

NAVY DEPARTMENT  
OFFICE OF CHIEF OF NAVAL OPERATIONS  
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NAVAL AVIATION TRAINING BULLETIN NO. 132

**Subject:** Sextant (or Octant) Mirror Trainer

**References:** (a) Device 1-QQ1 (Mirror)  
(b) Device 1-QQ2 (Sextant)

1. The Sextant Mirror Trainer provides facilities for instruction and practice in the use of the bubble sextant. Its use is easily integrated with classroom study and is independent of location, time of day and weather.

2. The device consists of a mirror (1-QQ1) with a bracket which may be easily attached to bulkhead or overhead and an adjustment which permits the mirror face to be set at any desired angle with the horizontal. Standard bubble sextants (1-QQ2) are also provided with an attachment consisting of a small electric light in a position close to the line of sight through the instrument.

3. With the mirror fixed at any given angle, only one angle can be obtained by "shooting" the mirror-image of the electric light with the sextant. The observed angle, or altitude, must, if "shot" correctly, be the same as the angle indicated on a small protractor scale attached to the mirror frame; thus the instructor is provided with a quick and easy check on the quality of the student's observations. Since the student's errors may be determined both quantitatively and qualitatively, the device furnishes an excellent means of checking student progress.

4. A mirror, or a number of mirrors, can readily be set up in a room to provide a class of students with a great deal of practice in a short time. In addition, the instructor is able to combine desk work in celestial navigation with actual practice in handling sextants.

5. The light attachment provided on each sextant does not interfere with the normal operational use of the instrument, thus permitting the same equipment to serve for classroom use with the mirrors and for outdoor observations of the sun or stars.

6. Since considerable variation is anticipated in the use for which this equipment may be put, it is requested that activities ordering material specify the number each of 1-QQ-1 mirrors and 1-QQ-2 sextants desired.

**WEIGHT:** 1-QQ-1 (mirror)

**WEIGHT:** 1-QQ-2 (sextant)

**Shipping:** 1 1/4 lbs.  
**Net:** 1 lb.

8 1/2 lbs. in carton  
8 lbs. in portable kit

**SIZE:** - as ordered

**SIZE:**

**Boxed:** 5" x 7" x 3/4"

**Device:** 5" x 7" x 3/4"

4" x 8" x 12 1/2" in kit  
3" x 7" x 11"

**OPERATION:**

**Power Required:** None  
**Space Required:** Approx. 15' x 2' -- clear space in front of mirror  
**Student Capacity:** One per trainer

**CAUTION:** The light attachment should be "on" only during actual observations, otherwise the batteries will burn out rapidly.

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