



# *Desert Skies*

*Tucson Amateur Astronomy Association*

Volume XLIII, Number 9

September, 1997



## Calendar of Events

**BEGINNERS LECTURE:** Will not be held this month.

**GENERAL MEETING - September 5, 7:30 pm** at the Steward Observatory Auditorium - room N210. Topic is "First Results from the Mars Pathfinder Mission" by Dan Britt.

**BOARD OF DIRECTORS MEETING - September 11, 7:00 pm** at the NEW LOCATION: Steward Observatory, Room N305.

**STAR PARTIES & EVENTS:**

September 6, Empire Ranch

September 12, Randolph Center

September 17, Ventana Canyon Resort

September 19 & 20, ASTRO Workshop

September 27 ~~at Kitt Peak~~

**Newsletter Schedule:** Deadline for articles: Monday, September 15. Printing: Monday, September 22. Folding Party: Wednesday, September 24. Mailing: September 25. The newsletter is scheduled to be in the mail at least one week prior to the following month's General Meeting.

**Cover:** Gene and Carolyn Shoemaker as photographed at David and Wendee Levy's wedding last March. Gene was killed in an auto accident on July 18th. Gene was a leading astrogeologist specializing in craters and cratering mechanisms. Photo by Robert Summer Field courtesy Wendee Wallach - Levy.

**TAAA Home Page:** <http://www.primenet.com/~lwilson/taaa/taaa.html>

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President	Terri Lappin	579-0185	tlappin@as.arizona.edu
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	Nina Lehman	579-1382	ninalehman@aol.com
Star Parties	Karen Allen	749-5744	
Deep Sky Astrophotography SIG	Ray Wallace	294-1197	

**TAAA Mission Statement**

We are a source for anyone interested in astronomy. It is our mission to nurture a person's natural curiosity about the night sky. By giving people a knowledge and understanding of astronomy, we enhance their enjoyment of the sun, moon, and stars. Through our public activities and school evening observing sessions, we bring astronomy to persons of all ages. Our regular meetings and observing sessions offer members a forum to meet others with similar interests and experiences and to learn from one another.

**Membership in the TAAA**

Regular membership	\$ 23
Senior (over 60) membership	\$ 21
Add for Family membership	\$ 5
Add for Astronomical League	\$ 3
Add for Sky & Telescope	\$ 27
Add for Astronomy Magazine	\$ 20

Rates for membership are given above. Family Membership includes two adults plus minor children. Members may subscribe to Sky & Telescope or Astronomy Magazine (or both) at the time of membership renewal, saving substantially over the regular subscription rates. To assure we understand what you are paying for, please identify which class of membership and what options you want. Send one check made payable to TAAA to cover both membership and magazine subscription(s) to:

Tucson Amateur Astronomy Association  
Attn: Renewals  
P.O. BOX 41254  
Tucson, AZ 85717

Call the Treasurer if you have any problems.

**Send Address Changes to:**

TAAA  
Attention: "ADDRESS CHANGE"  
P.O. Box 41254  
Tucson, AZ 85717

**Desert Skies Publishing Guidelines**

All articles, announcements, news, etc. must be submitted by the newsletter deadline listed above. Materials received after that date will appear in the next issue. All submissions are retained by the editor unless prior arrangements are made. Partial page article submissions should be submitted on Wordperfect compatible files on a floppy. Full page articles, artwork, and photos should be camera ready. We will not publish slanderous or libelous material! Send articles, announcements, etc. to:

TAAA - Desert Skies  
PO Box 91316  
Tucson, AZ 85752-1316

OR email: [nialehman@aol.com](mailto:ninalehman@aol.com) or [nlwagner@aol.com](mailto:nlwagner@aol.com)

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**4 Easy Steps to Membership Renewal**

1. Pay your dues 2-3 months early. Your month of membership expiration is listed on your newsletter mailing label.
2. Find your membership class and its rate. Add the Family Membership rate to this if applicable.
3. If you desire membership in the Astronomical League or magazine subscription(s), add the appropriate amounts to your membership rate. If this is a renewal, include the renewal notice if possible. Be sure to identify which options you are paying for.
4. Write one check, payable to TAAA, and send it to the address given above.

## President's Message

### President's Message

As I write this I am starting to think that monsoon season is over. If the clear skies last we will be getting together at Empire Ranch on the 6th. There is also a star party scheduled for the 17th at Ventana Canyon Resort. The TAAA will receive \$200 for the star party which will go into our Land and Telescope Fund. If you can help please get your name on the sign-up sheet. Remember that resort star parties are more formal than our Empire Ranch star parties and that we are "entertainers with telescopes" instead of violins.

Member's Night is next month. I hope some of you have presentations you want to make. Get on the sign-up sheet which will be at the September meeting or call either John Kalas or me if you will not be at this month's meeting.

We receive several newsletters from around the country, but the one that I enjoy most is The Albuquerque Astronomical Society (TAAS) newsletter, The Sideral Times. Their newsletter is similar to Desert Skies in length and they have about the same number of members that we have. TAAS has an observatory near Belen, NM with a 16" telescope. I read about their problems as the problems TAAA will have to

face in the future when we have an association telescope. Currently TAAS members are trying to landscape the area around their observatory. TAAS members are willing to help with this hot, sweaty job. They are rewarded with food, refreshments, and a feeling that they have made a contribution to the project. Do we have these kind of members in the TAAA? I hope we do, especially if we undertake building an observatory at the TIMPA site. If you are out there, let me know.

