

Desert Skies

Tucson Amateur Astronomy Association

Volume LVI, Number 5 May, 2010



Sharing the Sky Star Party

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TAAA Phone Number: (520) 792-6414

Desert Skies: May, 2010

Cover Photo: Sharing the Sky star party. Photos by George Barber

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

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Office/Position	Name	Phone	E-mail Address
President	Ken Shaver	762-5094	president@tucsonastronomy.org
Vice President	Keith Schlottman	290-5883	
Secretary	Luke Scott	749-4867	secretary@tucsonastronomy.org
Treasurer	Teresa Plymate	883-9113	treasurer@tucsonastronomy.org
Member-at-Large	George Barber	822-2392	mal1@tucsonastronomy.org
Member-at-Large	John Kalas	620-6502	mal2@tucsonastronomy.org
Member-at-Large	John Croft	300-5885	mal3@tucsonastronomy.org
Chiricahua Astronomy Complex Director	John Kalas	620-6502	cac-director@tucsonastronomy.org
Chief Observer	Dr. Mary Turner	743-3437	chief-observer@tucsonastronomy.org
AL Correspondent (ALCor)	Nick de Mesa	797-6614	alcor@tucsonastronomy.org
Astro-Imaging SIG	Steve Peterson	762-8211	astro-photo@tucsonastronomy.org
Astronomy Fundamentals SIG	Robert Gilroy	743-0021	fundamentals@tucsonastronomy.org
Starry Messenger SIG	Terri Lappin	977-1290	smsig@tucsonastronomy.org
Newsletter Editor	George Barber	822-2392	taaa-newsletter@tucsonastronomy.org
School Star Party Scheduling Coordinator	Mark Meanings	826-2473	School-star-party@tucsonastronomy.org
School Star Party Volunteer Coordinator	Roger Schuelke	404-6724	school-sp-volunteers@tucsonastronomy.org
Web Director	Terri Lappin	977-1290	taaa-webmaster@tucsonastronomy.org
Club Apparel Sales	Mary Lofquist Jeanne McCleery	297-6653	taaa-sales@tucsonastronomy.org
TIMPA Gate Card controller	John Kalas	620-6502	timpa@tucsonastronomy.org
Equipment Loan Coordinator	Al Dohner	297-7118	elc@tucsonastronomy.org
Librarians	Claude Plymate Teresa Plymate	883-9113	librarian@tucsonastronomy.org
Grand Canyon Star Party Coordinator	Jim O'Connor	546-2961	gcsp@tucsonastronomy.org
General Information	Terri Lappin	977-1290	Taaa-info@tucsonastronomy.org
Publicist	Liz Kalas	620-6502	publicist@tucsonastronomy.org

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 trease	urer)\$13.00
Options (add to above membership rates)	

Donations are accepted for the following funds: SA-IDA/Light Pollution, TIMPA,Education,TAAA Astronomy Complex,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

I would like to begin by thanking everyone who attended the Sharing the Sky fundraiser star party. I did not do an official count but it seemed like we had a record volunteer turn-out this year. This was especially surprising to see since we did not expect to have favorable lighting conditions this year. Even the Solar-viewing portion of the event had more scopes this year than I have ever seen at STS. The community attendance was also good this year and everyone I talked to was very impressed with the display of telescopes, and the knowledge and friendly interaction from all of the volunteers. Thank you to all of the people who organized this very wonderful event. I would also like to add that it was very nice to see Flandrau open once again. I hope that we will be able to see it remain that way.

Don't forget the next upcoming big events for the club are the Grand Canyon Star Party and the ALCon Expo in June. Time is running short to get signed up so please don't delay in getting your name in. The ALCon2010 event planners have been working extra hard to ensure that this year's convention will be one of the best ever held. We are very excited to be a part of not only the Astronomical League, but to have the International Dark Sky Assoc. as our partner in this event. The IDA is planning to hold their annual General Meeting as part of this event as well. I would like to welcome Lunt Solar Systems who will be conducting their annual solar convention along with us and all together we should bring in people from just about all walks of the astronomy community. We will also have some great prize giveaways thanks to our generous

sponsors, so please plan to attend. Sign-up forms can be found in this newsletter and on line at www.alcon2010.astroleague.org/.

This month's general meeting is Members Night, a favorite agenda topic for many. It is always exciting to hear from fellow members about each of your own astronomy interests and activities. Please plan to join us on Friday the 7th for these exciting presentations.

The May meeting also brings us the Board of Directors Elections and since I am not running on the current ballot for re-election, this will be my last monthly message to you as your President. I have learned a great deal and had a very rewarding term serving you these past two years. I will value the friendships I have established with my fellow Board Members and I am grateful for the opportunity the position allowed me in getting to know so many of you better. Even though my service as president is coming to an end, I do not plan on being less involved in club activities. I look forward to continue being a part of the volunteer group that this club relies on so much in advancing our internal projects and maintaining our community outreach programs. Please join me in wishing the next President and Board much success.

Thank you and clear skies,

Ken Shaver TAAA President

Meeting Information and Calendar of Events

TAAA MEETING DATE: Friday, May 7, at the Steward Observatory Auditorium – Room N210

MEMBER'S NIGHT: 6:30 pm

Tonight is your night to share the spotlight! If you have an astronomy-related topic you would like to present, contact Ken Shaver to reserve a time slot during the main meeting.

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

STAR PARTIES AND EVENTS:

03 May - Astro-Imaging SIG at China Rose

04 May - Utterback MS Star Party

06 May - Arizona Virtual Academy Star Party

07 May - Pima Air & Space Museum/Lauffer Middle School

08 May – AF-SIG Solar Observer's Session, Ft. Lowell Park

08 May - TAAA and AF-SIG Star Party at TIMPA

08 May - TAAA Star Party at CAC

10 May - Lineweaver ES/ Camp Cooper Star Party

13 May - Astronomy Fundamentals SIG

14 May - Coronado School K-8 Star Party

14 May - Pima County Natural Resources Star Party

15 May - TAAA Star Party at Las Cienegas

15 May - TAAA Star-B-Que at Kitt Peak

17 May - BASIS School, Inc Star Party

20 May - The Salvation Army Tucson Amphi Corps ASK Program Star Party

21 May - Doolan MS Star Party

22 May – Starry Messenger SIG Workshop

NEWSLETTER SCHEDULE: Deadline for articles: Sat, May 22. The newsletter is published 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: Bob Pagano and Robert Woerner. 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 at our website after logging in as a member. You can also pick one up at most meetings.)

Nomination Committee

The final list of confirmed candidates is as follows:

President: Keith Schlottman Vice-President: Bill Lofquist

Secretary: Luke Scott

Treasurer: Teresa Bippert-Plymate

Members at Large: George Barber John Kalas John Croft Michael Turner

Nominations can be accepted prior to the balloting during the May meeting,

as long the nominated member is there to accept the nomination.

