

# East Valley Astronomy Club

May 2000

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

Scottsdale, Arizona

## President's Message

By Silvio Jaconelli

The March local star party was very well attended – I counted 17 vehicles and approximately 25 attendees. This was the first decent weather night for observing at a local star party for a long time – it was a very enjoyable evening, although high cirrus cloud did start to move in around 11:30pm – an hour before the Moon was due to rise anyway. The night before – Friday March 24 – several of us were out at Florence Junction and we witnessed an amazing display of large meteors.

Martin Bonadio saw a magnitude minus 5 fireball from his truck at around 7pm as he was driving into the site, and later on there were more very bright fireballs – one in particular which broke up into many pieces as it ended its entry into our atmosphere. We stood in silence for a minute for the sound of it to reach us but we did not hear anything. We are all still puzzled as to why that evening produced such a large number of bright meteors.

A. J. Crayon cancelled The Messier Marathon on April 1<sup>st</sup> (an inauspicious date indeed!) at 12pm that very day, only for the weather to dramatically clear up later in the evening. It seems that the clouds began to clear from the southwest, as the clouds persisted in Phoenix until late into the night. I have learned that 22 folks did in fact make it to Arizona City for the Marathon, of which around 6 were EVAC members. It just goes to show that you cannot second-guess the weather or observing. I also understand that some groups headed to the southwest part of the state that evening and enjoyed good observing weather as the clouds cleared from that direction. My sympathies go out to A.J. Crayon, the organizer of this annual event who puts so much effort into this. We can just hope that next year will see a reversal in the unsatisfactory observing weather that we have been experiencing lately. Until next month...

## Adopt-a-Highway

By Silvio Jaconelli

Our club held our semi-annual Adopt-a-Highway clean up on Saturday, March 18<sup>th</sup>. This is one of our club's civic contributions, and it involves the picking up of litter and trash along a mile stretch of highway 60 just east of Florence Junction; this stretch of road is just a few miles east of our local observing site.



## EVAC & Other Events: 2000

	New Moon	Meet	Local	Deep Sky	Other
May	3 <sup>th</sup>	10 <sup>th</sup>	27 <sup>th</sup>	6 <sup>th</sup>	5/13 Kitt Peak Tour
Jun	2 <sup>nd</sup>	14 <sup>th</sup>	24 <sup>th</sup>	3 <sup>rd</sup>	6-3 -6/10 Grand Canyon Star Party
July	1 <sup>st</sup> , 30 <sup>th</sup>	12 <sup>th</sup>	22 <sup>nd</sup>	1 <sup>st</sup> , 29 <sup>th</sup>	Universe 2000
Aug	29 <sup>th</sup>	9 <sup>th</sup>	19 <sup>th</sup>	26 <sup>th</sup>	Stellafane
Sep	27 <sup>th</sup>	13 <sup>th</sup>	23 <sup>rd</sup>	30 <sup>th</sup>	N. AZ SP. Enchanted Skies Star Party Socorro, NM September 28- October 1
Oct	27 <sup>th</sup>	11 <sup>th</sup>	21 <sup>st</sup>	NA	10/7 Lowell Tour 10/21 EVAC Picnic 10/28 All-AZ Star Party
Nov	25 <sup>th</sup>	8 <sup>th</sup>	18 <sup>th</sup>	NA	Elections
Dec	25 <sup>th</sup>	13 <sup>th</sup>	16 <sup>th</sup>	23 <sup>rd</sup>	Christmas Party

We had the highest turnout ever – 12 volunteers – Martin Bonadio, Bob Birket, Sam Herchak, Silvio Jaconelli, Chris & Jim Kline, John & Katherine Mathews, Jack Schroeder, Angie Soto, Jim Weisenberger, and Don Wrigley. Please accept my apologies for any spelling errors above.

It was a beautiful spring morning when we gathered at Florence Junction at 8am – I may be biased, but the desert here in Arizona is just beautiful, and the spring weather with low humidity and temperatures peaking in the low eighties are unbeatable. The surrounding mountains were both rugged and awe-inspiring.

