

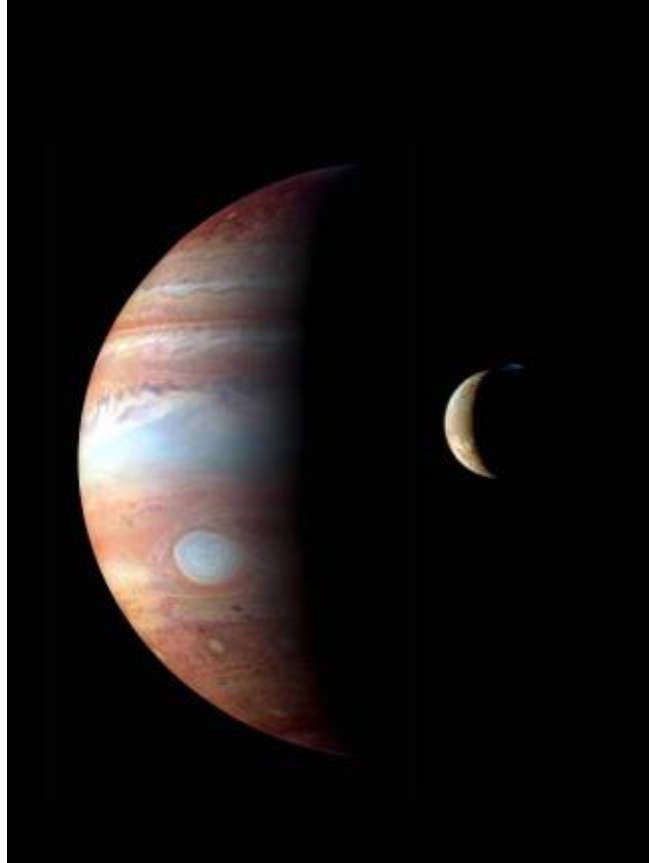


Desert Skies

Tucson Amateur Astronomy Association

Volume LIV, Number 9

September, 2008



Jupiter dominates our sky!

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Cover Photo: A Jupiter-Io Montage from New Horizons Spacecraft. Credit: [NASA](#), [Johns Hopkins U. APL](#), [SWRI](#)

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Membership in the TAAA

Annual Fees

Individual membership	\$25.00
Family (includes two adults plus minor children)	\$30.00

Youth under 18 years must join as a family upon parental or guardian acknowledgement of participation in TAAA events. Ask the Treasurer for the required form.

Discounts (one discount allowed, subtract from above rates)

Seniors (over 60 years)	\$2.00
College Students, Teachers (K - 12)	\$8.00
Youth under 18 yrs (form required, contact the treasurer).....	\$13.00

Options (add to above membership rates)

Tucson society of the Astronomical League (TAL) fees.....	\$ 7.50
Sky & Telescope Magazine 1 year (12 issues)	\$32.95
Astronomy Magazine 1 year (12 issues)	\$34.00
2 years (24 issues)	\$60.00
Postage for New Member Pack	\$ 4.80

Donations are accepted for the following funds: SA-IDA/Light Pollution, TIMPA, Education, 30" Telescope & Land, and General/Undesignated.

Renewal Information

- Your membership expires as indicated on your mailing label.
- TAAA members may join the Tucson society of the Astronomical League (TAL) at the time they join or renew.
- Discounted Sky & Telescope or Astronomy magazine subscriptions are available to members and can be started or renewed at anytime. Rates are given above. Allow 3 months for processing. Subscriptions must be sent through the TAAA. *Do not send money directly to the*

magazines. To change an individual subscription to the group rate, pay the subscription amount to the TAAA treasurer. Include your magazine renewal notice.

- Please include a note explaining what you are paying for. Credit cards are not accepted. Write one check or money order for fees plus any options or donations. Make it payable to TAAA and send to:

Tucson Amateur Astronomy Association
PO BOX 41254 Tucson, AZ 85717

Mailing Address or Email Changes - Send to address above or email the treasurer.

TAAA Mission Statement - The mission of the Tucson Amateur Astronomy Association is to provide opportunities for members and the public to share the joy and excitement of astronomy through observing, education and fun.

Desert Skies Publishing Guidelines - All articles, announcements, news, etc. must be submitted by the newsletter deadline. Materials received after that date will appear in the next issue. The editor retains all submissions unless prior arrangements are made. Submissions should be submitted in Word compatible files via e-mail or on a recordable media.. All material copyright Tucson Amateur Astronomy Association or specific author. No reproduction without permission, all rights reserved. We will not publish slanderous or libelous material! Send submissions to:

George Barber
TAAA/Desert Skies Editor
15940 W Ridgemoor Ave
Tucson AZ 85736

Join our Email Lists on YahooGroups

Announcements: <http://tinyurl.com/e7o3y> (TAAA news, no posting allowed, 15/month)
TAAA Forum: <http://tinyurl.com/hwoau> (general astronomy discussion, posting allowed, 75/month)
TAAA Dark Site: <http://tinyurl.com/3d8ts9> (discussion of dark site issues, posting allowed)

Desert Skies is published monthly by the
Tucson Amateur Astronomy Association, Post Office Box 41254, Tucson AZ 85717.

President's Message

Monsoon season is winding down and the great Arizona fall astronomy weather is fast approaching. This month we will have a lot happening on several of our current projects. The General Meeting this month will cover the details of these projects. We will hear about the contractors being obtained to move forward on the dark site so that we can get the needed permits to begin Phase One of construction. We will also be able to dedicate the TIMPA observing facility very soon.

Hopefully many of you had the chance to see the recent publicity the club received in the Tucson Citizen. This is thanks to the efforts of our newly appointed Publicist. Please welcome Debra Malmos to this position and join me in thanking her for volunteering for this position. She takes on this role in addition to the great job she is doing on our new website as the club Webmaster. We look forward to the future with her in this role as she has many more ideas for getting our club more visible in the community.

As we move into a new school year please keep in mind that we have a need for your help as a star party volunteer. If you have never volunteered for a school star party let me tell you that it is a very rewarding experience. I would like to thank all of our volunteers for their continued support.

Have a great September.