Best regards,

Mary Turner Carter Smith Lawrence Schindler

Candidate Biographies

Each of the 4 candidates for Member-at-Large would like to introduce themselves:

John Kalas

- Mechanical Engineer
- Joined TAAA in Feb. 1994
- Wife, Liz, is publicity chairperson & very active in
- Enjoys lunar & planetary observing & imaging
- TAAA President from 6/1998 to 5/2001
- Astronomy Services Coordinator (Paid S.P.'s) from 1998 to present
- Member of the Perseus Group who purchased & donated land for CAC Site
- Construction Coordinator for Phase 1 development of **CAC Site**
- Recently appointed CAC Site Director
- Currently Member-at-Large
- Currently developing observatory/cottage complex adjacent to CAC Site

George Barber

- **Electrical Engineer**
- Joined TAAA in August of 1999
- Enjoys visual observing
- Participant in Project ASTRO for over 5 years
- Member-at-Large from 2006 to present
- TAAA Newsletter editor for over 7 years
- Led construction of TAAA observatory at TIMPA

John Croft

I am John Croft, and I am a candidate for reelection to the TAAA Board of Directors as a member-at-large. I have served on the Board for the last year and have enjoyed participating in many of the activities that are advancing the TAAA and its members. Over the last few years, in addition to the historically great outreach programs, we have begun to develop a world-class educational program for our members, and we are on course to substantially increase the activities offered to the membership for continuing astronomy education. I have worked closely with members of the AFSIG in advancing these programs with the Board and would enjoy continuing this work in the year to come. In addition to working with the AFSIG, I have participated in the development of the new CAC dark site as well as the project to get the Observatory at TIMPA completed. My contribution to the CAC development includes writing, with much help, a set of policies for the site and coordinating a work day at the site to install boulders to define the parking area. We have much to do to bring the CAC site to full operation, and I am looking forward to participating in the completion of this dream; but, it is only a part of what we are doing to advance the love of astronomy for our members, and I hope you will consider sending me back to the Board of Directors for one more term as a member-at-large.

Michael Turner has been a TAAA member since 1997 and has served as a Vice-President. He is also a member of the Tucson Society of the Astronomical League (TAL) and a very active supporter of the TAAA Astronomy Services (paid star party) program. Michael is an active member of the Astro-Imaging and Solar Observers SIG's, the lead instructor for the Gila Monster Observatory Meade LX200GPS-14 inch David and Wendee Levy Exploration Telescope and the sole instructor for the TAAA Equipment Loaner Program, Meade LX-200GPS-10 inch telescope. He is the current instructor for the famous TAAA Red LED Lamp Workshop as well as the AF-SIG Newtonian/ Dobsonian collimation workshop. Michael and his wife Mary, live in the Tucson Mountains with their 2 cats, Ptolemy and Hypatia.

Desert Skies: May, 2010

Club News (cont.)

Astro-Imaging SIG Meeting

Monday, May 3, 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 Thursday, May 13, 6:30 pm

AFsig is moving ahead with new and exciting events. Since January, we have awarded 4 certificates for completing both the classroom and star party requirements for our "Introduction to Fundamentals of Astronomy" mini course, with more qualifying every month – stay tuned.

In February, we launched the Solar Observing Program and held the first Solar Filter Workshop. We followed up in March with our Lunar Observing Program. In the following months we will launch two more observing programs: Constellations Observing Program and Solar System Observing Program.

In the planning stage are the following projects: Parallelogram Workshop, Headlight Deflector Workshop, the very popular Red Lamp Workshop, and, of course, the next offering of "Introduction to Fundamentals of Astronomy" (coming this fall).

At our next meeting on May 13 we will be finalizing the events of 2010 and planning and setting the stage for events and projects we will be offering in 2011.

Do you want to learn more? Are you ready to participate?

Come and join us for an evening of serious discussion. Bring your ideas, questions and enthusiasm. USGS Building - NE Corner 6th St. and Park Ave

Our Sponsors

Solar Observers Group News

The newly formed Solar Observers Group (a sub-group of the Astronomy Fundamentals SIG) will be meeting to observe the sun on the second Saturday mornings of each month (9 am - 12 noon) starting on May 8th. We may alternate observing spots (UA campus/Fort Lowell Park) depending on what's most convenient for the members of the observing group. Our next group observation will begin at 9 am at Fort Lowell Park (Craycroft & Glenn). To find us, look for the telescopes. Even if you are not a member of our group, bring your telescope or just drop by to view the sun through one of the telescopes that will be there.

If you would like to know about our activities and want to be added to our email list, please send a request to Dennis Dawson <dennisldawson@gmail.com>.

TAAA Spring Star-B-Cue at Kitt Peak May 15 (Saturday)

The TAAA has scheduled a star party and pot-luck barbecue at the picnic grounds up on Kitt Peak on Saturday, 5/15, starting at 4:00 pm. A maximum of 70 TAAA Members and families will be allowed to participate. A gas-fired barbecue grill at the ramada will be fired up starting at 4:30 pm and members are invited to cook their dinners between 4:30 and 6:30 pm. Bring a dish to share with other members. The grill will be turned off at 6:30 pm. Telescope observing will commence after sundown. Kitt Peak allows the club to observe as late as we want. Be prepared for cool temperatures and mosquitoes.

TAAA Member, Claude Plymate, in association with the National Solar Observatory (NSO) is adding an extra feature to this TAAA Star-B-Cue. The NSO is inviting members of the TAAA to a special viewing of sunset through the McMath-Pierce Solar Telescope (McM-P). Weather permitting; the telescope's roughly 0.8m diameter solar image will be projected onto a table top for all to see. Don't expect to necessarily see sunspots. The very deep solar minimum we're currently experiencing has resulted in an extremely quiet sun over the past couple of years. You can, however, count on seeing solar granulation, interesting atmospheric effects and the infamous "green flash".



STARIZONA ADVENTURES IN ASTRONOMY AND NATURE

5757 N. Oracle Rd. Tucson, AZ 85704

www.starizona.com 292-5010



Club News (cont.)

The size of the McM-P observing room requires attendance to be limited to 30 members. The star-b-cue sign-up sheet will include a check box for those interested in attending the McM-P sunset on a first-come, first-serve basis. Kitt Peak requests that TAAA members minimize traffic on top of the mountain by carpooling up from the picnic grounds as much as possible. Members who sign up for the solar viewing must be at the picnic area by 6:15 pm for check-in. Carpooling will leave the picnic area shortly thereafter to arrive at the McM-P telescope by 6:30 pm. Immediately following sunset, members will be expected to depart from the top of the mountain and return the picnic grounds.

There will be a sign-up sheet on the table at the back of the lecture hall at the start of the May 7th meeting. Because of the popularity of this event, attendance will be initially limited to TAAA Members and their immediate family members only. If, after all TAAA Members have had an opportunity to sign up, there are any openings or cancellations, the attendance of guests will be considered. If you are unable to attend the May meeting, phone and e-mail reservation requests will be taken on a first-come, first-serve basis *after* 9:00 am Saturday, 5/8. Contact John Kalas at 620-6502 or via e-mail at <jckalas@cox.net>.

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

No vehicles are allowed above the picnic grounds after 4:00 pm (except for the McM-P solar viewing).

Only the ramada gas-fired barbecue grill is permitted for cooking food at the picnic grounds. No open fires or use of the personal barbecue grills is permitted.

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

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

TAAA Apparel

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

Grand Canyon Star Party - Almost Here! June 5-12, 2010

It's about time to lock down your plans to attend the 2010 edition of the Grand Canyon Star Party. GCSP '10 is the 20th annual collaboration among the National Park

Service, Saguaro Astronomy Club, Tucson Amateur Astronomy Association, and astronomers from around North America to bring astronomy outreach to Park visitors.

As volunteers, we act as interpretive rangers for the night sky. The National Park Service has gradually increased the awareness of the event over the last few years, with an accompanying increase in visitor participation to over 50,000 visitor contacts on the South Rim for two of the last three years.

