



The President's Corner

mail to: president@saguaroastro.org

The most important issue for SAC coming up before year's end (with the possible exception of the Christmas party) is to find new officers, especially a new Vice President, Secretary and Treasurer. I will run again for the President for 2019.

It is difficult to find the appropriate words to describe the important role and excellent job Michael Poppre and Lori Prause have done in the last two years. I also want to recognize the work Rick Rotramel does in producing the Newsletter at this point. We all owe them an immense sense of gratitude. I think I can speak for everyone in the club when I say, "Thank you!"

The club is more than a social gathering (or a place to get really good cookies once a month). It really does promote the hobby/science in the central Phoenix area; even if it does not appear so at times (with low turn-out at some meetings). The club has done much to improve the hobby, especially for me. Guest and member presentations and the annoying questions I have fostered upon my fellow members have improved my astrophotography and understanding of the cosmos. I would hate to see the club decline because no one serves leadership positions.

Without the officers who volunteer for positions of leadership in SAC, we would have no club.

We need other members to "step up to the plate" and serve. I am asking for people to seriously consider taking on the mantle of SAC officers.

Clear sky,

David



SAC President, David Dillmore at the Thunderbird Park Spring Public Star Party
Photo: Rick Rotramel

Website: saguaroastro.org Like SAC on Facebook



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Quick Calendar

Tuesday, October 16: **NO SAC ATM/Imaging Meeting, CANCELED THIS MONTH**

Friday, October 19: **SAC General Meeting, 7:30 PM, Nominations for 2019 SAC Officers, Speaker: Steve Ruff, School of Earth and Space Exploration, ASU, Topic: Geology of Mars, ancient hot springs and the possibility of preserved microbial life there on Mars.**

* **New Room:** Engineering Building 1-202. It is just north of the parking garage.

Saturday, November 3: **Star Party, Antennas Site, Weather permitting, see page 2**

Tuesday, November 13: **SAC ATM/Imaging Meeting, 6:30 PM, Paul Lind's Shop, see page 2**

Friday, November 16: **SAC Board Meeting, 6:30 PM, in a room nearby the SAC meeting room**

Friday, November 16: **SAC General Meeting, 7:30 PM, Speaker: TBA, Topic: TBA; Elections**

Header image © 2000-2013 Stellarium Developers
Scorpius setting in the southwest.



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Editor Notes



Hi Folks,

I missed the *All Arizona Star Party* this year as Saturday was looking like rain. Reports say that Friday was a good night for star gazing but Saturday had clouds & rain after 11:00 PM.

The nominations for 2019 SAC Officers are to be done at the October 19th SAC General Meeting. Vice President, Secretary & Treasurer officers need new persons elected, due to term limits. Here's your chance to serve as a SAC officer. See the duties in *Bits & Pisces*.

Best of the NGC features this month, NGC 7009, a planetary nebula in Aquarius.

Check out the ads in *Such-A-Deal*. There is one new one, the rest have been there quite a while and those items need a new home.

Bits & Pisces has minutes of the September 21st SAC General Meeting, a run down of the duties of the SAC officers open for nominations at the October General SAC Meeting on Oct. 19th, some SAC history, & a report on the September 18th ATM/Imaging meeting. Enjoy!

Rick Rotramel, Editor

Schedule of Events 2018

SAC General Meetings

Jan 5	Feb 2 plus Board Meeting	Mar 2	Apr 6
May 4 plus Board Meeting	June 22	July 20	Aug 24 plus Board Meeting
Sept 21	Oct 19	Nov 16 plus Board Meeting	Dec 8 Holiday Party

@ Grand Canyon University, Engineering Bldg, 7:30 PM
See page near back of this issue for location.

ATM/Astro Imaging Meeting
Tuesday, October 18th, 6:30 PM @ Paul Lind's Shop
210 W. Tierra Buena Lane, Phoenix, AZ

Canceled this month.

Star Party

Saturday, November 3rd, Sunset (Weather permitting)
Antennas Site, link:

[http://saguaroastro.org/wp-content/sac-docs/maps/antennas-handout%20\(REVISED\).pdf](http://saguaroastro.org/wp-content/sac-docs/maps/antennas-handout%20(REVISED).pdf)

Outreach:

Grand Canyon Star Party, North Rim

Saturday to Saturday, June 22 - 29, 2019
Self-Lodger reservations open 8/1/18 - 12/31/18
Camping reservations open 1/1/19 - 3/1/19
<http://saguaroastro.org/grand-canyon-star-party/>

Spaceflight Trivia

Can you name the mission involved in this picture below? ([See answer on page 5](#))



