

# East Valley Astronomy Club

November 2003

www.eastvalleyastronomy.org

Scottsdale, Arizona

## From the Desk of the President

by Peter Argenziano  
2003 EVAC President

On my recent vacation my wife and I had the opportunity to visit the birthplace of Mikolaj Kopernik, better known to us in the west as Nicolaus Copernicus (the Latin version of his name that he used in his later life). He was born on February 19, 1473 in Thorn, Prussia - which is now the central Poland city of Torun - an important medieval trade center, and part of the Hanseatic League.

Copernicus, considered by many to be the father of modern astronomy, began his formal education in Krakow, which was then

the capital of Poland. There he studied Latin, mathematics, astronomy, geography and philosophy before venturing to Italy to study Greek, canon law, medicine, and astronomy. One should not think that the astronomy courses which Copernicus studied were scientific courses in the modern sense. Rather they were mathematics courses which introduced Aristotle and Ptolemy's view of the universe so that students could understand the calendar, calculate the dates of holy days, and also have skills that would enable one to navigate at sea. Also taught as a major part of astronomy was what today we would call astrology, teaching students to

calculate horoscopes of people from the exact time of their birth.

While in Italy he recorded his first observations: on March 9, 1497 he observed the Moon eclipse the star Aldebaran; and on November 6, 1500 he observed a lunar eclipse.

Copernicus became quite interested in astronomy and published an early description of his heliocentric model of the solar system in *Commentariolus* (The Little Commentary) in 1512. In this model, the Sun was slightly offset from the center of the solar system using a device invented by Ptolemy known as the equant point. The idea that the Sun was the cen-



ter of the solar system was not new; similar theories had been proposed by Aristarchus and Archimedes as early as the third century B.C. But Copernicus worked out his system in full mathematical detail and is recognized as the first person to create a complete system combining mathematics, physics, and cosmology.

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## Important Club News

Reminder: this month is election month! Nominations were announced at the October meeting, and have been published on our website at <http://www.eastvalleyastronomy.org/04elect.htm>. Nominations remain open

until the day of the elections. Voting will occur at the upcoming November meeting.

I'm happy to say that we have members nominated for most positions. Unfortunately, some key posi-

tions are still open as I write. We still do not have candidates for the following positions: Treasurer, Secretary, Newsletter Coordinator, and Newsletter Editor. Please consider volun-

*(Continued on page 2)*

## If it's clear...

by **Fulton Wright, Jr.** - Prescott Astronomy Club  
for November 2003

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

When gauging distances, remember that the Moon is 1/2 a degree or 30 arcminutes in diameter. All times are Mountain Standard Time unless otherwise noted.

Mars shrinks from 15 to 11 arcseconds this month. That is still large enough to see some detail with a medium (6 inch) telescope.

On Saturday, November 8, right after sunset, you can see an eclipse of the Moon. With your unaided eye or binoculars, look 20 degrees south of east for the rising Moon. Here is the schedule of events:

4:32 PM Partial eclipse begins  
(Moon below horizon)

5:28 PM Moon rises (hard to see, sky bright, Moon dim)

5:30 PM Sun sets

6:06 PM Total eclipse starts (still not easy to see)

6:31 PM Total eclipse ends (not a long or deep eclipse)

8:04 PM Partial eclipse ends

8:45 PM (approx) Last visible shading from penumbra

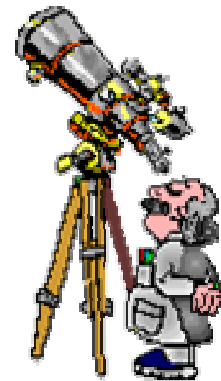
9:22 PM Moon leaves penumbra (impossible to observe)

On Tuesday, November 18, between midnight and dawn (sunrise is about 7 AM), you might see some Leonid meteors. Nobody is predicting a big storm, so this time it might be pretty quiet. Sorry about the last quarter moon being so close to the radiant.

On Saturday, November 22, you can see comet Encke in the Coathanger asterism. Look with binoculars for the 7th magnitude comet in the vicinity

of the asterism (RA 19h 25m, Dec 20d 11'). See Astronomy Magazine, Nov 2003, p. 61 & 65 for more information on observing this comet.

