



Saguaro Astronomy Club, Phoenix, AZ

Volume 48, Issue 6
June 2024

The President's Corner

A Tale of Two Star Parties....

SAC was involved in two outreach star parties in the past two months and, boy, were they a study in contrast. We held the spring Thunderbird Park star party in mid-May and then the Grand Canyon North Rim star party in early June. I'll let you guess which one was a great success and which was a complete disaster.

The T-bird party was set up as always from the club's perspective with the City of Glendale. We had about eight members show up with 'scopes and binos ready to go. Then the strangest thing happened (or didn't happen) - not one member of the public showed up. This had never happened before. We waited, speculated and kicked around ideas as to what might have gone wrong. The most likely reason in my mind was a breakdown in communication to the public. Oh well, things happen, lessons learned, etc.

So that means the GCNR star party was a great success. We had a great turn out of volunteers, the weather was rather mild, only one night was even "mostly cloudy" (while I was there anyway) and the visitor attendance was very enthusiastic. I averaged over 90 visitors at my scope for each of my five nights there. More details in this or next month's newsletter.

Finally, my hats off to all the observing volunteers, park staff and visitors who turned out for such a great job. I especially want to thank Steve Rottas of SAC who has been running point on this event for the past three years. Steve stepped up to follow in the footsteps of Steve Dodder who started and organized the NRSP for decades. Thank you both!

Happy Star Hunting,

Michael Poppre,
SAC President



Photo by: Susan Trask



SAC on Facebook:
SAC has a Facebook moderator!
Mike Willmoth

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Quick Calendar

The June 21st SAC **general meeting** will be held at 7:00 pm at the clubhouse at 3030 E Mission Ln, Phoenix, AZ.

* SAC member reports on the North Rim Star Party

* The June Speaker: Jessica Berkheimer, Topic: "Citizen Science"

Header image © 2000-2013 Stellarium Developers

* Scorpius setting in the southwest.



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Editor Notes



Hi Folks,

Such-A-Deal has six old ads.

SAC Bits & Pisces has minutes of the May SAC general meeting.

SAC Observing has sky info for the month.

SAC Outreach has a group photo of the 2024 Grand Canyon North Rim Public Star Party. There will be full reports and images in the July issue. There also will be reports given at the June 21st SAC meeting, so be sure to attend to see those.

SAC Sky has info on the stars and planet locations this month for you all.

Enjoy.

Rick Rotramel, Editor >



< Left: SAC Webmaster, Terry Shay



Right: SAC ATM Leader, Paul Lind >

Photos: Susan Trask

Observing Alert:

“Moon occults Saturn in daytime on the morning of June 27th. Visible (with telescope) from the greater Phoenix area. I show Contact 1 on this at about 9:00 am. The Moon should be about 242 deg. Az and 25 deg. Alt, in the SW-W.”

Reported by: Michael Poppre

Schedule of Events 2024

SAC General Meetings

Jan. 26	Feb. 23	Mar. 22	April 26
May 18 * Saturday	June 21	July 19	Aug. 16
Sept. 13	Oct. 12 * Saturday	Nov 15	Dec. 14 Holiday Party

* Saturday dates are at Thunderbird Park Public Star Parties, Glendale, AZ

**Meetings held at the Heritage Heights Clubhouse
3030 E Mission Ln, Phoenix, AZ
(SE of State Route 51 and 32nd Street)
Meeting time: 7:00 PM**

View video recordings of the *past* Zoom meetings here:
<https://www.youtube.com/channel/UCEKTF10gwebABZ XwKbhe9oA>

Thunderbird Park Public Star Party SAC General Meeting

Saturday, October 12th, Sunset, Glendale, AZ

2024 SAC Officers

President: Michael Poppre >



< Vice President: Steve Rottas

Secretary: Sandy Milward >



< Treasurer and Properties Director: Tom Curry

Photos: Susan Trask



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Such-A-Deal

Ads placed here are free to SAC members and friends. SAC is not responsible for the quality of the advertised items. If you wish to place an ad here to sell your telescope or astronomy related items, email the editor:

rrotramel601@gmail.com

Canon EF 200mm f/2.8L II USM Lens

For Sale - Canon EF 200mm f/2.8L II USM Lens
It's in good condition and includes the following.

