

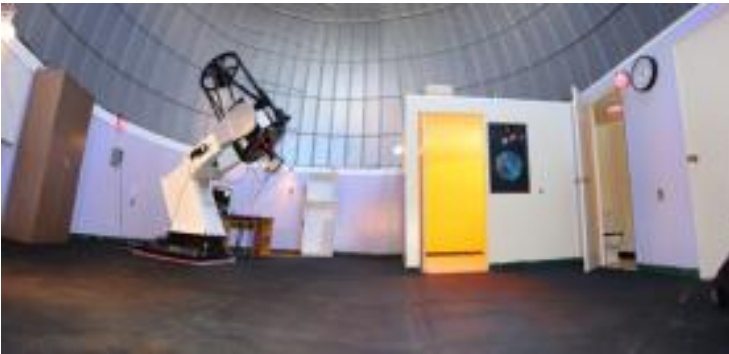


Desert Skies

Tucson Amateur Astronomy Association

Volume LIV, Number 10

October, 2008



Mount Lemmon SkyCenter

Inside this issue

Learn about:

- ♦ The new electronic newsletter!
- ♦ Volunteer for School star parties
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- ♦ Super-Skyway
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- ♦ TAAA Astronomy Complex Update
- ♦ Articles from our members
- ♦ Constellation of the month

Cover Photos: Upper left: The 24-inch telescope is enclosed atop Mount Lemmon within the dome at the left. Lower left: A 24-inch telescope was installed in the newly remodeled dome at the Mount Lemmon Sky Center in April. Right: The 24-inch Mount Lemmon Sky-Center telescope is the one the public uses in programs offered through the UA's College of Science and Steward Observatory. All photos by Adam Block.

TAAA Web Page: <http://www.tucsonastronomy.org>

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.....\$ 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)

President's Message

The LBT tour in September was a great success despite my attempts to spoil it by being late. I would like to send my sincere thank you to everyone who helped out. I would especially like to thank Dr. John Hill for his generosity in offering to let us visit the facility.

As usual, the fall brings many astronomy events and activities for Tucson and Southern Arizona. Please keep an eye on the web and newsletter for club schedules. We will be moving forward aggressively on the dark site plans. The strategic planning committee is putting together the necessary documentation and plans to submit for the permits needed so that we can begin construction. They have put together a very aggressive time schedule that would allow us to begin using the facility early in 2009. Those efforts will require support from the club membership both in time and financially. If you see a way that you can contribute to the success of this project we would love to hear from you. We hope to begin with some fundraising efforts to help support the project soon.

The board has selected a date for the newsletter to go electronic. Beginning the first edition in January 2009, we will be sending the newsletter notices via e-mail. Between now and then, the board will be testing the system to make sure that the transition will be smooth. This move promises to keep our club budget under control without affecting our membership rates, and still be able to fund our many rising operating expenses. It will also provide members with a much improved and timely newsletter. Please help us out and contact Terri Lappin if you are having any issues with the e-newsletter delivery.

Clear Skies

Ken Shaver
TAAA President

Meeting Information and Calendar of Events

TAAA MEETING DATE: Friday, October 3, at the Steward Observatory Auditorium – Room N210

ASTRONOMY ESSENTIALS: 6:30 pm

Title: Objects of the Season

Speaker: Dr. Mary Turner

Dr. Turner will give her quarterly update on the best objects for observing during the fall and early winter season.

GENERAL MEETING: 7:30 pm

Title: Mount Lemmon SkyCenter

Speakers: Valerie Grindle and Adam Block

The Mount Lemmon SkyCenter lives on a site that is steeped in both astronomical and military history. Our presenters will describe a bit about these things and then segue into the programs being offered at this unique and precious place. They will offer details about the premium experiences a person can take advantage of at the Sky Center. These include SkyNights, which take place almost nightly to rave reviews. Finally, our speakers will demonstrate a bit of image processing, which will give a little insight into how they create the celestial vistas that have received some attention as of late.

BOARD OF DIRECTORS MEETING: Wednesday, October 8, 6:30 pm. The meeting is held at Steward Observatory Conference Room N305.

STAR PARTIES AND EVENTS:

04 Oct - TAAA and AF-SIG Star Party at TIMPA

06 Oct - Astro-Imaging SIG

07 Oct - Immaculate Heart Academy Star Party

08 Oct - Hughes ES/ Camp Cooper Star Party

09 Oct - Astronomy Fundamentals SIG

15 Oct - Hughes ES/ Camp Cooper Star Party

15 Oct - Miles, ELC Star Party

16 Oct - Tucson Hebrew Academy Star Party

17 Oct - Robins Elementary Star Party

21 Oct - Lamb's Gate Christian School Star Party

25 Oct - TAAA Star Party at Las Cienegas

03 Nov - Utterback MS Star Party

04 Nov - Ft. Lowell ES/ Camp Cooper Star Party

NEWSLETTER SCHEDULE: Deadline for articles: Sat, Oct. 25. Printing: Mon, Oct. 27. Folding Party: Wed, Oct. 29. Mailing: Thu, Oct. 30. 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: Daniel Bell, Mikael J Ciuk-Karlsson, Bob (Fred) Frederick, Terry Kowing & Sherry Brown, and John Michael Palmer. We also welcome back former members Thomas Burdon, Chuck Dugan, Nina Lehman, and Brad Shankles. 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.)

Astro-Imaging SIG Meeting

Monday, Oct. 6, 7pm

China Rose, NE corner Speedway/Rosemont

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 AFSIG for October

The Astronomy Fundamentals Special Interest Group (AFSIG) will meet on Thursday, October 9, at 6:30 pm in room 253 of the Environmental and Natural Resources Building (USGS and Weather Service) on the northeast corner of Sixth Street and Park Avenue on the campus of the University of Arizona.

