



Desert Skies

Tucson Amateur Astronomy Association

Volume LIII, Number 12

December, 2007



Happy Holidays!

Inside this issue

- ◆ TAAA Holiday Party
- ◆ School star parties
- ◆ TAAA Dark Site Update
- ◆ Object of the Month
- ◆ Constellation of the month

Cover Photo: Sunset over Kitt Peak. Taken by Dean Ketelsen using a Canon 20DA.

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TAAA Phone Number: (520) 792-6414

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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\$ 5.00
 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 \$ 4.60

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

President's Message

With Thanksgiving upon us as I write and the holidays soon to follow, we are drawing toward the end of the year. It has been a busy and most interesting one. For at least a small group of us, the process of pursuing a permanent dark site for the club has been a demanding and time-consuming task. Now that we have accomplished that, the opportunity for more members to become involved will expand quickly. By the time you receive this issue of Desert Skies the application for the Special Use Permit will have been submitted. We will confirm this in the January issue, but we anticipate that our hearing before the Cochise County Planning and Zoning Commission will be on the evening of January 9, 2008. In the meantime, the Citizen Review Process related to our application will continue up until the time of that meeting.

The Board is planning to have two special meetings focused on the development of our dark site during January and February next year. We will let you know the time and place for these two meetings, and we hope to get good participation at them.

On December 7, in place of our regular monthly meeting we will have our annual Holiday Party in the Lofquist's back yard like we did last year. Please look elsewhere in this issue for information about this and directions to our house. We are asking members to bring some raffle prizes to supplement those from our retail shop friends. If you have some spare astronomy related treasures that you can contribute to the raffle, we will make a super-raffle a part of the entertainment.

Many members have been active in a number of ways throughout the year, especially related to the star party program. We appreciate the many hours of fun that have been contributed to our star party volunteers.

A major contribution this year has been made by the four members known to us now as The Perseus Group. They have purchased the property for our dark site and will be donating 16 acres of it to TAAA. They are Sam Rua, Robert Crawford, John and Liz Kalas and Erich Karkoschka. Their generosity is incredible, and this has made it possible for us to obtain the dark site. Think positive thoughts now that we will get over the final hurdle of obtaining the Special Use Permit, and we will have achieved the goal set by the Board at its June meeting.

I would like to thank the members of the TAAA Board of Directors for the hard work they have put in this year. They are an enjoyable and knowledgeable group it has been my pleasure to work with.

So we will move into 2008 with a lot on the table and much we can be pleased with that was accomplished during 2007. Best wishes for the New Year!

Clear skies,
Bill Lofquist

Meeting Information and Calendar of Events

TAAA MEETING DATE: There will be no monthly meeting for December. Plan to attend the club's holiday party on Friday, December 7.

BOARD OF DIRECTORS MEETING: Wednesday, Dec. 12, 6:30 pm. The meeting is held at Steward Observatory Conference Room N305.

STAR PARTIES AND EVENTS:

01 Dec - TAAA and BSIG Star Party at TIMPA
05 Dec - Beginner's SIG at China Rose
07 Dec - Holiday Party at Bill and Mary Lofquist's
08 Dec - TAAA Star Party at Las Cienegas

10 Dec - Astrophoto SIG at China Rose
12 Dec - Immaculate Heart Academy Star Party
14 Dec - Santa Rita HS Star Party
15 Dec - Maldonado ES Star Party
29 Dec - TAAA and BSIG Star Party at TIMPA

NEWSLETTER SCHEDULE: Note: the deadline has been advanced 1 week due to the holidays. Deadline for articles: Sat, Dec. 15. Printing: Mon, Dec. 17. Folding Party: Wed, Dec. 19. Mailing: Thu, Dec. 20. 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: Patricia Boquard, Thomas Vigorito. Glad to have 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.)

Astro-Imaging SIG Meeting

Monday, Dec. 10, 7pm
China Rose, NE corner Speedway/Rosemont

Our presentations feature CCD images, planetary web-

Club News (cont.)

cams, 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.

