

# East Valley Astronomy Club

February 2001

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

Scottsdale, Arizona

## Meeting John Dobson

by Joe Orman

Has any living person done more to popularize astronomy than John Dobson? Every amateur is familiar with the telescope that bears his name, (which, with characteristic lack of ego, he prefers to call the "Sidewalk Telescope"). Actually, the term **Dobsonian**, or more simply "Dob," refers to the manually slewed alt-az mount that Dobson developed to hold a Newtonian telescope. This approach allows the most aperture for the buck, making a telescope available to many who couldn't otherwise afford one. By showing people that they, too, can grind their own mirror and build an inexpensive mount, Dobson started a quiet revolution that has had a profound effect on amateur astronomy.



*John Dobson (right) and friends reinstall the mirror in a sidewalk telescope. Photo by Joe Orman.*

Dobson has led a decidedly unorthodox life. He spent 23 years in a monastery; there he developed his spiritual approach to cosmology

and a simple approach to telescope making. Since he had no money, he taught himself to make telescopes out of scrap material -- the design was simple by necessity. His followers formed an organization called the *San Francisco Sidewalk Astronomers*, showing the public that the wonders of the universe are accessible to them even from a city street corner. Now, their name simplified to the *Sidewalk Astronomers*, they visit National Parks and other sites around the country where they might find dark skies and large crowds. Millions have looked and been inspired.



*John Dobson (right) checks the collimation.  
Photo by Joe Orman.*

It was a sunny winter day at Death Valley National Park that I happened to come across a group of people taking apart a large 'scope on the visitor center lawn. I quickly recognized the spry man with the silver hair pulled back in a ponytail, who was enthusiastically but strictly guiding the operation of cleaning the mirror. Dobson said the weather had been clear and a good crowd had come out to look through the scopes the previous night. I couldn't stay until

the next night, but Dobson also had one small solar scope set up that he let me look through.

At that time (December 1996), Dobson was 81 years old. He recently turned 85, celebrating in the most appropriate way: with a massive telescope-building party on the lawn of the Griffith Observatory in Los Angeles. John Dobson is still going strong on his mission to bring the cosmos to the people.

## My Scope

By: Jim Kline

I would like to introduce a new feature called **"My Scope"**. The idea is to have a different person each month give a review of his/her telescope(s). This feature will be limited to telescopes and binoculars only. If there's enough interest, we could introduce another feature for other types of astronomy equipment. Article submissions will be taken on a first-come, first-served basis. Articles with pictures will be given priority. One or two articles will be printed each month as space permits. Since I'm the Newsletter Editor I get to go first!

My telescope is a Celestron G-8N (8" Newtonian) with a Celestron CG-5 German Equatorial Mount. I purchased the telescope in Dec. 1999 and have really gotten my money's worth from it. It came with a 20mm Plossl 1¼" eyepiece and a 9x50mm Finder. I have since added a Vixen LV 8-24mm Zoom 1¼" eyepiece and a Telrad finder.



### General Specs:

- Optical System – Newtonian Reflector
- Length of Tube – 19 ¾"
- Aperture – 200mm (8")
- Focal Length – 1000mm (40")
- f/Ratio – f/5
- Weight of Tube – 15 ½ lbs.
- Weight w/Tripod – 30 ½ lbs.

Being an f/5 with a 8" mirror, this scope is great for deep sky objects. I have used this scope to find about 2/3 of the Messier objects in the

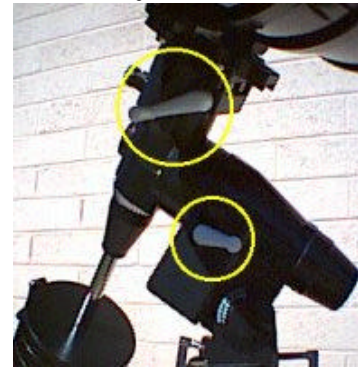
past year. However, the short tube and long focal length give this scope a large secondary mirror obstruction, making it only okay for planetary viewing.

The large 9x50 finder scope works well when trying to pinpoint star clusters, nebulae, and other deep sky objects. But in my opinion you shouldn't own a telescope without a Telrad finder.

I picked the 8-24mm Zoom eyepiece over a set of eyepieces for ease of use. I find it a lot easier to twist the eyepiece to the proper zoom as opposed to swapping eyepieces.

Setup and tear down time is very fast. I can be viewing within 5 minutes of arriving at the viewing site. With the short tube, the telescope and tripod fit in our small SUV with no problem.

The only maintenance I have done is to



collimate the scope and replace the slow motion controls on the tripod. I found collimating this scope very easy, after reading the instructions in the Celestron manual. I replaced the slow motion controls with

window cranks (seen in the picture) that I bought at Home Depot. The window cranks actually turned out to be a better control than the round knobs that came with the tripod. They are easier to find in the dark plus I can make faster more accurate adjustments with the cranks.

