



Saguaro Astronomy Club, Phoenix, AZ

Volume 48, Issue 5
May 2024

The President's Corner

Summer season is fast approaching and with that so are some SAC activities. One of which I've been enjoying ever since I joined the club and the other is a new one to me. On the 18th, in lieu of a regular club meeting, SAC members will be mingling with community members at our twice a year Thunderbird Park Star Party. I have always been somewhat amazed at how much people who are not aficionados of our particular hobby will go out of their way to gather at a telescope and stand in thrall to the view of an object so distant it has nothing to do with their daily lives. When presented with the opportunity, there is clearly a desire to experience what is beyond our planet.

The activity that is new to me this year is the Grand Canyon North Rim Star Party. Held the first week of June, club members will be sharing

celestial wonders with park visitors throughout the week right on the rim of a natural earthly wonder. It should be a fun and rewarding week. I'll let you know how it went next month! Until then...

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 May SAC **general meeting** is **being replaced** on **Saturday, May 18th**, by the **Thunderbird Park Public Star Party**
(There will be **no meeting** on Friday May 17th)

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 April SAC general meeting.
SAC Observing has sky info for the month.
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

Attention:

There will be **no** May general SAC meeting on Friday, May 17th.

It's being **replaced** by the *Spring Thunderbird Park Public Star Party* in Glendale, AZ, Sat, May 18th

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/UCEKTF10gwebABZXwKbhe9oA>

Thunderbird Park Public Star Party & SAC Meeting Combination

Glendale, AZ Saturday, May 18th @ Sunset

Grand Canyon Star Party North Rim, June 1st – 8th, 2024

For the Grand Canyon North Rim event:
 email Steve Rottas: srottas@gmail.com

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.rotamel@cox.net

Telescope Equipment For Sale

* Ads on this page were submitted through the SAC Website

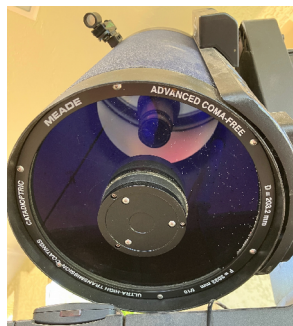
Meade 8" LS8-8ACF

- 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

- Focus Motor for SCT and EdgeHD Telescopes
- Several Eyepieces and Misc. attachments
- Meade Flip Mirror System, Model 644
- Meade Deep Sky Imager, Mono CCD Camera

\$ Best Offer \$

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





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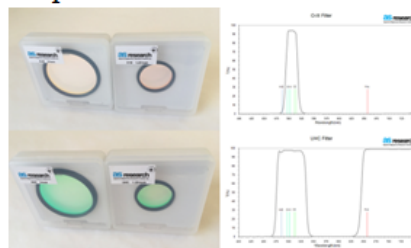
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The HyperStar-equipped ISERV telescope is now installed on the ISS!

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 April 26 SAC General Meeting

By Sandy Milward, SAC Secretary

SAC Meeting Minutes April 26, 2024

- SAC president Michael Poppre called the meeting to order with 15 club members attending.

Old Business:

- 11 Messier Marathon sheets were turned in. Certificates were mailed to those who live out of town. Certificates were presented to Joe Goss 60 objects, Jack Jones 62 objects, Terry Shay 104 objects and Steve Rottas 109 objects.

New Business:

- Sat, May 18 is the Thunderbird Park Star Party. Arrive between 6pm and 6:30 to set up.
- Tom Curry and Mike Poppre attended an outreach event at El Charro on Lincoln.
- June 1-8 is the North Rim Star Party.
- Tom Curry, SAC Treasurer then gave a report on our finances and paid memberships. The club has \$3,288.22 in funds, and 31 current paid members.
- Steve Rottas reported on the solar eclipse as viewed from Kingsland, Texas. There were light wispy clouds and viewing was not bad.
- Terry Shay reported on observing the solar eclipse from Copperas Cove, Texas. Rain was predicted but he and Rosemary decided to stay in place and set up. They set up at Central Texas University campus. Terry used Vaonis by Hestia to take pictures with his phone.
- Dave Berg reported on his Eclipse experience in Cleveland, Ohio where it was cold, rainy and snowy. The clouds were high and thin. Just in time for the eclipse there were light clouds and then clear skies. He used the Vaonis by Hestia smart phone based telescope. He plans to use the Vaonis as a finder for his push to scope in the future.
- Paul Lind reported on his family vacation with an added eclipse. His family gathered in Cleburne, Texas which is about 50 miles from Dallas. His goal was to see the eclipse with the naked eye and minimal equipment. He used an 80mm f/4 scope. The sky kept improving for him.
- Tom Polakis reported on his partial eclipse observation from downtown Tempe, Arizona. He also reported on the near earth asteroid 439437 (2013 Nk 4) which made a close approach to earth. The optimal time to observe was April 16-24. Tom utilized the College of DuPage public page of NEXLAB satellite and radar images. He plotted light curve variations in brightness.
- Tom Curry reported on his Solar observation from his driveway in Phoenix. His neighbors were happy to share the experience with Tom.
- The meeting was then adjourned.