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.

Beginners' Special Interest Group

BSIG Meeting is December 5

Normally the Beginners Special Interest Group dinner meeting is held the Wednesday before the regularly scheduled TIMPA observing night. However, TIMPA is scheduled twice in December, on the 1st and the 29th, and scheduling the meeting the Wednesday before either of those dates is problematic. Therefore, the December BSIG dinner meeting at the China Rose restaurant (NE corner of Speedway and Rosemont) will be held on Wednesday, December 5, at 6:00 pm. J.D. Metzger will present "Mars and Meteors". Mars will be at its closest approach on December 18, and the annual Geminid meteor shower will peak on December 14. J.D. will discuss observing Mars, and watching meteor showers in general, and the Geminids in particular. So join us at the China Rose for information and good company, and we hope to see you at TIMPA also!

COME TO THE TAAA HOLIDAY PARTY DECEMBER 7!

The TAAA Holiday Party will be held in place of the December general meeting on December 7 at the home of Bill and Mary Lofquist. We are holding it on our regular meeting night because the rooms usually available to us at the Steward Building and the Kuiper Building are in use that night for exam week.

The party will be a pot-luck dinner. Please bring any of the following items: hors d'oeuvres, salads, main dishes, vegetables, bread, desserts or drinks. There will be grills available for cooking meat if you would like to bring your own.

We will not have a speaker, but a couple features for the evening will be our usual raffle and a special raffle of an 8" SCT that was donated to the club. This scope is used but very serviceable. Tickets for this special raffle will be \$5 each and can be purchased at the party.

For the regular raffle, in addition to the donations from our local astronomy shops, we are asking members to bring something from your collection of astronomy related paraphernalia. It might be a book, some software, an eyepiece or something you thought you really needed

at some time but haven't used in a long time. You might even wrap it up as a surprise for someone to take a chance on.

George will have his sound system available for music. If it is cold we will have patio heaters as we did last year. So come prepared for some good fellowship with fellow astronomy buffs.

To get to the Lofquist's, let's begin at the intersection of Ina Road and La Cholla Boulevard. This is near Foothills Mall. Go south on La Cholla Boulevard to the first traffic light and turn left (east) on Omar Drive. Go a short block to Amahl Drive and turn right. Go one half mile and turn left on Harran Drive. The next left is Harran Circle, and we live at 1935 West Harran Circle. If you get lost call us at 297-6653.

We look forward to seeing you at the TAAA Holiday Party!

Upcoming Lectures

NO MEETING IN DECEMBER! Due to the final exam schedule at the UA we've been unable to acquire a lecture hall suitable in size for the December lecture. Please join us at the Holiday Party on our regular meeting night, Dec 7th. See an article elsewhere in this newsletter about the Holiday Party.

If you've been watching this article over the last month or so, you'll notice some changes have taken place. Peter Smith's lecture has been moved to the March meeting to accommodate his schedule. Luckily, the speaker originally set for March says that April would be much better for her. Doug Isbell, who was to speak to us at the December meeting, will be talking to us in February. So, all worked out well. However, we're left with no speaker for the January meeting. If you want to suggest a speaker, please tell Terri Lappin (see page 2 for contact info).

Jan 4	<i>Astronomy Essentials</i>	Mary Turner, Seasonal Objects
	<i>Invited Lecture</i>	OPEN
Feb 1	<i>Astronomy Essentials</i>	Keith Schlottman Observing Accessories You Can't Live Without
	<i>Invited Lecture</i>	Doug Isbell
Mar 7	<i>Astronomy Essentials</i>	OPEN
	<i>Invited Lecture</i>	Peter Smith, LPL Mars Phoenix Mission
Apr 4	<i>Astronomy Essentials</i>	OPEN
	<i>Invited Lecture</i>	Gilda Ballester Exoplanets

Club News (cont.)

