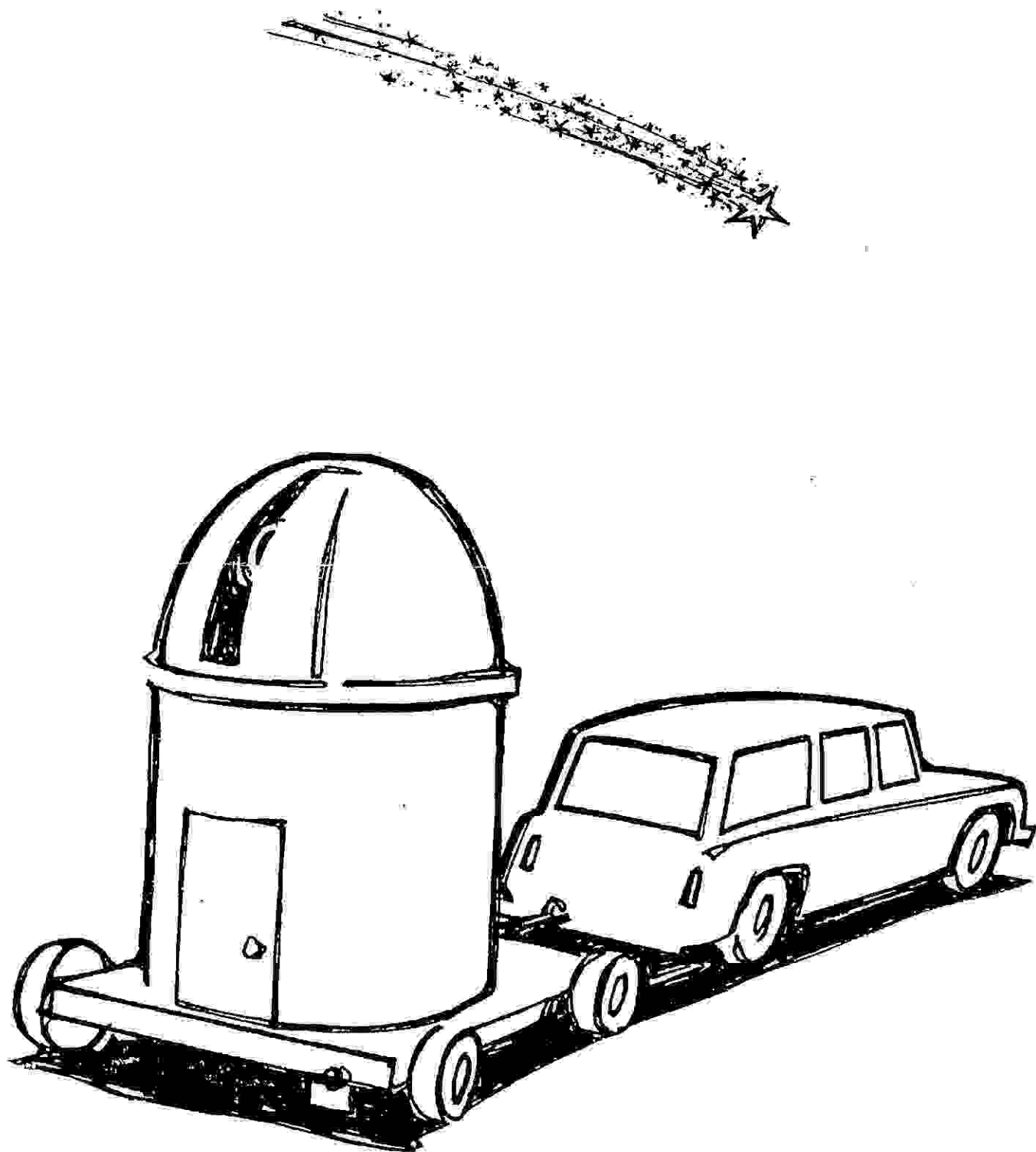


Desert Skies

JUNE 1992





GENERAL MEETING - Friday, June 5, 7:30 P.M. - Mike Lesser, of Steward Observatory, will present a talk on "New CCD Technology".

EXECUTIVE MEETING -Thursday, June 11, 7:30 P.M. at Flandrau Science Center.

STAR PARTIES - Saturday, June 6 - Star Party co-sponsored by Whipple Observatory at the base of Mt. Hopkins.*

Saturday, June 20 - Star Party at Arivaca site.*

(Star Party at Kitt Peak picnic area. There was a sign-up sheet at the May meeting...see Andy Meyer).

TAAA ANNUAL PICNIC & STAR PARTY - Saturday, June 27 - The annual potluck picnic will be held at Vega-Bray Observatory.*

* see map inside this newsletter



TAAA EXECUTIVE

President	Dean Ketelson	293-2855
Vice-President	Terri Lappin	579-0185
Executive Sec.	Dick West	574-0830
Recording Sec.	Sharon Niehaus	299-7328
Treasurer	Duane Niehaus	299-7328
Member-at-Large	Bob Goff	790-1452
Member-at-Large	Ed Vega	747-9323
Chief Observer	Andy Meyer	742-4549
Membership Coord.	Terri Lappin	579-0185
Past President	Tim Hunter	299-2972
Desert Skies ed.	Dolores Hill	325-9820
Asst. ed.	Rik Hill	325-9820

Desert Skies Publishing Guidelines

- * All articles, announcements, news etc. must be submitted by the 20th of the month. Materials received after that date will appear in the NEXT issue.
- * All submissions are retained by the editor unless prior arrangements are made.
- * Articles, artwork, and photos should be camera ready. Photos should be screened.
- * We will not publish slanderous or libelous material!