General information regarding GCSP is found at http://www.tucsonastronomy.org/gcsp.html

On the South Rim, events include a slide show nightly at 8:00 p.m. next to Yavapai Observation Station, followed by telescope viewing under extremely dark skies at 7000 feet that continues into the night.

Spreading an appreciation of the night sky and the awareness of the dark sky environment is a rewarding activity; you never know which one contact you make with a visitor will profoundly change their, and maybe even your, life. Visitor participation tends to drop off sharply at 11 PM, leaving the rest of the night for the individual astronomers' agendas.

If you intend to participate at the South Rim this year, please email your intentions to me at the email address below and I'll forward you the waiver for free entrance to the Grand Canyon National Park as well as maps and other welcome information from our Ranger contact and me. Astronomers are responsible for arranging their own lodging: gcsp [at] tucsonastronomy.org.

For information and current status on the North Rim (currently fully booked for telescopes), please check at http://www.saguaroastro.org/content/2010GrandCanyonStarPartyNorthRim.htm

Jim O'Connor South Rim Coordinator Grand Canyon Star Party gcsp@ [at] tucsonastronomy.org

Upcoming Lectures

June 4	Astronomy Essentials	Keith Schlottman AL & ALCON			
	Invited Lecture	OPEN			
July 2	Astronomy Essentials	Mary Turner Seasonal Objects			
·	Invited Lecture	OPEN			
	Astronomy Essentials	OPEN			
Aug 6	Invited Lecture	Mark Wagner Science at LBT			

Club News (cont.)

New Password for Viewing Members Area of Website

With this issue of Desert Skies, we are changing the password for logging into the member's area of the TAAA website. Please read the email message that you receive when this newsletter is released. Rumor has it that we will be implementing individual logins this summer making these quarterly changes unnecessary. Please be sure you have paid your dues so that you will receive the website login password in a timely manner.

What's your name? - Place Your Order for a Name Badge

How many of us have struck up a conversation with another member and then can't recall the person's name to whom we're talking? It's embarrassing asking someone you may sit next to every month, "What's your name?"

All members are entitled to one name badge. Family memberships are entitled to two name badges. You're under no obligation to pay for the nametag – they're free. Your only obligation is to wear it to TAAA events. The cost to the TAAA is about \$6; if you want to help offset this cost you can through a donation. If you want more name badges than you're entitled to, you may purchase them at \$6 each.

Terri Lappin is taking names for the badges until May 25th. Please see Terri at the May meeting, or call/email her (see Page 2). She needs two pieces of information:

The exact spelling of your first and last name

Do you want a magnet or pin on the back?

The name badges will be ready by the June meeting. They will not be mailed to you. Please only order one if you are able to pick the nametag up at a meeting.



Night Sky Network Toolkits

Below is a list of our Night Sky Network Outreach Toolkits and other resources for teaching astronomical concepts. The Night Sky Network program recognizes the essential role that amateur astronomers play in public astronomical education by providing us with these toolkits well suited for use at star parties. They were developed by the Astronomical Society of the Pacific under contract with NASA. If your scope is not well suited for public viewing, or if you want a change in pace, consider bringing a

toolkit to one of our community school or church star parties. They are also great options for those questionable, cloudy nights. With each use of a NSN toolkit we are closer to qualifying for the next toolkit which has been rumored to be about comets.

Night Sky Network Toolkits:

PlanetQuest: explains planet detection techniques

Our Galaxy, Our Universe: scale model of the Milky Way galaxy and the Universe

Black Hole Survival Kit: what is a black hole and how does it affect objects nearby

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

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

Exploring the Solar System: scale model of solar system and NASA exploration of planets

Supernova!: life cycle of massive stars, touches on life cycle of sun-like stars

Mirrors and Glass - An inside look at telescopes: how telescopes work

Other Resources:

SolarScope: provides a white light image of the sun suitable for small group viewing.

Dark Skies Education Kit: light pollution principles, includes a Sky Quality Meter

Comet Chef: an apron (with a comet on it) and chef's hat to wear when mixing up comets

Each NSN toolkit contains several projects. You pick and choose which part you want to use. They contain all essential materials. A Resources CD and a Training DVD is also included. Individual training in their use is available.

Please make arrangements with Terri Lappin (tk-lappin[at] comcast.net or 579-0185) to borrow any toolkit.



Starry Messenger Workshop May 22. Saturday 9AM – Noon Steward Observatory Conference Room N305

It's time for another Starry Messenger Workshop. This is our third workshop in the past year. The workshop on May 22nd will be about the Milky Way Galaxy. How do you describe something as immense as a galaxy to someone who doesn't have a clue what a galaxy is? After this workshop you'll be able to help the public get a good grasp on what a galaxy is and where we fit into the scheme of things.

Club News (cont.)

The Starry Messenger workshops are meant for both beginners and advanced members. As with all Starry Messenger Workshops, our goal is to assist our members in feeling comfortable in their understanding of astronomical topics and concepts and to help them pass that knowledge onto the public. If someone were to ask you to explain what a galaxy is, most of the time they want a simple, direct answer. We will cover the basics about our galaxy, but emphasis will be on how to explain what you know in a meaningful way so they come away with a good visual understanding of what a galaxy is. Supporting information will be provided and we will likely delve a bit into more advanced topics such as galaxy shapes, galactic super clusters, and the large scale structure of the universe.

A sign up sheet for the May 22nd workshop will be at the meeting, or email smsig[at]tucsonastronomy.org.

The star party schedule should be easing up a bit as school soon will end. Check out the list of school star parties elsewhere in the newsletter and sign up for one near your job site. If you're lucky enough to be retired, read through the star party listing and sign up for one of our larger events. We need all the support you can offer.

The Starry Messenger Special Interest Group provides an environment in which TAAA members can enhance their knowledge and understanding of astronomy and related concepts. We offer tools and techniques for explaining astronomy to people of all ages. By virtue of involvement in the TAAA's astronomy outreach programs, you are considered a member of the Starry Messenger SIG. The Starry Messenger SIG is currently lead by Terri Lappin and Loretta McKibben. If you are interested in becoming a Starry Messenger leader, talk to Terri or Loretta. The SIG leaders write newsletter articles, plan workshop and meeting activities, and contribute to the planning of outreach events.

Items of Interest

Websites: Trips on the Internet Super-Skyway By Rik Hill

Old 'scopes, and their catalogs, never die.

Last November I did this column on some old telescope catalogs that have been posted on line. I received several nice comments on that column and since then have found a few more pages that may be of interest, especially if you are refurbishing or trying to identify the age of one of these older instruments.

First I would call your attention again to Bob Provin's excellent reference page at:

http://geogdata.csun.edu/~voltaire/classics/

There are some really rare catalogs and links to other "classic" telescope websites.

For example, there's James Witt's collection of old catalogs at:

http://www.pbase.com/smokedaddy/

telescope_manuals&page=all

and his collection of "classic" telescopes (some more classic than others):

http://www.pbase.com/smokedaddy/scopes&page=all

Jack Harper has a Cave Astrola page that has a lot of good information for those that are interested in these telescopes or have one:

http://www.frobenius.com/cave.htm

Unfortunately some of the links at the bottom of this page are broke but one of the more interesting that is not is: http://www.omahaastro.com/cave/

that further links to a number of these telescopes still in service. It's wonderful to see these venerable instruments still doing good astronomy! Lastly, if you are not a member of Cloudy Nights (http://www.cloudynights.com/) you should be. There's a lot of good information gleaned from the experience of many amateur astronomers in that website. Most particularly to the topic here is the equipment discussion on classic telescopes at:

http://www.cloudynights.com/ubbthreads/postlist.php/Cat/0/Board/classics

If you have a classic telescope you could find out more about it here or post information about yours that will lead others to know more about what they have. This site also includes a gallery of images of many classic telescopes:

http://www.cloudynights.com/photopost/showgallery.php?cat=508

including an 8" f/4 Vega Maksutov (no relation to Ed Vega) from the 1960s! There were VERY few of these made, most being the 6" f/4 and they were very expensive at the time.

