



Desert Skies

Tucson Amateur Astronomy Association

Volume LIV, Number 3

March, 2008



Phoenix Mission to Mars

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Cover Photo: From the Phoenix Mission website: *Launch*, taken by Sid Leach. *Landing*, artwork by JPL artist Corby Waste. *Mural*, taken by Angela Poulson. *Roger Tanner* (TAAA Member) testing the Phoenix Surface Stereoscopic Imager mast.

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Membership in the TAAA

Annual Fees

Individual membership \$25.00
 Family (includes two adults plus minor children)..... \$30.00
 Youth under 18 years must join as a family upon parental or guardian acknowledgement of participation in TAAA events. Ask the Treasurer for the required form.

Discounts (one discount allowed, subtract from above rates)

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

Options (add to above membership rates)

Tucson society of the Astronomical League (TAL) fees\$ 5.00
 Sky & Telescope Magazine 1 year (12 issues)..... \$32.95
 Astronomy Magazine 1 year (12 issues)..... \$34.00
 2 years (24 issues)..... \$60.00
 Postage for New Member Pack \$ 4.60

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

Renewal Information

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

subscription amount to the TAAA treasurer. Include your magazine renewal notice.

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

Tucson Amateur Astronomy Association
 PO BOX 41254 Tucson, AZ 85717

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

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

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

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President's Message

At the time of this writing we are just five days away from our hearing before the Cochise County Planning and Zoning Commission to get a Special Use Permit to develop our dark observing site. By the time you receive this issue of Desert Skies we will know the verdict of the Commission. In a way this has been a long and trying saga to reach this goal since we started the initiative last June. On the other hand, we have accomplished a great deal in a short time with the involvement of many TAAA members to come this far.

We have a strategic plan to create an exemplary astronomy club observing site in a very dark area. A number of our members contributed to the articulation of a clear vision that has now been shaped into a fairly specific picture. The elements of the emerging facility are ready to be given more specific detail. We have not wanted to jinx our chances of obtaining the Special Use Permit, so we have not yet dotted the i's and crossed the t's.

We have begun, however, to take the initial steps toward determining just what we need in the way of infrastructure. That includes roads, water system, septic system and electric service. Several members with the appropriate know-how are leading teams that will clarify the details.

Two important meetings will occur during March to push things ahead. This assumes that we are approved for the Special Use Permit in the very near future.

At the General Meeting on Friday, March 7 we will use the Astronomy Essentials part of the meeting to talk about the

new dark site. That begins at 6:30, so we hope to have a full house there to participate in that discussion.

The second meeting will be a Special Meeting to occur on Saturday, March 15 in Room N305 in the Steward Observatory Building. That meeting will become even more specific.

These meetings are described in more detail in a separate article in this issue of the newsletter.

Another important meeting is planned for Saturday, March 22 to focus on the Special Interest Group (BSIG) for new and beginning members of TAAA. J. D. Metzger, Mary Turner and Dennis McMacken have been leading the BSIG and are asking members to join them in building that group for the future. Be sure to see the article about this meeting and plan to join us that day.

George Barber and those who have been helping on the TIMPA observatory are at last putting the finishing touches on that project. We hope this will be complete by the time of our March meeting. A celebration will be in order when we have First Light through the 14-inch Meade telescope that will go into this new observatory.

So, many things are happening with TAAA this spring. It will be exciting to see these projects move ahead.

Clear skies,

Bill Lofquist

Meeting Information and Calendar of Events

TAAA MEETING DATE: Friday, March. 7, at the Steward Observatory Auditorium - Room N210

ASTRONOMY ESSENTIALS: 6:30 pm

Title: Discussion of the New Dark Site - Update and Future Steps

Leader: Bill Lofquist

This month we are using the time for the Astronomy Essentials part of the meeting to talk about our new dark site in Cochise County. We hope that all of our members, who are interested in learning more about this important development, and especially those who plan to use it, will come early for this part of the meeting. We hope to announce that we have been granted the Special Use Permit. We will discuss our plans for moving ahead. This will include the structures we are putting in place for member involvement, planning and decision making. There are a number of ways that members can make important contributions to shaping the Astronomy Complex in the weeks and months ahead.

GENERAL MEETING: 7:30 pm

Title: Mars Phoenix Mission

Speaker: Peter Smith, UA Lunar and Planetary Lab

After a number of failed missions to Mars, the Phoenix mission will send a set of instruments to probe the icy-rich soils of the polar region at 68 N latitude landing on May 25, 2008. Peter Smith is the principal investigator leading the mission and will describe the scientific goals of the mission and its relation to Earth. The mission attempts to learn the history of the ice-rich surface by measuring the salt and mineral content of the soil near the ice. These are sensitive indicators as to whether the ice has ever melted and created an environment suitable for life.

Peter Smith was the Principal Investigator for the Mars Pathfinder mission and is co-investigator for the HiRISE camera aboard the Mars Reconnaissance Orbiter. He is a senior research scientist at the UofA Lunar and Planetary Lab. He received his MS in 1977 from the UofA. For more information about the Mars Phoenix Mission, go to <http://phoenix.lpl.arizona.edu/index.php>.

Meeting Information and Calendar of Events (cont.)