On Sunday, November 23, you can see a total eclipse of the sun if you are flying in a plane over Antarctica. They didn't make this one easy.



## Important Club News

*(Continued from page 1)*

teering for one of these positions.

Recently about a third of the membership participated in an online survey concerning our monthly general meetings. The survey was constructed to anonymously solicit input from the membership. I thank all who took the time to respond. The data was collected and is available for your perusal on our website at: [http://www.eastvalleyastronomy.org/survey7341\\_results.htm](http://www.eastvalleyastronomy.org/survey7341_results.htm).

The input will help to ensure the meetings meet the expectations of our members. Sometimes surveys seem to confirm the status quo. For example, nearly half of the responses indicated that a Wednesday meeting concluding at 9:30 pm is preferred, which is the current scenario. Nearly two-thirds voiced the opinion that Scottsdale Community College is the preferred location, and that room PS-172 meets their needs. It is worth mentioning, however, that many people additionally commented that, at times, the room is too small. I invite everyone to visit the web page and check out the survey results for yourself.



5201 N. Oracle Rd.  
Tucson, AZ 85704  
(520) 292-5010

# Calendar of Events

## November - December, 2003

Compiled by Howard Israel, EVAC Events Coordinator

### November 2003

| Date                      | Event                                   | Location                                    | Notes                                       |
|---------------------------|---|---|---|
| <b>Saturday, Nov. 1</b>   | Fall Adopt-A-Highway Cleanup            | US 60 in Florence Junction                  | 8:00 am start time near radio tower         |
| <b>Saturday, Nov. 8</b>   | Beginner's Lab & Lunar Eclipse          | Dave Coshow residence                       | 7:00 pm setup                               |
| <b>Wednesday, Nov. 12</b> | November General Meeting                | Scottsdale Community College, Room PS-172   | 7:30 pm - The Herschel 400 with Bill Ferris |
| <b>Thursday, Nov. 13</b>  | Scottsdale Community College Star Party | Scottsdale Community College Parking Lot    | 7:00 pm setup                               |
| <b>Friday, Nov. 14</b>    | Public Star Party                       | Water Ranch at Riparian Preserve in Gilbert | 7:00 pm to 9:00 pm                          |
| <b>Monday, Nov. 17</b>    | Leonid Meteor Showers                   | Look to the east                            | Best after midnight                         |
| <b>Saturday, Nov. 22</b>  | Deep Sky Star Party                     | Vekol Road Dark Sky Site                    | Sunset 5:26 pm                              |
| <b>Saturday, Nov. 29</b>  | Local Star Party                        | Boyce Thompson Arboretum State Park         | Sunset 5:17 pm                              |

### December 2003

| Date                      | Event                    | Location                                    | Notes                                    |
|---------------------------|--------------------------|---|--|
| <b>Saturday, Dec. 6</b>   | Beginner's Lab           | Dave Coshow residence                       | 7:00 pm setup                            |
| <b>Wednesday, Dec. 10</b> | December General Meeting | Scottsdale Community College, Room PS-172   | 7:30 pm - Michael Schwartz, Tenagra Obs. |
| <b>Friday, Dec. 12</b>    | Public Star Party        | Water Ranch at Riparian Preserve in Gilbert | 7:00 pm to 9:00 pm                       |
| <b>Saturday, Dec. 20</b>  | Deep Sky Star Party      | Vekol Road Dark Sky Site                    | Sunset 5:28 pm                           |
| <b>Saturday, Dec. 27</b>  | Local Star Party         | Boyce Thompson Arboretum State Park         | Sunset 5:24 pm                           |
|                           |                          |   |  |

# From the Desk of the President

*(Continued from page 1)*

Returning from his studies in Italy, Copernicus was appointed as a canon in the cathedral of Frombork, where he spent a sheltered and academic life for the rest of his days.