Clear Skies

Ken Shaver
TAAA President

Meeting Information and Calendar of Events

TAAA MEETING DATE: Friday, Sept. 05, at the Steward Observatory Auditorium - Room N210

ASTRONOMY ESSENTIALS: 6:30 pm
Title: Deep Sky and Solar Sketching
Speaker: Jerry Farrar

If you've spent any time observing with Jerry Farrar, you've surely seen his beautiful sketches of all-things-astronomical that he's viewed through his telescopes. At this month's Astronomy Essentials presentation, Jerry will describe the methods, tools, and equipment you can use to make your own sketches. He'll include techniques that help to accurately and reliably sketch - you'll be surprised at how your senses can be sharpened so you, too, can capture fine details and faint objects on paper. Bring a few pencils and pad - give it a try! Jerry plans to guide you through your first sketch.

GENERAL MEETING: 7:30 pm
TAAA Status

We will hear about many of the projects and get a detailed status of the many things going on within the club at the General Meeting on September 5th. We will cover project status of the Dark Site and TIMPA, and get a financial funds status report for those projects. We will also get an update on our Paid Star Party Program, The Website, Electronic newsletter, publicity, and the future of the Grand Canyon Star Party.

Presentations:
TIMPA 14" Scope - George Barber
Dark Site - Bill Lofquist
Fund Balances - Terri Lappin
Paid Star Party Program - John Kalas
Website, Newsletter, and Publicity - Debra Malmos
Grand Canyon Star Party - Jim O'Connor

BOARD OF DIRECTORS MEETING: Wednesday, September 10, 6:30 pm. The meeting is held at Steward Observatory Conference Room N305.

STAR PARTIES AND EVENTS:

06 Sept - TAAA and AF-SIG Star Party at TIMPA
06 Sept - Tucson Pima Public Library Astronomy
08 Sept - Astro-Imaging SIG Meeting
13 Sept - KPNO Star Party
13 Sept - LBT Tour
11 Sept - Astronomy Fundamentals SIG
26 Sept - SGSC Star Party
27 Sept - TAAA Star Party at Las Cienegas (Empire Ranch)
27 Sept - TAAA Fall Star-B-Cue at Kitt Peak

NEWSLETTER SCHEDULE: Deadline for articles: Sat, 20 Sept. Printing: Mon, 22 Sept. Folding Party: Wed, 24 Sept. Mailing: Thu, 25 Sept. The newsletter is mailed at least one week prior to the following month's General Meeting.

Club News

Member News

We welcome these members who have recently joined the TAAA: Ross Dubois and Norma Gaddy. Glad to have all of you join! New members can pick up a members pack at a meeting if they didn't request it by mail. Hope you'll make it to our star parties or meetings so we can all get to know you. (Updated membership lists are available online at either Yahoo Groups email list website under Files, or at most meetings.)

Board of Directors Change

We have recently had a change to the TAAA Board of Directors. In August, we received a letter of resignation from our long standing Secretary, Steve Marten. I would like to take this opportunity to say thank you for the many years of dedication and hard work that Steve provided to the club. He has been instrumental in helping the board to manage and organize the many meetings and club activities. His knowledge and attention to details has been a great asset to the club.

I hope you all will join me in thanking him for his years of service and wish him the very best.

I would also like to have everyone welcome our newly appointed secretary Luke Scott. Luke was appointed to fill this position at the August Board of Directors meeting. We look forward to working with Luke on the Board over the coming year.

Please join me in thanking Luke for accepting this new post and congratulations from all of us.

Ken Shaver
TAAA President

Astro-Imaging SIG Meeting

Monday, Sept. 08, 7pm
China Rose, NE corner Speedway/Rosemont

Note: The meeting has been postponed one week to allow for the Labor Day holiday.

Our presentations feature CCD images, planetary webcams, and film. Come see some of the state of the imaging art over some Chinese food. Just show up and enjoy the show! For more information, contact Steve Peterson.

Astronomy Fundamentals Special Interest Group (Formerly the Beginner's Special Interest Group)

The Astronomy Fundamentals Special Interest Group (AFSIG) will meet on Thursday, September 11, at 6:30 pm.

J.D. Metzger will present "Using Filters for Visual Observing". There are many different filters available that can enhance your observing experience. J.D. will discuss filter basics and offer some tips on using them.

The meeting will be held at the Environmental and Natural Resources Building (USGS and Weather Service) in room 253. The USGS building is on the northeast corner of Sixth Street and Park Avenue on the campus of the University of Arizona. Parking will be available in the lot to the east of the building. There are no restrictions on parking after 5:00pm. To get to the lot, go one block north on Park and turn east onto Lowell. The entrance to the lot will be on your right shortly past the building. From the parking lot walk through the breezeway to the open court yard. Take the stairway to the second floor patio area. Room 253 is immediately to the left side of the patio at the top of the stairs.

Feel free to bring your own snacks and drinks.

TAAA Fall Star-B-Cue at Kitt Peak

September 27 (Saturday)

The TAAA has scheduled a star party and pot-luck barbecue at the picnic grounds up on Kitt Peak on Saturday, 9/27, starting at 4:00 pm. A maximum of 70 TAAA Members and families will be allowed to participate. A gas-fired barbecue grill at the ramada will be fired up starting at 4:30 pm and members are invited to cook their dinners between 4:30 and 6:30 pm. Bring a dish to share with other members. The grill will be turned off at 6:30 pm. Telescope observing will commence after sundown and will be concluded by 11:30 pm. All members must be heading down the mountain by midnight. Be prepared for cold temperatures.

Reservations are required. There will be a sign-up sheet on the table at the back of the lecture hall at the start of the September 5th meeting. Because of the popularity of this event, attendance will be initially limited to TAAA Members and their immediate family members only. If, after all TAAA Members have had an opportunity to sign up, there are any openings or cancellations, the attendance of guests will be considered. If you are unable to attend the September meeting, phone and e-mail reservation requests will be taken on a first-come, first-serve basis *after* 9:00 am Saturday, 9/6. Contact John Kalas at 620-6502 or via e-mail at <jckalas@cox.net>.

It is very important for all attendees to abide by the rules established by Kitt Peak and respect the facility. Adherence to the rules will help to continue TAAA activities on Kitt Peak in the future.