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

STAR PARTIES AND EVENTS:

01 Mar - TAAA Star Party at Las Cienegas
04 Mar - Lyons Elementary Star Party
05 Mar - Northminster Presbyterian Church Star Party
06 Mar - Tucson Symphony Orchestra Star Party
08 Mar - TAAA and BSIG Star Party at TIMPA
09 Mar - Tucson Symphony Orchestra Star Party
14 Mar - Luz Academy of Tucson Star Party

15 Mar - Friends of Sabino Canyon Star Party
18-21 Mar - Southern Arizona Regional Science and Engineering Fair (SARSEF)
28 Mar - Liberty Elementary School Star Party

NEWSLETTER SCHEDULE: Deadline for articles: Sat, March 22. Printing: Mon, March 24. Folding Party: Wed, March 26. Mailing: Thu, March 27. 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: Charlie Davis, Chester Fennell, Lyle Johnsen, Jim Knoll, Mark Richards, and David Sattinger. 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, March 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.

TAAA Apparel

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

Beginners' Special Interest Group

BSIG for March

First of all, we are very pleased to announce that Steve Marten has joined the BSIG Committee! Thanks, Steve!

The Beginners Special Interest Group will gather for the monthly dinner meeting/TIMPA warm-up at the China Rose restaurant (NE corner of Speedway and Rosemont) on Wednesday, March 5, at 6:00 pm. J.D. Metzger will present "All about Eyepieces", always a popular topic. Join us at the China Rose for information and good company,

and at TIMPA the following Saturday, March 8, for (we hope) clear skies!

BSIG Revitalization Planning Meeting!

Saturday, March 22 - All Interested Members Invited
By J.D. Metzger

The Beginner's Special Interest Group (BSIG) was started almost 3 years ago in an effort to assist new members and beginners in various aspects of amateur astronomy, including basic astronomy, observing skills, and equipment selection and use. In some ways the BSIG has been successful, but there are some significant issues that need to be addressed:

1. Attendance at BSIG monthly meetings and TIMPA star parties has declined significantly over the past year. There may be many reasons for this, but the concern is that the BSIG is not addressing the needs of new members and beginners. We need to re-examine our approach, and develop a strategy and offer meaningful activities that not only will address the needs of the new members and beginners, but offer learning opportunities for all TAAA members.
2. The China Rose restaurant venue for BSIG meetings and activities is too restrictive. Although the China Rose is a convenient place to meet due to its central location, it does not support any type of hands-on activity or provide a suitable area for demonstrating equipment or teaching observing skills. A new location is desperately needed. Finding such a location is critical to the future success of the BSIG.
3. The BSIG lacks a formal presentation "curriculum". Up to this point, most of the presentation material used by the BSIG has been developed on an "as needed" basis, with no overall plan. The BSIG Committee recently developed a proposed formal curriculum, but help is needed to review and finalize the list of topics.
4. The BSIG needs to conduct more "hands-on" and workshop activities. The BSIG Committee feels this is a

Club News (cont.)

major issue, and that improvement in this area is critical to success. We need experienced members to help develop and conduct workshop activities.

5. The BSIG has not contributed any significant number of new star party volunteers. One of the goals of the BSIG has been to recruit and develop new star party volunteers. So far, this informal approach has produced very few new volunteers. The club needs to take a more formal approach, and create a TAAA School Star Party Volunteer Program. The BSIG needs assistance in designing the details of such a program.

If you would like to voice your opinions on these issues, and help us plan the future of this important special interest group, please attend the meeting in conference room N305 at Steward Observatory on Saturday, March 22 at 9:30 am.

THE TAAA ASTRONOMY COMPLEX:

Two Important Meetings in March
By Bill Lofquist

There are two meetings during the month of March focused on our development of the TAAA Astronomy Complex. By the time you receive this issue of Desert Skies the meeting of the Cochise County Planning and Zoning Commission to hear our application for a Special Use Permit will have been held. That occurs on February 27. We hope we will have good news to report at the general meeting of TAAA on March 7. We do know that the Planning staff is suggesting several conditions to the Commission, and we should know clearly what those are at that time.

The first of the two meetings will be during our monthly meeting on March 7. The Board of Directors decided to use the 6:30 to 7:15 part of the meeting to discuss the TAAA Astronomy Complex. So we hope members will come to hear what is happening at that time and to learn how they can contribute to the specific development of our observing site.

The second meeting will be a Special Meeting in room N305 in Steward Observatory on Saturday, March 15. That meeting will begin at 9:30 AM. We will focus on the work to be done and the way we are organizing to involve members in the creation of our site.

We will have an opportunity to create an innovative and exemplary astronomy club observing site. Many member ideas have already contributed to the shaping of the vision in a general way. We have created a concept plan based on those ideas and presented it to the Planning and Zoning Commission in our application. Specific designs for the particulars are yet to be shaped.

If you have not yet seen the application, you may get a copy of it as a PDF file by requesting it from me. Please call me at 297-6653, or write an email to wlofquist@comquest.net. I will be happy to forward it to you.

There is much work to be done to make it happen. We have proposed a three phase development plan. The first phase may take as much as a year, and it will get us into some serious observing quickly. Phase I will include the basic infrastructure that includes roads, parking area, electric service, water and septic systems. It will also include restrooms, observing pads and storage. It may also include small observatories and an amphitheater.