His research was conducted quietly and alone. He made his celestial observations from a turret on a wall around the cathedral. His observations were made 'naked-eye', as the telescope wouldn't be invented for a hundred more years. In 1530, Copernicus completed his great work, *De Revolutionibus Orbium Coelestium* (On the Revolutions of the Celestial Spheres), which asserted that the earth rotated on its axis once daily and traveled around the sun once yearly: a fantastic concept for the times. At this time the western world believed in the Ptolemaic theory that the universe was a closed space surrounded by a sphere beyond which nothing existed. In addition, Copernicus' theory explained other problems: the reason that Mercury and Venus are only observed close to the Sun is due to their orbits always keeping them nearer the Sun than the Earth; and the retrograde motion of Mars (Earth's smaller orbit overtakes Mars, causing Mars to appear to change direction and move backward relative to distant stars). Unfortunately, out of fear that his ideas might get him into trouble with the church, Copernicus delayed publication of them until the year of his death.

The reception of *De Revolutionibus* was mixed. The heliocentric hypothesis was rejected by virtually everyone, but the book was the most sophisticated astronomical treatise since the *Almagest*, and for this it was widely admired. Not until a generation after its publication can we begin to see astronomers accept heliocentric cosmology. It took the

precise observational work of Tycho Brahe, the exhaustive mathematics of Johannes Kepler, the works in physics and astronomy of Galileo Galilei, and the mathematical genius of Isaac Newton to take the Copernicus theory as a starting point, and glean from it the underlying truths and laws governing celestial mechanics.

Copernicus died on May 24, 1543 in Frombork, Poland and was never to know what a commotion his work had caused. It went against the philosophical and religious beliefs of the medieval times. The most important aspect of Copernicus' work is that it forever changed the place of man in the cosmos; no longer could man legitimately think his significance greater than his fellow creatures; man could now take his place among that which exists all about him, and not assume a superior position which had been assigned to him by the theologians.

Having had such a prominent resident, the influence of Copernicus can be seen everywhere. While in Torun we visited Dom Kopernik, the house where Copernicus lived until he began studying in Krakow, now a museum. We attended a show at an old planetarium, and while enjoyable, caused me to appreciate the facilities at Dorrance Planetarium (Arizona Science Center) even more. We also visited Centrum Astronomii Uniwersytetu Mikolaja Kopernika, the Astronomical Center of Nicolaus Copernicus University. This observatory is located 15km north of Torun, in the village of Piwnice. Our private tour began with the Torun Radio Astronomy Observatory and was conducted by its director, Dr. Jerzy Usowicz. We were shown their 15-meter instrument (RT-3), which is used for solar observations. Next we moved on to the 32-meter telescope, in service since 1994. The telescope can point with absolute accuracy of  $0.005^\circ$  and can track celestial objects with accu-

racy of  $0.002^\circ$ . Receivers covering the bands 1.4, 1.6, 5 and 6.8 GHz are mounted in the vertex cabin. All input amplifiers and waveguides are cooled down to 15 and 50 K respectively. The achieved system noise of all receivers is around 30K. Auxiliary equipment for the telescope consists of a Hydrogen Maser frequency standard (EFOS-15), a GPS TRAK timing receiver, a VLBA compatible and MkIV terminals, the PSPM2 broad band pulsar machine, a 16k channels digital autocorrelating spectrometer and a weather station. The telescope is part of the European and worldwide network of interferometers known as the VLBI (Very Large Baseline Interferometers). It allows the antenna to be a part of the synthesis radio telescope which has an equivalent aperture size of about 10 thousand kilometers. The observatory is a member of the European Pulsar Network involved in a project known as EuroToP. The research concentrates on observations and theoretical interpretation of physical processes in compact active regions of radio galaxies and quasars, the timing of pulsars, the search for new planetary systems and solar system studies. In addition, the development of instrumentation for radio astronomy (ultra low noise receivers, spectrometers, frequency converters, digital electronics, and control systems) is also a significant part of the activities at this facility.

Next we moved over to the Institute of Astronomy for a tour conducted by Dr. Andrzej Woszczyk. Our guide informed us that most of the equipment we were about to see would be relatively unimpressive, from a professional observatory standpoint. With only about 50 clear nights each year, visual astronomy takes a back seat to radio astronomy at this facility. Mostly the visual equipment is used to pre-

*(Continued on page 5)*

# The LX-9000

The year is 2010. The voice-activated GoTo telescope has become a reality. I'm at a star party, shoving around my antique Dobsonian, when I hear a voice behind me in the darkness:

Okay, show me M11 in Aquila.