- No vehicles are allowed above the picnic grounds after 4:00 pm.
- Only the ramada gas-fired barbecue grill is permitted for cooking food at the picnic grounds. No open fires or use of the personal barbecue grills is permitted.

Club News (cont.)

- All trash must be placed in the garbage receptacles.
- Use of cellular phones and radio walkie-talkies is prohibited. All cell phones must be turned off.
- No alcoholic beverages are permitted.

When leaving the picnic grounds after dark, if possible, use your parking lights until you have reached the main road and are headed downhill after exiting the picnic area.

TAAA Apparel

Looking for a special gift or a way to make that fashion statement? Try on something from our fine line of club apparel. We have got hats, T-shirts, denim shirts, and patches. We take cash and checks.

LBT TOUR

Did you know that Mt. Graham near Safford Arizona is home to one of the most unique and largest telescopes in the world? I am referring to the Large Binocular Telescope (LBT). On September 13th TAAA members are going to have an opportunity to get a tour of the now open LBT facility. Sign ups will be limited to 30 people (Club members only) and will be available on a first come first serve basis at the September general meeting. If, after the general meeting, there are still openings available we will take additional names over the weekend of the 6th and 7th. We must have a list of names for the LBT tour by Monday the 8th.

We will be meeting at a yet to be determined location near the Mt. Graham facility, most likely at the Safford base camp. We will then proceed to the mountaintop as a group for a scheduled 4:00 pm tour. Additional meet-up details will be available for those that sign up at the General Meeting.

Upcoming Lectures

If you have a suggestion for either an Astronomy Essentials or Invited Lecture, or if you want to give one yourself, let Terri Lappin know. The September 5th

Astronomy Essentials lecture is the next opening we have. Invited Lectures are currently scheduled through January 2009. Our next Members Night is on November 7th so start thinking about what you might want to present that night.

Oct 3	<i>Astronomy Essentials</i>	Mary Turner Seasonal Objects
	<i>Invited Lecture</i>	Valerie Grindle Mt Lemmon SkyCenter
Nov 7	<i>No AE lecture, meeting starts at 6:30pm</i>	Members Night
Dec 5	<i>Astronomy Essentials</i>	OPEN
	<i>Invited Lecture</i>	Don Sweeney LBT
Jan 2	<i>Astronomy Essentials</i>	Mary Turner Seasonal Objects
	<i>Invited Lecture</i>	Bill Gates Supernova Remnants



Night Sky Network Toolkits

The TAAA has a wonderful resource available for outreach events. Below is a list of the Night Sky Network Outreach Toolkits developed by the Astronomical Society of the Pacific under contract with NASA. These toolkits are specifically developed for amateur astronomers and are perfect for those early hours at a star party before its dark enough to observe. Some projects are well suited for use after dark. They are best when used in a small group as you might have around your telescope at a school star party.

(Continues on next page)



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www.stellarvisiontucson.com

Club News (cont.)

Here's a complete list of the NSN Outreach Toolkits we have:

- PlanetQuest:** explains planet detection techniques
- Our Galaxy, Our Universe:** scale model of the Milky Way galaxy and the Universe
- Black Hole Survival Kit:** what is a black hole and how does it affect objects nearby
- Telescopes - Eyes on the Universe:** explains basic principles of optics, the human eye, and observing
- Shadows and Silhouettes:** covers lunar phases, eclipses, and transits
- Exploring the Solar System:** scale model of solar system and NASA exploration of planets
- GLOBE at Night:** light pollution principles
- Supernova!** life cycle of massive stars; touches on life cycle of sun-like stars
- SolarScope:** provides a white light image of the sun suitable for small group viewing.

These toolkits come to us free of charge. Using them as part of our outreach activities qualifies us to receive future toolkits. We appreciate those who have put the toolkits to use this year. Six activities have been logged so far - and we still have the fall months to go. This is better than we've done in the last couple of years.

Each toolkit contains several projects. You pick and choose which part you want to demonstrate. They contain essentially all the materials needed. All NSN toolkits include a Resources CD and a training DVD. You can request a copy of the CD and DVD set from Terri Lappin (give her a week or so to make them up). The CDs contain PowerPoint presentations, along with scripts and background information should you be presenting to a larger audience.

Anyone can borrow the toolkits, TAAA membership is not required. Contact Terri Lappin (see page 2) to make arrangements. Terri can also provide one-on-one training for all toolkits.

TAAA Website - Login/Password Required

The TAAA website now has more resources for members viewing. Members must login using the user name and password that has been distributed by email. If you haven't received the email message, it may mean we do not have your email address in our records. Please contact Terri Lappin who will update your information in our records. We currently have a common user and single password that everyone uses. You do not enter your email address or any other personal information to gain access to the member's pages. Should you not have email and want the user name\password, contact any board member.



shop & give

#23178

Basha's Shop & Give

Basha's has an excellent program to support local non-profit groups like the TAAA. It's called Shop & Give. This is a no-brainer fundraiser for the TAAA. If you shop at Basha's and have a "Thank you" card, the next time you go through the checkout, give the cashier our ID number: #23178 for the Shop & Give program. They can look up the number using our name, too. It's that easy! Just do it once. At the end of the program next spring, Basha's will make a donation to the TAAA based on the total sales of every Thank You card linked to our number. We can receive up to \$5000, but only if we get lots of people to sign up. Anyone can participate, so give our number to family and friends. If you participated last year, you need to give our ID number again, or your sales won't count. Thanks to everyone who participates.

2009 Calendars

Calendars for 2009 will be available for purchase at regular meetings beginning this month. You'll find them at the same table where you purchase TAAA apparel. This year we have chosen the Astronomy Magazine "Deep Space Mysteries" calendar. The cost for a calendar is \$10 each (nearly \$3 off the regular selling price), or \$9 each for more than one. Proceeds from the sale of these calendars will be used appropriately as decided by the board. Thank you to all who support the TAAA through the purchase of the yearly calendars.