NASA

2018 SAC Officers

President: David Dillmore
Vice President: Michael Poppre
Treasurer: Lori Prause
Properties Director: Robert Brewington
Secretary: Andrew Perry
Photo: Susan Trask



SAC Announcements

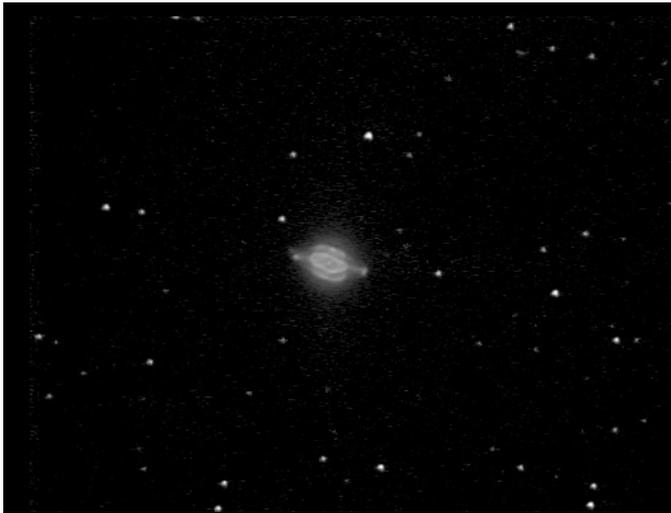
Remember to renew your SAC membership!

Mail in your SAC 2018 dues today

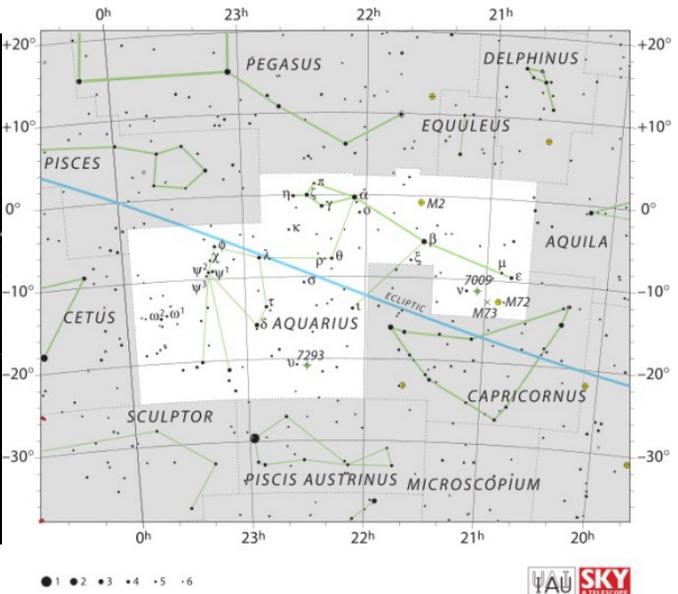
Use the form on the last page of this issue or on the SAC website.

Best Of The NGC: NGC 7009, Planetary Nebula in Aquarius

By SAC Imagers, Observers & Sketchers



Guest Image by Chris L. Peterson, NGC7009, Saturn Nebula
300mm LX200 SCT (f/6.7), ST8I Camera, 15 Min. Exp,
7/14/02, Guffey, Colorado



Aquarius Star Chart

<p>Observing Chart D. M. Douglass - Tempe, AZ</p>	<h3>C 055</h3>	<p>Observed and Imaged Date: Sep 23, 2016 Time (Local): 19:30 Site: DaHut, Tempe, AZ 33-22-54(N) - 111-54-15(W)</p>
<p>Other Names: NGC-7009; Saturn Nebula</p>		
<p>Observing Program: EVAC and Astronomical League General Observation Caldwell Objects</p>		
<p>This image was taken to replace and update a prior image as part of an image update and enhancement project.</p>		
<p>Image Information: Total # of frames (subs): 06 Frame exposure time (min): 05 Total exposure time (min): 30 Camera: SBig ST-8300-M Camera controlled by: TheSkyX Pro Preprocessing and stacking: CCDStack PostProcessing: Adobe Photoshop CS3</p>	<p>CGEM Mount Control: TheSkyX Pro All slews by "closed loop" (Plate Solved) Mount Guiding: TheSkyX Pro - Lodestar X2</p>	
<p>Telescope: Celestron EdgeHD 8" SCT Mount: Celestron CGEM (EQ)</p>	<p>Type: Plan Nebula R.A. 21:04:12 DEC -11:22:0 Magnitude: 8 Size (Arc Min): 0.4 x 1.6 Constellation: Aqr</p>	<p>Weather: Temp: 76 Wind: Calm Clouds: None Estimated Seeing: FWHM CCDInspector = 2.1</p>
<p>Mag (SBig): (2000/22.5) = 88 FOV = 32 x 24 Arc Min Filter: Lumicon Deep Sky (UHC/LPR) w/ Baader IR/UV Cut</p>	<p>Sky Brightness Mags / sq ArcSec (v) 18.5 or Bortle Scale: 6 Moon Ill = 00 % Estimated Transparency: Object = Little Dipper Value (Mag) = 5</p>	

David Douglass

Continued on next page...

