

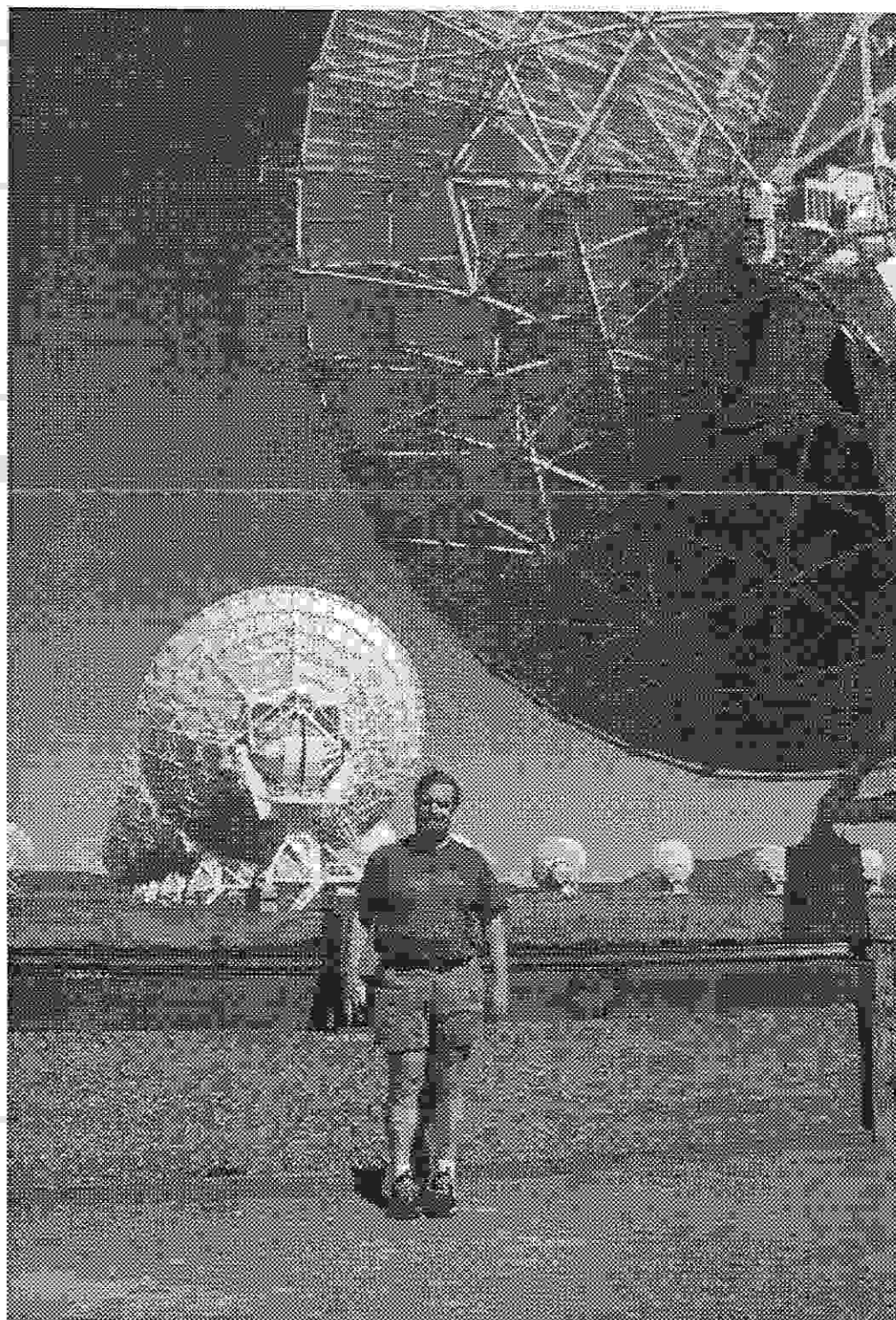


Desert Skies

Tucson Amateur Astronomy Association

Volume XLIII, Number 11

November, 1997



Calendar of Events

BEGINNERS LECTURE: 7 November, 6:30 pm at the Steward Observatory Auditorium - room N210. This month's topic is Telescopes by Alfred Garcia.

GENERAL MEETING -7 November, 7:30 pm at the Steward Observatory Auditorium -room N210. This meeting is to be a telescope workshop..

BOARD OF DIRECTORS MEETING -13 November, 7:00 pm at the Conference Room at Flandrau Science Center.

STAR PARTIES & EVENTS:

November 1-22-29 - Empire Ranch

November 5 - Agua Caliente

November 7 - General Meeting

November 8 - St. Ambrose

November 10 - Engineering Convention

November 13 - Board Meeting

November 21 - Our Mother of Sorrows

November 22 - Girl Scouts

December 3 - Children's Academy

December 4 - Wilson Middle School

Newsletter Schedule: Deadline for articles: Monday, 17 November. Printing: Monday, 24 November. Folding Party: Tuesday, 25 November. Mailing: 26 November. The newsletter is scheduled to be in the mail at least one week prior to the following month's General Meeting.

Cover: Dean Ketelsen visited the VLA (Very Large Array) while attending the Enchanted Skies Star Party in October of this year. The 27 antennae are a striking contrast to the stark high altitude New Mexico desert. Check out the review of the star party inside. Slide by Dean Ketelsen, scanning by Lee and Michelle Dettmann.

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

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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
P.O. BOX 41254
Tucson, AZ 85717

OR email: ninalehman@aol.com or nwagner@aol.com

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.

Desert Skies is published monthly by the Tucson Amateur Astronomy Association, PO Box 41254, Tucson, Arizona 85717

President's Message

When I first became president of the TAAA almost three years ago, former TAAA president Duane Niehaus gave me some advice. He suggested that I try arranging meetings that aren't lecture oriented, but would get our members get out of their seats! Well, it's taken me a long time to apply this advice, but we will be doing just that this next meeting.