Member's Events

TAAA and AF-SIG Star Party at TIMPA

Saturday, September 6

Come on out and enjoy the summer skies (monsoons willing)! TIMPA star parties are great for both beginners and experienced observers. Our novice members can get help with observing issues or equipment problems, as there are many experienced members there who would be happy to help. If you don't own a telescope, come anyway, because there are lots of telescopes set up and everyone is invited to look through them. This is a great way to check out different telescope designs before you make that all important decision to buy. We'll do our best to get you the answers you need. If you have friends or relatives who are curious about amateur astronomy, feel free to bring them along. The TIMPA site features a large parking area, and full restroom facilities. Directions to the TIMPA site are located on the outside flap of this newsletter.

If the weather is threatening, be sure to check the taaaforum Yahoo group before heading out.

TAAA Star Party at Las Cienegas (Empire Ranch)

Saturday, September 27

Las Cienegas (formerly Empire Ranch) has been our normal dark-sky observing site for quite a number of years. Please try to arrive before sunset. Stay as long as you like, but let everyone know when you are ready to leave; someone may be taking astro-images. Bring a telescope if you have one, but you don't need one to attend. Any member would be glad to let you look through their telescope. And, there are now restroom facilities at the site. Las Cienegas is at 4000 feet so be prepared for cool temperatures. Attendees should park their vehicles either perpendicular to the airstrip facing toward the center of the strip, or parallel to the airstrip along either side facing

west. That way, when you are ready to leave, you will not have to back up and turn on your bright white backup lights. See the directions to Las Cienegas on the outside flap of this newsletter.

TAAA Fall Star-B-Cue at Kitt Peak

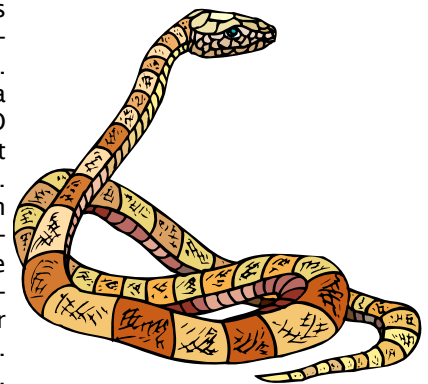
Saturday, September 27

See article in the *Club News* section.

Rattlesnake Alert!

Be alert for rattlesnakes! Rattlesnakes are generally aggressive only if disturbed. If you see one, keep a safe distance and DO NOT try to interact with it in any way. Snakes are much faster than our reflexes, and should be handled only by professionals. Wear boots and long jeans. For more information, go to

<http://www.friendsofsaguaro.org/rattlesnakes.html>.



Along with rattlesnakes, other desert critters, such as gophers and ground squirrels, make their home wherever they want. These residents can leave holes and other potential tripping hazards, so be careful when walking.

Items of Interest

Websites: Trips On The Internet Super-Skyway

By Rik Hill

Jupiter dominates our sky

In case the monsoons have made you a shut-in and you haven't gotten back in the swing of observing, that bright "star" in the southern sky during most of the night is Jupiter. The ardent Joviaphiles have been imaging the planet for a few months now but for those with day jobs it is now best placed. So here are some links to help you enjoy this apparition.

A nice general guide to observing Jupiter is of course on the Sky and Telescope website at:

<http://www.skynewsmagazine.com/pages/jupiterguide.html>

Another good one by Antonio Cidadão can be seen here:

http://www.astrosurf.com/cidadao/jupiter_obs.htm

Though it has not been updated since 1999 it is still relevant as an observing guide.

One of my favorite sites for getting Great Red Spot (GRS) transit times is:

http://www.projectpluto.com/jeve_grs.htm

It's always fun to image Jupiter when that is on the disk. And for phenomena of the Galilean satellites (eclipses, transits and shadow transits) I like the French page at:

<http://www.imcce.fr/en/ephemerides/phenomenes/ephesat/predictions/Jupiter/phenJup.php>

To get yourself inspired NASA has a gallery of amateur images (mostly Don Parker and Sean Walker) of Jupiter at:

http://juno.wisc.edu/gallery_amateur2008.html

And professional galleries at:

(Continues on next page)

Items of Interest (cont.)

<http://www.nasaimages.org/luna/servlet/view/search/what/Ganymede/where/Jupiter/?q+=Voyager>
http://nssdc.gsfc.nasa.gov/photo_gallery/photogallery-jupiter.html

Some other best amateur images and galleries are found here:

Paolo Lazzarotti: <http://www.lazzarotti-hires.com/index.php>

Paul Haese: <http://paulhaese.net/>
<http://www.extremeastronomy.com/gallery/showgallery.php/cat/500/ppuser/158>

Chris Go: <http://www.christone.net/astro/jupiter/>
 While these images are breathtaking and comparable to pre-Galileo spacecraft images, don't let that stop you from doing your own! This just gives you something to shoot for.

If you just want to know more about Jupiter in general good websites for that information are:

<http://www.nineplanets.org/jupiter.html>
http://www.nasa.gov/worldbook/jupiter_worldbook.html
<http://solarsystem.nasa.gov/planets/profile.cfm?Object=Jupiter>

I try to keep my own gallery of Jupiter images as up to date as I can but it's difficult with the flood of data coming off my telescopes. These are accessible from the Jupiter Observations or Questar links at: <http://www.lpl.arizona.edu/~rhill/obs.html>

I am particularly interested in what our members are doing. Do you have a website of recent observations of any celestial objects? Please let me know and we'll give your site some publicity: rhill@lpl.arizona.edu

SAIDA NEEDS MORE HELP FROM MORE TAAA MEMBERS. AFTER ALL, WE WILL ALL BENEFIT FROM DARK SKIES IN OUR AREA !!!

For more information, go to: www.sa-ida.org

Or feel free to contact:

John Polacheck
 President of SAIDA
 E-mail: jpolach@dakotacom.net
 Telephone: 743-1362

SAIDA meets on the second Wednesday of each month from 5:30 to 7:30 PM in the IDA office located at 3225 N. First Ave, just North of Ft. Lowell. And.....

WE USUALLY HAVE PIZZA !!!

