PROCEDURE FOR OPENING AND CLOSING THE 24 INCH REFLECTOR

OPENING:

Observatory:

1). Turn on main room lights.

2). Sign in main room log; if alone, be sure to lock the front door before going into the domeroom area..

In Dome:

1). Turn on floor lights; adjust to convenient level.

2). Turn on observing deck lights; check underdeck and darkroom doors that they are locked.

3). Turn on dome power.

4). Inspect observing deck area for possible damage; if found, enter in dome and in main room logbooks.

5). Log in at observing deck log book as follows:

a) DATE
b) EASTERN TIME IN 24 HOUR NOTATION
c) Q.O. NUMBER
d) INITIALS
e) PURPOSE

6). Open dome; allow 15 to 20 minutes for temperature adjustment. Note: on the same wall that the floor and dome power switches are mounted, there is a control panel for ventilation. This can be used on humid nights to improve cooldown times.

7). Insert key and activate drive; RED BUTTON lamp should be OFF until you push it on.

8). Adjust sidereal clock;center 'scope on known star;
hold blue button in, and move sidereal clock to match coordinates.

9). Attach the TelRad to the telescope, if you wish to use it.

10)Rotate instrument to west side of pier,
set declination axis and tube parallel to
floor and deck. Remove all dust covers and
store on observing deck table.

11). Elevate instrument to point to zenith.

CLOSING:

In Dome:

1). Rotate dome to storage position; close and lock slit.

2). Push red button off; turn key to off position and remove.

3). Log out; observing deck as follows:

a) DATE
b) EASTERN TIME IN 24 HOUR NOTATION
c) Q.O. NUMBER
d) INITIALS

4). Rotate instrument to west side of pier,as in opening procedure, install dust cover and caps.Remove TelRad, if used, and replace it in its storage box.

5). Rotate instrument to storage position. i.e., zero degrees declination, hour angle at 6 hours, with the tube pointing east.

6). Turn observing deck lights to maximum brightness.

7). Check dome area and clean up, if needed.

8). Move to floor level; turn off dome power and observing deck lights.

9). Adjust floor lights to maximum, then turn off.

10). Lock dome door.

Observatory:

1). Check kitchen area; stove off, etc., lavatory lights out, check all doors for security, air conditioning/heating switch to UNOCCUPIED.

2). Sign out in main room log.

3). Lock and exit through front door.

24 INCH TELESCOPE SPECIFICATIONS

Model 131	24 inch Cassegrain Telescope.
Built by	Group 128 Waltham, Massachusetts (no longer in business)
PRIMARY MIRROR:	25 inch stopped down to 22 inches for better contrast. 24 Inch (.61 meter) f/3 Paraboloid. Pyrex glass with overcoat.
SECONDARY MIRROR:	7 1/2 inch f/12 Hyperboloid. Pyrex glass with overcoat. Compound Focus (at eyepiece) f/12 Prime Focus (inaccessible) f/3
FOCAL LENGTH:	264 inches (6705.6 mm)
TUBE:	1/16 inch rolled aluminum.
MOUNTING:	Modified German Equatorial. Welded steel plates, built for our lattitude.
EYEPIECES:	55mm Plossl 122 power 40mm Plossl 168 power 32mm Plossl 209power 20mm Plossl 335power
FINDER SCOPES:	1). 8x50mm 2). 20x125mm 3). TelRad reflex sight
SCOPE WEIGHT:	One Ton. Tube = 500lbs. Counterweights = 500lbs. Base and Mount = 1000lbs.
FOCUSING SYSTEM:	Stepper motor driven - Two inch movement of secondary mirror. (not a true cassegrain telescope)
DRIVE SYSTEM:	1). Stepping motors on both axis for slewing and tracking. 2). Sidereal clock on R.A. axis. 3). Manual axis clamps.
ACCESSORIES:	1). 4x5 Plate camera. 2). Counterweights to balance 100 lbs.
RESOLVING POWER:	Theoretical - 0.207 arc seconds.
PRICE:	When purchased; $28,500 Today; $100,000+