Best Of The NGC:

NGC 7009, Planetary Nebula in Aquarius

By SAC Imagers, Observers & Sketchers

SAC Observer Steve Coe

NGC 7009 is the Saturn Nebula, a famous planetary with outer ansae (wing-like projections) and a bright inner disk. It was discovered by William Herschel in 1782 but Lord Rosse was the first to see the extending ansae. The projections reminded him of the planet Saturn and he gave this object its' nickname. Amateurs have been trying to duplicate that observation ever since.

TV 102; Antennas, S+T=7, 14mm, pretty bright, small, elongated 1.5X1, striking aqua color - in a 4 inch!! 6.7mm, color more subdued, I got two blinks of the central star.

6" f/8; Antennas, S+T=7, 14mm, pretty bright, pretty small, elongated, a light aqua disk even in the small scope. 6.7mm, a gray-green disk that is elongated 1.8 X 1. With averted vision the central star winked at me twice.

13" f/5.6; Cherry Rd, S+T=8/10 night; bright, pretty large, elongated 1.5 X 1 in PA 75, at 220X the central star and ansae are obvious and the nebula is light green.

16" f/4.5; Antennas site, S+T=7, 27mm shows this planetary as non-stellar elongated dot. With the 8.8mm, it is bright, pretty small, elongated 2 X 1 in an E-W direction. Both ansae are seen at this power and the central star winks at me about 10% of the time.

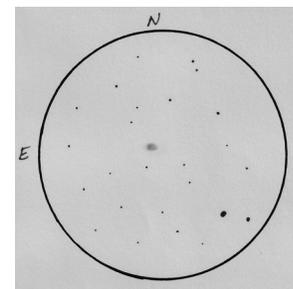
20" f/6 Newtonian; Helen and Richard Lines' Observatory in Meyer, AZ. The nebula is bright, small, somewhat elongated and light green at 150X. Raising the power to 225X will show the ansae as faint projections from the bright central section. At 400X the central star is obvious and the ansae stand out more clearly. One of the bright spots along the ansae (Helen Lines calls them wing tanks) is visible at this higher power. All these observations are on a night I rated 7/10 for seeing and transparency and I found that the UHC filter did NOT help with either the central disk or the ansae detail. Several observers, myself included, saw the nebula as light green, without the UHC filter installed.

20" f/5 Newtonian; Pierre Schwaar's "Biggest Bigfoot" with a 12mm eyepiece really makes this bright planetary come to life. This observation is from Sentinel, Az on a night I rated the seeing at 7/10 and the transparency at 8 out of 10. The oval shape is obvious and there is a light glow that surrounds the nebula on all sides. This faint outer nebulosity is better seen with averted vision. The central star is easy with this aperture. The extensions, called ansae, are easy to see with direct vision and grow longer with averted vision. What is most striking about this beautiful object is the fact that it is florescent aqua in color. The Saturn Nebula really does glow in the dark.

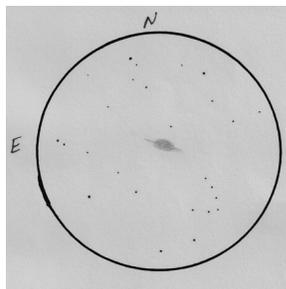
36" f/5; Ultimate Star Party, McDonald Observatory, Oct. 95, S=6, T=8, with a 16mm eyepiece. My best view ever, a lovely blue-green oval with a blazing central star. The ansae or wings of the Saturn Nebula are immediately obvious, as is the left hand "wing tank," a bright knot in the extension of the nebula. The right hand "wing tank" is seen better with averted vision, both are seen as thickenings within the ansae. The central section is elongated 2.5 X 1 and there is a small dark region which surrounds the central star. WOW!!



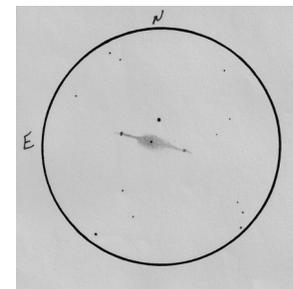
15' x 15'



6" f/8, 100x



13" f/5.6, 220x



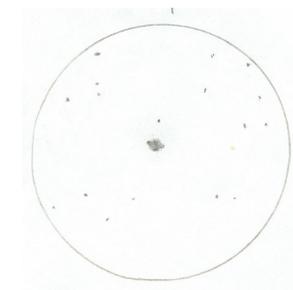
36" f/5, 375x

SAC Observer Rick Rotramel

16" f/4.4, Newtonian, 200x; Very bright, fairly large, Saturn shaped (two ears) just like the name, The Saturn Nebula.