The TAAS also has a rather long list of helpers, such as a librarian, archivist, telescope and observatory coordinators, and several other positions on their board of directors. The TAAA by contrast has few members willing to go the extra mile to help. The same handful of members is left doing the many jobs that need to be done. If you want to get involved let me know. I am always on the lookout for the following: librarian, publicist, education coordinator, general helpers for short term jobs, Beginner's Lecture coordinator, property chairperson.

See you under clear skies!  
Terri

\*

## Meeting News

### Featured Speaker: Dan Britt

FIRST RESULTS FROM THE MARS PATHFINDER MISSION

Dan Britt is Project Manager for the Imager For Mars Pathfinder (IMP) team. He will be presenting the September lecture titled First Results from the Mars Pathfinder Mission. The Mars Pathfinder Spacecraft successfully landed in the Ares-Tau Valles region of Mars on July 4, 1997 carrying a payload consisting of a stereoscopic camera (built at the University of Arizona), a package of atmospheric sensors, an Alpha-Proton-X-Ray Spectrometer, and a mobile rover. Pathfinder was designed to pioneer a new type of landing system based on inflatable airbags to cushion the shock of landing. It also is the first of NASA's low-cost "Discovery-Class" missions designed to produce good engineering and science on a short time-scale with a tight budget. Despite (or perhaps, because of) the constraints in budget and schedule, the landing system, the scientific instruments, the rover, and the mission operations team performed flawlessly. The mission has operated on the surface of Mars for almost two months (double the planned "nominal" mission) and returned triple its planned data volume. The landing site has proved to be stunningly scenic

as well as scientifically interesting. Imaging data have shown geological features left over from ancient Martian catastrophic floods, impressive early morning clouds, and a range of peaks and crater rims dotting the horizon. By any scientific or engineering measure Pathfinder has been a spectacular success and a fitting start to NASA's systematic exploration of the Red Planet.

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### Steward Observatory Public Evening Series

Steward Observatory has been hosting public evening lectures in astronomy for 70 years. The seven lectures for the Fall 97 semester will be held on Monday nights at 7:30pm in room N210 of Steward Observatory. Following talks, there will be opportunities for viewing the night sky (weather permitting) with the use of the 21-inch telescope on site at the Observatory. All of the lectures and the use of the telescope are free of charge and open to the general public.

For more information about speakers and their talks, visit our website at the new URL address:  
[http://hypatia.as.arizona.edu/~connie/pub\\_lect.html](http://hypatia.as.arizona.edu/~connie/pub_lect.html).

Date	Speaker	Topic
September 8	Dr. Nick Woolf	Terrestrial Planet Finder --What does it take? What will it show?
September 22	Dr. Brian Chaboyer	The Age of the Universe
October 6	Dr. George Rieke	There's a Black Hole in the Galactic Center & we're Falling Toward It!!!
October 20	Dr. Ray White	Astronomy Through Culture & Through Time

## No Beginner's Lecture This Month!

## Club News

### Member's Night October 3

There will be a sign-up sheet at the September meeting for anyone wishing to contribute to the October 3 Member's Night. This list will allow us to mention topics and speakers in the October newsletter so all members will know what will be happening at that meeting. We are looking for people with slides or prints of an astronomical nature, any equipment you wish to show off (doesn't necessarily have to be something you built), or anything else you think other members may be interested in. Sales pitches will not be allowed and we will screen all potential topics to help make it an enjoyable evening for most everyone. \*

### Member News

We welcome the most recent members who have joined the TAAA. If you wish to discuss anything about the TAAA, please feel free to call any board member. All phone numbers are listed on the first page of the Desert Skies. Our newest members are: Clayton Barnett, Jordan & Valerie Kaplan, Neil L. Schrantz, Thomas Kuszelewicz, Edward Gosselin, and Joseph L. Montani. Hope to see you under clear skies or at a meeting.

(This featured section of the newsletter is meant not for gossip but to let everyone know what is going on with each of us. If you have something to contribute (new job, new baby, new telescope, special recognition, etc.), send it to Terri and it will be incorporated into this section. \*

### Board Meetings Being Moved

Until further notice, the TAAA Board of Directors meetings will be held in room N305 of Steward Observatory. We are currently experimenting with a wireless door bell (which isn't working yet). If you arrive late, please look for it at either the Cherry Ave. or courtyard entrance. This move is being made because Flandrau planetarium is now closed every evening except Friday and Saturday. \*

### From the Mailbag

Here are some things that recently landed in our PO Box. If you want anything, call Terri at 579-0185 and she will get it to you.

#### \* Reports

Minutes from the recent meeting of the Sonoita Valley Planning Partnership. This includes the discussions regarding the mine that is being proposed on the east end of the Santa Rita mountains not far from our current observing site.

#### \* Samples

Someone selling a photograph of Comet Hale-Bopp.

#### \* Announcements

Enchanted Skies Star Party in Socorro, NM set for October 2-5.

#### \* Trips

Many companies have sent us information for several eclipse trips.

#### \* Catalogs

We always have a selection of catalogs including Meade, ASP Conference Series, Novagraphics, Edmund Scientific, Swift Binoculars, Sky Publishing, Kalmbach Publishing. There are many others.