The second phase will include more pads and small observatories, a ramada and clubhouse, the 16' dome and more storage. Projected for the third phase are a larger roll-off roof observatory, some sleeping rooms for members to use, and possibly a caretaker residence. Of course, we may make some changes during these phases that we can petition the P&Z Commission for permission to add.

Obviously, there will be many decisions and plans to make for all of this to happen. We have put in place a simple structure and process for member involvement, plans and recommendations, and Board approval to move ahead. We will discuss all of this at the meetings in March, but briefly described, here is the concept.

We will create some small Ad Hoc Working Groups to focus on specific matters. TAAA has many members with special knowledge and skills to engage. Two of these Working Groups have already begun to take shape. Larry Brown is the convener of a group focusing on the electric service we need for the Complex. He has created a spreadsheet into which we can put information that will help us decide how much service we need. Larry would



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like some help from other members who are familiar with the electrical demands for this type of project.

Another Working Group that is taking shape focuses on water. Ken Shaver, who has a well and water storage system on his property, is the convener for this one, and he is asking for help from others with this knowledge and experience. An early task is to locate a well site and the placement for the septic system.

At our March meetings we will consider other Working Groups that will be useful. Robert Crawford has been collecting a lot of information about our needs for the infrastructure, and he will continue to be involved with that. These small Working Groups will function until their task is completed, and then disband.

The Ad Hoc Working groups will feed information and recommendations to a Strategic Planning Group that was created last June when the initiative was started. This group consists at present of Keith Schlottman, Teresa Plymate, Claude Plymate and myself. Three of us are Board members and will take matters to the Board that require policy and funding decisions, and will generally keep the Board informed of all developments.

March should be a month in which a lot comes together for us.

Grand Canyon Star Party

21-28 June, 2008
North and South Rims
By Dean Ketelsen

It is definitely time to finalize those plans for the Grand Canyon Star Party! There are a couple items of note to think about. First, I take names for the free campsites on 1 March. This assures everyone gets a shot at getting one. Generally, only those staying at least 6 of the 8 nights will be allocated one of these campsites. If you are only joining us for a day or two, please make your own reservations. They usually go pretty fast so mark your calendar. I would really like to get e-mails - phone messages need to get written down and might get lost, so a semi-permanent record (like e-mail) is preferred. The Park Service is upping us to 18 sites this year, and since the sites are limited to 2 cars and we are all friendly folk, I usually try to double up on occupancy. So please let me know if a: you are already planning to share with a friend and will have more than 1 vehicle, or b: if you are driving a large vehicle which may prevent parking a second vehicle in a site. We usually get 25-28 astronomers in the 16 sites we normally get.

Secondly, there will be a North Rim event this year! After some prodding by the new staff why we were cutting back their star party (last year's staff were the ones requiring a cutback last year!), Steve Dodder (and lovely wife Rosie from the Saguaro Astronomy Club) stepped up and will be running the resurrected event. There is a link to north rim information on the Grand Canyon Star Party page, so if

you have ever considered attending that version, be sure to contact them.

That is about it for now - if anyone has questions, please let me know at ketelsen@as.arizona.edu. Thanks!

Telescope Loaner Program

By Richard Dougall

Attention members! We have a wide variety of telescopes for use by our members here in the club and they are not being utilized. They are starving of proton deficiency - they need to be fed! So borrow one for some TLC. They are here for the asking; contact me at 245-5441, or the club email.

Upcoming Lectures

Our meeting lecture schedule for the first half of 2008 is looking very full. The June Astronomy Essentials lecture is still open. Contact Terri Lappin if you want to present that lecture. Any topic that is about general astronomy would be perfect. Any member may give an Astronomy Essentials Lecture - even you!

Apr 4	<i>Astronomy Essentials</i>	<i>Mary Turner Seasonal Objects</i>
	<i>Invited Lecture</i>	Gilda Ballester Exoplanets
May	<i>Astronomy Essentials</i>	Members Night, meeting begins at 6:30pm Election of Officers
	<i>Invited Lecture</i>	
Jun	<i>Astronomy Essentials</i>	Steve Marten Ancient Astronomy, What They Already Knew
	<i>Invited Lecture</i>	Randy Jokipii Solar Heliopause and Voyager

Basha's Thanks a Million Program

Basha's has an excellent program to support local non-profit groups like the TAAA. It's called the Basha's Thanks a Million for Friends and Neighbors program. This is a no-brainer fundraiser. If you shop at Basha's and have a "Thank you" card, the next time you go through the checkout, give the cashier this number: ID #23178. They can look up the number using our name, too. It's that easy! Just do it once. At the end of the program next spring, Basha's will make a donation to the TAAA based on the total sales of every Thank You card linked to our number. Anyone can participate, so give our number to

Club News (cont.)

family and friends. If you participated last year, you need to give our ID number again, or your sales won't count. Thanks to everyone who participates.