Desert Skies Classified

FOR SALE	REDUCED PRICE!! Orion Megaview 15X80 binoculars with hard case, and Sunpack Platinum Plus 7500 Pro tripod with soft case. Like new, \$300 for both (list price is \$479 for the binocs alone). These are LARGE binoculars with 20mm of eye relief for eyeglass wearers. Tim 398-6590 hm, 663-9350 wk. Review at: http://excelsis.com/1.0/entry.php?sectionid=21&entryid=150 [12/08]
SERVICE	Green laser pointer need repair or tune up? Contact Donald Arndt at (415) 215-2409 or donaldja@pacbell.net . Typical repairs cost \$25-50, including return shipping.
FOR SALE	Original case for an Astro-Physics AP140 telescope. I have an extra case. Outside dimensions 40"x10.5"x10.5". Foam lined. Could be used for many refractors. \$50 has slight damage. I was quoted \$237 plus shipping from AP. Local pickup or buyer pays for shipping. Call for details - Larry Phillips at 777-8027 or llp41astro@cox.net . [09/08]
FOR SALE	Meade DS-2114ATS Reflecting Telescope with Autostar Computer Controller. Optical diameter=144mm; Focal length/ratio=1000mm, f/8.8. Comes with 2 eyepieces (25mm, 9mm). Used 2x. Purchased new for Christmas 2005. Asking \$150. Call Kim at 574-2995. [11/08]

Your ad will run for 4 months unless specified. Month and year of last appearance is last item of ad. For additions or changes to this list, call or e-mail the newsletter editor.

Public Star Parties and Community Events

All members of are asked to support the TAAA School Star Party program and other community events listed below. TAAA either sponsors or co-sponsors these events. These are great opportunities for beginners as you may only need to know a few objects in the sky. Even without a telescope, you can be valuable in other capacities. Sign up sheets for many events can be found at the meeting or contact a TAAA officer.

**Tucson Pima Public Library
Astronomy Adventure
Saturday, 9/6/2008**

**South-Central
No. Of Volunteers: 1 or 2**

Tucson Pima Public Library will be hosting Cornerstones of Science at 101 N. Stone Avenue. From Speedway, take Stone Ave. South to Alameda, Right on Alameda, left into the library-parking garage. Hands-on activities for about 10 children ages 7-10 will be in the Children's Meeting Room. Contact person Mary Sanchez can be reached at 520-594-5500 or email mary.sanchez@pima.gov. Free parking will be available for TAAA volunteers! Set-Up Time: 1:30pm. Observing will be from 2:00pm to 3:30pm.

**KPNO Star Party
Saturday, 9/13/2008**

**Southwest
No. of Scopes: 8**

Kitt Peak National Observatory will be holding Tohono O'odham Family Night at Kitt Peak. Follow Ajo Way through Three Points to the junction of 86 and 386. Turn left and drive 12 miles to the Kitt Peak picnic area. Viewing will be at .9-m parking lot near WIYN, south side

of lot along the wall. Contact person Robert Wilson can be reached at 318-8440 or email rwilson@noao.edu. Set-Up Time: 6:30pm. Observing will be from 7:00 pm to 9:00 pm. Sunset: 06:36pm, Dark Sky: 07:29pm Moon Phase: near Full Moon.

**SGSC Star Party
Friday, 9/26/2008**

**Foothills
No. of Scopes: 4**

Sahuaro Girl Scout Council will be planning Happening at the Hacienda. EAST on SPEEDWAY Blvd. Turn LEFT onto WILMOT Rd. Continue NORTH on WILMOT Rd as it becomes TANQUE VERDE Rd. Turn LEFT onto SABINO CANYON RD. North on SABINO CANYON RD. The Hacienda will be on the west side of the road. Viewing will be at the end of north parking lot. Contact person Michelle Higgins can be reached at 520-319-3187 or email progspec@sahuarogsc.org. Set-Up Time: 7:30pm. Observing will be from 8:00 pm to 10:00 pm. Sunset: 6:18pm, Dark Sky: 7:11pm Moon Phase: (no moon during viewing).

TAAA Dark Site News

ASTRONOMY COMPLEX UPDATE – Sept. 2008

Bill Lofquist

As we look to September, the pace of moving toward the beginning of construction of the TAAA Astronomy Complex picks up momentum. As members may recall, the Board of Directors at its June, 2007 meeting set two goals: (1) to have secured land in a dark site for a permanent place to observe, and (2) to have a strategic plan for the development of the site in place.

In October, 2007 the land was secured by four TAAA members, known as The Perseus Group, with a view toward deeding land to the club to develop the site. In February, 2008 the Cochise County Planning and Zoning Commission unanimously approved the request of TAAA for a special use permit. That application included our overall plan for development.

These two accomplishments meant that the Board's goals were achieved. A lot of work by TAAA members has been occurring since June of last year. As of this writing we are moving quickly toward preparing our request for a building permit to begin the first phase of construction. This phase will include preparing the roads both outside and within the land, installation of the electrical service, drilling of a well and completion of the water system, preparation of a parking lot with spaces for the handicapped,

building of restroom/shower room facilities, putting in a septic system, and construction of some observing pads adjacent to the parking lot. These basic elements of our Astronomy Complex will enable us to begin using it.

Other later elements in the strategic plan will be added in subsequent phases. These will include member observing pads and small member observatories, construction of club observatories, a clubhouse and outdoor ramada, an amphitheater for observing and education and, as needed, some basic sleeping quarters.

To move beyond the first phase of building, we will need to do some fundraising. We are envisioning these efforts to be of two sorts: contributions from within TAAA and an external search for funds.

A special meeting to focus on external fundraising will occur on the evening of Tuesday, September 16, 2008. A separate article about this meeting appears elsewhere in this issue of Desert Skies.

An important step that needs to occur before we can apply for the building permit for the first phase is the deeding of the 16 acre parcel of land from The Perseus Group to TAAA. Our aim is for this to take place during the month of October, 2008. When this occurs we plan to

(Continues on next page)

TAAA Dark Site News (cont.)

launch a pledge campaign to raise additional funds within the TAAA membership. Some of our members have indicated they intend to make contributions to the development of the Astronomy Complex at that time.

At the September General Meeting of TAAA we will make a more detailed report to the membership about all of these plans.

Several small groups of members are at work on different aspects of the Astronomy Complex, and we will need more help in these and other areas. We have a working group focusing on the Policies and Procedures for the Complex. Another group will develop plans for small observatories and larger club observatories. We will need help in shaping a Landscaping Plan for the Complex. There is interest in longer range planning for remote controlled observing.