Because we steadfastly adhere to our two-times-a-year schedule, the degree of difficulty is very low – we are now able to clean up the highway in around two hours or so – a far cry from the 5 to 6 hours that we spent when we first started the program several years ago. A special word of thanks to Sam Herchak is warranted here – Sam is the driver behind this program and is responsible for its smooth operation.

We have found some real ‘interesting’ (if that is the right word!) trash on past clean-ups, but this time things were pretty tame – Don Wrigley rated this clean-up as a ‘4’ on a scale from one to ten with regard to the interest level of the trash that we collected this time!!! What we did find was an “X” rated Polaroid photograph (which Martin ruled was inappropriate to reproduce for this newsletter!), a CD with George Strait’s greatest hits (which Martin ruled was also inappropriate to reproduce for this newsletter!), and a pile of large bones from goodness-knows-what! We also found enough hardware to build half a Dob mount.

Being amateur astronomers, we couldn’t help but gaze at the sky every so often. At one point we saw several motorized hang gliders way in the distant hills placidly inching over the desert floor. And then a little later our attention was taken by several circling buzzards which tended to perplex Don Wrigley somewhat – he asked me if they had stethoscopes round their necks.

When we finished, we had collected 15 large bags of trash, and then we headed over to Village Inn at Apache Junction for lunch where the manager Randy Peterson who also happens to be an active club member joined us. Another satisfying and enjoyable clean up!!

# Meeting Minutes for 4/12/00

by Tom Mozdzen - secretary

President Silvio began the meeting promptly at 7:30pm, and the room was again packed with over 80 attendees. A few April reminders were mentioned, and Joe Orman was congratulated for getting a couple of photos chosen as photo of the day.

Show and Tell guidelines were reiterated as:

- 10 minutes in length
- A presentation will not begin after 9:30pm
- Any presentations not shown that day will be first in line the next month.

Rogier Windhorst then gave a very interesting talk about the Hubble Space Telescope (HST) over the past 10yrs, and gave us a glimpse of what is to come with the Next Generation HST.

## Vice President’s Comments

By Chuck Crawford

### ***MAY GUEST SPEAKER***

Our guest speaker will be Jeff Medkeff. The title of his presentation will be "Tube Currents and Other Smoking Guns". The subject matter will be concerned with thermal properties of telescopes and how thermal effects affect the images that a telescope delivers. Members will remember, hopefully, the dramatic video of tube currents Jeff showed some months ago, taken through an Schleran apparatus. This talk will be the end product of that research.

### ***DINNER WITH OUR GUEST SPEAKERS***

Again we will be meeting at the Black-eyed Pea on Indian Bend Road in Scottsdale at 5:30. All members are welcome to attend. Please contact me if you plan to do so in order to let the manager know how many places to set. We have ongoing reservations but there could be different rooms depending upon the count. Call 480-985-8824 or [astroc@mindspring.com](mailto:astroc@mindspring.com).

## LOWELL AND METEOR CRATER TOUR

We will begin signups and collection of the charter fee at the May meeting. Make all checks out to EVAC and note on it Lowell. The amount for the bus charter is \$ 25. The last day for signup and fee collection will be at our July meeting. I have been in touch with Dr. Ted Bowell of Lowell, who will also be our guest speaker September 13, and he has indicated that we may also be allowed to visit the Mesa, which is off the normal tourist list.

A note here about his upcoming presentation: I have asked him to present step by step how to find asteroids and comets yet undiscovered. Not just the end product but a lesson from A to Z in discovery procedures (how to do it) and he has consented to do so. More regarding this as the time grows nearer but Dr. Bowell is a well noted asteroid and comet discoverer at Lowell. So prepare your questions and notes if you have any interest in taking on a future discovery project.