#### \* Newsletters

The Woman Astronomer, International Dark-Sky Association, Saguaro Astronomy Club (PHX), East Valley Astronomy Club (PHX), Astronomy Club of Sun City West (PHX), Albuquerque Astronomical Society (NM), Salt Lake Astronomical Society (UT), Denver Astronomical Society (CO), Von Braun Astronomical Society (Huntsville, AL), Peoria Astronomical Society (IL), Warren Astronomical Society (MI), The Universe in the Classroom (ASP). \*

### Technical Difficulties, Please Stand-by

Well July was the proverbial "Month-from-Hell" and I'm not talking about just the heat. Both Gary Rosenbaum and I have been in up to our armpits dealing with life's little floods to the point where we are only now getting around to passing the Treasurer's baton. I now have the (hopefully) latest financial and membership records for the TAAA and will soon have the last 2 months worth of transactions updated. My profuse apology to all of you that are wondering why your checks haven't cleared. I will be depositing them early in August. Anyone affected by the delay will have their membership brought forward through August 98 at least. I will also shortly be sending renewal info to Sky Publishing, so hopefully no one will suffer a lapse in their subscription. We also just updated the accounting software to the latest version and I'm still learning it. We will now be able to keep detailed member transaction records on the computer, but a few data entry errors may show up over the next few months, so please bear with me. Thanks  
Larry Wilson (Your Harried Treasurer) \*

### Convention Star Party Volunteer

We are looking for someone who can scout out a few resorts, especially ones out of town, to determine which ones are conducive to star parties. The TAAA will then contact the appropriate person at these resorts and offer our service (star parties) to their convention groups. This should help us in two ways. First, we can target those convention groups which will have a view of the sky (nothing is worse than setting up telescopes under a million trees!). Second, this should put us in contact with the person at the resort who plans the evening program for convention groups. This will give us more opportunities to make some money for the Land and Telescope Fund. If you know a little about the night sky (for example, where in general will planets be found?) maybe you are the person we need. You will be calling the resort to get permission to look at their site, so you will be the FIRST IMPRESSION of the TAAA that the resort gets. If you have the skills needed and the time to do this, give Terri a call at 579-0185. This job can be done whenever you have time, but as with all our jobs, it is unpaid. \*



## Deep Sky Astrophotography (SIG)

The Deep Sky Astrophotography SIG plans to have observing sessions during the coming months of this year on the following dates: August 2, 9, 30. September 6, 7. October 4, 25. November 1, 20, 29. December 20, 27, 1997, -- And January 3, 1998. For time and places, call Ray Wallace, 294-1197. SIG NEWS \*

## New E-Mail Address

I have had some problems with my AOL address recently. I was losing and/or not receiving articles submitted to me for inclusion in the Desert Skies. I shall no longer be using AOL. I have switched to Compuserve, and my new E-mail address is: 110366.2176@compuserve.com. Please send all future articles to this new address.

Thank you, Nancy Wagner

## Editor Needed !

Nina and Nancy regret to inform the readers that we shall no longer be able to assemble and produce Desert Skies. We have personal commitments that must be met which leave us with not enough free time to devote to the publication. We want you to know that we have enjoyed the effort and the people involved. We shall miss you. We shall be responsible for the forthcoming issues through the December 1997 one. If anyone out there is interested, we shall be only too happy to share out methods and formats. To volunteer, please call or email our President, Terri Lappin at 579-0185 or tlappin@as.arizona.edu. \*

## Gene Shoemaker

The following is an E-mail from Carolyn Shoemaker:

Dear Friends, old and new, all special people,

My children and I want to thank you for all your outpouring of love and support since Gene's death. To know Gene was loved, liked, admired, and respected by so many people has helped to sustain us in this very difficult time. Gene would have been so pleased to know you cared. The concern people have shown for me has been comforting and I am happy to report that I am recovering quite well and hope to be returning to Flagstaff soon. I was fortunate to have all my

children (including my in-law children) and two Australian friends arrive very promptly in Alice Springs. New friends in Alice Springs opened their doors to all of them and then to me when I left the hospital. Everyone has been very helpful in taking care of the necessary details that needed to be addressed after the accident and this has allowed me to focus on my own recovery. My children and I have also had time to reflect on our loss together and to think about it in the perspective Gene would have wished.

Gene and I were traveling on the Tanami Track in Northern Territory close to the Western Australia border when the no-fault accident occurred. We were to meet Dan Milton in a few days to help field check the geology and mapping of Goat Paddock, an impact structure. The accident occurred on one of the few bends in the road where you could not see another vehicle coming. It was an unlikely place considering all the places we have traveled, yet it was a blind curve on a very rough track. There is no question that Gene died immediately in the vehicle on impact. It was my good fortune that it happened where it did, because help was quick to come from the gold mines in the area. In four hours time the Royal Flying Doctors had transported me back to the emergency ward in Alice Springs. I owe a special thank you to everyone who helped to save my life and the superb care I received at the hospital. It is remarkable I survived at all considering that mostly what was left of our vehicle was the bed of the truck.

Although the death of Gene is still a shock and a great loss to us all, Gene would have felt it was a good way to go. He was out doing something he loved away from all the pressures of the world, in a country he loved, with the woman who had been his life partner for 46 years, and he died quickly. We had both talked about how, if our lives were to end, we had lived very fulfilling lives. We had wonderful children and a close knit family. Our scientific careers have been extremely rewarding. We were blessed with having numerous friends in our lifetime. And, most of all, we had a marriage in which our love for each other knew no boundaries.