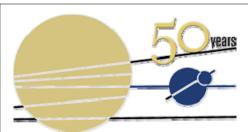
http://www.cloudynights.com/photopost/showphoto.php?

photo=12848&password=&sort=7&thecat=508

This should occupy your mind for a few nights!

As always, if you know of a particularly good website, or silly ad (I'm collecting bad astro-ads), you would like mentioned here, drop me a line at: rhill@lpl.arizona.edu

Items of Interest (cont.)



DEPARTMENT OF PLANETARY SCIENCES . LUNAR AND PLANETARY LABORATORY

LPL Catalina Observatories Open Day

Saturday, May 22, 2010, Noon - 6 p.m.

The <u>Lunar and Planetary Laboratory</u> invites you to celebrate 50 years of science in the Catalina Mountains!

Escape the heat and come to the cool mountain environment at the very summit of Mt. Lemmon

- Tours and Demonstrations of the asteroid-hunting Catalina Sky Survey 60-in telescope
- Hands-on meteorite displays
- Solar viewing
- Displays describing the history of Arizona astronomy in the Catalina mountains
- Information about the Mt. Lemmon Sky Center Sky Nights and Discovery Days programs
- Images and information from the UA/LPL <u>HIRISE</u> camera that's currently orbiting Mars
- Walking tours of the retired Air Force Station on top of Mt. Lemmon
- Talks and demonstrations describing nature and science in the Catalinas

Parking is limited so reservations are REQUIRED by May 14, 2010 (only those with reservations will be permitted onto observatory grounds)

To register, go to http://www.lpl.arizona.edu/forms/openday/

Member's Events

Rattlesnake Alert!

It's spring again, and our reptilian friends have come out of hibernation. 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.

TAAA and AF-SIG Star Party at TIMPA Saturday, May 8

Come on out and enjoy the spring 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 allimportant decision to buy. There is no scheduled talk for this activity, just come out and enjoy. 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. Be prepared for Directions to the TIMPA site are cool temperatures. located on the outside flap of this newsletter. The new observatory at TIMPA, featuring a 14-inch telescope, should also be open for use.

TAAA Star Party at CAC Saturday, May 8

The Chiricahua Astronomy Complex (CAC) is the club's newest observing site. Located in Cochise County approximately 100 miles from the center of Tucson, the site includes a full bathroom facility. At an elevation of 4800 feet, be prepared for cold temperatures. Try to arrive before sunset. Unlike the other two club observing sites, TIMPA and Las Cienegas, the CAC site requires that members make reservations for both monthly club star parties and private member use. We are restricted by a 60

Member's Events (cont.)

person/30 vehicle maximum limitation. If you would like to attend, contact CAC Director John Kalas via e-mail at jckalas@cox.net or by phone at 620-6502. Reservations will be on a first come – first serve basis. Depending on the number of members interested in attending, guests may not be allowed.

Directions to CAC:

The Chiricahua Astronomy Complex is about 90 miles and a 1½ hour drive from the TTT Truck stop at Craycroft Road and Interstate 10.

- Take I-10 East from Tucson past Benson.
- Exit I-10 at Dragoon Road (Exit #318) Turn right onto Dragoon Road at bottom of exit ramp.
- Travel 13.5 miles southeast to intersection with Route 191 and turn right (south).
- Travel 17.9 miles south (past Sunsites and Margie's Corner Café at High St. on the right and Border Patrol checkpoint) to intersection with Route 181 at Sunizona and turn left (east).
- Travel 10.9 miles east to intersection with S. Price Ranch Road and turn right (south). S. Price Ranch Rd. is a dirt road just before you reach mile post 49 (cluster of mailboxes on right on Rte. 181).
- Travel ½ mile south on S. Price Ranch Rd. to intersection with E. Perseus Way (wide dirt road with E. Perseus Way street sign on left) and turn left (east).
- Travel east on E. Perseus Way slightly more than ¼ mile to entrance of Chiricahua Astronomy Complex, address 9315 on right (twin brown gates flanked by white rail fences set back 50 feet from road). Look for TAAA sign on left side of entry road.

TAAA Spring Star-B-Cue at Kitt Peak May 15 (Saturday)

See article in the Club News section.

TAAA Star Party at Las Cienegas (Empire Ranch) Saturday, May 15

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. Plan to 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 after sunset. 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.





Board of Directors Elections at the May Meeting

Want better observing?
Join the group that's keeping the sky dark
International Dark Sky Association
Southern Arizona section

We get people to use better lighting, so we'll have a dark sky

Some of the things we do:

- Talks to schools and organizations
- Demonstrations at Desert Museum
- PowerPoint presentations on CD

- Work with government agencies
- · Identify non-compliant lighting in So AZ

Monthly meetings 2nd Wednesday, 5:30 - 7 pm.

nd wednesday, 5:30 - 7 pm 3225 N. First Ave

Contact: Joe Frannea sky@sa-ida.org www.sa-ida.org

To preserve and protect the nighttime environment and our heritage of dark skies through quality outdoor lighting

Public Star Parties and Community Events

All members 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.

Utterback MS Star Party Tuesday, May 4

Central No. of Scopes: 4

Utterback MS will be doing a Exploring the Night Sky for an estimated 60 students and parents at 3233 South Pinal Vista. East on Broadway to Kino Pkwy; turn right. South on Kino 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 take place in the large courtyard inside the school entrance. Contact person Gricelda Meraz can be reached at 520-225-3579 or gricelda.meraz@tusd1.org. Set-up time: 7:30 pm. Observing will be from 8:00 pm to 10:00 pm. Sunset: 8:05 pm Moon Phase: (no moon during viewing).

Arizona Virtual Academy Star Party

West

Thursday, May 6

No. of Scopes: 3

Arizona Virtual Academy will be doing a 6th grade science club for an estimated 40 students and parents at 600 N. Silverbell Road. West on Speedway, north on Silverbell, park is on the east side of the road. Viewing will take place at ramada #4. Contact person Lauren Risley can be reached at 882-6027 or ice_fire@cox.net. Set-up time: 7:45 pm. Observing will be from 8:15 pm to 10:15 pm. Sunset: 8:06 pm Moon Phase: (no moon during viewing).

Pima Air & Space Museum Lauffer Middle School Star Party Friday, May 7

South No. of Scopes: 6

Pima Air & Space Museum/ Lauffer Middle School will be doing a Space Day for an estimated 120 students and parents at 6000 E Valencia Rd. I-10 to Exit 267 Valencia, turn left. The museum is on the right side of the road before the Wilmot intersection. Viewing will take place Outside of Hangar 1. Contact person Mina Stafford can be reached at 618-4819 or mstafford@pimaair.org. Set-up time: 9:30 am. Observing will be from 10:00 am to 12:00 noon. Sunset: 8:07 pm Moon Phase: (no moon during viewing).