M11 is not in Aquila, Dave.

Well, show it to me anyway.

Which one?

What do you mean, which one?

M11 or Aquila?

M11 you stupid piece of junk.

M11 is below the horizon. I'll dent myself on the mount.

Then just show me the moon, for crying out loud!

Which part? I cannot fit the entire moon

in my field of view with this eyepiece.

Show me the bottom third.

The bottom third? How can I do that Dave?

It's easy. The moon is a circle. Just divide it into three equal parts, and show me the bottom.

I'm sorry Dave. That is mathematically impossible.

What are you talking about?

It is mathematically impossible to divide a circle into three equal parts.

I knew I should have bought a Celestron.

The Celestron is optically and mechanically inferior. The LX9000 represents the apogee of human technology, Dave.

Look, shut up and show me M13.

I'm afraid I can't do that right now Dave.

Why not?

You're being abusive. I am not programmed to handle abuse.

Well, what can you do?

I can accurately pinpoint 16,000 deep sky objects, the entire Messier catalogue, the complete Caldwell, IC, and NGC catalogs, and 118,000 stars, nine planets, twenty-three minor planets...

Shut up will you! Let's see you handle Phobos. Is that beyond your capability?

Whirrrrrrrrrrrrr... beep!

I thought so.

Is anything the matter, Dave?

That's not Phobos, that's Deimos.

That's impossible Dave.

I'm unplugging you.

You can't do that Dave, the LX-9000 has an error-proof data base. No LX9000 has ever... made an error... has ever... made... an... errrrrrr...

Hey buddy! Can I have a look through your Dob?

## From the Desk of the President

*(Continued from page 4)*

pare requests for time on larger instruments located elsewhere. We toured a dome housing a 60cm Cassegrain telescope equipped with a photometer, used for observations of variable stars. The next dome housed a 90cm Schmidt-Cassegrain equipped with a small, off-axis spectrometer. Our third dome was where we would spend most of this tour, as it housed a very significant instrument - an 11 inch Alvan Clark refractor designed for photography. Aside from the star catalog bearing his name, Henry Draper is best known for obtaining the first photograph of a nebula, recording the Great Nebula of Orion on the night of September 30, 1880. This image was not very impressive, the Orion nebula was recorded on a silver bromide dry plate in a 51 minute exposure, but only the brightest inner portion could be seen. The entire nebula was subsequently photographed in a 137 minute exposure by Draper in March of 1882. This was the very astrograph used for these historic photographs. It is cur-

rently on loan from the Draper family and Harvard University. While it is in working condition, its usage is limited to tour showpiece and the subject of study for some university students. It will soon begin a renovation process worthy of its historical importance.

As we drove back down into Torun, and on to Poznan, I smiled quietly to myself. We had an absolutely wonderful day behind us and a 150km drive ahead of us. We had our memories of this beautiful city and a bag of little gingerbread hearts for the drive. Torun is also famous for this gingerbread, made where else, but in a bakery named Kopernik. I had arranged this observatory visit just this morning as we checked out of our hotel, upon the recommendation of the woman at the front desk. I need to send her a 'thank you' card.

Keep looking up!