Basha's Thanks a Million Program

Basha's has an excellent program to support local non-profit groups like the TAAA. It's called the Basha's Thanks a Million for Friends and Neighbors program. This is a no-brainer fundraiser. If you shop at Basha's and have a "Thank you" card, the next time you go through the checkout, give the cashier this number: ID #23178. 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. 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.



ID # 23178



<<<NEWS - WORKSHOPS IN THE NEAR FUTURE>>>

A request has been made to arrange for NSN Toolkit workshops so members can learn more about them and perhaps get them into more use at our outreach events. Terri Lappin is looking into this. Let her know (see page 2 for contact info) you're interested and if you have a pref-

erence for when they are held. This will help her know how many people will attend and when best to schedule the workshop. The first workshop will most likely cover the Exploring the Solar System toolkit.

All NSN toolkits contain essentially all the materials needed for the projects. The projects are easy to do and you don't have to use all the projects in your outreach activity. You get to pick and choose the project(s) you demonstrate.

PlanetQuest: materials to explain how planets are detected, why we put telescopes in space, treasure hunt for objects related to stellar evolution, star chart of naked eye stars known to have planets in orbit

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, includes a game that a group or family can play

Telescopes - Eyes on the Universe: explains the basic principles of optics, the human eye, and observing

Shadows and Silhouettes: covers lunar phases, eclipses, and transits

Exploring the Solar System: scale model (size and distances) of solar system and NASA explorations of planets

All NSN toolkits include a Resources CD, a training DVD, and essentially all the materials needed for the projects. Each workshop attendee will receive a CD and DVD set. You can also request a copy of the CD and DVD set at a meeting.

The Night Sky Network has also given us a SolarScope to use in our outreach efforts. It will provide a white light image of the sun suitable for a small group to view together.

2008 Calendars

Calendars for 2008 will be available for purchase at regular meetings. You'll find them at the same table where you purchase TAAA apparel. This year you have your choice of either the Astronomy magazine "Deep Space Mysteries" calendars or the Vatican Observatory calendar...or get both. The cost for a calendar is \$10 each (\$3 or \$5 off the regular selling price), or \$9 each for more

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Club News (cont.)

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.

Needed: A New Star Party Volunteer Coordinator

We have an opportunity for some lucky TAAA member - School Star Party Volunteer Coordinator. For the past year Claude Plymate has been carrying this role and he will be vacating the position at the end of January, 2008.

The School Star Party Volunteer Coordinator helps to make sure that we have enough astronomers available for the star parties that have been scheduled. As most members know, we are able to sign up for school star parties at each general meeting of TAAA. If a school has asked for four telescopes and only three people sign up for that one, the Volunteer Coordinator will contact the pool of astronomers to let them know we need one more scope. So, most of the work is done on the Internet.

With the new revisions to our club web site, we hope to be able to show the scheduled star parties in the months ahead and have people sign up for them through the web site. This will help us to plan ahead more easily and generate the number of scopes needed more efficiently.

If you would like to learn more about this opportunity, please call Bill Lofquist at 297-6653 or email him at wlofquist@comcast.net.

Kitt Peak Sunset Drive

22 December (23rd cloud date)

By Dean Ketelsen

As mentioned in the November meeting, I'm leading an "expedition" to photograph the sun setting behind Kitt Peak National Observatory near Winter Solstice. The spot is on the Mount Lemmon Highway near milepost 9, and we will meet up at the McDonalds on Tanque Verde and Mt Lemmon Highway at 3pm. Please let me know IN ADVANCE if you plan on joining us! There is limited parking and we likely need to fit into 4 cars or so max. E-mail me at ketelsen@as.arizona.edu or call and leave a message at 293-2855. In the meantime, practice shooting at least one sunset to make sure you have an educated guess about image size, shutter speeds and filter needs. The primary trip will be on Saturday the 22nd, with a "clouded-out" date of Sunday evening. But please, let me know you want to join us. This is mostly a photographic safari, not much to see visually!