## KITT PEAK TOUR

We will leave at 8:00 am from the far east parking lot at Scottsdale CC on Saturday May 13. Please park in this area and please do not leave any valuables visible in your vehicle. We should arrive back at Scottsdale CC around 8:00 pm. There will be a stop on the way down for lunch and another for dinner coming back. On Kitt there is a \$ 2 donation per person and a gift shop. The bus is full so only those who have signed up and paid the fee can go on it. If anyone not signed up wishes to follow in a car that is fine!

## Test Your Knowledge

By Chuck Crawford

See how well you do with the following questions for this month. No fair looking up the answers. And this time there is only one answer for each question, I promise \*smile\*.

1. *Of the types of electromagnetic radiation listed below, the one with the shortest wavelength is:*
  - a. X ray
  - b. radio wave
  - c. visible light
  - d. ultraviolet light
2. *A device that disperses light into its component colors using thousands of microscopic parallel grooves is called a:*
  - a. prism
  - b. grating

- c. CCD
- d. lens

3. *In the absence of mass, space-time is said to be flat. In the presence of mass, space-time is said to be:*
  - a. smooth
  - b. length contracted
  - c. confused with acceleration
  - d. curved
4. *According to the special Theory of Relativity, "moving" clocks:*
  - a. run more slowly at all times
  - b. run more slowly when the observer is moving at extremely high velocities
  - c. run more slowly when compared to other clocks that are considered to be at rest
  - d. Never run more slowly. The effect is an illusion. Time runs at the same rate for everyone
5. *Planets are observed to move, for a time, in retrograde motion. This motion describes the:*
  - a. Easterly drift of the planets
  - b. Westerly drift of the stars
  - c. Backward or easterly motion of the stars
  - d. Backward or westerly motion of the planets

*Bonus: Based on our current understanding of galactic formation and evolution*

- a. Nearby rich galaxy clusters are thought to consist mainly of elliptical galaxies, although more distant clusters probably have a somewhat larger number of spiral galaxies
- b. Nearby rich galaxy clusters are thought to consist mainly of spiral galaxies, although more distant clusters probably have a somewhat larger number of elliptical galaxies
- c. Rich galaxy clusters contain the same percentage of elliptical galaxies regardless of distance
- d. Rich galaxy clusters contain the same percentage of spiral galaxies regardless of distance

## Technical Tip of the Month

By Silvio Jaconelli

*Do you have trouble seeing colors in double stars?*

There are many double stars (such as Albireo in Cygnus) whose components show a pleasing contrast in colors. The most common colors are blue and white – the smaller companion usually being blue. However, many observers (especially older observers whose eyesight may have deteriorated with age) cannot easily discern the differing colors of both stars.

Apart from moving up in aperture (!!), colors can be accentuated by moving the eyepiece slightly out of focus so that the light from the stars is spread over a wider area. You will need to experiment a little with this – some observers find that only a very slight de-focus will accentuate the colors, while other observers

need a fair amount of defocus. For some reason, defocused star images will accentuate color contrast.

## If it's clear...

by Fulton Wright, Jr.  
Prescott Astronomy Club  
for May 2000

Shamelessly stolen information from Sky & Telescope magazine, Astronomy magazine, and anywhere else I can find data.

On Thursday, May 18, about 8:00 PM you can see Mars and Mercury together. With binoculars look 5 degrees above the west to northwest horizon for Mercury (mag -1) and, 1 degree to the left, Mars (mag +1.5). This won't be an easy observation because it won't be very dark yet and the planets are low in the sky. Mercury rises higher in the sky as the month progresses.

On Tuesday, May 23 or any other night for the rest of this month you can look for Pluto as it approaches its June 1 opposition. At mag 13.7 it is not easy to find even in a large telescope. For finder charts see Sky and Telescope, March 2000, p. 111; or Astronomy Magazine, May 2000, p. 72; or Guy Ottwell's Astronomical Calendar 2000, p. 57.