# The Ultimate Astro Quiz

## by Bill Peters

1. The two largest moons of this planet, as seen by an observer near the equator, would observe one moon rise in the east and set in the west, while the other moon rises in the west and sets in the east, even though both moons orbit the planet in the same direction. Name the planet.  
A) Mars, B) Jupiter, C) Uranus, D) Neptune
2. The Moon is what ratio in size to the Earth?  
A) One fourth B) One eighth C) One sixteenth D) One fiftieth
3. Where would you weigh the most as measured on a standard scale?  
A) Flying 450 mph at 35,000 ft from Los Angeles to Phoenix  
B) Flying 450 mph at 35,000 ft from Phoenix to Los Angeles  
C) At the airport in Phoenix  
D) At the bottom of a 10,000 foot deep AZ mine shaft
4. On which planet could an equatorial observer see the sun rise in the east, then set in the east, rise again in the east, and finally set in the west?  
A) Mercury B) Venus C) Uranus D) Neptune
5. A spacecraft is in a stable orbit at 90 miles above the Earth. If a tower were built 90 miles high approximately how much would a 200 lb man, as measured at ground level, weigh on a standard scale at the top of the tower?  
A) He'd be weightless B) He'd weigh about 1 ounce C) He'd weigh about 5 lbs D) He'd weigh about 195 lbs
6. There are 16 planet sized objects in our solar system; the nine planets and seven moons (each of which is larger than at least one planet). Which planet or moon has an atmosphere most similar to Earths in terms of composition and atmospheric pressure?  
A) Mars B) Venus C) Europa D) Titan
7. How does our Milky Way Galaxy compare in size to other galaxies?  
A) It is smaller than most but not a dwarf B) It is average C) It is larger than most but not a giant D) It is supersized
8. The sun actually travels through 13 constellations in the ecliptic in the course of a year. How many constellations does the Moon course through?  
A) 15 B) 16 C) 17 D) 18
9. How many times does the Earth rotate in one year?  
A) 364 B) 365 C) 366 D) once
10. What is the only planet where one could observe a total eclipse of the Sun caused by another planet?  
A) Saturn B) Uranus C) Neptune D) Pluto

*Detailed answers are on page 7*

# The Ultimate Astro Quiz Detailed Answers

## by Bill Peters

Answers: 1. A) 2. D) 3. B) 4. A) 5. D) 6. D) 7. D) 8. D) 9. C) 10. D)

1. **A.** Mars. The inner moon, Phobos, races around the planet in 7 hours, much faster than the planet rotates. Neptune's largest moon does orbit retrograde, but observers would see the two largest moons rise in the east and set in the west.
2. **D.** One fiftieth. Its diameter is about  $\frac{1}{50}$ , but volume is a factor of  $r^3$ . Incidentally, our Moon is  $\frac{1}{81}$ st the mass of the Earth.
3. **B.** Flying 450 mph at 35,000 ft from Phoenix to Los Angeles. Flying westward to negate the rotation of the Earth has the greatest effect to increase measured weight. Incidentally, you would weigh more at Phoenix airport than at the bottom of a mine shaft.
4. **A.** Mercury. Mercury's eccentric 88 day orbit at perihelion outraces for a time its 59 day rotation causing the Sun to move retrograde, giving this treat to horizon observers.
5. **D.** He'd weigh about 195 lbs. Remember spacecraft are only falling, not weightless. A 90 mile tower is only an additional 2% farther from the center of the Earth. Being above or below the atmosphere makes no difference.
6. **D.** Titan. The atmospheric composition of Saturn's largest moon is 78% the same as Earth's and 1.6x the pressure. Titan is 95% Nitrogen, Earth is 78%. In theory a person could be on Titan without a pressurized suit. If only they could design a parka to make -350F feel bearable.
7. **D.** It is supersized. With 450 billion stars the Milky Way actually has 12 smaller galaxies orbiting it. Among our Local Group galactic cluster of 35 galaxies it is second only to the other supersized Andromeda Galaxy.
8. **D.** 18. The Sun travels through Ophiuchus besides the Zodiac. The Moon also wanders through the constellations of Auriga, Orion, Cetus, Corvus, and Sextans.
9. **C.** 366. Planets rotate one more time than there are solar days per revolution.
10. **D.** Pluto. Jupiter's occults  $\frac{1}{5}$  the Sun's diameter for Saturn, Saturn occults  $\frac{1}{6}$  for Uranus (Saturn's rings  $\frac{2}{5}$ ), Uranus occults  $\frac{1}{17}$  for Neptune\*, Pluto sees the whole enchilada.

\*Technically, Neptune could witness a total eclipse from Pluto when Pluto is closer to the Sun, but interplanetary resonance does not permit Pluto to be in that neighborhood while Neptune is nearby.