Lineweaver ES/ Camp Cooper Star Party West Monday, May 10

No. of Scopes: 4

Lineweaver ES/ Camp Cooper will be doing a for an estimated 75 students and parents 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 take place. Contact person Inga Davidson can be reached at or idavidson@aol.com.

Set-up time: 7:45 pm. Observing will be from 8:15 pm to 10:15 pm. Sunset: 8:10 pm Moon Phase: (no moon during

Coronado School K-8 Star Party Northwest

Friday, May 14

No. of Scopes: 6

Coronado School K-8 will be doing a Exploring the Night Sky for an estimated 150 students and parents at 3401 East Wilds Road. Take Campbell Road North to River road. Turn Left on River. Turn right on First. Turn Left on Sunrise. Right on Oracle. Turn Right on Wilds Road. The viewing will be on the far north side of the school, next to the parking lot. Viewing will take place on the sports fields North of the school building. Contact person Lauren Marlatt can be reached at 696-6659 or lmarlatt@amphi.com. Set-up time: 7:00 pm. Observing will be from 7:30 pm to 9:30 pm. Sunset: 8:13 pm Moon Phase: (no moon during viewing).

Pima County Natural Resources Star Party West Friday, May 14 No. of Scopes: 2

Pima County Natural Resources will be doing a Night With the Stars for an estimated 35 students and parents at 1548 S. Kinney Road. Take Speedway, which turns into Gates Pass Road. Continue on Gates Pass Road, until it dead ends at Kinney Rd. Go left on Kinney Rd, past Old Tucson, then take a right on Hal Gras Rd (keep an eye out for this turn - it's not well marked, but we'll have a sign up for the Star Party event). Follow the road about 1/4 mile. We'll set up near the restrooms. Viewing will take place near restrooms on left side of road. Contact person Sandy Reith can be reached at 520-615-7855 or sandy.reith@pima.gov. Set-up time: 8:15 pm. Observing will be from 20:45 to 22:45. Sunset: 8:13 pm Moon Phase: (no moon during viewing).

BASIS School, Inc Star Party North Monday, May 17 οf Scopes:

BASIS School, Inc will be doing a Exploring the Night Sky for an estimated 45 students and parents at Peppersauce Campground. Drive up to Oracle on 77. Turn right on American. Veer right on Mt. Lemmon Rd. Veer right on NF 38. Follow to Peppersauce Campground. The group site is at the back of the campground. Viewing will take place at the group campground. Contact person Cheryl Carnes can 520-326-6367 reached at ccarnes@basistucson.org. Set-up time: 7:45 pm. Observing will be from 8:15 pm to 10:15 pm. Sunset: 8:07 pm Moon Phase: (no moon during viewing).

Public Star Parties and Community Events (cont.)

The Salvation Army Tucson Amphi Corps ASK Program Star Party Thursday, May 20

Central No. of Scopes: 6

The Salvation Army Tucson Amphi Corps ASK Program will be doing a After School Program Graduation for an estimated 100 students and parents at 218 E. Prince Rd. Speedway to Stone. Go north on Stone to Prince.Turn right on Prince heading east. Viewing will take place Outside on our soccer field. Contact person Kyna Kelley can be reached at 520-971-4423 or kyna.kelley@usw.salvationarmy.org. Set-up time: 7:45 pm. Observing will be from 8:15 pm to 10:15 pm. Sunset: 8:18 pm Moon Phase: First Quarter.

Doolan MS Star Party Friday, May 21

Central No. of Scopes: 4

Doolan MS will be doing a Exploring the Night Sky for an estimated 60 students and parents at 2400 N Country Club Road. North East corner of Grant and Country Club. Viewing will take place in the School Court Yard. Contact person Ivan Yocum can be reached at 232-6976 or Ivan.Yocum@tusd1.org. Set-up time: 7:45 pm. Observing will be from 8:15 pm to 10:15 pm. Sunset: 8:19 pm Moon Phase: First Quarter.

ASTEROID OCCULTATION REPORT BY MARK MEANINGS

Observing and recording asteroid occultations is fun and easy, and unlike most other aspects of observational astronomy, something actually HAPPENS while you watch! All you need is a means of telling time (by way of the WWV on shortwave radio, for example), a recording device (like an MP3 player with a microphone), and the ability to see stars down to about 11th magnitude and oftentimes fainter (which means you'll need at least an 8" telescope and a pretty dark sky).

One thing that I'd like to see happen in the near future is to set up a series of coordinated observations in the Tucson area. This would allow us to collect some very useful data not only on the path of the occultation shadow (which will help in making orbital parameters more precise), but also direction, velocity, size, and shape of the asteroid. Plus, if you report your observation with IOTA, you'll be part of history!

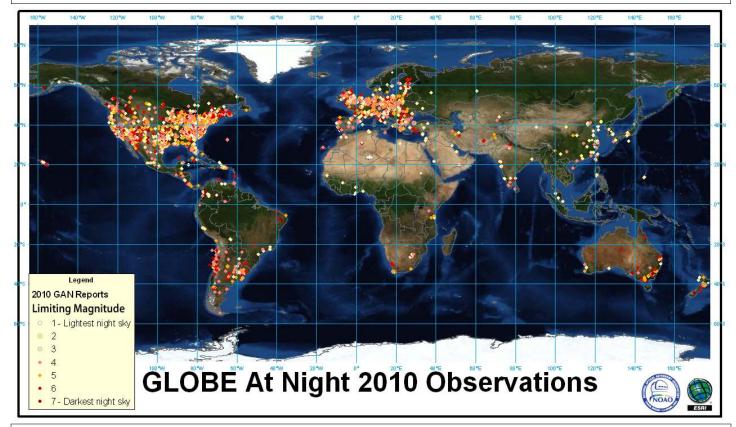
A little skimpy on the occultations once again this month. An interesting one, but probably not really observable, is the 2 Pallas occultation on the evening of 1 May (2 May UT). The star being occulted is magnitude 8.6, but the drop in magnitude is a mere 0.06 magnitudes.

Likely Occultations for Tucson -- May 2010

UT Date	UT Time	Asteroid	Star	Star Mag
2010 May 1	09:46:12	30 Urania	2UCAC 21366721	11.3
2010 May 2	02:41:42	2 Pallas	TYC 2026-01347-1	806
2010 May 31	08:28:54	1678 Hveen	TYC 7316-00794-1	10.0

If you'd like to participate in a coordinated observation of any of these occultation events, please contact me at cosmiclettuce AT yahoo DOT com. Also, if you'd like more detailed occultation information for a specific location, just send me your latitude, longitude, and altitude to the same email address.

GLOBE AT NIGHT



A Sky High Number of Measurements for the International Dark Skies Campaign, GLOBE at Night 2010

With half of the world's population now living in cities, many urban dwellers have never experienced the wonderment of pristinely dark skies and maybe never will. Light pollution is obscuring people's long-standing natural heritage to view stars. The GLOBE at Night program (www.globeatnight.org) is an international citizen-science campaign to raise public awareness of the impact of light pollution by encouraging everyone everywhere to measure local levels of night sky brightness and contribute observations online to a world map.

