

# East Valley Astronomy Club

November 2002

[www.eastvalleyastronomy.org](http://www.eastvalleyastronomy.org)

Scottsdale, Arizona

## Election Of Nominees To Be Held

By Martin Bonadio

It appears that we currently have volunteers and nominations for all but one position for next year. Great job, and I'm pleased that we have such interest this year. Brings a tear to this President's eye. Ok, so I'm over-selling here. Anyway I thought I would make one more plea before the election on the 13<sup>th</sup> at the November meeting.

**The EVENTS COORDINATOR slot is open.** This is actually a fun position as you get to help organize all the events and star parties. It's mostly just maintaining the club calendar and occasionally recruiting people for star parties, etc. It's a great opportunity to have some fun, and I'll gladly appreciate any nominations or volunteers for the spot.

David Coshov is currently doing a great job with this position and I'm sure will also tell you all about what it entails. Don't hesitate to email me at [mbonadio@cox.net](mailto:mbonadio@cox.net) or call me at 480-926-4900 if you have more questions about it or want to sign up!

<b>EVAC EVENTS CALENDAR - 2002</b>							
<-- Members only -->							
	<b>New Moon</b>	<b>Meeting</b>	<b>Local</b>	<b>Deep Sky</b>	<b>Gilbert</b>	<b>Other Events</b>	<b>Club Meeting Speaker</b>
<b>Nov</b>	11/4	11/13	10/26	11/2	11/8	11/2 Boyce Thompson 11/5 SCC Star Party 11/16 Safford Star Party	Tom Polakis
<b>Dec</b>	12/4	12/11	11/23	11/30	12/13	Holiday Party	
<b>Jan 03</b>	1/2/2003	1/8/2003	TBA	TBA	TBA	TBA	TBA

**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 November & December

**Nov 2** Boyce Thompson Arboretum Star Party.  
**Nov 5** SCC Star Party  
**Nov 16** Safford Hot Springs Star Party  
**Dec 14** Holiday Party – Details TBA  
**January 2003** TBA

## **EVAC Meeting Minutes – October 9, 2002**

Tom Polakis, Secretary

In President Martin Bonadio's absence, VP Diana Jane' opened the meeting with an introduction of visitors and officers. A new slate of officers was proposed for 2003:

President - Peter Argenziano  
Vice President - Diane Jane'  
Secretary - Tom Polakis  
Treasurer - Stanley Bronstein  
Properties - Gary Finnie  
Webmaster - Marty Pieczonka  
Newsletter - John Matthews  
Web developer - Dave Kelley

Some upcoming events were listed, including the Boyce Thompson Arboretum event on November 2 and the SCC star party on November 5.

Peter Argenziano announced the existence of a course by MIT called "Hands On Astronomy." He also announced an upcoming Desert Sunset Star Party, scheduled for Spring of next year near Benson. Gene Lucas announced the availability of the Royal Astronomical Society of Canada's "Observer's Handbook" for 2003. Contact Gene for more information.

After the break, Tom Polakis showed some images from Star Hill Inn. This was followed by Chris Schur's presentation about building an observatory near Happy Jack on the Rim. Pedro and Diana Jane' showed a slide show of the All-Arizona Star Party. Technical difficulties prevented Richard Neyenheius from showing a video of the Steward Mirror Lab's spin casting facility.

Tom Polakis  
Arizona Sky Pages <http://www.psi.az.com/polakis/>

## **If it's clear...**

by Fulton Wright, Jr.  
Prescott Astronomy Club  
for November 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 Thursday, November 7, about 7:00 PM, you can see a planet near a star. With a

small (3 inch) telescope, look 35 degrees above the south horizon for Neptune (mag 8) and slightly brighter star (RA 20h 42.7m, dec -18d 07') 2.5 arcminutes apart. If you watch over several nights, you should be able to see the motion of Neptune.

On Monday, November 18, from 1:08 AM to 1:14 AM, you can see one of Jupiter's moons move in front of another. With a telescope, the bigger the better, look 20

See Pg 3 **Clear...**

degrees above the east horizon for Jupiter. Europa moves in front of Io. A small telescope will show two points of light merging then separating. A large telescope might show more detail but the seeing may not be good so low in the sky.

On Monday, November 18, about 9:00 PM, you might see some meteor activity. At this time there is supposed to be a peak in the Leonid shower. Two things are working against you. The moon is full (bad) and the radiant is 25 degrees below the horizon (really bad). You probably won't see anything. The radiant rises about 11:30 PM. But don't give up hope, because later that night ...

