



Saguaro Astronomy Club, Phoenix, AZ

Volume 43, Issue 1
January 2019

The President's Corner

mail to: president@saguaroastro.org

What a good time to be alive if you're an amateur astronomer! The list of achievements in the last 30 years would have been incomprehensible in the 1960s.

I assume all of us have seen the "giant snowman" Ultima Thule. The *New Horizons* space craft has given us pretty good picture of it while the *Hubble Space Telescope* saw only a few pixels. I find it amazing that we can receive its 15 watt signal from 4 billion miles. I remember trying to get my 5-watt CB radio to work over a distance of 5 miles.

Our "go to" telescopes would also have been considered science fiction when I was a teenager. A small computer was the size of a very large desk. Most took up an entire room.

I must assume there have been tremendous gains in optics as well making visual observing more revealing. My eyes have always been bad and I can't really tell the difference between a \$100 and a \$900 eyepiece (nothing I see is truly in focus). When I was 17 I couldn't see a nebula through my 50mm scope.

What all this means is that the new technology has enabled our club members to accomplish things that professional astronomers did a half century ago.

Now for a little business. We are still

gathering information about a possible relocation of our club meetings if the club so chooses. I think our current location is a good one but I worry about the long walk from the remote parking lots for our older members when there is a special event at GCU. The walk from the second story of the parking lot next to Engineering 1 tires me, I don't want to think about walking from Parking lots 15 and 80 (far northwest of the campus).

Clear skies,

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, January 22: **SAC ATM/Imaging Meeting**, 6:30 PM, Paul Lind's Shop, see page 2
Friday, January 25: **SAC General Meeting**, 7:30 PM, Speaker: Paul Knauth, Topic: TBD
Saturday, February 2: **Star Party at the Antennas Site**, see page 2
Tuesday, February 19: **SAC ATM/Imaging Meeting**, 6:30 PM, Paul Lind's Shop, see page 2
Friday, February 22: **SAC Board Meeting**, 6:30 PM, in a room nearby the SAC meeting room
Friday, February 22: **SAC General Meeting**, 7:30 PM, Speaker: Jim Bell, ASU School of Earth & Space Exploration, and President of The Planetary Society, Topic: The Ultimate Interplanetary Travel Guide: A Futuristic Journey Through the Solar System
Saturday, March 30: **All Arizona Messier Marathon**, see page 2
Saturday, May 11: **Thunderbird Park Spring Public Star Party**, see page 2
Saturday, June 22-29: **Grand Canyon Star Party, North Rim**, see page 2

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



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Editor Notes



Hi Folks,

Welcome SAC members to the first issue of Saguaro Skies for the new year of 2019.

Here's hoping we all get a view of the Total Lunar Eclipse on Sunday evening, January 20th. I'll be happy to publish images here in the SAC *Imaging* feature if you get some.

The position of SAC Vice President is vacant and needs to be filled, see the duties in *Bits & Pisces*. President, David Dillmore, Secretary, Kevin Kozel & Treasurer, Paul Dickson, were elected at the past November SAC general meeting.

Best of the NGC features this month, NGC 2022, a planetary nebula in Orion.

Such-A-Deal has five ads that have been there a loong time. Check them out.

Bits & Pisces has some SAC history and also some photos taken by Susan Trask at the annual SAC Holiday Party held on December 14, 2018 at the home of Mitch & Lori Prause.

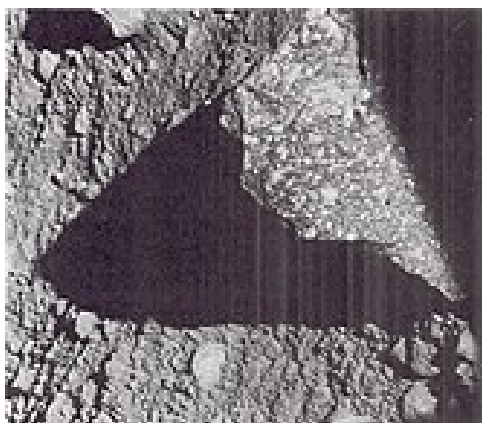
SAC Outreach lists two events to volunteer your time and telescope for the public.