Our guest lecturer will be Robert Wilson, Senior Program Coordinator for the Public Affairs and Educational Outreach department of the National Optical Astronomy Observatory (NOAO). Robert will speak on star atlases. Star atlases may look the same at first glance, but look closer and you might notice some important differences. Knowing how star atlases present their information can help new amateur astronomers make informed decisions about which atlas may best suit their observing needs. Robert will explore the differences and similarities of two well known and two not so well known star atlases, each with a slightly different way of presenting the night sky.

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 will have new apparel items available at the meeting, including long sleeve denim shirts, long sleeve t-shirts, and knit caps. Orders will be taken for jackets during the October and November meetings. These jackets will be delivered at the December meeting.

Pictures and descriptions of the jackets will be available at the meeting. We take cash and checks.

2009 Calendars

Calendars for 2009 are currently being sold at our regular meetings. You'll find them at the same table where you purchase TAAA apparel. This year we have chosen the Astronomy Magazine "Deep Space Mysteries" calendars. 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.

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.

Unsure about being a school star party volunteer?

By Roger Schuelke

School Star Party Volunteer Coordinator

As Ken mentioned in last month's President's message being a star party volunteer can be very rewarding. There is nothing as wonderful as the exuberance of a first-time observer. The "Ohs" and "Ahs" of an excited child looking through your scope must be experienced to be appreciated. And it is such a great service to give to your community. But maybe you are hesitant, or unsure of your ability to be a volunteer. Let me assure you that it is really quite simple and a basic understanding of the sky is all that is needed. However, if you are still not sure, then we can help. If you contact the AFSIG group we can pair you with a buddy who can help you 'learn the ropes' of being a star party volunteer. Your buddy will assist you at your first school star party, help with your scope and finding objects and generally be there to support you until you are comfortable on your own. You can contact me, J.D. or Dennis and we will see that you are paired with a buddy. Come out and join us.

Roger Schuelke

Star Party Volunteer Coordinator, email:

roger_s47@yahoo.com, phone: 520-404-6724

Club News (cont.)

J.D. Metzger, email: jayhawk68@cox.net, phone: 520-760-8248

Dennis McMacken, email: dkcmacken@yahoo.com, phone: 520-743-2066

Basha's Shop & Give



#23178

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 that will require 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.

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. Our Fall Member's Night is coming up very soon. A sign up sheet will be at this month's meeting. If you sign up now to give a

presentation, we can notify members of your topic through the newsletter. We also need to fill the Dec 5th Astronomy Essentials lecture, so consider giving a 30 minute presentation.

Nov 7	No AE lecture, meeting starts at 6:30pm	Members Night
Dec 5	Astronomy Essentials	OPEN
	Invited Lecture	Don Sweeney LBT
Jan 2	Astronomy Essentials	Mary Turner Seasonal Objects
	Invited Lecture	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 when it's dark. They are best when used in a small group as you might have around your telescope at a school star party.

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

PlanetQuest: explains planet detection techniques



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Club News (cont.)

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.

Member's Events

TAAA and AFSIG Star Party at TIMPA

Saturday, October 4

Come on out and enjoy the autumn 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. Directions to the TIMPA site are located on the outside flap of this newsletter.

TAAA Star Party at Las Cienegas (Empire Ranch)

Saturday, October 25

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.

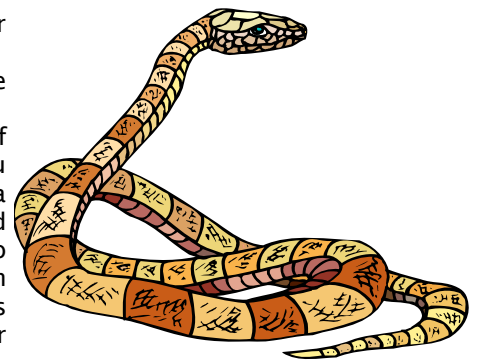
Rattlesnake Alert!

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

Where to buy?

With money tightening, many amateur astronomers are turning to the internet to buy used equipment. The first website they usually go to is eBay. That place is really the Wild West when it comes to buying sensitive instruments like catadioptric telescopes or things like cameras. I have had mixed results and in one case the item purchase was never received and the seller refused to accept any responsibility.

So where to go? Of course the granddaddy of online astronomical classifieds is AstroMart:

<http://www.astromart.com/classifieds/>

If you have not registered with them you should though your spouse may hate me for this! You will not be put on a mailing list but will gain access to buy and sell on their list. I have bought and sold many things through this website and never been disappointed.

Another astro-classifieds website is AstroBird:

<http://www.buytelescopes.com/classifieds/categories.asp>

It seems allied with Anacourt that hosts AstroMart.

Playing a close second to the AstroMart is the Cloudy Nights Classified page:

<http://www.cloudynights.com/classifieds/>

I have purchased things here and been completely satisfied with the functioning of this website, its oversight and its subscribers

There are some other smaller lists you can lurk as well.

Don Rothman's used-but-like-new list has some real interesting unusual items on it:

<http://astronomy-mall.com/astro.parts.outlet/>

While not a big list, there were some good bargains at Telescope Trader:

<http://www.geocities.com/telescopetrader/>

Gary Hand, an old 'hand' at astronomical optics, has a large website of equipment (telescopes, mounts and accessories) called Hands on Optics with a "used equipment" page at:

<http://www.handsonoptics.com/used.html>

Another website that offers lots of astronomically useful things is Surplus Shed:

<http://www.surplussshed.com/>

This is a website full of interesting things for the optical or scientific tinkerer, the ATM and amateur astronomer. Being an old devotee of the Amateur Scientist column in old Scientific American magazines (when they used to build things) I can easily overspend the budget at this place. In fact, when the hardcopy catalogs come to my house they often mysteriously wind up in the trash before I get a chance to see them! Can't imagine how that happens.

