

East Valley Astronomy Club

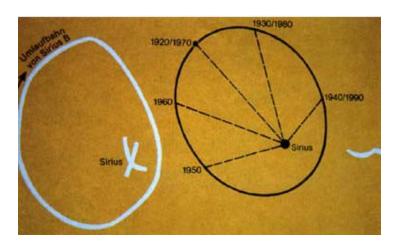
December 2001

www.eastvalleyastronomy.org

Scottsdale, Arizona

A 'SIRIUS' Tale

Organized by Martin Bonadio



As winter rapidly approaches, we all look forward to seeing Sirius, The Dog Star, which is the brightest star visible in our Arizona skies. What you might not know is that Sirius is also the subject of one of the most enduring - and most farfetched - claims of extraterrestrial visits to Earth. I ran across this incredible story after watching a program on the History Channel, and would like to share it with you.

EVAC & Other Events: 2001-2002							
	New Moon	Meet	Local	Deep Sky	Other		
Dec	12/14	12/12	12/8	12/15	Holiday party (TBA)		
Jan	1/13	1/9	1/5	1/12			
Feb	2/12	2/13	2/2	2/9			
Mar	3/14	3/13	3/9	3/16			

The story revolves around the Dogon people of West Africa. In the late 1940s, Dogon leaders make an intriguing reference to Sirius in their tribal teachings (interpreted by two French anthropologists) -- not just to the familiar, bright star, but to an invisible companion!!!

This second star was said by the Dogon to be composed of an extremely dense material ("all earthly beings combined cannot lift it") and to move in a 60-year orbit around Sirius. The anthropologists estimated that this knowledge had been part of the Dogon mythology for several centuries. Ancient drawings on caves even show diagrams of many astronomical symbols that bear amazing similarities to present day understanding. One, in particular, shows an orbit that resembles Sirius A and the position of Sirius B in that orbit! I found this to be quite intriguing.

What is so remarkable about this belief is that it wasn't until 1862 that astronomer Alvan Clark discovered that Sirius did indeed have a small, barely visible companion star. Not only this, but the composition of this star is also believed to be very dense – nearly 6000 times the gravity of Earth. The Dogon had apparently beat Clark to the punch by several hundred years!! How could they have known about it? A number of theories are floating around on the Internet ranging from Alien encounters to special eyesight, to long lost Egyptian technology.

It gets better.... This sensational discovery was turned into an even more sensational book in 1976 called The Sirius Mystery. Author Robert Temple took the easy route, explaining the mystery by postulating that amphibious (!)

aliens came to Earth 5,000 years ago and brought with them the secrets of the galaxy, including the existence of Sirius' companion. Ok, I'm not implying that any of this is true, but it certainly had me thinking about this more carefully – hence the reason why I started to collect information and put this article together.

The scientific community ridiculed Temple's explanation, and prominent astronomers, among them Carl Sagan and Ken Brecher, came up with the following explanation: French missionaries had been active in the region where the Dogon lived since the 1920s. In Europe at that time real public excitement had been generated by Sirius.

Close examination of the light spectrum arriving at Earth from Sirius' tiny companion star showed that the light had escaped from an enormous gravitational field. This proved that the tiny star was indeed - as the Dogon had maintained - extremely dense.

Brecher and Sagan argued that somehow the missionaries of the 1920s conveyed that information to the Dogon, who in turn incorporated it into their legends. Brecher suggested a scenario in which a Dogon tribesman asks a Jesuit for his myths, and the missionary replies, "See that star? It is actually two stars and the invisible star is the heaviest thing there is."

There are precedents for the incorporation of recent information into mythic formats. However, this explanation, while it preserves scientific sanity, has none of the romance of the original. And it hasn't gotten any better today. Most of the theorizing and fantasizing above took place in the 1970s. However, the Dogon story lives on. The counter-arguments today are based on doubts about the very basis of the story.

Is there any truth to these stories? How did the Dogon adopt this amazing culture? What secrets do they hold that would be of value to Astronomers today? Even more importantly... Has anyone in this club ever seen Sirius B through an amateur instrument? It really created a lot of interest for me!!!

Black Holes

By: Randy Peterson

On Wednesday, November 7, Dr. Stoeger, a Jesuit Priest from the Vatican Observatory, was a guest speaker at the Arizona Science Center. He gave an interesting talk for about an hour on Black Holes. The following are some of the highlights of his talk.

