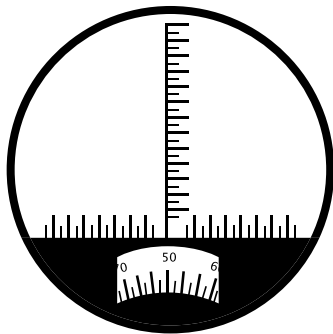# BARSKA®

HOW TO USE INTERNAL RANGEFINDER AND DIRECTIONAL COMPASS RETICLE

To use the rangefinder scale, you will need to know either (1) the size or (2) the distance of the object. When the size of the object is known, the rangefinder scale indicates the distance to the object. When the distance to the object is known, the rangefinder scale tells you its size. Each mark on the vertical scale has a value of 5 MIL (1 MIL is equivalent to an angle that can determine an object one meter in height at a distance of 1000 meters.) Therefore, if a navigation chart gives the height of an object, by sighting on it and counting the number of MILs, you can determine how far away the object is. The horizontal scale should be aligned with the base of the object that you are sighting on. The increments on the horizontal scale can be used to determine the distance to the object if the width of the object is known and calculated using the formula.

1. To measure the DISTANCE (object size must be determined):

$$\text{Distance} = \frac{100 \times \text{Object Size}}{\text{Rangefinder Scale Reading}}$$

2. To measure the SIZE (object distance must be determined):

$$\text{Object Size} = \frac{\text{Distance} \times \text{Rangefinder Scale Reading}}{100}$$

3. USING THE DIRECTIONAL COMPASS
   The compass scale is in one degree increments. It is aligned with the vertical range finding scale. North is represented as 0°, East as 90°, South as 180° and West as 270°. When using the compass, bear in mind the local variation between magnetic North and true North.