If you need inspiration, Surplus Shed even offers all the old Amateur Scientist articles on CDROM at:

<http://www.surplussshed.com/pages/item/m2071.html>

If you have never seen these you need one of these. It will keep you busy for months!

As always, send ideas of topics you like explored (or spousal hate mail about this article) to me at rhill@lpl.arizona.edu

See the Stars through a Telescope

Free and open to the public

Saturday, October 18

Smithsonian Institution
Fred Lawrence Whipple Observatory
Visitors Center near Amado, Arizona

Observing will begin after 6:45 p.m. with telescopes provided courtesy of the Tucson Amateur Astronomy Association (TAAA) and the Sonoran Astronomical Society (SAS).

4:30 p.m. Visitors Center opens

5:45 p.m. Informal lecture presented by Observatory staff

~6:45 p.m. Observing begins (next to Visitors Center)

Please cooperate with staff directing parking when you arrive. The parking spaces nearest the building are reserved for TAAA/SAS members and their telescopes. Visitors should park along the driveway or in the parking area outside the gate or along the road as directed.

For more information call 670-5707. In case of threatening weather, call 670-5707 after 4:30 p.m. on the 18th for information about star party cancellation.

<http://www.cfa.harvard.edu/facilities/flwo/starparty.html>

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 Polachek
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 !!!

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 SP Northwest **Tuesday, 10/7/2008 No. of Scopes: 4**

Immaculate Heart Academy will be hosting Night Sky Adventure 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 is to be arranged. Contact person Maureen Summers can be reached at 297-6672 or email msummers@ihschool.org. Set-Up Time: 6:30pm. Observing will be from 7:00 pm to 9:00 pm. Sunset: 6:04pm Dark Sky: 6:57pm Moon Phase: First Quarter.

Hughes ES/ Camp Cooper Star Party West **Wednesday, 10/8/2008 No. of Scopes: 2**

Hughes ES/ Camp Cooper will be planning Interdependence: Where are Conditions Right for Life? at 5745 W. Trails End Rd. Drive west on Speedway or Anklam Road. Just beyond the intersection of Speedway and Anklam turn right (north) on to Camino De Oeste. Turn left (west) on to Trails End Road. Drive one mile. Cooper ESC is on the left (south) side of the road. Viewing will be on the dark trail on east side of Camp Cooper. Contact person Terry Hartmann can be reached at 232-7400 or email terry.hartmann@tusd1.org. Set-Up Time: 6:30pm. Observing will be from 7:00 pm to 8:30 pm. Sunset: 6:03pm Dark Sky: 6:56pm Moon Phase: near First Quarter.

Pima Community College, Northwest Campus, **Earth Science Day** **Wednesday, 10/15/2008** **No. of Volunteers: 2 or more**

Pima Community College, Northwest Campus will be hosting Earth Science Day.

The Event will be held in the courtyard. Contact person Denise Meeks can be reached at 206-2247 or email dmeeks@pima.edu. Lunch and refreshments will be available for TAAA volunteers! Set-Up Time: 8:30am. Activities will be from 9:00am to 1:00pm.

Miles, ELC Star Party Central **Wednesday, 10/15/2008 No. of Scopes: 4**

Miles, ELC will be planning Exploring the Night Sky at 1400 E. Broadway. West on Speedway to Campbell. South on Campbell to Broadway. West on Broadway to Highland.

Our school sits at the Southeast corner of Broadway and Highland. Viewing will be on the playground (huge field). Contact person Samantha Sims can be reached at 520-225-2200 or email Samantha.Sims@tusd1.org. Set-Up Time: 6:15pm. Observing will be from 6:45pm to 8:45 pm. Sunset: 5:55pm Dark Sky: 6:48pm Moon Phase: near Full Moon.

Tucson Hebrew Academy Star Party Central **Thursday, 10/16/2008 No. of Scopes: 6**

Tucson Hebrew Academy will be celebrating Night "Spacetacular" at 3888 E. River Rd. From Speedway, drive north on Swan to River Rd. Left on River Rd. Viewing will be on the backfield. Contact person Michael Pensak can be reached at 529-3888 or email pensakm@comcast.net. Set-Up Time: 6:15pm. Observing will be from 6:45pm to 8:45 pm. Sunset: 5:51pm Dark Sky: 6:44pm Moon Phase: Near Full.

Robins Elementary Star Party West **Friday, 10/17/2008 No. of Scopes: 6**

Robins Elementary will be planning 2nd Annual Family Science Night at 3939 N. Magnetite Lane. Located just west of Silverbell off of Sweetwater (west of the Pima Animal Control Center). Sweetwater is north of Grant and 1 mile south of Ruthrauff/Camino de Oeste. Viewing will be School playground near basketball courts. Contact person Sylvia Bracamonte can be reached at 820-3700 or email Syl1470@yahoo.com. Set-Up Time: 6:15pm. Observing will be from 6:45pm to 8:45 pm. Sunset: 6:00pm Dark Sky: 6:53pm Moon Phase: near Full Moon.

Lamb's Gate Christian School SP North-Central **Tuesday, 10/21/2008 No. of Scopes: 3**

Lamb's Gate Christian School will be hosting Trip to the Moon at 4700 N. Swan Rd. North on Swan past River to 4700 (First Evangelical Free Church). Viewing will be basketball court. Contact person Diane Liotta can be reached at 299-2151 or email sliota@msn.com. Set-Up Time: 6:15pm. Observing will be from 6:45pm to 8:45 pm. Sunset: 5:48pm Dark Sky: 6:41pm Moon Phase: (no moon during viewing).

