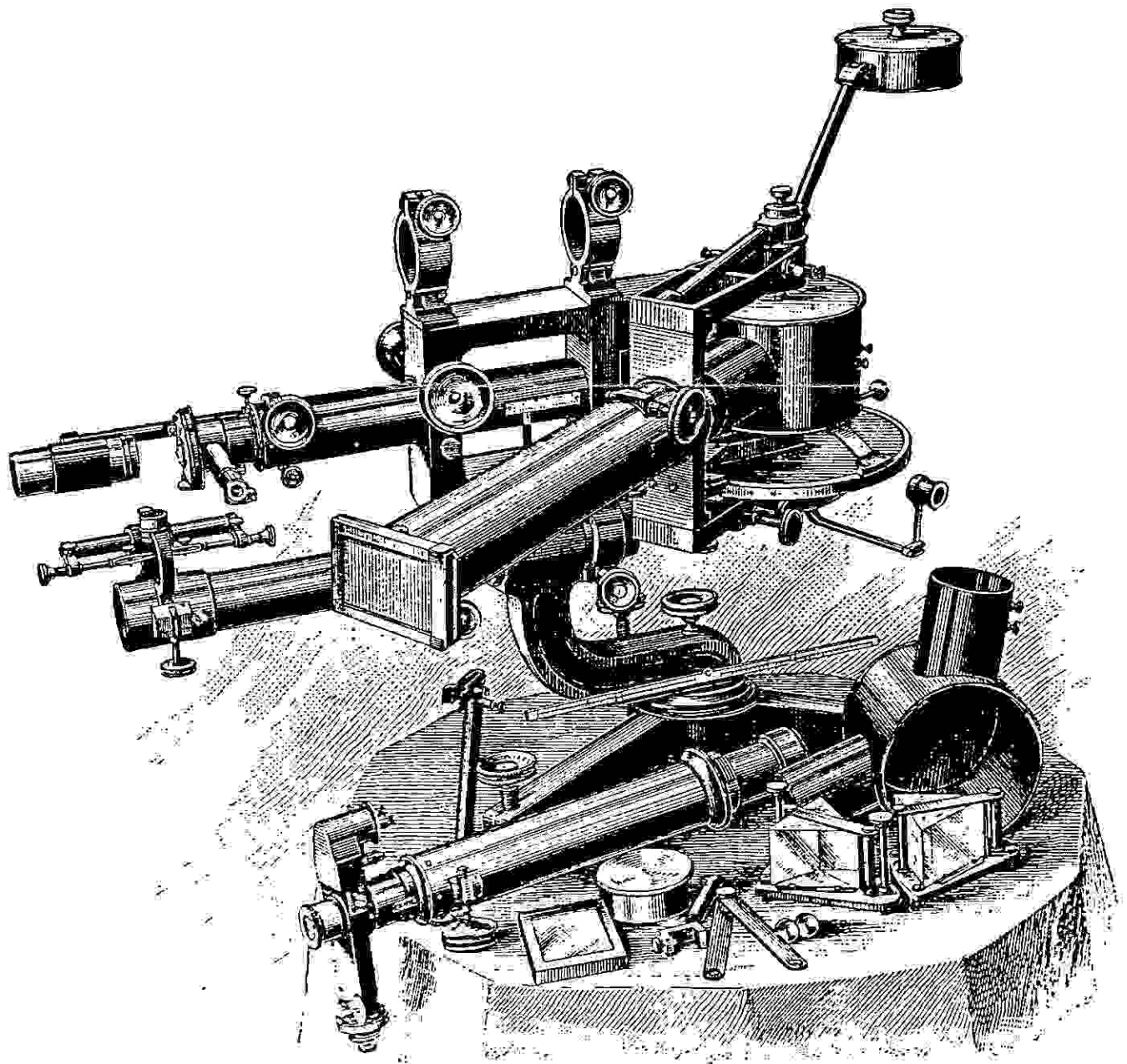


Desert Skies



Brashear's Universal Spectroscope (arranged for Photographic Research)



GENERAL MEETING - Friday, Nov. 6, 7:30 P.M. at the **NEW** Steward Observatory Auditorium. - The speaker will be Matt Johns of the WIYN Telescope.

7:00 P.M.- pre-meeting "Beginners lecture" by Teresa Lappin about "Telescopes & Eyepieces" will be held in the "old" Steward Obs. room 204. ALL are welcome!

NOTE: The November meeting will be held at the **NEW** Steward Observatory Auditorium.*

EXECUTIVE MEETING -Thursday, Nov. 12, 7:30 P.M. at Flandrau Science Center.

STAR PARTIES - Sunday, Nov. 1, 5:30 P.M. - Star Party at Loew's Ventana Canyon*
Thursday, Nov. 5, 5:30 P.M. - Star Party at Donaldson Elementary School*.
Saturday, Nov. 21 - Star Party at Arivaca .
Saturday, Nov. 28 - Star Party at Arivaca .

* see map inside this newsletter



TAAA EXECUTIVE

President	Dean Ketelsen	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
Publicist	Peggy Brown	571-0654

MEMBERSHIP IN THE TAAA

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

Sky & Telescope subscription (optional) \$20.00 (as of July 1992)

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.