We have selected three topics of interest to anyone with a telescope and will have a meeting of demonstrations and instructions, with the intent of teaching our members something about these topics. We're calling it a Telescope Workshop, for lack of a better name. The three selected topics are Telescope Alignment (or collimation), Optical Cleaning, and the Observer Interface.

The Observer Interface needs a little explaining. Bob Goff will be demonstrating the effects an observer has on the telescope surroundings. He has a classic example of why you should not set up a telescope near your warm vehicle!

Optical cleaning is very important as it helps to keep your coatings in tip-top shape, but cleaning that primary mirror or eyepiece

terrifies many a telescope owner. Rather than risk scratching their optics they live with the dust, dirt, and gunk which will eventually damage the coatings.

Telescope collimation is important if you want to get the most out of your telescope, but many telescope owners either don't know to check the optical alignment, or they don't understand how to do it. Did you know it takes just a few seconds to check your optical alignment? I'm always surprised at how many telescopes are not properly aligned. We will have demonstrations about how to align the optics of some, if not all, types of telescopes. Then there should be no excuse for misaligned optics at our star parties.

Let me know if this kind of meeting agrees with you. Since it's the first time we're doing anything like this in a long time there are bound to be problems. If we can work out the problems and the membership likes this meeting, then I would like to do something similar in 6-12 months.

See you under clear skies, Terri

*

Meeting News

Beginner's Lecture

This month's Beginner's Lecture will be presented by Alfredo Garcia, who presented a fine lecture at last month's Member's Night about CCDs. His Beginner's Lecture will be about the different types of telescopes used in amateur astronomy. This will fit in well with the main meeting which is being called a Telescope Workshop. *

General Meeting: A Telescope Workshop

We will be trying something different this month. Instead of a lecture, we have selected three topics of concern to the telescope

owner and/or user and will have ongoing demonstrations about these topics for the duration of our November meeting. The selected topics: Optical Alignment (or collimation), Cleaning Your Optics, and the Observer and the Observing Interface. We'll start as usual in the lecture hall for some announcements and any prepared reports. Then you are invited to visit one, two, or all three stations and learn something about these topics. This will make for a great opportunity for those with the experience to help those who want to learn the techniques required to make your telescope work at it's best. (If you want to help with the demos at the meeting, be sure to call Terri to find out how you can best help.) *

Special Interest Groups

Deep Sky Astrophotography SIG

The Deep Sky Astrophotography SIG plans to have photo sessions during the coming months of this year on the following dates: November 1, 20, 29, December 20, 27, 1997... and January 3, 1998. There will be a 2nd half presentation by the ATM SIG group. Ray Wallace will have a short 5 minute electronics project presentation. For time and places, call Ray Wallace, 294-1197. *

Deep Sky Astrophotography SIG Session Guidelines

The following was submitted for publication by Ray Wallace and identifies the ATMSIG (Astrophotography and Telescope Making special Interest Group) Session Guidelines:

No experience is required. All TAAA members and their invited guests (2 per member) are welcome. People must be very interested in using their equipment (telescopes, binoculars, etc.) to do observing or astrophotography. Also, everyone must be careful not to disturb people while they are observing or guiding exposures.

Be willing to share your successes and failures with everyone so

we can all learn. This includes telescope making and equipment modifications.

Arrive and set up before sunset if possible. It's easier to see what you are doing in natural light. If you are going to arrive after dark, you must let someone know so others can be warned. That way, hopefully, vehicle lights from late arrivals won't ruin exposures.

No smoking, alcohol, or white light! Red LED light Only! Be sure vehicle lights cannot be turned on accidentally, and, be careful with red led light. It is still bright enough to damage exposures.

If you want to leave, let everyone know. Wait until nobody is exposing film and leave.

The sessions are currently held at the missile silo site southwest of Tucson on the Sasabe hwy (286). Directions to the site: Take Ajo Way (86) west from Tucson going toward Kitt Peak. Go to Robles Junction (Three Points). Turn left onto the Sasabe Hwy after mile marker 32. Turn into the entrance and follow the road past the small parking lot to the dirt road that curves to the left. About .1 (point one) mile down the dirt road there is a large concrete slab on the right. Set up your equipment on the concrete slab.

These strict behavior and equipment use (telescopes, binoculars, etc.) Guidelines are intended to assure TAAA members and their invited guests of the environment needed to become as involved in observational astronomy or astrophotography as possible. *

Club News

Newsletter Editor Needed

oops - they do one more issue!

We are still looking for someone to take on responsibility for editing Desert Skies. This is the last issue that Nina and Nancy will be producing. John Kalas has agreed to take it over temporarily until we find a replacement editor(s). This is a much needed, important position which benefits everyone. Roger Tanner prints the newsletter, the Folding Gang assembles the newsletter, and Terri mails the newsletter, so those jobs are not the responsibility of the editor. What the editor's responsibility is to assemble the articles and announcements, proofread the newsletter, and to print out a single original from which the copies can be made. This needs to be done in a timely fashion so members get the newsletter before the meeting. Organization skills are required to get all the articles together and put into something that looks like a newsletter. Members write most articles, but writing is required on some occasions. A computer is essential and email access is suggested. (Nina and Nancy spoiled us by using email.) Talk to Terri, Nina or Nancy about this really important position. *

From the Mailbag

Here are some things that recently landed in our PO Box. These items will be at the next meeting, so ask Terri about anything that catches your eye. Mention of an item does not indicate its endorsement by the TAAA.

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

The Astronomical Pocket Diary. Has a neat flip diagram of the planets in orbit about the sun for each week.

Books

Mars The Living Planet
catalog of Signal Processing book

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, two Meteor Catalogs. There are many others.

