

## 12" INCH PROCEDURES FOR USE ANNOTATED CHECK LIST

### I. Opening/ Preparing to observe

Key with OS opens the north outside door and the ramp of the Observatory; key marked 27 - 28 unlocks the Club Room, (Rm 28); third key (AAAA3) unlocks the dome. **It is good practice to keep the keys in your pocket.** Once inside the building, make sure that the exterior doors are locked shut.

1. Upon entering the dome, check around dome for current condition.  
(Ex. power - OFF; slit - Closed and Secured, balcony door locked, etc.)
2. **SIGN IN and begin the LOGBOOK entry!** Record any issues noted from your inspection in item # 1.
3. **OPEN THE NORTH BALCONY DOOR AND THE DOME SLIT & WINDOWS as desired.**  
This is to allow the dome interior to come to equilibrium with the outside.

**Never open or close the dome slit with the lens caps off**

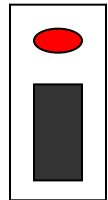
Open slit with a hook-pole located in 201 (the closet next to the desk). Unfasten the ring from the retaining slot on the left side of the slit, then pull down on the ring on the right side. If this is difficult, leave a note in the logbook so that it can be fixed.

**Maximum wind: 35 mph.**

4. **KEEP THE INSIDE ACCESS DOOR CLOSED** to prevent drafts and turbulence in the dome.  
**Now is a good time to collect the eyepieces if you haven't already got them. [see below 'Using telescope to observe]**
5. **REMOVE THE FINDER SCOPE CAP.** Do **NOT** jump to reach it; use a chair if necessary.
6. **REMOVE THE PRIMARY LENS CAP.**

**1)** Lift the drawtube to the full "UP" position and **GENTLY** tighten the Focuser Friction Thumbscrew and remove the yellow storage sling. [If necessary, refer to the separate instruction sheet.] **2)** Unlock the telescope; **3)** check to see that the telescope is properly balanced (visually and by cautiously checking to see that the scope does not move freely after an applied force. **4)** Move the telescope to approximately 0 declination. **5)** Lock the declination (the **smooth** knob) but leave the right ascension (**fluted** knob) unlocked. Using the ship's wheel on the north side of the pier, rotate the telescope clockwise (westward) until the lens cap is within reach. **6)** Remove the lens cap by gripping both sides firmly and pulling evenly.

7. **STORE BOTH LENS CAPS INTERIOR SIDE DOWN.**
8. **TURN ON THE POWER FOR THE TELESCOPE AND DOME.** Lower west side of pier. Open the hatch and locate the **RED** rocker switch on the power strip just inside the opening on the **RIGHT**. Turn this switch on. The switch and a small **RED** LED will illuminate when the power is ON.
9. **TURN ON THE DRIVE MOTOR (RED SWITCH) AND SETTING CIRCLE LIGHTS (BLACK SWITCH)**  
The two switches are located on the north side of the pier **ABOVE** the Sidereal Time dial.



**NOTE PLACARD REGARDING MOTOR FAILURE TO START.**

**CONTINUE TO MONITOR MOTOR OPERATION.**

**Never leave the telescope unattended with the drive motor running.**

### Using the Telescope to Observe

The eyepieces are stored in a plastic case in the basement Club Room (room 28), in the gray standing cabinet. Use care when changing them. Some of the eyepieces do not fit very tightly.

**NEVER TOUCH OR CLEAN ANY OPTICAL SURFACE**

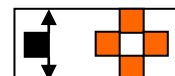
**UIAS  
eyepieces**

**Use ONLY the RED knobs to move the telescope.  
Do NOT push or pull on ANY OTHER PART OF THE TELESCOPE!**

**It is important to remember to unlock the telescope before moving it and lock it again once the object has been located. Always be aware of balance when releasing the telescope. (If it becomes unbalanced, it could move by itself and hit the pier.)**

**NOTE: The telescope is nearly impossible to move near declinations +90; move it to +40 first.**

There is a control box located on the telescope near the finder. The fine adjust [ **square** ] buttons are operable. **The toggle switch turns the dome**



## II "ROLL-OVER" PROCEDURE:

**NEVER LET THE COUNTERWEIGHTS GET ABOVE TELESCOPE TUBE.**

1. **PLACE THE TELESCOPE IN STANDARD POSITION** (hour angle=0, declination=40 ).
2. **MOVE THE TELESCOPE TO +90**
3. Unlock the right ascension, lock the declination, and **ROTATE THE TELESCOPE OVER THE PIER** using the captain's wheel. Move the telescope slowly and watch what you're doing.
4. Once the telescope is on the other side of the pier **UNLOCK THE DECLINATION AND MOVE THE TELESCOPE TO A COMFORTABLE POSITION.** Don't hesitate to use a chair in reaching the telescope. **MOVE THE TELESCOPE AWAY FROM THE PIER.**
5. When finished observing on the west side of the pier, **REVERSE THE PREVIOUS STEPS** to return the telescope to the other side.

## III. Closing

1. Turn the **clock drive and setting circle lights off** (North side pier)
2. **Replace the primary lens cap.** (See #6 in the "opening" section)
3. Place the telescope in **STANDARD POSITION** and **LOCK** the knobs. (Hour angle=0, declination=40 )
4. Insert eyepiece cover.
5. Attach the yellow focuser sling. [If necessary, refer to the separate instruction sheet.]

**IT IS IMPORTANT TO ATTACH THE SLING PROPERLY SO AS TO NOT TORQUE OR PULL ON THE FOCUSER.**

6. Put the finder scope lens cap back on.
7. Move dome to face **east, close the slit**, secure the chain in the slot, and put the hook back in closet.
8. Turn off the main power. (**RED** rocker switch in side west side of pier)
9. Close and lock the north balcony door, close and lock the windows, and lower the window shades.

**DO NOT PULL THE SHADES BELOW THE BOTTOM OF THE WINDOW SILL LEDGE  
CONFIRM NORTH BALCONY DOOR IS LATCHED AND BOLTED**

10. Return eyepieces all equipment to the proper places.
11. Complete the logbook entry. Objects observed, problems with the telescope or equipment.

**REPORT MAJOR EQUIPMENT PROBLEMS** to one of the officers.

12. Turn off the lights in the dome.
13. Close and lock the dome door. The lock allows the door to remain unlocked during use.  
Therefore make sure it is locked when you leave.
14. Be sure the outside door is locked.
15. Turn the keys into the Astronomy Department by 11:00 a.m. the following business day.

SUMMARY OF CHANGES  
(previous version: 07-18-2016)

- 1) Removed dome use instructions regarding unusable motor.
- 2) Removed assumption of responsibility and signature section; replaced by cards
- 3) Added instructions re clock drive motor.
- 4) Formatting