Desert Skies Publishing Guidelines

- * All articles, announcements, news etc. must be submitted by the 15th 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

4 EASY STEPS TO MEMBERSHIP RENEWAL

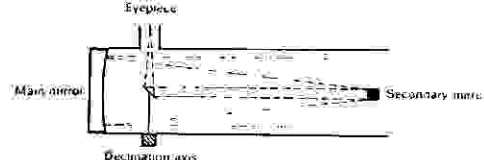
1. Pay your dues 2-3 months early. Your month of membership expiration is listed on your newsletter mailing label.
2. a) Decide if you want Sky & Telescope, then add \$20 to your membership rate.
b) Include Sky & Telescope's renewal notice, if possible.
3. Write one check, payable to TAAA.
4. Send it to TAAA, P.O.Box 41254, Tucson, AZ 85717.

Call the Treasurer if you have any problems.



BEGINNER'S LECTURE #3

TELESCOPES & EYEPIECES

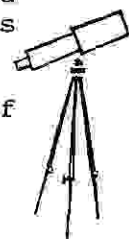


At last month's beginner's lecture I asked for input from the audience concerning topics of interest for future lectures. This month's topic will be telescopes and eyepieces and was suggested by someone at last month's lecture. I hope to cover the mainstream telescope designs and several eyepieces available to the amateur astronomer---in just 30 minutes!

Please be aware that this talk is for beginners and will not be a technical discussion about the optical performance of telescopes and eyepieces. If the only mirror you really understand is the one you stare into each morning and the only lens you have ever used was a magnifier to see bugs close up when you were a kid, then this talk is for you.

See you at 7pm on November 6th---one half hour before the start of the regular meeting.

Teresa



ITEMS 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.

FOR SALE: 6 x 30 stright-through finder (w/out brackets)...\$20 or will trade for 7-15mm eyepiece (either 1 1/4 or 0.965").....Call Chaz Bufe at 628-8720.

FOR SALE: 11 x 14" prints of the winter sky done with Steward Observatory's All Sky Camera...\$10 each; also **WANTED:** Casio Moongraph watches.....Call Mike Terenzoni at 577-6857.

FOR SALE: Plastic model of Canadian 72" telescope includes 2" concave mirror, eyepiece, equatorial mount. Makes a nice mantelpiece.....\$10; 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; **WANTED:** 25mm eyepiece..... Call Gilbert Friedman at 571-1662.

FOR SALE: 8" f/6.0 reflector, Lil Big-Foot equatorial mount, rotating tube, 12V D.C., R.A. and Dec drives, very portable, 3 eyepieces, Barlow, sun filter, 2" focuser...\$500. Call Don Dietrich at 885-5851 or write 8989 E. Escalante, Space 104.

WANTED: Celestron CompuStar-14 owners: Does your telescope track well enough for astrophotography? I am having tracking problems with a new ComputStar-14 and, so far, the manufacturer has not fixed the problem. Is this a widespread problem or a glitch with this particular telescope? If you have any information please call Marvin Vann at 648-1204 or write 441 Paseo Bolsa, Green Valley, AZ 85614.

FOR SALE: Celestron 2" Barlow (new)...\$89; Celestron 1.25" Illuminated projection reticle (new)...\$99; Meade Wedge for 10" SC (2120, LX-6, etc.)...\$70. Call Larry Solomon at 743-7924.

FOR SALE: Hallicrafters SX-110 General Coventry handband receiver/matching speaker, crystal filtering. EFO S(5?) meter.....\$100. Call Mike Hurwitz at 321-1813.

FOR SALE: Dobbins achromat 6" f/10 in homemade tube assembly...\$1000. 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.

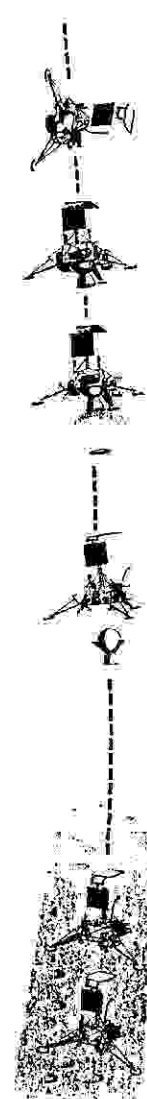
FOR SALE: Epson LQ-2250 twenty-four pin, wide carriage, color dot matrix printer, \$450. Call Dan Knauss at 881-2639.

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.

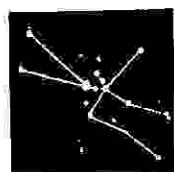
WILL TRADE: 4.8mm NAGLER eyepiece (excellent condition) and additional cash for 7mm Nagler eyepiece. Call John Zajac at 299-3203 (answering machine is always on).