On Monday, May 29, about 4:20 AM you can see the (planetary) northwest part of the Moon at its best. With a small or medium telescope look 15 degrees above the east horizon for the crescent Moon. The upper left part of the Moon will be tipped toward us by librations. The moon will be lower in the sky the following morning but the terminator will be even closer to the limb. If you wait till about 4:40 AM on either morning, you will be able to see Jupiter (mag -2) and Saturn (mag +2) rise, about a degree apart.

## Riverside Telescope Makers Conference

By Silvio Jaconelli

The annual Riverside Telescope Makers Conference is almost upon us. This is a combination star party/equipment sale event held every Memorial Day weekend at Camp Oakes, a YMCA camp east of Big Bear City, located 50 miles northeast of Riverside in the San Bernadino mountains. The site elevation is 7000 feet, and even as late as Memorial Day it is

common to have snow falling; in fact, several years ago the star party was actually snowed out !

This is an excellent opportunity to look through some very interesting telescopes – there are ATMs (amateur telescope makers) from all over the country in attendance and there are all sorts of equipment set up for viewing – refractors, reflectors and compound telescopes of all shapes and sizes. One recent display was a 20 foot long 6” refractor, while another was a van with an observing dome built into the top of it !

Then there are the commercial equipment vendors – Televue, Starsplitter, Meade, Celestron, Protostar, Rigel , to name just a few from prior years. And folks like Al Nagler are there to promote their equipment. They have demos set up and it is fun looking through these.

A real interesting part of RTMC is the swap meets – it seems that every available piece of ground is taken up by individuals with stuff to sell and you can find some real bargains here, especially if you are prepared to haggle. Old magazines, books, star charts, ATM materials, old telescopes, viewfinders, eyepieces, you name it – it's for sale at Riverside.

And finally there are the technical talks. Experienced people from their respective fields are invited to talk in classroom-type settings throughout the weekend. The keynote topic this year is solar observing – very appropriate given the fact that we are around solar maximum right now; it will be given by Sallie Baliunas and will be entitled “The Sun and Climate Change – Why Louis VIV had Cold Feet”. There will also be organized tours to the Big Bear Solar Observatory on the Saturday and Sunday.

Our very own EVAC – which has some very accomplished members – will be providing workshops:

- *Chris Schur* – “Tri Channel Astrophotography”
- *Gene Lucas* – “Pierre Schwaar Memorial”
- *Tom Polakis* – “Deep Sky 101”

Other distinguished speakers include :

- *Bryan Greer* on “ Thermodynamic Effects of Heat on Telescope Performance”
- *Richard Berry* on “CCD Imaging/Software”
- *Alan Adler* on “Micro Flexing Spherical Mirrors into High Quality Paraboloids”

Access to RTMC will start on Friday May 26<sup>th</sup> at 9am, and ends on Monday May 29<sup>th</sup>. Admission can be through day passes, or weekend camping with or without cafeteria meals. There are motels nearby that provide very easy access to RTMC. Conditions for evening observing will be excellent this year – Moonrise each evening will occur well after midnight. Check out <http://www.tmc-inc.org> for further info.

All in all, this is a great way to spend a weekend, totally immersed in a hobby that we love. It's a chance to do some great observing, to check out the latest equipment, to pick up some bargains, to attend some excellent workshops, to renew old acquaintances, and to make new acquaintances. An opportunity not to be missed! I hope to see you there!

## The “Light” Side

*You know that you're a Lunar/Planetary observer  
when ...*

- You support brighter street lighting so that you can read your charts more easily when out observing in your backyard
- You don't think its funny when people say that refractors make good finders
- You have your nose surgically removed to provide increased clearance for Panoptics in your bino-viewers
- You wear an old Astro-Physics baseball cap to bed and in the shower
- You wear your new Astro-Physics baseball cap at fancy dinners and job interviews
- The optics of your 2" eyepieces have reverted to sand due to lack of use
- You can count the number of objects that you have observed on the fingers of two hands
- Your idea of LPR filters is sunglasses
- You have a compulsive urge to make detailed drawings of the low-contrast detail seen in light bulbs
- You wait for the first quarter Moon to put your telescope out
- You don't know what a Light Year is

- You think that 180MM is large aperture
- Deep what ..... ?????