Newsletters

Save the Scenic Santa Ritas, 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), Peoria Astronomical Society (IL), Warren Astronomical Society (MI), The Universe in the Classroom (ASP). *

Member News

We welcome the following new members! Bill Baggeson, Paula & Robert Bladen, Thompson Hoyt, Alicia & Victor Jones, Robert Magill & Family, Daniel Manrique, Jay Midyett, David Perry, David Redmond, David Schlicher, Joanne & Warren Stevensen, Kirsten Tynan, Lyle Ulrick, Ken Wheelock, and Rea Young. We hope you make new friends in the TAAA and we look forward to observing the night sky with you! *

1998 Calendars Available

Get your calendars now! We will be selling 1998 Exploring the Universe calendars at the November, December and January meetings. They will sell for \$10 each or 2 for \$18. This wall calendar, produced by the publishers of Astronomy magazine, has a different astronomical image for each month. There's plenty of room for noting family events, and there are notes about what's going on in the night sky. Get yours at the next meeting. *

Job Opening at Steward Observatory

A full-time Staff Technician, Large Optics Generator Operator position is open at the University of Arizona's Steward Observatory. This individual will operate the large optical generator (LOG) for fabrication of 6.5 and 8.4 meter glass telescope primary mirrors located at the Steward Observatory Mirror Lab. This position is intended to be on second shift - afternoon or evenings. This employee must be willing to be flexible in the working schedule and be able to work rotating shifts. The applicant should not have transportation or other non-negotiable constraints. Preferred qualifications are eight years of varied/diversified technical experience relevant to optical fabrication. He/she must be computer literate and able to operate various machinery and heavy equipment. Minimum qualifications by the University include: completion of a 2 year program in related field AND 6 years of applicable experience; OR eight years of broadly diversified experience in a variety of positions involved with complex applied technology; OR any equivalent combination of experience, training, and/or education approved by the Personnel Department. Hiring Range: \$25,478 - \$29,536. Interested applicants submit a current resume to: Steve Miller, University of Arizona Steward Observatory Mirror Lab, 933 N. Cherry Ave, Tucson, AZ 85721. Phone (520) 621-9753, FAX (520) 621-1578, email smiller@as.arizona.edu. *



"Jerry, the claims adjuster is here."

Dark Skies for November 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

Fr/Sa 31/ 1	18:57 - 5:18	Mo/Tu 10/11	3:27 - 5:25	Fr/Sa 21/22	18:46 - 0:15
Sa/Su 1/ 2	18:56 - 5:19	Tu/We 11/12	4:34 - 5:26	Sa/Su 22/23	18:46 - 1:08
		We/Th 12/13	- - -		
Su/Mo 2/ 3	19:32 - 5:19	Th/Fr 13/14	Full Moon	Su/Mo 23/24	18:46 - 2:00
Mo/Tu 3/ 4	20:21 - 5:20	Fr/Sa 14/15	- - -	Mo/Tu 24/25	18:46 - 2:52
Tu/We 4/ 5	21:13 - 5:21	Sa/Su 15/16	18:48 - 18:49	Tu/We 25/26	18:46 - 3:45
We/Th 5/ 6	22:10 - 5:22			We/Th 26/27	18:46 - 4:40
Th/Fr 6/ 7	23:10 - 5:22	Su/Mo 16/17	18:48 - 19:42	Th/Fr 27/28	18:46 - 5:35
Fr/Sa 7/ 8	0:12 - 5:23	Mo/Tu 17/18	18:48 - 20:37	Fr/Sa 28/29	18:46 - 5:39
Sa/Su 8/ 9	1:16 - 5:24	Tu/We 18/19	18:47 - 21:32	Sa/Su 29/30	18:45 - 5:40
		We/Th 19/20	18:47 - 22:27		
Su/Mo 9/10	2:21 - 5:25	Th/Fr 20/21	18:47 - 23:22	Su/Mo 30/ 1	18:45 - 5:41

Weekend	Sun	Sun	Mercury	Venus	Mars	Jupiter	Saturn	
Sa/Su	Set	Rise	Set Vi	Set Vi	Set Vi	Set Vi	Set Vi	Vi=Visibility
1/ 2	17:32	6:40	18:04 9	20:10 -3	20:09 2	23:55 -2	4:46 0	-3 brilliant
8/ 9	17:26	6:46	18:10 7	20:14 -4	20:04 2	23:31 -2	4:17 0	0 conspicuous
15/16	17:22	6:52	18:19 6	20:17 -4	20:00 2	23:07 -2	3:47 0	3 moderate
22/23	17:19	6:58	18:29 5	20:20 -4	19:57 2	22:44 -2	3:18 1	6 naked eye limit
29/30	17:17	7:04	18:36 4	20:21 -4	19:54 2	22:21 -2	2:50 1	9 binoculars limit

By Erich Karkoschka

Star Parties & Events

Empire Ranch

1, 22, 29 November

We have scheduled three star parties for Empire Ranch. We will be observing near the same location we have been at, but we will be driving about 1/4 down the wide swath of open area (formerly a landing strip). This should get us away from the traffic on the dirt road. Try arriving shortly after sunset. If you arrive late, please turn your headlights off (parking lights only) once you've turned off the dirt road and onto the landing strip. Please drive slow to minimize the amount of dust. Remember that others are observing or photographing the sky, so before you leave make the rounds and tell everyone you will be turning on some lights. *

Agua Caliente Elementary

5 November

Agua Caliente School is planning a star party and needs 6 scopes. There will be free pizza for participants. Set up is 6:00pm and viewing to start at 6:30 pm. Call Karen Allen to volunteer or to gain additional information at: 749-5744. *

St Ambrose School

8 November

St. Ambrose School located at 300 S. Tucson Blvd in Tucson is planning a star party for grades K through 8. They need 6 to 8 telescopes. Set up will be at 6:00 pm with viewing to start around 6:30 pm. Call Karen Allen at 749-5744 to sign up. *

Engineering Convention

10 November

Details to be announced at the next general meeting. See Terri Lappin. *

Our Mother of Sorrows School

21 November

Our Mother of Sorrows located at 1800 S. Kolb Rd (near Kolb and 29th) will host a star party on this night. Need several scopes. Set up will be at 6:00, viewing at 6:30. Call Karen Allen for details at 749-5744. *