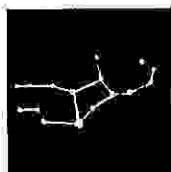


CELESTIAL CALENDAR for November 1992 (all times are in MST):

- S Nov. 1 5:30pm, **Star Party at Loew's Ventana Canyon**, convention group, 100-200 people (we make \$1 a head), please support your club by showing up for this one, see map elsewhere.
- M Nov. 2 2:09am, **FIRST QUARTER MOON**, take a picture tonight and on November 17th @ the same plate scale and compare the size.
Taurid Meteors, 12 ZHR, bright, many fireballs.
- T Nov. 3 8pm, Moon at apogee, distance 63.4 earth-radii.
- W Nov. 4 1st spectroscopic confirmation of a Transient Lunar Phenomenon (TLP), 1958.
- T Nov. 5 5:30pm, **Star Party at Donaldson Elementary**, see map elsewhere.
- F Nov. 6 7:30pm, **TAAA General Membership Meeting**, Steward Obs. new auditorium.
- S Nov. 7 1st transit of Mercury observed by Gassendi, 1631.
- S Nov. 8 Edmond Halley, English astronomer, born 1656 (Gregorian calendar).
- M Nov. 9 7pm, Mercury 2.5° N of Antares low in SW sky.
- T Nov. 10 2:21am, **FULL MOON**, the "Frosty" or "Beaver" Moon.
- W Nov. 11 7am, Mercury stationary in RA; begins retrograde (westward) motion.
- T Nov. 12 7:30pm, **TAAA Executive Meeting**, Flandreau Science Center conference room.
- F Nov. 13 Mariner 9 becomes first craft to orbit another planet (Mars), 1971.
- S Nov. 14 Andromedid Meteors, ZHR 5-15, faint.
7pm, Pluto at conjunction, passes into the morning sky.
- S Nov. 15 5am, Moon passes 5.0° S of Mars.
- M Nov. 16 Radio message beamed toward M13 by Frank Drake and colleagues using the giant Arecibo (Puerto Rico) radio telescope, 1974.
- T Nov. 17 **Leonid Meteors**, ZHR 40-150,000, last quarter Moon interferes.
4:39am, **LAST QUARTER MOON**, see November 2nd.
- W Nov. 18 5pm, Moon at perigee, distance 58.0 earth-radii.
- T Nov. 19 6pm, Mercury at ascending node through the ecliptic.
- F Nov. 20 Edwin Hubble's 101th birthday (1889-1953).
- S Nov. 21 **TAAA Star Party**, Arivaca site, see map elsewhere.
- S Nov. 22 The phases of Mercury first seen by Hevelius, 1644.
- M Nov. 23 Andy Meyer, American amateur astronomer, born this date 1956.
- T Nov. 24 2:11am, **NEW MOON**, beginning of lunation 865.
- W Nov. 25 12:50pm, Moon at ascending node, longitude 261.5°. 1pm, comet Swift-Tuttle at perihelion.
- T Nov. 26 5am, **Venus 1.9° S of Uranus**, both are 41° from the Sun in the evening sky.
- F Nov. 27 6am, **Venus 3.0° S of Neptune**, both are 41° from the Sun in the evening sky.
- S Nov. 28 **TAAA Star Party**, Arivaca site, see map elsewhere.
- S Nov. 29 9am, Mars stationary in RA, begins retrograde (westward) motion.
- M Nov. 30 10am, Mercury stationary in RA, begins direct (eastward) motion.



The constellation Taurus, from a Swiss calendar, 1989.



The constellation Virgo, from a Swiss calendar, 1990.



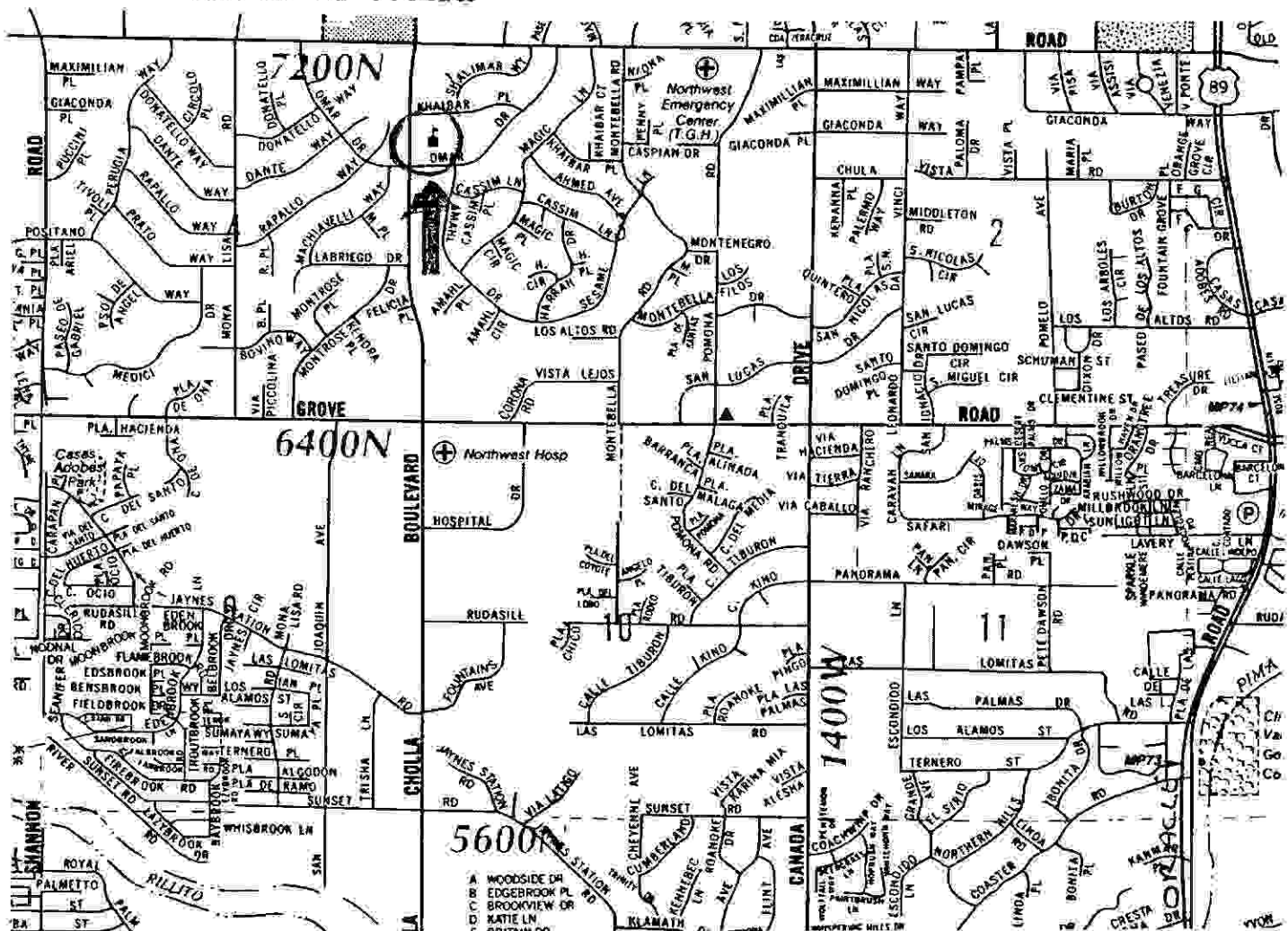
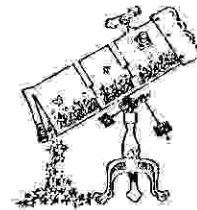
The constellation Aries, from a Swiss calendar, 1990.