## Member Q&A

Answers provided by Win Pendleton

**Q.** I have enjoyed observing Jupiter and Saturn so much and hate to see them leave. I was wondering if anyone has an estimate of when they might be observable again? Saturn is still pretty fair but Jupiter was too low on the horizon as observed this past week and looked fuzzy. They have become like old friends to me.

**A.** Saturn and Jupiter are almost gone but not for long. These two spectacular planets are setting just after the sun now and they are hard to observe. But if you wait until early June they will rise several hours before the sun and you can see them before sunrise in the eastern sky looking away from Phoenix. Because of their orbital positions relative to the earth, they will appear to be very close together at that time. (Venus will also be rising at about the same time and will create a close grouping of these three planets.) Saturn and Jupiter will continue to rise earlier each night. They won't become evening viewing objects again until about November when they rise at 6 PM and get high in the sky at midnight. They will be ideal for observing for several months and will start to fade into the sunset about one year from now.

**Q.** A question regarding the discoveries made of other planets. They have not actually observed the planets and I have heard that it is the movement or the wobble caused by gravity of the star they are orbiting that they are able to detect the planets. Also is this detectable by studying the different light being emitted from the star? I read in the newspaper this morning that they have decided that one of the planets is not a planet but a background star. Could someone explain what a background star is?

**A.** Have you ever taken a photograph of a person and discovered from the print that there is a distant telephone pole growing out the top of her head? That sometimes happens when you take an astro-photograph. The object you are interested in appears to have another object nearly touching it. Sometimes two stars are very close together - they are called binary stars. More often however, the two stars are not close but happen to be in nearly the same direction in the sky. These are called double stars. One star is closer to us than the other much like the head and telephone pole. In the case of the

star/planet discovery, what appeared to be a photograph of a bright star and a dim planet seems to have been a bright star and a very dim star that appeared to be very close. You can tell the difference by taking several photographs over a period of months. A planet moves relative to the star, a background star does not. A star's wobble reveals the presence of planets. Imagine a playground seesaw that is designed to spin around the balance point rather than rock back and forth. On this seesaw is an elephant and a mouse. The elephant sits very close to the balance point and the mouse has to sit far out on the opposite side in order to balance. As they spin around the balance point the mouse makes a large circle and the elephant turns in a very small circle so that they remain opposite each other. In space the same thing happens with a star and a planet. The planet makes a big circle and the star (being so much more massive) makes a small circle. Each of these circles have a common center - the center of gravity. Since the sun is so much brighter than the planet it has not been possible yet to photograph them separately. However, we can detect the motion of the sun as it makes that small circle. Even the circle itself is too small to detect so we measure the motion of the star indirectly using the Doppler effect. As the star moves toward us in its tiny circle the starlight colors get shifted slightly toward the blue end of the spectrum. One half cycle later the star is moving away from the colors and us are shifted toward the red end (this is the red shift that is so important in studying the expanding universe). By measuring the amount of shift and the periodic cycle of the change, we can figure out the mass of the planet and the size of its orbit. So far we can only detect planets that are much more massive than Earth and that are generally closer to the sun. As our methods get better maybe we will someday "find" a planet enough like earth to make things really interesting.

## Aurora in AZ

Assembled by Martin Bonadio

*Sky and Telescope News Bulletin:*

Many sky watchers who went outside to view the Moon, Mars, Jupiter, and Saturn grouped together Thursday night were treated to a bonus spectacle -- a surprise auroral display. According to reports sent to SKY & TELESCOPE and also collected at the Auroral Activity Observation Network, the dramatic red display was visible across Europe and seen as far south as New Mexico and Florida. The shock wave of solar wind hit the Earth at about 12:40 p.m. Eastern

Daylight Time (16:40 Universal Time) and the visible display lasted until about 10:30 p.m. EDT.

