

# Saguaro Astronomy Club



# SACnews

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## In Memoriam -- Wally Brown Notes by Gene Lucas (17250)

Wally J. Brown, Jr. moved to the Valley after working as a successful copy writer and creative director for a major advertising firm in New York City. Thereafter he ran his own free-lance advertising business here in Phoenix. He was a talented artist as well as a clever advertising man and effective speaker, and used those skills to help the club. He joined SAC in its early years (about 1980) and enthusiastically promoted observing skills for beginners (which was his own experience level at that time). He observed mainly with a Celestron C-8, and developed a number of clever add-ons to aid in observing, including a strap-on eyepiece and accessories case that attached to the Celestron tripod, and an electric dew eliminator (several years before the latter item became commercially available).

Wally organized and led the SAC Deep Sky Group meetings for a number of years, encouraging the practice of members collecting and sharing their observations. Beginning in 1981, Wally organized the first Messier Marathons for the club (initially at the club's observing site at Fessler's Ranch, north of town, and east of what is now the community of Anthem). He wrote and published an outstanding booklet on observing the Messier objects, illustrated with his own artwork and finder charts. He also wrote a number of articles in the Newsletter on the Messier objects, as well as brochures introducing the Club to the public. He also conducted private classes for beginners at the Wilson Camera shop (with sales director Jack Johnston) in Phoenix. From the class materials came an outstanding privately-published booklet in 1984, titled "Astro Class Clas-

sics". The booklet included lots of Wally's illustrations, with many sections devoted to taking the "mystery" out of the ways of the sky, including finder charts for all the Messier objects, notes on when the M objects were available in the sky, interesting sky fields, a list of 100 color-contrasting double stars and how to observe them, a list of three dozen select non-Messier NGC objects (with finder sketches), and so forth. (The booklet was offered to several publishers, but was never reprinted.) Later, Wally and Bob Buckner sponsored a 1,000-object Observing Award program (with ads in *Sky & Telescope*). In addition to SAC, Wally was the founder of the Arizona Darts League, and was a competitive darts player locally.

From the SAC Deep Sky Group April 1981 Messier Marathon booklet, here is a short poem authored by Wally:

"Discount the lesson  
so many learn  
from pondering the celestial sea;  
The one where countless  
wonders seen  
seed a sense of insignificant me.  
I assure you,  
the insignificant  
would sit a lesser seat than we.  
Indeed,  
wondrous significance  
attends the root ability."

Wally Brown, April 1981

Wally passed away on May 27, 2007, aged 75.



## Chew on This

By Diane K. Fisher

The Mars robotic rovers, Spirit and Opportunity, are equipped with RATs, or Rock Abrasion Tools. Their purpose is to abrade the surface patina off the Mars rocks so that the alpha x-ray spectrometer can analyze the minerals inside the rocks, rather than just on the surface.

But future robotic missions to Mars will be asked to go even further below the surface. Scrapers and corers will gather rock samples of substantial size, that, in order to be analyzed by a spectrometer, will need to be crushed into a fine powder.

lower jaw), rocks are crushed between the two plates. The jaw opening is larger toward the top and smaller towards the bottom. So when larger rocks are crushed near the top, the pieces fall down into the narrower part of the jaw, where they are crushed again. This process repeats until the rock particles are small enough to fall through a slit where the two plates are closest.

Engineers have tested the Mars Rock Crusher with Earth rocks similar to those expected to be found on Mars. One kind of rock is hematite. The rusted iron in hematite and other rocks help give Mars its nickname



*Looking down on the jaws of the Mars Rock Crusher, we see a magnetite rock get crushed into smaller and smaller particles.*

Crushing rocks on Mars? Now there's a problem that brings to mind a multitude of possible approaches: Whack them with a large hammer? Squeeze them until they explode? How about just chewing them up? It was with this latter metaphor that the planetary instrument engineers struck pay dirt—so to speak.

Thanks to NASA's Planetary Instrument Definition and Development Program, a small group of NASA engineers came up with the Mars Rock Crusher. Only six inches tall, it can chew the hardest rocks into a powder.

The Mars Rock Crusher has two metal plates that work sort of like our jaws. One plate stays still, while the other plate moves. Rocks are dropped into the jaw between the two plates. As one plate moves in and out (like a

"The Red Planet." Another kind of rock is magnetite, so-called because it is magnetic. Rocks made by volcanoes are called basalts. Some of the volcanoes on Mars may have produced basalts with a lot of a mineral called olivine. We call those olivine basalts, and the Rock Crusher chews them up nicely too.

Visit [www.jpl.nasa.gov/technology](http://www.jpl.nasa.gov/technology) to read the latest about other NASA technologies for exploring other planets and improving life on this one.

*This article was written by Diane K. Fisher and provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.*

## Bits & Pisces, Minutes of the SAC Meeting June 1, 2007

By Jennifer Polakis

In celebration of the Blue Moon, this was the 1st of two SAC meetings this month. We'll see ya'll again on June 29th.

Lindsay "Telradette" Tejera called the meeting to order by introducing her Dad the President to the podium. Wielding the gavel with precise expertise, she is truly a force to be reckoned with. I pondered the thought of our next elections. Is there a minimum age requirement for the presidency?