- Canon Lens - \$600 from B&H Photo
- B&W UV Filter - \$75
- Canon Tripod Mount Ring - \$150
- Lens Caps and Lens Hood
- Carrying Bag

Asking \$300 OBO.

Cash or bank cashier's check.

Contact me at the email below.

jimwaters@cox.net



Tele Vue 31mm Type 5 Nagler Eyepiece

For Sale - Tele Vue 31mm Type 5 Nagler Eyepiece
The optical coatings are in good condition and I can't find anything wrong with the eyepiece including the rubber eye guard. Eyepiece end-caps are included.

My cost new was \$600. **Asking \$300 OBO.**
Cash or bank cashier's check.

Contact me at the email below.

jimwaters@cox.net





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Such-A-Deal

Ads placed here are free to SAC members and friends. SAC is not responsible for the quality of the advertised items. If you wish to place an ad here to sell your telescope or astronomy related items, contact Rick Rotramel at: r.rotramel@cox.net

Telescope Equipment For Sale

* Ads on this page were submitted through the SAC Website

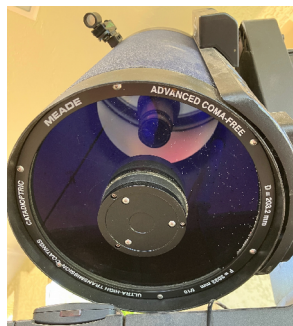
Meade 8" LS8-8ACF

- ACF (Advance Coma Free) optics with UHTC coatings (Ultra High Transmission Coatings)
- LightSwitch Technology: Once the scope is turned on, it permits the scope to automatically level itself and find north (Meade calls this Level/North Technology), then with the use of its internal ECLIPSE CCD camera and on board GPS, align itself to the night sky without any user intervention. The steps are simple, flip the switch. Once the scope is turned on, you're greeted by the "Astronomer Inside". The "Astronomer Inside" gives you a brief introduction to the LS 8, and informs you of each and every step of the way during the alignment process.
- Eyepieces: Meade 8.8mm and 24mm UWA Series 5000, 82° apparent field of view
- TeleVue Qwik Point Finderscope
- Tripod
- 602 736-9221
- I'm near 7 th St. and Thunderbird. Buyers pick up.
- **\$ Best Offer \$**

Email Contact - Click Link Below:

[mailto:lorraine.drobny@cox.net?subject=Meade 8" Telesco pe For Sale in SAC Newsletter](mailto:lorraine.drobny@cox.net?subject=Meade 8)

Lorraine Drobny
602 736-9221



Celestron C11 Telescope On Celestron CGE Mount

- Celestron C11 Optical Assembly
- Celestron CGE Mount
- Celestron WiFi Unit
- Celestron StarSense Unit
- I'm near 7 th St and Thunderbird. Buyers pick up.
- **\$ Best Offer \$**
- 602 736-9221
- Email Contact - Click Link Below:

[mailto:lorraine.drobny@cox.net?subject=Meade 8" Telesco pe For Sale in SAC Newsletter](mailto:lorraine.drobny@cox.net?subject=Meade 8)



Orion 80mm ED Refractor with case

- Orion 80mm, f/7.5, F.L. 600mm Telescope
- With hard case
- **\$ Best Offer \$**

Lorraine Drobny
602 736-9221
[Lorraine.drobny@cox.net](mailto:lorraine.drobny@cox.net)



Celestron Focus Motor, Meade Imager, Eyepieces & Misc. Attachments

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- Several Eyepieces and Misc. attachments
- Meade Flip Mirror System, Model 644
- Meade Deep Sky Imager, Mono CCD Camera

\$ Best Offer \$

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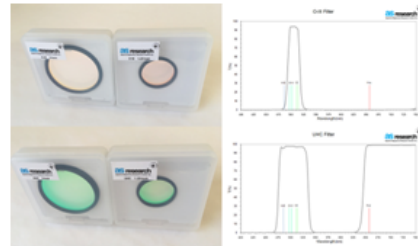
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Overgaard, Arizona

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in
Arizona



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The HyperStar-equipped ISERV telescope is now installed on the ISS!

