



# THE OBSERVER

## East Valley Astronomy Club



Rosette Nebula Bernard Miller

### UPCOMING EVENTS:

- Deep Sky Star Party - February 1*
  - Public Star Party - February 14*
  - Evac Monthly Meeting - February 21*
  - Local Star Party - February 22*
- Check out all of the upcoming club events in the Calendars on page 8*

### EVAC This Month by Claude Haynes

This month the East Valley Astronomy Club is participating in the Arizona SciTech Festival. We are partnering with the Town of Gilbert, the Riparian Institute and over 350 other organizations. Our public Star Party on February 14 is our key event, along with our regular weekend sessions at the observatory. I would encourage you to go to their website, <http://azscitechfest.org/>, and check out some of the events; especially if you have children or grandchildren. There is a lot to see and do, even for adults. Many of our members participated in STEM before it had a fancy name. The disciplines of Science, Technology, Engineering and Math held sway

as we explored the universe. Many of you have even made these fields your profession, and now we have an opportunity to encourage the next generation.

As an example, I want to tell you about a most minimal school star party. It was our first time at the science night for this elementary school in a poor neighborhood. Because of a flurry of bad colds plus pretty cloudy skies, we only had three observers. Dave Shiel, Tyler Bryan and myself. The clouds kept us from viewing anything but Jupiter. The teachers organized everyone into a long line and sent small batches; first to my scope for

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# EVAC This Month

*Continued from page 1*

a wide view of Jupiter and the Galilean moons, and then to Dave for a higher power image of just the planet (it was so cloudy Tyler couldn't even align). That wasn't a problem for Dave and I using our Dobs. It would have brought a smile of glee to John Dobson's face because this was essential

## If It's Clear...

*by Fulton Wright, Jr.*

*Prescott Astronomy Club*

### February 2014

Celestial events (from Sky & Telescope magazine, Astronomy magazine, and anywhere else I can find information) customized for Prescott, Arizona. Remember, the Moon is 1/2 degree or 30 arc-minutes in diameter. All times are Mountain Standard Time.

If you are up before sunrise, look for Venus low in the South-east. It goes from 13% illuminated, 51 arc-seconds in size on the 1st to 36% illuminated, 33 arc-seconds in size on the 28th. As they say, "You can't miss it." It is magnitude minus 4 1/2.

On Saturday, February 1, about 6:30 PM (half an hour after sunset), you can see Mercury. Look directly below the thin crescent Moon in the west-southwest for the magnitude -0.3 planet. It sinks lower in the sky as the week progresses.

On Monday, February 3, from 9:37 PM to 12:33 AM (Tuesday) you can catch Io and its shadow playing around the Great Red Spot on Jupiter.

On Wednesday, February 5, the Moon is at first quarter phase and sets at 12:43 AM (Thursday).

On the night of Wednesday, February 5, a number of interesting events happen with Jupiter's moons. Here is the schedule:

- 03:06 PM Jupiter rises (still daylight).
- 06:04 PM Sunset, Io and its shadow are on the planet.
- 06:18 PM Io moves from in front of the planet.
- 07:02 PM Io's shadow leaves the planet.
- 07:09 PM Callisto moves in front of the planet.
- 10:33 PM Callisto moves from in front of the planet.
- 01:52 AM Europa moves in front of the planet.
- 02:01 AM Callisto's (!) shadow falls on the planet.
- 03:22 AM Europa's shadow falls on the planet (2 shadows).
- 04:32 AM Europa moves from in front of the planet.
- 05:26 AM Jupiter sets.

sidewalk observing. It doesn't take much to kindle a flame that will last a lifetime, and I hope that you can also join us on March 8 as we pay tribute to John with a nation-wide night of observing.

On Saturday, February 8, at 7:04 PM, Ganymede moves from in front of Jupiter. From 7:07 PM to 10:18 PM Ganymede's shadow is on the planet.

On the night of Saturday, February 8, at 12:05 AM (Sunday), the Moon occults a 5th magnitude star with its southern limb. It reappears at 12:31 AM on the bright limb of the Moon. This is worth observing because it might be a very close double star which will disappear in 2 steps.

On Friday, February 14 (happy Valentine's Day), at 6:18 PM (6 minutes after sunset), the full Moon rises, spoiling any chance of hunting for faint fuzzies for the night. As was true last month, the north pole of the Moon is tilted toward us by libration, so a few days around this date is a good time to look at that area.