There were 54 present including 2 guests.

Treasurer Paul Dickson reported. Please renew your membership if you haven't. We currently have 94 paid memberships, a balanced budget, and a really great treasurer. I pondered the thought of our next elections. Can the treasurer's term limit be overridden by a majority of members?

President Tejera discussed menu options for the 30th Anniversary dinner September 29th @ The Challenger Space Center. A vote was made and the "Regional Comfort Buffet" won. President Telrad also gave the rundown on upcoming events--all of which passed at this writing with great successes including the Grand Canyon Star Party hosted by the Tucson club and "Five Mile Meadow" aka Buck Butte commandeered by our very own truly incredible amazing wonderful fabulous and so on and so forth, Dr. Professor Mr. Steve Coe, Amateur Astronomer Extraordinaire (he's no chigger) Thanks for this star party Steve!

Public Events Man, Jack Jones...Pick up your T-shirts if you haven't yet or they'll go on the chopping block at our June 29th Blue Moon Swap Meet and Show and Tell. Jack! We have never known you to be so mean! Jack also had some instruction for the Grand Canyon Star Party and thanks to him and his efforts, many SAC members participated and our annual sponsorship of the GRANDEST PIZZA PARTY ON EARTH was a success as usual.

An unabashed plug for WE COOK PIZZA AND

PASTA. Just outside the S. Rim entrance in Tusayan, they have consistently been supportive of the Grand Canyon Star Party. They have always contributed extra pizzas to SAC's effort; they make the process very simple for order and pick up; the food is always yummy and nutritious; and, if it wasn't for them, Bernie Sanden would've starved to death by the 3rd or 4th day of the star party. Thanks especially to the manager, Katrina and to the cook with the interesting mustache and to the nice guy who helped Tom carry the stacks out to the SKYGZR Pizza Delivery Service vehicle.



*Our June Speaker, Dr. Jay Holberg & his wife.*

Tomás A. Polakis, Director of Properties, loaded up 5 Show and Tells. His wife was thankful as she pondered the thought of a few short years ago and having to load reels of slides. It's no wonder former Properties Directors have quit the hobby to take on dealing Black Jack.

Steve Coe showed some "Dirt Boulevard" (Nuke) site photos, asterisms BIG G and Skiploader, Kofa site photos with Al Stewing and Richard Payne (July's Speaker!), a fake photo from the television of the Magellanic Clouds in the Mt. Palomar skies, and a detailed photo of his newest invention, the Tri-noculars, for those astronomers fortunate enough to have a 3rd eye to view those Palomar Magellanic Clouds. Telrad showed his first efforts of Lunar photography with his new Orion Starshoot imager and spoke to the great news from Ted Dunham that S.O.F.I.A.'s funding is restored. Peter Argenziano had a couple of photos of the mega mansion with a mega dome recently built just below the Chapel of the Holy Cross in Sedona. Rick Rotrammel took us for a spin on his annual video tour of the year's RTMC. Jeff Hopkins showed proceedings, equipment, and photos of really important folks like Richard Berry, Gene Lucas 12540, Arnie Hendon, Jeff Hopkins & Ron Kaitchuck from the SAS (The Society for Astronomical Sciences) event that immediately precedes RTMC in nearby Big Bear.

Gene and Jeff have just completed *\_AutoStar CCD Photometry\_*, a very well written guide to mastering an affordable way to do CCD photometry and become a con-

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# Call For Observations—Crater

By A.J. Crayon

Crater is also known as the Cup, in addition to being called the wine goblet by the Greeks. They, the Greeks, also called it the Cinerary Urn, a water bucket. Take your pick.

While deciding on what you want to call this constellation, take a look at the observations submitted by SAC members.

## NGC3511

**8" f6 Newtonian, 81X;** Rick Tejera: Seen as Bright & slightly elongated. It has slight brightening to the center, otherwise pretty evenly bright throughout.

**18" f4.5, Dobsonian, 209X;** Dan Gruber: This galaxy is elongated NNE -SSW with total size about 5' X 1'. It has a fairly bright oval core about 0.5' X 2'. The halo is dim and fades into the field. There's a mag 11 - 12 star at the N tip and a mag 12 - 13 star at the S tip.

## NGC3513

**8" f6 Newtonian, 81X;** Rick Tejera: Seen in same field as NGC 3511. It is very small, almost stellar. Not much else seen.

**18" f4.5, Dobsonian, 209X;** Dan Gruber: This galaxy is about 10 - 12' ESE of **NGC3511**. It has a circular halo about 4' in diameter with a slightly brighter, uniform core about 3' in diameter. There's a mag 12 - 13 star about 1' N.

## NGC3672

**8" f6 Newtonian, 81X;** Rick Tejera: Still seen only using averted vision but the mottling seems more pronounced. Elongation seemed to grow a bit as well, to about 3-1

**8" F6 Newtonian, 120X;** Charlie Whiting: I was able to see some of this galaxy with direct vision. It has a very narrow bright core, about 2' long and 0.5' wide. I was able to see more of the galaxy with averted vision. The halo is also very narrow, about 4' long and 1' wide. Using averted vision the bright core disappears and I see an evenly bright elliptical cloud. Since this is a type Sc galaxy, the more accurate observation is that with averted vision.