15' x 15'



16" f/4.4, 200x

Call for *Best of the NGC* images, notes and sketches.

Hello SAC imagers, observers & sketchers:

For **November**, NGC 891, Sb Spiral Galaxy, 02 22.6 +42 21, 11.5 mag, 14 x 3, edge-on with dust lane, in Andromeda.

For submitting images, send your file as an attachment in an email to the editor. Please send caption details of the image: Optics, camera, main software used, exposure, location and date taken.

Observation notes are sent in the email text area or as an attached file.

For scanned sketches, send a file with caption details: optics and eyepiece power used.

Email to: r.rotramel@cox.net

For **December**, NGC 1535, Planetary Nebula, 04 14.2, -12 44, 10.4 mag, 20" x 17," bright bluish disk, in Eridanus.

For **January**, TBA.

Spaceflight Trivia Answer

STS-26 Returns Shuttle to Flight

Mission type	Manned Earth Orbital Flight
Operator	NASA
COSPAR ID	1988-091A
Mission duration	4 days, 1 hour, 11 seconds
Distance traveled	2,703,000 kilometers (1,680,000 mi)
Orbits completed	64
Spacecraft properties	
Spacecraft:	Space Shuttle Discovery
Launch mass	115,487 kilograms (254,605 lb)
Landing mass	88,078 kilograms (194,179 lb)
Payload mass	21,082 kilograms (46,478 lb)
Crew	
Crew size	5
Members	Frederick H. Hauck, Richard O. Covey, John M. Lounge, David C. Hilmers & George D. Nelson
Start of mission	
Launch date	29 September 1988, 15:37:00 UTC
Launch site	Kennedy LC-39B
End of mission	
Landing date	3 October 1988, 16:37:11 UTC
Landing site	Edwards Runway 17
Orbital parameters	
Reference system	Geocentric
Regime	Low Earth
Perigee	301 kilometres (187 mi)
Apogee	306 kilometres (190 mi)
Inclination	28.5 degrees
Period	90.6 min.



[Click here to return to page 1](#)

Such-A-Deal

ITEMS FOR SALE

MEADE ETX-90EC 90mm Maksutov Telescope

- Includes the following:
- #07426 8 x 21mm Erect Image Viewfinder
- #07427/#825 8 x 25mm Right Angle Viewfinder
- Deluxe Tripod
- Eyepieces:
 - Meade Ultra Wide Angle 6.7mm multi-coated
 - Meade Super Plossl 26mm LP multi-coated
- Meade 2X teleneegative multi-coated
- Meade remote controller
- #880 Table Tripod for Polar Alignment of the ETX-90EC Astro Telescope
- Manual
- Compass
- Carrying Case
- Allen wrenches



- Selling on behalf of a friend, Asking \$350.00 For all.
- Contact Rick Tejera: 623-203-4121
- Email: Saguaroastro@cox.net

16-inch Dobsonian & Observing Chair

Telescope: 16-inch f/4.5 Enterprise Optics mirror, excellent figure and performance.

- Truss-type Dobsonian, home-made of Baltic Birch structure, bearings of Ebony Star and Teflon.
- Black fabric light shield (not shown in photo)
- 'Scope disassembles and nests into approximately 3-foot cube, to fit into your van.
- Protective box for primary mirror.

Observing chair: stand or sit comfortably, even when viewing at the zenith!

Asking:

\$1900

Contact me to schedule a visit in Gold Canyon.

Bob Buchheim

Email: oca_bob@yahoo.com

480-646-1324



Celestron Nexstar 130 SLT

- Celestron Skyportal wifi module
- Orion Lasermate Collimator
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- Meade 2X Barlow Lens
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- Nikon adapter ring
- Moon filter
- Original manuals and start up guides
- Original investment: over \$600
- Asking for all items: \$375.00
- Steve Scott, 602-502-4955
- Mailto:steve@equitysigngroup.com



For Sale

Orion Maksutov-Cassegrain
Telescope - 127mm 5in

\$300.00

602-240-5421 or 602-499-9910

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

Such-A-Deal

ITEMS FOR SALE

Vixen SXW Computerized, Equatorial Mount with Starbook Controller

I purchased this mount with a Vixen 8" Astrograph on top of it from the estate of the past president of the Riverside Astronomical Society, the astronomical portion of that estate being sold off by RAS at a past RTMC gathering. I sold the astrograph some time ago but the mount has been my primary solar observatory mount for several years now here in Flagstaff. It comes with the manual, deluxe tripod, Starbook controller, two factory counterweights, and any features which were standard equipment on the original unit. Weight capacity is stated to be 35 pounds. It has a Vixen dovetail rail mounting. This mount is easily light enough to be transported and I occasionally drag it down to Camp Verde in the winter months to continue the solar work while staying in our trailer.