Enjoy,

Rick Rotramel, Editor

Spaceflight Trivia

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



NASA

Schedule of Events 2019

SAC General Meetings

Jan 25	Feb 22 plus Board Meeting	Mar 22	Apr 12
May 10 plus Board Meeting	June 14	July 12	Aug 9 plus Board Meeting
Sept 13	Oct 11	Nov 8 plus Board Meeting	Dec ? Holiday Party

Meetings held at Grand Canyon University
3300 W. Camelback Rd. Phoenix, AZ
Engineering Building 1-202, 7:30 to 10:00 PM

ATM/Astro Imaging Meeting
Tuesday, January 22nd, 6:30 PM @ Paul Lind's Shop
210 W. Tierra Buena Lane, Phoenix, AZ

Star Party, Antennas

Saturday, Feb. 2, 2019, Sunset * Weather permitting
[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)

All Arizona Messier Marathon

Saturday March 30, 2019 + Swap Meet, Dinner & Raffle
Salome Emergency Air Strip Site
More info: <http://saguaroastro.org/all-arizona-messier-marathon/>

Outreach:

T-bird Park Spring Public Star Party

Saturday, May 11, 2019, 7-9:30 PM
More info: <http://saguaroastro.org/>

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
More info: <http://saguaroastro.org/grand-canyon-star-party/>

2019 SAC Officers

President: David Dillmore



Vice President: TBD

Treasurer: Paul Dickson



Secretary: Kevin Kozel



Properties Director & Webmaster: Robert Brewington
Photos: Susan Trask (3) and Rick Rotramel (1, of Kevin Kozel)



SAC Announcements

Remember to renew your SAC membership!
Mail in your SAC 2019 dues today.

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

Best Of The NGC:

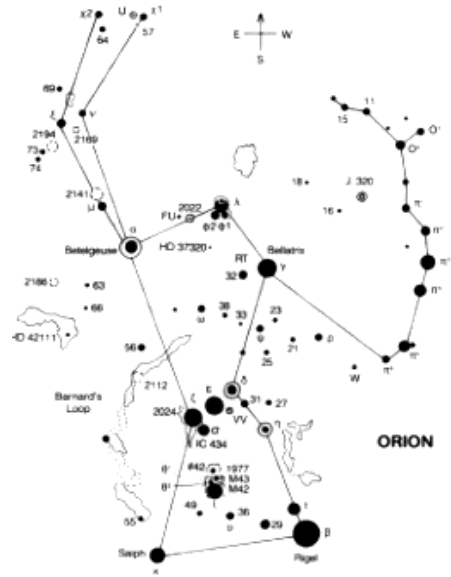
NGC 2022, Planetary Nebula in Orion

By SAC Imagers, Observers & Sketchers

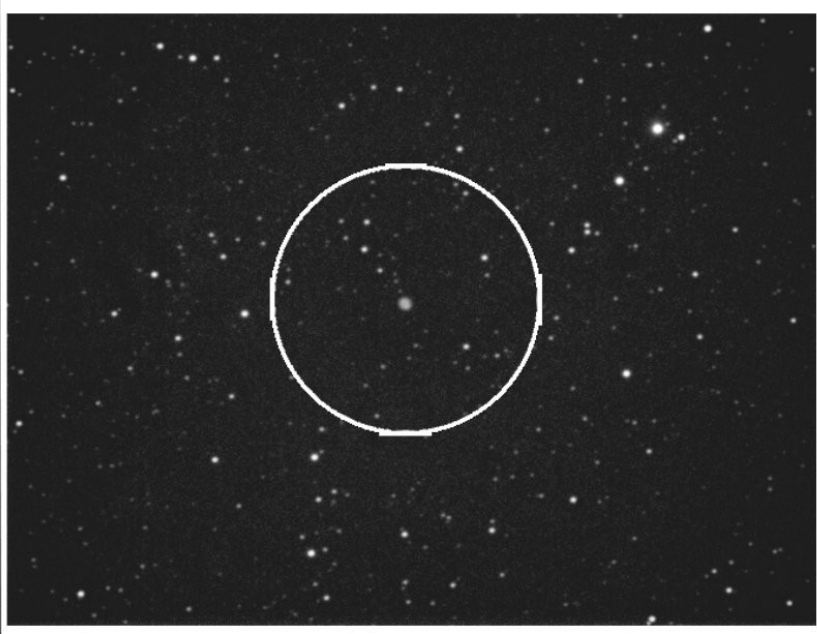


NGC2022, (HR)GB:9x30sec., 13" f4, 2x Barlow, Starlight MX716, February 2005, Gert Gottschalk

Guest Image by Gert Gottschalk



Orion Star Chart

<p>Observing Chart D. M. Douglass - Tempe, AZ http://www.AZ-DaHut.net</p> <p>Other Names:</p> <p>Observing Program: EVAC and Astronomical League and General Observations</p> <p>Telescope and Mount: Celestron EdgeHD 8" SCT Mount: Celestron CGX-L (EQ)</p> <p>CGX-L Mount Control: TheSkyX Pro All slews by "closed loop" (Plate Solved) Mount Guiding: TheSkyX Pro Guide Camera: Starlight Express Lodestar X2</p> <p>Image Capture Information: Mag (SBig): (2000/22.5) = 88 FOV = 32 x 24 Arc Min Image Scale = 1.15 ArcSec/Pixel Filter: Lumicon Deep Sky (UHC/LPR) w/ Baader IR/UV Cut</p> <p>Total # of frames (subs): 15 Frame exposure time: (min): 01 Total exposure time (min): 15 Camera: SBig ST-8300-M Camera controlled by: TheSkyX Pro Plate Solved by: TheSkyX Pro Preprocessing and stacking: CCDStack PostProcessing: Adobe Photoshop CS3</p> <p>Object Type: Plan Neb R.A. 05:42:06 DEC 09:05.2 Magnitude: 12 Size (Arc Min): 0.7 Constellation: Ori</p> <p>Sky Brightness and Weather Mags / sq ArcSec (v)18.5 or Bortle Scale: 6 Moon Ill = 28% 55 Deg F - Calm</p>	<h3 style="margin: 0;">NGC 2022</h3> <h3 style="margin: 0;">SAC - Best of NGC - Jan 2019</h3> 	<p>Observed and Imaged Date: Dec 12 2018 Site: DaHut, Tempe, AZ Elevation at Site: 1200 ft Local Time: 20:00</p>
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Best Of The NGC:

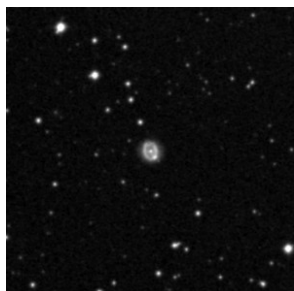
NGC 2022, Planetary Nebula in Orion

By SAC Imagers, Observers & Sketchers

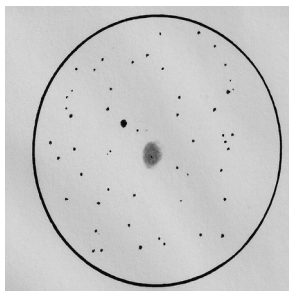
SAC Observer Steve Coe, 1949-2018

Pretty bright, pretty large, round, somewhat brighter in the middle, a nice disk at higher powers. It was spotted at 100X, the central star was never seen, just a brightening in the middle. I called the color grey in the 13", using my old 17.5" Dobsonian at 200X I observed that this planetary was greenish.