**18" f4.5, Dobsonian, 135X;** Dan Gruber: This galaxy has a small bright core about 1' X 3' surrounded by a halo about 2' X 5' elongated N - S.

## NGC3887

**8" F6 Newtonian, 38X;** Charlie Whiting: This galaxy was just barely visible. At **120X** it is an oblong, 3' by 2'. Its nucleus is a bar, aligned a little east of due north. Its

nucleus looks to be about 2' by 1'. There's a triangle of 3 faint stars flanking its northeast edge.

**8" f6 Newtonian, 81X;** Rick Tejera: Seen as Bright and round and very mottled. Averted vision brought hint of one of the spiral arms to the south.

**18" f4.5, Dobsonian, 209X;** Dan Gruber: This galaxy has a N - S elongated halo about 2' X 5', a bright core 1' X 3', and a possible stellar nucleus in the N portion of the core. The galaxy is embedded in the valley of a V-shaped asterism of 5 m 11 - 12 stars pointing to the N.

## NGC3892

**8" F6 Newtonian, 60X;** Charlie Whiting: I detected the presence of this galaxy. At **120X** it was a faint small smudge, about 2' in diameter. It was slightly elongated and aligned approximately due east. It was pretty evenly bright. Its surface brightness is supposed to be 15<sup>th</sup> mag, so I was surprised that I was able to see it at all. But it is also rated as a 12.4-mag object. I assumed that I was seeing only the core. There's a very dim star pinning its west edge to the sky.

**8" f6 Newtonian, 81X;** Rick Tejera: Easy to find as there is a curved chain of 6 stars pointing right to it. It is also seen as round, bright and suddenly brighter to the middle.

**18" f4.5, Dobsonian, 209X;** Dan Gruber: A dim round halo about 3 - 4' across surrounds a 2' bright core and a possible stellar nucleus. There's an isosceles triangle of mag 12 - 13 stars about 5' W of the galaxy.

## NGC3957

**8" F6 Newtonian, 120X;** Charlie Whiting: I could only see this galaxy with averted vision. It was very narrow, about 2' long and 0.5' wide. Aligned almost due north. It was just an elongated smear of light gray on a dark gray background. There's a very faint star due east that plays peek-a-boo.

**8" f6 Newtonian, 81X;** Rick Tejera: Very small and dim, seen only with averted vision. Could not hold; saw only in moments of steady seeing. Noted only as a small smudge, evenly bright (relatively speaking) did not note any elongation, although this is listed as about a 4-1 elongated object. Confirmed it was the correct object by matching the field.

**18" f4.5, Dobsonian, 209X;** Dan Gruber: A N - S elongated halo 1' X 4' comes to points at both ends. The 0.5' X 2' core also is elongated. There's a possible m 13 double about 10' E with 30" separation and PA 45 degrees.

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### NGC3962

**8" f6 Newtonian, 61X**; Rick Tejera: Framed by two 11<sup>th</sup> mag. stars on either side to the N & S, it was almost circular and the pretty even in brightness throughout. I did suspect with averted vision what seemed to be a dark notch one side extending to just short of the center. This gave the galaxy a slight horseshoe shape. Could not hold see this with direct vision and could only suspect with averted vision.

**8" f6 Newtonian, 81X**; Rick Tejera: Seen as Small but bright with a suddenly brighter nucleus Brighter to the N. Noted the dark notch observed last time I observed this object. I did not refer to the previous observation, so this was not something remembered to look for. Nice to know its still there :)

**8" F6 Newtonian, 38X**; Charlie Whiting: I was able to detect this galaxy as a tiny smudge due north of 2 fairly bright stars. Going to **60X** this galaxy now takes on some form. It is brighter middle and a little larger overall. At **120X** it became an ellipse-shaped gray cloud, aligned roughly north. It was evenly bright most of the time. But at certain moments it seemed to grow a bright core. Overall it is about 3' in diameter.

**16" f4.4 Newtonian**: Rick Rotramel: G - pS, pB, slightly oval, bright core, fairly bright outside the core.

**18" f4.5, Dobsonian, 209X**; Dan Gruber: A circular halo about 3' in diameter surrounds a 2' bright core. There's a possible stellar nucleus.

### NGC3981

**8" f6 Newtonian, 81X**; Rick Tejera: Seen with averted vision as a slightly elongated evenly bright smudge. Elongated about 1 1/2 -1 NNE-SSW

**8" F6 Newtonian, 120X**; Charlie Whiting: I could only glimpse this galaxy using averted vision. And even then I could hold it only momentarily. It was an elongated cloud of gray, aligned roughly due north. It is about 3' by 1.5' in extent.

**18" f4.5, Dobsonian, 209X**; Dan Gruber: This galaxy is elongated 1' X 4' N - S with tapered ends. There is a faint elongated core 0.5' X 2' and no apparent nucleus.

