

- You must be checked out on the telescope by one of the telescope committee. Your CfA entry card will then be able to open the telescope door.
- You may use the standard CfA room reservation form to reserve the telescope.
- Emergency number: Jonathan at 617-447-9618

STARTUP CHECKLIST

1. Swipe card key in door.

YOU ARE NOW RESPONSIBLE FOR THE TELESCOPE. If you go home when there are still people there, make one of them (who must have access rights) swipe their card so that they take over responsibility.

- 2. Lights on. There are two sets of lights, red and white. Each has a switch by the door and a switch on the pier.
- 3. **BEGIN LOGBOOK** entry. Record your presence in the logbook, giving date and time and number of people present.
- 4. DOME ROTATION POWER ON. Lower dome box on north wall, turn key.
- 5. **SLIT POWER ON**. Slit Box on dome next to slit; use stairs to reach it, and turn key. Note orange electrical strip around base of dome, and don't stick your fingers in it.
- 6. **UPPER SLIT OPEN.** Hit top left black button on slit control panel. Yellow light will come on during 3-second delay.
- 7. LOWER SLIT OPEN. Wait till upper slit has moved at least 30 cm. Hit bottom left black button on slit control panel.
- 8. **ADD EYEPIECE**. The telescope is stored with a film canister in the tube instead of an eyepiece. Use one of the standard eyepieces or bring your own. Turn the clamp to make sure the eyepiece is in tight.
- 9. **ROTATE DOME.** Rotate dome to correct part of sky, using Dome Box buttons. At least move the dome a little bit, so that any debris (snow, leaves..) falls in before telescope lens is exposed. Before changing direction, use red STOP button and wait for dome to stop moving.
- 10. **TELESCOPE TO HORIZONTAL.** Rotate telescope to horizontal, making sure you are holding on to it at all times. Telescope should not go below horizontal. Dome should be already open.

WHENEVER MOVING TELESCOPE:

- Move it slowly and make sure it is always under full control.
- Check there are no obstacles in the path of either end of the telescope, like the movable stairs or your friend's head.
- Don't move it holding the movable part of the eyepiece end as you will lose focus and potentially damage the mechanism.
- NEVER NEVER NEVER under any circumstances touch the main lens.
- 11. LENS CAP OFF: Carefully place stairs at lens cap end; rotate cap and pull; store cap on table.
- 12. **DRIVE ON.** Turn on telescope drive using small switch on W side of pier. Check that red light comes on. It's fine to move the telescope with the drive on.
- 13. FINDER CAP OFF. Push the lever on the finder scope and rotate finder cap.

You are now ready to observe.

OBSERVING CHECKLIST

- 1. Locate object approximately in sky.
- 2. Move dome to approximate location.
- 3. Sight along finder and move telescope to approximate location.
- 4. Locate object with finder and main telescope. We like to 'star-hop' using the finder and a star atlas, starting from a bright star and iterating to your target. It is also possible to use the setting circles to align the telescope on a given RA and Dec. Use a low power eyepiece in the main telescope when searching for your object.
- 5. Adjust focus using knob on side of tube.
- 6. Be very careful when changing eyepieces: first remove old eyepiece and store it carefully on the table, then put new eyepiece in and tighten the clamp. Don't try and juggle two eyepieces in your hand at the same time!
- 7. The clock drive should keep the object centered for a while, but eventually you will need to adjust the pointing, either by very gently moving the whole telescope or by twiddling the slow motion control knobs.
- 8. IF THE WEATHER DETERIORATES: Close the dome if it looks like it will start raining, or in the presence of very strong winds. Close the dome AT ONCE and shut down the telescope if any precipitation begins.
- 9. IN CASE OF PROBLEMS: Email Jonathan McDowell (jcm@cfa), or any other telescope committee member giving details on the problem. If the dome slit will not close due to electrical failure, the telescope should be covered by a tarp. In a major emergency (potential damage to telescope) you can try calling Jonathan at 617-447-9618.

SHUTDOWN CHECKLIST

- 1. DRIVE OFF.
- 2. FINDER CAP ON.
- 3. LENS CAP ON. Place cap slits over tube pegs and rotate to lock in place.
- 4. **TELESCOPE VERTICAL**. Stow on W side of pier.
- 5. LOWER SLIT CLOSED. Push lower right button on slit box. Upper slit will not close until lower slit close is complete.
- 6. UPPER SLIT CLOSED. Wait..... ok. Now push upper right button on slit box.
- 7. SLIT BOX POWER OFF. Turn key on upper box.
- 8. DOME BOX POWER OFF. Turn key on lower box. Dome position does not matter.
- 9. **EYEPIECE STORED**. Remove eyepiece and put in film canister (AKA Anti-Spiders-Device).
- 10. LOGBOOK. Complete logbook entry for the evening, giving closing time. Add at least a sentence describing your evening, and sign entry.
- 11. LIGHTS OFF.
- 12. FINAL CHECK. Did I really, really switch off the drive?
- 13. CLOSE DOOR. Make sure door is firmly locked.