Member's Events

TAAA and BSIG Star Party at TIMPA

Saturday, December 1 and Saturday, December 29

Come on out and enjoy the winter skies! 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. It's also a good idea to bring insect repellent. Directions to the TIMPA site are located on the outside flap of this newsletter.

TAAA Star Party at Las Cienegas (Empire Ranch)

Saturday, December 8

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 cold 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.



Holiday Party!
Friday, Dec. 7
Bill and Mary Lofquist



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.

Immaculate Heart Academy Star Party Northwest
 Wednesday, 12/12/2007 No. of Scopes: 3

Immaculate Heart Academy will be hosting Night With the Stars at 410 E. Magee Rd. North on Oracle, past Ina to Magee, turn east (right) on Magee, go to the stop sign, and continue about 1/4 mile. The school will be on your right, through the iron gates. (Sign on gate says Immaculate Heart Lodge). Viewing will be Park in dirt lot on left; observing will be on upper field. Contact person Maureen Summers can be reached at 297-6672 or email msummers@ihschool.org. Set-Up Time: 5:45pm. Observing will be from 6:15pm to 8:15 pm. Sunset: 5:20pm Dark Sky: 6:18pm Moon Phase: Crescent after New Moon.

Santa Rita HS Star Party Southeast
 Friday, 12/14/2007 No. of Scopes: 2

Santa Rita HS will be planning Exploring the Night Sky at 3951 South Pantano. From UA, take Aviation Highway east and continue east on Golf Links. At Pantano Road,

turn south (right). Proceed on Pantano for ~2 miles. Santa Rita is at the SE corner of Pantano Road and Escalante. Viewing will be on the Lawn. Contact person Erin Moore can be reached at 731-7500 or email Erin.Moore@tusd1.org. Set-Up Time: 5:45pm. Observing will be from 6:15pm to 7:45pm. Sunset: 5:21pm Dark Sky: 6:18pm Moon Phase: Crescent after New Moon.

Maldonado ES Star Party Central
 Saturday, 12/15/2007 No. of Scopes: 3

Maldonado ES will be holding Family Science Night and Learning the Night Sky at 3535 West Messala Way. Event to be held at Reid Park. Viewing is to be arranged. Contact person Susan Ropp can be reached at 908-4164 or email sropp2@msn.com. Set-Up Time: 5:45pm. Observing will be from 6:15pm to 8:15 pm. Sunset: 5:21pm Dark Sky: 6:19pm Moon Phase: near First Quarter.

Dark Skies for December 2007

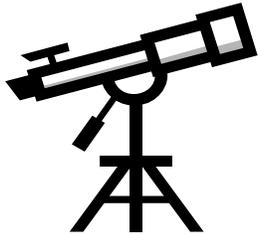
DARK SKIES (no twilight, no moonlight) for Tucson in 24-hour MST: 18=6pm, 20=8pm, 22=10pm, 0=12am
 RISE, SET, VISIBILITY for sun and bright planets: rise for morning object, set for evening object

Fr/Sa 30/ 1 18:45 - 23:53	Mo/Tu 10/11 18:47 - 5:47	Fr/Sa 21/22 - - -
Sa/Su 1/ 2 18:45 - 0:50	Tu/We 11/12 19:02 - 5:48	Sa/Su 22/23 - - -
We/Th 12/13 20:03 - 5:48		Su/Mo 2/ 3 18:46 - 1:45
Th/Fr 13/14 21:05 - 5:49	Su/Mo 23/24 Full Moon	Mo/Tu 3/ 4 18:46 - 2:40
Fr/Sa 14/15 22:07 - 5:50	Mo/Tu 24/25 - - -	Tu/We 4/ 5 18:46 - 3:36
Sa/Su 15/16 23:09 - 5:50	Tu/We 25/26 18:53 - 19:26	
We/Th 5/ 6 18:46 - 4:32		We/Th 26/27 18:54 - 20:34
Th/Fr 6/ 7 18:46 - 5:29	Su/Mo 16/17 0:11 - 5:51	Th/Fr 27/28 18:54 - 21:38
Fr/Sa 7/ 8 18:46 - 5:45	Mo/Tu 17/18 1:16 - 5:51	Fr/Sa 28/29 18:55 - 22:39
Sa/Su 8/ 9 18:46 - 5:46	Tu/We 18/19 2:23 - 5:52	Sa/Su 29/30 18:56 - 23:36
	We/Th 19/20 3:33 - 5:53	
Su/Mo 9/10 18:47 - 5:47	Th/Fr 20/21 4:47 - 5:53	Su/Mo 30/31 18:56 - 0:32