On the night of Saturday, February 15, you have a second chance to see Ganymede and its shadow on Jupiter. The satellite is in front from 7:26 PM to 10:34 PM. The shadow is on from 11:07 PM to 2:19 AM.

On Monday, February 17, at 6:44 PM, Algol has a minimum (magnitude 3.4). Tonight will be a good time to watch it grow to magnitude 2.1 as the night progresses.

On Wednesday, February 19, from 7:38 PM to 10:52 PM, Io or its shadow will be on Jupiter.

The night of Friday, February 21, at 1:00 AM (Saturday), the third quarter Moon rises.

On Friday, February 28, it is new Moon, and you have all night to hunt for faint fuzzies.

# EVAC Meeting Minutes

by Marty Pieczonka

Claude Haynes called the meeting to order at 07:30 PM on January 17. After visitor introductions, Dave Coshow gave a short report on the observatory. Visitor attendance was good but we are still in need of volunteer operators. If anyone can help out, contact Dave Coshow or Gordon Rosner.

Events Coordinator Lynn Young said that we have a very busy schedule for February:

- . February 4- Basis Mesa Charter School
- . February 7 - Salt River Tribal Library
- . February 13 - Navarrete Elementary
- . February 14 - Riparian Public Star Party and Skywatch
- . February 15 - City of Chandler
- . February 19 - Arcadia Learning Center
- . February 20 - Serrine Elementary
- . February 21 - General Meeting at SE Library
- . February 25 - Red Mountain Elementary
- . February 27 - Sousa Elementary School

Volunteers are always welcome to help out.

David Shiel was confirmed as Treasurer for 2014 and Ray Heinle (outgoing treasure) gave his final report on the club's finances for 2013:

1/1/2013 through 12/31/2013	
<b>INFLOWS</b>	
AASP-Income	708
Dues	3132
GRCO Income	973
Miscellaneous	976
<b>TOTAL INFLOWS</b>	<b>5789</b>
<b>OUTFLOWS</b>	
AASP (BLM Permit)	300
AASP-Expenses	659
Donation To Lowell Observatory	1000
GRCO Expenses	1540
Insurance	684
Miscellaneous	1789
Refreshments	553
Speakers	799
Internet (GoDaddy.com)	349
<b>TOTAL OUTFLOWS</b>	<b>7673</b>

## EVAC Cash Position

### Summary

- Checking account balance 12/31/2012 \$12,145.98
- Checking account balance 12/31/2013 \$ 9,711.73
- GRCO Income 2013 \$ 972.50
- GRCO Expenses 2013 \$ 1,539.70
- Israel Memorial Fund
  - Savings account balance 12/31/2013 \$10,284.17

### Membership

- As of 1/14/2014.
  - 31 members have paid their dues.
  - 44 members total (including lifetime, etc.)
  - 154 if we include those paying in 2013.
  - 40 new members since 1/1/2013.

The Messier Marathon is scheduled for March 29th at the Hovatter Airstrip. Tom Polakis gave an interesting presentation on "What I Did On My Christmas Vacation". He presented some very nice photos of the sun, moon, and Jupiter. David Douglas followed with a presentation on the Herschel Objects. The break was followed by David William's presentation on The Satellites of the Outer Planets.