Auroras most often glow green, the color emitted by oxygen atoms high in the upper atmosphere after they are struck by bombarding electrons from Earth's magnetosphere. Red displays are rarer, sometimes involving energized nitrogen molecules lower down in the atmosphere -- an indication of a more potent geomagnetic storm. Auroras that extend away from the poles and closer to the equator, as occurred last night, also reflect strong storm conditions.

According to Cary Oler of Solar Terrestrial Dispatch, "Although there will probably be some residual sub storm activity over the higher latitudes during the next 24 hours, there will not be a recurrence of the Auroral storming for most middle-latitude locations."

You can learn about what causes auroras, what to look for, and how to photograph them, as well as the threats geomagnetic storms have on Earthly activities in a series of articles in the March issue of SKY & TELESCOPE. If you'd like to receive aurora and geomagnetic alerts by e-mail, sign up for S&T's AstroAlert service at:

<http://www.skypub.com/news/astroalert/astroalert.html>



*Photo Courtesy of Chris Schur*

*Notes by Chris Schur, April 6, 2000:*

At about 8:00 PM, we were out of the front yard to get some pictures of the conjunction of the moon, Jupiter, Saturn and Mercury. we were going to look for the northern lights that night, because of the solar activity warning from the sky and telescope web page e-mail service arrived saying that a strong storm of solar wind activity would be striking our atmosphere

that evening. Then the telephone rang, and was Tom Polakis excitedly telling us that Aurora had are even spotted down south as far as Florida. So the stage was set, and we waited another half-hour until it got dark.

As soon as it got dark at about 8:30, we noticed that the North Western skyline was glowing a very dull red. The glow pulsated over several minutes, and increased in size until it reached up to 45 degrees up in the sky. the 35mm camera was already ready, mounted on a tripod with a 28 mm at 2.8 lens. I had selected a nice red sensitive film, Kodak PJ400 Professional. (I've got a freezer full of this stuff). As the Aurora brightened at 8:30, I did a five-minute, and a 10 minutes star trail shot with the lens wide open. After that about 15 minutes later, the glow nearly subsided and did not reappear for the remainder of the night!

The next day we developed the film, and found we recorded gorgeous red Aurora lighting up the entire Northwestern sky. The constellations Auriga, and Perseus were well embedded in the Aurora treating us to a spectacular backdrop for the blazing red sky. The black and white photo shown here does not begin to reveal the depth of beauty that this font phenomenon possessed. For the full color shots, go to the following web site, and you can enjoy in full-color detail.

<http://www.PSIAZ.com/Schur/astro/latest.html>

## Library Focus

By Joe Orman

Each month I will review a different volume from your club library. This month: *Whitney's Star Finder* by Charles A. Whitney.



Almost anyone who looks up at the night sky can name one or two of the stars they see. But I recently decided to familiarize myself with all of the most conspicuous stars in the sky, and which constellation they are found in. As the title suggests, *Whitney's Star Finder* is good for doing just that. The book's appendix includes a table of the 30 brightest stars, and these stars are labeled on the "Star Finder" (actually a simplified planisphere) included with the book. But the book is deceptively titled, because it is also a general beginner's guide to understanding and observing many aspects of the night sky.

There are many general guides available on the market, but beginners may find this one less intimidating than most, since it is very concise and written in plain conversational English. More-experienced observers may also want to check it out -- it never hurts to review the basics, and you may pick up a few new pointers. Of course you may also take exception to some statements, such as "Pluto requires at least a twenty-four-inch telescope and special star charts" (actually Pluto can be viewed with an 8-inch if care is taken). Another drawback to this book is that it's out of date -- the tables of eclipses and other sky events only go through 1995. But *Whitney's Star Finder* is still recommended as an introduction to the sky for beginners, or a way for more-experienced amateurs to "brush up" on the basics ... it helped me to learn a few more bright stars!

