



Sacnews

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SAC Officers

President: David Frederiksen
623-979-0513
david.frederiksen@gmail.com

Vice President: Diane Hope
602-431-6959
di.hope@asu.edu

Treasurer:
Paul Dickson
sac-treasurer@pobox.com

Secretary: A. J. Crayon
602-938-3277
Acrayon@mindspring.com

Properties: Rich Walker
rhwalker@mindspring.com
623-780-1386

Public Events:
Adam Sunshine
623-780-1386
Asunshine@mindspring.com

Deep Sky Group: A. J. Crayon
602-938-3277

Acrayon@mindspring.com
SACNEWS Editor:
Rick Tejera, 623-572-0713
SaguaroAstro@aol.com

ATM Subgroup: Thad Robosson
602-527-0455

Starstarcraacker@qwest.net

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AstroByte– Freeware You Can Use A Product Review by Rick Tejera

For the most part, I've found that Freeware is usually worth the price you pay. I'm usually glad I didn't pay anything for it, because I'd feel pretty ripped off if had. However, as with most rules, there has to be an exception. In this case Astrobyte is that exception. Astrobyte is an astronomical planning & logging suite that offers a high level of utility with ease of use. For most amateur astronomers, this program would be all they ever needed to plan their observing sessions and observation records. Similar commercial programs can start at \$50.00, yet Astrobyte is free for the download.

Program author Ron Rueter, of Indiana has used the SAC database v7.2 as the basis for the program. Also included are suites for the Sac double star database and an extensive solar system database. An empty database is included for user-defined objects such as supernovae, new comets, etc.

The heart of the program is the SAC database suite. All 10,000 plus objects can be searched and sorted by many different criteria. You can either use the simple search engine if you know what you're looking for. More likely, though, you would use the advanced search to define an observing list for a nights observing. You can define the search by object type, size, magnitude, constellation, RA, Dec or catalogue. You can combine any of these parameters to narrow your search to a reasonable sized list that fits the capabilities of your equipment. For instance if you like to generate a list of open clusters with nebulosity & planetary nebulae brighter

than 13th magnitude in Cygnus, Scutum & Sagittarius, In the Hershel 400, Astrobyte can handle it. Once generated, you can sort the retrieved records by RA or Constellation. Print out can be either a listing of all objects retrieved, including all pertinent data for the objects, or you can print observing records for each object.

The retrieved data can be manipulated into various reports and worksheets. The nicest feature here is the ability to print out a worksheet for your planned observing list. These worksheets contain space for all pertinent information (most already filled in), including your own notes and two drawing circles per object. Perfect for taking to the eyepiece.

After an observing session you can then enter your observations for each object observed. To speed things up there is a copy function that enables you to paste repeated info into multiple observations. Future searches can exclude objects marked as observed although this can be overridden if you want to re-observe something. The observed item report prints in a very neat and professional looking report, worthy of handing in to A. J. The only limitation as of now is the inability to record multiple observations for the same object. I've just appended the first observation with any changes in date, instrument. Etc. and then added my new record. Ron has indicated that the next release will have the ability to record multiple observations.

There are additional suites for recording your observations in the Messier, SAC

(Continued on page 2)

(Continued from page 1)

110 best of the NGC SAC 110 best double stars, and solar system objects, along with a user defined database for objects not in any other catalogues or newly discovered objects. One thing I noticed using the Messier suite is that observations entered directly into the Messier suite don't show up in the SAC database suite. However, if you enter your observations in the SAC database, they WILL appear in the Messier Suite. The same holds true for the SAC 110 Suite.

These minor points aside, Astrobyte is a very complete, usable piece of software. If you've been put off by the price of commercial planning software, your wait is over. Astrobyte is definitely the exception to the rule.

If you try Astrobyte and like it, please let the author know. Also if there are any features you'd like to see added, let him know as well. Ron can be reached through the Astrobyte website listed below.

Astrobyte is available on the New SAC CD (See Steve Coe), or directly from the author at: www.mainbyte.com/astrobyte.

Astrobyte Screen Shots

This is the Advanced Search dialogue from the SAC Database Suite. The selections shown are the same as in the example in the article. You can also filter out object that either been observed or are yet to be observed, or pick a Sky Atlas 2000.0 or Uranometria Chart. Records retrieved can then be printed into a variety of useful reports.

The Messier logging form. This form includes a star chart for each object, along with a detailed description. Objects can be sorted by Messier Number, Or month best placed for viewing. The lower right section is where you record your observations. Space is included for recording seeing conditions, Instrument & Magnification, Location & Time, and your own personal observation notes.

[Click Here to Download Astrobyte](#)

A Story Above Your Heads

Coma Berenice

By Mark Klosinski

The winter sky constellations are moving out of the way to make room for the springtime constellations. One of those springtime constellations that missed the original 48 of the Catasterismi is Coma Berenice. This group of stars is mentioned in the Catasterismi, but it is recognized as being the tuft of the tail of Leo the lion. R. H. Allen states that it wasn't until 1590 that Tycho Brahe set the catalogues straight and gave the name of Coma Berenice to this tight grouping of rather dim stars. I have always found this area of the sky to be particularly interesting for binoculars. An interesting cluster of stars is identified not by a Messier or NGC number, but by a catalog listing of Melotte 111.

The story of Coma Berenice, or Berenice's Hair goes something like this. In ancient Egypt, a pharaoh named Ptolemy took the daughter of the King of Cyrene, Berenice, as his wife. Not being from North Africa, Berenice's hair was blonde and unusual in these parts. Therefore, she became quite famous for her long beautiful blonde hair. It wasn't long after these two were married that Ptolemy had to set off to war against the Syrians. Berenice was very much in love with Ptolemy. This greatly upset Berenice, and she went to the temple to pray. Berenice prayed to the god's in hopes that they would see the safe return of her beloved Ptolemy. In returned for his safe return, Berenice vowed to sacrifice

her beautiful long blonde hair if they would see Ptolemy's safe return home.