**FIRST QUARTER MOON ON FEBRUARY 6 AT 12:22**

**\*FULL MOON ON FEBRUARY 14 AT 16:53**

**LAST QUARTER MOON ON FEBRUARY 22 AT 10:16**

**NEW MOON ON MARCH 1 AT 01:00**

***Looking for that perfect weekend activity?***

***Why not resolve to getting involved?***

***Contact Dave Coshow to join the staff at GRCO***

***Email: [grco@evaconline.org](mailto:grco@evaconline.org)***

***Help Wanted EVAC Officers: Board Member***

***Email: Claude Haynes - [president@evaconline.org](mailto:president@evaconline.org)***



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# Upcoming Meetings

February 21

March 21

April 18

May 16

June 20

July 18

August 15

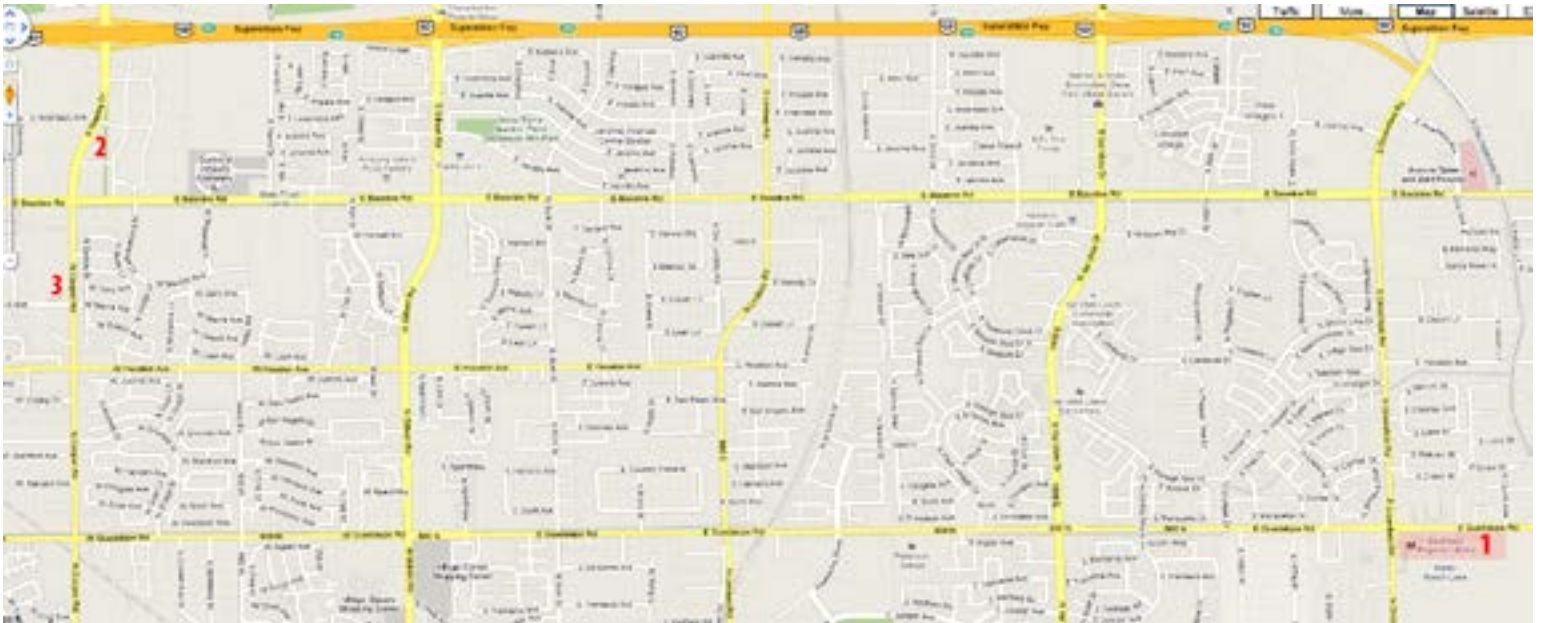
September 19

The monthly general meeting is your chance to find out what other club members are up to, learn about upcoming club events and listen to presentations by professional and well-known amateur astronomers.

Our meetings are held on the third Friday of each month at the Southeast Regional Library in Gilbert. The library is located at 775 N. Greenfield Road; on the southeast corner of Greenfield and Guadalupe Roads. Meetings begin at 7:30 pm.

All are welcome to attend the pre-meeting dinner at 5:30 pm. We meet at Old Country Buffet, located at 1855 S. Stapley Drive in Mesa. The restaurant is in the plaza on the northeast corner of Stapley and Baseline Roads, just south of US60.

***Visitors are always welcome!***



**2**

**Old Country Buffet**  
1855 S. Stapley Drive  
Mesa, Az. 85204

**1**

**Southeast Regional Library**  
775 N. Greenfield Road  
Gilbert, Az. 85234



## FEBRUARY 2014

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	<b>4</b>	5	6	<b>7</b>	8
9	10	11	12	<b>13</b>	<b>14</b>	<b>15</b>
16	17	18	<b>19</b>	<b>20</b>	<b>21</b>	22
23	24	<b>25</b>	26	<b>27</b>	28	