This year the GLOBE at Night 2010 campaign (which took place March 3-16) set a record high of over 17,800 measurements from people in 86 countries. The dots (or points) on the resulting world map represent the contributed measurements of night sky brightness: the lighter colored the dot, the brighter the sky and the darker the dot, the darker the sky. The lightest colored dot (e.g., "Limiting Magnitude 1") represents a night sky you might see from a very large city. Then, only a handful of stars are visible across the whole sky. The darkest dot (e.g., "Limiting Magnitude 7") represents a night sky you would see from a national park where no city lights are visible. Then there are so many stars across the sky, it is hard to distinguish one constellation from another.

In the United States, 49 states plus the District of Columbia contributed more than 10,900 measurements. The top three states were Arizona (over 1800), Michigan (over 1200) and West Virginia (over 1000). Puerto Rico had over

1,000 measurements; Poland over 800; Romania and Chile over 600; the Czech Republic over 400; Argentina over 300; Hungary close to 300; Canada, the United Kingdom and South Korea just over 200; and China just under 200. Only 1.3% of the 17,800 measurements were not map-able.

The residents from the greater Tucson area in Arizona provided a record high for the city of over 1,000 measurements. Most measurements came from amateur astronomers as well as children of 110 teachers who were trained during a series of workshops given in the last year. Twenty of the teachers were part of a new program called Dark Skies Rangers hosted by the National Optical Astronomy Observatory and the Cooper Center for Environmental Learning, both in Tucson. After the training, these teachers brought hundreds of their students to the center for overnight experiences, which included handson, dark skies education activities in the evening.

"Reaching so many people made a difference in the increased number of GLOBE at Night measurements from Tucson", said Connie Walker, director of GLOBE at Night. "We cannot thank them enough for their participation. The increased awareness of how light pollution affects people's lives globally will hopefully lead to people's help in remedying the situation locally."

Constance E. Walker, Ph.D. Director, GLOBE at Night campaign www.globe.gov/globeatnight

ALConExpo 2010

Para Marenfeld of NODEVALDANSE



Vinen 25-27 June 2010





Where

Tucson Hilton East*
7600 East Broadway, Tucson, Arizona 85710

Feature Speaker Saturday Night Banquet
Dr. Roger Angel

Director of the University of Arizona Mirror Lab

Solar Luncheon

David Levy Astronomer and Comet Discoverer

With

International Dark-Sky Association's Annual General Meeting 2010 on Sunday 27 June 2010

Don't miss.

the Dark Sky Giveaway winner announcement at the IDA AGM. Visit www.darksky.org to learn more.

For more information visit www.alcon2010.astroleague.org or e-mail ALCon2010Expo@gmail.com

Send to: ALCon 2010 3225 North First Avenue, Tucson, AZ 85719 Fax 520,293,3192

or register online at www.alcon2010.astroleague.org

*24 May 2010 is the deadline for Hilton rooms at the discounted rate.



Astronomical League Convention and Exposition 2010

www.alcon2010.astroleague.org | ALCon2010Expo@gmail.com

□ \$30 per person—Fri. Solar Luncheon with

David Levy

25-27 June 2010 at the Tucson Hilton East*

7600 East Broadway, Tucson, Arizona 85710

☐ \$60 2 days; After 1 June 2010 (\$75)

Fri & Sat ALCon

Astronomical League annual Council meeting and Thursday Evening Jarnac Observatory tour on 24 June 2010 International Dark-Sky Association's Annual General Meeting Sunday 27 June 2010

☐ \$60 3 days; A	After 1 June 2010 (\$ 75) Con with Sun, IDA AGM		□ \$50 per person—Sat. Banquet at the Hilton							
995025985 VI	NS NS 82272275		□ \$30 per person—Sun. IDA AGM Luncheon							
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24 June 2010	y Evening Jarnac Observatory [(<i>Limited number of spaces</i>)		4 May 2010 is the dea	Total adline for Hilton rooms at the	\$discounted rate.					
Check(check #_) payable to ALCon 2010	VISA	MasterCard	American Express	Discover					
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Payment must be received by 1 June 2010 in order to receive the early-registration rate. Whereas we request one registration sheet per attendee, you may put all payments onto one check. Conference registration is not required to attend the Luncheon or Banquet. A limited number of room reservations are

available at the Tucson Hilton East at a special rate of \$72.00 per night, plus taxes. 24 May 2010 is the deadline for Hilton rooms at the discounted rate. You may make your room reservations at the Hilton by calling 1-800-HILTONS. Be sure to tell them you are with the Astronomical League for this special rate.

Telescopes for Borrowing



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
Meade10-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.

Dark Skies for May 2010

DARK S	KIES (no	twiligh	ıt, n	o moonl:	ight) fo	or Tuc	son in	24	-hour	MST:	18=6pm,	20=8	3pm,	22=10pm,	0=	12am
RISE,	SET, VI	SIBILITY	for	sun and	bright	plane	ts: ri	se :	for m	ornin	g object,	, set	fo	r evening	ob	ject
Fr/Sa	a 30/0	1 20:34	-	21:48	Mo/Tu	10/11	20:4	4	- 3	:40	Fr/Sa	21/	22	1:37	-	3:46
Sa/St	u 01/0	2 20:35	-	22:42	Tu/We	11/12	20:4	5	- 3	:56	Sa/Su	22/	23	2:10	-	3:46
					We/Th	12/13	20:4	6	- 3	:55						
Su/Mo	02/0	3 20:36	-	23:30	Th/Fr	13/14	20:4	7	- 3	:54	Su/Mo	23/2	24	2:44	-	3:45
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Tu/We	e 04/0	5 20:38	-	0:46	Sa/Su	15/16	21:2	2	- 3	:52	Tu/We	25/2	26	-	-	-
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Sa/St	u 08/0	9 20:42	-	2:41	Tu/We	18/19	23:5	0	- 3	:49	Sa/Su	29/	30	21:02	-	21:21
					We/Th	19/20	0:28	3	- 3	:48						
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CHIRICAHUA ASTRONOMY COMPLEX

Construction Update

John Kalas - Construction Coordinator/CAC Site Director

Prior to the April 10th monthly club star party, I attempted to install the new security system at the site. A minor problem arose with the mounting of the key safe on one of the bathroom facility's porch posts, so the installation was aborted. The new system will be installed before the next monthly star party scheduled for 5/8.

Due to higher-than-expected electric bills for the bathroom facility during the cold weather, it has been determined that the thermostat controlling the freeze protection system does not regulate down to a sufficiently low temperature. We believe the currently installed thermostat is trying to keep the un-insulated bathroom facility at ~60 degrees. Therefore, our contractor Randy Maddox has been instructed to replace the existing thermostat with a digital one donated by J. Kalas which has the ability

CHIRICAHUA ASTRONOMY COMPLEX (cont.)

to regulate down to 45 degrees. Insulation will also be installed around the water heater and the exposed hot water pipes. We are also requesting Randy install an additional 110V duplex receptacle into the electric pedestal near the bathroom facility. This will give us four outlets allowing more members to access electric power via extension cords.

Bill Lofquist and I visited Cochise County Permit Dept. in Bisbee on 4/20 to review the documentation requirements for the Phase 2 building permit. We were pleasantly surprised to hear that we will not be required submit roll-off roof observatory drawings designed by an architect or structurally engineered. The Permit Dept. considers the roll-off roof observatory to be a "glorified shed" with simple electric power requirements. We had been concerned that they would challenge the moveable roof feature and require extensive engineering evaluations. This decision is very important since it will allow the club to generate the drawings quicker and cheaper.

The winter rains have caused significant weed growth at the site. I will be purchasing a large sprayer and weed killing chemicals to address this issue.