Send articles, announcements etc. to:
Dolores Hill, Desert Skies
4632 E. 14th St., Tucson, AZ 85711
or Lunar & Planetary Lab, UA campus mail

Send ADDRESS CHANGES to:

TAAA
Attention: "address change"
P.O.Box 41254
Tucson, AZ 85717

MEMBERSHIP IN THE TAAA

Individual Membership	\$20.00
Family Membership	\$25.00
Senior Citizen (over 60)	\$18.00

Sky & Telescope subscription (optional) \$18.00

Rates for membership in the TAAA are given above. Members can subscribe to Sky & Telescope at the time of membership renewal, saving over 25% off the cost of a regular subscription. The subscription term must match your membership period.

Send one check, made payable to: Tucson Amateur Astronomy Association, to cover both membership and subscription to: TAAA, P.O.Box 41254, Tucson, AZ 85717. It is best to pay your dues 2-3 months before your membership actually expires.

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. a) Decide if you want Sky & Telescope, then add \$18 to your membership rate.
b) Include Sky & Telescope's renewal notice, if possible.
3. Write one check, payable to TAAA.
4. Send it to TAAA, P.O.Box 41254, Tucson, AZ 85717.

Call the Treasurer if you have any problems.

WANTED OR FOR SALE.....

If YOU have placed an ad and sell the item(s) or no longer wish to run it, please call Dolores or Rik Hill at 325-9820 (home) or 621-6951(work). Otherwise the ad will continue to appear. Thanks. -ed.

FOR SALE: Celestron 6" f/5 Newtonian tube assembly with ring mounts...\$150; Dobbins achromat 6" f/10 in homemade tube assembly...\$1000; ASTRONOMY magazine 1974-1990, missing 7 early issues, 14 yrs. complete in good condition...\$150; CAVE drive, 1½ inch shaft with housing, only 40 hrs. running time...\$80.00. Call Mike Sweetman evenings at 297-2781.

FOR SALE: Cave 8" f/6, equatorial mount, rotating rings, clock drive, setting circles, 2" focuser, 2 eyepieces, Cannon camera adapter.....\$600. Call Walt Brown (for Rip Loman) at 325-2189.

ANNOUNCEMENT: We have received information about The Planetary Society Scholarship Programs that are awarded to college and high school students. It's not a lot of money, but every bit helps when you're a student. If you are interested, contact Teresa Lappin.

FOR SALE: Book published in 1858 by Harper & Brothers, "Celestial Scenery; or The Wonders of the Planetary System Displayed", written by Thomas Dick. Interesting reading, I'll bring it to the May meeting. Make an offer....Bookman's offered me \$3!.....Teresa Lappin 579-0185.

FOR SALE: 14 1/2" F/5.5 Newtonian. Superb optics by Enterprise (Ed Breck) with special coatings. Optics tested by Duane Niehaus, 2-inch helical focuser with 1 1/4 " adapter, finderscope and rotating rings, heavy duty Elysium mount with 12-inch Byers gear, RA and Dec motors. Both scope & mount made by Gary Rosenbaum. Pick-up only.....\$5,300. Call Ed Vega at 602-747-9323 (work 602-721-3815).

FOR SALE: Epson LQ-2250 twenty-four pin, wide carriage, color dot matrix printer, \$450. Call Dan Knauss at 881-2639.

WANTED: 25mm eyepiece; **FOR SALE:** Small diagonal for Newtonian telescope; 20th wave, 7/8" minor axis, custom made; **OR WILL TRADE FOR** 1 1/4" diameter eyepiece with 16-18mm focal length. Call Gilbert Friedman at 571-1662.

FOR SALE: 18" mirror 1 1/2" thick, presently has 25 foot focal length and is coated...Call Rik Hill at 325-9820 for info.

FOR SALE: Estey (Vermont) antique pump organ, 11 stops, all notes work fine, delightful sound... \$995. Contact Stephen B. Smith at (602) 456-9440 or Box 5056, Huachuca City, AZ 85616.

SERVICE: Newtonian telescope mirrors tested **FREE** for club members by Bob Goff (call 790-1452).

NEEDED: Donations of astronomy magazines to give away at star parties along with the TAAA brochure.

FOR SALE: CELESTRON binocular viewer (mint condition, like new, used only once); TELEVUE 2" star diagonal (excellent condition) with 1 1/4" adapter and Schmidt-Cass. adapter. Call John Zajac at 299-3203 (answering machine is always on).

WILL TRADE: 4.8mm NAGLER eyepiece (excellent condition) and additional cash for 7mm Nagler eyepiece. Call John Zajac at 299-3203 (answering machine is always on).

FOR SALE: 65mm refractor with equatorial mount (no motor), manual slow motion controls, carry case, 4 eyepieces, approx. 30 yrs. old.....good for beginner.\$65. Call Virginia Breckenridge at 298-3586.