13" f5.6; Granite Wash Mt, S=7, T=9, great night, 100X - obvious dot. 220X - pretty bright, pretty small, little elongated 1.5X1 in PA 0. There is no central star at 220X. 330X - some difficult structure is seen, mostly averted vision only. The east side is consistently brighter than the west side. There are brief glimpses of a stellar spot offset to SE. All this detail is at the limit of the 13".



5' x 5'



13" f/5.6, 320x

SAC Observer Michael Poppre

Over two nights (Dec. 29 and 30, 2018), central Scottsdale and one night during the AAMM in 2017. **10" Newtonian on Dob mount.**

On Dec. 29th, I could barely make out 2022 after some searching. Could see it as a faint object definitely of a different shade than the background sky. No details visible. Using between 109x and 136x. The overall sky was very "bright." Went back to it later but could not say for certain I could find it again. I used a light pollution filter (Orion Skyglow) which helped somewhat.

On Dec. 30th, I had much better luck as the sky conditions had improved. I would say seeing and transparency were average and fainter stars were visible naked eye than the previous night. NGC 2022 now came into view much easier and was visible as a dull, grey oval shape distinct from the background sky. Using a OIII filter I could see the shape and color very well. This was at 109x. I was also using the EQ platform which helped keep it visible longer without touching the 'scope.

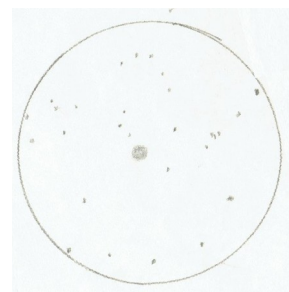
March 24, 2017 during the All AZ Messier Marathon at the "Hovatter" dark sky site. Same set up, recorded as a uniform grey-blue color with a round/oval shape at 109x. I did not record using a filter.

SAC Observer Rick Rotramel

16" f/4.4, Newtonian, 200x, Fairly bright, pretty small, slight void in the center, with a nebulous glow.



20' x 20'



16" f/4.4, 200x

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

Hello SAC imagers, observers & sketchers:

For **February**, NGC 2158 OC IN GEMINI
06 07.5 +24 06, Mag 8.6, 5.0, near M35, compact

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 **March**, NGC 3521 Sc GALAXY IN LEO,
11 05.8 -00 02, Mag 10.1, 13.5x7.0, large, bright

For **April**, NGC 2841 Sb GALAXY IN URSA MAJOR,
09 22.0 +50 59 10.5 7.4x3.5 bright edge-on

Spaceflight Trivia Answer

Surveyor 7

Mission type	Lunar lander
Operator	NASA
COSPAR ID	1968-001A
Mission duration	45 days (launch to last contact)
Spacecraft properties	
Manufacturer	Hughes Aircraft
Launch mass	1,039 kilograms (2,291 lb)
Landing mass	305.7 kilograms (674 lb) after landing
Start of mission	
Launch date	January 7, 1968, 06:30:00 UTC
Rocket	Atlas SLV-3C Centaur-D
Launch site	Cape Canaveral LC-36A
End of mission	
Last contact	February 21, 1968
Lunar lander	
Landing date	January 10, 1968, 01:05:36 UTC
Landing site	41.01°S 11.41°W

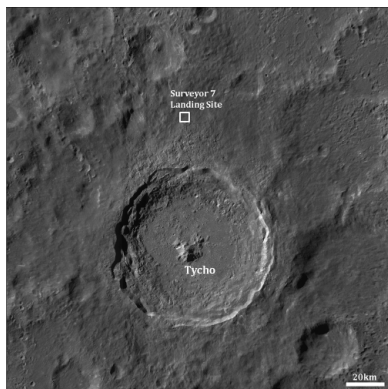
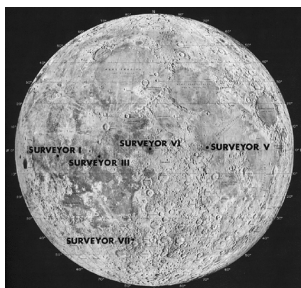
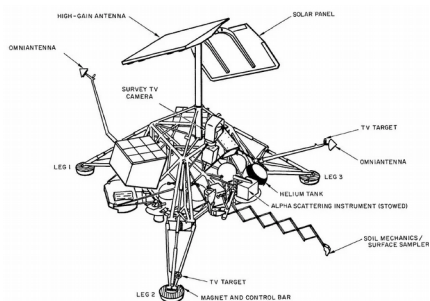
Surveyor 7 was the seventh and last lunar lander of the American unmanned Surveyor program sent to explore the surface of the Moon. A total of 21,091 pictures were transmitted to Earth.