Public Star Parties and Community Events (cont.)

Utterback MS Star Party
Monday, 11/3/2008**South-Central**
No. of Scopes: 2

Utterback MS will be holding Exploring the Night Sky at 3233 South Pinal Vista. East on Broadway to Kino Pkwy; turn right. South on Campbell to 36th Street; turn left. East on 36th Street to Campbell Avenue (1 block); turn right. South on Campbell to Pinal Vista (2 blocks); turn left. Utterback is on the left. Viewing will be on the field. Contact person Gricelda Meraz can be reached at 225-3500 or email Gricelda.Meraz@tusd1.org. Set-Up Time: 6:00pm. Observing will be from 6:30 pm to 8:30 pm. Sunset: 5:35pm Dark Sky: 6:30pm Moon Phase: near First Quarter.

Ft. Lowell ES/ Camp Cooper Star Party
Tuesday, 11/4/2008**West**
No. of Scopes: 3

Ft. Lowell ES/ Camp Cooper will be hosting Planet Camp Out at 5745 W. Trails End Rd. Drive west on Speedway or Anklam Road. Just beyond the intersection of Speedway and Anklam turn right (north) on to Camino De Oeste. Turn left (west) on to Trails End Road. Drive one mile. Cooper ESC is on the left (south) side of the road. Viewing will be at the telescope designated location at Camp Cooper. Contact person Thalia Wright can be reached at 520-232-7153 or email thalia.wright@tusd1.org. Set-Up Time: 6:00pm. Observing will be from 6:30 pm to 8:30 pm. Sunset: 5:35pm Dark Sky: 6:29pm Moon Phase: near First Quarter.

TIMPA SITE NEWS

TIMPA Pier is ready for the Telescope

Michael Turner, Jerry Farrar, J.D. Metzger, John Kalas, George Barber

The Celestron to Meade pier adapter plate is in place at TIMPA, and the Meade Ultra Wedge, on-loan from Keith Schlottman, has been installed. Bring on the telescope!



The "Gila Monster Observatory" mascot

Celestron 2 Meade Pier
Adapter plateAdapter plate and
Wedge at the ready

Home!!!

There are still some minor finishing touches needed for the observatory, and George will be coordinating the cleaning and final preparations for first light.





Your newsletter is going **Electronic!**

Starting in January, 2009, the newsletter will be sent to your individual e-mail account

Why an electronic newsletter?



Go Green!

No need for paper or toners conserves resources



More Information

Articles and features can be added without additional cost



You'll enjoy full color photos and astro-images

Instant Access



Your e-mailed newsletter will arrive days before a printed and mailed version



Best of all, we'll save YOU money!

- The annual cost of newsletter production is over \$4,000.
- Club operating expenses are expected to increase
- Continued printing and mailing would require a dues increase.

Watch your email...

The October, November, and December newsletters will be sent to your e-mail account.

If you do NOT receive your electronic newsletter, contact Terri Lappin at 977-1290, treasurer@tucsonastronomy.org



No e-mail or internet?



Contact Terri Lappin at 977-1290, treasurer@tucsonastronomy.org, to continue receiving a printed newsletter

Dark Skies for October 2008

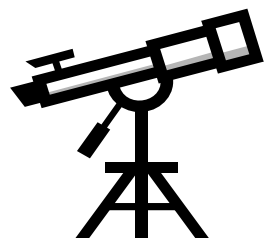
DARK SKIES (no twilight, no moonlight) for Tucson in 24-hour MST: 18=6pm, 20=8pm, 22=10pm, 0=12am
RISE, SET, VISIBILITY for sun and bright planets: rise for morning object, set for evening object

Tu/We 30/ 1	19:30 - 4:57	Sa/Su 11/12	4:06 - 5:04	Tu/We 21/22	19:06 - 0:21
We/Th 1/ 2	19:29 - 4:58			We/Th 22/23	19:05 - 1:26
Th/Fr 2/ 3	19:51 - 4:58	Su/Mo 12/13	- - -	Th/Fr 23/24	19:04 - 2:29
Fr/Sa 3/ 4	20:32 - 4:59	Mo/Tu 13/14	- - -	Fr/Sa 24/25	19:03 - 3:29
Sa/Su 4/ 5	21:19 - 5:00	Tu/We 14/15	Full Moon	Sa/Su 25/26	19:02 - 4:28
		We/Th 15/16	- - -		
Su/Mo 5/ 6	22:10 - 5:00	Th/Fr 16/17	- - -	Su/Mo 26/27	19:01 - 5:15
Mo/Tu 6/ 7	23:06 - 5:01	Fr/Sa 17/18	19:10 - 19:55	Mo/Tu 27/28	19:00 - 5:15
Tu/We 7/ 8	0:04 - 5:02	Sa/Su 18/19	19:09 - 20:56	Tu/We 28/29	18:59 - 5:16
We/Th 8/ 9	1:03 - 5:02			We/Th 29/30	18:59 - 5:17
Th/Fr 9/10	2:04 - 5:03	Su/Mo 19/20	19:08 - 22:03	Th/Fr 30/31	18:58 - 5:18
Fr/Sa 10/11	3:04 - 5:04	Mo/Tu 20/21	19:07 - 23:13	Fr/Sa 31/ 1	19:13 - 5:18

Weekend	Sun	Sun	Mercury	Venus	Mars	Jupiter	Saturn
Sa/Su	Set	Rise	Rise Vi	Set Vi	Set Vi	Set Vi	Rise Vi Vi=Visibility
4/ 5	18:02	6:19	6:00 -	19:29 -1	18:53 8	23:25 -2	4:13 3 -3 brilliant
11/12	17:53	6:24	5:34 9	19:28 -1	18:39 9	23:01 -2	3:50 2 0 conspicuous
18/19	17:45	6:29	5:06 4	19:28 -2	18:26 -	22:37 -2	3:26 2 3 moderate
25/26	17:38	6:34	5:12 3	19:31 -2	18:13 -	22:13 -2	3:02 1 6 naked eye limit
1/ 2	17:31	6:40	5:34 4	19:36 -2	18:01 -	21:51 -2	2:37 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) or any club officer for details about these telescopes.