FOR SALE: NEW (never used) 13mm Plossl TeleVue eyepiece...\$80; two Celestron polarizing filters, 67mm dia. @ \$10.00; 10 rolls of Ektapress print film, 1600 ASA, hi-contrast...\$6/roll or \$25/Propack (5 rolls). (This is the film Mike used for the award-winning photo in the September issue of ASTRONOMY); calymenina trilobites from Morocco...\$10 ea. Call Mike Terenzoni at 577-6857.

FOR SALE: 2" Rack & pinion Novak focuser with 1 1/4" adapter- mint condition (never used).....\$90.00. Call Ray Wallace at 294-1197.

FOR SALE: Yashica 35mm SLR camera/50MM lens...\$150. Call Patrick Craig at 792-4980 (new phone#).

OBSERVERS REPORT

Star Parties

Regular:

June 20

Arivaca site,
see map

June 27

Club Potluck at Vega-Bray
Obs., see map

Public:

June 6

Star Party, Smithsonian
Base Camp, see map



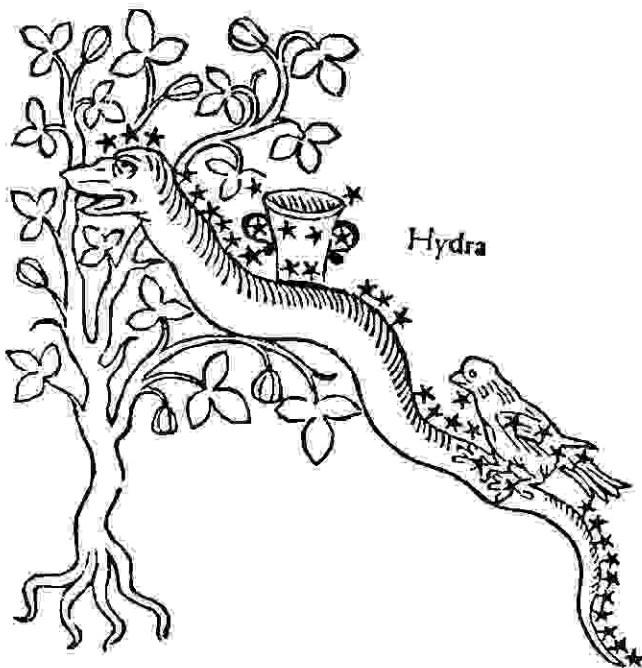
Due to an excessive amount of business travel theres not a lot to report. Though I would like to know where everyone was hiding the night of May 2th?! The weather cleared and the seeing was great after about 9pm.

Otherwise I'm packing my family up for our annual junket to the San Bernardino Mountains for the Riverside Telescope Makers Convention (RTMC for those in the know). I'll report on this event in my next installment. Till then...may the stars get in your eyes!

Andrew J. Meyer

DARK SKIES for June 1992 (in MST):

M/T	Jun.	1/2	9:04pm - 3:39am
T/W	Jun.	2/3	9:18pm - 3:38am
W/T	Jun.	3/4	10:08pm - 3:38am
T/F	Jun.	4/5	10:51pm - 3:38am
F/S	Jun.	5/6	11:30pm - 3:37am
S/S	Jun.	6/7	12:05am - 3:37am
S/M	Jun.	7/8	12:39am - 3:37am
M/T	Jun.	8/9	1:12am - 3:37am
T/W	Jun.	9/10	1:47am - 3:36am
W/T	Jun.	10/11	2:25am - 3:36am
T/F	Jun.	11/12	3:06am - 3:36am
F/S	Jun.	12/13	none
S/S	Jun.	13/14	none
S/M	Jun.	14/15	none
M/T	Jun.	15/16	none
T/W	Jun.	16/17	none
W/T	Jun.	17/18	9:13pm - 9:32pm
T/F	Jun.	18/19	9:13pm - 10:06pm
F/S	Jun.	19/20	9:14pm - 10:36pm
S/S	Jun.	20/21	9:14pm - 11:04pm
S/M	Jun.	21/22	9:14pm - 11:32pm
M/T	Jun.	22/23	9:14pm - 12:01am
T/W	Jun.	23/24	9:14pm - 12:31am
W/T	Jun.	24/25	9:14pm - 1:05am
T/F	Jun.	25/26	9:14pm - 1:43am
F/S	Jun.	26/27	9:14pm - 2:28am
S/S	Jun.	27/28	9:14pm - 3:21am
S/M	Jun.	28/29	9:14pm - 3:40am
M/T	Jun.	29/30	9:14pm - 3:41am
T/W	Jun.	30/1	9:14pm - 3:41am



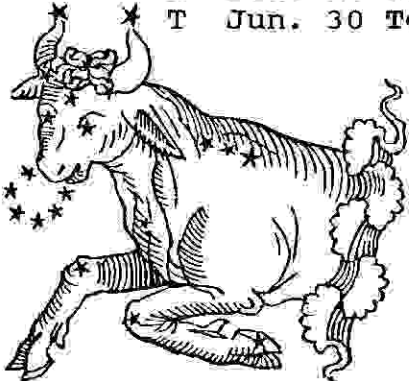
Times listed are for Tucson, Arizona when:

- (1) Moon is below the horizon
- (2) Sun is $>18^\circ$ below the horizon
(astronomical twilight)