Plan to be present at the September 5 General Meeting of TAAA to discuss and learn more about these plans and to become involved in making it happen.

ATTEND A TAAA SEMINAR ON FUNDRAISING

Bill Lofquist

On Tuesday, September 16, 2008, we will have a seminar on fundraising that will focus on seeking grants from foundations, public sources, corporations and individuals. The purpose of this discussion will be to develop a plan for generating additional funds to develop the TAAA Astronomy Complex.

We hope members who have experience and interest in this will attend the seminar.

The meeting will be led by two people who have been very successful at helping nonprofit organizations to raise funds. They are Claire Scheuren and Carol Carpenter and they are part of the Technical Services Division of the Pima Prevention Partnership.

The meeting will be held at The Pima Partnership Academy, located at 1346 North Stone Avenue. This is at the southeast corner of Drachman and Stone and you enter the parking area from Stone Avenue.

The seminar will begin at 7:00 PM and will last about an hour and a half.

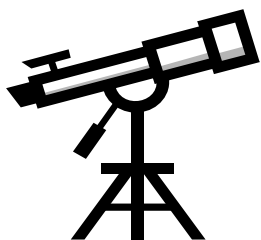
As we begin construction on the initial elements of the TAAA Astronomy Complex this fall we will develop a funding plan to make other parts of the facility a reality. Obviously, building the club observatories and other amenities will call for additional resources. We want our permanent observing facility to be of high quality with the best equipment we can afford.

An article describing the plans that have been developed is also in this issue of Desert Skies, and we will discuss these plans more at the General Meeting on September 5.

If you have questions about this meeting, contact Bill Lofquist at 520-297-6653 or by email at wlofquist@comcast.net.

We hope to see you at the seminar.

Telescopes for Borrowing



Free service



Only for Members

Don't own a telescope?

Our Loaner Program is your answer!

These telescopes are in the program

Sears 60mmf/15 on equatorial mount

Unitron 62mmf/14.5 on equatorial mount

Meade 90mm ETX

Coulter Odyssey8 8-inch f/4.5 Dobson

Meade 8-inch f/4 Schmidt-Newtonian LXN-55

Meade 10-inch f/4.5 on equatorial mount

Meade 10" LX200 GPS (requires training session)

Beginners, here's your chance to learn and observe the sky before buying any equipment. The Loaner Program is available to any current member after meeting requirements detailed in the TAAA Loan Policy. Contact the Equipment Loan Coordinator (see page 2) or any club officer for details about these telescopes.

TAAA Board of Directors Meeting - 13 August 2008**TAAA Board of Directors Meeting, 13 August 2008**

Attending: Board members present (8): Ken Shaver (presiding), Bill Lofquist, Keith Schlottman, Terri Lappin, Luke Scott, John Kalas, George Barber, and Teresa Bippert-Plymate. Members present (4): Robert Crawford, Liz Kalas, Ann Scott, and Claude Plymate.

The president called the meeting to order at 6:35 pm.

Announcements

An ETX-90 telescope has been donated to the club; Bill Lofquist will follow-up with the donor. Stellar-Vision has relocated to 3721 E. 37th Street (NE corner of Palo Verde and 37th).

Club Secretary – Ken Shaver

Steve Marten has resigned as club secretary. Appointment of Luke Scott to office of secretary approved unanimously.

September Meeting – Ken Shaver

September main meeting is reserved for the yearly TAAA status report. Agenda will include status of Dark Site development.

Treasurer's Report – Terri Lappin

Basha's has raised the donation limit of the Shop & Give program to \$5000. Members must link their Basha's Thank You Card to the TAAA group number in order for the club to receive a donation.

Ken Shaver and Terri Lappin will prepare and submit charity fund raiser forms required by the Arizona Secretary of State.

Preparation of TAAA tax forms by Keith Schlottman approved unanimously by Board.

Directors and Officers Liability Insurance – Keith Schlottman

A policy update has been received from insurance company and rates are unchanged.

Conflict of Interest Policy – Keith Schlottman

Keith Schlottman presented a Conflict of Interest Policy to the Board. Policy was discussed and motion was made and seconded to adopt the policy. Approved unanimously.

Dark Site Land Development – Bill Lofquist

The Strategic Planning Group (SPC) presented three recommendations for action to the Board:

Recommend that the Board approve the proposal for contract of Mr. John Riggs, architect. Approved unanimously.

Recommend that John Kalas be appointed to serve with the Strategic Planning Group. Approved unanimously.

Recommend that the Board approve an amount of up to \$700 from the Land and 30" Telescope Fund as an expenditure for a septic site evaluation. Approved unanimously.

The SPC and Perseus Group presented a consolidated list of events in spreadsheet form that need to occur in order to move forward with Phase 1(a) development.

TIMPA

The annual TIMPA Aerobatic Shootout will be held on 6-12 October and the site will be closed to observing during this time. Board will follow-up with TIMPA officers to determine if TAAA needs to clean up the telescope pads area.

Meeting adjourned at 9:05 pm.

Respectfully submitted,
Luke Scott
Secretary

Dark Skies for September 2008

DARK SKIES (no twilight, no moonlight) for Tucson in 24-hour MST: 18=6pm, 20=8pm, 22=10pm, 0=12am
RISE, SET, VISIBILITY for sun and bright planets: rise for morning object, set for evening object