Time pasted slowly as the war raged on. Eventually, news reached Berenice that Ptolemy and Egyptians were victorious, and that Ptolemy was headed home. True to her vows to the gods, Berenice shaved her head of her beautiful locks, and went to the temple to place them on the alter. When Ptolemy finally reached home, he was shocked to see that Berenice had lost her hair. But that didn't matter at the moment as they both rejoiced in their reunion. Ptolemy finally asked about her hair, to which Berenice told him that she had promised to sacrifice her hair upon his safe return home. Ptolemy suggested that they both go to the temple to see her hair one last time. Upon entering the temple, they found the hair was missing. Ptolemy was furious. He immediately approached one of the priests and demanded the return of the hair. The priest was flustered and didn't know anything about the hair or what to say to the victorious pharaoh. The temple astronomer over heard Ptolemy's rage, and intervened on the priest's behalf. The astronomer explained to Ptolemy that the gods took the hair, and transformed them into the constellation that we know as Coma Berenice.

Novice Group Meeting

When & Where: Saturday, May 4th, Cherry Rd. Site

Subject: Beginning Astrophotography

The novice group session originally scheduled for April 6th, has been rescheduled for the May 4th star party at Cherry Rd. Please note the site has also been moved to our northern site to beat the heat (See directions on page 13). The subject will be: Beginning Astrophotography. Steve Coe will answer your questions about getting into this fascinating part of the hobby. Different types of photography will be discussed along with the equipment required and various techniques.

As a bonus, Rick Tejera will bring his Scotch Mount and we'll have a roll of film ready to go. Interested folks will get the chance to try their hand at taking a wide field guided photo. Rick will demonstrate aligning the mount (with help from the group) and then each person

participating will frame a shot and guide it through its exposure. We'll get the film developed and give you your first astrophoto at the next meeting.

This session promises to be a lot of fun and a good way for folks to lose the fear of astrophotography. If you've ever wanted to try your hand at astrophotography, but didn't know how to get started, here's a perfect opportunity.

(Ed Note: At the time of this writing, I do plan on being at the Novice group. However, If my beloved Coyotes make it into the second round of playoffs, I may not make it if a game is schedule for that date. I'll bring the Scotch Mount to the next star party if this occurs. I'll post info on SAC-Announce as soon as I know.)

Fuzzy Spot, Leo

By Ken Reeves

With the winter Milky Way setting in the west, the galaxy rich spring skies are rising. A definite sign of this is the presence of Leo overhead. Bright Regulus at the base of the sickle, which forms the head, is easy to spot, the triangle of stars to the east forms the hind, and a few fainter stars to the south complete the legs making a whole lion.

In Leo, there are a wide variety of galaxies ranging from the relatively easy Messier objects to some very nearby but faint dwarf galaxies. All of the observations here were made in my 10" F4.5 scope.

NGC 2903 (09 32.2 +21 29): This large face-on spiral galaxy is better than some of the Messier objects. It is very bright, large, elongated N/S, has a bright middle and a non-stellar nucleus. Using averted vision, a possible clockwise spiral structure was seen. Some mottling was seen, using a UHC filter helped bring out some of the brighter knots.

NGC 3351 (10 44.0 +11 42): This is the first Messier object in Leo, M 95. I saw it as somewhat bright, fairly large, with a much brighter middle and a non-stellar nucleus. It was seen as round, and by using averted vision; I suspected some swirling around the middle.

NGC 3368 (10 46.8 +11 49): M-96 is next door to M-95, and is very bright, pretty large, and much brighter in the middle and contains a non-stellar nucleus. It is elongated NNW/SSE. The halo drops off suddenly on the WSW side, and the nucleus appears to be on the NNW side.