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SAC Observing

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2024



ASTRONOMICAL CALENDAR

1

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www.universalworkshop.com

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

0431.977	May	1	Wed	11:27	Last quarter Moon
0432.625	May	2	Thu	3	Pluto stationary in longitude; starts retrograde motion
0434.144	May	3	Fri	15	Pluto stationary in right ascension; starts retrograde motion
0434.479	May	3	Fri	24	Moon 0.77° SE of Saturn ; 57° from Sun in morning sky; magnitudes -8.7 and 1.3; occultation
0434.915	May	4	SAT	10	Mars crosses equator northward

Continued next page...



SAC Observing

0435.300	May	4	SAT	19	Moon, Mars, and Neptune within circle of diameter 4.16°; about 44° from the Sun in the morning sky; magnitudes -8, 1, 8
0435.313	May	4	SAT	20	Moon 0.31° ESE of Neptune; 46° from Sun in morning sky; magnitudes -8.0 and 7.9; occultation
0435.5	May	5	SUN	0	Eta Aquarid meteors ; ZHR 50; 3 days before New Moon
0435.625	May	5	SUN	3	Moon 0.44° NE of Mars ; 41° and 42° from Sun in morning sky; magnitudes -7.7 and 1.1; occultation
0436.413	May	5	SUN	22	Moon at ascending node; longitude 15.4°
0436.422	May	5	SUN	22:08	Moon at perigee; distance 56.94 Earth-radii
0436.750	May	6	Mon	6	Moon 3.4° NNW of Mercury; 26° from Sun in morning sky; magnitudes -6.6 and 0.7
0438.083	May	7	Tue	14	Moon 3.2° NNW of Venus; 8° from Sun in morning sky; magnitudes -4.8 and -3.9
0438.641	May	8	Wed	3:23	New Moon ; beginning of lunation 1254
0438.954	May	8	Wed	11	Mars at perihelion; 1.3815 AU from the Sun
0438.979	May	8	Wed	12	Moon 3.4° NNW of Uranus; 6° and 4° from Sun in evening sky; magnitudes -4.6 and 5.8
0439.100	May	8	Wed	14	Moon, Jupiter, and Uranus within circle of diameter 4.46°; about 6° from the Sun in the evening sky; magnitudes -5, -2, 6
0439.188	May	8	Wed	17	Moon 4.1° NNW of Jupiter; 8° and 7° from Sun in evening sky; magnitudes -4.8 and -2.0
0439.521	May	9	Thu	1	Moon 0.49° ESE of Pleiades; 12° from Sun in evening sky
0440.391	May	9	Thu	21	Mercury at westernmost elongation ; 26.4° from Sun in morning sky; magnitude 0.5
0441.833	May	11	SAT	8	Moon 4.2° N of M35 cluster; 42° and 41° from Sun in evening sky; magnitudes -7.7 and 5.3
0443.208	May	12	SUN	17	Moon 4.9° S of Castor; 58° and 59° from Sun in evening sky; magnitudes -8.6 and 1.5
0443.458	May	12	SUN	23	Moon 1.60° S of Pollux ; 61° from Sun in evening sky; magnitudes -8.8 and 1.2
0443.884	May	13	Mon	9	Uranus at conjunction with the Sun; 20.602 AU from Earth; latitude -0.28°
0444.069	May	13	Mon	14	The equation of time is at a maximum of 3.64 minutes
0444.334	May	13	Mon	20	Sun enters Taurus, at longitude 53.54° on the ecliptic
0444.583	May	14	Tue	2	Moon 3.5° NNE of Beehive Cluster; 74° from Sun in evening sky; magnitudes -9.4 and 3.7
0445.992	May	15	Wed	11:48	First quarter Moon
0446.458	May	15	Wed	23	Moon 3.2° NNE of Regulus; 95° from Sun in evening sky; magnitudes -10.2 and 1.4
0448.106	May	17	Fri	15	Mars and Saturn at heliocentric conjunction; longitude 342.3°
0448.295	May	17	Fri	19	Moon at apogee; distance 63.44 Earth-radii

Continued next page...