Girl Scouts

22 November

The Girl Scout Council has arranged for a couple star parties for events this winter (the other is in January). These will be held at the Boy Scout campground near the Ajo and Kinney road intersection. Look for the map in the newsletter. Set up will be at 6:00 and viewing at 6:30. They are expecting up to 100 girls to attend the overnight, so at least 10 scopes will be needed. Call Karen at 749-5744. *

The Children's Academy

3 December

The Children's Academy of Arizona is located at 1346 N. Stone Avenue. The star party is for a small select group of children - about 25 students. Dinner will be pot luck and will be provided to the lucky volunteer. We need one scope. Call Karen Allen at 749-5744 to be the chosen one. *

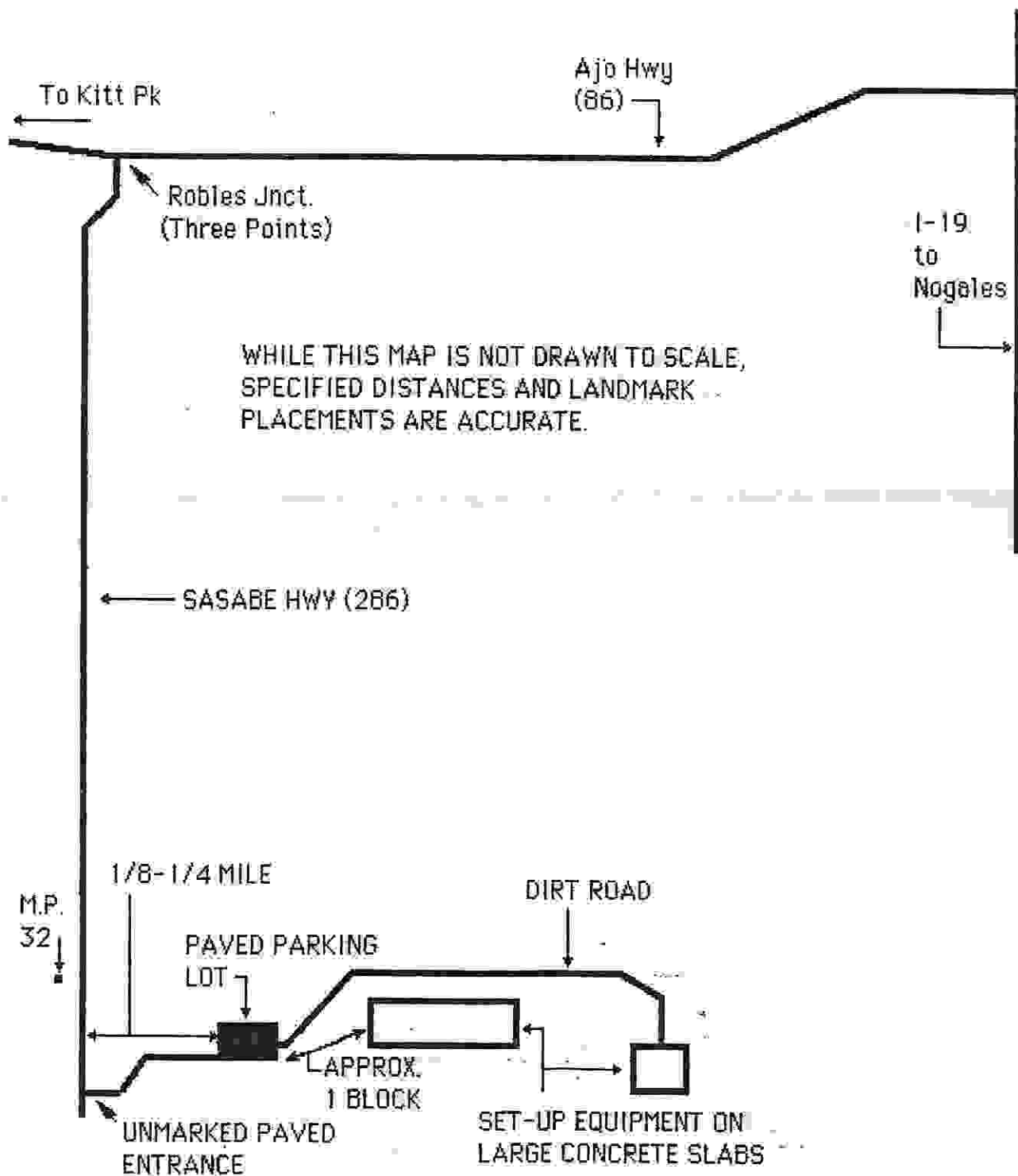
Wilson Middle School

4 December

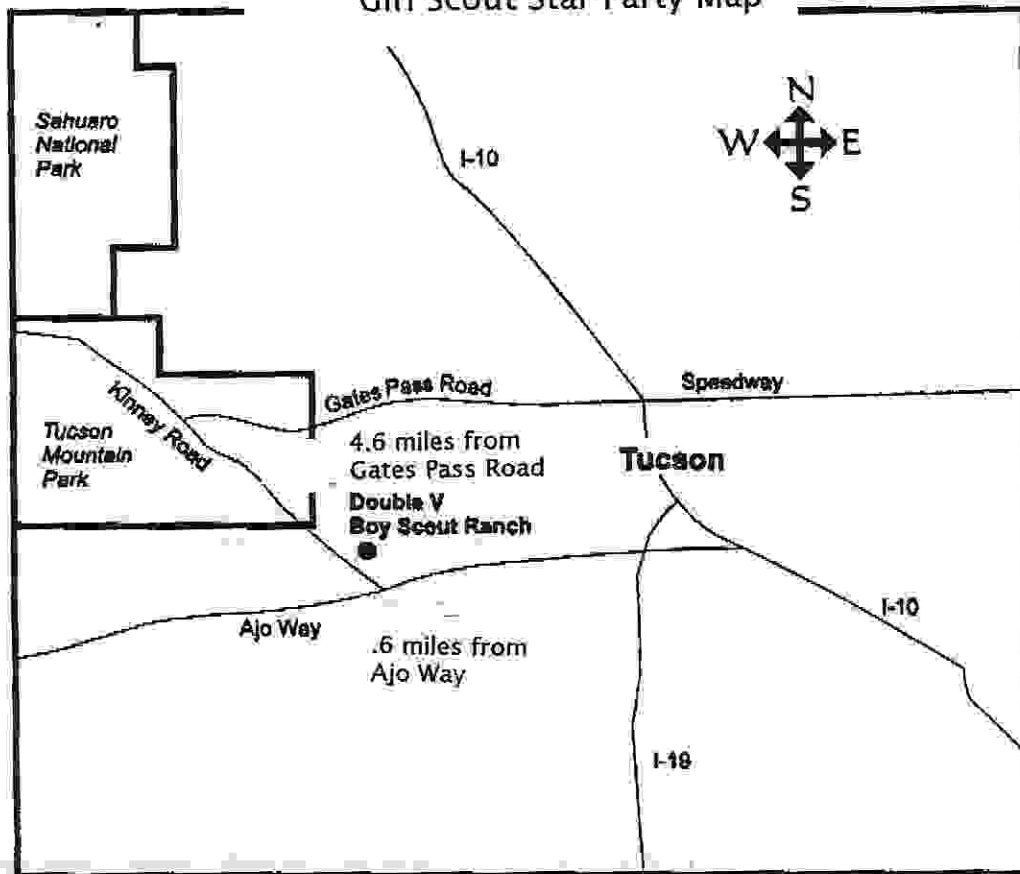
This school is at 2330 W. Glover Rd, near La Cholla and Tangerina area. We need 5 scopes. Set up will be at 6:00pm, and viewing to start at 6:30 pm. Call Karen Allen at 749-5744. *

Maps

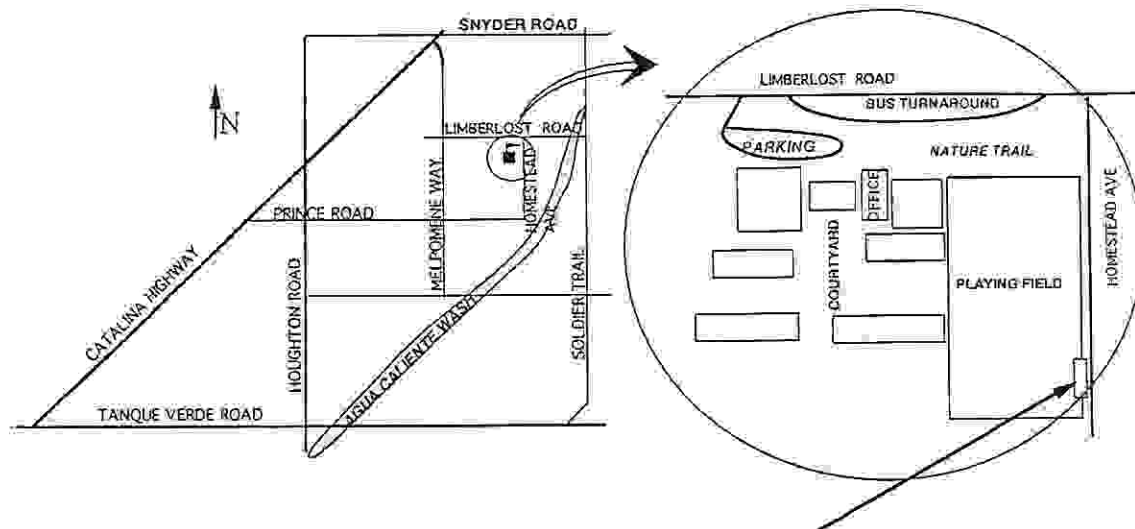
Deep Sky Astrophotography SIG Map



Girl Scout Star Party Map



Agua Caliente Elementary School Star Party



GATE WILL BE UNLOCKED AND OPEN.
GUESTS WITH TELESCOPES WILL BE
ALLOWED TO DRIVE ONTO THE FIELD
TO SET UP.

Notes From Other Clubs

What's the Astronomical League?

The Astronomical League was founded in Philadelphia 50 years ago by astronomy club officers and professional astronomers. The main goals are to promote the science of astronomy. The League is a federation of 230 astronomical societies with 13,000 members.

The AL is very active in a great variety of worthwhile projects. The National Young Astronomer Award (NYAA) is one example. Each year, high school students compete for awards which include a paid trip to the AL's national convention, a Meade LX-200 10-inch Meade telescope, and lifetime passes to the McDonald Observatory.