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	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.

TAAA Board of Directors Meeting - 10 September 2008

Attending: Board members present (7): Ken Shaver (presiding), Bill Lofquist, Terri Lappin, Luke Scott, John Kalas, George Barber, and Teresa Bippert-Plymate. Members present (2): Liz Kalas and Richard Crump.

The president called the meeting to order at 6:40 pm.

August Minutes

Minutes of the August Board meeting were accepted, unanimously.

Announcements

John Kalas – Astronomy Magazine has acknowledged receiving TAAA's entry for the 2008 Out-of-this-world Award.
Ken Shaver - E-mail providing time and meeting location has been distributed to members taking the LBT tour on 13 September.
Teresa Bippert-Plymate – The telescopes recently donated to TAAA are a 6" Dynascope and a Meade ETX-90.
Ken Shaver – NPR has contacted TAAA, but details are not known. Ken will follow-up on the contact.
Bill Lofquist – A fundraising seminar has been scheduled for 16 September.

Treasurer's Report – Terri Lappin

A summary of club operating fund income and expenses was presented. Terri noted that the club will see lower profit on 2008 calendars due to poor sales.

Electronic Newsletter

A motion was made and seconded to transition the club, with due diligence, to an electronic newsletter beginning with the January 2009 issue. The motion was approved 6-1. Articles detailing the transition plan and inviting member feedback will be featured in the remaining 2008 newsletters.

Website

Status of website was reviewed. It was noted that contact information for Stellar Vision needs to be updated and both Stellar Vision and Starizona should be identified as "supporters" rather than "sponsors."

Dark Site Land Development – Bill Lofquist

The Strategic Planning Group (SPC) has held discussions with three contractors, and has decided that two will be invited to bid on the Phase 1A construction.

Well costs will be shared equally among the four members of the Perseus Group and TAAA.

If the Dark Site schedule can be maintained, deeding of land to TAAA may occur in October.

TIMPA

The annual TIMPA Aerobatic Shootout will be held on 6-12 October and the site will be closed to observing during this time. TAAA will hold a clean-up workday for the telescope observing area on 28 September, starting at 8:00 am.

Meeting adjourned at 9:35 pm.

Respectfully submitted,
Luke Scott
Secretary

TAAA ASTRONOMY COMPLEX**WE'RE GETTING READY TO BUILD THE TAAA ASTRONOMY COMPLEX!**

By Bill Lofquist

As reported in the September issue of Desert Skies and at the September General Meeting, we are pushing toward readiness to begin building our new Astronomy Complex. Getting the building permit is our next major step. Also, the completion of the tasks needed for the Perseus Group to transfer the title to the property to the TAAA is under way.

To keep you posted on how the Perseus Group and the TAAA Strategic Planning Group are viewing our tasks, here is an overview of our timeline for making it all happen.

INITIAL STEPS FOR BUILDING THE TAAA ASTRONOMY COMPLEX
(Prepared 9/12/2008 by the Strategic Planning Group, Rev. 1)

TASKS FOR THE PERSEUS GROUP FOR PHASE I(a)

TAAA ASTRONOMY COMPLEX (cont.)

- Create CC&Rs for the Property
 - Complete Well Share Agreement
 - Appraise the 16 Acre Donation
 - Prepare Legal Documents for Gift
- (The above tasks will be completed during September and October.)
- Donate Land to TAAA (Probably early November.)
 - Drill well and Build Well House
- (This task will be completed after the building permit is received, likely to be in November or December.)

TASKS FOR THE STRATEGIC PLANNING GROUP FOR PHASE I (a)

- With Architect, Complete Master Site Plan (Completed.)

- Complete Septic Evaluation
 - With Architect, Complete Restroom Plan
 - Get Bids from General Contractors
 - Retain Services of General Contractor
- (These tasks will be completed in September and early October.)

- Obtain Construction Quotes
 - Finalize Phase I(a) Budget for Board
 - Prepare and Submit Phase I(a) Permit
- (These tasks will be completed in October.)

- Receive Deed to the Property from Perseus Group (Early November.)

- Oversee Phase I(a) Construction (November, 2008 through February, 2009.)

- ~ External and Internal Phase I(a) Roads, Parking Area and RV sites
- ~ Paved walkways and parking places for limited-mobility users
- ~ Install Electric Service
- ~ Complete Septic System
- ~ Complete Water System
- ~ Build Restrooms/Shower Room
- ~ Build Public Observing Pads

(As these steps are completed we will update this page and send to members.)

In the weeks ahead there will be many opportunities for TAAA members to become involved in helping to plan and contribute to the further development of the Astronomy Complex. For example, more work is needed to complete the Policies and Procedures that will govern our use of it. Landscaping will be an important task. While we are planning to use natural desert vegetation, there are many ways we can create and maintain an attractive setting. We need to design a clubhouse that will serve our needs, as well as some simple sleeping rooms.