The HyperStar-equipped Celestron 9.25" telescope (and its backup) that is now installed on the ISS. The scope also features a Starizona MicroTouch Autofocuser. With the Starizona gang: Steve, Scott, Dean, and Donna. (Steve has since had to move to NY because he was dressing too much like Scott.)

Call Us: (520) 292-5010
<http://starizona.com>
info@starizona.com

Bits & Pisces

Minutes of the May 18 SAC General Meeting/Thunderbird Park Public Star Party

Minutes & Photos By Sandy Milward, SAC Secretary

SAC Meeting Minutes May 18, 2024

- SAC president Michael Poppre called the meeting to order with 9 club members attending.
- We met at Thunderbird Conservation Park in Glendale, AZ for a public star party. As the sun set it cooled down and an evening breeze kept us comfortable. A few guests arrived and a good time was had by all.



Tom Curry



Gail & Paul Lind



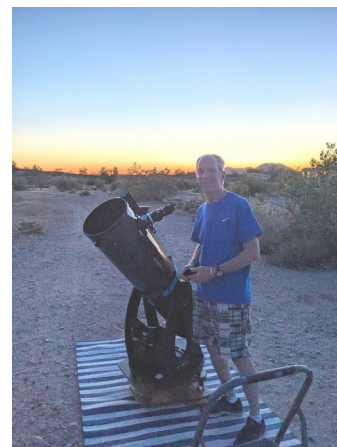
Sandy & Ken Milward



Glenn Nishimoto



Rheta Peiser



Michael Poppre



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SAC Observing

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2024

ASTRONOMICAL CALENDAR

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www.universalworkshop.com



1

The left column gives Julian Dates (number of days from 4713 B.C. Jan. 1 noon), useful for finding time spans between events by subtraction. The first 3 digits of the Julian date (245) are omitted, to save space.

Hours and minutes, where given, are in Universal Time. (Sometimes the hour appears as "24" or the minute as "60," because the instant was shortly before the end of the day or hour.)

Occasions such as "Moon 1.25° NNE of Venus" are **appulses**: closest apparent approaches. They are slightly different from conjunctions, when one passes north of the other as measured in right ascension or in ecliptic longitude. A quasi-conjunction is an appulse without a conjunction, and typically happens when a planet is near its stationary moment.

Occasions when three bodies are within a circle of small size are "**trios.**" Like appulses, they are most interesting when the bodies are bright and are not at small elongation from the Sun.



For **meteor showers**: ZHR (zenithal hourly rate) is an estimate of the number to be seen under ideal conditions at the peak time if the radiant were overhead. Actual rates may be very different. Peak times (predicted from where the center of the stream seems to cross nearest to Earth's orbit) are uncertain; best to start watching the night before. Meteor are usually most abundant in the morning hours.

Tell me of errors you notice. It's hard to check the accuracy of every detail, but errors are more easily corrected here than in the former printed *Astronomical Calendars!*
universalworkshop.com/contact
This calendar may be subject to improvement. Come back to it!

Explanation of terms can be found in our glossary book **Albedo to Zodiac**. There is more about each kind of event in **The Astronomical Companion**. And events in this list can be traced in the large **Zodiac Wavy Chart** for the year.

For all these, see universalworkshop.com

0462.646	Jun	1	SAT	4	Moon 0.33° ENE of Neptune; 71° from Sun in morning sky; magnitudes -9.4 and 7.9; occultation
0463.631	Jun	2	SUN	3	Moon at ascending node; longitude 14.1°
0463.809	Jun	2	SUN	7:25	Moon at perigee; distance 57.71 Earth-radii
0464.417	Jun	2	SUN	22	Moon 2.16° NNW of Mars; 48° from Sun in morning sky; magnitudes -8.1 and 1.0

Continued next page...