This is a very sophisticated mount with an exquisite controller system, the Starbook. It has been very happy with a coaxially mounted Lunt 80mm double stacked solar scope and a Stellarvue 80mm triplet with a Thousand Oaks white light filter on it. I also run a Celestron 9.25" cassegrain on it for planetary.

This is a very good deal at **\$1000**, exactly what I paid for it. If it makes it easier, I might be open to a part trade. I'm open to driving down to Cordes Junction or so to meet.

Fred Tretta, Flagstaff, AZ

Email: ftretta@msn.com



Ioptron Cube with 80mm Refractor

I made one of my movies with it. Works well as a camera base (as long as its not too unbalanced). The little black thing on top is a plastic camera holder I printed. I also added the red dot finder scope. Down side is the Hand Control connector cable has a broken tang (stays put by friction), I only have one eyepiece for it, and the focuser is all plastic. I'm selling it to off-set some of the cost of an eyepiece I bought.

Only \$100.00 David Dillmore, 623-522-7357





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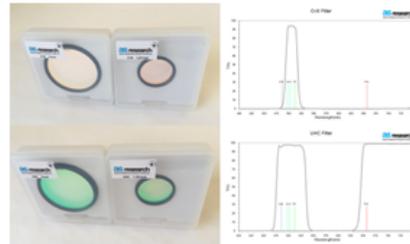
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The HyperStar-equipped ISERV telescope is now installed on the ISS!

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/acb/index.aspx>
dean@starizona.com



Bits & Pisces

Minutes of the September 21, 2018 SAC General Meeting, by Kevin Kozel, Michael Poppre & Lori Prause subbing for SAC Secretary Andrew Perry

President David Dillmore called the meeting to order at 7:31 pm.

The President asked if any visitors were present and there were none. Jimmy Ray returned after a long time of not attending Club meetings.

Vice President Michael Poppre will be absent until next January due to employment requirements.

Club officer nominations will take place during Octobers' Club meeting. Positions open and required to be filled are the Vice President, Secretary & Treasurer. The current President and Properties Director can remain in office for another year.

The camping reservations for the 2019 Grand Canyon Star Party, North Rim will be taken by Steve Dodder beginning on January 1st, 2019. Reservations for the cabins should take place now due to the fact that the cabins will fill up fast. The Park Service generally allows cabin reservations only six months in advance, per their regulations.

Treasurer Lori Prause stated the Club is in good financial condition with \$3,815.78 in the bank at this time. Some of our members have already paid their 2019 dues.

Show and Tell Presentations

Paul Lind gave the ATM/Imaging Meeting report, where he tested two 10" mirrors brought in by Kevin Kozel. Paul then showed us what he has been with "Dithering" of images with the Pixinsight photo processing program. His photos were very nice.

JD Maddy was present at tonight's meeting and told of his adventures with his astrophotography and a Celestron 9555 camera. His comet photos are very nice. He spoke of and showed a photo his new observatory at his new site near Tucson. He also told of an estate sale of astronomy equipment from a member of the Verde Valley Club who passed away. He has various items for sale and you may contact him through this newsletter.

AJ Crayon recommended having a third quarter moon stargazing event each month northeast of the Phoenix area along Seven Springs Road north of Carefree Arizona. There is a location listed on Google Maps with the title of "WSPH+3P Scottsdale AZ" that will show an aerial view of the Bronco Trailhead in the Tonto National Forest. Members who wish to stargaze close to home for an evening can go to there on the Saturday closest to the third quarter moon each month. Announcements will be placed on the AZ-Observing@freelists.org or on the other chat lists.

AJ was asked by Lori for a report on Steve Coe. AJ stated that Steve Coe is still recovering at his home at the North Ranch trailer park north of Congress Arizona.