The Astronomical League also supports distinctive, national level, amateur astronomer observing awards. Many of you have heard of the Messier Award, the Herschel Award, and a multitude of other observing awards. Last month, Jeff Brydges won the Double Star award. All of these are sponsored for by the League for no charge and certificates and pins are awarded.

The Reflector is the quarterly journal of the League. This color newsletter is included with your membership. In addition to keeping up to date with astronomical activities around the nation, the Reflector also supports, ALPO, IDA, and many other astronomical groups. The Reflector also reports news of regional star parties such as the Starry Nights Festival, the Texas Star Party, and the Grand Canyon Star Party. It is an excellent value!

The League publishes guide books available at very reduced prices through the AL Sales Office. In addition, through the leverage of the League, many clubs are able to obtain insurance coverage not possible through other sources without outrageous prices.

If you aren't already, we need you to become members of the League. Your membership costs only three dollars per year, and it is greatly appreciated. Further, it supports a great multitude of worthwhile projects. Please make sure the TAAA officers know how you feel on this subject. Bob Gent Western Region Representative Astronomical League *

IDA Report: Dark Skies Jobs and Other News

The International Dark-Sky Association will be hiring a part time employee to work noon to 4pm three or four days a week. Due to their appreciation of dark skies, TAAA members will be given the first opportunity to fill this position. Wages are negotiable. Please contact me if you are interested in working in an exciting job with the potential for future growth and possible full time employment.