The search for Black Holes (BH) began in the late 20's, in response to Einstein's theories which gave belief that such a thing should exist.

About 4 or 5 solar masses is the minimum requirement to form a BH. This makes such stars as Betelgese, Antares and Rigel prime candidates to form a BH as they eventually collapse into themselves.

Some comparative distances: A red giant star has a radius of about 200,000,000 miles: our sun, about 864,000 miles; a white dwarf, about 10,000 miles; a neutron star, about 10 miles; and a black hole, about 3 miles. So, a star with at least 4-5 times the mass of the sun must collapse into a space of less than 3 miles radius to form a BH! As it grows, the "event horizon" becomes larger. For example, a BH with 10 solar masses has an event horizon of about 50 km, whereas one with 40 solar masses is about 230 km. This is on a linear scale.

A few of the places where black holes are suspected to exist: Centaurus A and 3C273 are both suspected of having an approximate billion solar mass BH at their centers. A one million solar mass BH is suspected at the center of our Milky Way Galaxy. Cygnus X-1 is an example of star material being sucked into an accretion disk of a black hole. Tucane 47, M31 and M87 are all candidates for having a BH at their center. The "jets" of Cygnus A give rise to being caused by a BH.

Since light cannot escape from a black hole, indirect methods must be used to infer

that it is present. A black hole distorts Euclidian Space-Time, which bends light rays. The center stars of a galaxy like the Milky Way rotate much faster than the outer stars, which would indicate a BH is present. Light rays fluctuating in milliseconds provide evidence of a black hole.

I don't pretend to know a whole lot about this subject, but I found the talk enlightening, and at least know more now than I did!

The Backyard Astronomer How many telescopes do you need?

By: Bill Dellinges

I knew a guy in a California club who for all the years I knew him, had one scope, an Optical Craftsmen 8" Newtonian reflector which he took to every event-I'm sure it was the only scope he owned. And he was quite content with his one and only scope (which, by the way, was one hell of a performer). We all know someone in our hobby of astronomy that owns many telescopes and we might ask ourselves why do they need so many. Thus, my question: How many scopes do you really need?

Certainly one good one is enough. But there ARE people out there who own an "armada" of scopes. We have one in our club, I won't mention names, but his initials are Don Wrigley. Now, some folks just like to collect telescopes. But let's discuss here what I feel is the minimum number needed based on practical requirements. Yes, one is fine-have a ball! But indulge me, if you will.

Scope # 1: OK, first, you need a portable-quick setup scope. Something you can quickly and easily bring outside for quick looks. It will also be your "travel scope" for eclipses, solar observation, camping, etc. May I suggest a C-90, C-5, Questar, Orion/Celestron Short tube 80, or Takahashi Sky 90 (Orion's new Starmax 90-127mm Maksutov line looks interesting, pending reviews).

Scope # 2: You need your main telescope, the one you will be using most often. It needs to have at least 8" of aperture and be

somewhat manageable (otherwise you'll never use it). There are many possibilities here as the current market is loaded with interesting choices. I might suggest a Meade or Celestron 8" Schmidt-Cassegrain telescope, an equatorial Newtonian or one of the many Dobsonians out there in the 8-12" range (Orion, Meade, Celestron, Obsession, Discovery, Starsplitter).

Scope # 3: A refractor! Any Refractor of at least 4" aperture. You haven't lived till you've looked through one. They make you very aware of the shortcomings of reflectors in the resolution and contrast department. Recently, some low-end 4-6" refractors have appeared on the scene. But high-end models from Astro-Physics, TMB, and Takahashi are pricey (now there's an understatement!).

Scope # 4: You need a "light bucket" for those times when just raw light gathering ability is called for. This instrument would be utilized at a dark site every now and then when you'd like to really see things at their best; after all, there is no substitute for aperture. Personal experience: as nice as the C-5, C-8, and C-14 are, I found the 8" imaging far superior to the 5" and the 14" far superior to the 8". Each larger scope made the smaller one seem like a toy. Views in 17-20" Dobs render my C-14 a toy. Here, consider a Dobsonian over 12", C-14, Meade LX-200 12", 16" (yeah, right, \$\$).

Scope # 5: A wide field instrument. Getting upset because you can never get as much field in as you like? Try an Astroscan, Tele-Vue 101, any F4 ratio scope.