Most important, we will be building the 16' Dome and Warm Room, as well as a large roll-off roof observatory.

These will challenge the talent and know-how we have in the club.

Individual members will have an opportunity to engage a "member pad" or a "member observatory" for personal use.

Elsewhere in this issue of Desert Skies there is a description of a Fundraising Strategy. A meeting was held on September 16 to begin studying ways that we can generate funds for our larger projects from external sources.

There is plenty of work to be done in the weeks, months and years ahead as we develop and use what we envision as an outstanding Astronomy Complex. Many members have been involved in shaping the concept and plans for it to-date, and the real fun is just about to start. We hope to be observing in early 2009!

A FUNDRAISING STRATEGY FOR THE BUILDING AND OPERATION OF THE TAAA ASTRONOMY COMPLEX

By Bill Lofquist

At this time in the development of the TAAA Astronomy Complex, it appears that we may have enough funds to pay for most, if not all, of the Phase I(a) construction. A number of questions have been raised about how we will pay for the further building and operation of the Complex. It is important that we shape a long-range funding strategy that will carry us through to the completion of all phases of the project AND the ongoing maintenance, insurance coverage and other necessary expenses of operating a well-managed and supported observing site.

I hope this concept paper will generate the thoughtful discussion that is needed for us to move forward with this bold and exciting undertaking for the club that we have begun. It is something that we need to attend to immediately and forthrightly.

A THREE-PART STRATEGY

I recommend that we undertake a strategy that includes three parts:

- Internal TAAA Fundraising
- External Fundraising
- User Fee Support

The first of these, Internal TAAA Fundraising, can be initiated at the time the property is deeded by the Perseus Group to the TAAA. A specific pledge has been made to start this effort, and a number of members have indicated that they will make contributions when the property is, in fact, deeded. We now need to make plans for the specifics of how this pledge and contribution initiative will take place. Once the initial infrastructure has been built as covered by the Phase I(a) permit, the funds for subsequent

TAAA ASTRONOMY COMPLEX (cont.)

phases can be generated to cover very specific amenities, such as extending the roads, the amphitheater, the clubhouse, a ramada, picnic tables, slightly elevated tent sites, sleeping quarters, etc. (Additional funds for these projects can also be raised through the second approach.)

The second approach, External Fundraising, was the focus of a seminar we held on September 16. This important seminar took a look at how funds for specific projects can be generated from foundations, public educational funds, corporate donations and private individual gifts. We will need to have a follow-up meeting on this to involve more TAAA members. Larger amounts of support can be generated for such later-phase amenities as the 16' dome and warm room, an excellent telescope and CCD imaging equipment for the dome, the large roll-off roof observatory for club telescopes and, if and when needed, a caretaker residence.

The third approach is based on the use that individual members make of specific facilities within the Complex. This can

include individuals covering the construction costs of member pads and member observatories (including the costs of roads and parking spaces adjacent to and within their parcels). It can also include small usage fees for RV parking, tent sites and sleeping rooms. Some clubs have created tiered membership fees for those who commit to regular use of the facility, while occasional use fees can also be collected from other members and guests.

It is important to note that a significant amount of income has been generated through the Astronomy Services Program. Some of these funds are now available for the support of Phase I(a). They can make additional contributions to the development of the Complex in the discretion of the TAAA Board of Directors.

Through these approaches TAAA can initiate construction projects and maintain a sufficient operations and maintenance budget. In the next two months, it will be important to organize a Fundraising Working Group to provide leadership in further shaping and carrying out this strategy.

MEMBER'S FORUM

Halloween Astronomy Fun

By Terri Lappin

Halloween is a great time to get your scope out for the neighborhood kids. The moon sets early so most of the evening will be moonless. If you're set up early, you might get a view of Venus and the crescent moon. They'll set by 7pm. Jupiter will be well placed all evening.

If your local lighting situation allows, you can view the Andromeda Galaxy. You'll need to describe to the viewer what they are looking for in the eyepiece. You could mention that it's believed by astronomers that our Milky Way Galaxy and the Andromeda Galaxy are destined to collide in about 3 billion years. If you have a laptop computer available, you could play a simulation of such a collision found at <http://tinyurl.com/yho9ba> (same as http://www.nasa.gov/audience/forstudents/5-8/features/F_When_Galaxies_Collide.html). Our sun won't likely collide directly with anything, but the two galaxies will certainly change their appearance.

The other deep sky object that you might want to try viewing is the Ring Nebula in Lyra. This object is small, but bright enough for most kids to see. Its easily recognizable doughnut or Cheerio shape is easy to describe to the viewer. The doughnut shape really pops out if the viewer looks off to the side of it (this is "averted vision"). The Ring Nebula is the result of a star similar in size to the sun that has reached the end of its stable life and has fluffed off its outer atmosphere. The sun will go through a similar event once it's reached the end of its stable life.

Uranus and Neptune are also up. Learn about them and their positions at the Sky & Telescope website: <http://>

tinyurl.com/478civ (same as <http://www.skyandtelescope.com/observing/objects/planets/12435011.html>).

Here are a few guidelines to help make your Halloween a success. Set up your telescope near the sidewalk with a jack-o-lantern or similar attention getting, but dim, light source nearby. Spooky music gets attention too! Make sure power cords don't become trip hazards. Leave your patio lights off to draw kids away from your front door and towards you and the telescope. Be sure to have a stepladder handy for the little ones. The tendency is for people to support themselves by leaning against the telescope so politely warn them not to touch your telescope, explaining that it's carefully balanced and will not support their weight. It's best to use an eyepiece with some eye relief as they are more comfortable to use; however I also recommend using an eyepiece you didn't pay too much for. Many kids wear makeup, and that stuff can get all over your eyepiece! I put an eyecup on my eyepiece which takes the brunt of the makeup. If you need to clean your eyepiece after the night is over there is information about doing this in the TAAA member's pack, or you can request that information from me.

