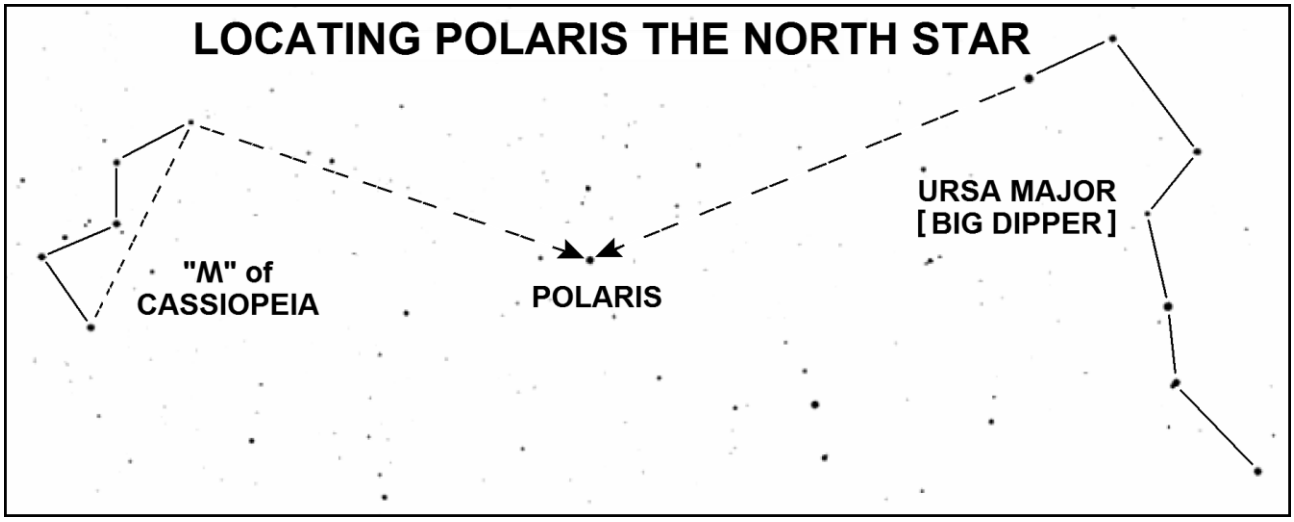
Some Beginning Observing Tips and Techniques

1. Telescope Alignment, and Orientation – Finding North

Orientation: Locate North (Polaris) using either the "Big Dipper" or Cassiopeia as pointers (see below.) When the Big Dipper is up, Cassiopeia will be down, and vice versa, always allowing you to locate Polaris. Once you find north, you will be able to locate other constellations and celestial objects more easily.



Telescope Alignment: Make sure your finder scope is aligned properly. Select a bright star or planet. Center it in the telescope eyepiece and check to make sure that the cross-hairs are centered. If not, adjust the position.

2. Observing

Initial Observing – Lowest Magnification First: For each object, always begin observing using the lowest power eyepiece (ex. 40mm). The lower magnification and wider field of view will allow you to find the object more easily. You can then move on to higher magnifications.

Optimum Magnification: Optimum Magnification is somewhat subjective. It can depend on the size of the object, its brightness, and other factors. For each object use whatever magnification shows you the best detail you desire.

Averted Vision: Your eye is more light sensitive in a dark environment around the edges (where the "rods" in your eye are located), rather than at the center (where the "cones" or color receptors, are.) Averted Vision is simply not staring directly at a faint object when trying to view it, but rather observing and concentrating on it from the side of your eyes' retina. It can mean the difference between seeing a difficult or dim object, and not seeing it.

Night Vision and Red Flashlights: Use a red LED flashlight to read charts and to locate things in the dark. Visual dark adaption, night vision, is the process by which the human eye increases its sensitivity to low levels of light. Compared to daylight, the sensitivity can increase 10,000-fold. Red light is easier on dark-adapted eyes. Hence, astronomers use red light to work around a telescope and read star maps so they will not lose their night vision.

3. Keeping Warm

- Most heat loss occurs through the head, so keep yours warm with the proper head gear.
- Body heat can also drain through your feet into the cold ground. Bring heavy socks.
- Dress in several layers.
- Keep disposable warmers in your side pockets for quick hand warm-ups.

4. Closing Down

Make an "equipment check" before you leave your observing site. Make sure all eyepieces, Barlow lens, filters, and other small items (telescope & eyepiece covers, set screws, etc.) are all accounted for. All are easily lost in the dark.