Gene said a few years ago he would never be able to complete the many projects he had going. He said it would be up to others to pick up where he left off. He never felt he had all the answers, but he had complete faith that there were others who were capable to come along and follow in his footsteps. Gene would have said, "Don't grieve for me. Get on with life and work at the things that make you happy!" We hope you all will be inspired to do that.

Love,  
Carolyn

\*

## Dark Skies for September 1997

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

Su/Mo 31/ 1	20:14 - 4:34	Th/Fr 11/12	1:29 - 4:43	Su/Mo 21/22	19:43 - 22:24
Mo/Tu 1/ 2	20:12 - 4:35	Fr/Sa 12/13	2:31 - 4:44	Mo/Tu 22/23	19:42 - 23:14
Tu/We 2/ 3	20:11 - 4:36	Sa/Su 13/14	3:37 - 4:45	Tu/We 23/24	19:40 - 0:06
We/Th 3/ 4	20:09 - 4:37			We/Th 24/25	19:39 - 0:58
Th/Fr 4/ 5	20:21 - 4:38	Su/Mo 14/15	- - -	Th/Fr 25/26	19:38 - 1:51
Fr/Sa 5/ 6	20:54 - 4:38	Mo/Tu 15/16	Full Moon	Fr/Sa 26/27	19:36 - 2:44
Sa/Su 6/ 7	21:30 - 4:39	Tu/We 16/17	- - -	Sa/Su 27/28	19:35 - 3:37
		We/Th 17/18	- - -		
Su/Mo 7/ 8	22:09 - 4:40	Th/Fr 18/19	19:47 - 20:06	Su/Mo 28/29	19:34 - 4:29
Mo/Tu 8/ 9	22:51 - 4:41	Fr/Sa 19/20	19:46 - 20:50	Mo/Tu 29/30	19:32 - 4:56
Tu/We 9/10	23:38 - 4:42	Sa/Su 20/21	19:45 - 21:36	Tu/We 30/ 1	19:31 - 4:57
We/Th 10/11	0:31 - 4:42			We/Th 1/ 2	19:30 - 4:57

Weekend	Sun	Sun	Mercury	Venus	Mars	Jupiter	Saturn	
Sa/Su	Set	Rise	Rise Vi	Set Vi	Set Vi	Set Vi	Rise Vi	Vi=Visibility
30/31	18:48	5:57	6:02 -	20:31 -2	21:38 2	4:09 -3	20:45 0	-3 brilliant
6/ 7	18:40	6:01	5:09 9	20:24 -2	21:25 2	3:38 -3	20:17 0	0 conspicuous
13/14	18:30	6:05	4:44 4	20:18 -2	21:12 2	3:07 -3	19:48 0	3 moderate
20/21	18:21	6:10	4:52 3	20:13 -2	21:00 2	2:38 -2	19:20 0	6 naked eye limit
27/28	18:12	6:14	5:18 5	20:09 -3	20:49 2	2:09 -2	18:51 0	9 binoculars limit

By Erich Karkoschka

## Star Parties & Events

### Empire Ranch September 6

We will be observing from Empire Ranch on September 6. Arrive around sundown to set up telescopes. All members and their guests are welcome to attend (just a few guests per member, please). There are no facilities at this site. Remember that other members may be taking long exposure photographs during the star party so please use red flashlights. Before you leave make some rounds and tell everyone you will be leaving so they can prepare for your vehicle lights. \*

### Randolph Center September 12

Randolph Center is located at 200 S. Alvernon (south of Broadway). Raindate (should it be needed) will be 26 September. Set up will be at 7:00 p.m. We need 2 or 3 scopes and a speaker. Audience will be children from 6 - 13 years of age. Please call Karen Allen at 749-5744 for signup and/or information. \*

### Ventana Canyon Resort September 17

The TAAA has been invited to participate in an evening's activities at a national sales meeting for a local manufacturer, Huck International. Five or six telescopes will be needed to handle 50 - 60 people. Details of the activity are not yet finalized, but should be available at the September meeting.

John Kalas is coordinating the event. The TAAA will receive \$200 for the event. \*