The speaker for the evening was Dr. Arjun Dey, an astronomer on the staff of the National Optical Astronomy Observatory, which is based in Tucson. Topic: "Mapping the Universe: Understanding its History." My interest in astronomy began as a child, and I started my career in astronomy as an avid amateur. I did my BA at Northwestern University and my PhD at UC Berkeley. Most of my research in astronomy has focused on studying the formation and evolution of galaxies and observational cosmology. I am currently the NOAO Project Scientist for the Dark Energy Spectroscopic Instrument project, which aims to produce a precision measurement of the expansion history of the universe over the last 10 billion years. Abstract: I will describe the ideas behind the Dark Energy Spectroscopic Instrument project which is currently under construction at the 4M Mayall Telescope of the Kitt Peak National Observatory. The combination of the Mayall and DESI is the great cosmic cartography endeavor of our time: it will map the three dimensional positions of 40 million galaxies and quasars and use them to track the expansion history of our universe over cosmic time. And it will all happen right here in Arizona.

The 50/50 raffle winner was drawn by the main speaker.

The President adjourned the meeting at 9:45pm.



Arjun Dey

Photo: Susan Trask

The September SAC Meeting Speaker

Dr. Arjun Dey, PhD, NOAO Project Scientist for the Dark Energy Spectroscopic Instrument project, DESI, at the 4M Mayall Telescope of the Kitt Peak National Observatory.

Topic: "Mapping the Universe: Understanding its History" The combination of the Mayall and DESI is the great cosmic cartography endeavor of our time: it will map the three dimensional positions of 40 million galaxies and quasars and use them to track the expansion history of our universe over cosmic time. And it will all happen right here in Arizona.



Bits & Pisces

October SAC Meeting:

Agenda: Nominations for 2019 Officers

Positions open:

Vice President, Secretary & Treasurer, Term: 1 yr, 2 yr. Max.

Duties Defined, From The SAC Constitution:

Article V: Form of Government, B. Administrative Officers—Tenure of Office and Elections, 7) Duties of the Board of Directors:

b) Duties of the Vice President shall be: The Vice President shall serve in the President's place in the event the President is absent or unable to serve for any reason. He will be in charge of club programs and both general club publicity and program publicity. He will be the one to whom other board members report the lines of communications between the President and the Board. He shall serve as chairman of the program and activities committee and shall in the execution of this duty, be responsible for coordinating and scheduling the following:

- (1) General business meetings and the program agenda;
- (2) Club activities such as star parties, etc.

c) Duties of the Secretary shall be: The Secretary will be custodian of all official documents and records of the organization and shall, with the President when properly authorized, execute all legal documents in the name of the organization and shall perform other duties delegated to her/him: He shall record the minutes of all meetings of the General Assembly and the Board of Directors and shall at the next succeeding business meeting of the General Assembly, read back all pertinent minutes of all meetings of the General Assembly and Board of Directors occurring from the time of the last regular business meeting. He will be official correspondent with other clubs, organizations, etc. He will be responsible or appoint responsibility for the publication of the club newsletter.

d) Duties of the Treasurer shall be: The Treasurer will be responsible for presenting a proposed budget; will be in charge of ways and means; will handle club capital, checking account and may sign checks; will collect membership dues, process subscriptions and provide an official membership list for publication; will be in charge of membership application forms and club information sheets.





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Bits & Pisces

New SAC Meeting Location:

Engineering Building 1-202

It is just north of the parking garage.

(Old room location, Building 33)

GRAND CANYON UNIVERSITY

3300 W. Camelback Road, Phoenix, AZ 85017
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- Security Booths
- Designated Smoking Area
- Student Housing
- Covered Parking
- Blue-Light Security Stations
- Food Services
- Other
- Handicap Parking

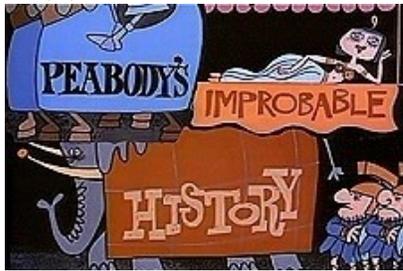


New Meeting Room

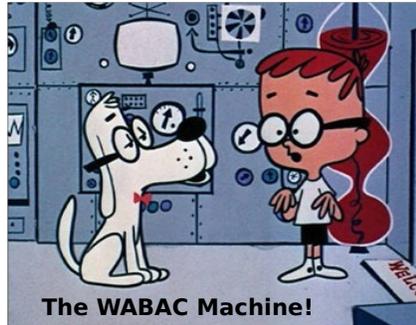
Parking Garage



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© Peabody and Sherman, 'Rocky and Bullwinkle' Pictures



Where we going today Mr. Peabody?

25 Years Ago in SAC

Saguaro Astronomy Club
 Metro Phoenix, Arizona
SACNEWS
 December 1993 — Issue #203



Minutes of the October Meeting

The October meeting opened at 7:35 PM with President Bob Dahl giving a welcome to guests and new members asking them to sign the guest book to receive the SAC newsletter. Paul Dickson reminded members about the upcoming casting party scheduled in mid-December [Now scheduled for the first week of January. -ed.] to be held at the University of Arizona's Mirror Laboratory in Tucson—more information will be in the newsletter. Rich Walker reported that at the public star party at Thunderbird Park, there were at least fifteen scopes and no one had to wait in long lines for viewing. The All-Arizona Star Party had good conditions for Friday, but clouds cleared most everyone out by Saturday evening.