Weekend	Sun	Sun	Mercury	Venus	Mars	Jupiter	Saturn	
	Set	Rise	Rise Vi	Rise Vi	Rise Vi	Set Vi	Rise Vi	Vi=Visibility
1/ 2	17:17	7:06	6:27 9	3:37 -4	19:14 -1	18:24 4	23:53 1	-3 brilliant
8/ 9	17:17	7:11	6:53 -	3:48 -4	18:36 -1	18:03 6	23:26 1	0 conspicuous
15/16	17:19	7:16	Set -	4:00 -4	17:56 -2	17:42 -	22:59 1	3 moderate
22/23	17:22	7:20	17:28 -	4:12 -4	17:16 -2	17:22 -	22:32 1	6 naked eye limit
29/30	17:26	7:22	17:52 -	4:24 -3	7:07 -2	17:02 -	22:04 1	9 binoculars limit

By Erich Karkoschka

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 LXD-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) for details about these telescopes.

Desert Skies Classified

Wanted	Telescope for Sunnyside School District. Is that C-12 just taking up space around the house? The Sunnyside School District is looking for a telescope for use in school classes and programs. The ideal instrument would be a 10-inch telescope or larger and would be permanently mounted at a school site. Anyone who is interested in helping with any part of this project should contact the office of Tucson City Council member Steve Leal. Vice Mayor Steve Leal, Ward 5, 4300 South Park Avenue, Tucson, AZ 85714, Phone: (520) 791-4231, FAX: (520) 791-3188, E-Mail: steve.leal@tucsonaz.gov [02/08]
For Sale	Orion VersaGo Precision Alt/Az mount with dovetail 5" L-Arm. Used only 3-4 times, \$300.00. ZenithStar 66 Petzval f/6 400mm semi-apo with crayford focuser with 1:10 dual speed microfocuser. Comes with William Optics custom soft case. Used 3-4 times, \$300.00. William Optics 2" star mirror diagonal with 1/10 lambda @99% dielectric, carbon fiber plate, used 3-4 times, \$170.00 William Optics 1 1/4" 45deg erecting prism, \$75.00. Items bought for use by wife, physical disability no longer allows viewing. Package deal - Paid \$845.00 - will take \$700.00. Make offer for package deal or individual items. Contact Neal Scofield at (520) 883-5456 or email RetiredBadge@msn.com . [02/08].
For Sale	4.5-inch elliptical secondary mirror and holder. 1/8 wave. Excellent condition \$300. Meade 2-inch, 26mm QX wide angle eyepiece. \$70 or best offer, brand new in box. Gary Vecere, 207-2898 [12/07]
For Sale	Celestron C-14 optical tube assembly with dovetail mounting plate, 50mm finder scope, dust caps and trunk; \$2500.00. SBIG ST-9E parallel port CCD camera with TC-211 guider, CFW-8 filter wheel (no filters), carrying case with cables; \$1800.00. Meade LXD75 10" Schmidt-Newtonian optical tube assembly with mounting rings; \$600.00. Losmandy G-11 German equatorial mount; complete, with adjustable tripod 2-21# and 1-11# counterweights, Losmandy digital setting circles, polar axis alignment scope; \$2000.00 Contact Steve Peterson at 762-8211 or email at ccdcat@msn.com [12/07]
For Sale	Total custom professional 12.5" f-17 ultra-lightweight Cassegrain system. 96% coatings, Zerodur secondary, Cervitt conical primary. Completely diffraction limited with 25% center obstruction. In original cartons, for \$2500. A new in-the-box Astrophysics focuser is also available; price negotiable. Robert Powers, 822-3107. [12/07]
For Sale	1.4 acre dark site in Diamond Bell Ranch. Comes with custom executive 2500 square foot home with rock fireplace, library, 3-bdr. Complete custom woodwork, 3-car garage. \$395,000. Robert Powers, 822-3107. [12/07]