Andrew J. Meyer

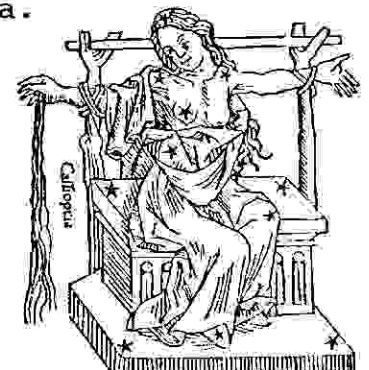
CELESTIAL CALENDAR for June 1992(all times are in MST):

- M Jun. 1 11am, Mercury at perihelion, 0.3075 a.u. from Sol.
T Jun. 2 6:08am, Moon at descending node (longitude 90.7°)
W Jun. 3 Tau Herculid meteors, slow, ZHR 15-18
T Jun. 4 1st reliable record of a total solar eclipse is made, China, 780 B.C.
F Jun. 5 7:30pm, **TAAA General Meeting**, Steward Obs. Auditorium.
S Jun. 6 6:30pm, **Smithsonian Base Camp Star Party**, see map elsewhere.
S Jun. 7 1:47pm, **FIRST QUARTER MOON**.
M Jun. 8 Librid meteors, seen only in 1937, radiant in SE Libra, ZHR may be 10.
T Jun. 9 12pm, Venus at ascending node through the ecliptic.
W Jun. 10 7am, Moon passes 3.0° S of Spica.
T Jun. 11 7:30pm, **TAAA Executive Meeting**, Flandrau Science Center conference room.
F Jun. 12 9pm, the equation of time is zero.
S Jun. 13 8 Ophiuchid Meteor shower, ZHR <10
9am, Venus is at superior conjunction with Sol, passes into the evening sky.
S Jun. 14 9:50pm, **FULL MOON**, the Rose Moon.
M Jun. 15 10:07am, Moon at ascending node (longitude 270.6°).
T Jun. 16 8:am, Winter solstice on Mars.
W Jun. 17 3pm, Asteroid Pallas at opposition.
T Jun. 18 Canterbury monks record possible crater-forming (Giordano Bruno) impact on the Moon, 1178 (?).
F Jun. 19 3pm, Moon at apogee, distance 63.5 Earth-radii.
S Jun. 20 Arivaca Star Party, see map elsewhere.
8:14pm, **Summer solstice**
S Jun. 21 Galileo Galilei is forced by the Inquisition to "abjure, curse, and detest" his Copernican heliocentric views, 1633
M Jun. 22 Pluto's moon Charon discovered by James Christy, 1978
T Jun. 23 1:12am, **LAST QUARTER MOON**.
W Jun. 24 Fred Hoyle, English astronomer, born 1915
T Jun. 25 Light Pollution from Los Angeles forces Mt. Wilson 100-inch telescope to be closed, 1985
F Jun. 26 Corvid meteors, ZHR 10.
S Jun. 27 **TAAA Annual Picnic**, Vega-Bray Obs, 4pm, bring your telescope! See map elsewhere
S Jun. 28 7am, Moon passes 7.4° N of Aldeberan.
M Jun. 29 3:53pm, Moon at descending node (longitude 90.7°).
T Jun. 30 **Total eclipse of the Sun**, S. America.



Taurus

Andrew J. Meyer



Personification of Cassiopeia, from Hyginus' Astronomicon, Venice, 1482

APPULSES FOR JUNE by Brad Becker

(All dates indicated on the charts are for 0 Hrs. Universal Time, i.e. 5:00 p.m. local on previous day).

Minor Planet 192 Nausikaa and M7

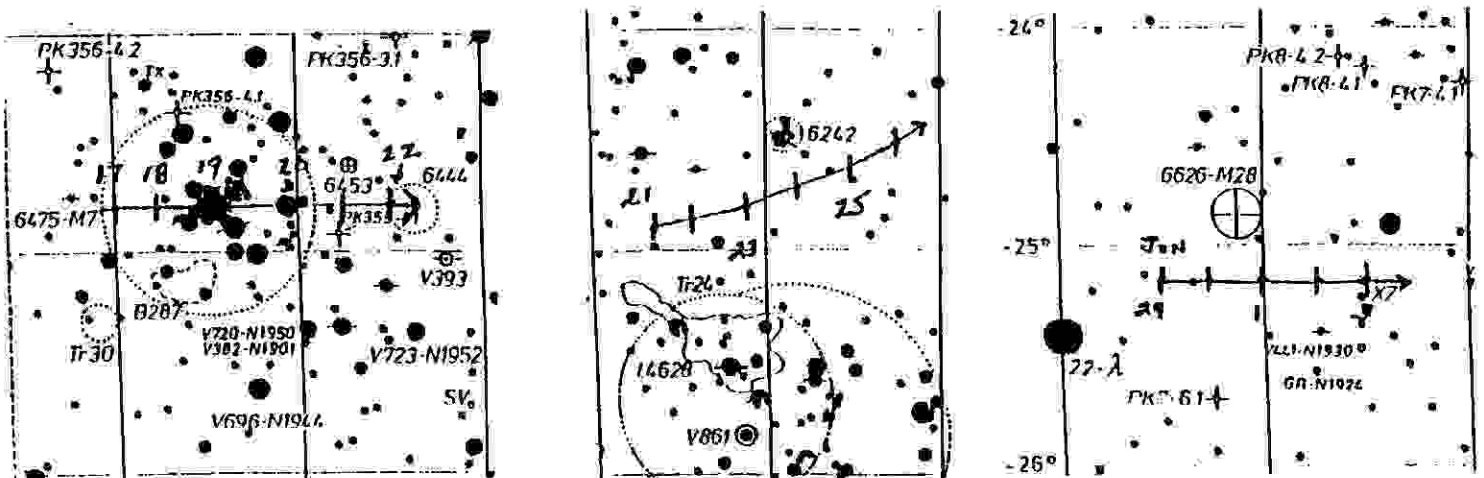
Try viewing this appulse after 11:00 p.m. when it's high enough for viewing. Moonlight becomes less of a problem after June 20th, though at magnitude 9.8 Nausikaa is fairly bright as minor planets go. Movement is due west at 0.6 arc seconds/minute and may require careful observation due to the richness of the star field.