Piet Burggraaf asked for telescope support at the Desert Valley School for Wednesday, November 17. A.J. Crayon reported that the Deep Sky Meeting will be on November 4 at the McGrath house; the constellation will be Pisces. He also presented the Messier Catalog award to Bob Gardner and explained about the new award of 1000+. This is for those observers who have completed the Messier, the Best 110 NGC, and the Herschel 400, and gave the first award and plaque to Steve Coe for his completion.

Carol Lee gave the Treasurer's Report and mentioned that there was a change in the group rate for Astronomy magazine—now \$18/year. Subscription and membership renewals are now due. Steve Coe still has the deep sky database disk available for members. Stan Student said that the club's library also has a copy. Pierre Schwaar was featured on Channel 3's news in connection with the Space Shuttle's dawn appearance. Although, Pierre was not able to see it, several other club members reported good sightings.

The Club's annual Christmas Party is scheduled for Saturday, December 18, 1993, and currently we need a volunteer to host the gathering. Please contact Bob Dahl if you can help.

November is the annual election month, and President Bob Dahl opened the offices for nominations. Tentatively, the slate of officers is as follows: President—Tom Polakis, Vice-President—Tim Lee, Secretary—A.J. Crayon, Properties—Pierre Schwaar, and Public Relations—open. Carol Lee has agreed to continue as Treasurer for the coming year. All members are encouraged to nominate other members or themselves for the elections at next month's meeting on November 19, 1993.

There was no scheduled program and the meeting adjourned at 8:10 PM.

Respectfully submitted, —Susan V. Morse, SAC Secretary

10 Years Ago in SAC

Saguaro Astronomy Club
SACnews
 Volume 32 Issue II November 2008



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Bits and Pisces, Minutes of the October General Meeting By A.J. Crayon



After calling the meeting to order out esteemed President Steve Dodder requested visitors to introduce themselves. To this end 6 did so and were amongst the 39 others in attendance. Steve also announced his availability as the new Novice Group Chair to help anyone with astronomy questions, be they casually interested, new or experienced folks.

All others indicated they would stay for another year. So here is the, current, slate of candidates, including offices available for you to fill. President – open; Vice President – open; Treasurer – Charlie Whiting; Secretary – AJ Crayon and Properties – Jack Jones.

The treasurer's report indicated we have \$3547 in checking and \$121 cash-on-hand. He also reminded us it is time to **RENEW OUR MEMBERSHIPS**. So, please for next month fill out the form at the end of the newsletter and turn it in with a check for the appropriate amount. Please include your e-mail address and phone number.

AJ Crayon presented the 110 Best NGC award to Bob Christ. He and others are busy on the Herschel 400. Keep it up guys. Steve Coe announced a garage sale at his house to relieve himself of many goodies, both astronomy and not.

We also need a venue for the Holiday Party, scheduled for December 6th. Later Susan Trask volunteered her abode for this annual get together. Stay tuned for more details.

Dick Harshaw thanked those who showed up to do a star party for his neighborhood. There were 8 folks with scopes and about 100 folks. I hear the pizza was as delicious as the crowd. Finally, Chris Hanrahan requested help with a star party on this past October 21st to be held at Central Ave and Maryland. There were about 10 scopes and 70 folks. Thanks to all that helped make these events a success.

Upcoming events: November 11 – ATM at Paul Lind's house; November 14 – SAC Meeting; November 22 – Star Party at Antenna's site; and November 29 – Star Party at Antenna's site, be careful this is Thanksgiving weekend

For Show-n-Tell Gene Lucas gave a thorough presentation on occultation's with the model being 9 Metis that included how to use video.

This is time for year for our annual elections. To our surprise Steve Dodder, president and Jennifer Polakis, vice president, both announced they would not run for re-

election. After the break Jennifer Polakis introduced our main speaker for the evening. He was Steven Aggas with the topic *Basic Telescope Construction*. He discussed making his own 20" and 36" telescopes with emphasis on the 36-inch. He introduced many interesting, if not novel, ideas for such a behemoth. (If this is basic I wonder what is advanced? ajc)

And They Build Telescopes

By Rick Rotramel

The SAC ATM (Amateur Telescope Making) / Astro-Imaging meeting was held on Tuesday, September 18, 2018 at Paul's home shop. Attended by: Paul Lind, Chet, Kevin, Joe, Mike McDonald, Sean and me.