**February 4** - Basis Mesa Charter School

**February 7** - Salt River Tribal Library

**February 13** - Navarrete Elementary

**February 14** - Riparian Public Star Party and Skywatch

**February 15** - City of Chandler

**February 19** - Arcadia Learning Center

**February 20** - Serrine Elementary

**February 21** - General Meeting at SE Library

**February 25** - Red Mountain Elementary

**February 27** - Sousa Elementary School

## MARCH 2014

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	<b>6</b>	<b>7</b>	8
9	10	11	12	<b>13</b>	<b>14</b>	15
16	17	18	19	20	<b>21</b>	22
23	24	<b>25</b>	26	<b>27</b>	28	

**March 6** - Edu-Prize School

**March 7** - Circle Cross Ranch

**March 13** - Pomeroy Elementary

**March 14** - Riparian Public Star Party and Skywatch

**March 21** - General Meeting at SE Library

**March 26** - C.O. Greenfield School

**March 27** - Settler's Point Elementary



# East Valley Astronomy Club -- 2013 Membership Form

Please complete this form and return it to the club Treasurer at the next meeting or mail it to EVAC, PO Box 2202, Mesa, Az, 85214-2202. Please include a check or money order made payable to EVAC for the appropriate amount.

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

Select one of the following:

- New Member
  Renewal
  Change of Address

**New Member Dues** (dues are prorated, select according to the month you are joining the club):

- |   |   |
|---|---|
| <input type="checkbox"/> <b>\$30.00 Individual</b> January through March  | <input type="checkbox"/> <b>\$22.50 Individual</b> April through June       |
| <input type="checkbox"/> <b>\$35.00 Family</b> January through March      | <input type="checkbox"/> <b>\$26.25 Family</b> April through June           |
| <input type="checkbox"/> <b>\$15.00 Individual</b> July through September | <input type="checkbox"/> <b>\$37.50 Individual</b> October through December |
| <input type="checkbox"/> <b>\$17.50 Family</b> July through September     | <input type="checkbox"/> <b>\$43.75 Family</b> October through December     |
- Includes dues for the following year*

**Renewal** (current members only):

- \$30.00 Individual**
 **\$35.00 Family**

**Name Badges:**

- \$10.00** Each (including postage) Quantity: \_\_\_\_\_

Name to imprint: \_\_\_\_\_

**Total amount enclosed:**

*Please make check or money order payable to EVAC*

- Payment was remitted separately using PayPal
  Payment was remitted separately using my financial institution's online bill payment feature

Name:

Phone:

Address:

Email:

City, State, Zip:

- Publish email address on website

URL:

**How would you like to receive your monthly newsletter? (choose one option):**

- Electronic delivery (PDF) *Included with membership*
 US Mail **Please add \$10 to the total payment**

**Areas of Interest (check all that apply):**

- |  |   |
|--|---|
| <input type="checkbox"/> General Observing   | <input type="checkbox"/> Cosmology        |
| <input type="checkbox"/> Lunar Observing     | <input type="checkbox"/> Telescope Making |
| <input type="checkbox"/> Planetary Observing | <input type="checkbox"/> Astrophotography |
| <input type="checkbox"/> Deep Sky Observing  | <input type="checkbox"/> Other            |

Please describe your astronomy equipment:

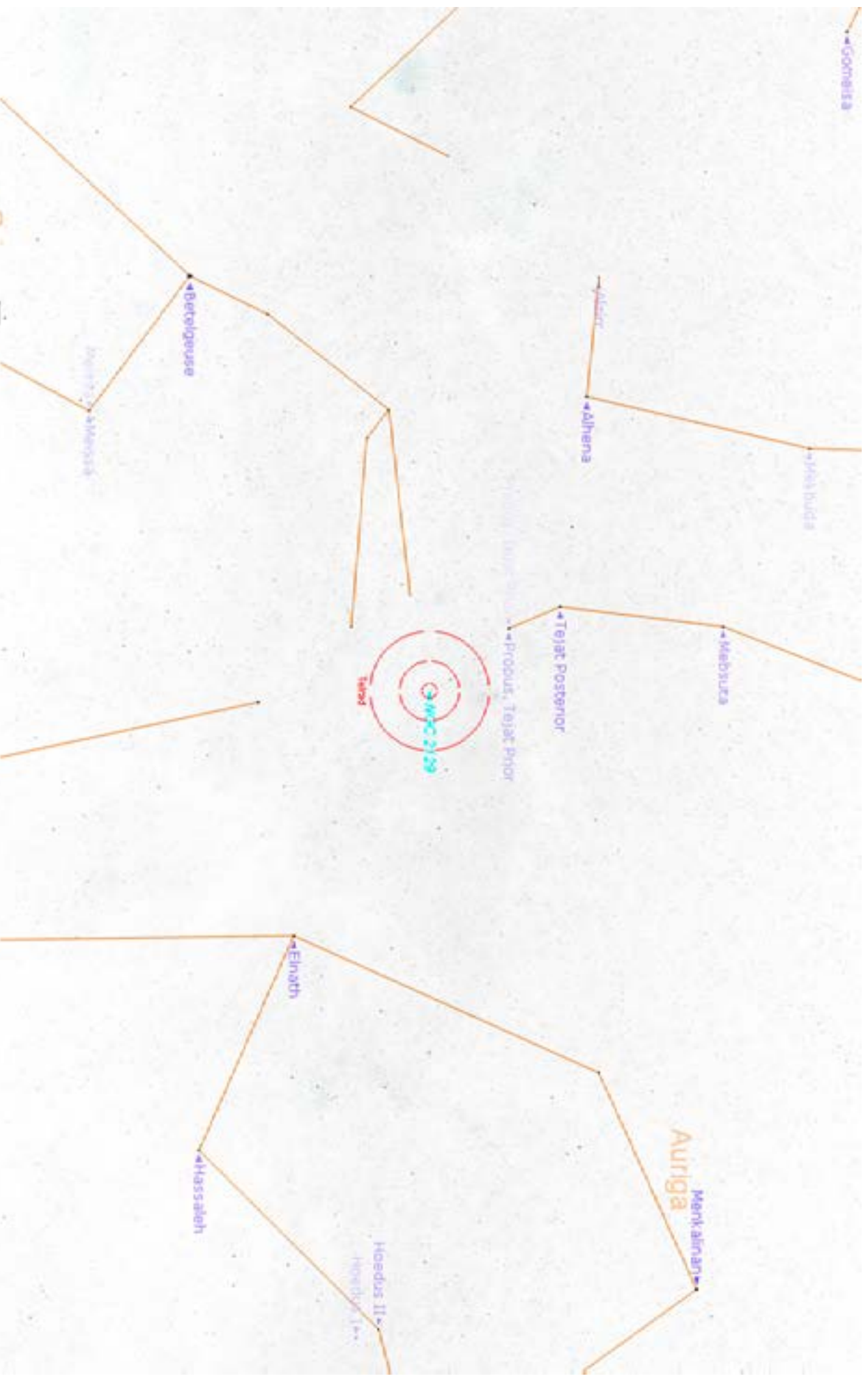
Would you be interested in attending a beginner's workshop?  Yes  No

How did you discover East Valley Astronomy Club?

**PO Box 2202**  
**Mesa, AZ 85214-2202**  
[www.evaconline.org](http://www.evaconline.org)

All members are required to have a liability release form (waiver) on file. Please complete one and forward to the Treasurer with your membership application or renewal.

# THE DEEP SKY OBJECT OF THE MONTH



NGC 2129 (Collinder 77)

Open Cluster in Gemini

RA 06h 01m 07.0s

DEC +23° 19' 20"

Magnitude: 7.0

Apparent Size: 5.0'

*The Observer is the official publication of the East Valley Astronomy Club. It is published monthly and made available electronically as an Adobe PDF document the first week of the month. Printed copies are available at the monthly meeting. Mailed copies are available to members for a slight surcharge to offset printing and mailing expenses.*

*Please send your contributions, tips, suggestions and comments to the Editor at: [news@evaonline.org](mailto:news@evaonline.org) Contributions may be edited. The views and opinions expressed in this newsletter do not necessarily represent those of the East Valley Astronomy Club, the publisher or editor.*

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

East Valley Astronomy Club  
PO Box 2202  
Mesa, Az. 85214-2202

*President: Claude Haynes*

*Vice President: Lesley Watkins*

*Secretary: Marty Pieczonka*

*Treasurer: David Shiel*

*Board of Directors: Ron Barstad, David Douglass, Gordon Rosner & John Goerger*

*Events Coordinator: Lynn Young*

*Property Director: David Hatch*

*Refreshments: Jan Barstad*

*Observing Program Coordinator: Marty Pieczonka*

*AL Representative: TBD*

*Membership: Les Wagner*

*Newsletter Editor: Marty Pieczonka*

*Webmaster: Marty Pieczonka*

*SkyWatch Coordinator: Claude Haynes*

*Observatory Manager: Dave Coshov*