SAC Observing

0465.229	Jun	3	Mon	18	Mercury 5.0° SE of the Pleiades; 13° and 14° from Sun in morning sky
0465.333	Jun	3	Mon	20	Mercury, Jupiter, and the Pleiades within circle of diameter 5.09°; about 13° from the Sun in the morning sky; magnitudes -1, -2, 3
0465.958	Jun	4	Tue	11	Mercury 0.12° SE of Jupiter; 12° from Sun in morning sky; magnitudes -1.1 and -2.0
0466.125	Jun	4	Tue	15	Venus at superior conjunction with the Sun; 1.735 AU from Earth; latitude -0.14°
0466.458	Jun	4	Tue	23	Moon 3.6° NNW of Uranus; 21° and 20° from Sun in morning sky; magnitudes -6.1 and 5.8
0466.858	Jun	5	Wed	9	Moon, Jupiter, and the Pleiades within circle of diameter 5.21°; about 15° from the Sun in the morning sky; magnitudes -6, -2, 3
0466.896	Jun	5	Wed	10	Moon 0.41° SE of Pleiades; 15° from Sun in morning sky
0466.896	Jun	5	Wed	10	Venus brightest; magnitude -3.91°
0467.042	Jun	5	Wed	13	Moon 4.5° N of Jupiter; 13° from Sun in morning sky; magnitudes -5.3 and -2.0
0467.100	Jun	5	Wed	14	Moon, Mercury, and Jupiter within circle of diameter 4.77°; about 12° from the Sun in the morning sky; magnitudes -5, -1, -2
0467.208	Jun	5	Wed	17	Moon 4.5° N of Mercury; 11° from Sun in morning sky; magnitudes -5.1 and -1.3
0467.627	Jun	6	Thu	3	Venus at ascending node through the ecliptic plane
0468.027	Jun	6	Thu	12:39	New Moon ; beginning of lunation 1255
0468.083	Jun	6	Thu	14	Moon 4.5° N of Venus; 5° and 1° from Sun in evening sky; magnitudes -4.4 and -3.9
0468.5	Jun	7	Fri	0	Daytime Arietid meteors; ZHR 30; near New Moon
0468.720	Jun	7	Fri	5	Winter solstice for Mars northern hemisphere
0469.208	Jun	7	Fri	17	Moon 4.1° N of M35 cluster; 16° and 15° from Sun in evening sky; magnitudes -5.5 and 5.3
0469.563	Jun	8	SAT	2	Mercury 5.3° NNW of Aldebaran; 8° and 9° from Sun in morning sky; magnitudes -1.5 and 0.9
0470.490	Jun	8	SAT	24	Mercury at ascending node through the ecliptic plane
0470.604	Jun	9	SUN	3	Moon 5.1° S of Castor; 32° and 33° from Sun in evening sky; magnitudes -6.9 and 1.5
0470.833	Jun	9	SUN	8	Moon 1.74° S of Pollux ; 35° from Sun in evening sky; magnitudes -7.1 and 1.2
0470.938	Jun	9	SUN	11	Saturn at west quadrature, 90° from the Sun
0471.958	Jun	10	Mon	11	Moon 3.3° NNE of Beehive Cluster; 48° from Sun in evening sky; magnitudes -8.0 and 3.7
0472.745	Jun	11	Tue	6	Mars and Neptune at heliocentric conjunction; longitude 357.9°

Continued next page...