Surveyor 7 was the fifth and final spacecraft of the Surveyor series to achieve a lunar soft landing. The objectives for this mission were to perform a lunar soft landing (in an area well removed from the maria to provide a type of terrain photography and lunar sample significantly different from those of other Surveyor missions); obtain post landing TV pictures; determine the relative abundances of chemical elements; manipulate the lunar material; obtain touchdown dynamics data; and obtain thermal and radar reflectivity data. This spacecraft was similar in design to the previous Surveyors, but it carried more scientific equipment including a television camera with polarizing filters, a surface sampler, bar magnets on two footpads, two horseshoe magnets on the surface scoop, and auxiliary mirrors. Of the auxiliary mirrors, three were used to observe areas below the spacecraft, one to provide stereoscopic views of the surface sampler area, and seven to show lunar material deposited on the spacecraft. The spacecraft landed on the lunar surface on January 10, 1968, on the outer rim of the crater Tycho. Operations of the spacecraft began shortly after the soft landing and were terminated on January 26, 1968, 80 hours after sunset. On January 20, while the craft was still in daylight, the TV camera clearly saw two laser beams aimed at it from the night side of the crescent Earth, one from Kitt Peak National Observatory, Tucson, Arizona, and the other at Table Mountain at Wrightwood, California.

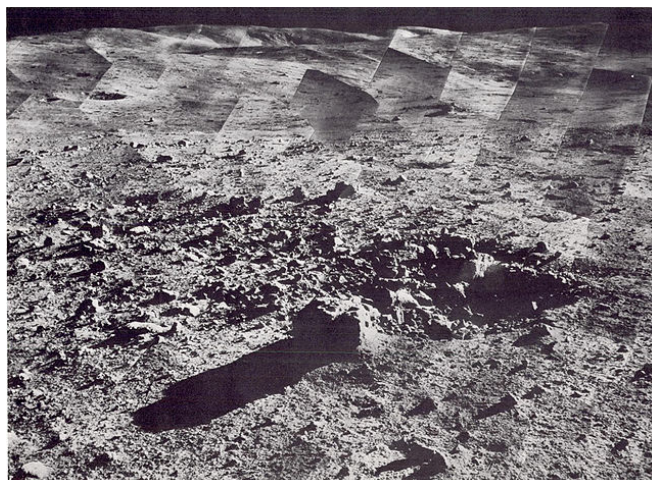
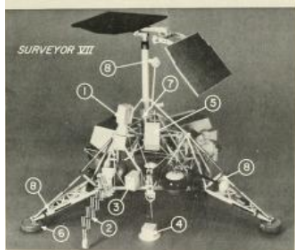
Operations on the second lunar day occurred from February 12 to 21, 1968. The mission objectives were fully satisfied by the spacecraft operations. Battery damage was suffered during the first lunar night and transmission contact was subsequently sporadic. Contact with Surveyor 7 was lost on February 21, 1968.

It was planned to be visited by the cancelled Apollo 20 mission, however Skylab and subsequent budget cuts stopped this from happening.

Photomosaic of a panorama taken by Surveyor 7 of its landing site. Surveyor 7 was the first probe to detect the faint glow on the lunar horizon after dark that is now thought to be light reflected from electrostatically levitated moon dust.