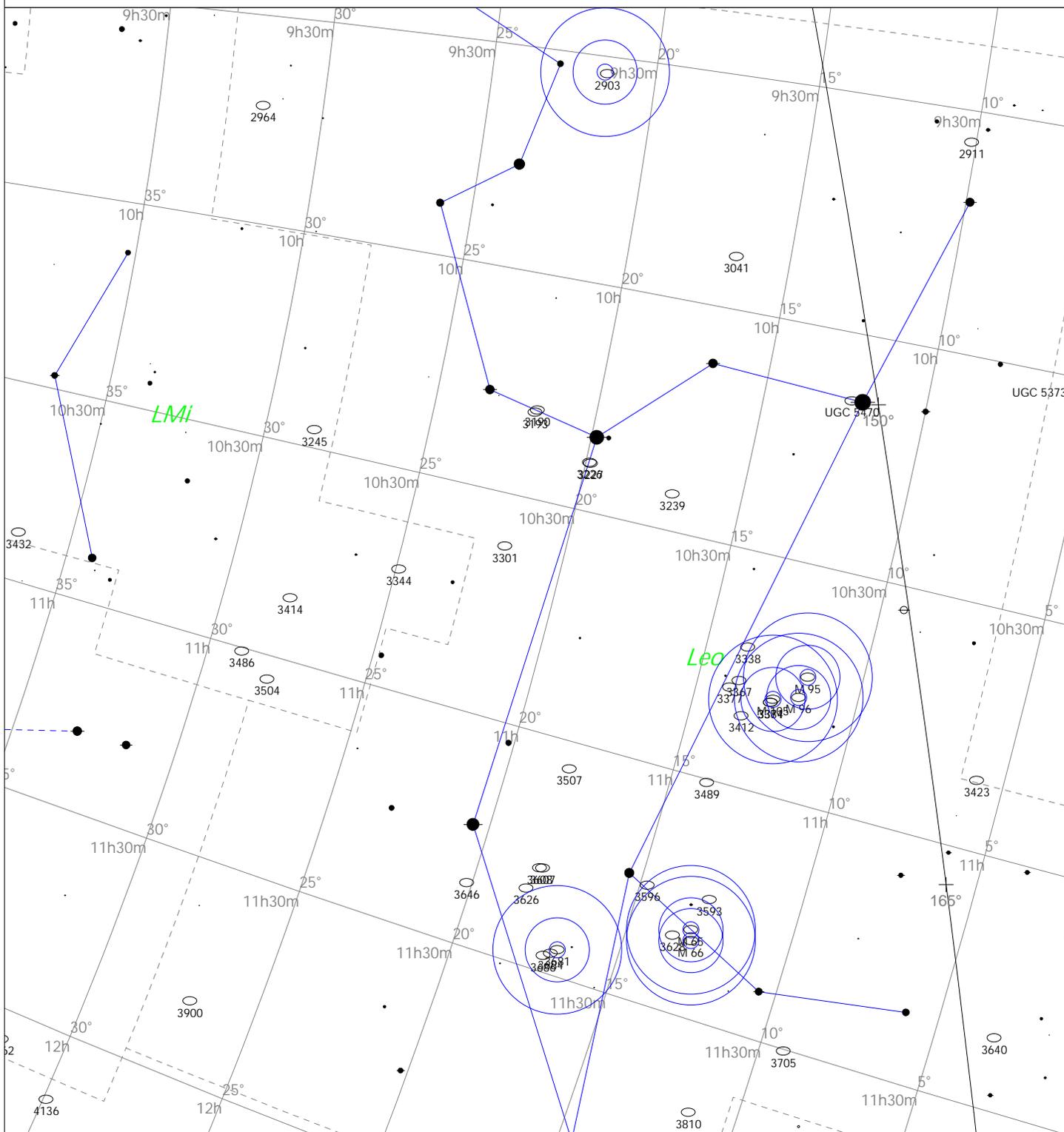
NGC 3379 (10 47.8 +12 35) M 105, NGC 3384, NGC 3389: One of my favorite galaxy groups in the sky, I like to refer to this as the Leo trio. M-105 is the brightest of the group, very bright with a bright center and a somewhat bright round halo. 84 is the next brightest, located to the ENE of M-105. It is roughly the same as M-105 but a little fainter, and may be elongated slightly. 89 is much fainter than the other two galaxies, and is located to the ESE of M-105. It is faint, with a slightly brighter middle, and a suggestion of elongation.

NGC 3623 (11 18.9 +13 05): M-65. Now we move

into the two bright galaxies of Leo. These can even be seen from a fairly light polluted city site. M-65 is somewhat bright (but a little fainter than M-66), a little brighter in the middle, and contains a non-stellar nucleus. It is very elongated NNW/SSE, with the core being elongated more NW/SE. There are stars nearby to the SW and NE; neither is involved with the galaxy. Using averted vision shows the elongation better and makes the nucleus stand out. Between M-65 and M-66, I like this one better. NGC 3627 (11 20.2 +12 59): M-66. The second of this Messier pair is pretty big, very bright, very elongated NW/SE, somewhat brighter in the middle, and contains a possible non-stellar nucleus. The halo is very bright, and by using averted vision, it helps bring it out and enhances the elongation. To the W is a nice pattern of stars just out of the halo.

NGC 3628 (11 20.3 +13 36): This galaxy is north of M-66. It is pretty bright, pretty large, very elongated E/W with a possible dust land on the S. The center brightens up somewhat but there is no nucleus to be seen. Using averted vision brings out some mottling, but applying the UHC filter does not help. NGC 3681 (11 26.5 +16 52), NGC 3684, NGC 3686, and NGC 3691: This is a unique grouping of 4 galaxies. 81, 84, and 86 are in a row roughly NE/SW, and 91 is perpendicular to this row on the SE. All four galaxies are in the same field of view at 70X. 81 is the SW most galaxy, at 100x it is located near a grouping of 4 stars. The galaxy is somewhat bright, pretty small, and has a bright center with a possible occasional stellar nucleus. I saw it as elongated either N/S or NNW/SSE. The middle galaxy is 84. It is the faintest of the three in a row, not too bright, with a brighter middle. Using averted vision makes the halo grow slightly, and shows a slight elongation N/S. 86 is on the NE end and is the largest of the three. It is pretty large, somewhat bright, has a little brighter middle, but without a nucleus. There is a possible elongation with this galaxy, but I couldn't tell the direction. Finally, 91 is the faintest and smallest of the group. Very little detail is seen on this galaxy, using averted vision really helps it show up.

Fuzzy Spot Leo



STARS

- <1
- 2
- 3
- 4
- 5

SYMBOLS

- Multiple star
- Variable star
- ☄ Comet
- Galaxy
- Bright nebula
- Dark nebula
- ⊕ Globular cluster
- Open cluster
- Planetary nebula
- ⊗ Quasar
- △ Radio source
- × X-ray source
- Other object

Herschel 400 Objects: 2903, 2964, 3190, 3193, 3226, 3227, 3377, 3379, 3384, 3412, 3489, 3521, 3593, 3607, 3608, 3626, 3628, 3640, 3655, 3686, 3810, 3900, 3912
SAC's 110 Best of the NGC Objects: 2903, 3384, 3521, 3607, 3628

Fuzzy Spot, Virgo

By Ken Reeves

This month, we will be looking at Virgo, one of the sure signs of spring. And with Virgo, it means one thing, Galaxies! In the SAC 6.2 Database, there are 676 galaxy entries, enough to keep an astronomer busy for a long time. There are several reasons for this. Virgo is the second largest constellation in the sky (only Hydra is larger), when looking at Virgo, you are looking "up" from the plane of the Milky Way, so there is less galactic dust to obscure the view, and when looking at Virgo, you are looking toward the large and fairly close Virgo cluster of galaxies.