Scope # 6: A "giant" binocular for super wide views of stars or objects with the added beauty of being able to use BOTH EYES! After many years of one-eyed peering, I discovered the refreshing and relaxing world of stargazing with tripod mounted binoculars. Consider Orion's 9x or 12x63, 11x70,15x80, 25x100, 20x125, Celestron's 20x80 Deluxe, Fujinon 10x or 16x70, 25x150 (ouch,\$\$), Miyauchi 20x77, 20x100, Takahashi 22x60.

There you have it folks. YOU NEED SIX TELESCOPES, MINUMUM! Do I practice what

I preach? Well, let's see. Hmmm. I have a T/V 70mm Ranger, Questar 3 ½ (travel scopes), Astroscan (wide field), 5" refractor (fills refractor requirement), C-8 (main scope), C-14 (light bucket), and 10x70 and 20x100 binos (fills the 2 eyed wide field requirement). Ok, that's 8 because I have 2 instruments in two categoriesso shoot me. I just want to be Don Wrigley when I grow up.

President's Message

By Martin Bonadio

Greetings everyone, I hope you had a great Thanksgiving and are having a wonderful time with family and friends this Holiday season. Have you made out your holiday wish list for astronomy related items yet? You can be sure I'll be asking you to tell us all about it at the January club meeting!!

I hope that you were able to get out and enjoy the Leonids this year. What a spectacular show it was! Despite some thin clouds on the night of November 17th and into the morning of the 18th, I was still able to count no less than a few hundred from my light-polluted backyard in Gilbert over a period of less than 2 hours. I had originally planned to do some deep sky observing from Vekol that night, but decided to stay home instead – shame on me! I had a great time nonetheless – and again I'll plead my case that backyard astronomy can be fun and very convenient. The only thing I'll mention -- I really should have built a "Howard Israel" light shield prior to observing. Instead, I strategically positioned myself on the side of my house where most of the direct lights were blocked. This gave me a great view of the eastern sky!

I thought I would take the time this month to highlight the success of our club this year. Here is my top ten list:

- 1. The club reached 200 members in size.
- 2. The beginner's lab has been a hit during the year we had 5 planned activities and each brought 10 or more people.
- 3. We participated in a great Astronomy Day activity at the AZ Science Center and made ourselves available to thousands of people

- in the community. Rick Scott and Joe Orman presented our slide show and wowed the crowd!
- 4. Numerous members of our club were recognized for their efforts in Astronomy Magazine, Sky and Telescope, at the Riverside Telescope Makers conference, and in other capacities too lengthy to report here
- 5. We had several top-notch speakers who covered a variety of topics from purchasing a telescope to living in space! (Thank you David Coshow)
- 6. We now have some great t-shirts and polo shirts. Plus, our EVAC bank account is in great shape (Thank you Randy Peterson)
- 7. Our website has brought many new faces to the crowd (Thank you Robert Kerwin)
- 8. Our members brought many show-and-tell presentations to the meetings and kept us all up to date on their efforts
- 9. Several SIG groups were formed and seem to be progressing. I've seen activities planned for some of them already, and more will certainly follow. We have new books, video materials, and eyepieces in the club library (Thank you Rick Scott)
- 10. Our EVAC newsletter has never looked so good in color, and 75% of our members receive it electronically each month saving us a lot of money! (Thank you Jim Kline)

I could continue, but I think you all get the point!! Stay tuned for an even more exciting top ten list next year!

In addition, I'm pleased to announce the officers who have been elected to serve next year:

- **President** Martin Bonadio
- Vice President Diana Jane'
- **Treasurer** Randy Peterson
- **Properties** Gary Finnie
- **Secretary** Tom Polakis
- **Events Coordinator** David Coshow
- **Newsletter Editor** Don Wrigley
- **Newsletter Coordinator** Silvio Jaconelli
- Webmaster Dave Kelley

Board of Directors - Craig Dokken, Jack Grbcich, Gene Lucas, Dave Hertel, Howard Israel, Paul Murray Another exciting thing is the creation of two new positions, and the recognition of the Webmaster as an officer position. Furthermore, the membership voted in favor of the recognition of "family" memberships and of a change to the $4^{\rm h}$ quarter membership fees – from \$5 to \$25 and covering both the $4^{\rm th}$ quarter and the following year.

Finally, I want to extend special thanks to everyone who has participated as an officer, board member, or volunteer for this club. I cannot detail all the efforts in this short space, but I can tell you that I am grateful to each of you.