or November 1992 (in MST):

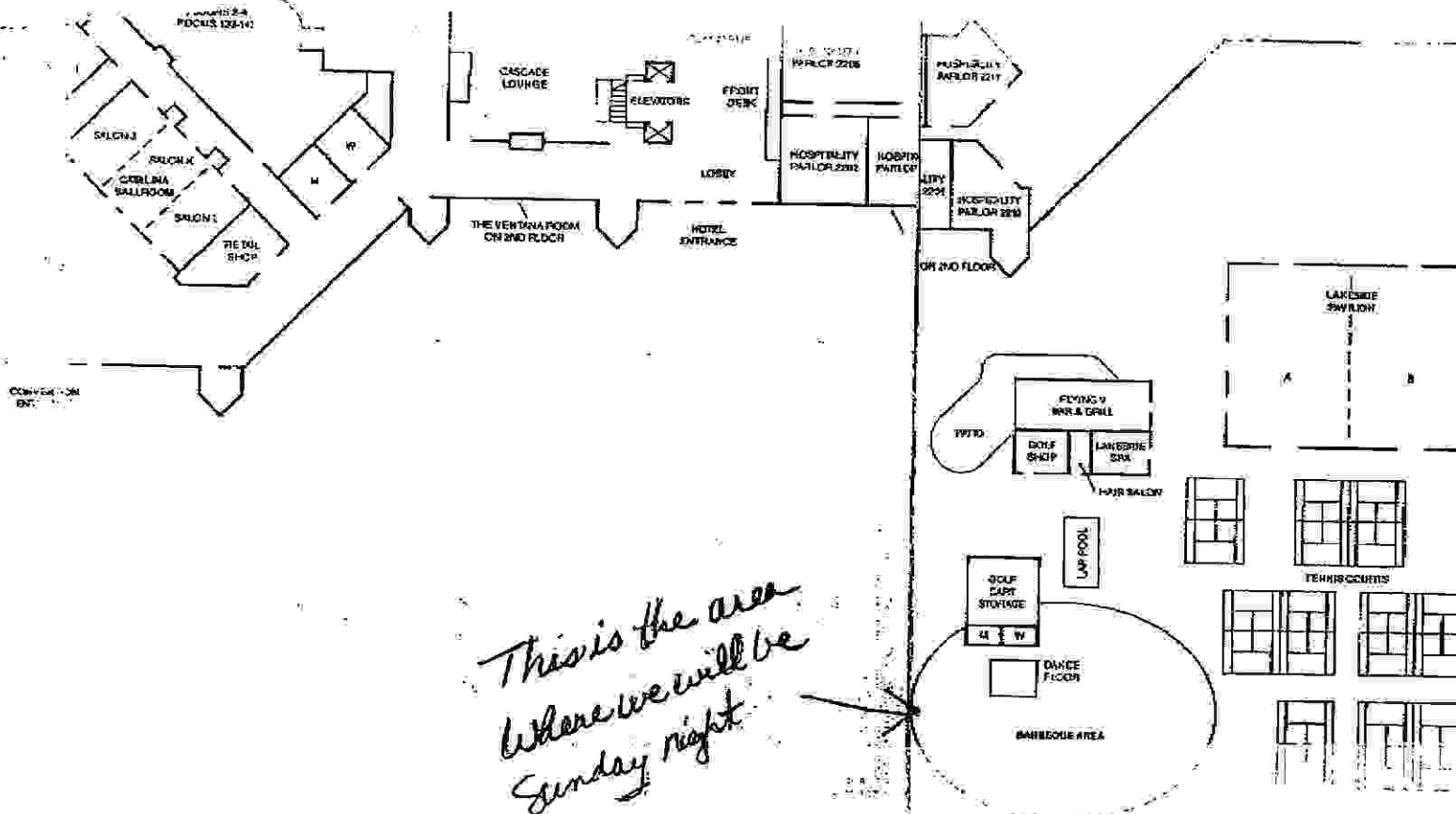
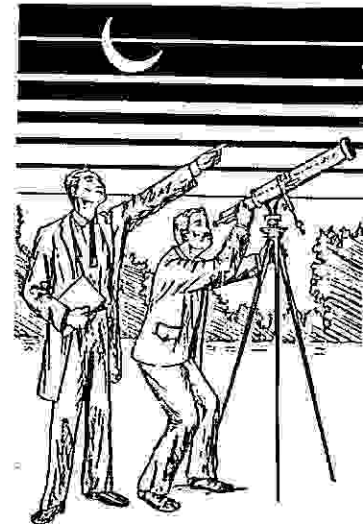
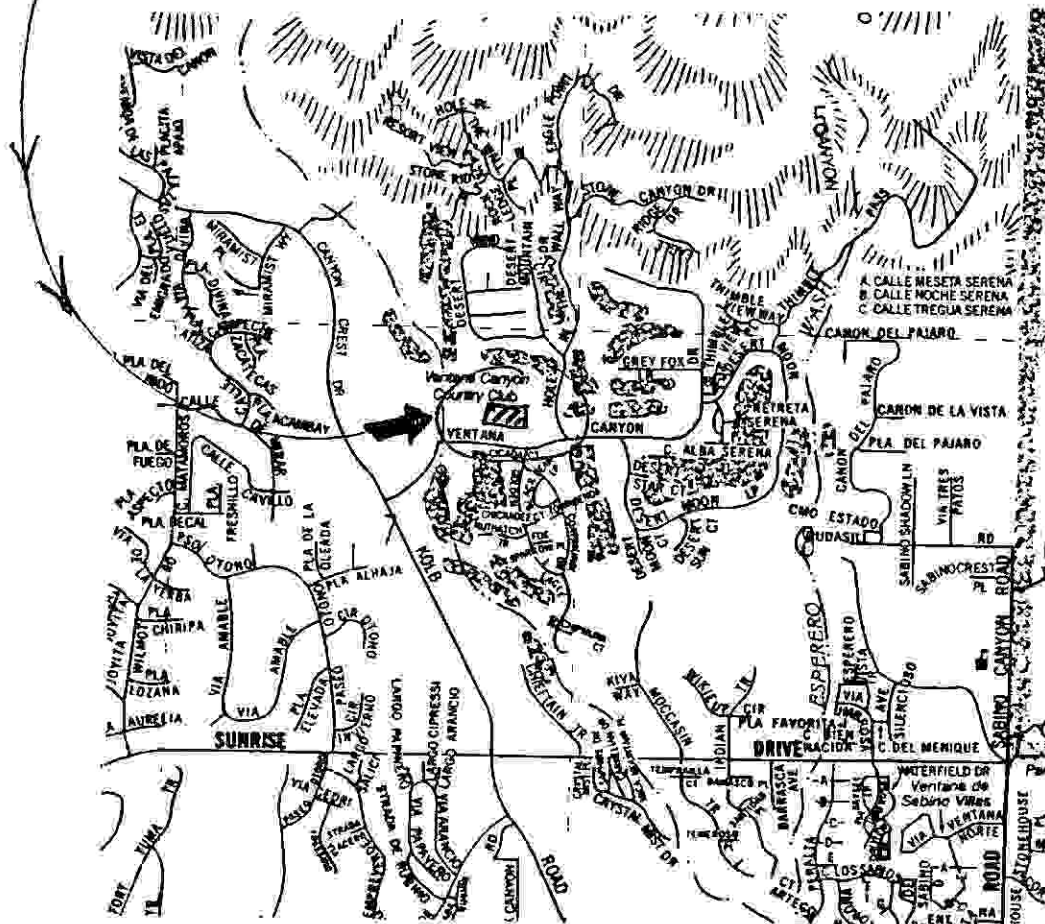


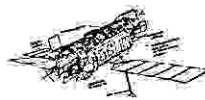
Andrew J. Meyer

SET UP BY 5:30PM



STAR PARTY @ LOEW'S VENTANA CANYON RESORT
SUNDAY, NOVEMBER 1, 1992
SET UP BY 5:30pm
(CALL ANDY MEYER @ 742-4549 IF YOU CAN HELP OUT)