ID # 23178



GLOBE at Night – Light Pollution Awareness

The TAAA was awarded a GLOBE at Night kit last month by the Night Sky Network. The GLOBE at Night is a worldwide effort to bring light pollution to everyone's attention. The kit is to be used during the dates from Feb 25th to Mar 8th, when Orion is best visible in the evening from most parts of the world. The principle is very simple. Go outside, look at the constellation Orion, and match what you see to a set of sky brightness star charts. Then, report your findings online. (See <http://www.globe.gov/GaN/> for more information.) As a recipient of this kit, the TAAA has promised to use it during the window of dates, so we need your help. Consider borrowing the kit for a school star party during the target dates. The TAAA also was awarded a Sky-Brightness Meter which gives a digital measurement of sky glow.

It is through the efforts of Robert Gilroy that we have received this kit. Ask him about the kit and the GLOBE at Night project. Participate in the GLOBE at Night project from Feb 25th to Mar 8th by telling others about it and be sure to go online to report your own observations. (The Magnitude Charts are available online; the kit is not needed but enhances the educational aspect of the project.)

Below is a listing of All NSN toolkits we have received to date. They contain essentially all the materials needed for the projects. All projects are easy to do and you don't have to use all the projects in each kit. You get to pick and choose the project(s) you demonstrate.

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

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

Black Hole Survival Kit: what is a black hole and how does it affect objects nearby, includes a game that a group or family can play

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

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

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

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

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

The TAAA Announcements, Forum and Dark Site Email Lists

Do you have email? Are you a member of the TAAA Announcements List or the TAAA Forum? These are TAAA email distribution lists run on Yahoo! Groups. Members of the Announcements List receive reminders and information about TAAA events. The TAAA Forum List allows members to send emails to everyone on the forum. There are about 15 announcements and about 75 forum messages per month. The TAAA Dark Site list is the newest addition. Activity on this list should increase with the future work planned for our dark site.

Since Yahoo! Groups hosts these lists, you may see ads inserted into the email messages. The TAAA has no control over the content of these ads; however, your email program or internet security software may be configurable to block the ads so you won't see them.

Membership in these groups is restricted to TAAA members. Please follow the directions below to join. Please also send an email to Terri Lappin at treasurer@tucsonastronomy.org letting her know you have requested membership in the list(s). Be sure to include your name so she can verify your membership and approve your request.

If you are a member of Yahoo:
Go to the following websites and click on "Join this Group".

Announcements: <http://tinyurl.com/e7o3y> (same as <http://groups.yahoo.com/group/tucsonastronomy>)

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TAAA Forum: <http://tinyurl.com/hwoau> (same as <http://groups.yahoo.com/group/taaaforum>)

TAAA Dark Site: <http://tinyurl.com/3d8ts9> (same as <http://groups.yahoo.com/group/TAAADarkSite>)

If you aren't a member of Yahoo:

Join Yahoo by going to the above URLs and registering when you see the Login screen. Before joining Yahoo, it's recommended that you visit the Yahoo®! Groups website (<http://groups.yahoo.com/>) to learn about their privacy policy (link is at the bottom of the screen). Once you join, you should check the default "Marketing Preferences" for your account by clicking on "My Account" (top of the screen), and then "Edit your marketing preferences" (about center of screen).

If you don't want to join Yahoo:

Send a blank email to the following addresses using your email account where you want the messages to be sent.

Announcements:

tucsonastronomy-subscribe@yahogroups.com

TAAA Forum: taaaforum-subscribe@yahogroups.com

TAAA Dark Site:

TAAADarkSite-subscribe@yahogroups.com

If you have any problems, contact Terri Lappin.

Items of Interest

SARSEF - Developing Enthusiasm for Science March 18-21

By Steve Marten

The Southern Arizona Regional Science and Engineering Fair (SARSEF) was developed in the late 90's to challenge Kindergarten through 12th Grade students' knowledge and interest in science. SARSEF is supported by donations to the SciEnTeK-12 Foundation (www.sarsef.org).

The SARSEF staff welcomes your visit and, if you are able, your expertise to judge the many interesting science entries. The Fair is a truly fun and enjoyable event. Just being there, talking to some of these super students and seeing their fantastic project exhibits are the basic rewards that attract visitors and volunteers from TAAA and other science-related organizations year after year.

Another benefit is the knowledge that you are doing something important in keeping America strong in Science and Technology. There is currently discussion about the US lagging behind many countries in its pre-college science education. We know that what we are doing is indeed bringing some youth who had never even thought about a career in science, medicine, engineering and technology into that mainstream. We are helping build the high technology workforce of the not-too-distant future, and you - as a volunteer - are a crucial and important part of that accomplishment.

SARSEF has projects from Kindergarten through 12th grade, totaling nearly 1500 projects, and the staff assures each project is judged by at least three judges. Teams are established to judge by grade and category. Some categories have large teams. For example, there are usually around 500 5th grade projects. A number of elementary school judges are needed with so many exciting projects to see! High School judges must be professionals or hold advanced degrees, but these are not required for K-8th grade judges.

Please contact Steve Marten
(secretary@tusconastronomy.org) or 520.307.5237 to
signup. Let me know your judging category preference

(see below), and join us on Tuesday, March 18 at TCC for a great breakfast brought to us by Texas Instruments followed by a fun day reviewing great project displays.

If you are unable to join us for most of Tuesday to judge these surprising and interesting entries, please visit on one of the visitor days from Wednesday through Friday, March 19-21, 9am to 8pm. Awards will be presented to students on Thursday, March 20 at 6.30pm (Elementary K-5th grade) and Friday, March 21 (Middle and High School) at 7pm.