Have fun and be sure to tell me your experiences. If you enjoy this kind of informal observing you might want to give a school star party a try.

MEMBER'S FORUM (cont.)

KPNO Tohono-O'odham star party

Text by George Barber

I had the opportunity to help out with the family night star party at Kitt Peak. The weather was clear, perfect for an evening of observing.

Even before we had completely set up, people started to show up at the parking lot of the 0.9-meter telescope. I popped an eyepiece into my telescope, and quickly turned toward the nearly full moon. It did not take long before everyone was peering at our nearest neighbor in space.

The crowd grew, as if the word was spreading. In the evening twilight, I spied Jupiter, and swung my telescope onto the King of Planets. Young and old alike were thrilled with the view, showing cloud bands and all four Galilean moons.

By this time, lines had formed at all of the telescopes. All of us were kept busy straight through until around 8:30 pm. We treated everyone to views of the moon, Venus, Jupiter, and M13.

I was very pleased with the number of people who came and expressed interest in the views that we offered. I have attended this event in past years, and this year's attendance was by far the most I have seen.

Photo Credit: J. Glaspey and NOAO/AURA/NSF



Photo Credit: D. Isbell and NOAO/AURA/NSF

Deep Sky Companions: Hidden Treasures

by Stephen James O'Meara

2007 Cambridge University Press/Sky Publishing

Reviewed by Tom Watson

Last year saw the publication of a third volume in Stephen James O'Meara's Deep Sky Companions series. Like the

previous volumes, this one presents a detailed and thoroughly researched observing guide to a list of 109 deep sky objects. However, this time the list is of the author's own making, a compilation of observing targets selected in part for their



accessibility to the owners of modest telescopes. (The descriptions presented are almost entirely based on what he saw through a 4 inch refractor.) The selection process was also guided by a desire on O'Meara's part to introduce amateur astronomers to a range of objects not always found in other lists and guides. His list is an eclectic mix of galaxies, open and globular clusters, both bright and dark nebulae, along with a high proper motion star and a few asteroids. Galaxies and clusters are the most numerous object types listed.

Overall, this is a large and heavy book, containing 584 pages and weighing in at about 4 pounds. It can be used while observing, but I find it easier to use it as a resource for planning. (While I use the charts provided in the book, I do so mostly to find the object on the atlas I use, before heading out.)

Each entry includes something of the science of the object, meaning how it was discovered and what we have learned through the study of it. This material is generally followed by descriptions of finding and observing the object with telescope, binoculars, and in some cases the naked eye. He even takes a look at many of them through an antique spyglass that would not seem out of place on the set of a *Pirates of the Caribbean* movie. The spyglass is used in part because it was with a similar instrument that Caroline Herschel began her career as an astronomer. This is relevant to the book because part of the supplemental material at the end consists of a short but well-written biography of Caroline Herschel, contributed by Barbara Wilson.

The spyglass is relevant in another way as well. You see, the book is entitled *Hidden Treasures* in part because of the pirate theme that runs through it. That's right, tracking down objects in this book is treated by the author as a treasure hunt, complete with maps (the star charts) on which "X" marks the spot. Pirate analogies are applied many times through the book. I've seen other reviewers

MEMBER'S FORUM (cont.)

express annoyance with this, but I found myself completely enjoying this often whimsical approach, which is delivered with a light touch. The use of the pirate theme does not, for me, take away from the tremendous amount of information presented in *Hidden Treasures*. Far from it, the theme served as an amusing reminder that amateur astronomy is to be enjoyed.

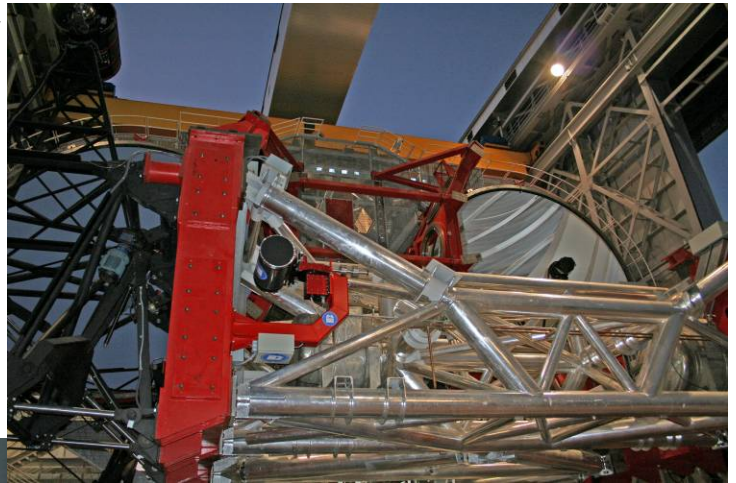
A good read, and highly recommended.

Photos from the LBT tour

By Ken Shaver



**Look Great!
With TAAA
Apparel**



shop & give

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Watch your email...

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and December newsletters will be
sent to your e-mail account.