In other IDA news, Southern Arizona is facing a very critical problem - growth of illegal lighting. This is putting all astronomy at serious risk throughout the region. Fortunately, Dr. Ed Vega has agreed to help with the Southern Arizona Chapter of IDA. There is lots of activity in this region with a multitude of tasks to be completed. For example, many of you have seen that Ace Hardware has been advertising those cheap, ugly (and illegal in the State of Arizona), glaring, dusk-to-dawn, security lights. This problem and many others need to be solved ASAP. In addition, many neighborhoods and businesses across the region continue to install poorly designed, unshielded lights. We can use all the help we can get to educate the public on this important subject.

IDA needs volunteers to work these problems. Please let me know if you can help. Wishing you clear, dark and steady skies, Bob Gent IDA Public Relations Officer, SaveOurSky@aol.com or IDA office 293-3198. *

Observing Reports

Chief Observer's Report

Greetings!

It seems that this is the first month since my return from Wyoming that things have been somewhat normal. It is great to be back under desert skies once again... and actually being able to observe without the aid of three layers of clothing!

To begin, I would like to comment on the daylight fireball observed early in October for those who have been unable to find additional information on this event. It appears, from a number of sources, that the object was estimated at 50 to 75 centimeters across, peaked at magnitude -1.5 to -1.8, was visible as a fireball for on the order of a second or so, and exploded in midair north of El Paso, and never reached the ground. The acre of charred land outside of El Paso that was reported as the "impact site" is actually the remnants from some small scale fires in the area the day before the event. Depending on whose population model you use, objects this size are estimated to impact the Earth every day to couple days. It was the fortunate placement near a few major population centers that made this event "newsworthy". If anyone saw the fireball, I would like to hear your reports.

November holds a few very interesting events for observers. First off, observers in the Southeast part of the country will be treated to a grazing occultation of Saturn by the Moon on the morning of the

11th. While we won't see an event here in Arizona, the pair will be quite beautiful in a telescope or a pair of binoculars.

For those who haven't seen Saturn since the ring plane crossing, the planet is beginning to look like it's old self once again. With a moderate tilt of the rings, Cassini's division can now readily be discerned in medium sized telescopes.

At the other end of the month, Mercury reaches greatest elongation on the 28th. Look West shortly after sunset to see the planet hanging low on the horizon. This is your best opportunity to see the planet nearest the sun until the next elongation some months away.

Finally, the event we have all been looking forward to, the Leonids. This years peak is predicted for 12:40 UT on the 17th (5:40 AM local time the same day), though numerous meteors should be visible before and after that time. The best observing will be had after about 2 AM. Last years shower produced many very bright meteors with almost all displaying very distinct trains. Can we expect a similar show this year with the parent comet, Tempel-Tuttle nearing the Earth? Only time will tell.

With the monsoon gone and El Nino supposedly on its way, this may be the only good month we get to observe for some time. Enjoy it while you can. Clear Skies, Gil Esquerdo, Chief Observer. *

Enchanted Skies Star Party

BY DEAN KETELSEN

After spending too much time at work lately and feeling like the monsoons would never end, I thought hard between attending the All-Arizona Star party, held about 40 miles north of Kitt Peak, and the Enchanted Skies Star party, a multi-day event held in Socorro New Mexico. Figuring the longer trip would get me in a better frame of mind, I opted for New Mexico. Of course, it helped that a friend of mine had a change of plans and made his registration available to me, saving me about \$55 in the process. Thanks Chuck! Interestingly, the route to Socorro duplicated the trip that several TAAAS club members took on the observatories tour last April. Roger Tanner, Derald and Denise Nye and I went to visit VLA, the Trinity Site, NSO and Apache Point Observatory. That was a great trip, but we did little observing so I was looking forward to some great views.

After arranging a 3-day weekend from work, I left Thursday night and got a head start on the 7 hour drive, staying in Safford overnight. The drive from Safford thru the mountains in eastern Arizona and western New Mexico is about as scenic as you can get around here. There were a couple potential high altitude observing sites I noticed for possible future reference. I got to the VLA radio observatory late Friday morning, and with a few clouds left from the hurricane that had quickly blown thru, I decided to put off a photo opportunity for later in the weekend. Pushing on to Socorro, I checked into my temporary home at Motel 6 and went to check into the star party.

The Enchanted Skies Star Party (New Mexico is the "Land of Enchantment" - get it?) is headquartered around a technical and mining school located on the west edge of Socorro (population about 6,000). They had a good list of speakers and the facilities at the college were absolutely first-rate. The lecture hall was large and roomy with space outside the hall for a few vendors to set up shop. The registration desk quickly transferred Chuck Schroll's registration to me and I headed up to hear some talks. Before I could get there I ran into Jonathan Spargo, one of the principals of the star party and also the safety officer at VLA. We caught up on some mutual friends and he filled me in on some of the questions I had on VLA setup. The VLA has 4 configurations with the 27 antennae equally divided on 3 arms that are 9 miles long each. Last April they were well spread out in the B configuration, the second highest resolution mode (A is most spread out which is the highest resolution, D is most compact and lowest resolution, but highest sensitivity). This trip their appearance was drastically different. They were in configuration D, north C, which put the east and SW arms most compact, but the north arm spread out a bit more. Jonathan explained that this configuration was used for a few weeks (most configurations are changed every 3 months on a regular rotation) to optimise it for observing the center of the Milky Way Galaxy. Since it is low in the south, the longer north arm tends to make the array beam more circular, which is desirable.

After talking with Jonathan for so long, I missed most of a solar eclipse talk by a NASA scientist, and decided to catch some shuteye for a couple hours before the night's observing. As I was leaving the facility, I recognised the purple t-shirt of a certain Astronomy magazine editor outside the hall taking a smoke break - Patti Kurtz, a friend of ours from Grand Canyon '96. She invited me to dinner with some of her acquaintances and made plans to meet later (the last dinner I had with her included Alan Hale and Tom Bopp and was a great time!). After a too-short rest Patti treated about 9 of us to dinner and with darkness descending some headed

off to the evening lecture on SETI (Search for Extra-Terrestrial Intelligence), popular locally because the movie *Contact* was partially filmed at VLA. I chose to head off to the observing site for the evening, at the college's observatory, on the west side of campus surrounded by a golf course.