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- 3 SURFACE-SAMPLER AUXILIARY
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- 5 ALPHA-SCATTERING-INSTRUMENT ELECTRONIC COMPARTMENT
- 6 FOOTPAD MAGNET BRACKET
- 7 STEREO MIRROR
- 8 PHOTOMETRIC TARGET



Such-A-Deal

ITEMS FOR SALE

MEADE ETX-90EC 90mm Maksutov Telescope

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- #07427/#825 8 x 25mm Right Angle Viewfinder
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- Eyepieces:
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- Meade remote controller
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- Manual
- Compass
- Carrying Case
- Allen wrenches



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- Email: Saguaroastro@cox.net

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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

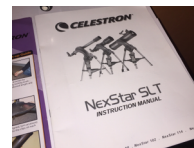
Email: oca_bob@yahoo.com

480-646-1324



Celestron Nexstar 130 SLT

- Celestron Skyportal wifi module
 - Orion Lasermate Collimator
 - Celestron 2" Universal Digital Camera Adapter
 - Meade 2X Barlow Lens
 - 25mm & 9mm Eyepieces
 - 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

Such-A-Deal

ITEMS FOR SALE

Vixen SXW Computerized, Equatorial Mount with Starbook Controller

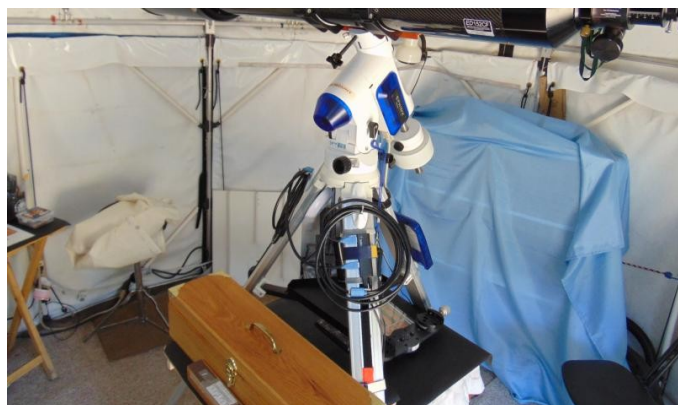
I purchased this mount with a Vixen 8" Astrograph on top of it from the estate of the past president of the Riverside Astronomical Society, the astronomical portion of that estate being sold off by RAS at a past RTMC gathering. I sold the astrograph some time ago but the mount has been my primary solar 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





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Such-A-Deal

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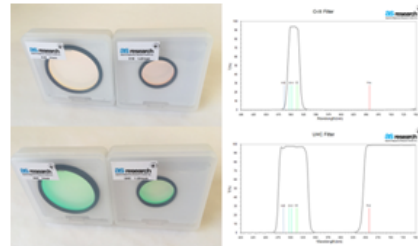
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The HyperStar-equipped ISERV telescope is now installed on the ISS!

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

At the November 16, 2018 SAC Meeting:

Election of 2019 SAC Officers, Results

President: David Dillmore
Treasurer: Paul Dickson
Secretary: Kevin Kozel

Position still open: Vice President

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:

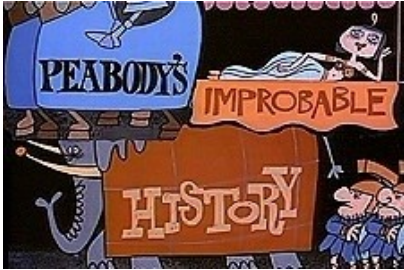
b) Duties of the Vice President shall be: The Vice President shall serve in the President's place in the event the President is absent or unable to serve for any reason. He will be in charge of club programs and both general club publicity and program publicity. He will be the one to whom other board 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.

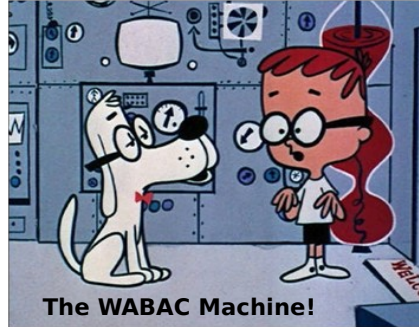




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© Peabody and Sherman, 'Rocky and Bullwinkle' Pictures



The WABAC Machine!