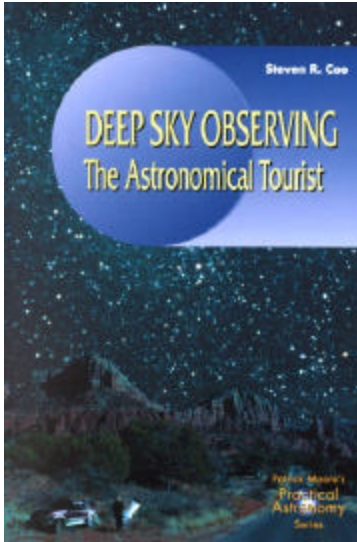
Over all this has been a great first telescope for my wife and I.

## Library Focus

by Joe Orman

This month's review: **Deep Sky Observing: The Astronomical Tourist** by Steven R. Coe (part of the Practical Astronomy Series edited by Patrick Moore).

Steve Coe is well known in the Arizona amateur astronomy community. His exuberant



personality has enlivened many a meeting and star party. EVAC

members who attended the November meeting will remember his entertaining talk on dark nebulae. He also brought copies of his new book, one of which was acquired for the EVAC library. The club's money was

well spent. While there are some tips on equipment, the book is mostly a guide on "how to use that equipment to view and enjoy a variety of deep-sky objects" (galaxies, nebulae and star clusters), and includes Steve's actual observing notes and his own sketches of each object as seen through a variety of apertures during his 20-plus years of observing. As someone whose entire output of astronomical artwork consists of two crude sketches, I can personally attest to the amount of effort that must have gone into producing the dozens of fine sketches reproduced here. Many of the objects are also shown in photos taken by Steve and others. My only major complaint is that the 373-page book does not include an index, so finding a particular object in the book takes a bit of page-flipping. "Deep Sky Observing" is not only a handsomely-printed guide to a cornucopia of intriguing objects, it's like sharing 'scope time with a friendly and knowledgeable companion.

As a special addition to this month's review, here is my Question & Answer session with the author himself:

Q: Many of us who are juggling jobs and families can barely find time to go observing. Can you tell us how you also found time to write a book? Was most of the work just transcribing your existing observing notes?

A: I had already done much of the observing, so some of the task had been completed just from years of going out with the telescope. In the

acknowledgements at the very front, my Dean at DeVry was kind enough to work with me on getting a sabbatical. That term away from the classroom made a big difference in clearing out the time to put the book together and proofread it.

Q: In this age of sensory stimulation, instant gratification, and CCD photography, can you tell us how you nurtured the patience required to do these drawings?

A: I just plain enjoy drawing what I see at the eyepiece. It is the most personal way I know to capture what can be seen with a telescope. I love to take astrophotographs also, but my drawings have more "soul". A photo is a task to be completed, a drawing is a labor of love. Even when there are over 70 of them to complete before a deadline!



*Steve Coe with 13-inch Newtonian*

Q: The sketches really are top quality. I notice you mention Rembrandt at least twice. Is this a subtle attempt on your part to achieve greatness by association?

A: One can only hope. I know my limitations in this area, maybe having my book with Rembrandt's name in it will provide me better sketching skills in the future.

Q: Anyone who's met you knows you have a great sense of humor, and that really comes across in the book as well. Do you consciously use that to promote astronomy? Are there any other behaviors that amateurs can use to make

the hobby attractive to others, especially young people?

A: Yes, my sense of humor is always at the forefront of any task I am trying to complete. But, seriously folks..... One could say that I am blessed, or cursed, with that bizarre manner of looking at life. I don't have to consciously turn it on, quite the opposite. As far as attracting young astronomers, we need to communicate that looking at the stars is both great fun and a great challenge. When the entertainment industry has blasted the senses at such a high level of input, it is tough to fully appreciate the subtle glow of a distant nebula. But, as amateur astronomers, we are the only ones on the Earth who have the tools and the expertise to pass on the beauty of the Universe we live in. That is the reason there is a chapter on public viewing sessions and a list of objects to present.

Q: On page 341 you say "Galileo invented the telescope." Tsk, tsk ... you should know better. Care to issue a correction?

A: Ok, Galileo invented the astronomical telescope. Better? I will add it to my list of errata. There aren't too many so far.

Q: Have the profits from your book allowed you to buy any of the goodies on your wish list, such as the 35 mm Panoptic eyepiece?

A: Yes, and I am hoping to go truck shopping soon, so buy early and often. They make great presents.

Q: Now a somewhat serious question. In your philosophy, what is the ultimate purpose of observing: for personal enrichment, to make a contribution to science, to make friends, just for fun ... or all of the above?