## Call for Observations

The constellation Serpens is divided into two parts, separated by Ophiuchus. For this session the western part will be studied and the east will be saved for another time. First for this session is the extremely faint globular cluster **Palomar 5**. To get there, it is 29' in PA 172 deg from 4 Serpentis. If you don't have a 20" or larger telescope try using a hood and averted vision while waiting for moments of good seeing. Don't forget that lightly tapping the telescope will help bring out the

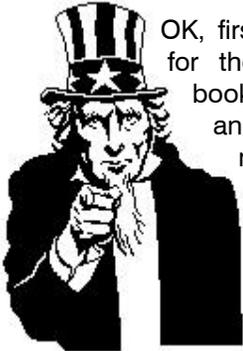
brighter stars. It probably won't have the characteristics of a globular, but a few faint stars, that come and go, should be good enough. After this gem the incomparable **M 5** awaits. There shouldn't be a problem locating and observing. If it is visible in your finder, please include that in your comments. After these two globular clusters it is all galaxies and we begin with the barred spiral **NGC5921**. At mag 10.8 can you discern the bar, even if it is an elongated, slightly brighter middle? Next, slew on over to **NGC5957**. This 11.7 mag galaxy has an NGC designation of cometary. Do you agree? The next hop is to **NGC5962**, an 11.3 mag late type spiral galaxy. Slew north about 4 deg and a little to the west is **NGC5970**; a mag 11.5 late type barred spiral galaxy. Be careful not to let the 7th mag stars interfere with your observation. The last two galaxies are close to the eastern edge of this part of the constellation. Start with **NGC6070**, an 11.8 mag that is joined by some pretty faint galaxies; but about all we will see is the elongation. **NGC6118** is the last, at magnitude 11.7. It is the more elongated of the last two and, perhaps, has the lowest surface brightness. So don't expect much.

In order to stay a step or two ahead of the summer monsoon the next constellation in the monthly sequence will be covered in this column. It isn't clear what I'm getting myself into but I'd like for us to do an observing sequence on the *Table of Scorpius*. <http://www.schursastrophotography.com/xtiastro/ic4628.html> This is a magnificent section of this constellation that stands out to the naked eye, is an excellent binocular area, yet to review with a telescope is a very rewarding experience. While there are a number of open clusters there are some interesting dark nebulae involved that will add some variety to the process. **NGC6242**, to the northern part of this section of sky, will be the beginning. It is bright and large so should be easily found. Next is **Trumpler 24** about a degree in size and containing some 200 stars. Involved in its northern part is the bright nebula **IC 4628**, it to has several stars involved that belong to the cluster. Just to the west is the rather elongated dark nebula **Barnard 48**. The SAC database indicates a UHC brings out the bright nebula. Try this and let us know your results. Next slew your telescope west, to **Collinder 316**, which almost involves all of Tr. 24. This cluster is about 1.5 degrees in size, but is rather scattered about. Just to the west is the cluster **NGC6227** that is 18', large and rich. Back in 1985 it was non-existent and is with SIMBAD, yet NED gave coordinates as 16h 51m 33.54s and -41 13' 50.2" which looks to be a 5<sup>th</sup> magnitude star in a rich Milky Way Field. Are there enough stars in an 18' area to qualify as an open cluster? Before leaving this area

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## President's Corner

### By Rick Tejera



OK, first up, plans are progressing nicely for the 30th anniversary dinner. We're booked for both the Challenger Center and the caterers. At the last meeting, menu choices were discussed and the Region Comfort Buffet was the choice. I'll have the details of the menu out for final choices of Entrée's at the July meeting.

Now for the difficult part. At the last meeting, I was asked why members are being asked to pay \$25.00 and the club is not funding the entire event. The question itself is valid, the problem was the timing. Frankly, this is a question that should've been asked back in February, when we first started planning the event. As you know I passed out a survey and published the same survey in the March issue of SACnews. From the 30 or so responses I received the majority indicated that they were willing to pay in the \$25.00 range. I only had 4 responses indicated a preference for the club to fund the entire event. At the April meeting I took a hands up poll of the survey questions and got pretty much the same input. It was based on this that I worked out the costs and presented that to the membership.

Where I'm going here is that if you have concerns about what's happening, don't sit in the back and gripe about it at the break. I need to know. The board needs to know. While the office of president gives me certain authority and decision making powers, I'm fully aware that I am not the "Die Eisen Faust" of the club. I've been diligent about making sure the decisions I make or recommend to the board are made with the maximum input

from the members. I want to make sure the club is heading in the direction YOU want. So I ask please do not let things stew and build up to a boiling point. If I don't know what you want, I can't act on those desires.

OK, Now on to more pleasant topics. First up is our fourth club Asteroid. David Healy recently named the 146268th little rock "Jennipolakis" Jennifer joins her husband Tom (4078, Polakis), The late Pierre Schwaar (13006 Schwaar), Gene Lucas (17250, Genelucas) in perpetual orbit between Mars & Jupiter. On June 27th, Jennifer will pass by Zeta Gem. She'll be kinda hard to find though, She's only gonna be at Mag. 22.3. I'm really resisting the Dim jokes here. Congratulations Jennifer.