With all these galaxies to choose from, I am going to stick with the Messier Objects. This alone provides 11 galaxies to observe. Many of these descriptions come from my early days of astronomy, so they are somewhat brief. In one instance, I have more than one observation. This helps illustrate how as one becomes more experienced on observing and note taking, the more one sees. Unless otherwise specified, all of the observations were taken from my 10" F4.5 scope.

M-49 (12 29.8 +08 01): At 100X, I saw this galaxy as pretty bright, somewhat large, round, and with a much brighter middle. The nucleus is uncertain. To the SSE is a star and to SW is a faint galaxy (NGC 4470). No other detail seen, not much.

M-58 (12 37.8 +11 50): This galaxy is pretty big, somewhat faint, has a slightly brighter middle and a slightly brighter non-stellar nucleus. There is a possible elongation E/W. The galaxy darkens up quicker on the S. I suspected a counter-clockwise spiral structure, specifically on the N, and some possible mottling. To the W is a bright star, which interferes slightly, and a second star to NE.

M-59 (12 42.1 +11 39): I saw this galaxy at 100X as somewhat bright, somewhat small, with a very gradually brighter middle and an occasional non-stellar nucleus. There is a star or stellingar to the N of nucleus. It is elongated slightly N/S. There is a bright star to NW, which does not interfere with viewing. Using averted vision brings out the halo and stellingar.

M-60 (12 43.7 +11 34): Somewhat bright, somewhat large, with a gradually then suddenly much brighter middle, but without a nucleus seen. It may be elongated N/S, and the middle may be offset to the E. To the N is NGC 4647, which is about as bright as M-60, but is lacking the bright middle.

M-61 (12 22.0 +04 29): Somewhat bright, pretty large, with a halo that is pretty even, and no middle brightening except for a bright stellar nucleus. A clockwise spiral structure is suspected. The shape is round. Averted vision really helps bright out the details in this spectacular object.

M-84 (12 25.1 +12 54): This galaxy is pretty bright, somewhat small, and much brighter in the middle, with a

non-stellar nucleus. Averted vision doesn't do much. If there is any elongation it is very slight WNW/ESE. Not much here.

M-86 (12 26.3 +12 57): Nearby to M-84, this is pretty bright, somewhat small, contains a somewhat brighter middle, but not as much as M-84, non-stellar nucleus, round. Very similar to M-86.

M-87 (12 30.9 +12 24): This galaxy is pretty bright, pretty big, smoothly brightens up to the middle, but no nucleus was seen. It is round with no structure at all. There are bright stars to NW and SE. NGC 4478 and NGC 4476 are in same field.

M-89 (12 35.7 +12 34): At 100X this galaxy is somewhat bright, somewhat small, has a very much brighter middle and a suspected nucleus. Round, averted vision makes it grow slightly. There is a star on edge of halo on the NE.

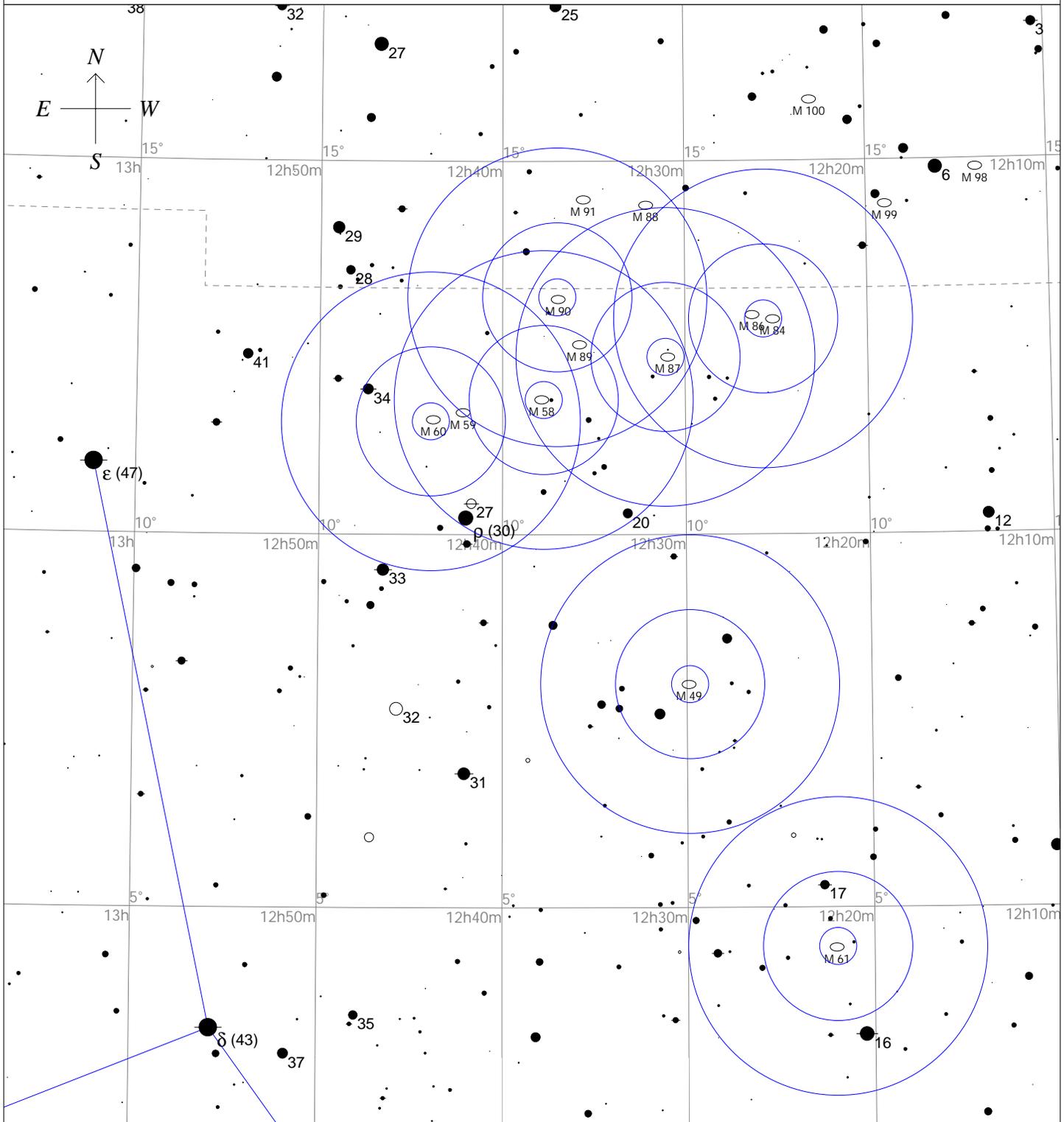
M-90 (12 36.9 +13 10): Somewhat bright, pretty large, very elongated N/S, slightly brighter middle with a bright non-stellar nucleus. Averted vision makes it fill out a little. Possibly slightly darker on E side, maybe a dust lane? This is one of the nicer Messier galaxies in this area. To the NW is a nice triangle of stars.