Where we going today Mr. Peabody?

25 Years Ago in SAC

Saguaro Astronomy Club

Metro Phoenix, Arizona

SACNEWS



March 1994 — Issue #206

Minutes of the January Meeting

President Bob Gardner opened the first meeting of 1994 promptly at 7:30 PM.

Carol Lee gave the Treasurer's report and announced that there were some 1994 Observer's Guides and name tags that were available.

The following announcements were made:

A.J. Crayon described the next Deep Sky meeting which will cover the constellations Gemini and Lupus. Also the 1994 Arizona Messier Marathon [April 9] and the Sentinel Star Party [May 7] were announced.

Rich Walker, Public Events Director, announced Public Star Parties for 1994. Two are planned for Spring [April 16 at Reach 11 and May 14 at Thunderbird Park] and one for Fall.

Turning to old business, the president opened nominations for Vice President. Tom Polakis gave an overview of the responsibilities for the office. There were no takers. The president promised to bug the membership until we get one.

Gene Lucas described a publication outlining the contributions of the late Cliff Holmes to Astronomy. His major achievement was to organize the highly popular Riverside Telescope Makers Conference. His contributions will be missed.

For the first Show-'N'-Tell, Pierre Schwaar had 2 "short features." The first was a video of the November lunar eclipse and the second a slide show. The eclipse video captured the lunar occultation of a very close double star and showed it to wink out in 2 distinct steps. Nice job Pierre!

Tom McGrath did the second Show-'N'-Tell. He showed the club some breathtaking slides from the serviced Hubble Space Telescope. Images from the Wide Field/Planetary Camera can best be described in one word — WOW! The pictures are available in GIF (Graphical Image Format) file from the internet host "seds.lpl.arizona.edu".

After the break, Tom Polakis and Chris Schur described their journeys to Chile and Australia.

Tom and Brian Skiff spent 2 weeks at Las Campanas Observatory in Chile. He described the "incredible" observing conditions and how his telescope was modified into

an 102 pound 13" dobsonian.

Chris showed slides taken from his observatory with a 50mm lens; with and without an Interference Filter. Exposure time was 3 hours and the filtered pictures showed nebulosity not seen on the other slides. His schmidt slides, from Australia, took about 3 minutes.

—A.J. Crayon, SAC Secretary

10 Years Ago in SAC

Saguaro Astronomy Club



SACnews

Volume 33 Issue 2

February 2009

VOLUME 33 ISSUE 2

SACNEWS

PAGE 3

Bits & Pisces, Minutes of January 6th, 2009 General Meeting by AJ Crayon, Secretary



The meeting was called to order by the new president, Dick Harshaw. A call for visitors and new members netted one new member. During this time a

head count was taken and netted 41 people.

Upcoming events that, probably, haven't taken place as of this writing include; Feb 6th, SAC General Meeting, Feb 14th, Star Party at Saddle Mt and Feb 21st, Star Party at Antennas. More in advance is the Grand Canyon Star Party North Rim from June 13th through the 20th. If you want to attend GCSPNR the begin your planning now for reservations.

Peter Argenziano had 2009 RAS handbooks for sale at the great price of \$20.00 and many took advantage of the offer.

Chris Hanrahan announced the Desert Foothills Astronomy Club's speaker for their January 26th meeting is Father George Coin from the Vatican Observatory.

Charlie Whiting gave the final treasurers report for 2008. He estimated we will have a short fall of about \$700.00. Several proposals were discussed to increase our revenue and will be reviewed.

For Show-n-Tell Dick Harshaw showed a view titled *Orion's Wonder* and compared it with the Tarantula Nebula.