Categories

Elementary Grades (K-5)

- Physical Science
- Life Science

Middle School (6-8)

- Physical & Astronomy Sciences
- Earth Science
- Life Science
- Engineering, Math/Computer Science
- Behavioral/Social Science
- Energy & Transportation

High School (9-12)

- Animal Sciences
- Behavioral & Social
- Biochemistry/Chemistry
- Cellular & Molecular Biology
- Computer & Mathematical Sciences
- Earth Science
- Engineering
- Energy & Transportation
- Environmental Sciences
- Medicine and Health
- Microbiology
- Physics & Astronomy
- Plant Sciences

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 valueable in other capacities. Sign up sheets for many events can be found at the meeting or contact a TAAA officer.

Lyons Elementary Star Party

Tuesday, 3/4/2008

East

No. of Scopes: 5

Lyons Elementary will be planning Family Science Night at 7555 E. Dogwood St. From Kolb and Speedway take Kolb Rd. south, past Golf Links to Escalante. Turn left (east) on Escalante and proceed about $\frac{3}{4}$ mile to Evergreen. Turn right (south) on Evergreen and proceed about half a mile to Dogwood, turn right (west) and proceed $\frac{1}{4}$ mile to school. Viewing will be on the playground area behind the school. Contact person Sandy Blitz can be reached at 584-6600 or email sandra.blitz@tusd.k12.az.us. Set-Up Time: 6:45pm. Observing will be from 7:15 pm to 9:15 pm. Sunset: 6:24pm Dark Sky: 7:17pm Moon Phase: (no moon during viewing).

Northminster Presbyterian Church North-Central

Wednesday, 3/5/2008

No. of Scopes: 3

Northminster Presbyterian Church will be celebrating God is bigger than the Universe at 2450 E Fort Lowell Road. The church is located on the corner of Ft. Lowell and Tucson Blvd. Viewing will be on the Basketball Court. Contact person Sheila Yamanaka can be reached at 520-327-7121 or email vyamanaka@northminstertucson.org. Set-Up Time: 6:45pm. Observing will be from 7:15 pm to 9:15 pm. Sunset: 6:25pm Dark Sky: 7:18pm Moon Phase: (no moon during viewing).

Tucson Symphony Orchestra Star Party

Thursday, 3/6/2008

Tucson Symphony Orchestra will be hosting Holst's The Planets at TCC Music Hall. Viewing is to be arranged. Contact person Paul Moss can be reached at (520) 240-2084 or email school-star-party@tucsonastronomy.org. Discount tickets will be available for TAAA volunteers! Set-Up Time: 6:15pm. Observing will be from 6:45pm to 9:30 pm. Sunset: 6:26pm Dark Sky: 7:19pm Moon Phase: (no moon during viewing).

Tucson Symphony Orchestra Solar Viewing

Sunday, 3/9/2008

Tucson Symphony Orchestra will be hosting Holst's The Planets at 2175 North Sixth Ave. Viewing is to be arranged. Contact person Paul Moss can be reached at (520) 240-2084 or email school-star-party@tucsonastronomy.org. Discount tickets will be available for TAAA volunteers! Set-Up Time: 12:30pm. Observing will be from 1:00pm to 3:00 pm.

Luz Academy of Tucson Star Party

Friday, 3/14/2008

West

No. of Scopes: 4

Luz Academy of Tucson will be preparing Family Science Night/ Science Fair at 2797 North Introspect Drive. West on Grant Rd, Turn North on Silverbell. Drive .5 to 1 mi north. Introspect Dr. will be on the left (west) past last house. Viewing will be on the basketball court. Contact person Dolores Arroyo can be reached at (520) 807-5892 or email beall@luzacademy.com. Set-Up Time: 7:00pm. Observing will be from 7:30 pm to 9:30 pm. Sunset: 06:32pm Dark Sky: 07:25pm Moon Phase: First Quarter.

Friends of Sabino Canyon Star Party

Saturday, 3/15/2008

East

Friends of Sabino Canyon will be hosting Music in the Canyon at 5700 N. Sabino Canyon Road. Take Speedway east 5 miles to Wilmot. Turn north onto Wilmot and continue 1.7 miles. The road will become Tanque Verde Rd. Turn left onto Sabino Canyon Rd. Take Sabino Canyon Rd north 4.5 miles. The park entrance will be on your right. Set up at the entrance to the main park area. Contact person Mike Weasner can be reached at 520-289-3402 or email mweasner@mac.com Set-Up Time: 4:30pm. Observing will be from 5:00 pm to 9:00 pm. Sunset: 6:32pm Dark Sky: 7:25pm Moon Phase: First Quarter.

Liberty Elementary School Star Party

Friday, 3/28/2008

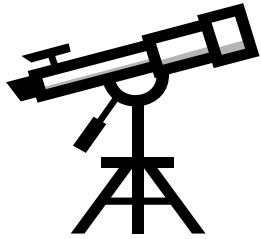
South

No. of Scopes: 5

Liberty Elementary School will be holding Night Sky with the Planets at 5495 South Liberty Avenue. Viewing will be on the amphitheater at the back of the school. Contact person Deborah Green can be reached at 545-3100 or email Deborahg@susd12.org. Set-Up Time: 7:00pm. Observing will be from 7:30 pm to 9:30 pm. Sunset: 6:42pm Dark Sky: 7:35pm Moon Phase: (no moon during viewing).