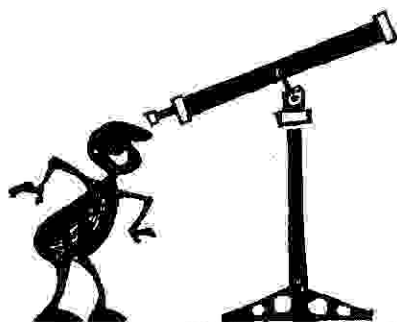
Minor Planet 101 Helena and NGC 6242

NGC 6242 is a magnitude 8.1 open cluster spanning 10 arc minutes at right ascension 16 56' and declination -39 30. 101 Helena should be around 11th magnitude as it traverses northwesterly at 0.5 arc seconds/minute. As with 192 Nausikaa try viewing this appulse after 11:00 p.m. due to the southerly latitude.

Minor Planet 30 Urania and M28

No moonlight interference here so view anytime after 10:00 p.m. Urania will be magnitude 10.3 as it passes south of this Sagittarius globular, traversing due west at 0.6 arc seconds/minute.





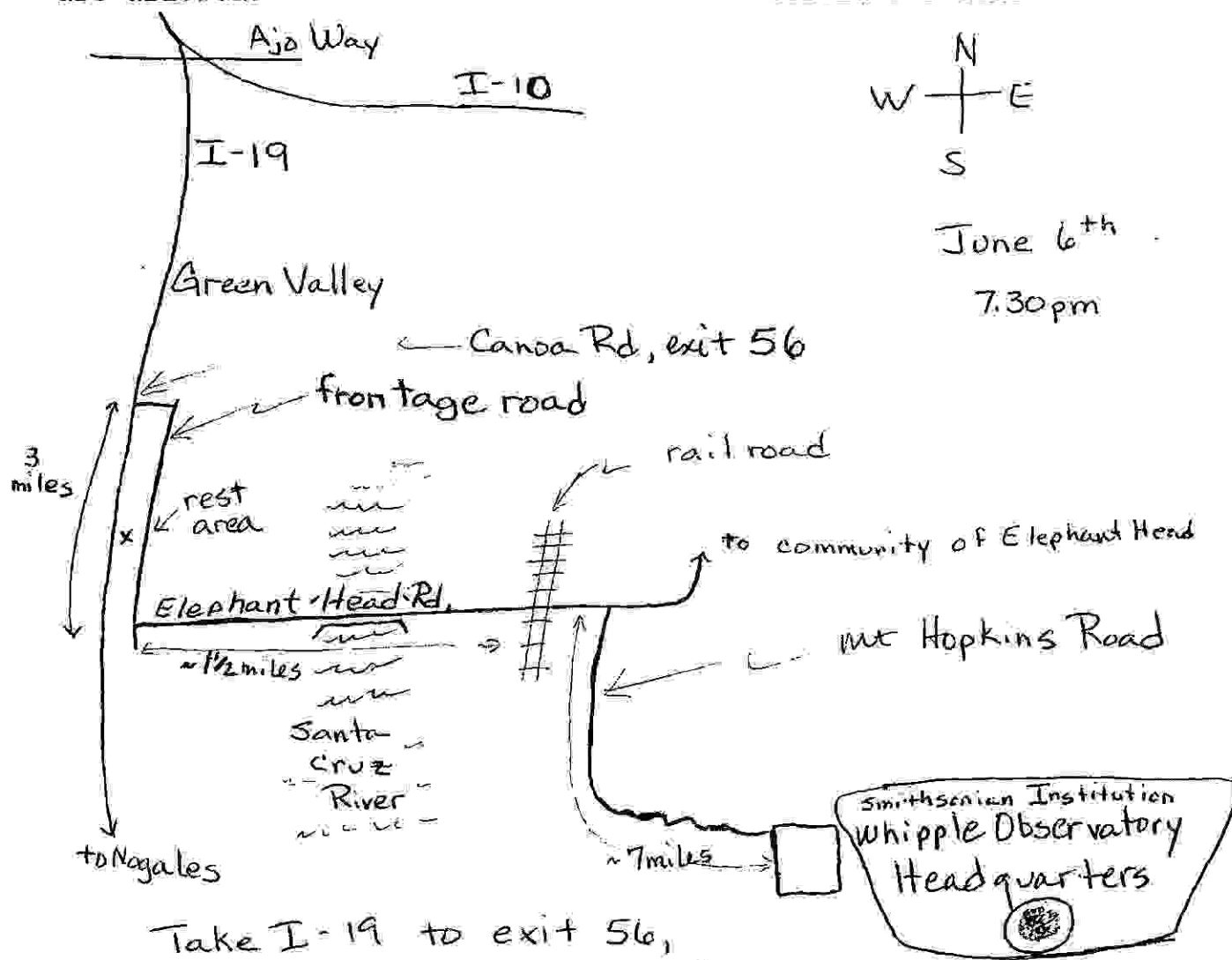
PUBLIC STAR PARTY

COSPONSORED BY WHIPPLE OBSERVATORY

We will be holding another Santa Cruz Valley Public Star Party at the Whipple Observatory headquarters on Saturday June 6th, starting at 7:30pm. The headquarters are located at the base of Mt Hopkins in the Santa Rita Mountains south of Tucson. It is about 40 miles from the University of Arizona, most of which is interstate driving and the entire route is paved. You will not need to drive any dirt roads. The site is reasonably dark and great for public star parties. Facilities are available and AC power can be provided if necessary (call Teresa if you need AC power). A map is provided in this newsletter.

Arrive by 7:30pm to set up the telescopes. A short talk will be presented by one of the staff astronomers. Arrive earlier and bring a picnic dinner if you wish. There is a picnic area, but no grills are allowed.

Teresa 579-0185



Take I-19 to exit 56,
then follow signs to Elephant
Head Road. Turn south onto Mt Hopkins
Road and follow paved road to headquarters.

Another Kitt Peak Picnic!

Another Kitt Peak picnic has been scheduled for June 20th. The rules for this one are the same as the first. We will be limited to 30 attendees, and should be off the mountain by midnight. Since moonrise is at about 11pm, this should not be a problem. Please be aware that the observatory grounds closes at 4pm and we will not be allowed on top of the mountain after that time, however I do encourage you to attend the public tours starting at 1:30 if you are new to Kitt Peak. If you arrive for the picnic after 4pm, please go directly to the picnic area.

The last event was fun even if it was pouring rain most of the time. If we continue to be on our best behavior, hopefully we can do this on a regular basis.

The signup sheet will be at the June meeting and again, attendance will be held to 30. Last time there were cancellations, so we can take more than 30 names. If you want to attend, but cannot make the June meeting, please call me and I will consider your request.