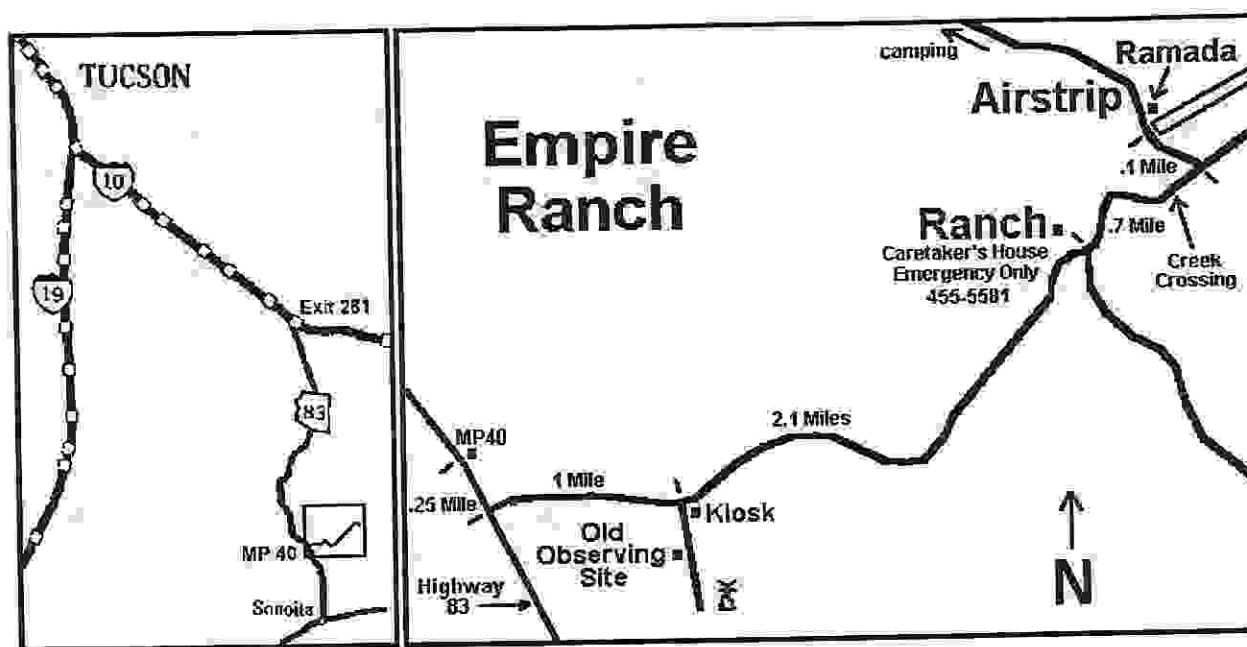
### Project ASTRO Getting Underway September 19 & 20

The second year of the Astronomical Society of the Pacific's Project ASTRO Tucson site is starting this month. Both amateur and professional astronomers and teachers from around Tucson will attend a two day workshop on September 19 and 20. There will be about 50 people at the workshop. Both Suzanne Jacoby and Ginny Beal of the National Optical Astronomy Observatory (NOAO) Education Outreach Office did a superb job of pairing up teachers and astronomers last year. Hopefully they learned everything about running a workshop from the ASP presenters last year. This year the workshop will be given entirely by local people and some of them are TAAA members. If you feel left out of this great program you can still be involved through the school star parties. Many of them are for Project ASTRO partnerships. And, plan on getting paired up with a teacher for the next school year. \*

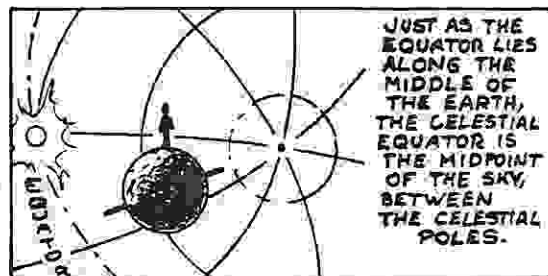
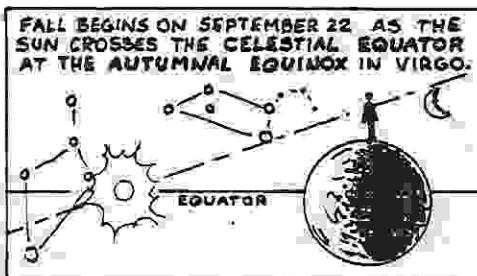
### Kitt Peak September 27

Dean is in the process of scheduling another cookout and observing session at the Kitt Peak picnic area on September 27. Please sign up at the September meeting, or call him after the meeting at 293-2855 to be put on the list. We are limited to 50 attendees, so be sure to sign up! \*

## Maps



## Starman



(C) 1997 Jan Ryan

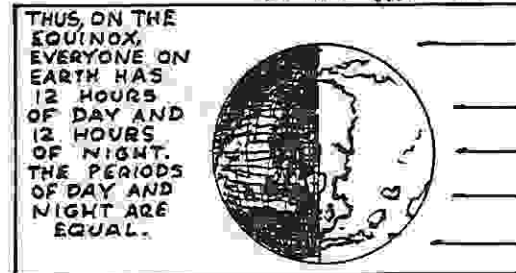
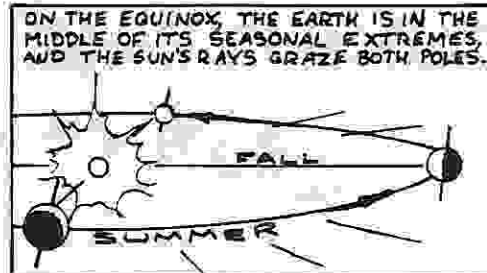
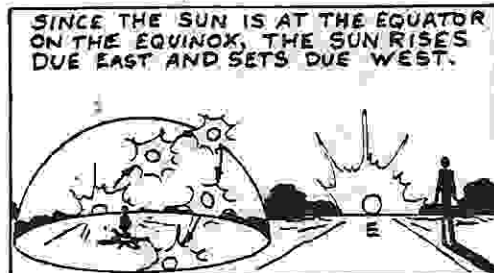




Photo Album

Photographs from the Vega-Bray Picnic, May 10, 1997 were provided by John Croft. Thanks, John!