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.

Dark Skies for March 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

Fr/Sa 29/ 1 19:43 - 2:45	Mo/Tu 10/11 22:11 - 5:18	Fr/Sa 21/22 - - -
Sa/Su 1/ 2 19:44 - 3:34	Tu/We 11/12 23:23 - 5:16	Sa/Su 22/23 - - -
Su/Mo 2/ 3 19:44 - 4:19	We/Th 12/13 0:34 - 5:15	Su/Mo 23/24 20:00 - 20:47
Mo/Tu 3/ 4 19:45 - 4:59	Th/Fr 13/14 1:40 - 5:14	Mo/Tu 24/25 20:01 - 21:45
Tu/We 4/ 5 19:46 - 5:25	Fr/Sa 14/15 2:39 - 5:12	Tu/We 25/26 20:02 - 22:43
We/Th 5/ 6 19:47 - 5:24	Sa/Su 15/16 3:29 - 5:11	We/Th 26/27 20:03 - 23:40
Th/Fr 6/ 7 19:47 - 5:23	Su/Mo 16/17 4:11 - 5:10	Th/Fr 27/28 20:03 - 0:35
Fr/Sa 7/ 8 19:48 - 5:21	Mo/Tu 17/18 4:46 - 5:08	Fr/Sa 28/29 20:04 - 1:26
Sa/Su 8/ 9 19:52 - 5:20	Tu/We 18/19 - - -	Sa/Su 29/30 20:05 - 2:12
Su/Mo 9/10 21:00 - 5:19	We/Th 19/20 - - -	Su/Mo 30/31 20:06 - 2:53
	Th/Fr 20/21 Full Moon	

Weekend	Sun	Sun	Mercury	Venus	Mars	Jupiter	Saturn
Sa/Su	Set	Rise	Rise Vi	Rise Vi	Set Vi	Rise Vi	Set Vi Vi=Visibility
1/ 2	18:20	6:48	5:30 4	5:38 1	2:53 0	3:46 -1	6:40 0 -3 brilliant
8/ 9	18:25	6:39	5:31 4	5:38 1	2:35 0	3:23 -1	6:11 0 0 conspicuous
15/16	18:30	6:30	5:33 5	5:36 2	2:18 1	2:59 -2	5:42 0 3 moderate
22/23	18:35	6:21	5:36 7	5:33 3	2:02 1	2:36 -2	5:13 0 6 naked eye limit
29/30	18:40	6:12	5:40 9	5:30 4	1:46 1	2:12 -2	4:44 0 9 binoculars limit

By Erich Karkoschka

Desert Skies Classified

FOR SALE	Celestron C4.5 reflector telescope with Polaris equatorial mount, wooden tripod, and 26mm eyepiece. Excellent condition. \$150. Please call John McClelland at 520-990-2262. [05/08]
FOR SALE	Meade DS-2114ATS Reflecting Telescope with Autostar Computer Controller. Optical diameter=144mm; Focal length/ratio=1000mm, f/8.8. Comes with 2 eyepieces (25mm, 9mm). Used 2x. Purchased new for Christmas 2005. Asking \$150. Call Kim at 574-2995. [03/08]

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.

Member's Events

TAAA Star Party at Las Cienegas (Empire Ranch) Saturday, March 1

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.

TAAA and BSIG Star Party at TIMPA Saturday, March 8

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

Constellation Report by Chris Lancaster

Crater

The Cup

Crater plays a role in an elaborate story involving the nearby constellations of Corvus, the crow, and Hydra, the water serpent. The myth tells of Apollo, who sent Corvus for a cup (Crater) of spring water. Beside the spring, Corvus spotted a fig ripening on a nearby bush. The fig looked so delicious that the crow waited for it to ripen. When he returned to Apollo, he brought along with him a water serpent (Hydra), saying that the serpent had attacked him and that was the reason it took him so long to return. Apollo saw through the lie and banished all three to the sky. To find Crater, put yourself under some dark skies, since Crater's brightest star is magnitude 3.5 and most others are dimmer than magnitude 4. Look either 30 degrees west of Spica, the brightest star in Virgo, or 30 degrees south of the hindquarters of Leo. With not too much imagination, you should be able to see the shape of a cup which is tilted to the east.

Looking toward Crater, which crosses the meridian just before midnight during the ides of March, will give you a view which is about 25 degrees away from the southern Milky Way. Through the sprinkling of nearby stars lay an unobstructed view of far away galaxies. Most of these are dim and challenging, but a few are within the grasp of small telescopes.

On our way to these galaxies, let's stop at double star Gamma Crateris. This pair, 78 light years away, is separated by 5 arc seconds, which allows it to be easily split at high power. The primary shines brightly at magnitude 4.1. The secondary is several times dimmer at magnitude 9.5. Both show a pure white color.