As you can see, I'm really proud to be a part of this organization. I have had a lot of fun, made some great friends, and learned a lot about a hobby that brings me great satisfaction. Over the next few months I look forward to moving into a new home, getting things settled down, and then spending a lot more time observing!! Clear Skies to all!

EVAC Meeting Minutes 11/14/01

By Tom Mozdzen

7:30pm: Martin Bonadio punctually called the meeting to order. After some brief humor, Martin gave some beginner's tips on buying a new telescope. There were ~75 people in attendance with several guests present.

The new officer slate was approved along with several new offices. This was covered in detail in the President's Message.

Upcoming star parties and events were discussed:

- Dinner with the speaker is on hold as the Blackeyed Pea has closed.
- Next beginner's lab in December.
- Volunteers needed for:
 - Someone to host a Holiday Party
- Video lecture series on astronomy just obtained for the library. It is a series of 45 lectures from a U.C. Berkeley professor.

- Tom Polakis and Chris Schur are members in print.
 - Tom has an article in the December Astronomy issue titled Cepheus and Lacerta.
 - o Chris has a CCD image photo of a faint galaxy in the same issue.

8:00 Presentations:

Gene Lucas gave us a very informative talk about the upcoming Leonid Meteor shower. He talked about what causes the showers, how they appeared in history, the 33-yr cycles, and gave us some web addresses for further information. The AV material was very helpful in visualizing the whole process.

Howard Israel talked about his invention for a street light shield made out of PVC piping, a tarp, and some tarp ties. Total cost: under \$35. One other member pointed out that the city would put up a shield on the light if you call them. That works only if the light is on your side of the street.

Steve Aggas gave us a slide show, which showed us the various stages of completion of his backyard observatory. It is an amazing piece of construction with the base and roof door fitted with bearings, and the walls sealed very well, and a nice sturdy brick base.

Tom Polakis demonstrated how a Dobsonian tracking platform works. The platforms don't come cheap, but do the job of tracking, and are wonderful at high powers. It gives you about an hour of tracking before you have to reset the platform – which is easily done with a tap of the foot.

Chris Schur started off by showing us an image of comet linear in Perseus. It is expected to increase in brightness over the next month to be naked eye visible.

He then talked about what causes the Auroras and the SOHO reports that can give us about a 1hr notice of a solar activity, which has occurred, and will shortly arrive at the earth. The KP value is monitored. It usually sits around 1 out of a scale from 1-10. A value of 8 or higher gives us a good chance at a naked eye view of an aurora in Arizona. A value over 6 can

produce auroras which are hard to see with the eye, but will show up on film.

Chris then showed us his best 15 slides of the aurora using a red sensitive film. Many slides had the edge of the aurora in view. The aurora appeared as red to the eye as it does in the film.

The KP index can be found at www.spaceweather.com

Laurice Dee talked about where the Cassini satellite is on its way to Saturn, due to arrive in 2004. It has been in space for 4yrs. It is an international scientific effort. She showed us some of the pictures from its past such as a close up while on the ground and the launch. She also talked about some of the mission goals including the Huygens probe.

If you have questions about the missions, please send her an email, and she will be happy to answer them.

9:15 Computer Star Chart programs

Several laptops were set up with various programs such as:

- Megastar
- Starry night
- Sky Map Pro
- Deep Sky 2000
- Redshift 4 cheap version is good for planets, but bad for deep sky.
- EPIC 2000
- Sky PE

Members could check these programs out during the break/social time.

Next week we will have 2 "formal" presentations on these programs.

9:20 pm Meeting Adjourned.

Magazine Subscriptions Update

By: Randy Peterson - EVAC treasurer

At our discounted club rates, Sky & Telescope magazine offers a one-year subscription for \$30. "Astronomy" magazine is now offering a one-year OR a two-year subscription for \$29 and \$55 respectively. If

you are interested in subscribing or renewing, mail your check to "EVAC" at the P.O. Box listed in the newsletter, or bring your check made out to EVAC to the next meeting and I will take care of it for you!

If it's clear... For December 2001

By Fulton Wright, Jr.; Prescott Astronomy Club

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, December 6, from 7:00 PM to 11:00 PM you might see the comet LINEAR, C/2000 WM1. See Sky and Telescope, December 2001, p. 101; or Astronomy, December 2001, p. 73 for a finder chart and more information. It should also be visible for a few days around this date.