## More Survey Results

### Public Activities

The TAAA should continue its youth activities:

- at the same level as now - 28
- less than we now do - 3
- more than we do not - 7
- no response - 21

The TAAA should continue its general public activities:

- at the same level as now - 30
- less than now - 1
- more than now - 12
- no response - 16

Do you volunteer for school star parties:

- yes - 18
- no - 34
- n/a - 7

Do you volunteer for other public or private star parties?

- Yes - 23
- no - 30
- n/a - 6

If you participate in our public activities, why do you think it is important:

- Continuing ed for public is good p.r.
- Don't know enough about them to comment at present.
- Enjoy talking with others about astronomy
- For recruitment and public information
- Fun for us, informative for them.
- Give back to public works to get people interested in combating light pollution
- Good for public relations
- Good for science
- Helps beginners learn more. Sparks interest in newcomers.
- I like public star parties because of those occasions when someone has an "aha" experience as a result of my being there
- It is always important to interest and educate the public young and old
- Its important to educate people. Few receive education in astronomy at school
- For me to learn about astronomy, public to learn about astronomy, raise \$'s for the TAAA
- Probably the most common exposure / introduction the public has to common astronomy
- Public needs to be educated about astronomy
- Science education is one of our nation's most critical needs. I want to do all I can to help
- Raises awareness level regarding light pollution
- To expand awareness of astronomy. People don't think to look up at the sky, and they are amazed when they do
- To share the wonders of the universe is our greatest contribution

If you do not participate in our public activities, what would make you more active:

- Changing work hours
- Closer to Sierra Vista
- Don't have time or equipment
- Experience and time
- Having really basic job; I'm not proficient in Astro.
- I am doing what I can (I am prez of SAS in Green Valley)
- I have no telescopes
- I live too far away. I participate in local school and public activities
- I suffer from panic disorder and have to limit my activities
- If we had our own equipment
- Just need to make the commitment
- Less Arthritis
- More free time (3)
- Move them to Phoenix?
- Since I live in Sierra Vista, travel time is always a problem
- These activities are usually scheduled on a work night for me. Friday or Saturday nights would be better.

### Star Parties

How often do you attend star parties at Empire Ranch or other dark sky site:

- Once a year - 14
- Few times a year - 23
- Once a month - 6
- More than once a month - 1
- Never - 9
- No response - 6

Would you attend star parties if they were closer to Tucson than Empire Ranch?

- Yes - 24
- Mo - 18
- n/a - 17

Do you have any suggestions for improving star parties, and if you do not attend star parties, why not:

- A few special purpose star parties for beginners, meteor showers, astrophotographers, etc.
- Before disability I used to attend quite often
- Create various level observing curriculums for members and give certificates for completion
- Don't attend Empire because it's only slightly darker than home. I like Kitt Peak or darker / better seeing
- Empire is too far from me. Would attend more star parties if I felt I had more to offer. Feel clumsy using scope.
- Empire Ranch is a great location. Excellent skies
- Have other interests
- Have own scope
- Haven't been to one
- I have a very good observing sight at home where I observe approx once a week.

- I'm afraid they're for advanced viewing and I'm not there yet
- Lack of time
- My skies are dark!
- New member, haven't been to one yet. Empire is an advantage
- Not a night person and have lots of access to observing through good binocs
- Often conflicts with other activities
- Once in a while, I would host them at my home
- Physical problems
- Public sp's are fine. I don't attend because I prefer to be solitary unless teaching
- Publish Star Party Etiquette
- Time
- Too new to have been to one
- Usually a matter of personal convenience and schedule. I most like the public events but the club parties are fun too
- Work schedule prevents us from going to star parties
- Working nights

### Observing site

First time I've heard about this project - 6

How often would you use a dark site:

- Once a year - 4
- Few times a year - 28
- Once a month - 16
- More than once a month - 4
- Never - 5
- No response - 4

Indicate the importance of the following facilities:

(Average of responses: 1=most, 8=least)

- Bathroom - 1.91
- Camping/picnic area - 3.22
- Clubhouse - 4.15
- Kitchen - 4.98
- Resident caretaker - 5.10
- RV hookups - 6.11
- Dorm rooms - 6.13
- Other
  - Spacious observatory building
  - Individual telescope pads
  - Dark Room
  - Program Director
  - RV camping - no hook-ups

Indicate the importance of the following characteristics of the site:

(Average of responses: 1=most, 8=least)

- Dark sky overhead - 1.49
- No direct lights nearby - 2.13
- Good access to the site - 3.00
- Security concerns - 3.41
- Power nearby - 4.17
- Water nearby - 4.83
- Vegetation - 5.95
- Other
  - Closer to Sierra Vista

## Observing Reports

## A DELPHINUS DELIGHT

Lying high overhead and stretching southward during September evenings is the very distinct "Summer Triangle" marked by the three bright stars of Vega, Altair and Deneb. Altair is the southernmost star of this triangle representing Aquila the flying Eagle. If you scan to the northeast of Altair you'll see a faint diamond-shaped pattern of stars. This is the constellation of Delphinus the Dolphin. This diamond-shaped asterism is sometimes referred to as "Job's Coffin", but there is some confusion as to the historical background of this name. The northeasternmost star which marks the Dolphin's nose is one of the finest visual binaries visible in the early Autumn. This star has the designation of Gamma ( $\gamma$ ) Delphini, and it is easily resolved by low power telescopes.