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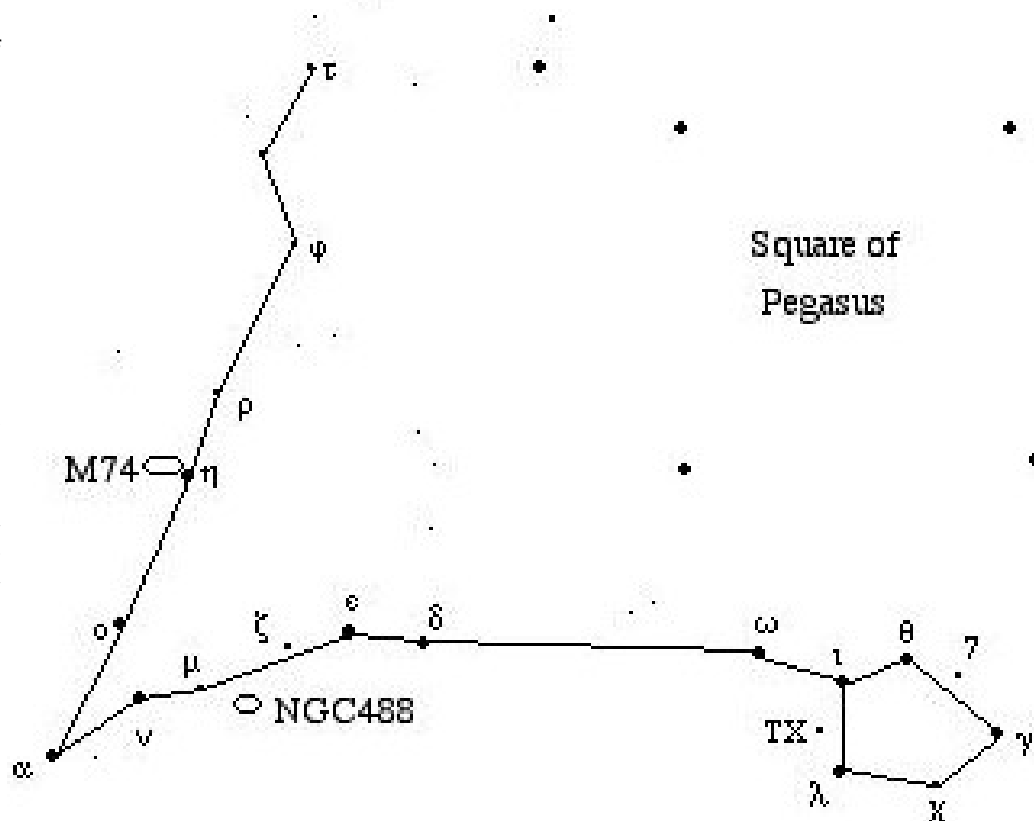
Constellation Report by Chris Lancaster

Pisces

Although this constellation is one of the prominent ones of the zodiac, it can be easily overlooked because it has no star brighter than 3rd magnitude. It represents two fish, one beneath Andromeda, and the other below Pegasus. They are joined to each other at Alpha Piscium and thus form a skinny "V" pattern pointing toward the southeast. Currently, the easiest way to find Pisces is to look to Jupiter high in the south during the mid-evening hours. The planet starts off just east of Pisces at the beginning of the month, moves into the "V" on November 9th when it will be 8.5 arc minutes from Omicron Piscium, and continues its retrograde motion deeper into the constellation throughout the month.

The ancient Babylonians, Persians, Romans, Greeks, and Turks all saw fish in this group of stars. One story depicts Aphrodite and her son Eros who jumped into a river to escape a giant named Typhon. They turned into fish and swam away. So that they wouldn't be separated, they tied their tails together with a cord. In fact, the Alpha star mentioned above is named Alrishā, Arabic for "knot" or "cord."

South of the Great Square of Pegasus is the circlet of stars marking the head of the western fish. Seven stars make up the circlet, and the one which stands out from the others is the variable star TX Piscium (also designated 19 Piscium), the eastern most star of this group. It varies slightly from magnitude 5.5 to 6.0, but one look at it will show that what makes it special is its color. Although it doesn't have a catchy nickname like the Crimson Star in Lepus or the Garnet Star in Cepheus, its red color is no less striking. Try using the different color sensitivities of your retina by looking directly at it, and then to the side. You should notice that its color is rich when in the center of your vision, and then fades to a lighter pink or almost white as you move your gaze away from it.



Pisces is home to a decent number of galaxies, but the only one big and bright enough for Charles Messier to add to his catalog is M74. Its magnitude 11.0 glow and 9'X 9' size can be spotted 5' in RA east and 0.5 degrees north of Eta Piscium (or RA 1h 36.7m Dec +15d 47'). This face-on spiral should appear as a faint, circular glow lacking much detail. In fact, early astronomers found it to be so elusive that after its discovery in 1780, there were differing opinions as to what type of object it really was. John Herschel decided that it was a globular cluster in his General Catalogue in 1864 when others thought it was a galaxy, and it wasn't until 1893 that the first detailed photograph showed its spiral arms.

Another spiral galaxy within range of amateur instruments is NGC488. It is almost as bright as M74 at magnitude 11.2 but much smaller, measuring roughly 3'X 3.5'. This is a compact spiral with tight arms which more evenly distribute its light across its face. Here are a few ways to find NGC488--look about 2/3 the distance between Alpha and Epsilon and one degree south of this line; or starting at Epsilon, drop down 2.5 degrees and move east 19' in RA; or dial up coordinates RA 1h 21.8' Dec +5d 15.4'. Once you find it, go to a high power eyepiece to bring it into better view. An easy double star to view in any telescope is Zeta Piscium. This pair of magnitude 4.2 and 5.3 stars sits less than 1/4 degree south of the ecliptic and is separated by 23.5". They are of neighboring spectral types (A5 and F6) so the color contrast between the two may be too slight to detect. I see only shades of gray-white, but since individuals' eyes are different, some may see a subtle yellow or blue tint between them.

Tucson Amateur Astronomy Association
P.O. Box 41254
Tucson, AZ 85717

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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 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.