On Saturday, December 8, at 11:25 PM, you can see 2 of Jupiter's moons close together. With a small (3 inch) telescope look 50 degrees above the east horizon for Jupiter. Io (to the north) and Europa (to the south) will be 7 arcseconds apart.

On Friday, December 14, after midnight, you might see the Geminid meteor shower. With your unaided eye and a sleeping bag on a lounge chair look 60 degrees above the east horizon for Castor, which is near the radiant. About one meteor a minute might appear somewhere in the sky. Actually you could see some meteors any time during the night of December 13-14.

On Friday, December 14, from 1:24 PM till 3:25 PM you can see a partial eclipse of the Sun. With a proper sun filter (# 14 welders glass, solar filter made for the front end of a telescope, etc.) look 30 degrees above the south horizon for the sun (you can't miss it). At mid eclipse (2:25 PM) about 20% of the diameter of the Sun will be covered by the Moon so this isn't a very deep partial eclipse as seen from Arizona. Be careful, you can damage your eyes if you don't use a good filter. You are always

safe if you punch a pin hole in a piece of paper and cast an image on another piece of paper 3 or 4 feet behind it.

On Sunday, December 16, at 1:30 AM, you can see 2 of Jupiter's moons close together. With a small (3 inch) telescope look 75 degrees above the south horizon for Jupiter. Io (to the north) and Europa (to the south) will be 7 arcseconds apart again.

On Saturday, December 22, at 10:09 PM, you can find an asteroid easily. With a medium (6 inch) telescope look 35 degrees above the east horizon for 81 Geminorum (mag 5). A little less than 2 arcminutes west is a mag 12 star. Asteroid 654 Zelinda (mag 10) is half way between these stars. In just a few minutes the asteroid moves enough that the three points of light are no longer lined up.

On Friday, December 28, at 1:27 AM, you can see the Moon cover Saturn. With a medium (6 inch) telescope look 50 degrees above the west horizon for the almost full Moon. Saturn peeks out again about 2:41 AM.

On Sunday, December 30, about 3:30 AM, you can see a penumbral eclipse of the Moon. With your unaided eye or binoculars, look 50 degrees above the west horizon for the full Moon. Notice the southern part of the Moon is slightly darker than the rest. The effect should be barely noticeable for about an hour centered on this time.

Here are the times of some interesting events with Jupiter's moons:

Dec 2:

11:12 PM Callisto disappears in Jupiter's shadow

Dec 3

1:00 AM Io's shadow falls on Jupiter

1:32 AM Callisto appears from Jupiter's shadow

1:41 AM Io moves in front of Jupiter

Dec 4:

8:07 PM Io moves in front of Jupiter

9:42 PM Io's shadow leaves Jupiter

10:21 PM Io moves from in front of Jupiter

11:03 PM Europa's shadow falls on Jupiter

Dec 6

9:27 PM Europa appears from behind Jupiter

Dec 10:

8:20 PM Ganymede appears from in front of Jupiter

Dec 11:

9:22 PM Io's shadow falls on Jupiter 9:51 PM Io moves in front of Jupiter 11:36 PM Io's shadow leaves Jupiter

Dec 12:

9:24 PM Io appears from behind Jupiter

Dec 13:

8:01 PM Europa disappears in Jupiter's shadow 11:42 PM Europa appears from Jupiter's shadow

Dec 17:

8:45 PM Ganymede moves in front of Jupiter 10:22 PM Ganymede's shadow leaves Jupiter 11:47 PM Ganymede moves from in front of Jupiter

Dec 19:

7:45 PM Callisto appears from Jupiter's shadow 8:03 PM Callisto disappears behind Jupiter 8:34 PM Io disappears in Jupiter's shadow 10:45 PM Callisto's shadow falls on Jupiter 11:08 PM Io appears from behind Jupiter

Dec 20:

7:59 PM Io's shadow leaves Jupiter 8:15 PM Io moves from in front of Jupiter 10:35 PM Europa disappears in Jupiter's shadow **Dec 22** 8:23 PM Europa's shadow leaves Jupiter 8:52 PM Europa moves from in front of Jupiter

10:28 PM Io disappears in Jupiter's shadow $\bf Dec~27$:

7:38 PM Io's shadow falls on Jupiter

7:44 PM Io moves in front of Jupiter

9:53 PM Io's shadow leaves Jupiter

9:59 PM Io moves from in front of Jupiter

Dec 28:

1:10 AM Europa disappears in Jupiter's shadow 4:00 AM Callisto's shadow falls on Jupiter