A: I do not observe to make a contribution to science. I have rarely gone out with the telescope to provide scientific information. So, I do think that the other benefits are very compelling. Personal enrichment has been a big part of the hobby for me, the chance to really see our Universe in all its splendor is very compelling and it changes how you view existence. To make friends, I did not start out with this goal in mind, but it has come true in spades. So many of my lifelong friends are

amateur astronomers that it is great to go to a club meeting just to see them all. I find observers of the sky to be: intelligent, outgoing, motivated and just plain fun to be around. A very compelling reason to join in and see the sky.

Q: I'll close by saying your book is very informative and enjoyable to read, and every deep-sky observer should buy a copy. Is my bribe check in the mail?

A: Well, is it a bribe if what you are saying true? Now that we have had fun with it, I wish to thank everyone who has purchased a copy of the book and I do hope that they enjoy it under clear skies. Thank you.

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

## **STARDUST, GALILEO, AND CASSINI MISSION UPDATES**

By: Laurice Dee, Ph.D

In my last article, I shared some background information about the STARDUST, NEAR, Voyager, and Ulysses missions and provided their highlights. If you wish to follow up on the progress of the STARDUST, Voyager, and Ulysses missions, please see the website, <http://www.jpl.nasa.gov/>, and click on 'present' missions. For the NEAR mission, please use the website, <http://near.jhuapl.edu/>, to see exciting images of Eros.

I am going to provide a quick update on the STARDUST, Galileo, and Cassini missions in this article.

### **STARDUST**

STARDUST flew past our planet on January 15<sup>th</sup> to receive a gravitational boost for the second loop around the Sun. Since its launch on February 7<sup>th</sup>, 1999, STARDUST has already completed its first loop around the Sun and

collected interstellar dust. During the Earth flyby, STARDUST took numerous images of the Moon using its navigation camera. The images definitely turned out very well, despite the "halo" around the Moon. Please see the website to find out the reason for the halo and to enjoy the new images!

### **GALILEO AND CASSINI**

Both spacecraft are still in the Jovian system making interesting observations of Jupiter and its Galilean satellites. Cassini made a successful close approach to Jupiter on December 30<sup>th</sup> and is now looking back on the night side of Jupiter. Cassini has already received its final gravity assist from Jupiter and is now on its way to its ultimate destination, Saturn. Please see the following websites:

<http://www.jpl.nasa.gov/cassini>

<http://www.jpl.nasa.gov/galileo>,

to enjoy the latest images and to find out exactly where they are in relation to one another in the Jovian system!

Stay tuned for my upcoming reports and presentations on the various solar system missions! In the meantime, if you have any questions or comments, please do not hesitate to send e-mail to Laurice Dee at [Laurice.Dee@ARZ.Boeing.com](mailto:Laurice.Dee@ARZ.Boeing.com). Keep looking up!

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

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.

You can find interesting arrangements of Jupiter's satellites on the evenings of February 4<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup>, both around 8 PM and midnight.

On Thursday, February 1, at 4:30 AM, you might see an asteroid occult a star. This won't be an easy one. The star is mag 11. The asteroid, 18 Melpomene, is mag 12. The predicted path is fairly wide, and goes through Phoenix, but not Prescott. That might change

when they make more accurate predictions a few days before the event. See Sky and Telescope, Feb 2001, p. 116 if you are interested in trying for this one.

On Monday, February 5, at 8:40 PM, you can see Europa's shadow fall on Jupiter. Europa ends its passage in front of Jupiter 4 minutes later.

On Sunday, February 11, after 11:00 PM you can see the southeast part of the Moon at its best. With a small (3 inch) telescope look for the gibbous, waning Moon. The right hand side is tipped toward us by libration.

On Monday, February 12, at 11:16 PM, you can see Europa's shadow fall on Jupiter at the same time the satellite ends its passage in front of the planet.

On Wednesday, February 14, at 8:18 PM, you can see Callisto appear from Jupiter's shadow at the same time Io goes behind the planet.

On Wednesday, February 21, at 8:13 PM, you can see Callisto appear from behind Jupiter. The satellite enters the planet's shadow 3 minutes later.

On Saturday, February 17, at 9:00 PM you can see two of Jupiter's satellites, Io and Europa, only 9 arcseconds apart.

## **Aurora Borealis**



When a solar storm reaches Earth, the aurora borealis, or northern lights, can extend as far south as Texas. This image shows the aurora observed from Echo Mountain, 32 miles northeast of El Paso. Photo by: C. Grohusko - [www.particlebreezeimages.com](http://www.particlebreezeimages.com))

# Welcome New Members!

By: Jim Kline

I would like to take this time to recognize our newest EVAC members. Please join me in making them feel welcome.

Andrew Wollert	Dennis Knight
Dick & Kim Caldwell	Everett Deidiker
Gary Finnie	Jim Duncan
Matthew Gilbert	Peggy Bernard
Pierce McIntosh	Robert Anderson
Russell Gates	Dana McClaskey
Dave Lehnen	Eugene Meade
Jeremy Marwil	Laura Seckinger
Eric Monroe	Chris Countrymen
Tom Ballen	

## President's Comments

By Martin Bonadio

We got off to a great start in January. There were a lot of new and old faces in the audience at our last meeting and I was very pleased with the turnout!