Don't forget that we have two, count 'em two chances to get out this coming month. The regular Star party at Cherry R and the DOTM star party the 14th, also at Cherry Rd. A quick note, the Cherry II site that we've been using has suffered the same problem that the original site had last year. The roads has been graded so that the little meadow is inaccessible. Fortunately, the original site has once again become accessible so there we shall go. Please remember to close the gate behind you. You may also want to bring a shovel to clear the area of cow pies. Other than that, the site is just as good as I remember it. Hopefully, the extra observing sessions will help balance out Meteora and her monsoons.

Until next month,  
Clear Skies  
Rick

## Monthly Trivia Question

OK here' the 2nd of 3 question about the Original Mercury 7 Astronauts:

Who was the only Mercury 7 astronaut to walk on the moon?

Last Months Answer:

Which of the Original Mercury 7 Astronauts Spent the least time in Space?

Malcolm Scott Carpenter (4 hr 56m). Due to malfunctions in the automatic event sequencer had to fire his retro rockets manually. Due to misalignment in Yaw and a delay in firing, his splashdown was 200miles off target. Debate continues to this day as to whether the errors were his fault. Due to this, he never flew in space again. He later spent 28 days on the ocean floor in SEALAB II.

On the other side of the question, wally Schirra spent the most time in Space of the Original Mercury 7 (12d 7h 12m), Aboard MA-8, Gemini VI-A and Apollo 7.

# August 2007

| SUN  | MON  | TUE  | WED | THU | FRI                            | SAT                                 |
|------|------|------|-----|-----|--------------------------------|-------------------------------------|
|      |      |      | 1   | 2   | 3                              | 4                                   |
| 5 ☾  | 6    | 7    | 8   | 9   | 10                             | 11<br>SAC Star Party,<br>Cherry Rd. |
| 12 ● | 13   | 14   | 15  | 16  | 17                             | 18<br>DTOM Star<br>Party, Cherry II |
| 19   | 20 ☽ | 21   | 22  | 23  | 24<br>SAC Meeting,<br>GCU 1930 | 25                                  |
| 26   | 27   | 28 ○ | 29  | 30  | 31                             |                                     |

## Schedule of Events for August 2007

|           |  |
|-----------|--|
| Aug. 5th  | Moon at 3rd Quarter at 1420mst.  |
| Aug. 11th | SAC Star Party at Cherry II, Sunset 1920 End Ast. Twilight 2125, Moonrise 0140.                          |
| Aug. 12th | Moon is new at 0504mst.  |
| Aug. 18th | DTOM Star Party at Cherry II, Sunset 1942, , Ast. Twilight 2044 Moonset 2157, 0421 Ast. Twilight begins. |
| Aug. 20th | Moon at first Quarter at 1654mst   |
| Aug. 24th | SAC General Meeting at Grand Canyon University at 1930, Speaker: TBA                                     |
| Aug. 28th | Moon is full at 0335mst.   |

## Future Planning

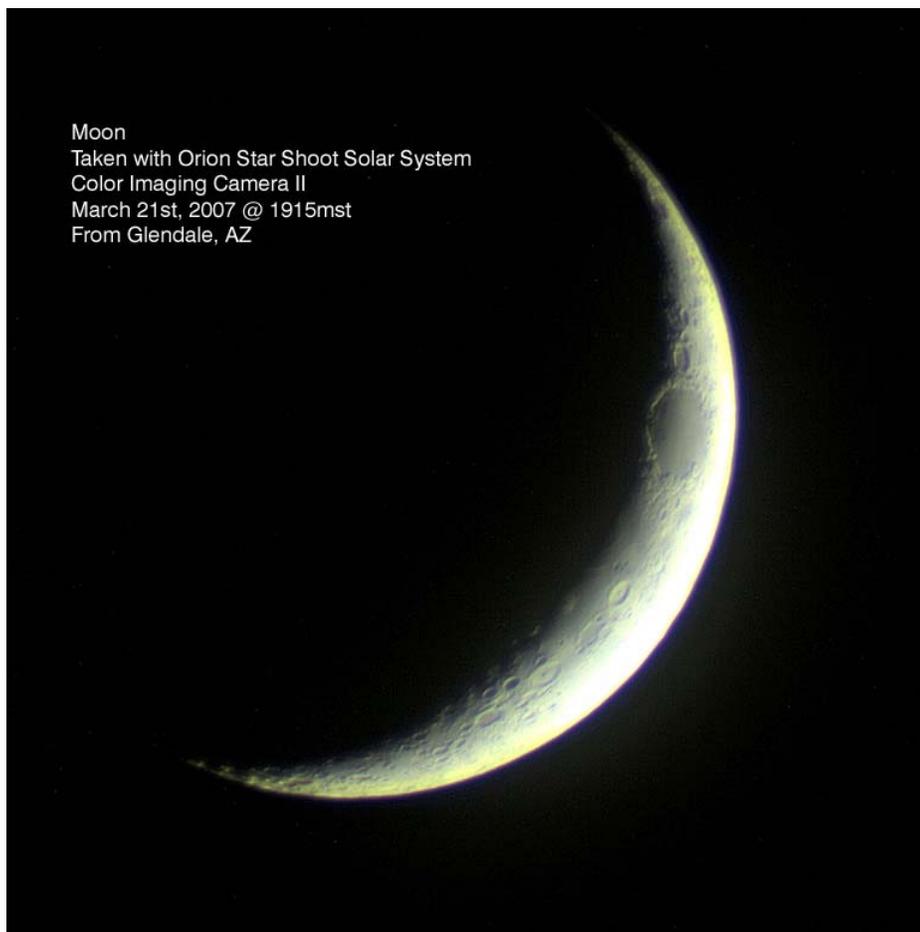
|                  |   |
|------------------|---|
| Sept. 29th, 2007 | SAC 30th Anniversary Dinner, Challenger Space Center  |
| Oct. 12th -13th  | All Arizona star Party, Got to <a href="http://www.eastvalleyastronomy.org">www.eastvalleyastronomy.org</a> for more info |
| Nov. 9th-10th    | Sentinel Schwaar Stargaze.  |