4:09 AM Europa appears from behind Jupiter

4:53 AM Callisto moves in front of Jupiter

Dec 29:

8:12 PM Europa's shadow falls on Jupiter 8:18 PM Europa moves in front of Jupiter 11:00 PM Europa's shadow leaves Jupiter 11:06 PM Europa moves from in front of Jupiter

For Sale:

I MUST SELL my 13.25" Dobsonian Truss Features **excellent** figured primary mirror with enhanced coatings, dielectric secondary, 2" JMI focuser, in a handsome Starsplitter Compact tube truss mount. Telescope is f4.4 (FL = 1947) and is excellent for deep sky observing. It is very easy to setup, and can be handled by one person and transported in a small car. The mount is very smooth, and the cabinetry is in great shape. I'm also including a laser collimator, cooling fan for primary, battery, and light baffle. Reduced to \$1100 OBO. I hate to part with it but wedding expenses force the sale! A picture can be seen http://members.aol.com/mabastro/truss.jpg Contact Martin at 480-926-4900 or email mabastro@aol.com.

For Sale: Bausch/Lomb 7x42 Discoverer binoculars. One year old, like new. Roof prism, eye relief 20mm, wt. 28 oz., Bak-4 prisms, Phase Coated, nitrogen purged, twist down eye cups. \$150. Bill Dellinges (480) 983-6651 or email: mrcomet@qwest.net

Deadline for the next Newsletter Submissions is December 20th, 2001. Send articles to djwrigley@earthlink.net

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
- () \$ 5.00 October December

Membership Renewals:

() \$20.00 January - December

Name Badges:

() \$7.00 each <u>Name:</u>

(New) (Renewal) Magazines: if renewal, customer #

- () \$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	 	
IIRI ·			

Polo shirt: Hanes, short sleeved, with pocket on left.

50% cotton/50% polyester.

EVAC logo in black on right.

Logo may not show up as well on Royal Blue.

Polo Shirt Order Form

SIZE	M	L	XL	XXL	XXXL
Color	Qty:	Qty:	Qty:	Qty:	Qty:
White					
Ash					
Light Steel					N/A
Light Blue					N/A
Royal Blue					N/A
Price>	\$16	\$16	\$16	\$18	\$19

T-shirt: Hanes "Beefy" T, short sleeved, white,

Pre-shrunk 100% cotton.

Four-color silkscreen picture of M-51 galaxy & EVAC logo Two choices:

- (1) with pocket, picture on back. logo on front
- (2) without pocket, picture on front, logo on back

T-Shirt Order Form

SIZE	S	M	L	XL	XXL	3XL
Color:	Qty:	Qty:	Qty:	Qty:	Qty:	Qty:
White						
White w/pocket						
Ash						
Ash w/Pocket						
Price>	\$14	\$14	\$14	\$14	\$16	\$17

<u>Clothing: IMPORTANT: Your shirt will not be made until a minimum of 12 polo shirts or 24 T-Shirts are ordered. Please be patient.</u>

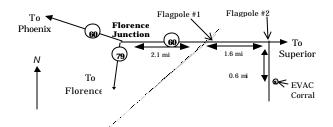
EVAC Star Parties

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"

<u>How To Get There</u>: 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.

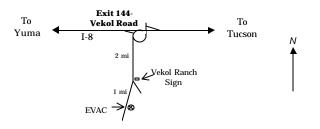


Deep Sky Star Party: Vekol Road Site

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.

<u>Location</u>: 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

David Coshow (480) 732-1132

TREASURER

Randy Peterson (480) 947-4557

SECRETARY

Tom Mozdzen (480) 497-5703

PROPERTIES

Rick Scott (480) 821-5721

NEWSLETTER

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. Email: rgp14159@aol.com

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.

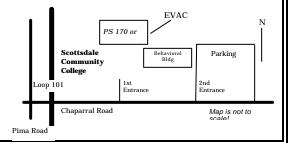
Address Changes: Contact Randy Peterson. PO Box 2202, Mesa, AZ. 85214-2202. Email: rgp14159@aol.com.

Newsletter: 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 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: A 10% discount when ordering books from Kalmbach and Sky Publishing. Order forms have a line for club members to subtract discount from regular price.

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





EVAC PO Box 2202 Mesa, AZ 85214

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 <u>AZ-Observing@freelists.org</u>

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, December 12, 2001