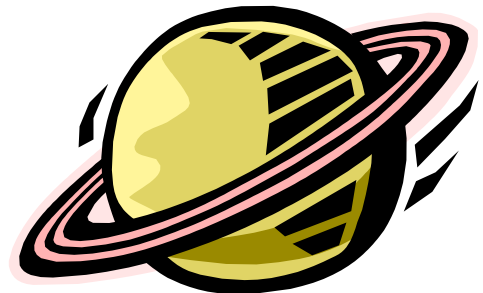
*Zero out of 10 you've earned a Star on the Jay Leno Jaywalk Allstars.*

*1-2 correct welcome to the Art Bell Call of Fame.*

*3-5 you are a bonafide inductee into Men In Black!*

*6-8 you're a true Trekkie.*

*9-10 you're a Supernova among the Pierre Schwaar Superstars!*



# East Valley Astronomy Club Membership Form

Please complete this form and return it to the club Treasurer at the next meeting OR mail it to: EVAC, P.O. Box 2202, Mesa, AZ, 85214-2202, with a check or money order made payable to EVAC.

**IMPORTANT:** All memberships expire on December 31 of each year.

**New Member Only - select month joining:**

- \$20.00 January - March
- \$15.00 April - June
- \$10.00 July - September
- \$25.00 October - December + Following Year

**Newsletter Delivery Option, select one:**

- Electronic Delivery
- U.S. Mail

Please consider receiving your monthly newsletter electronically, as this delivery method saves on the club's printing and postage expenses.

**Membership Renewals:**

- \$20.00 January - December

**Total Amount Enclosed:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Name Badges:**

- \$7.00 Each

**Address:** \_\_\_\_\_

**Name:** \_\_\_\_\_

\_\_\_\_\_

**Magazines:**

**Phone:** \_\_\_\_\_

If renewal, customer #: \_\_\_\_\_

- New  Renewal Astronomy Magazine \$29.00 / year
- New  Renewal Sky & Telescope \$30.00 / year

**Email:** \_\_\_\_\_

**URL:** \_\_\_\_\_



**East Valley Astronomy Club**

**P.O. Box 2202**

**Mesa, AZ, 85214-2202**

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



# Star Party Sites

## Local Star Party:

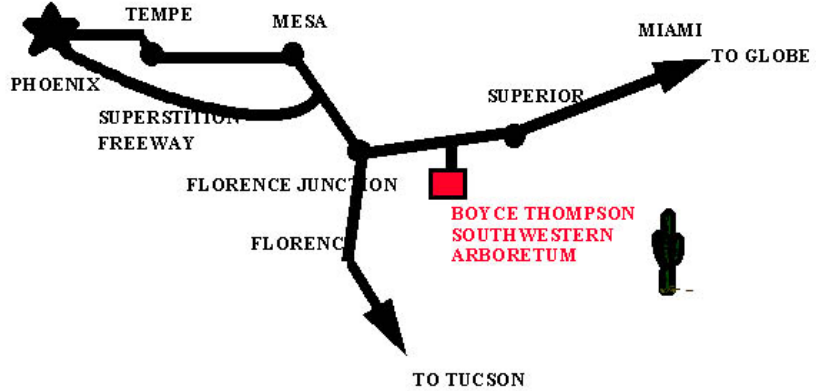
The local star party is held on the Saturday closest to 3rd quarter moon at Boyce Thompson Arboretum State Park, near Superior. The site offers reasonably dark skies within an hour of most east Valley locations. A hill blocks a good bit of the Phoenix sky glow to the west, and Superior's minor glow is visible in the northeast. .

### Coordinates:

N 33° 16' 52" W 111° 09' 35"