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.

TAAA DARK SITE UPDATE

TAAA DARK SITE UPDATE: The Land Has Been Purchased!

Bill Lofquist

At the end of October four members of TAAA purchased 60 acres in the Sulphur Spring Valley for the development of our dark observing site. When we obtain our Special Use Permit 16 acres of this property will be donated to the TAAA. This extremely generous gift is being made by Sam Rua, Erich Karkoschka, John and Liz Kalas and Robert Crawford.

The last step before our beginning to develop the site is to obtain a Special Use Permit from the Cochise County Planning and Zoning Commission. The application for the permit was submitted on November 19, and we will appear before the Commission at their meeting on January 9, 2008.

We are suggesting that TAAA members who are interested in the development of the land and those who anticipate using the observing site request a copy of the application. This will give you a detailed picture of what has been discussed so far and show how we need to refine our plans for implementation. You can request a copy of the application from Bill Lofquist.

We have a Strategic Planning Working Group which will coordinate the planning and implementation of the site.

This consists of Keith Schlottman, Teresa and Claude Plymate and Bill Lofquist. We will create several small Ad Hoc Working Groups to focus on aspects of development. Some of these that have been suggested are Policies and Procedures for using the Site, Plans for Small Observatories, Plans for the 16' Dome Observatory, Landscaping, Remote Control Telescopes, and Fundraising.

After a decision is made on the Special Use Permit, we will call Special Meetings for members who are interested in January and February. These meetings will help to get the development started.

Year-end Tax Deductible Contributions

For members who might be interested, you can make tax-deductible contributions to the 30-inch Telescope and Land Fund or to other areas of TAAA by the end of 2007. Please make checks payable to TAAA and indicate it is a donation. You can also designate how you would like your donation to be used.

2007 has been the year for securing the land for our dark site. Let's hope that 2008 will be the year for developing an outstanding observing facility for TAAA.

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 !!!



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Order your TAAA Apparel
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ID # 23178

TAAA Board of Directors Meeting - Nov. 14, 2007

Board members present: Ken Shaver, Terri Lappin, Teresa Plymate, Bill Lofquist, Keith Schlottman, and George Barber
TAAA members present: Larry Brown, Claude Plymate
Called to order: 6:32 pm

October minutes – Accepted. Unanimous

Agenda: Need to insure that all monthly agenda items are covered.

Member feedback:

1. Over 100 people attended Sunsites star party. Additional contact and support for the club's dark site resulted.
2. Need for safety awareness at TAAA projects.
3. Invite TAAA Astrophoto SIG to present at January's general meeting. Mary Turner is scheduled for January's Astronomy essentials.

General Announcements: January 2008 board meeting moved to January 16

Treasurer's Report:

1. Tax papers signed and mailed. State received, Federal Outstanding. Investment portfolio gained interest.
2. Lawyer fees have amounted to ~ \$3,000.
3. TIMPA funds utilized for roadway and roll-off building [~ \$10,000], ~ \$15,000 remaining.
4. No club VISA card bills received.
5. Board decided that no board or club members shall have a TAAA credit card, except for the club treasurer.
6. Need to outline expenses for club website and draft a summary of financial guidelines.
7. 2008 budget will be presented at December board meeting.