On Tuesday, November 19, about 3:38 AM, you really might see some meteor activity. This is the time of the second peak in the Leonid shower. The moon is still full (bad) but the radiant is 50 degrees above the east horizon (good). This is supposed to be the last hurrah for the flashy display of the Leonids in our lifetime, so set your alarm. You might even want to watch from 11:00 PM (before radiant rise) till 6:30 AM (morning twilight).

On Tuesday, November 19, about 6:40 PM you can see a penumbral eclipse of the moon. With your unaided eye or binoculars look 15 degrees above the east horizon for the full moon. Notice that the moon's northern edge is slightly darker.

## **President's Comments**

**By Martin Bonadio**

### **First Light Story**

Well, after selling my 13" Dob, my Televue 101, and my CCD camera I was able to free up enough cash to catch up on

bills, fund my trip to Korea, and get a nice compact 5" SCT for star parties and travel. But as luck would have it Randy Peterson was interested in my 10" LX-200 and I was thrilled at the fact that after my trip I had a little money left over.

So I made the transaction with Randy and purchased an LX-200 12" GPS w/UHTC optics. Fortunately the scope arrived after I returned from my trip and didn't interfere with the All-Arizona star party. I planned it that way.

Well, after my back recovered from lifting the weight of this giant telescope – 83 pounds for the scope, and another 50 or more for the tripod, I marveled at the massive size of this SCT. I even have to keep a small stool handy to observe at less than 20 degrees off the horizon (no, I'm not spying on my neighbors). It made for a few really nice pictures!! ☺

The scope assembled well. Because of the delays in shipments overseas, I had to use 8 "C" batteries to power the scope the first few days. This worked fine. During the day I performed a scope calibration routine that is supposed to improve the initial guide star pointing accuracy after initial GPS alignment. I also replaced the collimation thumbscrews with "Bob's knobs" and put a scope saver on the tripod. I'm glad I did because I wouldn't be able to line up the scope on the tripod without it. Just hump it onto the platform in between the guides, and it's ready to be threaded from below. I assembled and broke down the scope 3-4 times during the day to find the best way to manage the weight. I found that lifting it sideways by the handles works great. Finally I updated the firmware to the latest version, and downloaded some comet, asteroid, and double star coordinates using Meade's ACD program. The program works with a serial connection to your computer and the LX-

200. It's nice because it lets you create guided tours with text, and build your own object library on your home PC. These can all be downloaded to the scope. I found a bunch already done that I installed.

At night, I turned on the computer, and let it do a GPS alignment. It was successful in about 5 minutes and within 1 degree of the first guide star. After letting it choose and center 2 guide stars I was ready to do some observing. But first I had to spend some time doing the collimation of the scope – since I had messed it up putting on the “Bob's” Knobs. The knob's made doing this a breeze and I had perfect bullseye patterns in about 10 minutes using 1200x on a 5<sup>th</sup> magnitude star high over head.

My first choice was Uranus. At 638x power the tiny planet was well resolved in the scope as a nice sized disk. Neptune was smaller but also well rounded. Then off to the double-double. First split was easy at about 120x, and more power made the split even more obvious. Iota Cassiopeia – a nice triple also split well. Alberio showed wonderful color. I put in a variable projection eyepiece and looked at the moon as it rose to about 30 degrees and nearly full. Ouch!! My eyes aer still trying to recover. Because of the moon my deepsky observing on the first night was limited to M13, M57, NGC 7789, the double cluster at low power, M27 and Andromeda. Each was visible and sharp. I was very pleased with my optics.

The Autostar goto feature worked flawlessly all night long and I really like the new “spiral” slewing. As you get close to an object the scope slows down slewing and spirals into it. That's nice because if you miss the target for some reason you might have seen it pass by as it homes in, letting you move the scope quickly to it manually later. The mirror lock and micro focusing features were cool, as it let me really fine tune the

optics.

On my second time with the scope, I got up really early to see Jupiter and Saturn. My jaw is still dropping at the wonderful view I saw at 638x on both. Jupiter's festoons and clouds showed detail almost photo like. Saturn revealed the A/B ring and I believe I made out Enke's division for just a moment when the seeing was perfect. Both were huge in size and could be focused very sharply with a Meade 4.7mm ultra-Wide eyepiece.

I'm not sure how well the UHTC coatings help, but the planets were very bright. Does anyone have a non UHTC 12” that they want to do a side-by-side comparison with. Deos anyone have 12” dob or reflector that they want to compare. How about a 6-8” Refractor? This could be fun!