Early in the month, we were treated to a double transit of two moons of Jupiter- IO and Ganymede. What made this event more enjoyable was the fantastic viewing that I had at my house. With my 10" SCT, I was able to observe the event at over 600x. This allowed me to see the shadows and easily note the size difference between the much larger Ganymede shadow and smaller one of Io. At the same time, I watched as the red spot transited along with the shadows. For a short time after the IO shadow appeared, I was able to watch the moon and shadow. While set up, I spent a little time looking at Saturn at the same power and was really pleased at the amount of detail I saw within the ring system. Very Exciting!

Now, thank you, Warren for coming last month to discuss telescope equipment and the increasing trends in computerized telescopes. With such a variety of equipment on the market today, and the increasing complexities associated with computers, I hope that members were able to get some tips from Warren that will help with any plans you have

to purchase or upgrade your equipment. With a club of this size, there are countless varieties of telescopes and telescope equipment. I encourage you to try to attend the star parties and get in touch with me or any of the club officers to answer any questions you have in this regard.

With this in mind, on January 13<sup>th</sup>, the club sponsored a beginner's lab. There was a great turnout even though the better part of the day was overcast. Once it darkened, the clouds dissipated and everyone was able to do some viewing of the brighter objects and planets. Bill Dillenges, David Coshov and myself were on hand starting in the afternoon to assist members with assembly, operation, and general questions about telescopes and astronomy. A few brand new in the box scopes were brought out that day including an 8" Discovery Newtonian and an 8" LX-90. As the scopes were assembled, I spent a brief period of time helping everyone check their collimation, and get their telrads and other finders aligned. Once it got dark, the discussion progressed and the alignment of optics peak was demonstrated with a few star tests. Finally, with everyone set up, and lined up, we began having some fun observing. Some members wanted to learn more about how to operate their scopes, some wanted to see the same images through various scopes, eyepieces and filters, and others needed help understanding how to find objects. All in all, it was very successful, and I had a great time. Thanks again to Bill and David for helping me with this. I'll plan another beginner's lab in the next month or so.

Other good news includes a call that we received from the Arizona-Science Center. They are interested in having Rick Scott and Joe Orman present their slide show along with other EVAC sponsored astronomy activities on April 14<sup>th</sup>. We'll be organizing this more in the coming weeks, so if you think you would be interested in helping, please contact me at 480-926-4900 or email:[mabastro@aol.com](mailto:mabastro@aol.com).

Finally, the books or equipment we have in the library.the board met on Friday, January 12<sup>th</sup>. Some great topics were discussed, as you will see from the board meeting minutes in this issue of the newsletter. The good news from

that meeting is that the Board approved the purchase of new eyepieces for the club's library/equipment. With this, I encourage newer members or those considering the purchase of a telescope to talk to Rick Scott about borrowing any of

## **FROM THE VICE PRESIDENT**

By Dave Coshow

Our speaker for February will be Dennis Young, Dennis, President of the Sirius Lookers Astro Club and a Sedona resident for over a decade, and, will give a presentation on his nighttime photo work and adventures. Guidelines and insights on how he shoots at night and a slide show of his work will be presented. Dennis will also talk about his 3/4 meter telescope, including construction and portability of the scope. We hope to have the scope set up outside the room for observation and study of the construction.

We will meet at 5:30 PM on February, 14<sup>th</sup>, at the Black-eyed Pea (Indian Bend and Pima) for dinner and a gabfest before the EVAC meeting. Please call me at 480-730-1132 to let me know if you will be attending so I can notify the restaurant

## **EVAC Budget for 2001**

By Randy Peterson

At our most recent board meeting, your board members adopted and passed a budget for this year. The highlights are outlined below.

We are projecting to have about 180 members by the end of the year. Last year we finished the year with 182 members, some who joined the club in the last couple months of the year. Projected revenue is \$2850.

Our major budgetary expenses are as follows:

1. Newsletter costs. Thanks to the approximately 55% of our members who subscribe to the electronic version of the newsletter, our costs for printing and postage should remain

about the same as last year, which is significantly lower than in previous years. During the past year, Silvio Jaconelli provided free printing through his work, a service we expect to end later this year. Martin Bonadio is currently negotiating a deal with a local printing company to have this done at no cost to EVAC in return for a small advertising space in the newsletter. This leaves postage and supplies as the major expense. Projected costs for the year are \$750.

2. Speaker Honorarium. We have awarded our guest speaker a \$50 stipend per month. This has worked fine for most local speakers, but is not sufficient to attract out-of-state or "big-name" speakers. A few of the speakers in the past have taken a free 2-year membership in lieu of the monetary compensation. Projected costs are \$650 for the year.