M-104 (12 39.9 -11 37): This is the Sombrero galaxy. I have three observations here, which I am including without any changes (no grammar corrections). From the earliest to the most recent, they are:

- ★ M-104, the Sombrero. I always like M-104, some nice star patterns around it. 107X I can see dark lane in it. 170X Harder to see. (20-May-95).
- ★ M-104 Sombrero Galaxy: 100X Very bright, pretty large, much brighter middle, very elongated E/W. Very prominent dark lane on S side, with galaxy re-appearing past the dust lane. Averted vision really brings this out. Quite a spectacular object. Some nice field stars. (6-Apr-97).
- ★ M-104: 180X in the 20" F5 scope. Very bright, pretty large, extremely elongated 6:1 E/W with a very prominent dark lane on the S side. A nice bulge in the middle with a slow brightening and a very bright non-stellar nucleus. A star is to the N and a brighter star to the WSW. The halo is also seen on the S of the dark lane. Very nice! (10-APR-99).

Just to the WSW of the Sombrero galaxy across the border into Corvus is an interesting asterism of 6 stars, a small triangle inside a larger triangle. Since I could find no designation for this grouping, I have dubbed it Reeves-2 (Reeves-1 is another grouping in Cepheus).

Fuzzy Spot Virgo-Telrad's



STARS		SYMBOLS			Only Messier Objects Shown
● <4	● >9	● Multiple star	◻ Dark nebula	△ Radio source	
● 5		○ Variable star	⊕ Globular cluster	× X-ray source	
● 6		☄ Comet	○ Open cluster	○ Other object	
● 7		○ Galaxy	⊙ Planetary nebula		
● 8		◻ Bright nebula	⊗ Quasar		

Bits & Pisces

Minutes of the March 29th, 2002 General Meeting

By A.J Crayon

The meeting opened and run by Secretary AJ Crayon due to the President and Vice Presidents absence.

First order was to request visitors and new members to introduce themselves.

The May meeting date was announced as Friday, May 17th!

Peggy Kain discussed the consignment and scope parts that were either purchased or borrowed and she requested that if borrowed please return or pay for the equipment. If the equipment was from the Holmquist donation then Jack Jones should handle it; Peggy handles the Discovery and Schwaar collections.

The Treasurer's Report listed \$2638.65 in the checking account, \$2350.92 in savings and about \$1000.00 in the scholarships and grants account.

Adam Sunshine announced a Public Star Party hosted by the Glendale Parks and Recreation Department on May 18 at Thunderbird Park just north of 59th Ave and Loop 101. Gene Lucas pointed out this star party has been going on for 25 years. Rick Rotramel suggested the Glendale Police be notified of this event.

Paul Dickson has several years of SAC Newsletters on CD-ROM, see him if you are interested in having a copy.

AJ Crayon discussed the upcoming Messier Marathon to be held on Saturday, April 13th at the Arizona City site. Be sure to get a check off list if you participate and attempt to bag the 107 possible objects available this year. Jack Jones successfully ordered the outhouse that, by the way, will be delivered Friday afternoon.

AJ Crayon announced the next Deep Sky Meeting on May 2nd would have special program. Instead of discussing observations in selected constellations, Chris Schur will discuss planetary nebula - along with showing some of the images he has captured. If you attend be sure to plan on joining the discussion.

Also, if you like Ron Reuter's Astrobyte program, please drop him a line and let him know.

Rick Tejera discussed recent Newsletter status. The e-mail version is still experiencing problems with some recipients and is being worked. Rick asks for your indulgence, as it is frustrating for him!

Steve Coe spoke about the Novice group meeting at the next Star Party at Flat Iron. It will cover simple astrophotography. He also indicated the SAC CD-ROM was available that included Ron's program, the SAC database, an excellent and free planetarium program titled HN Sky. They are being sold for \$5.00 each with proceeds going to the scholarship and grants funds.

Steve Coe, who showed a number of slides taken with equipment to be discussed at the Novice group meeting, started show-n-Tell.

Dean Ketelsen, from Tucson, showed some nice astrophoto's of Ikeya-Zhang. He also announced the Grand Canyon Star Party will be held June 8 - 15. If interested in attending, contact the Grand Canyon or Dean for more details.

Tom Conner showed some excellent CCD images taken through his telescopes from here in Arizona.

Chris Schur showed his dozen or so best pictures, some of which took 2 hours.

At this time the meeting broke up for a short break.