Complaints? Well of course, be very careful with the weight of this scope. If you can handle it, then you will be rewarded with good views. I didn't like how the microfuser attaches to the rear cell and the diagonal – but Scopestuff.com has a fix for that. I didn't like the RA and Dec hard stops either. In fact the RA stop is already broken. No big loss – the scope operates fine without it. I just removed the stub that broke off inside the base. Lastly, the tripod height adjust lock screws didn't all fit the threads on the legs. I had to tap out 2 of them to make it fit properly. I wasn't about to send the scope back for this kind of minor stuff. Especially since the optics and computer seem to work very well.

My rating of the new LX-200 12” GPS w/UHTC = 7 out of 10.

## **Holiday Party**

Our holiday party will be held at my home this year on Saturday, December 14<sup>th</sup>. I'll publish more details and a sign-up sheet at the November and December meetings, and as well have email updates as the date gets closer. This will be a potluck party with the club sponsoring a main dish. We'll also be arranging for some kind of raffle and a white elephant gift exchange. If you are interested in helping me with this effort please contact me at 480-926-4900. Otherwise I'll hope to see you there.

## **Trash Cleanup Report**

As always we had a great turnout and a lot of fun at this fall's trash-cleanup. We had 20 people who rustled 32 bags – both counts being records. After the cleanup we enjoyed a nice "brunch" at Village Inn where manager and EVAC treasurer, Randy Peterson, joined us for a lot of telescope talk. It was interesting to see the frowns on the faces of people facing the window as they watched storm clouds roll in on a perfectly good star party night. Don Wrigley had strong words to me about buying any more equipment!!

Attendees were as follows and are to be thanked for their tremendous efforts: Steven Aggas, Dean Newton, Don Wrigley, John and Kathy Matthews, Dick Schaff, Jim Loral, Peter Argenziano, Brian Rhodes, Tom Ballen, Dave Lehnen, Everett Didiker, Bill Dellinges, David Coshov, Susand and Tish Healy, Jon Christensen, Sho Matsuura, Craig and Caleb Dokken, and myself!!

Prizes for treasures goes to the fellow who picked up the Department of Corrections identification tag, and to Don Wrigley who pocketed some "mystery" Polaroid's. No these weren't astrophotos, but ask Pedro Jane' – he'll tell you that there is no shortage of questionable material found each and every time we do a cleanup. Steven Aggas reported finding a few more parts for his telescope mount.

As always, I will report that the Adopt-a-highway cleanup is a great way for EVAC to show community support, make a difference, and for members to gather to get to know each other.

# **The Backyard Astronomer**

Bill Dellinges

## **A Visit to New Mexico Skies Guest Observatory (10/3/02)**

My wife Lora and I recently had the pleasure of spending two CLEAR nights at New Mexico Skies Observatory (el. 7,300'), 15 miles east of Cloudcroft, New Mexico. (A fine comprehensive article on this region, written

by club member Tom Polakis, can be found in the June 2002 issue of Astronomy magazine, p. 74).

Owners Mike and Lynn Rice opened their facility in May, 1999 on 35 acres bordering on a national forest. They offer an impressive array of equipment which you

can rent (you may bring and use your own scope, paying only for your lodging). In a row of three AstroHaven domes are, respectively: A C-14 on a Bisque GT-1100S Paramount mount, LX200 16", and 7" Astro-Physics refractor with a Takahashi 4" FSQ-106 piggy-backed on it riding on another Paramount mount. These instruments are strictly used for imaging-they have a ton of electronics hanging off them, CCD and video cameras, guiders, etc., and can, as I understand it, be operated at the scope or remotely from the Library/Lounge room through computers there. A fourth Home Dome has an LX200 12" used for visual observing. Adjacent to the domes is a large deck with a Tectron 30" Dobsonian with digital setting circles. 25" and 15" Dobs, and Miyauchi 20x100 binoculars are also available. Next to this deck are two small cement pads for those who want to set up their own scopes. Each has an electrical outlet nearby. Equipment rental fees can be found at their web site: [www.nmskies.com](http://www.nmskies.com) (example: LX200 16", \$115 per night).

A few meters across the path is a large roll off roof observatory (15'x30'?) equipped with two C-14's on Paramount mounts set up for remote use. Mike Rice told me they can, and have been used remotely from various places on the planet. He plans to add more C-14's in this observatory-the piers were in place.

The accommodations are modern and first class. They are equipped with range, microwave, refrigerator, and utensils-just bring your food or visit two nearby cafes. Beds have sheets and blankets, and towels are provided. Even salt and pepper and paper towels! Oh yeah, TV too.