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slew south to **NGC6231**, a cluster we have already done, but not as part of this kind of observing sequence. This is a 2<sup>nd</sup> magnitude cluster and should be visible to the naked eye. Can you see it? Continue your slew south and take a quick look at zeta 1 and zeta 2 area as there are some pretty bright stars there. Finally slew farther south to **SL 17**, another dark nebula elongated in a somewhat northern position. The SL references the dark nebula catalog of Sandqvist and Lindroos.

For October let's take on Lyra for the first time. We are all aware of the gem there, but there's more to the Lyre than the Ring Nebula. So, before getting there let's check what else there is to offer and start from the northern region. First up, in the same 15' field of view will be the galaxies **NGC6702** and **NGC6703**. The former will be the more difficult of the two, at mag 12.2 and about half the size. For the next galaxy, slew to **NGC6646**. This one is about 2° northwest from Vega. For a change, go to the yellow and blue double star **Struve 525**. Reminds you of Albiero, doesn't it? Reason this was selected is due to the proximity to next

selection, but I wanted you to stop and smell, I mean view, this one because it gets passed by on the way to the magnificent *Ring Nebula*. Yes, just to make it clear **M57** is next on the list. There has been much discussion amongst amateurs and professionals about the visibility of its central star. It is considered variable from 14<sup>th</sup> to 16<sup>th</sup> mag and, regardless, you will need a clear transparent sky for any chance at seeing this one. Let us know if you see it – a simple yes or no should do. Before ending there are two more observations on the list. **NGC6765** wonder of all wonders this is another planetary nebula. Yes its magnitude is listed at near 13<sup>th</sup>, but don't let this stop you as it should be, at least, stellar in an 8". The NGC description in the SAC database lists it as elongated. Does this show up in larger telescopes? After this you will understand why it is a little known planetary. The final selection is the famous variable star **RR Lyrae** [http://en.wikipedia.org/wiki/RR\\_Lyrae\\_variable](http://en.wikipedia.org/wiki/RR_Lyrae_variable). Its fame comes from being called a standard candle that is its absolute magnitude has been well determined. From knowledge of the absolute and visual magnitudes they are able to determine its distance. Pretty neat!



Moon  
Taken with Orion Star Shoot Solar System  
Color Imaging Camera II  
March 21st, 2007 @ 1915mst  
From Glendale, AZ

*The moon, taken through the Orion Star Shoot Solar System Color Imager. The image was taken through my ETX60.  
Image by Rick Tejera*

## "About a Marathon" By Wally Brown

Why a Messier Marathon? It doesn't add greatly to knowledge of the skies, contemplation and enjoyment of the objects viewed -- the pace is generally too fast for that. It has minimal social value -- a lesser but commonly appreciated feature of regular star parties -- because you're too busy to socialize for the most part. It's not the most practical avenue to regular awards (as the SAC Deepsky Group Certificate of 75 and 110 plaque) -- you need detailed observation records for those and that's difficult (but not impossible) in a Marathon mode.

A Messier Marathon, however, is a fine workout of equipment and technique that hones skills for beginner and pro alike. It is a challenge to those skills that strikes many as irresistible. The achievement of successfully

meeting that challenge has not only personal satisfaction as its reward, but increased confidence as well. We sincerely hope such increased confidence will spur increased activity and achievement for all Marathoners in the year[s] ahead. And that, perhaps, is the ultimate answer to the question with which we began.

Wally Brown -- April 1981.

*(Contributor Note: Well and truly stated, Wally, and sufficient enough reason to continue the tradition (26 years later)! Gene Lucas (17250))*

*Reprinted from the April 1981 SAC Deep Sky Group Messier Marathon booklet*

*(Continued from page 3)*

tributer to scientific investigation from the comfort of your own back yard. The price for SAC members is \$19.95 (normally \$24.95) and includes two genuine autographs of two important attendees of the 2007 Society for Astronomical Science conference.