-Dean Ketelsen 293-2855

Beginners To Astronomy Take Note

For new members and those just getting interested in astronomy, Teresa Lappin will soon be starting a new program covering the basics. Keep an eye on the newsletter for the starting date - probably in the Fall.

Along the same lines, there will be a beginners star party and Gab Fest (or monsoon watching party) at the home of Dean Ketelsen tentatively scheduled for July 10. Check out the July Newsletter for details!

COMING THIS FALL

INTRODUCTORY ASTRONOMY TALKS

It all started when I joined the Astronomy Book Club! I purchased the book "Seeing The Deep Sky" written by Fred Schaaf and learned some interesting facts in the first 20 pages or so and thought 'what a great book to teach from'! Beginning this September I would like to present a series of basic astronomy talks, using this book as a guide (and other books as well).

It has been mentioned a few times that we should have beginning astronomy lectures for those amateurs who were recently bitten by the astronomy bug. The TAA has at times included a beginning astronomy lecture during the second half of the meeting, but those who would benefit the most usually left during the break, leaving the more experienced members listening to stuff they already know. For this reason, these talks will begin at 7:00pm, before the regular meeting and will end by 7:15, allowing 15 minutes for the usual pre-meeting activities to take place.

I would like to get some feedback from members concerning this project. Are some members actually interested in arriving a half hour early for a short introductory talk? What kind of subjects should I cover? Fred Schaaf's book starts with stellar classifications and discusses the H-R diagram and stellar life cycles. Double and variable stars are discussed next. Since I'm still reading the book I'm not sure of the details. The book contains 35 short lessons, each with a few activities requiring a telescope. (These activities could be conducted during the break, or later in the month at a star party. It depends on some logistics such as how much sky will be left visible from Steward Observatory once the new building is completed!) Schaaf has written two other books, "Seeing the Solar System" and "Seeing the Sky" with the same format. I will be purchasing these books also if there is a genuine interest in this project.

If some of our experienced amateurs would like to help me out with this, let me know. You could give the 15 minute talk, or help with the telescope activities at a star party or during the break.