Our one bedroom (\$130/night) cabin was one of two on one end of the Rice's charming two story log home. From our

deck we had a wonderful view looking east across the mountains. Many birds flitted about. And trees! It was so nice to be amongst trees. There are two other log motif structures nearby. One building is a duplex affair with two, two bedroom cabins (\$160/night each). The other building is a three bedroom cabin (\$200/night).

The use of red lights at night is strictly enforced. Even our refrigerator had a red light in it! During night sessions, I noted I could not see even one white light in the distance. One reason, no doubt, is the fact that many of the Rice's neighbors also have observatories, something I noticed when driving in and on walks. There definitely is a growing astronomical community settling in around this area. The sky is fairly dark (perhaps not quite as dark as at the Grand Canyon), the Milky Way prominent. I could easily make out Capricornus and Aquarius. With direct vision, I could make out the stars in the Little Dipper except for 5<sup>th</sup> magnitude Eta U. Min which required averted vision on my part. There seemed to be an ever so slight light dome about 10 degrees high in the west, perhaps from Cloudcroft or Alamogordo (?). The second night I noted a mysterious lighting of the atmosphere about 15-20 degrees high, 360 degrees around us. A friend noted this too, but we were both puzzled as to its source. I was having too good of a time to critique the sky in more detail.

Though clear, the seeing was not so good the first night, my 5" APO could not resolve Iota Cassiopeiae cleanly. I could make out the "C" component 7.3" away but the B component 2.8" away was impossible. Conditions improved the next night enough for me to split that 7<sup>th</sup> magnitude, 2.8" distant star.

We found Mike and Lynn Rice to be a friendly couple who'd go out of their way to make you comfortable or assist you in your astronomical needs. I especially enjoyed the nightly ritual in

which one of them came out at 11 p.m. to invite everyone into the Library/Lounge room for coffee, cappuccino, or hot chocolate. It was enjoyable chatting with other gazers and learning where they were from and what they were doing. There was a lot of imaging-CCD talk which, as a visual observer, went wayyyy over my head. Nevertheless, I had a very enjoyable time at New Mexico Skies Guest Observatory. I look forward to returning for a longer period of time on my next visit to this very relaxing bucolic setting. Heck, I might even bring a telescope too!

## **Boyce Thompson Arboretum Star Party November 2, 2002**

Saturday evening at the Arboretum was a little overcast with high thin clouds. Even with the prospect of a cloudy evening, we had a splendid time. As usual the barbecue was a feast beyond compare. They always outdo themselves and it really makes it all worthwhile.

The members of the Arboretum are also very impressed with the views we could show them. There were sixteen EVAC scopes including one binocular viewer that were available to show our hosts fuzzy views of Vega, Alberio and a few occasional bright stars that would peek through the misty clouds. Overall it was a very enjoyable evening giving many of us time to compare and show off our scopes to each other.

### **SCC Planetarium**

I received the following information and would like to pass it along to club members:

Scottsdale Community College announces the opening of their new planetarium to the public. The facility is located in building PS 178N.

Show schedules are as follows:

October 12th (Saturday) 2 shows - 4:00 PM and 4:45 PM

October 19th (Saturday) 2 shows - 4:00 PM and 4:45 PM

Beginning in November, shows will be held on the first and third Saturday of each month.

Seating is limited - 22 people (maximum)

Reservations required!

Contact Steve Mutz at Scottsdale Community College

Telephone: 480-423-6122

e-mail: [steven.mutz@sccmail.maricopa.edu](mailto:steven.mutz@sccmail.maricopa.edu)

Marcia Collette

### **EVAC Holiday Shirts**

OK, we don't have red and green EVAC shirts, but we do have a limited number of t-shirts and polo-shirts that would make great Christmas gifts for you or a friend! There are various sizes, mostly large and X-L, and they are priced at \$14 to \$16. Some have pockets, most have a four-color picture of M51 (the Whirlpool Galaxy) taken by Chris Schur. All are looking for a good home!

These shirts will be available for purchase at the November meeting, so bring your checkbook and stock up before they disappear!

Randy Peterson  
EVAC treasurer

**EVAC!! I am in search of new homes for two Telescopes. They are:**

**Meade 8" LX-90 properly equipped**

**Celestron 11" Ultima – 8 to 10 years old.**

**Comes in a case with a wedge for photography.**

**Both scopes are in good condition and ready to use. Price is negotiable but will be in the range of \$1200 for the 8" and \$1800 for the 11". If anyone has an interest in either one, call me at 480-730-1132 and we will chat. Or email me at [djcoshow@cox.net](mailto:djcoshow@cox.net) Dave Coshow**

### **For Sale**

Sadly, I have to part with my 13" truss dobsonian. I'm putting it up for sale for \$1000. The scope has 2 truss poles holding the focuser/secondary assembly. The 13" mirror is a little dusty. The mirror was refigured by Pierre Schwaar and delivers pretty good images, though at f/4.1, focusing is pretty critical which is nicely done by a Crayford focuser. The scope also has a cooling fan at the back end of the scope. A Telrad Base is also included. For storage, the rocker box has a groove where the focuser/secondary assembly can slide in.