After the break, Vice-President Chris Hanrahan introduced our speaker for the evening, Ted Dunham, from Lowell Observatory. His topic Stratospheric Observatory for Infrared Astronomy, better known as SOFIA. The telescope is mounted in a Boeing 747SP and is undergoing testing. Closed door testing was completed last year. Open door testing is expected to last about 2 years. He is also co-investigator on the Kepler mission, a NASA Discovery class mission designed to detect extrasolar terrestrial planets using transit photometry and is part of SOFIA. For more information see the web site at <http://www.sofia.usra.edu/>. Ted has spoke at several SAC meetings in the past.

Bits & Pisces

The 2018 SAC Holiday Party, part 1

December 14, 2018

Photos by Susan Trask



David Dillmore and Paul Dickson



Mitch and Lori Prause



Gail and Paul Lind



Pat and Joe Goss



The counter with desserts



Rheta Peiser

Bits & Pisces

The 2018 SAC Holiday Party, part 2

December 14, 2018

Photos by Susan Trask



Dorlynn and Lynn Blackburn



Robert Brewington, Paul D, Paul L, Rheta P. and Al Stiewing



Al Stiewing



David Dillmore, David Douglass, Bill, Lori, Joe, Pat and Paul D



Brew, Mitch & Lori's daughter, Mitch, Rick, Al, & David



Susan Trask



Michael Poppre



SAC Outreach, 2 Events:

Saturday, January 19th, 2019 Church Youth Group

STAR PARTY VOLUNTEERS NEEDED!!!

A Church Youth Group of about 40 kids has requested a star party.
Please email Lori today or tomorrow if you can come with your scope.
There is no electricity at the location.

January 19th, 2019

Set up 6:00 PM

6:30- 8:00 pm Star Party

Keith Hinrichsen, group Leader

His home 27509 N 54th, Glen , Phx 85083

Please email Lori soon! loriprause@gmail.com

Actual setup location: Yellow Star on canal bridge.



Saturday, February 9th 2019, Mesquite High School in Gilbert, Arizona

On February 9th 2019, Mesquite High School in Gilbert Arizona will be hosting its very first Space Night. Space Night is a celebration of humankind's space exploration and a spring Carnival all wrapped into one.

We are hoping to involve as much of the community as possible in our Space Night. Local astronomy clubs with telescopes, an inflatable planetarium, university programs, local aerospace engineering companies, guest speakers from Nasa, Carnival games and activities, food trucks, silent auctions, and much more.

We are reaching out to you in hopes that you would like to join us and help us make Space Night a success. We are looking for people, companies and programs that would like to be a part of this and help it grow. We want this to truly be a community event so we cannot do this without your help!

Currently we are looking for:

- Guest speakers (Space Experts with a story to tell)
- Presentation booths
- Exhibits
- Astronomy experts
- Space themed activities
- University Involvement
- School clubs and organizations
- And anything else we can cram into our Space Night!

We look forward to hearing back from you and to the success of our first Space Night!

Thank You

Mesquite High School's Aerospace Engineering

Mark Jordan

mark.jordan@gilbertschools.net



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

2019 SAC Officers and Contacts

Board Members

President David Dillmore ([mail to:president@saguaroastro.org](mailto:president@saguaroastro.org))
 Vice-President Officer Position Vacant
 Treasurer Paul Dickson ([mail to:treasurer@saguaroastro.org](mailto:treasurer@saguaroastro.org))
 Secretary Kevin Kozel (<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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 Deep Sky Kevin Kozel ([mail to:kevin.kozel@cox.net](mailto:kevin.kozel@cox.net))
 Public Outreach Eric Hoag (<mailto:eric.hoag@gmail.com>)

Mail Address

SAC, 7720 N. 36th Ave, Phoenix, AZ 85051-6401

2019 Board Mtgs:

February 22, 6:30 pm

May 10, 6:30 pm

August 9, 6:30 pm

November 8, 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

Editor: Rick Rotramel

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

2013-2019 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



Please print all information legibly

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

Name: _____

City: _____

State: _____

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:

SAC Treasurer
Paul Dickson
 7720 N. 36th Ave.
 Phoenix, AZ 85051-6401

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://saguaroastro.org/newsletter/>