

071-329-1003

DETERMINE A MAGNETIC AZIMUTH USING A LENSATIC COMPASS

CONDITIONS: Given a compass and a designated point on the ground.

STANDARDS: Determined the correct magnetic azimuth to the designated point within 3 degrees using the compass to cheek method, and within 10 degrees using the center-hold method.

PERFORMANCE STEPS

1. Read your compass (Figure 1).

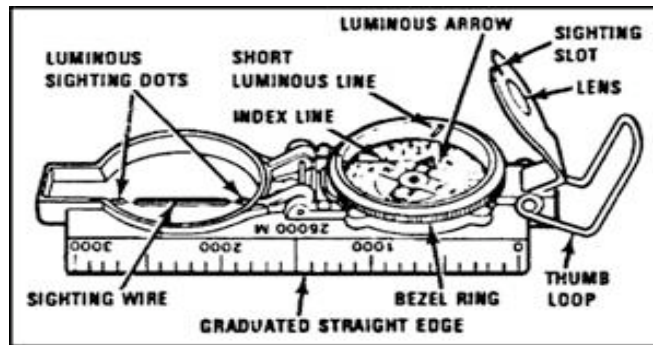


Figure 1. Lensatic compass.

- a. The floating dial is used to determine the direction in which you are pointing your compass.
- b. The outer, black ring of numbers and tick marks are used for finding direction in mils (Figure 2).

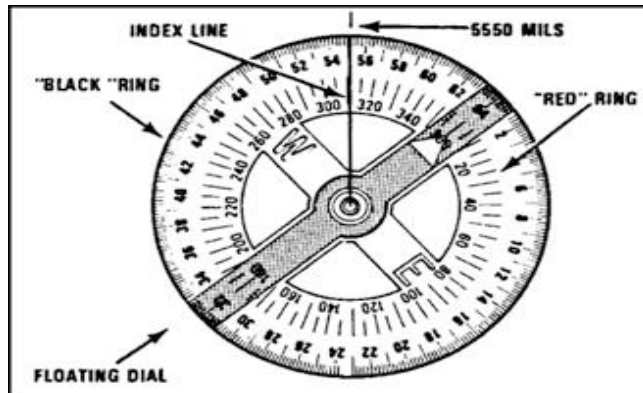


Figure 2. Lensatic compass floating dial.

c. The inner red ring of numbers and tick marks are used for finding direction in degrees.

- (1) There are 360 degrees or 6400 mils in a circle. These are marked with a tick mark every 5 degrees or 20 mils. However, not every tick mark is numbered. You will have to determine the number for these lines using the numbers that are shown.
- (2) To read direction, point the compass in the direction you want to go or want to determine.
- (3) Look beneath the index line on the outer glass cover and estimate to the nearest degree or 10 mils the position of the index line over the red or black scale.
- (4) Be careful to hold the compass still so that the dial remains stationary while you are reading the scale.
- (5) If you understand these readings and can apply either of the holding and sighting techniques of shooting an azimuth, you will be proficient in performing this task.

DETERMINE A MAGNETIC AZIMUTH USING A LENSATIC COMPASS

2. Shoot an azimuth.

a. Use your compass to determine or follow an azimuth. The arrow on the compass points toward magnetic north. The arrow is also attracted by any mass of metal; for example, a truck, your rifle, your helmet, and even electrical power lines. Thus, be sure you use your compass away from metal objects so it will not give a wrong reading.

b. The lensatic compass must always be held level and firm when sighting on an object and reading an azimuth.

c. There are two methods of holding the lensatic compass and sighting.

(1) Compass-to-cheek method (Figure 3). To use this method:

(a) Open the cover to a 90-degree angle to the base. Position the eyepiece at a 45-degree angle to the base.

(b) Place your thumb through the thumb loop, form a steady base with your third and fourth fingers, and extend your index finger along the side of the compass base.

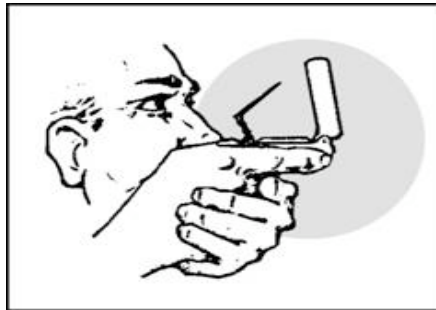


Figure 3. Compass-to-cheek method.

(c) Place the hand holding the compass into the palm of the other hand.

(d) Bring both hands up to your face and position the thumb that is through the thumb loop against the cheekbone.

(e) Look through the lens of the eyepiece. If the dial is not in focus, move the eyepiece up or down until the dial is in focus.

(f) Align the sighting slot of the eyepiece with the sighting wire in the cover on the point for which the azimuth is being determined. Look through the lens of the eyepiece and read the azimuth under the index line.

(2) Center-hold method (Figure 4). Use this method only when you do not need a precise direction:

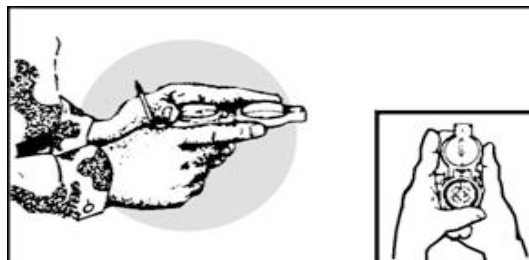


Figure 4. Center-hold method.

071-329-1003

DETERMINE A MAGNETIC AZIMUTH USING A LENSATIC COMPASS

- (a) Open the compass so that the cover forms a straight edge with the base. The lens of the compass is moved out of the way.
- (b) Next, place your thumb through the loop, form a steady base with your third and fourth fingers, and extend your index finger along the side of the compass.
- (c) Place the thumb of the other hand between the eyepiece and lens, extend the index finger along the remaining side of the compass, wrap the remaining fingers around the fingers of the other hand, and pull your elbows firmly into your side. This will place the compass between your chin and your belt.
- (d) To measure an azimuth, turn your entire body toward the object and point the compass cover directly at the object. Look down and read the azimuth from beneath the fixed black index line. This method can be used at night.
- (e) To keep from going in circles when you are land navigating, stop occasionally to check the azimuth along which you are moving. Also, you can move from object to object along your path by shooting an azimuth to each object and then moving to that object. Repeating this process while you navigate should keep you straight.

EVALUATION PREPARATION: SETUP: Select a point to use as a target and determine the azimuth to the point using the compass that the Soldier will use.

BRIEF SOLDIER: Point out the selected spot to the Soldier. Tell the Soldier to shoot an azimuth to that spot using both the compass-to-cheek method and the center-hold method.

REFERENCES

REQUIRED	RELATED	LINKS
FM 3-25.26		WWW.TRAININGNCO.COM