SAC Observing

0473.792	Jun	12	Wed	7	Moon 2.99° NNE of Regulus; 69° and 68° from Sun in evening sky; magnitudes -9.1 and 1.4
0474.057	Jun	12	Wed	13	The equation of time is 0
0475.161	Jun	13	Thu	16	Mercury at perihelion; 0.3075 AU from the Sun
0475.688	Jun	14	Fri	4:31	Earliest sunrise, at latitude 40° north
0475.721	Jun	14	Fri	5:19	First quarter Moon
0476.070	Jun	14	Fri	14	Moon at apogee; distance 63.35 Earth-radii
0476.181	Jun	14	Fri	16	Mercury at superior conjunction with the Sun; 1.323 AU from Earth; latitude 4.08°
0477.347	Jun	15	SAT	20	Moon at descending node; longitude 192.9°
0478.313	Jun	16	SUN	20	Moon 1.06° NNE of Spica ; 118° from Sun in evening sky; magnitudes -10.9 and 1.0; occultation
0478.958	Jun	17	Mon	11	Mercury 0.88° N of Venus; 4° from Sun in evening sky; magnitudes -1.9 and -3.9
0479.792	Jun	18	Tue	7	Mercury, Venus, and M35 cluster within circle of diameter 1.21°; only about 4° from the Sun; magnitudes -2, -4, 5
0479.958	Jun	18	Tue	11	Mercury 0.53° N of M35 cluster; 5° from Sun in evening sky; magnitudes -1.8 and 5.3
0480.688	Jun	19	Wed	5	Venus 0.40° S of M35 cluster; 4° from Sun in evening sky; magnitudes -3.9 and 5.3
0481.466	Jun	19	Wed	23	Mercury at northernmost declination, 24.90°
0481.978	Jun	20	Thu	11	Venus at northernmost declination, 23.93°
0482.000	Jun	20	Thu	12	Moon 0.50° ENE of Antares ; 160° from Sun in evening sky; magnitudes -12.2 and 1.0; occultation
0482.369	Jun	20	Thu	20:51	June (northern summer) solstice
0482.369	Jun	20	Thu	20:51	Sun enters the astrological sign Cancer, i.e. its longitude is 90°
0482.894	Jun	21	Fri	9	Sun enters Gemini, at longitude 90.50° on the ecliptic
0483.548	Jun	22	SAT	1:09	Full Moon
0485.368	Jun	23	SUN	21	Mercury at northernmost latitude from the ecliptic plane, 7.0°
0488.981	Jun	27	Thu	11:33	Moon at perigee; distance 57.90 Earth-radii
0489.146	Jun	27	Thu	16	Moon 0.33° NE of Saturn ; 107° from Sun in morning sky; magnitudes -10.7 and 1.1; occultation
0489.315	Jun	27	Thu	19:33	Latest sunset, at latitude 40° north
0489.875	Jun	28	Fri	9	Moon 0.31° N of Neptune; 97° from Sun in morning sky; magnitudes -10.4 and 7.9; occultation
0490.412	Jun	28	Fri	21:54	Last quarter Moon
0490.438	Jun	28	Fri	23	Mercury 4.8° S of Pollux; 16° and 17° from Sun in evening sky; magnitudes -0.7 and 1.2
0490.686	Jun	29	SAT	4	Moon at ascending node; longitude 11.5°
0491.249	Jun	29	SAT	18	Saturn stationary in longitude; starts retrograde motion
0492.331	Jun	30	SUN	20	Saturn stationary in right ascension; starts retrograde motion