Su/Mo 31/ 1 20:13 - 4:35	Th/Fr 11/12 3:18 - 4:43	Su/Mo 21/22 19:43 - 23:04
Mo/Tu 1/ 2 20:12 - 4:36	Fr/Sa 12/13 4:20 - 4:44	Mo/Tu 22/23 19:41 - 0:11
Tu/We 2/ 3 20:12 - 4:36	Sa/Su 13/14 - - -	Tu/We 23/24 19:40 - 1:20
We/Th 3/ 4 20:42 - 4:37		We/Th 24/25 19:39 - 2:28
Th/Fr 4/ 5 21:16 - 4:38	Su/Mo 14/15 Full Moon	Th/Fr 25/26 19:37 - 3:33
Fr/Sa 5/ 6 21:54 - 4:39	Mo/Tu 15/16 - - -	Fr/Sa 26/27 19:36 - 4:36
Sa/Su 6/ 7 22:38 - 4:40	Tu/We 16/17 - - -	Sa/Su 27/28 19:34 - 4:55
	We/Th 17/18 - - -	
Su/Mo 7/ 8 23:26 - 4:40	Th/Fr 18/19 19:47 - 20:20	Su/Mo 28/29 19:33 - 4:55
Mo/Tu 8/ 9 0:20 - 4:41	Fr/Sa 19/20 19:46 - 21:07	Mo/Tu 29/30 19:32 - 4:56
Tu/We 9/10 1:18 - 4:42	Sa/Su 20/21 19:44 - 22:02	Tu/We 30/ 1 19:30 - 4:57
We/Th 10/11 2:17 - 4:43		We/Th 1/ 2 19:29 - 4:58

Weekend	Sun	Sun	Mercury	Venus	Mars	Jupiter	Saturn			
Sa/Su	Set	Rise	Set Vi	Set Vi	Set Vi	Set Vi	Rise Vi	Vi	Vi=	Visibility
30/31	18:48	5:57	19:50 5	19:52 1	20:08 5	1:38 -2	6:10 -	-3	brilliant	
6/ 7	18:39	6:01	19:41 5	19:47 1	19:52 6	1:10 -2	5:47 -	0	conspicuous	
13/14	18:30	6:05	19:28 6	19:41 0	19:37 6	0:43 -2	5:24 9	3	moderate	
20/21	18:21	6:10	19:09 7	19:36 0	19:22 7	0:16 -2	5:01 6	6	naked eye limit	
27/28	18:11	6:14	18:41 -	19:32 -1	19:07 7	23:50 -2	4:37 4	9	binoculars limit	

By Erich Karkoschka

Constellation Report by Chris Lancaster

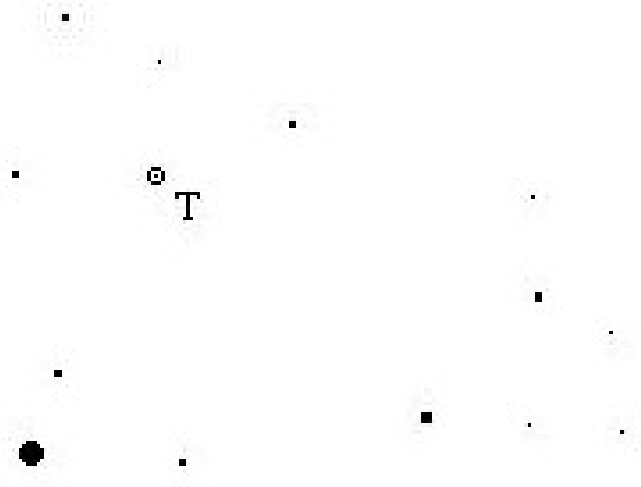
Grus

The Crane

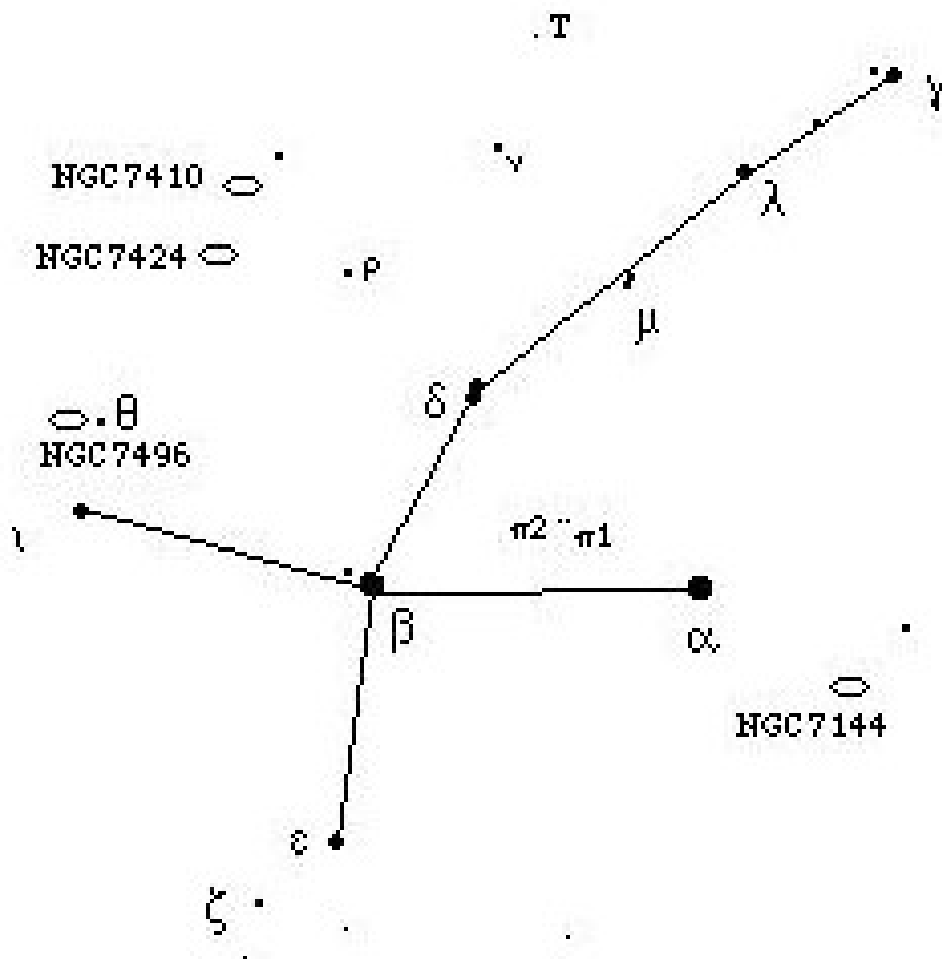
This constellation is comparatively recent, appearing in Johann Bayer's atlas in 1603. Originally, the stars of Grus were part of Pisces Austrinus (the Southern Fish), but since then they have been grouped into a separate, distinct constellation. There is little history associated with Grus since it contains stars of 2nd magnitude and fainter, and it lies in a far southern declination. Therefore, it largely escaped the attention of the ancients. Thanks to our latitude of only 33 degrees north, we can see Grus in its entirety when it is highest in the sky. From Tucson, we are limited to seeing stars only above -57 degrees declination, and Grus's southern boundary runs along declination -56.5. To find it, look for the 1st magnitude star Fomalhaut sitting alone in the southern sky about 27 degrees above the horizon. Grus is due south of Fomalhaut assuming the shape of an upside down, broken cross.