After the break Vice President Diane Hope introduced out speaker, Ted Dunham from Lowell Observatory. His talk was titled, "Airborne Astronomy, The Next Generation." The first airborne observatory was a Lear jet that housed a 12" telescope. Next was the Kuiper Airborne Observatory in a C141A housing a 36 incher. The one being developed is called SOFIA, Stratospheric Observatory For Infrared Astronomy, and is mounting a 2.5meter telescope in a Boeing 747! To learn more about this part of astronomy see the web site at www.sofiaarc.nasa.gov. A fascinating talk!

AJ Crayon
SAC Secretary

May 2002

SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Schedule of Events for May 2002

May 4th	SAC Star Party at Cherry Rd, Sunset 1917 Ast, Twilight 2050, Moonrise 0230. The Novice Group Session Originally Scheduled for April has been rescheduled for this night. (see page 3)
May 4th	Moon at last quarter at 0716 mst.
May 12th	Moon is new at 1045 mst.
May 14th	Skylab launched in 1973
May 17th	SAC General Meeting, Grand Canyon University, 1930, RESCHEDULED FROM MAY 24th. Speaker: Peter Wehinger of the Steward Observatory at U of A will talk about the progress of the Large Binocular Telescope.
May 17th	Sir Joseph Norman Lockyer Born in 1836, Found among other things that Solar prominences can be observed anytime via spectroscopy. Died in 1920.
May 18th	Public Observing Session at Thunderbird Park in Glendale (see page 12)
May 19th	Moon at first quarter at 1942 mst.
May 24th-26th	Riverside Telescope Makers Conference See http://www.rtmc-inc.org/ for more information.

Future Planning

June 8th-15th	Grand Canyon Star Party. See: http://www.tucsonastronomy.org/gcsp.html
Sept. TBA	Northern Arizona Star Party

Seeing Double

By Thad Robosson

By the time my wife and I moved into our new home, it was understood that the majority of the landscaping would have to be done before the pizza-oven summer hit. This meant that for me to have the new observatory done before it hit 110+ degrees, I was going to have to hustle.

The first thing I had to do to even start the landscaping was to dig trenches for the sprinkler system. After spending about an hour with 2 pickaxes (I broke the head on the first one.) and a trenching shovel, I realized that our backyard ground was much, much harder than I cared to keep digging in. There had to be an easier way to do this. After asking around, it was suggested that I rent a jackhammer with a spade bit. This turned out to be a great idea. After all, I could also dig the trench for the electric to the observatory, and dig the hole for the concrete pier at the same time. The jackhammer weighed about 75lbs, and I now know why the guys that run these things for a living have killer physiques. If lifting a 75 pound jackhammer up and over about a billion times isn't enough, the ground was hard enough in places to actually grab hold of the spade bit, making it nearly impossible to get free. Having spent a day and a half on this phase, it is now my honest belief that "caliche" is an ancient word of forgotten heritage that means "God's concrete". To put this into perspective, I had a softball size chunk that I couldn't break by forcibly throwing it against pavement. At least I know that I'll have a suitable base for a telescope pier.

It hasn't been all work and no play. I managed to assemble the re-bar "cage" that would be

encased in the concrete to reinforce it and hold the pier to the base (the two piece construction is due to needing to know the final height once the wooden floor is done.). I purchased the rebar and wire at Home Depot and set out assembling. The wire probably does wonders when one is not building something as complex as I was, but it was horrid at holding my "sculpture" together. I found myself thinking that it would be nice if I could weld this together. If I only had a welder...Hmmm. Wait a second, I DO have a welder. A bit of digging under my newly finished workbench revealed a shiny new welder that I had purchased about 6 months prior, and had forgotten about during the whole moving thing. A while later, I had a very sturdy rebar assembly that will be the backbone of the observatory. I also managed to machine the base plate that will mount the equatorial head to the pier. I fashioned this out of 3/8" aluminum. I allowed for 7.5 degrees of travel in both directions to align on North. Probably overkill, but it's nice knowing that I have plenty of "wiggle room". The base plate attaches to the pier with 3 J bolts that will be set into the concrete. I welded some rebar across these for added strength.

Once our sod is laid out, my next step is to spend an afternoon mixing about 30 bags of concrete mix for the base (Fair warning...I may be calling in favors on this one.). With most of the hard work behind me, I can finally start letting my mind wander to when I can roll back the roof and start observing.

Got an idea or suggestion? Shoot me an email at starstarcracker@qwest.net.

The Twin Points Observatory Under Construction



The baseplate is the link between the pier and the telescope's equatorial head. The J bolts will be sunk into the wet concrete, and the plywood circle will hold the j bolts in position while the concrete sets



The ground takes a pounding while the author gets hammered



The backbone of the observatory.

President's Message

By David Fredericksen

As I was running through my mental checklist (OK, so it was a short list) on what I wanted to take out for the Messier Marathon, I realized how lucky we really are. I was extremely thankful for living in Arizona. We live in a state where we can find relatively dark skies within easy driving distances. Our skies are clear much of the year for to go out and observe. I thought, "How could it get any better than this?" At this point I understood that what I was thankful for was only small part of the equation.



We all became members of the Saguaro Astronomy Club for any number of reasons: we were beginners and knew nothing about astronomy or our telescopes (that was me), we wanted to get together with other people that had the same interests, or we simply didn't want to go out to the desert by ourselves. For whatever reason, fate brought us together. I started thinking about what has kept us together all of these years. I finally realized that it was what we each bring to the club. We have many people who do things for this club, giving their time because they enjoy what they are doing. Without them and all of their efforts this club wouldn't be nearly as much fun.