3. Insurance costs. Last year we spent slightly less than the \$350 we have budgeted this year for insurance.

4. Our properties consist primarily of donated materials. We are grateful to all the people who have done so over the years, but we felt that allocating some money for this category is a worthwhile effort to purchase some additional items. There has been no budget for this category in the recent past. The first thing that was decided upon to purchase is a modest set of eyepieces for the two-loaner scopes that belong to the club. The old eyepieces are mostly homemade, and give unacceptable views to the new people that check out the scopes. For 2001, we budgeted \$300 for properties. An additional \$200 was approved by the board to be used to purchase the eyepieces!

5. Dinner with the Speaker. This is about an hour event, starting at 5:30 p.m., before each general meeting of EVAC. It is attended by the same half-dozen group of people each month, which makes an intimate group, but also shows there is plenty of room for more to attend. It is simply a dutch-treat dinner with members of your club and that night's guest speaker. We have a great time discussing all things astronomical, not only with the guest speaker but also among ourselves. All members are welcome to join in - please call David Coshow

to let him know you are coming. The club's expense is picking up the guest speaker's dinner. Budgeted amount, \$240 for the year.

After deducting all budgeted costs for the year, the projection is for a \$550 deficit for the year. This compares to a \$900 deficit in 1998, a \$350 deficit in 1999, and a \$500 surplus last year. The \$725 we collected in December for 2001 dues was applied to the 2000 fiscal year. This is why we ran a \$500 surplus rather than a \$225 deficit for last year.

## January EVAC Board Meeting Minutes

By: Tom Mozdzen

The board meeting was held on January 12th at Martin Bonadio's house and began at 7:30pm after a fine selection of various Domino's pizzas, sodas, cookies and chips.

### Members Present

Martin Bonadio	Dave Coshow
Jim Kline	Chris Kline
Ken Levy	Gene Lucas
Tom Mozdzen	Randy Peterson
Rick Scott	

### Treasurer's report

Balance was fairly flat for the last 12 months. Major 3 items are Paper newsletter costs, Speakers Fees and Dinner, and Insurance.

### Formal Club Activities

All AZ Star Party, EVAC-SAC Joint Picnic, Adopt-a-highway, Messier Marathon, and the Potluck Christmas Party.

### Guest Speakers

Several possible people are on the list. David is working out the schedule in January. Big name sought for one of the dates.

### Special Interest Group

The plan is to have groups meet separately from the monthly EVAC meetings. SIG meetings during the monthly EVAC meeting would mainly be for organizational purposes.

### Newsletter Costs

Promote electronic version more heavily. Do not raise membership rates for hard copy recipients.

### Club Membership Price

Ken brought up his favorite topic. Everyone felt the price was just right because cash flow has been flat year after year. Once again, Ken promised never to bring up the topic again.

### Incorporation Status

Tom said the period ran from April to April, and we were in good standing.

### Open Discussion

Each member agreed to start writing down the procedures for anything they were doing, which a successor might find useful. Typical items are: how to keep the membership list, publish the newsletter, file for incorporation status, apply for insurance, site permits, etc...A heated discussion arose on the topic of club growth and future direction. It was agreed to form a Special Interest Group to address short term and long term growth, and future direction of the club.

### Motions

A motion was passed to buy (\$200 limit) some new eyepieces for the 2 loaner telescopes.

A second motion was passed to propose a change in the club bylaws creating a new membership class, termed "family", to be offered for the same price as the "individual" class.

## EVAC Meeting Minutes

by Tom Mozdzen

7:30pm Martin Bonadio called the first meeting of the year to order. There were ~70 people in attendance with 10 new members arriving on the scene. Many heard about us through the web page which Robert Kerwin so diligently maintains.

Upcoming star parties and events were discussed:

- Board meeting on the 12<sup>th</sup>
- Beginner's Lab on the 13<sup>th</sup>

- Dinner with the speaker @ 5:30pm at Blackeyed Pea

Gene Lucas mentioned three events:

- March 10<sup>th</sup> - Astro imaging conference in Fullerton California
- May - Minor planet prof. Workshop in Tucson
- May - 20<sup>th</sup> IAPPP at Big Bear Lake Ca. (imaging and CCD)
- May - memorial day weekend - RTMC - near Big Bear Lake.

Florence Junction permits were in - pick one up if you want to go there alone.

IDA had T-shirts on sale for \$12, with \$2 going toward IDA.

Humongous plastic David Levy planetspheres were available for \$20.

8:00 pm Break:

SIG groups mingled during the 10min break. Pretty noisy and short on time to really get going. The groups are: Double stars, Astrophotography, solar Observing, Telescope making, Deep sky observing, lunar observing., solar system exploration, occultations.

Show and Tell

Martin - showed us his Christmas day partial eclipse photos.