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

## Reflections

Author Unknown

As a child growing up in New York City, I remember the daytime sky as being a vivid rich blue color. I guess that in the late thirties and early forties the amount of light and particulate pollution in a very large city was less than what would be found in a small sized American city today. One evening during World War II when New York was having a practice "Blackout" I happened to look up into a dark sky and for the first time experienced the view of the universe that had mostly been reserved for peasants, seamen, shepherds and cowboys. I saw a dipper (Big or Small I wasn't sure) but very clearly a dipper. I was deeply impressed. Of course it is common knowledge that our side won that war, and what with school, sports, and post graduate studies I didn't have another opportunity to look up at the evening sky for another 20 to 25 years.

Then one evening New York experienced another Blackout. This time it was unrelated to a war but rather to some sort of massive electrical grid dysfunction. I looked up at the sky again and was surprised that the Dipper was not in the place that I had remembered it those many years ago. Actually I couldn't find it at all. To tell the truth I didn't search very long as I was driving down a darkened Third Avenue at the time and I narrowly missed running into a light pole, which had suddenly leaped out in front of me. The next morning, however, I did take the time to look up at the daytime sky to see what else may have changed over the years and to my chagrin the beautiful deep blue color I had remembered had been replaced by a dull seemingly washed out hue. What a bummer. No doubt the result of the pollution produced by all that cigarette smoking, suburban burning of leaves and smoke from Yuppie fireplaces. Another 30 years went by and I found myself somewhat retired in Mesa, Arizona. The newspapers were reporting the imminence of a meteor shower or storm or something and this was confirmed on the Internet.

Now that I made my home in the wide open spaces of the Sonoran Desert, I had every reason to expect that the particulate pollution of the New York atmosphere should not have penetrated this far west, especially since the Jet Stream flowed from west to east. Unfortunately I had not remembered that all of California and Los Angeles in particular were polluting at an accelerated rate. Nonetheless it was time once again to look up at the heavens by day and to witness the Leonids meteor whatever that night. By day there was this thick yellowish mist or L.A. smog that was encircling the entire valley clinging to the surrounding mountains. I thanked my good fortune that I live closer to the center of the valley away from the ring of pollution. So I had every reason to expect that any meteors or solar flares would be clearly visible from my backyard patio. I ventured out into the potentially light and smog polluted air at the time suggested by AOL as the most opportune time to experience the fiery display. Surprisingly the air was fresh.

The evening cool, for Arizona, and as I looked up towards the eastern sky there was the glow of two meteors moving parallel in my direction. I was ecstatic. Right at the beginning of my entrance into the world of scientific astronomical research and without a telescope I was already witnessing a true wonder of our solar system. I called frantically to my wife to share in this wonderful experience. She came running fearful of what tragedy might be occurring in our yard. I pointed up at the twin meteors exclaiming "Look, look, isn't it wonderful?" "You mean the Southwest Airlines plane flying into Sky Harbor Airport?" she asked. The blinking red and green lights of the meteors turned airliner were now clearly visible as the plane flew over our house. My god! What a blunder! I had to think fast. This could turn into a humiliation that my wife would constantly refer to in whatever remaining days I have left on this planet. "No, no" I explained with as much of a pedagogical expression as I could muster. "It's that dim star you can barely make out way off in

the Southeast just above the horizon. That's a galaxy, Andromeda, I think.

You will be able to see it better when your eyes accommodate to the dark. Of course you will really be able to see it when I get that 24-inch Schmidt Cassegrain telescope I have been telling you about." "Well I have too much work to do and can't be wasting time looking at stars I can't see, and we can talk about the cost of that telescope and how you propose to pay for it later" she said, and then she was gone.

That was a close call. But after 28 years of marriage one learns to handle potentially devastating situations. However the real moral of this story is that if you are new to astronomy keep your mouth shut at home until you really have learned something about the subject. If you want to be able to ask stupid questions and have them answered by someone who is patient and knowledgeable and will never hold you up to ridicule, then join an astronomy club. That is why I joined EVAC. Who knows. Someday I may even buy a telescope. In the meantime I can look through someone else's. The club has a star party twice a month (weather permitting). Clear Skies.