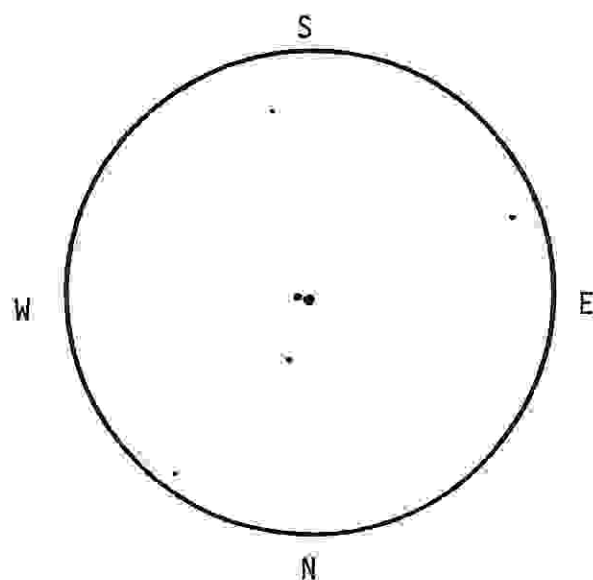
Gamma Delphini glows with the combined brightness of a 4th magnitude star. This binary system consists of two subgiant stars with spectra of G5 and F8. The individual magnitudes are 4.3 for the primary and 5.2 for its companion. The total luminosity of this system is about 30 suns.

As far as sizes go, the primary is 4 times larger than our Sun and the companion is about  $2\frac{1}{2}$  solar diameters. Distance estimates place this pair over 100 light years away.

In a small telescope the two stars appear to be separated by  $9.6''$  at a P.A. of  $268^\circ$  or almost due west of the primary. This duo was originally discovered by F.G.W. Struve in 1830. Since that time the two stars have been closing on each other with a slight  $5^\circ$  change in P.A. and a decreasing separation. The most appealing feature of this pair is the fine colors these stars present. At low power 35x in my 3" telescope I see a golden yellow pair. But at higher magnifications (50x-75x) when the companion is placed further away from the primary I see it has a slight greenish emerald tint. Do you notice this change in hues with your telescope, and if so at what powers?

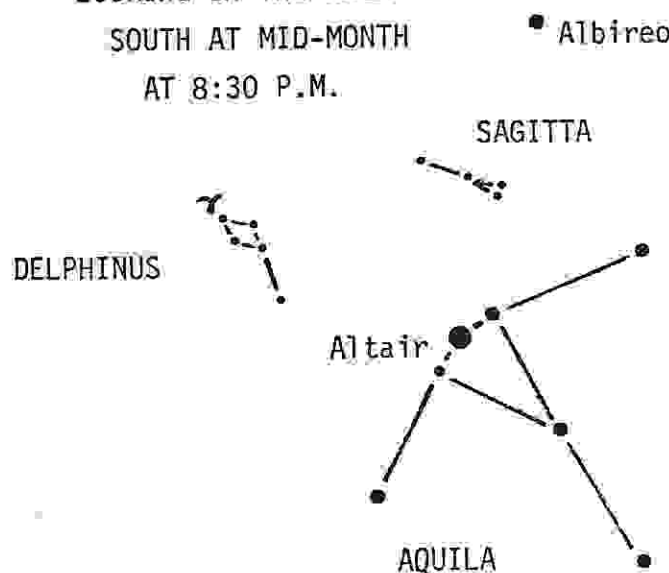
Gamma Delphini should repay you with it's interesting colors during this early Autumn season, so spend some time and study this fine Delphinus delight.

By Jeff Brydges



Gamma Delphini in a 3" telescope at 60x.

LOOKING IN THE HIGH  
SOUTH AT MID-MONTH  
AT 8:30 P.M.



Jupiter

## TAAA Board of Directors Meeting August 7, 1997

TAAA president, Terri Lappin, called the meeting to order at 7:12 pm on August 7, 1997, in the Flandrau Planetarium conference room. Attendees were Terri Lappin, John Kalas, Larry Wilson, Gary Rosenbaum, Bob Gent and Ingrid Saber.

**Star Parties:** The board discussed several planned star parties, including one to be held at the Ventana Canyon Resort on September 17. John Kalas reported that five telescopes will be needed, and the resort will donate \$200.00 to the TAAA for this event. See the events list in this newsletter for confirmation of this star party and others.

**Save the Scenic Santa Ritas:** Terri Lappin asked the board whether or not the TAAA should endorse the "Save the Scenic Santa Ritas Association." Construction of an open pit mine, operated 24 hours per day, is being planned very near the TAAA's Empire Ranch observing site. Due to the adverse impact on our observing, the board decided to endorse the SSSRA. This does not include spending any TAAA funds. It was noted that the TAAA must not become a lobby group, or we could risk losing our non-profit status.

**Convention and Visitor's Bureau:** Terri Lappin attended a meeting at the Metro Tucson Convention and Visitor's Bureau on August 7. This meeting was important because the MTCVB is a major source of revenue for the TAAA since many visitors pay for star parties. Terri Lappin requested help from a good observer who could investigate seeing conditions at hotels for these star parties.

**TAAA Board Meeting Location:** Beginning next month, future TAAA board meetings will no longer be held at the Flandrau Planetarium. The planetarium will be closed on Thursday evenings, and the conference room will not be available. Terri Lappin reported that the next meeting may be held either in N305 or 450 at the Steward Observatory.