Chris - showed us his CCD photos and his CCD + 3 filter photos = color CCD photos. Chris used both a 6" and a 12" to get some remarkable shots of deep sky objects. Looks like Chris's film budget will be greatly reduced in the near future - might even pay for the CCD equipment! (-:

Randy - showed a nice sequence of partial eclipse photos.

Laurice - Gave us updates on Galileo, Cassini, and Stardust spacecraft

8:45 Main Speaker

Warren held a question and answer session about telescope equipment, and gave us some interesting stories about working with NASA/JPL. Thanks Warren for sharing your knowledge with us!

9:30 pm Meeting Adjourned.

## Full Moon over Camelback

Photo provided by Chris Grohusko in El Paso Texas; National Geographic contributing photographer and night sky deep sky observing enthusiast.



## Vekol Observing and Complete Stops

by Tom Polakis

I bet I have made the drive from Tempe to Vekol Valley several hundred times in my 15 years in Arizona. Each time I become that much more careless about remote stop signs. One such stop sign marks the southern end of Maricopa Road, near the Burnt Bun Café. Looking casually at the expansive view to the east, I drifted through the stop sign as usual, and made my right turn. Seconds later the flashers appeared in my rear view, and I knew I was busted.

The officer was quite amiable. He saw my license plate (SKY-GZR), and correctly guessed I was interested in astronomy. More uncannily, he guessed that I was headed to Vekol. On a roll, he asked if I knew another astronomer name-withheld-by-request, who ran the same stop sign less than a week earlier. He seemed to remember the particulars of name-withheld-by-request's citation as if it had happened the same day. Then he rattled off two other cases of others from EVAC who he pulled over on their way to Vekol. Fortunately, he was giving out warnings only.

Next time you're heading out to the observing site, keep in mind that the troopers are out there, just waiting for the next local astronomer to run a stop sign. If only we could enlist their services at the observing site. I can see it now. Headlights: \$100, reverse lights: \$50, dome lights: \$25

## Sanborn Elementary Science Fair

By: Dave Hertel

I'm a fellow EVAC member with a opportunity for the club to promote astronomy to young and impressionable kids (and quite a few adults!). Sanborn Elementary of Chandler is holding an annual science fair on Tuesday, Feb. 13th - 6:30pm to 7:30pm. At this fair, they have the typical science activities within the school gymnasium but also have the potential for hosting outdoor activities. Two years ago, I took my trusty ol' 80mm refractor and the kids really enjoyed checking out Jupiter & its moons. I've been invited back again this year to share the joys of astronomy. This year with Jupiter, Saturn, and Venus readily available in the early evening sky the 'wow' factor should be even better.

The school is always looking for volunteers to assist with various activities. Therefore, I'm taking the liberty of asking the East Valley Astronomy Club if they have anyone that would be willing to bring a telescope and assist with showing off some heavenly sites.

The interest in viewing the heavens was quite impressive, with a large line of both kids & adults that had never looked through a telescope. There was definitely no lack of interest and I was kept busy the entire time.

**Where:** Sanborn Elementary. Major cross streets: Ray & McQueen in Chandler

**When:** Tuesday, Feb. 13th 6:30pm - 7:30pm (perhaps a little longer)

**Why:** Expose children (and adults alike) to the wonderful science of astronomy

**How:** Just setup and oversee the viewing experience. Answer the common basic questions...

If interested in volunteering please contact Dave Hertel at 480-812-0513 or [Dave.B.Hertel@intel.com](mailto:Dave.B.Hertel@intel.com)

## 2001 ALL ARIZONA MESSIER MARATHON

By: AJ Crayon, [acrayon@primenet.com](mailto:acrayon@primenet.com)  
& Jack Jones, [spicastar@mindspring.com](mailto:spicastar@mindspring.com)

Messier Marathon Coordinators  
Saguaro Astronomy Club

Site: Arizona City, AZ  
Date: March 24/25, 2001

Solar Data:  
March 24 6:33pm Moon set  
6:43pm Sun set  
8:04pm astronomical twilight

March 25 5:02am astronomical twilight  
6:21am Sun rise  
7:04am Moon rise

We don't have much choice for the Marathon this year, but OH what a choice! The only date possible is Saturday, March 24, 2001. New moon occurs on this date around 6:25pm MST! The optimal chance for finding ALL 110 entries in the Messier Catalogue is late March, about the 26th through the 29th. So we are within 2 days of the best chance for viewing the entire catalogue.

Worried about not being able to reach high counts? DON'T! Set your own goals, don't bother with trying to reach high counts or competing with everyone else. You decide on what YOU expect, what you want to do and try

to reach the goal. And the heck with everybody else! For instance, try 50 objects. If you find them, it qualifies you for a certificate. If that's too easy for you then "kick it up a notch or two" and try for 55, 60 or even 70 objects. Counts like these don't require you to be up the entire night; you can crash once your goal is reached. Then you will have enjoyed the true meaning of the Messier Marathon!