Director's and Officer's Insurance

Agenda item closed March 2007; club's exposure level will be changing due land acquisition. Re-evaluate club's liability coverage.

Donated 8-inch Celestron classic

Board authorized Keith to take the scope to Dean at Starizona for refurbishment; maximum cost of \$100. Telescope will be raffled at the holiday party, \$5 ticket, must be present to win.

Telescope loaner program

1. Telescopes will be moved to TIMPA storage container, wrapped in plastic film for protection.
2. Beginner's SIG can manage 90-mm ETX; possibly include with the loaner eyepiece kit.
3. Give away or raffle off the smaller, unused telescopes.

TAAA Dark Site

1. The application and site plan was approved, with Terri Lappin abstaining.
2. Ad Hoc groups will be created to initiate development of the dark site, overseen by strategic planning committee [Bill Lofquist, Keith Schlottman, Claude and Teresa Plymate].
3. 3 meetings will be held inviting TAAA members to join ad hoc groups.
4. Advised to contact neighbors in opposition to our permit application. Bill Lofquist may telephone or write the individuals. A future meeting may also be arranged.
5. Need to draft policy regarding naming dark site roads, buildings, etc.

Badges for Members

List to be available at member meetings so attendees can select a badge with pin or magnetic holder, or specify no badge.

Keith Schlottman will recommend suppliers.

The meeting was adjourned at 9:20 pm.

Submitted by George Barber, Member at Large

Constellation Report by Chris Lancaster

Eridanus

The River

This is the great celestial river that winds its way from the western foot of Orion to the southern star Achernar, which translated from Arabic means "the end of the river." This line of stars first heads west, takes a turn to the south, flows back to the east, and finally makes its final journey southwest behind the horizon. To be fair, from Tucson's latitude, Achernar (the 9th brightest star seen from Earth) can theoretically be glimpsed for a couple of hours when it is on the meridian, but since it only climbs half a degree in the sky at most, any hill or shrub will successfully hide it from view, and it can never be seen north of a latitude line connecting such cities as San Diego, Casa Grande, Dallas, and Charleston, SC. This constellation has been seen as a river since ancient times, most often the Nile or Euphrates.

An interesting target with which to start is the triple star system Omicron2 Eridani. The A component (mag 4.5) is separated from the B/C pair by an expansive 83", while B and C (mags. 9.7 and 10.8 respectively) stand about 9" apart. The group is only 16 light years from Earth, making the brightest star the 8th nearest of the naked eye stars. B is an important object simply because of what it is--a white dwarf. It's one of the most easily observable stars of its kind. The 0.44 solar masses it contains are squeezed by gravity into a body which is less than 2.5 times the diameter of Earth, making its density 90,000 times that of water. A golf ball sized chunk of this star would weigh close to 3.5 tons. The C star is a red dwarf and a featherweight among its stellar counterparts, weighing in at only 0.2 solar masses.