## For Sale

- JMI NGF DX2 2" focuser with 11/4" adapter. 10" radius base. – Good condition, asking \$100.00 Or Best Offer, (\$199.00 New)
- Orion 11/4" 2X Deluxe Barlow w/ Multi-Coated optics – Good condition, asking \$25.00 Or Best Offer, (\$47.95 New)

Contact Jim at (480) 554-8789 8 to 5PM

## Wanted

I am looking for a Telrad finder that is in good condition, base optional. I will pay up to \$25 depending on condition. Call Silvio at 602-244-4699 day time.



## EVAC on the Internet

EVAC Homepage: [www.eastvalleyastronomy.org](http://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](mailto: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](mailto: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](mailto: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

Dee Ann Zacher

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: \_\_\_\_\_

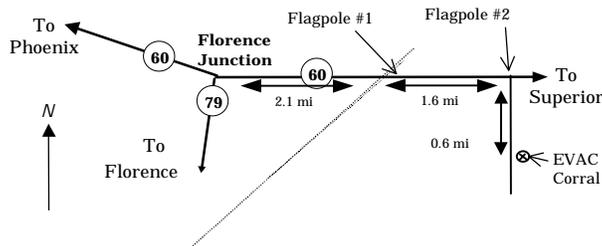
## EVAC Star Parties

### 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.

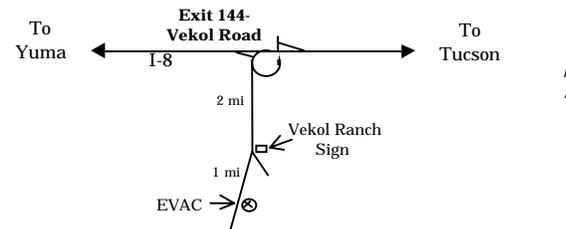


### Deep Sky Star Party: Vekol Road Site

**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 skyglow 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.



# East Valley Astronomy Club—2000

Scottsdale, Arizona

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

## EVAC Officers

### PRESIDENT

Silvio Jaconelli  
(480) 926-8529

### VICE-PRESIDENT

Chuck Crawford  
(480) 735-8042

### TREASURER

Dee Ann Zacher  
(480) 545-8769

### SECRETARY

Tom Mozdzen  
(480) 497-5703

### PROPERTIES

Rick Scott  
(480) 821-5721

**Membership & Subscriptions:** \$20 per year, renewed in December. Reduced rates to *Sky & Telescope* and *Astronomy* available. Contact Dee Ann Zacher. Email—[dazacher@uswest.net](mailto:dazacher@uswest.net)

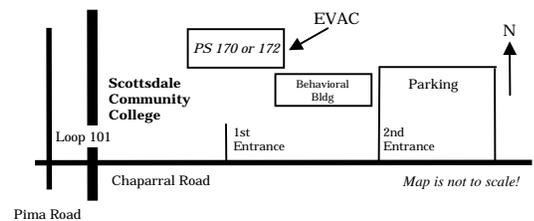
**Club Meetings:** Second Wednesday of every month at the Scottsdale Community College, 7:30 pm. Normally Room PS 170 or 172 in the Physical Sciences Building. See map below.

**Newsletter and Address Changes:** Contact Martin Bonadio 921 North Kingston Street, Gilbert, AZ 85233, 480/926-4900. [mabastro@aol.com](mailto:mabastro@aol.com). Contributions may be edited. The Newsletter is mailed out the week before the monthly Club meeting. An electronic version available in Adobe PDF format in lieu of a printed copy. Please contact Martin with 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 Dee Ann Zacher, club treasurer.

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



**Martin Bonadio, Editor**  
921 North Kingston St. Gilbert, AZ 85233

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**Reminder: Next EVAC Meeting**  
**Wednesday, May 10th, 2000**