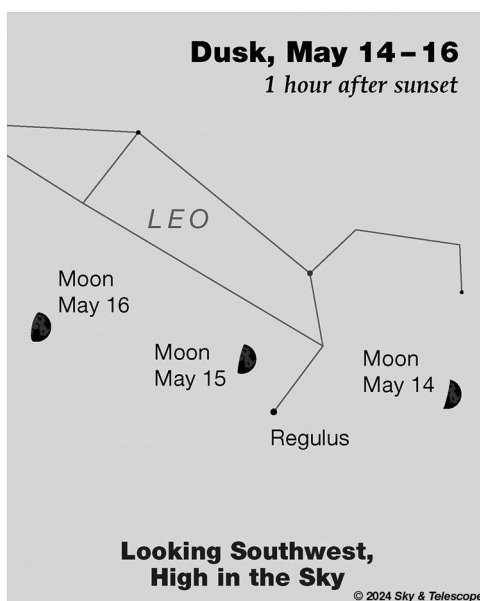
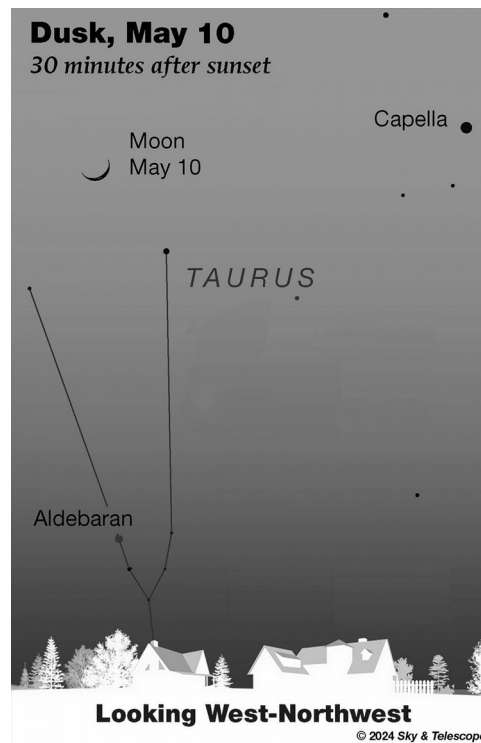
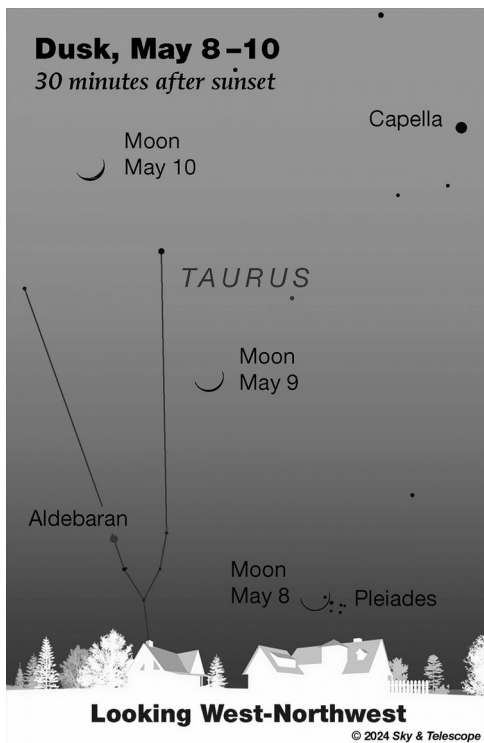
SAC Observing

0449.000	May	18	SAT	12	Venus, Jupiter, and Uranus within circle of diameter 4.86°; only about 3° from the Sun; magnitudes -4, -2, 6
0449.021	May	18	SAT	13	Venus 0.45° SE of Uranus; 5° from Sun in morning sky; magnitudes -3.9 and 5.8
0449.284	May	18	SAT	19	Jupiter at conjunction with the Sun; 6.027 AU from Earth; latitude -0.88°
0449.439	May	18	SAT	23	Asteroid 2 Pallas at opposition in longitude; magnitude 8.9
0449.5	May	19	SUN		Whit Sunday
0450.192	May	19	SUN	17	Moon at descending node; longitude 195.0°
0451.000	May	20	Mon	12	Moon 1.28° NE of Spica ; 145° and 144° from Sun in evening sky; magnitudes -11.7 and 1.0
0451.040	May	20	Mon	13	Sun enters the astrological sign Gemini, i.e. its longitude is 60°
0451.431	May	20	Mon	22	Mercury at southernmost latitude from the ecliptic plane, -7.0°
0453.854	May	23	Thu	9	Venus 0.19° N of Jupiter; 3° from Sun in morning sky; magnitudes -3.9 and -2.0
0454.080	May	23	Thu	13:55	Full Moon
0454.667	May	24	Fri	4	Moon 0.52° ENE of Antares ; 172° from Sun in morning midnight sky; magnitudes -12.5 and 1.0; occultation
0454.750	May	24	Fri	6	Venus 4.6° SE of the Pleiades; 3° and 5° from Sun in morning sky
0455.292	May	24	Fri	19	Venus, Jupiter, and the Pleiades within circle of diameter 4.82°; only about 4° from the Sun; magnitudes -4, -2, 3
0457.938	May	27	Mon	11	Jupiter 4.8° SE of the Pleiades; 6° and 7° from Sun in morning sky
0461.217	May	30	Thu	17:12	Last quarter Moon
0461.833	May	31	Fri	8	Mercury 1.28° SE of Uranus; 16° from Sun in morning sky; magnitudes -0.8 and 5.8
0461.875	May	31	Fri	9	Moon 0.46° ESE of Saturn ; 81° and 82° from Sun in morning sky; magnitudes -9.8 and 1.2; occultation
0462.458	May	31	Fri	23	Venus 5.3° N of Aldebaran; 1° and 6° from Sun in morning sky; magnitudes -3.9 and 0.9



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SAC Sky



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<https://skyandtelescope.org/observing>



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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, 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



Note: You can now pay with PayPal through the SAC Website. Click Below:

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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:

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