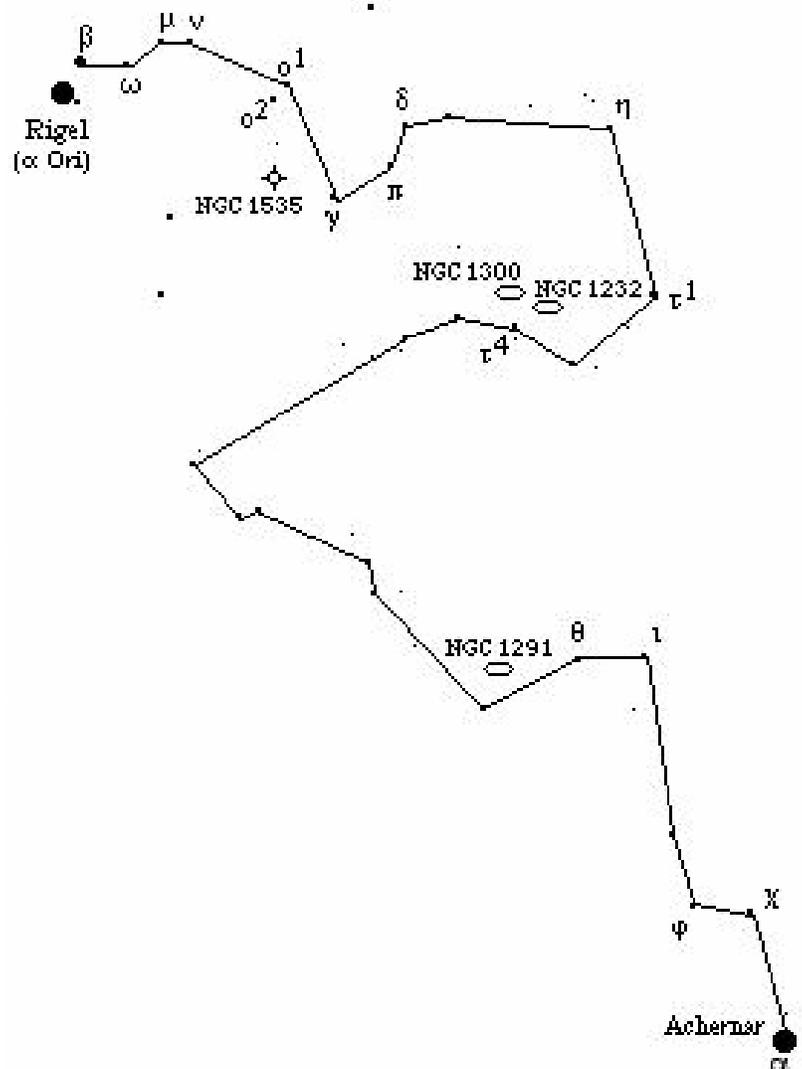
Another double star important for its visual appearance is Theta Eridani. Easily seen with the naked eye at magnitude 2.9, it appears through a telescope as a pair of brilliant white stars of magnitudes 3.5 and 4.5 separated by about 8.5".

There are dozens of galaxies in Eridanus, but three that take center stage are NGC1300, NGC1232, and NGC1291. The first two happen to be close to each other, forming a triangle with Tau4 Eridani. NGC1300 is a barred spiral of magnitude 11.2 and measuring 6.2'x 4.1'. You may not notice the two spiral arms but you should see the nucleus and bar making a thin oval structure. NGC1300 is found 2.4 degrees north of tau4, or RA 3h 19.7m Dec -19d 24.7".

Moving 2.6 degrees to the southwest will reveal NGC1232, a slightly brighter galaxy of magnitude 10.6 and larger than NGC1300, covering 7.4'x 6.4'. This one has closely wrapped multiple arms which seem to merge with each other to give this galaxy the appearance of a soft circle of light. You will find NGC1232 at RA 3h 9.8m Dec -20d 34.9'.

Near the far southern regions of the constellation is NGC1291, another bright spiral galaxy with tightly wound arms. It glows comparatively brightly at magnitude 9.4, and it is significantly larger than the other two galaxies, measuring 9.7'x 8.1'. However, it sits well down in the sky toward the southern horizon 3.7 degrees ESE of our double star Theta Eridani. Any significant dust or haze in the air will compromise your view of this galaxy. Look at RA 3h 17.3' Dec -41d 6.5' for this object.

A fairly easy deep sky object to view is NGC1535. It's a planetary nebula of magnitude 10 and 20" in size. Move 5.5 degrees south of the triple star omicron2, or zoom in to RA 4h 14.2' Dec -12d 44.5'.



Tucson Amateur Astronomy Association
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**No December Meeting
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Please consider renewing your membership on time. Renewal month and dollar amount appears on your address label. Magazine subscriptions are not included. TAL fee is included if participating in TAL. See details on page 2.

Directions to TIMPA and Empire Ranch

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.