I would like to thank the following club members for their hard work over the years:

- ★ All of the officers that have served in this club have made it what it is. I'm sure the future officers will keep the tradition going.
- ★ The newsletter editors, Rick Tejera and Paul Dickson and others that I don't

remember (sorry), for the long hours put in to turn out a fine newsletter. I also want to thank all of you that have contributed so many articles to be put in the newsletter. They have been enjoyable and informative.

- ★ The McGraths, for opening their house for many years so that the Deep Sky Group had somewhere to meet.
- ★ A.J. Crayon for chairing the Messier Marathon and his work with the Deep Sky Group.
 - ★ Ken Reeves and Steve Coe for their articles in the newsletters about what is up in the sky.
 - ★ Thad Robosson for his work with the ATM Group.
- ★ All of the members who over the years have given up their time and gone out to the many schools, boy scout meetings and public star parties to bring astronomy to the public.
- ★ All of the members that have brought things to share in the show and tell. I really look forward to this part of the meetings.

To mention everyone who has helped make SAC what it is today would take more space than this column allows, but I want to thank all of you, from the beginner to the most experienced. I look forward to sharing the continued growth of SAC as more people join us and have the opportunity to get involved and help shape our club. You are why we have such a great club. We are truly lucky to be a part of the Saguaro Astronomy Club.

Desert Mountain School Star Party

By Rick Tejera

On Feb 19th, SAC was invited to hold a Public viewing session at Desert Mountain School in North (way North) Phoenix. The event was in conjunction with the schools curriculum night. Our host was 8th grade science teacher Milissa Holder. Myself, Adam Sunshine and Joe Goss participated and showed The planets a few galaxies and clusters to the students and their parents. We were also treated with a pass of the ISS during the event. We got a very positive response from students & teachers alike.

I received the following note of thanks a few days later:

To the Saguaro Astronomy Club:

Desert Mountain Staff, Parents & Students would like to thank the Saguaro Astronomy Club for participating in our Curriculum Night on February 19th 2002. Parents were very impressed and all had a good time. We appreciate your time in making this night a success.

Sincerely:
Ray Manker
Principle
Desert Mountain School

Public Observing Session at Thunderbird Park

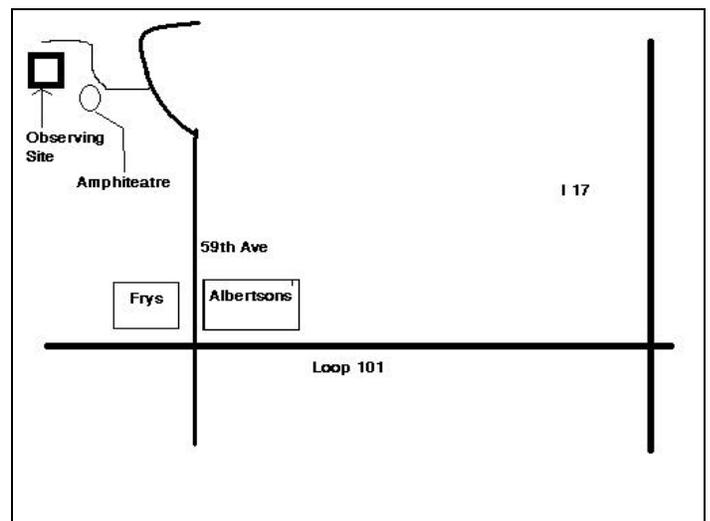
Speaking of Public Observing Sessions, SAC will host, in conjunction with the City of Glendale, A public Observing Session at Thunderbird Park on Saturday, May 18th. Thunderbird Park is located about 1 1/2 miles north of the Loop 101 off 59th Ave. Head north on 59th Ave and turn left into the park as you go up the mountain. Follow the road to the right past the amphitheatre to the observing area. Park rangers will be on hand to guide you if needed. (see map at right).

This event is traditionally well attended, so the more folks & scopes we have the shorter the lines will be. If you've never attended a public viewing because you felt you don't have enough experience, don't worry. There are plenty of good bright objects up that night that you've seen before, so even if you're a novice yourself, you can help show someone the night sky.

Some objects well placed for viewing that

evening: 1st quarter moon, Jupiter, Saturn, Venus, M13, M51, M44, Mizar & Alcor, γ Leonis and Comet Ikeya-Zhang.

So please come on out and help if you can. For More Information, Contact Adam Sunshine. (contact info on masthead, page 1)

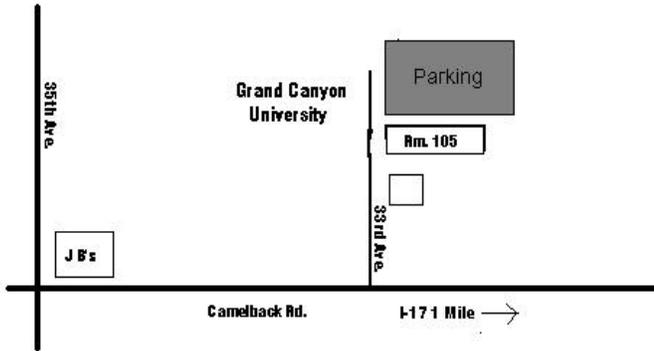


Map to Thunderbird Park, Glendale

SAC Meeting and Observing Sites

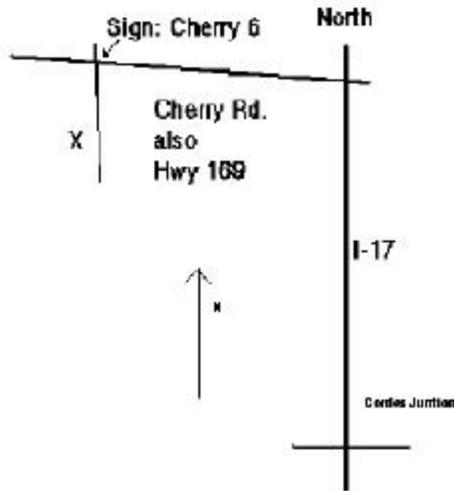
General Meetings

7:30 p.m. at Grand Canyon University, Fleming Building, Room 105: 1 mile west of I-17 on Camelback Rd., North on 33rd Ave., Second building on the right.