The one thing I never think of when observing from a truly desert site, and the vegetation in the area indicates a drier climate than Tucson, is mosquitos, and boy were they thick. I was dancing all night swatting them, making observing miserable. My suspicion is that it was the golf course, but they were even worse at the VLA the next day. My personal record for the weekend was getting 4 of them with one palm swat! Anyway, the bugs made me cranky and the observing conditions from the edge-of-town site was also none too dark, with a considerable sky glow and direct lights from town. There wasn't an abundance of telescopes, but numerous small ones and a pretty small crowd. My suspicion is that the reason the observing site is in town is that they open it up to the local population and schools. There were lots of kids running around - always a dangerous situation in my book when there are scopes around.

Anyway, I got a little observing in before the bugs and kids drove me off for an early evening. One fellow had a 7" Astrophysics refractor on Jupiter and it was likely the best view I've had since the one Bob Goff showed me thru Steward's 36" when we both worked on Kitt Peak. It was great with a wealth of belt structure and easy resolution of the moons' disks. Probably the highlight of the observing that night though was of Mir and the space shuttle flying in the same orbit. I had heard on the radio on the drive out that they would be visible in southern Arizona heading towards the NE and I figured they would be visible from the star party. News reports had indicated that they had separated about 7 hours earlier and indeed they were separated about 30 degrees in the sky, flying in formation before blinking out in the earth's shadow.

Saturday dawned clear with some of the dark blue skies that tell you the monsoons are well past. After sleeping in, I decided to backtrack out to the VLA for another tour and photo session under some perfect skies. It is about an hour's drive west of Socorro, and is always a surprise when the antennae come into view, sort of like how Kitt Peak suddenly appears as you drive west from Tucson. The close in configuration made them very photogenic and I finished off most of a roll.

The highlight of the weekend was expected to be the dark-sky observing from Pound Ranch, about a 20 mile ride SW of Socorro. Star party organizers had set up a chuckwagon dinner on site and it made for a nice destination after the 12 miles of rugged dirt road. It was on a nice flat area surrounded by rolling hills and excellent horizons. The dinner was great - pit cooked beef, turkey, beans, sopapilla and other fixings. With all you could eat, it was easily worth the \$15. The meal was followed by some dancing and drumming by children from the local Indian reservation. The sun had set during dinner revealing the crescent moon with Venus, Mars and Antares in the southwest. I had decided to bring out the binoculars and do some wide-field photography from the site. The crowd was small as were the number of telescopes, the largest being a fine 24" which showed a shadow transit on Jupiter in twilight. A few people came by to check out the 5" binocular views of Andromeda, the double cluster and Pleiades a little later. There was some talk of a scheduled high power laser test at White Sands missile range that evening at 10:30, but either the test was postponed or it was a non-visible laser.

The sky conditions at the ranch were nearly perfect - just the slightest sky glow from Socorro. There were rumors that some people had observed from the ranch all weekend and that would be preferable to the public observing from town, to me anyway. I'll have to look into that option if I get that way again. It is also nice having a reasonable sized town near the star party. Not only does it make a nice facility available, as at the college, but motel rooms are plentiful and make sleeping in much more pleasant. The only unpleasantnesses were the biting insects, which fortunately did not appear at the ranch, and the observing from town, which might be bypassed by observing from Pound Ranch.

The trip home went quietly, with another quick stop at VLA for more photos as, Patti Kurtz indicated that Astronomy needed some VLA pictures for an upcoming article. I got back to Tucson right about sunset Sunday. The drive is shorter than that of Texas Star Party or Riverside Telescope Maker's Conference, but the Enchanted Skies is a different, smaller, more intimate crowd and I would certainly consider another trip back. Let me know if you have any questions I could answer about upcoming star parties there. *

Light Pollution

By MIKE TERENCE

Greetings all, I would like to add that in my opinion the growth of illegal lighting in and around Tucson has clearly reached a critical stage. For instance, off of Cortaro Farms road west of I-10 there has been constructed in the last 6

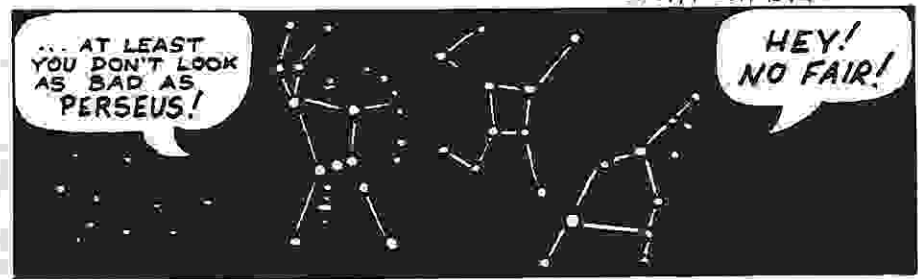
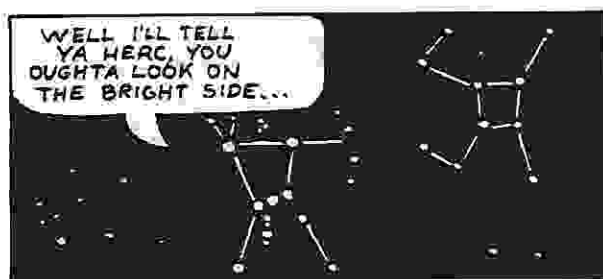
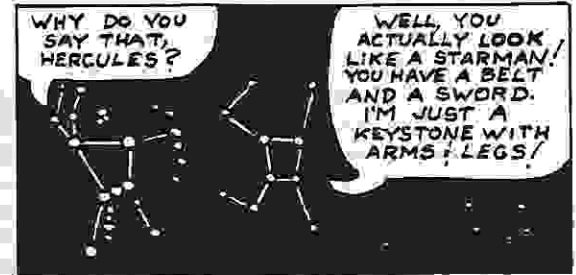
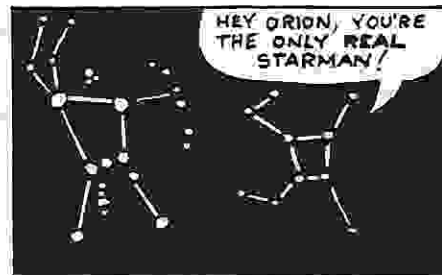
months (which I just noticed the other night as I drove by) a bunch of urban sprawl related to the Continental Ranch housing development, all with terrible lighting. All three are lit up "like daytime" (especially the strip mall's big parking lot):

1. A new Shell gas station.
2. A strip mall with Fry's supermarket on the corner of Silverbell and Cortaro Farms.
3. A Quick Mart on Silverbell north of Cortaro Farms road.