How do we keep track of who sees what? We don't, you do. The honor system is used so if you see the object, mark it and go on to the next. There are no referees for this exercise.

There will be a check off list available at the site to record your observations. Be sure to pick one up, preferably before you start marathoning, and fill in the top portion so awards can be made. It is important to remember that you must turn in your form to one of the Coordinators before leaving the site or by sunrise at the latest. We cannot accept any after these times.

The Messier Marathon rules leave the choice of how to locate each object up to the observer. Methods include star hop, setting circles or computer control. But you MUST check off each object viewed. Although it is possible to do the marathon with a 4" telescope, we can't really suggest this unless you are an experienced observer. Don't forget to check off each object as it is observed.

Plan on arriving at the site early enough to set up the telescope and allow it to reach thermal equilibrium. Be sure to fill out the heading of the attached form!

There are 6 objects within 15 degrees of the western horizon at evening twilight. They are;

- M 74 - 7 deg and 11 deg - all three!
- M 77 - 12 deg
- M 33 - 14 deg

There are only 2 objects within 15 degrees of the eastern horizon at morning twilight. They are

- M 30 - 1 deg - always the toughie
- M103 - 9 deg

Your efforts will not go unnoticed, as there will be awards in recognition of effort. People observing 50 or more objects will receive an 8 1/2 x 11 certificate. For first, second and third place there will be plaques suitable for mounting on a telescope. Duplicate awards will be made for ties.

We will need either you or your club's support to help purchase the awards for its members. Still not interested in the marathon? Come anyway, enjoy a night of observing, astrophotography or just plain old socializing.

## **AstroImage Seminar**

by Gene Lucas

We are starting to get the nearly annual Orange County Astronomer's (OCA's) AstroImage 2001 Seminar in gear and we would like to invite everyone to attend and participate. The target audience is those involved with CCD imaging and film Astrophotography (Silicon and Silver imaging). More information is available on the OCA's website: <http://www.chapman.edu/oca/>, but essentially it will be held at the Ruby Center at Cal State Fullerton all day Saturday, March 10, 2001, beginning at 9am and ending at about 6pm. We'll have the usual morning and afternoon snack breaks and a long lunch for socializing.

The talks will be about 45 minutes long, but shorter presentations are okay, too. If someone wants to give a talk on photographing the upcoming total solar eclipse in Africa, we need someone to do that, too.

We currently have 5 presenters. John Sanford (from the OCA), who will talk on his imaging exploits at his new Starhome Observatory. John Hoot (an OCA member from San Clemente), who always has interesting topics, will give two presentations, one courtesy of the NASA ambassador program. Allan Guthmiller (from Las Vegas and a student of master astrophotographer George Greaney), who has been taking some exquisite photos through his 20-inch. Plus Dale Mais (a chemist from San Diego), who will talk about amateur spectroscopy with SBIG's CCD

camera. We would like to have about 10 presentations to make for a full day. We also plan to have some vendors and space available for those too shy to stand in front of the audience to have posters displaying their latest work. The program will be varied and interesting as you can see and it is approaching fast!

## For Sale:

Perfect for astrophotography beginner or veteran as well as doing normal photography: Konica TC (small body, light weight) 35mm Autoreflex camera w/matched 50mm f17 lens, Vivitar close focus auto zoom 35-105mm lens, Vivitar close focus auto zoom 100-300 mm lens, cable release, adaptor rings (for telescope), eyecup attachment, complete instructions, Marsand case, all in excellent like new condition. Would consider as partial trade for Meade Series 4000 Ultra Wide Angle 14 mm and/or Super Wide Angle 40 mm eyepiece. \$ 575 or best offer. Contact Chuck Crawford at 480-985-8824 or [astroc@mindspring.com](mailto:astroc@mindspring.com)

Meade EXT125EC telescope with plossel 25mm eyepiece; deluxe tripod; hard side foam lined case; autostar controller; barlow lens; all in like new condition purchased Sept 2000 priced at \$1100 [hbwrasse@cs.com](mailto:hbwrasse@cs.com) 480-839-0101

**Deadline for March Newsletter**  
**Submissions is February 20<sup>th</sup>, 2001.**  
**Send articles to [JKLINE29@HOME.COM](mailto:JKLINE29@HOME.COM)**

## EVAC & Other Events: 2001

	New Moon	Meet	Local	Deep Sky	Other
<b>Feb</b>	2/23	2/14	2/17	2/24	
<b>Mar</b>	3/25	3/14	3/17	3/24	3/24 Messier Marathon
<b>Apr</b>	4/23	4/11	4/21	4/28	4/7 Adopt- a-highway 4/14 EVAC Slide Show
<b>May</b>	5/23	5/9	5/19	5/26	
<b>Jun</b>	6/21	6/13	6/16	6/23	
<b>July</b>	7/20	7/11	7/21	7/28	

Visit **Photon Instrument, LTD** for all your Astronomical Telescopes needs.