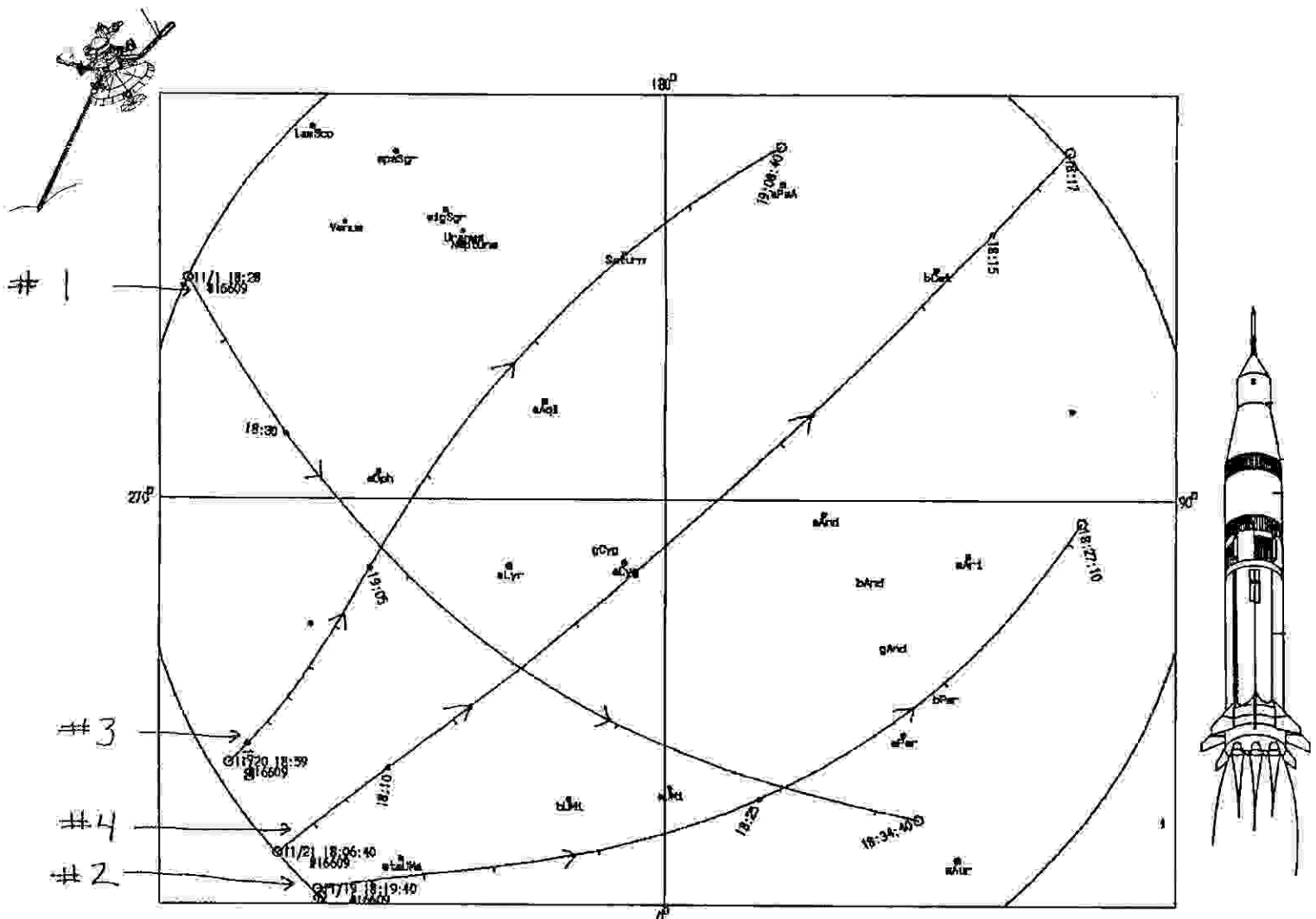


SATELLITES IN NOVEMBER

We'll focus on the Mir Space Station as other satellites of interest won't be visible in our evening skies this month. Fortunately, it makes four decent passes. Mike Terenzoni and I had the opportunity to see Mir on September 19th. It made for an interesting sight as it ducked in and out of scattered clouds shining around -1 in magnitude. A real treat was the October 2nd pass of Rosat. Those of you who saw it witnessed quite a show as it suddenly flashed into brilliance in the northeast above the Catalinas for about 5 seconds at a magnitude rivaling Venus! Rosat's solar panels were apparently pointed at just the right angle. For the Mir passes this month you can use the map by pointing to the north with the intersection of the two lines representing the zenith.

If the orbital projections hold up the November 20th pass looks real interesting as Mir will come extremely close to eclipsing Saturn. Here's the specifics for this month:

#	Date	Time	Direction
1	11/01	6:28 - 6:34 pm	SW to NE
2	11/19	6:22 - 6:27 pm	NW to SE
3	11/20	7:03 - 7:08 pm	NW to SE
4	11/21	6:09 - 6:17 pm	NW to SE



MIR TRAJECTORIES (STANDING NORTH - OVERHEAD VIEW) Ep J1992.86 Eq J1992.86

Predicted times are approximate - allow a few minutes either side of those indicated. BRAD BECKER

from

Antonius L. Ponjée

658 Gilda Drive • St. Augustine Shores, FL 32086

FLORIDA ASSOCIATION OF ASTRONOMY CLUBS AND SOCIETIES

INTERIOR TELESCOPE QUALITY.