When you add this to the sports park nearby, the increase in light pollution in the area is immense. Although new motels have been built in this area in the last 2 years to service I-10 traffic, the above three show a blatant disregard for any type of proper planning or for proper lighting. They would be very much at home in Phoenix.

As I frequent this area of the Tucson Mountains, I've seen the loss of desert habitat, exponential increase in congestion, light pollution, and sprawl in this once special area of Tucson, nearly all related to the Continental Ranch development. When I saw the above three (especially the strip mall and the Quick Mart) I was really disgusted with how Tucson area government (in this case Marana) handles development. At least the new town of Tortolita shows itself to be more environmentally friendly. A great effort to save our skies must be undertaken, but we are not alone in our opposition to ugly urban sprawl. Can IDA team up with existing organizations that share our view and work with us? Mike Terenzi *

Starman



TAAA Board of Directors Meeting - October 1997

No minutes were available as of this printing.

Desert Skies Classified

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 8 X 50 illuminated reticle finder. \$2500 value; sale price: \$1850. Call Jody Humber (602) 584-2289 (work) or (602) 412-2329 (home). (12/97)

FOR SALE: Eyepieces - 10.5 mm. fl. Orthoscopic, \$25. 7/8 inch fl. Brandon, \$40. 4 mm. fl. othoscopic, University optics, \$25. All in excellent condition.
 Celestron filter set, threaded for celestron 1/4 inch eyepieces. Purple, blue, green, light yellow, orange, neutral density. \$5 each or all for \$25.
 Barlow lens, 1 1/4. 2X. \$25.
 Celestron illuminated cross-hair eyepiece, 12.5 mm fl. With 2 D-cell battery pack and rheostat. Fits 0.96" or 1 1/4" with adapter, \$40.
 Star Diagonal, 1 1/4", \$20. For all of the above, call or contact Duane Niehaus at 797-4189. (01/98)

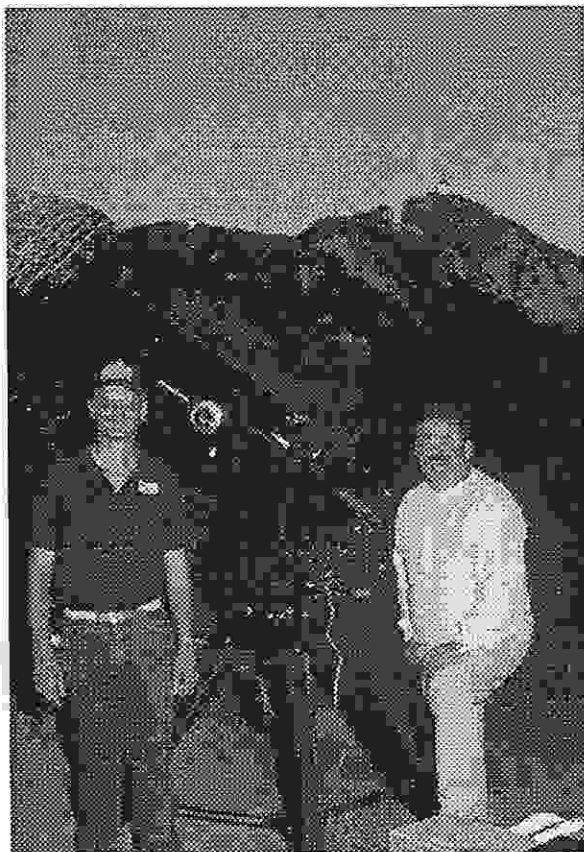
FOR SALE: Telescope - Schmidt-Celestron. 8" reflector. \$450. Call Fred Brandenburg at 299-1212 for additional information. (2/98)

FOR SALE OR TRADE: Jason 3065 explorer 60 mm alt-azimuth refractor. 4 eyepieces - 25 mm, 12.5 mm, 9 mm, 4 mm, 2x Barlow, 90° diagonal. \$125 OBO. Wanted 4.5 or 6" EQ or Dob. Call Duane or Kathy Hendricks at 696-0181 evenings or weekends (2/98).

FOR SALE: Meade Pictor 216XT CCD Autoguider/inager with AC adapter and all original accessories including software. Used only two times and is in mint perfect condition. Original cost over \$730, will sell for \$650. For information call Jean at 743-3341, or see the CCD camera at - Starizona, 5201 N. Oracle Rd. (2/98)

FOR SALE: Observagon (tm) Observatory Domes: 7, 10, and 15 ft. Rotating domes, unique design, inert pvc or metal construction, sturdy and lightweight, stand alone or on building, various heights, sensibly priced, 10 foot pvc dome for only \$1800. Contact: Stellar Structures, Inc. 12790 N. 39 th Ave. E. #240 Kellogg, IA 50135. Phone: (515) 236-9151 e-mail: shadow@se-iowa.net (2/98).

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 or nlwagner@aol.com.



TAAA members Dave Reynolds and Steve Peterson set up equipment for observing at the Kitt Peak picnic, September 27th. The event was very well attended and observing conditions were great! Slide by Dean Ketelsen, scanned by Lee & Michelle Dettmann.