After intermission, we settled into a great talk by **Dr. Jay Holmberg**, Sr. Scientist at U of A's Lunar and Planetary Dept. His talk was entitled SIRIUS: THE BIOGRAPHY OF A STAR. A fascinating account that covered ~2000 years from Ptolemy's Almagest to the January 31, 1862 discovery by Alvan Clark's son, Alvan Graham Clark of Sirius B--"Father Sirius has a companion" and onto today's accuracy of Sirius B's serious stats from the HST: V mag 8.44/ 1 M<sub>o</sub> crammed into .00025 R<sub>o</sub>/Temp: 25,193 ± 37 K/Age=123ma(the white dwarf cooling age) Here is a link to the HST's photo [http://en.wikipedia.org/wiki/Image:Sirius\\_A\\_and\\_B\\_Hubble\\_photo.jpg](http://en.wikipedia.org/wiki/Image:Sirius_A_and_B_Hubble_photo.jpg) and keep checking Sirius when it comes around--it's still in it's opening up stage and pretty soon we'll be able to drive a truck (Matchbook/Hotwheels size) through Sirius A and B.

Afterward, 22 homeless astronomers met up at JB's for some bread and water and continued astro-talk.

Which brings me to last meeting's notes which weren't done as I ponder the process of impeaching the Secretary halfway through her 1st term.

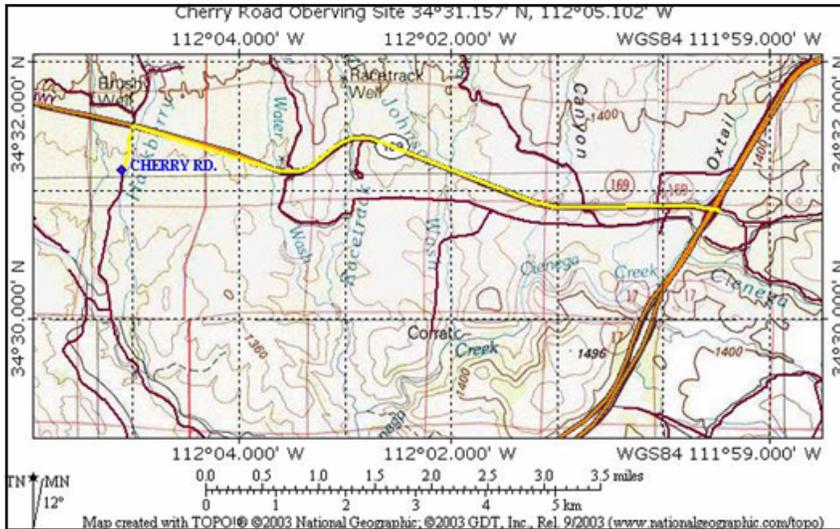
### BITS and Equuleus Small Minutes from SAC's May 4, 2007 Meeting

Fifty-five folks showed up including 3 guests. Club members can now renew Sky & Tel directly--new subscriptions still must go through SAC. Jennifer Polakis had an editorial in May S&T refuting an article that mentioned SAC renames known astro-objects. Jack Jones received a hefty Thanks Thunderbird Park for our Public Star Party there. AJ Crayon and Jack Jones received nice certificates from The Carl Sagan Astronomic Society Hermosillo Sonora Mexico for the "facilities granted to Dr. Salvador Aguirre and CP Raul Madero at the 2007 MM. Steve Dodder redefines Pierre's center of gravity in yet another attempt to refurb the GREAT BINO CHAIR. A "Rotrammel Spin" of the 2007 MM. And a great talk by **Dr. Professor Phil Christensen** of ASU, former geologist turned Martian. "MARS: NEW VIEWS OF A COMPLEX PLANET" Early in Phil's career Mars was Red White and Dark stuff and has now branched out into quartz, Feldspar, Pyroxene, Hornblende, Clay, Olivine, Calcite etc with lakes and gullies and melting snow 35,000' canyons "Marsquake" faults, 80,000' volcano, subsurface ice, geysers, etc. with the discoveries made possible by ASU's world renowned Mars Department--many new Mars' discoveries in the works...stay tuned.

Afterward 20 NHL/Astro enthusiasts met up at JB's to discuss the Stanley Cup Playoffs.

# SAC Meeting and Observing Sites

## Cherry Rd. Star Parties



Take I-17 north to the Cherry Rd exit. Turn west (left) and continue on Cherry Rd for about 5 miles. Turn Left on the dirt road just past the sign that says Cherry 6. Note you turn in the direction Opposite the arrow on the sign. The site is 3/4 down the road on the left.