Grus is clear of the obscuring Milky Way, allowing us to look past our home galaxy into intergalactic space. As a result, Grus is home to a wealth of galaxies and none of the comparatively nearby nebulae and star clusters. On our way to some of these galaxies, lets first stop at a visual pair of stars near the heart of Grus. The two, Pi 1 (magnitude 6.4) and 2 Gruis (magnitude 5.6), sit within the triangle of stars formed by Delta, Alpha, and Beta Gruis. They are separated by 4.3 arc minutes, so they can be split with just binoculars. Each star, however, presents more than initially meets the eye. Zooming in to Pi 2 reveals that this star is a double itself. It has a dim 10.6 magnitude companion 11" away at a PA of 212.5 degrees. Moving to Pi 1 to the west, we find that this star is an irregular variable fluctuating between magnitudes 5.4 and 6.7. Comparing Pi 1 to Pi 2 gives us a good way to judge the variable's behavior.

If you'd like to find another variable star, try T Gruis. This one is more predictable, being a long period variable with a fairly short



Constellation Report by Chris Lancaster (cont.)



period (for the type) of 136 days. At maximum, it is a not too bright 7.8 magnitude. At minimum, it all but disappears to magnitude 12.3. You can find T Gruis at RA 22h 25m 40.7s Dec -37d 34' 08", 1.7 degrees NNW of Nu Gruis, or use the included finder chart. North is at top, east to the right. Brightest star at lower left is magnitude 7.6. Image spans 33' left to right.

The galaxies in Grus are quite dim. You won't find an M31 or M81 caliber galaxy here. However, some are well within the grasp of medium sized telescopes. Up in the northeast part of the constellation is NGC7410; a spiral tilted almost edge on. It glows with a magnitude of 11.5 and measures 5.3' x 1.6'. The center of this galaxy is quite bright and broad, with the spiral arms fading rapidly toward the edge. NGC7410 sits at RA 22h 55m 00.7s Dec -39d 39' 41" in a line with Delta and Rho Gruis, 2.8 degrees northeast of Rho.

One and a half degrees south southeast of 7410 is NGC7424. This face-on spiral glows more brightly at magnitude 10.9, but the problem with spotting this one is that this light is spread over a larger area--9.5' x 8.0'. Thus the surface brightness is significantly lower. Its core is the most noticeable feature with its loose arms reaching faintly



beyond. Find NGC7424 at RA 22h 57m 18.0s Dec -41d 04' 09".

NGC7496 is easy to find. Just move half a degree east of Theta Gruis and you'll see a compact 11.9 magnitude fuzzy spot measuring 3.3' x 3.0'. For those of you who do want the specific location, it is RA 23h 09m 47s Dec -43d 25' 43".

Swinging completely over to the southwest corner of the constellation we will run across NGC7144, a galaxy that shows a totally different character. Evidently, here is an elliptical galaxy with a diameter of 3.7'. There is no detail to this one except for a perfectly round, evenly lit glow from innumerable stars. The trouble we have here is that it lies so low in the sky that we may have to compete with atmospheric imperfections and the limited time it is above the horizon. NGC7144 is 2.9 degrees southwest of Alpha Gruis, or RA 21h 52m 43" Dec -48d 15' 16".

Tucson Amateur Astronomy Association
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Directions to TIMPA and Las Cienegas

Directions to TIMPA Site

GPS coordinates: 32 deg 15.868' N, 111 deg 16.390' W

From the North:

1. Take Ina Rd. west about three miles past I-10.
2. Turn left (south) on Wade Rd.. Wade Rd. becomes Picture Rocks Rd. when the Rd. bends to the right (west).
3. Take Picture Rocks Rd. west to Sandario Rd..
4. Turn left (south) on Sandario Rd. to Manville Rd..
5. Turn right (west) on Manville Rd. to Reservation Rd..
6. Turn left (south) on Reservation Rd. (dirt Rd.) and go about two miles. The TIMPA entrance is on the left.

From the East:

1. Take Speedway Blvd. west and it turns into Gates Pass Rd..
2. Go over Gates Pass and continue west to Kinney Rd..
3. Turn right (north) on Kinney Rd. and continue past the Desert Museum.
4. Kinney Rd. bends left at the entrance to Saguaro National Park West and becomes Mile Wide Rd..
5. Take Mile Wide Rd. west about five miles to Reservation Rd.. Mile Wide Rd. ends at Reservation Rd. and you must turn right (north) onto Reservation Rd..
6. Take Reservation Rd. north about one mile. The entrance to TIMPA will be on the right.

NOTE

A gate card is required for TIMPA access. Please **DO NOT** ask the caretakers for entry to the TIMPA SITE. A list of TIMPA key keepers is available on the TAAA website, or by contacting a board member. For scheduled TIMPA star parties, a designated TAAA representative will provide access to the site.

Directions to Las Cienegas (Empire Ranch)

GPS coordinates: 31 deg 47.356' N, 110 deg 37.913' W

Take I-10 East from Tucson. Take Exit 281 (Route 83 Sonoita-Patagonia Highway South). Travel south on Route 83 for about 19 miles, watch for green and white milepost 40 sign on the right side of the road. Approximately ¼ mile past milepost 40, turn left into Las Cienegas. The road is dirt and is "washboarded" so go carefully. At about 2.9 miles, there is a fork in the road. Stay to the right. When the road ends in a "T", take a left. Cross over a concrete section of the road down in a wash. Just up the hill from the wash (about .2 mile), turn left. 0.1 mile ahead will be the end of an abandoned airstrip with a covered ramada. The club members have been setting up several tenths of a mile down the runway. If you arrive after dark, as a courtesy to other members, use only your parking lights to approach the set-up location.