- * Reputable telescope (Tx) makers sell good Tx's, but occasionally one with a less perfect optical performance slips through (see recent Sky & Tel and Astronomy articles).
- * The "department store" quality Tx can have a fairly good optical performance, when used within the "normal" magnification window for their diameter. The advertized magnifications are exaggerated for sales purposes, and are more "arithmetic", than giving actual performance data.
- * The eyepieces provided with the department store Tx's are not great, but an experienced observer can see something with them. A good eyepiece, which gives 30-50x is justified if the Tx is worth some \$30-40.
- * The weak point of the department store Tx's is no doubt the poor Tx mount and Fx mount.
- * The 1 ring - 3 screws Fx mounting systems should be outlawed in A. L. Ponjée (ALP)'s eyes.
Many Tx's stay in the closets because of Fx problems: if you can't find it, you can't see it!
- * A. L. Ponjée (ALP) has a standard presentation on upgrading department store type Tx's, so that they can be used for observation.

There are no "lemon laws" for lousy telescopes, nor is there an ombudsman, and the Better Business Bureaus do not know about these strange instruments.

The Tx industry had once a plan to form a group to ensure good good quality, but the whole idea fell through. Sooner or later the Tx industry will have to comply with the Quality Assurance laid down in the ISO 9000 = ANSI Q90 Series.

What to do in case you are not happy about a Tx's performance?

A. Optical performance.

1. Compare Tx with same or similar one, the owner of which is really happy or has the same problems.
2. Check collimation to see if it gets better.
3. If not yet up to snuff, contact manufacturer if under warranty or NOT.



4. If manufacturer cannot/will not resolve it, you may have to go to an optics lab for having the Tx checked out; NOT cheap, but in case you have to go to court, a report from a qualified lab is necessary. Small Claims Court or other?
5. Eyepieces are the easiest to check side by side using your friend's eyepieces on your scope; this is just a qualitative, not quantitative test. Only an optics lab can come up with figures.

B. Mechanical performance.

1. Drives, especially the more complicated ones, can develop some problems; under warranty contact the manufacturer; after that you need them for service.
2. Sloppy mounts: bad design
sloppy manufacture

When ordered from a reputable Tx manufacturer, contact him/send it back.

The department type Tx's are well known for not so good design and sloppy manufacture, but basically you are on your own to fix this; not so difficult, and here astro clubs can help the novice who got one for Xmas, and make her a member of the club.

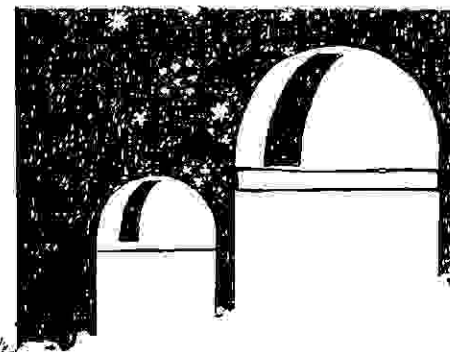
C. General.

1. In case of persistent problems, prepare a write-up for for your club newsletter. Since the newsletter should be copied to the Editor of the REFLECTOR and A. L. Ponjee, a wide audience can be reached. Do not forget that there is power in numbers, and that even Tx manufacturers do not like negative publicity.
2. Write to the Consumer Action/Testing Committee of the Astronomical League with full details to the following address:

John Allseits
800 E. Allanson Rd.
Mundelein, IL 60060

Prepared by A. L. Ponjee
August 6, 1992

Faacs20806/alp29



YOU SAY THAT STEPHAN'S QUINTET ISN'T REAL OBVIOUS IN YOUR C-8?

Well--how would you like to see it through the TAAA 30" telescope someday? You will be able to and it may be sooner than you think. Donated telescope is in need of repair (coating/painting). A donation of \$100 could fix it! It is going to take some \$\$\$\$ to make it happen. You can help out by making a donation to the TAAA 30" Telescope & Land Fund.

But let's be honest--most of us can't afford to make large sized donations. But maybe you can afford \$5 a month? That becomes \$60 in a year. That's \$60 closer to seeing Stephan's Quintet through the 30"!

End the year with a tax deductible donation! (See the treasurer for info.)

Donate what you feel comfortable with and we'll keep a record. At the end of the year you'll get a receipt showing your total donation. Drop a check in the mail or bring it to the meetings each month. Please use the form below to make bookkeeping a little easier. Make checks payable to TAAA. Send to PO Box 41254, Tucson, AZ 85717.