NGC3511 is one of the brightest galaxies in Crater. It is located 2 degrees west of Beta Crateris. While it shines at magnitude 11.6, its light is spread over a broad oval measuring 5.7'x 2.0'. Nearby (only 10 arc minutes to the southeast) is NGC3513. Here is an S-shaped barred spiral glowing faintly at magnitude 12.1 and measuring 2.8'x 2.3'. If you center your scope on RA 11h 3m 35s Dec -23d 9' 57", you will have both galaxies in a low power eyepiece.

Within or near the cup of Crater are three more galaxies of note. NGC3887 is a spiral located one and a half degrees north northeast of Zeta Crateris or RA 11h 47m 5s Dec -16d 52' 22". This is a tight spiral of magnitude 11.6 and is 3.3'x 2.5' in expanse. This galaxy shows a bright center with tightly wrapped arms which quickly disappear beyond its fuzzy boundaries.

Just above the lip of the cup is NGC3962. You'll find this elliptical galaxy about a third of the way between Eta and Theta Crateris and 1.5 degrees above the line connecting these two stars. Or you can dial up RA 11h 54m 40" Dec -13d 58' 23". NGC3962 shines at magnitude 11.9 but perhaps is easier to see because of its bright, condensed core. The entire galaxy occupies 2.5'x 2.2'.

TAAA Board of Directors Meeting - February 6, 2008

Attending: TAAA Board Members present (6): Bill Lofquist, presiding, Steve Marten, Terri Lappin, George Barber, Teresa Bippert-Plymate and Keith Schlottman. Members present (7): Larry Brown, Robert Crawford, Dean Ketelsen, Dennis McMacken, JD Metzger, Jim and Susan O'Connor.
The President called the meeting to order at 6.40pm.

January Minutes. Accepted unanimously.

Presentation Schedule

"Ancient Astronomy, What They Already Knew " by Steve Marten is scheduled for the June Astronomy Essentials presentation.

BSIG Update - JD Metzger

JD offered a review of the BSIG activities including issues of meeting attendance and location, curriculum, workshops and star party volunteers. He is looking to increase participation and help a greater number of less experienced members. A more formal mentoring system and immediately inviting new members to BSIG activities was discussed. Bill suggested creating an ad hoc committee to review current issues and create a strategy to increase activity. JD will write an article for *Desert Skies* inviting new members to the strategy meeting around March 22. The meeting will address new member and beginner issues.

Grand Canyon Star Party - Dean Ketelsen

Dean, in his 18th year as TAAA Grand Canyon Star Party (GCSP) Coordinator, will be stepping down after the event this summer and asked the Board to reassign the coordinator responsibility. To ensure continuity, Dean encouraged the Board to work from his annual preparation list. Bill Lofquist proposed a meeting within the next month to discuss the transition. Jim and Susan O'Connor are interested in assuming coordinator responsibilities beginning with 2009 GCSP preparations. Website grandcanyonstarparty.com is not controlled by TAAA but is maintained as a copy of the TAAA GCSP page. Bill will contact the domain owners to consider bringing it to TAAA. Last year, the GCSP attracted nearly 60,000 persons for a look through scopes during the ten-day event.

Dark Site Land Development - Bill Lofquist

Bill reviewed current land development status and proposed that the Board form ad hoc working groups as necessary to complete various tasks. The groups will report to the Strategic Planning Group (SPG) which includes Bill, Teresa and Claude Plymate and Keith Schlottman; Board will maintain oversight of the SPG. The Board accepted his proposal with modification. Several local parcel owners near the TAAA dark site remain opposed to proposed TAAA observing activities but have refused offers to meet with Bill Lofquist. Members of the local school board, teachers and neighbors continue their support for the planned TAAA site and many pledged to attend the Planning and Zoning meeting scheduled for Feb 27. Robert Crawford reviewed current planning for right of way and easement issues.

Name Tags - Keith Schlottman and Terri Lappin

The Board briefly discussed the logo to be used for the new name tags (badges). Steve Marten will obtain drawing of the most current logo and share with other Board members by email.

Nominating Committee - Steve Marten

Steve asked officers to inform the nominating committee if they intend to accept a nomination for 2008-2009 terms. Bill Lofquist indicated he will not seek another term as President and recommended Ken Shaver for President. Bill intends to continue to manage dark site development during the 2008-2009 terms.

Adjourned at 9:35 pm
Respectfully Submitted,
Steve Marten
Secretary

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

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

Or feel free to contact:

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

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

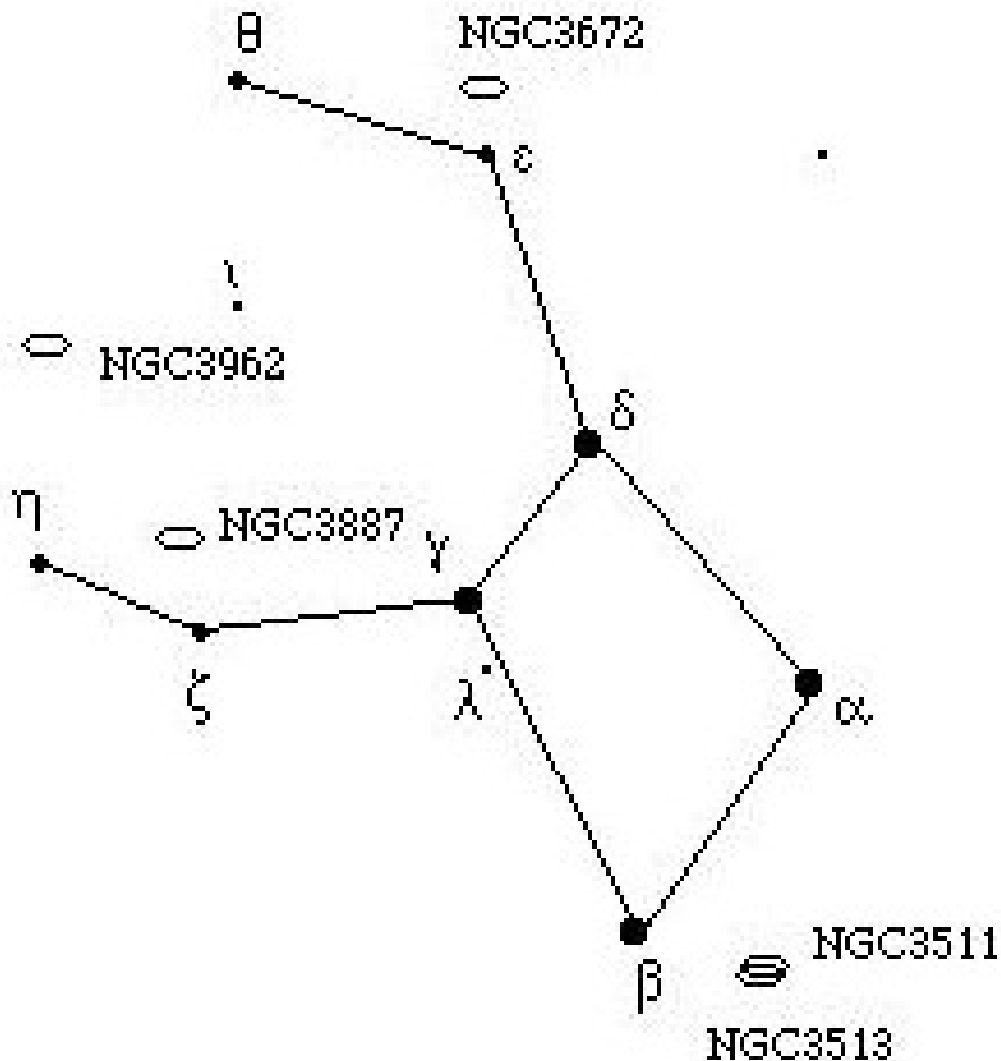
WE USUALLY HAVE PIZZA !!!

Constellation Report by Chris Lancaster (cont.)

Just over a degree north of Epsilon Crateris is NGC3672, yet another galaxy glowing with a fairly bright magnitude of 11.7. This spiral galaxy, centered at RA 11h 25m 13s Dec -9d 47' 43", is a spiral with a fairly bright center and mottled spiral arms.

The galaxies so far described only scratch the surface of the total number of galaxies present in Crater. However, most of them are reluctant to show themselves in small backyard telescopes. Those with larger instruments may want to search for some of these others summarized below.

- NGC3571--magnitude 13, RA 11h 11m 30s Dec -19d 18' 04". Size: 2.5'x 0.7'. Bright nucleus, distorted arms.
- NGC3635--magnitude 12.7, RA 11h 20m 31s Dec -9d 0' 49". Size: 1.2'x 0.9'. A very small and faint spiral.
- NGC3637--magnitude 12.9, RA 11h 20m 40s Dec -10 16' 32". Size: 1.6'x 1.5'. Paired with NGC3636. 3' from 6.5 magnitude star.
- NGC3715--magnitude 12.0, RA 11h 31m 32s Dec -14d 13' 57". Size 1.4'x 0.9'. Very small, round spiral.
- NGC3732--magnitude 13.0, RA 11h 34m 12s Dec -9d 51' 00". Size: 0.6'x 0.6'. Small, bright center.
- NGC3865--magnitude 13.0, RA 11h 44m 52s Dec -9d 13' 59". Size: 2.0'x 1.5'. Diffuse spiral.
- NGC3892--magnitude 12.0, RA 11h 48m 0s Dec -10d 58' 00". Size: 2.0' x 1.3'. Round spiral.
- NGC3955--magnitude 12.6, RA 11h 53m 58s Dec -23d 9' 54". Size: 2.0'x 0.9'. Spiral tilted almost edge-on.
- NGC3956--magnitude 12.9, RA 11h 54m 1s Dec -20d 34' 00". Size: 3.4'x 1.0'. Edge-on spiral.
- NGC3957--magnitude 12.9, RA 11h 54m 1s Dec -19d 34' 06". Size: 3.0'x 0.7'. Lenticular galaxy.
- NGC3981--magnitude 11.9, RA 11h 56m 7.2s Dec -19d 53' 42". Size: 5.2'x 2.3'. Double-armed spiral.
- IC2627--magnitude 12.6, RA 11h 9m 53s Dec -23d 43' 35". Size: 2.7'x 2.3'. Face-on spiral. Starlike nucleus.



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 Empire Ranch

Directions to TIMPA Site

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

From the North:

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

From the East:

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

NOTE

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

Directions to Las Cienegas (Empire Ranch)

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

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