Cherry Rd. Star Parties

Take I-17 North to the Cherry Rd Exit (Hwy. 169). This is the first exit past Cordes Junction. Turn Left (west onto Cherry Rd. and go about 5 miles until you reach the sign that says "Cherry 5". Turn Left (opposite of what the arrow says) onto a dirt rd. Proceed about 1/2 mile and the site is through a gate on the right.



Flatiron Star Parties



Head west on 110 to the 339th Ave exit (exit 103). Turn North (right) and go two miles to Indian School Rd. Turn West (left) on Indian School and go 1 mile to 355th Ave. Turn North (right). This will turn into Wickenburg Rd. Follow this road for about 12 miles. Just after mile marker 23 you will go through Jackrabbit wash and pass a cattle guard sign. There is a dirt road just after the sign, marked by white painted rocks. Turn on to this road and follow it about .9 miles. Just after you pass through a wash, you'll see the field on your left. If you hit the cattle guard, or the dirt road your on is next to a fence, you've missed the correct road. Go back and look for the white rocks. (see detail map above).

Please keep the gate closed at all times.

May Meeting Change

In order to accommodate those who wish to attend the Riverside Telescopemakers' Conference At Big Bear, CA and not miss a meeting, the date of the May meeting was changed to Friday May 17th, 2002. Same Time (1930), Same Place (Grand Canyon University). Please make a note of it. The change will be announced at each meeting prior to May and in each newsletter.

SAC Membership Services

Membership

Memberships are for the following 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 (one newsletter)
\$100.00	Business Membership (includes advertising)
\$ 14.00	Newsletter only
\$ 6.00	Nametag for Members

Subscription Services

The following magazines are available to members. Subscribe or renew by paying the club treasurer. You will receive the discounted club rate only by allowing the club treasurer to renew your subscription.

\$ 30.00/yr	Sky & Telescope
\$ 29.00/yr	Astronomy

Please Print

Name: _____

Address: _____

Phone: _____

E-mail (newsletter will be sent to this address): _____

Make Checks Payable to SAC

Mail Completed form to:

Paul Dickson
7714 N 36th Ave
Phoenix, AZ 85051-6401

Such-A-Deal

16 inch F 4.5 Dobsonian Telescope For Sale, telescope with all accessories ready to use. Two-piece design easy set up five minutes. See to 13th Magnitude Stars. Total \$3500.

16 Inch F 4.5 Mirror, made by John Hall, Pegasus Optics. Novak 9-point easy adjustable Aluminum Mirror cell Novak 3.0 inch secondary mirror and diagonal spider, High Quality Real Dark Oak Exterior Wood Finish , Open Truss Design with sturdy aluminum struts. University Optics 11 x 80 Right Angle Finder Scope (Presents same scale and view as on a Uranometria Sky Chart), Telrad Finder for fast finding of objects. Scope has some wear but the scope already knows its way around the sky and will be a real asset to an enthusiastic amateur astronomer. Mirror has several years of use left before it will need recoating. Selling for health reasons. Compare to Obsession.

Eyepieces, Filters, and aluminum foam padded Case. Like New Condition. Total \$765

TelVue Nagler 11 mm, TelVue Plossel 32 mm, TelVue Plossel 26 mm, TelVue Plossel 17 mm, TelVue Plossel 10.4 mm, TelVue Plossel 7.4 mm, Meade 2x 3x variable Barlow. Set of planetary filters – Green, Yellow, Red, Orange. Neutral Density Filter, Lumicon, Ultra High Contrast, Lumicon, O3, Collimating Eyepiece.

Whole Deal, Scope, Accessories + Eyepieces, Filters, Case. \$4100.

Also have Professional Quality Photographic Tripod. \$85. Contact George DeLange 22510 N. 71st. Lane Glendale, AZ 85310 623-561-6618 delange@extremezone.com www.delange.org

SAGUARO ASTRONOMY CLUB

April-May 2002

5643 W. Pontiac Dr
Glendale, AZ 85308-9117

Phone: 623-572-0713
Fax: 623-572-8575
Email: Saguaro Astro@aol.com



DUES ARE DUE

As you know all memberships expire at the end of the year. If you haven't already done so, now is the time to renew your membership. You will receive one more issue of SACnews unless you renew, so send in your remittance now. Use the handy renewal form on page 11 of this newsletter.

Videmus Stellae



SAC Schedule of Events 2002

REVIS-UPDATE

SAC Meetings

Jan. 25th, 2002	July 26th 2002
Feb. 22nd 2002	Aug. 23rd 2002
Mar. 29th 2002	Sep. 20th 2002
Apr. 26th 2002	Oct. 18th 2002
May 17th 2002	Nov. 15th 2002
June 21st 2002	Dec. 20th 2002 (Holiday Party)

SAC Star Parties

Date	Sunset	Astronomical Twilight Ends	Moonrise
Jan 5th	1737	1906	0049
Feb 2nd	1803	1929	2346
Mar 2nd	1829	1951	2238
Apr 6th	1856	2021	0355
May 4th	1917	2050	0230
June 1st	1937	2118	0102
July 6th	1945	2127	0258
Aug 3rd	1930	2104	0132
Aug 31st	1858	2024	0009
Sep 28th	1820	1942	2250
Oct 26th	1745	1909	2136
Nov 30th	1723	1851	0410
Dec 28th	1731	1900	0305

Deep Sky Group Meetings

Feb. 28th 2002	Aug. 29th 2002
May 2nd, 2002	Oct. 24th 2002
June 27th, 2002	Dec. 26th 2002