**TAAA Treasurer's Report:** Gary Rosenbaum submitted a complete, eleven page, treasurer's report. As of this meeting all treasury records and signature cards have now been officially transferred to Larry Wilson, 1997 elected treasurer. As of June 30, 1997, TAAA holds \$12,304.05 in general funds and \$32,266.94 in the Land and Telescope fund. Including petty cash of \$129.56, the total checking and savings account balance is \$44,700.55. Also, the club owns substantial fixed assets including a 30-inch telescope, a 14-inch Maksutov, a 16-inch telescope mount, other telescopes, equipment, and supplies. The total value of these fixed assets is \$35,734.00. Combining fixed assets and cash, the TAAA holds \$80,434.55 in total assets.

**TAAA Investments:** Bob Gent recommended that the board ask the treasurer to move a substantial portion of the club's cash assets, such as the land and telescope fund into a short term CD for higher interest while other investment options were being discussed. No agreement was made on this point. Action deferred to the TAAA financial committee.

**International Dark-Sky Association:** Terri Lappin asked the status of the IDA Southern Arizona Chapter. According to Bob Gent, IDA officer, this is urgently needed but has not been completed. Volunteers are needed to make this happen. If you are interested in helping fight light pollution in Southern Arizona, please contact Bob. Gary Rosenbaum asked the IDA to send the TAAA some information sheets and applications.

**Light Pollution on PBS Radio:** The National Public Radio program, Science Friday, for August 8, was discussed. This program carried a 30 minute section about light pollution and radio interference. Unfortunately, no PBS station in Tucson carried the program. The nearest station was 91.5 FM in Phoenix, and this could be received from some areas in Tucson. Late news update: Bob spoke on this program and generated significant interest in fighting light pollution. Among dozens of e-mail messages and phone calls, two city council members contacted IDA for help writing light pollution laws.

**TAAA Members Only Star Party:** Terri Lappin proposed that the TAAA hold a picnic and star party at the Catalina State Park. This would be for members only. Catalina State Park has plenty of facilities to support a picnic and star party. Terri has proposed that this event be scheduled later in the fall. If you would like to help, please contact her.

**Project ASTRO:** Year two of Tucson's Project ASTRO will begin with a training session for astronomers and teachers. This workshop will be held on September 19-20, and the TAAA will be asked to provide assistance. Project ASTRO is a program to bring professional and amateur astronomers to the classroom to promote astronomy education.

**Miscellaneous Items:** The board of directors is looking for a volunteer to help coordinate and negotiate the club's liability insurance policy. Terri Lappin reported that the TAAA handbook will be ready very soon. Also, Terri distributed a copy of the revised TAAA constitution and bylaws which was ratified by the general membership on May 2, 1997. Due to absent board members, there was no discussion of the TIMPA observatory or the TAAA pins and T-shirts.

Submitted by Bob Gent, TAAA Board Member at Large

## Desert Skies Classified

**FOR SALE:** Meade 8" f/6 Starfinder Equatorial Telescope, complete with mount and 3 eyepieces, exec. Cond., \$695. Meade Dobsonian mount for 8" Starfinder telescope, new, \$25. 8" f/10 optical tube assembly with optics, tube, focuser, telrad and 2 eyepieces, \$450 obo. Sky Atlas 2000 field edition (white stars on black), \$20 obo. Astro Cards: Messier, NGC1 \$2 with index box, \$15 obo. Call Mike at 743-9587, evenings. (09-97)

**FOR SALE:** Film hypersensitizing equipment. LUMICON, Model 1200 with hand vacuum pump. Large capacity: 3-35 mm, 2-6x6 cm rolls. Also 6-4x5" sheet film. Can do 9-35 mm in cassettes with optional temperature control. \$400. Jim Jondrow, 529-0933. (10-97)

**FOR SALE:** 2" Helical low profile focuser with 2" long extension tube \$20; 10.5mm Tele Vue Plossl Eyepiece \$50; 7.4mm Tele Vue Plossl Eyepiece \$50. Eyepieces come with dust caps for bottom. Call Terri 579-0185 (before 9pm). (10-97)

**For Sale:** Telescope making components: primary and diagonal mirror holders, spiders; primary and diagonal mirrors; 16" diameter fiberglass tube 100" long; Telrad; copy lens; 2" focuser; drawtubes etc. Most items unused, like new condition. I will have a list at the TAAA meeting. Call Gary Rosenbaum 579-0185 (before 9pm). (10-97)

**FOR SALE:** Astrographic camera, manufactured by J. W. Fecker, 1931.11 inch entrance aperture lens, 2 element lenses. Asking \$3000. Contact Hal Halbedel at 520-318-8614 or e-mail halbedel@noao.edu. (11-97).

**FOR SALE:** 1997 Pierre Schwaar custom made 12 1/2 reflector, 68" focal length (f5.44), 16" oversized tube assembly, 66" long. Candy Apple Red with custom auto body finish. Big Foot mount with rotatable saddle. 2" R & P focuser and 8X50 illuminated reticle finder. \$2500 value: sale price: \$1850. Call Jody Humber (602) 584-2289 (work) or (602) 412-2329 (home). (12/97)

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 Nancy or Nina at 579-1382 or email to [ninalehman@aol.com](mailto:ninalehman@aol.com) or [nlwagner@aol.com](mailto:nlwagner@aol.com).