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SAC Outreach

2024 Grand Canyon North Rim Public Star Party, Sat, June 1 to Sat, June 8



2024 Grand Canyon North Rim Public Star Party, Group Photo

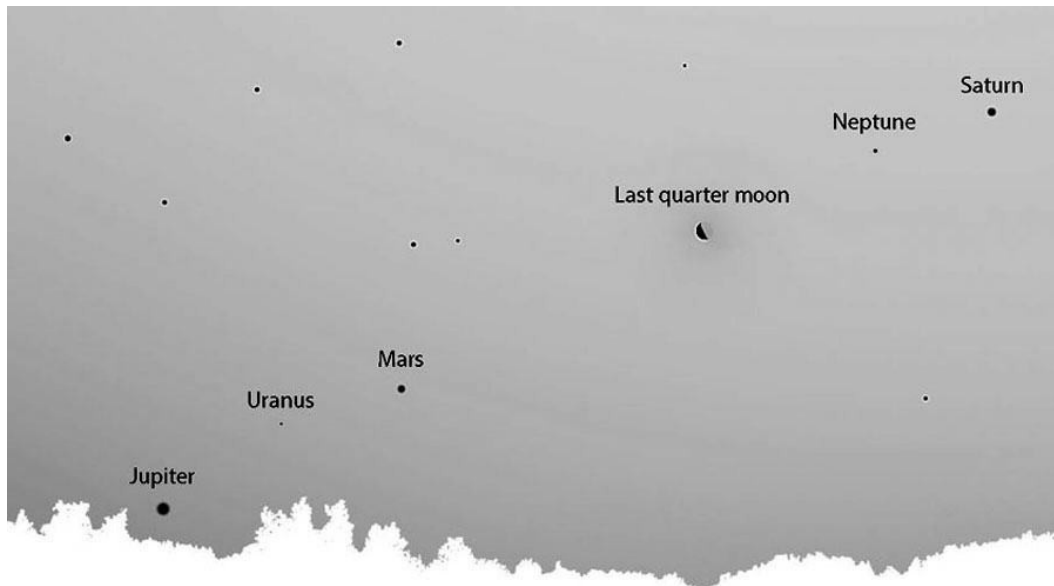
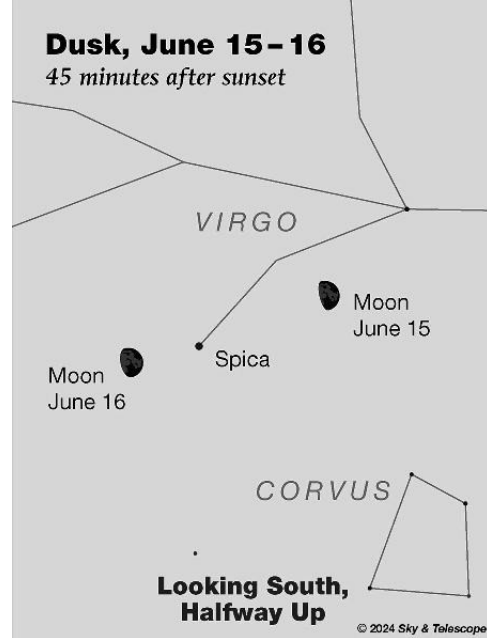
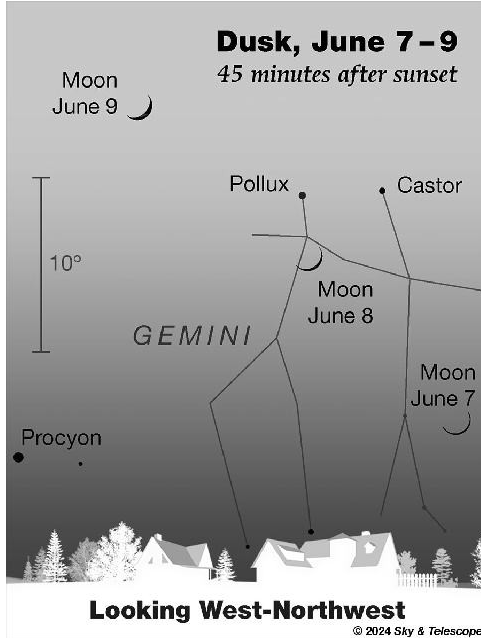
Photo by: Lauren Cisneros, Marketing Coordinator, Grand Canyon National Park

Left to right: 1. Park Ranger; 2. Scott Cunningham, West Valley Astronomy Club, Sun City West, AZ; 3. Terry Shay, SAC, Phoenix, AZ; 4. Tom Curry, SAC, Phoenix, AZ; 5. Dean Regas, Cincinnati, Observatory, Author & Podcaster; 6. Pamela Rottas, SAC, Phoenix, AZ; 7. Steve Rottas, SAC, Phoenix, AZ; 8. Sandy Milward, SAC, Phoenix, AZ; 9. Ken Milward, SAC, Phoenix, AZ; 10. Micki Killoran, Wilhoit, AZ; 11. Jason Hoover, Prescott Valley, AZ; 12. Tammy Schille (Straub); 13. Tim Straub, Prosser, Washington; 14. Michael Poppre, SAC, Phoenix, AZ

Not Pictured: Robert & Stella Tong, SAC, Phoenix, AZ; Rosemary Shay, SAC, Phoenix, AZ; Kevin Schindler, Lowell, Observatory, Flagstaff, AZ; Vince Turkin & Zerena, West Valley Astronomy Club, Sun City West, AZ; Beth Poppre, SAC, Phoenix, AZ; & Suzanne Hensel, Tucson, AZ

Full reports, next month...the Editor.

SAC Sky



Facing east-southeast about 90 minutes before sunrise on June 29

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2024 SAC Officers and Contacts

Board Members

President Michael Poppre ([mail to: president@saguaroastro.org](mailto:president@saguaroastro.org))
 Vice-President Steve Rottas
 Treasurer Tom Curry ([mail to: treasurer@saguaroastro.org](mailto:treasurer@saguaroastro.org))
 Secretary Sandy Milward
 Properties Tom Curry ([mail to: properties@saguaroastro.org](mailto:properties@saguaroastro.org))