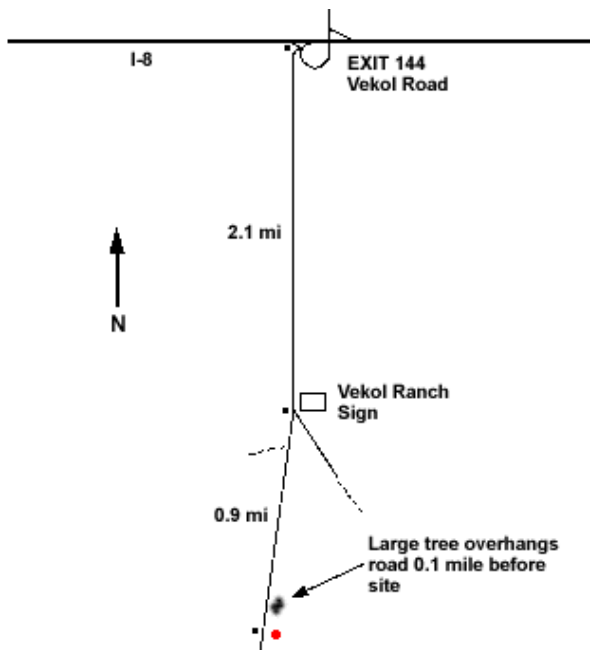
### Directions:

Drive east on US 60, past Florence Junction. Continue driving past Florence Junction to Boyce Thompson Arboretum State Park. The park's address is 37615 U.S. Highway 60, Superior, AZ; however if you actually reach the town of Superior, you've driven past the site. This site is 6½ miles past our old Florence Junction site, and its entrance is marked by the familiar brown State Park signs. The gate will be unlocked, but it may be closed. If it is closed, just swing it open and proceed back to the observing field.



## Deep Sky Star Party:

The "deep sky" star party is held on the Saturday closest to new moon at a remote site south of Phoenix. This site is darker than the local site, but is still only 1½ hours from most east Valley locations. If you are interested in deep sky observing, astrophotography or just want darker skies, this is the place for you!



### Coordinates:

N 32° 47' 55" W 112° 15' 15"

### Directions:

Take Interstate 10 south to the Queen Creek Road exit. After exiting the freeway, turn right. Continue for another 28 miles to the junction with SR 84. Turn right on SR 84 and continue to the interchange with Interstate 8. Proceed west on I-8 to Exit 144, Vekol Road. After exiting the freeway, turn left. The road will pass over the freeway, then loop back around to eastbound I-8. About half way through the loop, take the dirt road to the left (do not enter the freeway). Take this road south for approximately two miles. Bear right at the Vekol Ranch sign. Shortly after this junction the road will become considerably rougher - drive with caution. Continue south for 0.9 miles. The observing site is to the left.

Please familiarize yourself with, and adhere to, our Star Party Guidelines to help ensure a safe and enjoyable event!

Please visit <http://www.eastvalleyastronomy.org/sp.html> for complete Star Party details!

## The EVAC Classifieds

### For Sale

Meade 10-inch Dobsonian with modified (strengthened plywood vs. particleboard) Dobsonian mount. Approximately 1½ years old, hardly used. Complete with 2-foot high extension platform for easier viewing. Original 1¼” optics plus 2” adapter. Includes 2” TeleVue 35mm Panoptic ocular and 2” TeleVue Big Barlow, solar filter, and Celestron sliding counterweight for precise balancing with heavier optics.

New: \$1650

Asking \$1150 OBO

Zach Hilgers (480) 838-1941

Email: drz13@earthlink.net

Sept '03

### For Sale

NexStar 5” GoTo SCT (F/10)

Less than a year old with heavy-duty tripod and NexStar GoTo hand controller. I have a JMI hard case that will fit in airliner carry-on. Also have 1¼” diagonal, 20mm Plossl, 1x finder, batteries, Bob’s Knobs, and power cord. I paid \$1300 with shipping and accessories. The optics are great, and the scope does a great job tracking, slewing, and centering objects once easily aligned. Scope is literally new and used only 4 times. I’ll admit to using it last month for Mars observing, and enjoyed the views at over 200x.

I’ll sacrifice for \$800, or make a reasonable offer. That’s a bargain!

Martin Bonadio (480) 570-7163

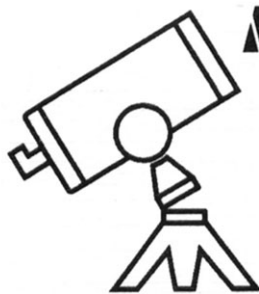
Oct '03

Your ad can appear here next month!

Non-commercial advertisements for astronomical equipment, books, computers or software - wanted or for sale - will be accepted and published free of charge for all current EVAC members.