Kevin's 10" Mirrors Tested

Kevin Kozel brought in two 10" mirrors for Paul to test on his test stand. The first one was one made by the late telescope maker Pierre Schwaar. The focal length measured 54.5" which makes it an f/5.5 and was calculated by Paul as 1/13 wave, "a good mirror" said Paul.

The second 10" mirror was made in China and measured focal length was 47" which makes it an f/4.7 and was calculated by Paul as 1/8 wave as a "pretty good" mirror, remarked Paul.



A 10" mirror being tested by Paul, as Joe and Kevin watch

10" f/10 Meade SCT Evaluated

Sean brought in his telescope, a Meade 10" f/10 SCT to have the collimation evaluated and adjusted if necessary. The scope was set up in the drive way and aimed at the star Antares, which was about the only bright star in the clear on a partly cloudy evening.

Paul checked it out and said that the collimation was "pretty close." So, Sean was happy about that. He said he spent a while collimating it and wasn't too sure if it was right or not.



Mike, Paul, Chet, Joe, Sean and Kevin on the drive way during the evaluation of Sean's telescope collimation.

Epilogue

That's all for this month, see you next time. Remember, if you have a "need" for your telescope, bring it over to Paul Lind's shop at the next SAC ATM/Astro-Imaging meeting on the Tuesday evening before the SAC general meeting and join in on all the fun. Paul will post the date on the SAC-Forum list. Hope to see you there. It's a fun time for all.



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2018 SAC Officers and Contacts

Board Members

President David Dillmore ([mail to:president@saguaroastro.org](mailto:president@saguaroastro.org))
 Vice-President Michael Poppre ([mail to:popps@fastq.com](mailto:popps@fastq.com))
 Treasurer Lori Prause ([mail to:loriprause@gmail.com](mailto:loriprause@gmail.com))
 Secretary Andrew Perry (<mailto:secretary@saguaroastro.org>)
 Properties Robert Brewington([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:r.rotramel@cox.net](mailto:r.rotramel@cox.net))
 Webmaster Robert Brewington ([mail to:webmaster@saguaroastro.org](mailto:webmaster@saguaroastro.org))
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 Public Outreach Eric Hoag (<mailto:eric.hoag@gmail.com>)

Mail Address

SAC, 8441 W. Foothill Dr, Peoria, AZ 85383

2018 Board Mtgs:

February 2, 6:30 pm

May 4, 6:30 pm

August 24, 6:30 pm

November 16, 6:30 pm

Occultation Info

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

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

Meeting Location: Grand Canyon University is located at 3300 W. Camelback Rd, Phoenix, AZ. We meet in Engineering Building 1-202, 7:30 to 10:00 PM.



Parking: Turn into the campus from Camelback Road at 33rd Ave. and drive straight and stop at the guard station. Tell the guard you are attending the astronomy club meeting. Then, drive into parking garage and park.

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,

www.saguaroastro.org/content/SACNEWS/newsindex.htm

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

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Photographers: Tom Polakis, Michael Poppre, Rick Rotramel and Susan Trask

2013-2018 Contributors: Bob Christ, Mike Collins, AJ Crayon, 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, 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
- ~~\$13.00 Member Nametag (pinned clasp)~~
- ~~\$14.00 Member Nametag (magnetic clasp)~~

~~Nametags will be mailed to address provided below~~



Please print all information legibly

Date: ___/___/___ For the year of: 20__

Name: _____

~~Address: _____~~

~~Address: _____~~

City: _____

State: _____

Zip Code: _____

Phone: _____

Email: _____

Check here if this is updated information

Make check payable to: SAC

Please bring your completed form to a meeting or mail it with payment to:

Saguaro Astronomy Club
c/o Lori Prause, Treasurer
8441 W. Foothill Dr.
Peoria, AZ 85383

Saguaro
Astronomy Club

SAC on the Internet

*SAC has several email lists. To subscribe, simply send an email to the list address with **Subscribe** on the subject line.*

SAC-Announce@freelists.org - Sac Announce is a list used for club announcements. Traffic is usually less than six messages per month.

SAC-Forum@freelists.org - SAC Forum is a general discussion list for members to discuss the club or astronomy in general.

SAC-Board@freelists.org - SAC Board is a list for discussions of club business. If you'd like to see how the club is being run, this is the list for you.

AZ-Observing@freelists.org - AZ-Observing is not a SAC list, but many members participate. This is the list for discussions on observing around the state.

Please download the PDF version of the monthly newsletter from our website. When the newsletter is published a message will be sent to the email address provided above containing a URL to the current newsletter.

<http://www.saguaroastro.org/content/SACNEWS/newsindex.htm>