail, there is a line to subtract the 10% club discount.

EVAC Party Line: Let other members know in advance if you plan to attend a scheduled observing session. Contact Dave Coshow (480) 730-1132.



Deadline for the September Newsletter is Aug 23rd

Space is limited. Get your articles in early. May be edited for brevity.

East Valley Astronomy Club

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PO Box 2202
Mesa, AZ 85214

Don Wrigley & Kathy Woodford, Co-Editors
Silvio Jaconelli, Coordinator
423 W 5th Ave, Apache Junction, AZ 85220

EVAC on the Internet
EVAC Homepage: www.eastvalleyastronomy.org

E-mail Mailing List:
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@freelists.org

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.

Reminder: Next EVAC Meeting Wednesday, August 14, 2002