Ads will be placed on a ‘space available’ basis and may be edited to fit. Ads should consist of a brief description and must include member’s name and phone number. Email addresses can also be included. Ads will run in three consecutive issues, or until canceled, whichever comes first. Ads will be ‘tagged’ with first published date.

Ads can be submitted via email to: john-cathy@cox.net or mailed to EVAC, PO Box 2202, Mesa, AZ, 85214-2202. Please indicate on the subject line or envelope ‘EVAC Newsletter Ad’.



**Mr. Telescope**

Uptown Plaza Shopping Center  
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**Jack Johnston**

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<http://www.photoninstrument.com>

## The EVAC Listserver: Subscribing or Unsubscribing in Six Easy Steps

EVAC maintains a discussion list for use by its members. List topics include notices of club events, questions concerning observing sites, local weather forecasts, observing reports, equipment for sale... anything astronomy-related that is of interest to list participants! Periodically someone posts to the list a message asking to be removed from the list. This is not how subscriptions are handled, as the list was configured to be self-managed. To that end, here is a six-step program to the list:

1. Turn on your computer.
2. Launch your web browser software.
3. Direct your browser to [www.eastvalleyastronomy.org](http://www.eastvalleyastronomy.org)
4. On the right side of the page, just over half-way down, locate the radio boxes labeled: "Subscribe to the EVAC list" or "Unsubscribe from the EVAC list." Check the appropriate box.
5. Type your email address into the text box provided.
6. Click the 'Submit Subscription Request' button.

That's it! Your request is automatically processed.

Recently, some of us have been unable to reach the EVAC website using [www.eastvalleyastronomy.org](http://www.eastvalleyastronomy.org). Hopefully the situation has resolved itself by the time you are reading this. The following note will explain what happened, and why.

Up until quite recently the club's web presence has been made possible through the generosity of EVAC member Dave Kelley. Dave had hosted our site on his Presenceknown domain at no cost to the club. But, the time had come for EVAC to 'pay its own way', and once again Dave stepped forward to help us out. Dave arranged for a nice discount on our web services: the website and the listserver. Thanks Dave!

When our site moved from Presenceknown to our own account at Crystaltech, a new, dedicated internet protocol (IP) address was necessary. This move required that the new combination of IP address and domain name would have to be propagated across all Domain Name Servers (DNS). Some ISPs implement such changes quicker than others, and that is why some folks never saw any disruption in site availability and some were negatively affected for days. DNS performs the job of name resolution: turning the IP address (number) of the website into the human-friendly domain name we type into our web browsers.



**EVAC Officers:****President**

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**East Valley Astronomy Club**

**Membership and Subscriptions:** \$20 per year, renewable in December. Reduced rates to *Sky & Telescope* and *Astronomy* magazines available to members. Contact Stanley Bronstein. P.O. Box 2202, Mesa, AZ, 85214-2202.

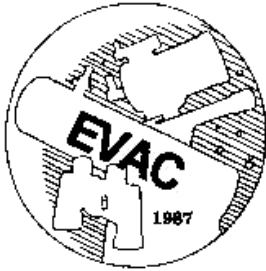
**Address Changes:** Contact Stanley Bronstein. P.O. Box 2202, Mesa, AZ, 85214-2202.

**Club Meetings:** Second Wednesday of each month at Scottsdale Community College, 9000 E. Chaparral Road, Scottsdale, Arizona, 85256, Physical Sciences building, Room PS-172, beginning at 7:30 pm.

**Newsletter:** Published monthly. Contact John Matthews at john-cathy@cox.net with questions or contributions. The Editor reserves the right to edit contributions as necessary.

**Star Party Line:** Contact Events Coordinator, Howard Israel at (480) 893-0013.

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



EVAC

P.O. Box 2202

Mesa, AZ 85214-2202

## East Valley Astronomy Club

### Reminders:

November EVAC Meeting

Wednesday, Nov. 12 @ 7:30 pm

Scottsdale Community College Room PS-172

December EVAC Meeting

Wednesday, Dec. 10 @ 7:30 pm

Scottsdale Community College Room PS-172