Sale, Service, Repair, and Restoration

**Warren & Judy Kutok**

122 East Main Street

Mesa, Arizona 85201

(480)835-1767 or (800)574-2589

<http://www.photoninstrument.com>

# Amendment to the Constitution

By Martin Bonadio

A petition is being considered for approval by the membership at large. We're asking everyone to please take a moment and respond YES or NO below. Proposed amendments to the Constitution and Bylaws must be submitted to the General Assembly in writing and signed by one-fourth of the voting members.

The board has discussed and supports the creation of a new class of membership, which will be known as FAMILY. In addition to receiving a monthly newsletter, a family membership allows each person of an immediate family to be recognized and receive all the benefits of membership in EVAC. This includes name badges, magazine and book discounts, access to the club library, and participation in club sponsored events. The cost of a FAMILY class membership will remain at \$20 for the fiscal year 2000.

With approval of this class the board would update the constitution to include this new class, in addition to updating all new member/renewal forms to include this option. The current EVAC constitution can be viewed online at <http://www.eastvalleyastronomy.org/bylaws.html#Art10>

Please indicate your approval of this addition below:

**YES** - I approve the addition of the FAMILY class of membership

**NO** - I do not approve the addition of the family class of membership

**Signed**

---

After completing this, please tear off this section and return it to the EVAC treasurer in person or mail to:

EVAC Treasurer  
PO BOX 2202  
Mesa, Arizona 85214-2202

You may also email your response to Randy Peterson @ [rgp14159@aol.com](mailto:rgp14159@aol.com). If you have any questions please direct them to Martin Bonadio @ 480-926-4900 or email: [mabastro@aol.com](mailto:mabastro@aol.com)

This page intentionally left blank



# East Valley Astronomy Club

## 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

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:

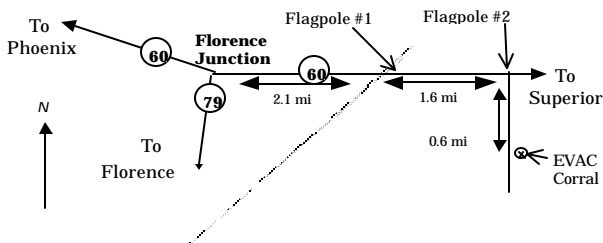
## EVAC Star Parties

### Local Star Party: Florence Junction Site

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

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

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

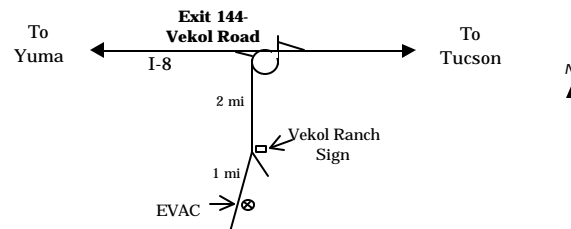


### Deep Sky Star Party: Vekol Road Site

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

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

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



## EVAC Officers

PRESIDENT  
Martin Bonadio  
(480) 926-4900

VICE-PRESIDENT  
David Coshov  
(480) 732-1132

TREASURER  
Randy Peterson  
(480) 947-4557

SECRETARY  
Tom Mozdzen  
(480) 497-5703

PROPERTIES  
Rick Scott  
(480) 821-5721

NEWSLETTER  
Jim & Chris Kline

East Valley Astronomy Club—2001  
Scottsdale, Arizona

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

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

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

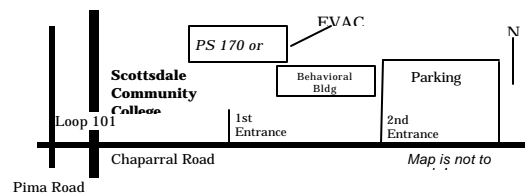
**Address Changes:** Contact Randy Peterson. PO Box 2202, Mesa, AZ. 85214-2202. (480) 947-4557. Email: [rgp14159@aol.com](mailto:rgp14159@aol.com).

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

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

**Book Discounts:** Great savings through Kalmbach and Sky Publishing. Contact Randy Peterson, [rgp14159@aol.com](mailto:rgp14159@aol.com)

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



## **East Valley Astronomy Club**

**Jim & Chris Kline, Editors**

**1209 W. Palo Verde Dr. Chandler, AZ 85224**

### **Contents:**

- Meeting John Dobson
- My Scope
- Library Focus
- Stardust, Gallileo, & Cassini Mission Updates
- If it's clear...
- Welcome New Members
- President's Comments
- From the Vice President
- EVAC Budget for 2001
- Jan. EVAC Board Meeting Minutes
- EVAC Meeting Minutes
- Vekol Observing & Complete Stops
- Sanborn Elementary Science Fair
- 2001 All Arizona Messier Marathon
- AsstroImage Seminar
- For Sale

**Reminder: Next EVAC Meeting  
Wednesday, February 14, 2001**