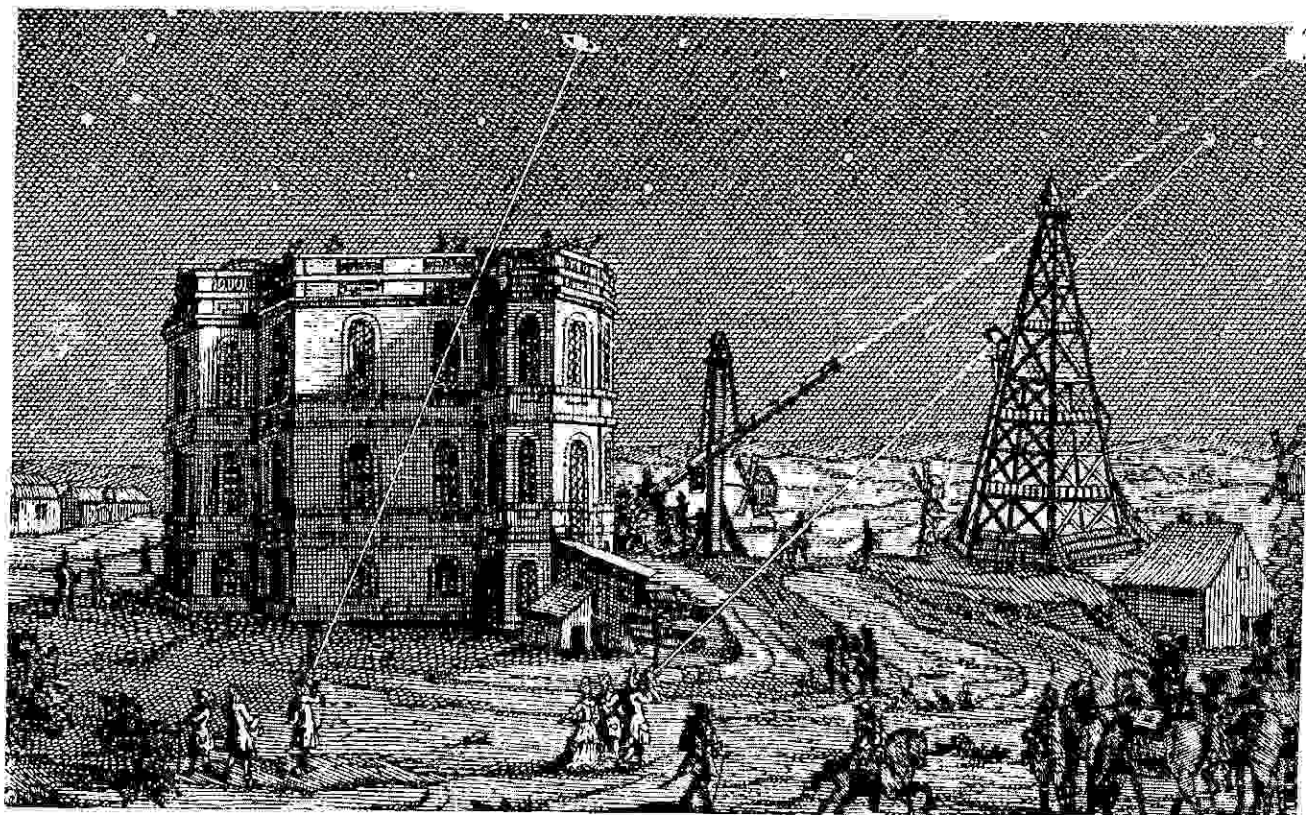
I WANT TO HELP OUT!!

I want to help out with a donation of \$_____ to the
TAAA 30" Telescope & Land Fund.

NAME_____ PHONE_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

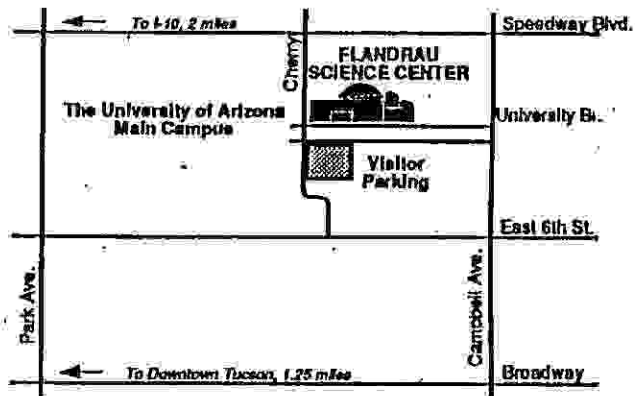


Above is a nighttime view of the Paris Observatory illustrated on the facing page. (Alfred Battex
Discovery of Nature Simon & Schuster, 1965.)



THE FLANDRAU STAR THEATER

PROGRAM INFORMATION : 621-STAR
 PLANETARIUM OFFICES : 621-4515
 ASTRONOMY NEWSLINE : 621-4310



PLANETARIUM PARKING—Free evening parking is available directly North of the building. Additional parking is available in the visitor parking lot, south of the building, across University Blvd. ★

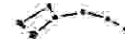
This unique facility provides entertaining, educational programs in our Star Theater for over 100,000 visitors annually. In addition, science exhibits provide challenging and memorable experiences on such subjects as meteorites, the Milky Way, moon rocks, the sun and telescopes.

Telescope • Binoculars • Microscope

Tucson's Complete Astronomy Shop



- We SELL & BUY
 - NEW & USED Equipment
from Celestron to Questar & Accessories
 - Books, Posters, Maps & Star-Charts
 - 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



90 Days Same As Cash
 Credit cards accepted

Telescope class

STELLAR - VISION & ASTRONOMY SHOP

571-0877

1835 S. Alvernon #208
 Alvernon & 29th St

Come in for your Discount Card

Motor Machines Observatory Sales/Services

- * 8 ft. Diameter fiberglass domes for as low as \$3000
- * Repairs
- * General contracting, machine and fabrication service

Call Aaron Brown 571-0654