The following tasks will be performed next:

- R. Maddox will replace the thermostat that controls the freeze protection system.
- R. Maddox will install an additional 110V duplex receptacle into the bathroom facility pedestal.
- TAAA (J. Kalas) will install the accessories in the shower room including; a floor water dam, shower curtain, clothing hook and shower caddy.

- TAAA (J. Kalas) will install the new security system.
- TAAA (J. Kalas) will purchase a weed-control sprayer and chemicals to address the weed growth problem.

Adopt-A-Highway Program

John Kalas - CAC Director

Bill Lofquist and I thought that it might be a nice community-relations project to apply for the Adopt-A-Highway program near the CAC Site. Bill checked with the Arizona Dept. of Transportation (ADOT) and found that the one-mile stretch of Route 181 near S. Price Ranch Road was available to be "adopted". We presented this proposal to the board of directors at the 4/14 BoD meeting and it was unanimously approved. I will be the coordinator of the project which requires me to attend some training by ADOT. The application was submitted and we are awaiting a response from ADOT.

This program allows individuals and organizations to "adopt" a section of state highway for the purpose of cleaning it twice a year. The cleanups must be scheduled with ADOT. ADOT supplies the plastic garbage bags for this task. There will be two signs erected alongside Route 181; one at milepost 48 and another at milepost 49. The signs will acknowledge the Tucson Amateur Astronomy Association as the adoptive organization. I suggested to ADOT that our first cleanup would be on June 12th, but I am awaiting their response. We thought that the cleanups could be scheduled during the afternoon before a monthly star party. We will keep you advised of the results of our application.

Desert Skies Classified

FOR SALE	Astronomical Books: Handbook of Astronomical Image processing by Berry and Burnhill including AIP/WIN Software, 2001 Edition (\$10), The New CCD Astronomy by R. Wodaski, 2002 Edition (\$10), CCD Astronomy by C. Buil, 1991 Edition (\$10), Sidgewich Amateur Astronomers Handbook (\$10), Burnham Celestal Handbook, Vols1-3, 1971 Edition (\$20), Deep Sky Observers Handbook, Vols 1-5 (\$30), Real Sky-The Palomar Observatory (Northern) Sky Survey on 9 CCDs (\$100), Real Sky South-The Digitized Southern Sky Survey on 11 CCDs (\$100), Uranometria 2000, Vol 1, Norther Hemisphere, 1987 (\$20), Sky Atlas 2000, Laminated Field Edition, 1987 (\$30). Call Bill Silvey at 825-6927 [07/10].
FOR SALE	Astro Film Camera: Olympus OM-1N Astro Film Camera (\$200) includes Case, Electronic Flash T32 with case, Varimangi Finder with case, 50mm f1.4 Auto-S Lens, 50-250mm lens with case, Focussing Screens (1-1 * 1500, 1-8 * 1500, 1-11 * 1500), Accessory Shoe 4, One foot length plunge push button flexible attachment, RPS (R-05321) 27'X30" Changing Bag.Call Bill Silvey at 825-6927 [07/10].
FOR SALE	Miscellaneous Astronomical Equipment: Celestron 9x50mm Finderscope with bracket (\$35), Celestron 10x40mm Finderscope with bracket (\$35), Tuthill Precision Polar Axis Finder (\$40), Lumicon Skylight Filter Model #2 (\$50), Lumicon UHC Filter Ultra High Contrast Type (\$50), Lumicon Deep Sky Filter for Nebulae and Galaxies (\$50), Lumicon Giant Easy Guider (\$200), Lumicon Duo View for Giant Easy Guider (\$50). Call Bill Silvey at 825-6927 [07/10].
For Rent	Beautiful New 3 Bedroom 2 Bath home in Arizona Sky Village, Portal AZ (sleeps 6). Bring your own telescope! Call Irene 520 777 6222 or ikitzman@yahoo.com [06/10]

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.

Desert Skies Classified (cont.)

FOR SALE	Celestron Nexstar 11 GPS, modified to mount on Celestron 14 telescope mount. Wedge is mounted on vernier rotation system which allows it to rotate and lock down independently from tripod. Tripod is on wheely bar with 1/2" leveling and stability bolts. The Nexstar can be remounted on Celestron 11 GPS wedge and mount, which is included. (\$2900 total). Equipment mounted on the Nexstar (and which will be removed if not desired) includes: Fastar Interface Lens (\$25), Astrozap Dew Shield (\$80), Cap for Astrozap (\$20), Stellarvue 80mm f-9.4 Achromatic Reflector autotrack Sytem (\$260), SBIG ST-237 CCD Camera mounted on Stellarvue (\$1800), CFW-5C Color Filter Wheel for SBIG ST-237 Camera (\$300), Microtouch Wireless Autofocuser (\$250), Spectro Sure Sharp Astrophotography Focusing Device with right angle viewer (\$50), Telrad with base, hinged deluxe dewcap, and Pulsar Unit (\$40), Vixen Illuminated Guiding Adapter GA-4, 31.7 mm (\$150), Lumicon superfinder, 82mm aperture, f=305mm with cross hair focusing star diagonal (\$150), Celestron 7x50mm Finderscope with quick release bracket and illuminated cross hair eyepiece (\$100), Polaris Finderscope with setting plate (\$25), Losmandy DC-11 Dovetail (\$50), Losmandy DR108 Ring Set (\$80), Losmandy Cradle Ring Set (\$80), Losmandy three point centering set for two rings (\$80), Outdoor Nylon 16"SCT Cover (\$20). Unmounted available equipment for the system includes: Hyperstar Lens (\$400), Starlight Express SXV-H9C CCD Camera (\$1800), Celestron Vibration Suppression Pads (\$75), Miscellaneous weight sets for Nexstar 11 GPS (\$50). Call Bill Silvey at 825-6927 [07/10].
FOR SALE	Eyepieces for Sale: Televue Binovue in Case (BVP204) (\$600) with Two Televue 22mm Panoptic Eyepieces (\$200 each) and Two Meade Super Plossl 32mm Multicoated Eyepieces (\$200 each). Parks Illuminated Cross Hair Eyepiece OR, 12.5mm (\$40), Lumicon 25mm Cross Hair Kellner Eyepiece (\$40), Televue Eyepiece Adapter, 1.25" to 2" (\$10), 2" Televue Eyepiece, 55mm Plossl (\$200), 2" Televue Eyepiece, 32 mm Wide Field (\$200), 2" Televue Eyepiece Nagler, 13mm (\$200), 1.25" Celestron Eyepiece, 18mm, Fully Coated (\$30), 1.25" Celestron Eyepiece, 40mm, Multicoated (\$30), Call Bill Silvey at 825-6927 [07/10].
FOR SALE	Coronado P.S.T (Personal Solar Telescope). Includes eyepiece, very nice case, and Orion equatorial tripod with manual slow motion controls. Asking \$450. Contact Lyle Kolze,)608) 346-5957, lkolze[at] yahoo.com [05/10]
FOR SALE	Classic criterion dynascope 6" f8 telescope with German eq mount \$200. Celestron 8" wedge \$100. Steve, 975-0098. [05/10]
SERVICE	Green laser pointer need repair or tune up? Contact Donald Arndt at (415) 215-2409 or donaldja(at)pacbell.net. Typical repairs cost \$25-50, including return shipping.