VEGA-BRAY OBSERVATORY

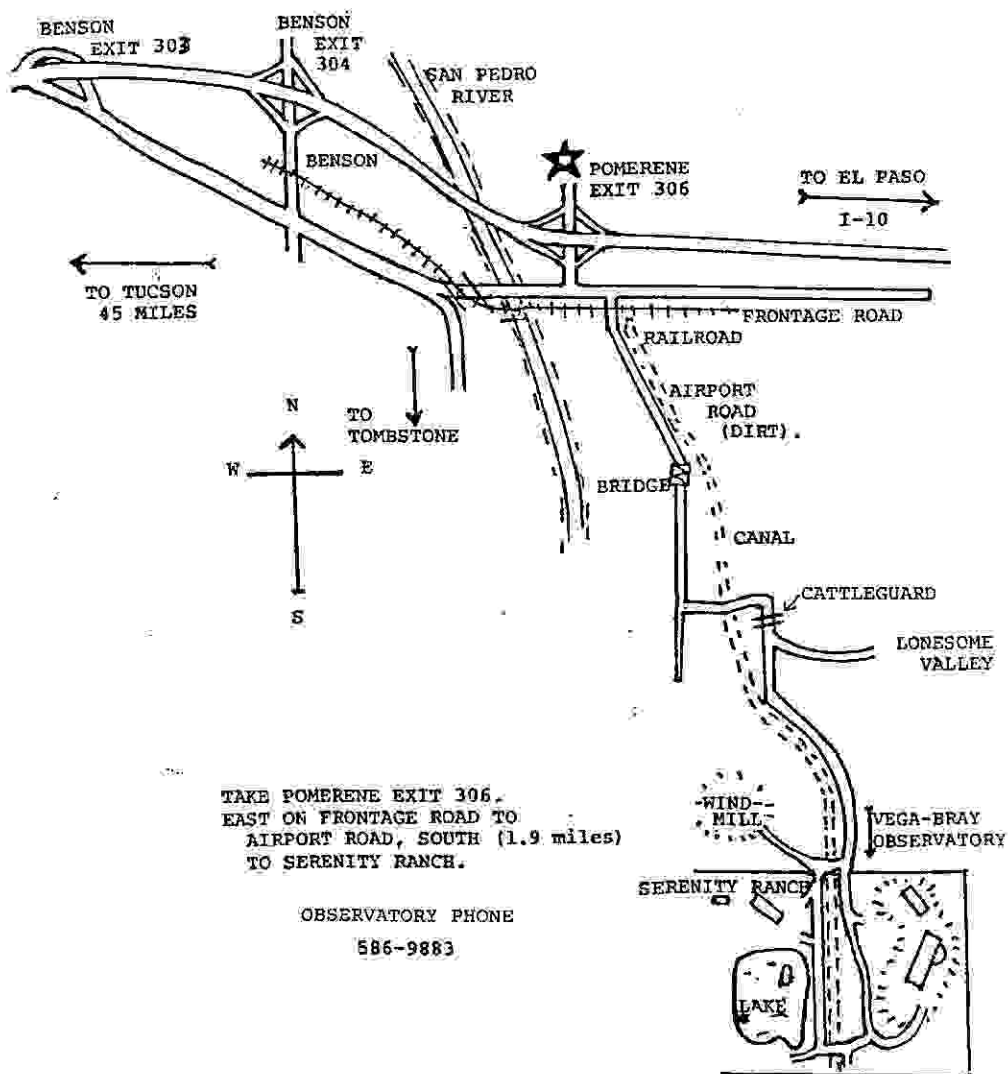
The TAAA's Annual Picnic and Star Party will be held at the Vega-Bray Observatory on Saturday, June 27th, starting at 4:00 P.M.

There are bathroom facilities and a phone (586-9883) at the observatory. There will also be a gas-grill and a microwave oven for those that want to cook their food.

Parking facilities at the top of the hill by the observatory are limited. Unload your vehicle at the top by the observatory and then park down in the parking area below the hill.

On the grounds, around the observatory, are a lake (large-mouth bass and catfish, catch and release only), a volleyball court, and open spaces for hiking. Bring your portable chairs and table and don't forget your telescopes.

VEGA-BRAY OBSERVATORY



FLANDRAU MAY BE CLOSED DOWN!

Why? Because Flandrau is a preliminary target for loosing its State Funding of about \$200,000.

What can be done by visitors?

(1) If you think Flandrau should stay open, write President Pacheco and tell him so.