I used this scope for observing three times, and I was very satisfied with its performance. It took me only about 10 minutes max to set up. Some eyepieces had a little trouble getting into focus (2" 30mm Vixen WA), but the previous owner used a Panoptic (I think it was 35mm) without trouble.

I'm selling this scope for 2 reasons: short on money right now and my apartment is on the second floor and a minutes walk from my car. Its hard to haul this scope between the two locations.

I truly hope that this scope could go to a good owner who could appreciate Mr. Schwaar's exceptional work. For any further inquiries, I should be at the EVAC meeting this Wednesday with some flyers. I can also email you photos of the scope. Thank you!

Clear Skies! Derrick Lim [spinor1108@yahoo.com](mailto:spinor1108@yahoo.com)

**Don Wrigley, editor of the EVAC Newsletter, has changed his email address effective October 1<sup>st</sup>. Be sure to note the new address to send your email to:**

**[DJWrigley@mchsi.com](mailto:DJWrigley@mchsi.com)**



## 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: \_\_\_\_\_

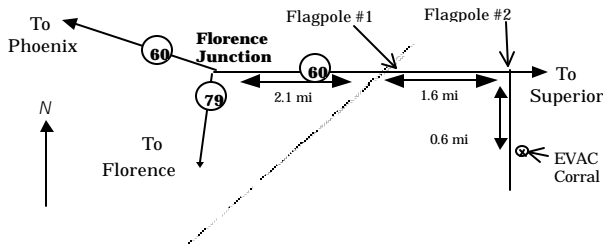
### EVAC Star Parties

**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.

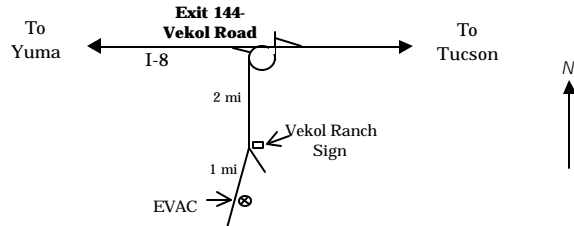


**Deep Sky Star Party: Vekol Road Site**

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.



**EVAC Officers****PRESIDENT**

Martin Bonadio  
(480) 926-4900

**VICE-****PRESIDENT**

Diana Jane  
(480) 833-2002

**TREASURER**

Randy Peterson  
(480) 947-4557

**SECRETARY**

Tom Polakis  
(480) 967-1658

**PROPERTIES**

Gary Finnie  
[gfinnie@kam-az.com](mailto:gfinnie@kam-az.com)

**NEWSLETTER**

Kathy Woodford and  
Don Wrigley, Editor  
(480) 982-2428

Silvio Jaconelli,  
Coordinator  
(480) 926-8529

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](mailto: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.

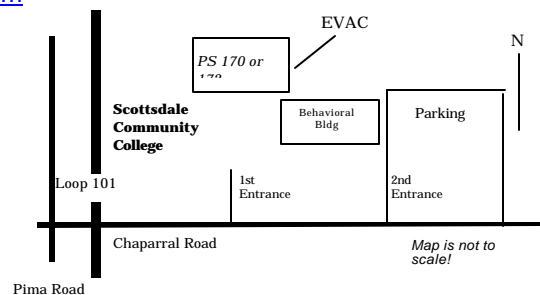
**Address Changes:** Contact Randy Peterson. Email: [rgpeterson@cox.net](mailto:rgpeterson@cox.net) or PO Box 2202, Mesa, AZ. 85214.

**Newsletter:** Contact Don Wrigley or Kathy Woodford, 423 W. 5<sup>th</sup> 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](mailto:SilvioJ@msn.com) or Don Wrigley [DJWrigley@mchsi.com](mailto:DJWrigley@mchsi.com). 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](mailto: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 December Newsletter is Nov 29<sup>th</sup>**



**East Valley  
Astronomy Club**

EVAC  
PO Box 2202  
Mesa, AZ 85214

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

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

**EVAC on the Internet**

**EVAC Homepage:** [www.eastvalleyastronomy.org](http://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](mailto: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, November 13, 2002**  
**At 7:30 P.M.**