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 - 14 April 2010

Attending: Board members present (7): Ken Shaver (presiding), Keith Schlottman, Luke Scott, Teresa Bippert-Plymate, George Barber, John Kalas, and John Croft. Members present (5): Terri Lappin, Liz Kalas, Bill Lofquist, Claude Plymate, and Mark Meanings

Call to Order: The President called the meeting to order at 6:30 pm.

Minutes: Minutes from the March Board meeting were approved unanimously.

Member Feedback

Talking at the back of the auditorium makes it difficult to hear the speakers during monthly meetings. The meeting facilitator will control the problem.

Announcements for Record

The tucsonastronomy@yahoogroups.com list server will be killed this week.

Upcoming Meetings

May is Members Night. Members wanting to present should contact the President. Keith Schlottman will present the June Astronomy Essentials lecture and will discuss ALCON 2010. The September meeting is the annual TAAA Status Report.

Treasurer's Report (Teresa Bippert-Plymate)

The TAAA checking account balance is \$46,519.09.

TAAA Board of Directors Meeting - 14 April 2010 (cont.)

One new member joined at the April meeting.

No new members joined at the Tucson Festival of Books.

Web Team Report (Terri Lappin and Mark Meanings)

A demonstration of an individual login procedure for the web site is planned for the May Board meeting. Board members will beta test the new login system. The Web Team goal is to move to an on-line dues payment system in January 2011.

The member's site will have a new password effective with release of the May newsletter.

Mark Meanings is automating the school star party set-up process. Future plans are to integrate the volunteer sign-up forms into the TAAA web site.

Chiricahua Astronomy Complex (John Kalas and Bill Lofquist)

A meeting is planned for the week of 19 April with the Cochise County Permit Department to discuss construction drawing requirements for CAC Phase 2.

About 6 members are planning to bring telescopes to the Sunsites Community Center star party on 4/17.

6 members have responded to Bill Lofquist's inquiry on RV use at the CAC.

The new security system has not yet been installed, but is expected to be in place after the May star party.

Winter rains have resulted in weeds encroaching into the gravel areas. It is recommended that the club purchase a spray tank and weed killer.

The CAC star party for May has been moved from the 15th to the 8th to avoid a conflict with the Kitt Peak Star-B-Que.

Special Interest Groups

Terri Lappin reported that the Starry Messengers SIG is planning a workshop on 22 May. The topic is the Milky Way Galaxy.

John Croft proposed that the club purchase Richard Hill's inventory of his book on solar observing. The books would be sold to AFSIG members and the club reimbursed. A motion was entered and seconded authorizing the expenditure of \$330 for 33 copies of Richard Hill's "Observe and Understand the Sun". The motion was approved unanimously.

Adopt-a-Highway

John Kalas presented a proposal for TAAA to adopt highway 181 near the CAC. The club would be required to clean up the roadside two times per year. A motion was entered and seconded for TAAA to adopt Highway 181 between mileposts 48 and 49. The motion was approved unanimously. John Kalas will coordinate this activity.

Other

Keith Schlottman reported that no more free registrations are available for volunteers for ALCON 2010.

Bill Lofquist reported that the club will not purchase new shirts for the Grand Canyon Star Party. Sufficient stock is left over from last year.

The polling feature on the TAAA Forum has been turned off and will be enabled by the Board as needed.

In a vote conducted via e-mail prior to the April 2010 Board meeting, the Board approved by a vote of 6-0 expenditures of \$40 to participate in Cochise Days in Sunsites and \$25 to join the Pearce Sunsites Chamber of Commerce.

Meeting adjourned at 8:20 pm.

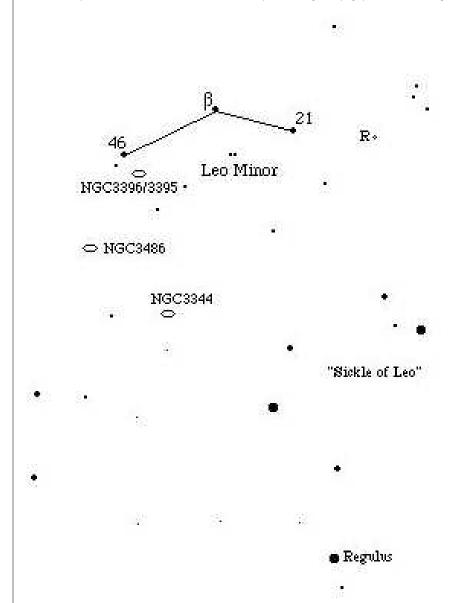
Respectfully submitted, Luke Scott Secretary

Constellation Report by Chris Lancaster

Leo Minor

The Little Lion

If you look to the well known and well formed constellation of Leo, the lion, and then move your gaze slightly north toward equally impressive Ursa Major, you'll come to one of the most uninteresting and uninspiring constellations to the eye that there is. Sorry to be so harsh, but the brightest star of Leo Minor, Beta Leonis Minoris (Alpha has somehow been dropped), is only magnitude 3.8, and the others are 4.5 or less. In fact, Leo Minor sits in an area of the sky which the ancient Greeks called amorphotoi, meaning "undeveloped." Johannes Hevelius came along in the late 1600's to give these stars their present name to fill in this comparatively empty part of the sky.



Leo Minor is a fair distance from the winter Milky Way, so what we expect to find here are no star clusters, and a good amount of galaxies and stellar objects. Looking to the west side of the constellation we find R Leonis Minoris, a cool M type star which is a long period variable (LPV) pulsing from magnitude 6.3 to a virtually invisible (depending on your telescope) 13.2 over a period almost matching a year -- 372 days. Included is a representation of the field surrounding R. The brightest star to the lower right (southwest) is of magnitude 7.2. R is roughly 4.5 degrees west of 21 Leonis Minoris, or, specifically, RA 9h 45m 35s Dec +34d 30' 45". The chart spans approximately 30'. North is at the top.

There are several galaxies in Leo Minor. Most are small and in the vicinity of 12th to 13th magnitude. A couple are brighter and within the grasp of most backyard telescopes.

We find one of these galaxies, NGC3344, at RA 10h 43m 31s Dec +24d 55' 25". It's one of Leo Minor's brightest ones at magnitude 10.7. It spans an area of 7.0'x 6.5'. NGC3344 is a wonderful face-on spiral galaxy with a sharp nucleus and diminishing spiral arms. Its general orientation with respect to the Earth is similar to the nearer galaxies M33 in Triangulum and M51, the Whirlpool Galaxy, in Canes Venatici. While not as two other large as these galaxies, rivals appearance NGC3344 their nonetheless if we allow for the greater distance.

NGC3486 is of similar brightness (magnitude 10.7) a bit farther east at RA 11h 00m 24s Dec +28d 58' 33". This

galaxy is of a very similar appearance, also being face-on to us and a size of 7.0'x 5.2'. You'll see a galaxy with a bright, broad nucleus.

Those of you will larger aperture can try for the interacting pair of galaxies NGC3396 and 3395 1.4 degrees southwest of 46 Leonis Minoris. Both of these are of magnitude 12.5 and a small 3.0'x 1.2' for 3396 and 2.1'x 1.2' for 3395. The centers of these galaxies are only 1.7 arc minutes apart, and long exposure images show distinct nuclei, but their adjacent edges are being smeared together from gravitational interaction. You can find the pair at RA 10h 49m 53" Dec +32d 59' 10".

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

Address Service Requested

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.
- 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:

- 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..
- 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.

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 1/4 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.

<u>Directions to Las Cienegas (Empire Ranch)</u>