President Pacheco

University of Arizona

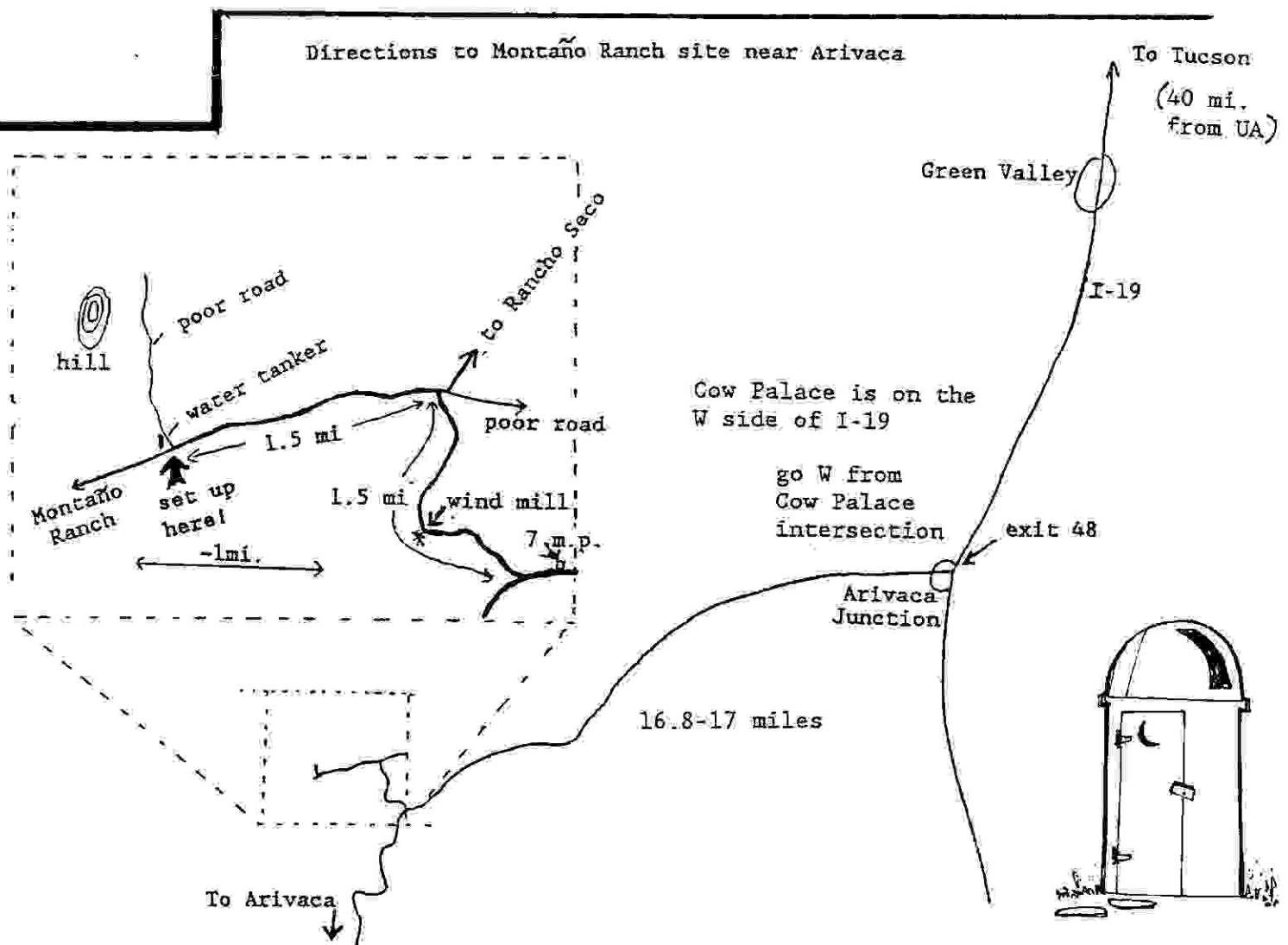
Tucson 85721

(2) Consider becoming a volunteer.

(3) Consider joining Friends of Flandrau.

What is the most likely outcome?

If enough community support is seen, Flandrau will most likely stay open. The cuts are real and if Flandrau is not cut, something else will have to be. It is a matter of determining priorities, and community sentiment will influence such decisions. Flandrau has plans underway to develop the Wizard "hands on" Laboratory, new exhibits in energy, vision, optics, and others similar to that for the Asteroid. The Wizard lab will have optical devices, pendulums, electronics, puzzles and mind games.





SKY PUBLISHING BOOK ORDER

Here's your chance

to order some good books

and save some money too!

Sky Publishing, who brings us Sky & Telescope each month, also makes astronomy books available at a reasonable discount to TAAA members. An order will be placed soon so look over this list and order something. Payment is needed in advance, costs listed include shipping charges. Make checks payable to TAAA and send to our PO Box or bring it to the next meeting. There are other books available and I will bring the complete catalog to the next few meetings or call Teresa at 579-0185 if you want to place an order. The deadline for placing an order is the August general meeting.

The Edmund Mag 6 Star Atlas (Dickenson, et al)	\$15.80
Burnham's Celestial Handbook, paper (3 volumes)	\$30.00
Sky Atlas 2000 (Tirion)	field edition \$13.10
	desk edition \$13.10
	color edition \$39.60
Norton's 2000.0, hardbound (ed. by Ridpath)	\$28.50
Uranometria 2000.0	north hemisphere \$35.20
	south hemisphere \$35.20
The Astronomical Companion, soft (Guy Ottewell)	\$10.60
Astronomy with Binoculars, softbound (Muirden)	\$ 6.20
1000+: The Amateur Astronomer's Field Guide to	
Deep Sky Observing, spiralbound (Lorenzin)	\$35.20
The Astronomers, hardbound (Goldsmith)	\$19.20
The Cloudy Night Book, softbound (Mumford)	\$ 6.90
Starlight Nights, softbound (Peltier)	\$10.00
Sky & Telescope Binders	\$10.75

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- Custom work - Machine & Wood shop work available
- Observatory Construction & Repair
- Featuring The Stellar-Dome manufactured by S.V.
in Tucson
- Repair work - Telescope cleaning & Collimating
- Knowledgeable Professional Staff
- Trade-ins welcome & Consignment

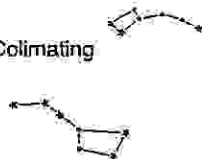


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Flandrau Flandrau Flandrau
" SUMMER

KID'S SHOWS "

The Secret of the Cardboard Rocket

Join two would-be astronauts on a magical voyage to the sun and planets in their homemade rocket. This is shown only at 10:30 a.m. Tuesdays through Fridays and 12:30 Saturdays from June 2 to August 15.

The Dinosaur Chronicles

This incredible show explores the age of the dinosaurs and may be Flandrau's "finest show ever". The weekday matinee times are Tuesday through Friday at 1:30 p.m. June 2 to August 15.

A special rate of \$2.00 per child applies for these shows.

For group reservations call 621-4515 Monday through Friday during business hours. Special showings may be arranged for 50 or more.