Non-board Positions

Novice Leader Steve Dodder ([mail to: fester00@hotmail.com](mailto:fester00@hotmail.com))
 Newsletter Rick Rotramel ([mail to: rrotramel601@gmail.com](mailto:rrotramel601@gmail.com))
 Webmaster Terry Shay ([mail to: webmaster@saguaroastro.org](mailto:webmaster@saguaroastro.org))
 Public Events Jack Jones ([mail to: publicevents@saguaroastro.org](mailto:publicevents@saguaroastro.org))
 ATM Group Paul Lind ([mail to: atmgroup@saguaroastro.org](mailto:atmgroup@saguaroastro.org))
 Imaging Al Stiewing ([mail to: amst@cox.net](mailto:amst@cox.net))
 Deep Sky Jack Jones ([mail to: deepskygroup@saguaroastro.org](mailto:deepskygroup@saguaroastro.org))
 Public Outreach Tom Curry (canyonhiker2@cox.net)

SAC on Facebook:

Moderator, Mike Willmoth (mwillmoth@compuserve.com)

2023 Board Mtgs:

January, TBA

April, TBA

July, TBA

November, TBA

Occultation Info

Wayne Thomas has asteroid occultation info for the greater Phoenix Area:

[Mail to: tomwaymas@gmail.com](mailto:tomwaymas@gmail.com)

Meeting Location: The Clubhouse, 7:00 PM, 3030 E. Mission Lane, Phoenix, AZ



Saguaro Astronomy Club

Saguaro Astronomy Club (SAC), Phoenix, Arizona, was formed in 1977 to promote fellowship and the exchange of scientific information among its members-amateur astronomers. SAC meets monthly for both general meetings and star parties, and regularly conducts and supports public programs on astronomy. Membership is open to anyone with these interests.

Saguaro Skies is posted as a pdf file monthly on the SAC website,

<https://www.saguaroastro.org/newsletter/>

for browsing or downloading for SAC members and friends of SAC. A email announcement of the monthly newsletter release is included with membership.

Direct all membership inquiries to the SAC Treasurer by using the membership form found in this newsletter. For editorial and SUCH-A-DEAL advertising inquiries, contact the Saguaro Skies Editor.

Contacting This Issue's Authors

If you wish to write to an author in this month's issue, contact them by sending your message to the editor of Saguaro Skies, Rick Rotramel, at: r.rotramel@cox.net

I will then forward your questions or comments to the author.

Saguaro Skies Staff

Editor: Rick Rotramel; Photographers: Tom Curry, Sandy Milward, Tom Polakis, Michael Poppre, Rick Rotramel and Susan Trask.

2013-2024 Contributors: Bob Christ, Mike Collins, AJ Crayon, Tom Curry, Paul Dickson, David Dillmore, Steve Dodder, Richard Harshaw, Dean Ketelsen, Kevin Kozel, Joan McGue, Sandy Milward, Andrew Perry, Tom & Jennifer Polakis, Michael Poppre, Jimmy Ray, Rick Rotramel, Steve Rottas, SAC Imagers & Observers, Darrell Spencer & Rick Tejera.



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Saguaro Astronomy Club Membership Services

Membership -- Memberships are for the calendar year and are pro-rated for new members as follows:
Jan - Mar: 100%; Apr - Jun: 75%; Jul - Sep: 50%; Oct - Dec 25%.

- \$32.00 Individual Membership
- \$36.00 Family Membership



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**SAC Treasurer
1238 E. Orchid Lane
Phoenix, AZ 85020**

AZ-Observing.groups.io (Email discussion list)

AZ-Observing is NOT a SAC mailing list, but it's a discussion mailing list about amateur observing in Arizona.

It's an open list for those interested in astronomical observing in Arizona. Messages to the list membership must be sent to az-observing@groups.io

Subscribing: Go to Groups.io, search for the group AZ-observing (or "AZ Observing"). Click on the button down the page to join the group. Your application will be accepted in a day or so by the moderators. Alternatively, send an email to AZ-observing+subscribe@groups.io. After your membership is set, go to the Subscription tab on the left. Set your preference as to how you should receive messages.

For help, email AZ-observing+help@groups.io

Unsubscribing:

Go to Groups.io, then go to the group SAC Forum. Go to the tab "Subscription" on the left, at the bottom of the page click "Leave Group".

Alternatively, use this link:

az-observing+unsubscribe@groups.io

<http://saguaroastro.org/newsletter/>