## Dark of the Moon Star Parties

| <i>Date</i>           | <i>Sunset</i> | <i>Moonset</i> | <i>Twilight</i> | <i>Location</i>      |
|-----------------------|---------------|----------------|-----------------|----------------------|
| <i>May 19th</i>       | <i>1931</i>   | <i>2311</i>    | <i>2109</i>     | <i>Antennas</i>      |
| <i>June 16th</i>      | <i>1941</i>   | <i>2142</i>    | <i>2127</i>     | <i>5 Mile Meadow</i> |
| <i>July 14th</i>      | <i>1942</i>   | <i>2019</i>    | <i>2124</i>     | <i>Cherry Road</i>   |
| <i>August 18th</i>    | <i>1913</i>   | <i>2157</i>    | <i>2044</i>     | <i>Cherry Road</i>   |
| <i>September 15th</i> | <i>1835</i>   | <i>2028</i>    | <i>2000</i>     | <i>Cherry Road</i>   |
| <i>October 13th</i>   | <i>1804</i>   | <i>1911</i>    | <i>1926</i>     | <i>Antennas</i>      |
| <i>November 10th</i>  | <i>1735</i>   | <i>1749</i>    | <i>1900</i>     | <i>Antennas</i>      |
| <i>December 8th</i>   | <i>1726</i>   | —              | <i>1855</i>     | <i>Antennas</i>      |

## SAC 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%.

- \$28.00 Individual Membership
- \$42.00 Family Membership
- \$14.00 Newsletter Only
- \$10.50 Nametag for members, Pinned Clasp
- \$12.50 Nametag for members, Magnetic Clasp  
(will be mailed to address below)

### Magazine Subscription Services

The following magazines are available at a discount to club members. Check the magazines you wish to subscribe to or renew, and pay the club treasurer. Please allow 3-4 months for the order to be processed.

- Sky & Telescope \$33.00/yr
- Astronomy \$34.00/yr
- Astronomy \$60.00 for 2 Years

Please Print

**Make Check Payable to : SAC**

**Name:** \_\_\_\_\_

**Bring completed form to a meeting or mail it with your remittance to:**

**Address:** \_\_\_\_\_

**SAC Treasurer  
c/o Paul Dickson  
7714 N 36th Ave  
Phoenix, AZ 85051-6401**

**City:** \_\_\_\_\_ **St:** \_\_\_\_\_ **Zip:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

Check here if this is an update of information already on file.

**E-Mail:** \_\_\_\_\_

### SAC on the Internet

**SAC has several E-mail mailing lists. To subscribe, send an email to the email address and put Subscribe in the subject box.**

**SAC-Announce@freelists.org:** SAC-Announce is a mailing list for just club announcements. Typically 3-5 messages per month.

**SAC-Forum@freelists.org:** SAC-Forum is a general discussion mailing list. Topics should be related to Astronomy or SAC

**SAC-Board@freelists.org:** SAC-Board is a mailing list for discussions of club business. If you'd like to see how the club is run (or not run), or have a question about the club, this is the list to read. Typically month to month matters are discussed.

**AZ-Observing@freelists.org:** AZ-Observing while not a Sac list, is well attended by SAC members. This is the list to with observing places around Arizona. Find out where people are going and what they saw.

### Printed Newsletter

Sac can save a lot of money if you download the PDF version of the newsletter. PDF files are readable by both PC's and Macs. When the newsletter is published, a message will be sent to the address indicated above with the URL of the newsletter. Check the box below if you don't have access to the internet or if your prefer a printed copy.

Please send me a hard Copy of the newsletter

# SAGUARO ASTRONOMY CLUB

July 2007

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Email: [newsletter@saguaroastr.org](mailto:newsletter@saguaroastr.org)



*Videmus Stellae*



## SAC Schedule of Events 2007

### SAC Meetings

|                    |                          |
|--------------------|--------------------------|
| January 5th, 2007  | July 27th, 2007          |
| February 2nd, 2007 | <b>August 24th, 2007</b> |
| March 2nd, 2007    | September 28th, 2007     |
| April 6th, 2007    | October 26th, 2007       |
| May 4th, 2007      | November 16th, 2007      |
| June 1st, 2007     | December, 2007           |
| June 29th, 2007    | Holiday Party-TBA        |

### SAC Star Parties

| Date                  | Sunset      | Astronomical<br>Twilight Ends | Moonrise    | Site     |
|-----------------------|-------------|-------------------------------|-------------|----------|
| Jan 13th, 2007        | 1725        | 1854                          | 0336        | F        |
| Feb 10th, 2007        | 1811        | 1935                          | 0223        | F        |
| Mar 10th, 2007        | 1835        | 1958                          | 0112        | F        |
| Apr 14th, 2007        | 1901        | 2029                          | 0447        | F        |
| May 12th, 2007        | 1927        | 2059                          | 0311        | C        |
| Jun 9th, 2007         | 1940        | 2125                          | 0140        | C        |
| Jul 7th, 2007         | 1944        | 2128                          | 0013        | C        |
| <b>Aug 11th, 2007</b> | <b>1920</b> | <b>2054</b>                   | <b>0522</b> | <b>C</b> |
| Sep 8th, 2007         | 1845        | 2011                          | 0415        | C        |
| Oct 6th, 2007         | 1809        | 1932                          | 0314        | F        |
| Nov 3rd, 2007         | 1737        | 1902                          | 0207        | F        |
| Dec 1st, 2007         | 1723        | 1851                          | 0057        | F        |

### Future Planning

|                         |  |
|-------------------------|--|
| June 15th-16th, 2007    | 5 Mile Meadow Star Party                       |
| <b>Sept. 29th, 2007</b> | <b>SAC 30th Anniversary Celebration Dinner</b> |
| November 9th-10th, 2007 | Sentinel Schwaar Stargaze                      |

F= Flat Iron; C= Cherry Road