

UFO OBSERVERS INSTRUCTION SHEET
(Sky Diagram)

1. GENERAL:

a. The diagram represents all of the sky normally visible to the observer, who is pictured standing under the center of the "dome" of the sky. It is designed to show a three-dimensional view of the area centered around the observer at the time of the UFO sighting.

b. The position of any object in the sky can be described by giving its elevation, or angle upward from the horizon, and its bearing or angle along the horizon, eastward from north.

(1) Illustrations:

(a) Elevation is 0 degrees for an object on the horizon, and 90 degrees for the point directly over the observer (zenith). Thus, an object half-way up from the horizon to the zenith has an elevation of 45 degrees.

(b) Bearing (or "azimuth") is the angle along the horizon, starting from north and moving clockwise eastward. Thus, an object directly toward the east, no matter what its elevation is above the horizon, has a bearing of 90 degrees; an object in the south has a bearing of 180 degrees; toward the west, 270 degrees and so on. North is, of course, zero.

EXAMPLE: An object is seen in the northeast and one-third way up from horizon to overhead. Thus, the object has a bearing of 45 degrees, and elevation of 30 degrees. Similarly, an object having a bearing of 180 degrees and an elevation of 60 degrees would be seen directly south and two-thirds of the way up from the horizon.

2. PLOTTING THE COURSE OF AN OBJECT ON THE SKY DIAGRAM:

a. The path of an object across the sky can be shown completely on this diagram simply by connecting with a curved or straight line the various positions the object successively occupies (see example sheet). To aid visualization, the path on the western side of the sky is represented by broken lines; the eastern side in solid lines. Direction of the object is indicated by arrows. The duration of the sighting can be shown by indicating the time at the position, where the object was first and last observed. Where possible, the time at various intermediate positions occupied by the object should also be shown.

b. The diagram can be made a more effective investigative and analytical tool by making the lines (showing the path of the object) thicker or thinner to indicate any varying brightness of the object observed. This is especially valuable when the object appeared only as a moving light at night. Thus, if a light becomes brighter and then gradually fades, it can be represented by a line becoming increasingly thicker and then gradually thinning out to nothing.

c. Use of colored pencils is especially recommended if the object changes color or hue during the sighting.

3. EXAMPLE OF DIAGRAM USE:

a. Verbal Description of Example Sighting: Object was first sighted in the southeast, about half-way up from the horizon to overhead, at 10:45 PM local time. Its shape or outline was hazy, but appeared round and about the size of a pea (at arm's length) from where observed. It was dim at first but brightened considerably as it got higher in the sky. Its color at this point was bluish white. After about two minutes it crossed to the western part of the sky a little to the north of overhead (zenith) and continued its flight toward the west. At this point its color appeared yellowish white. The light went dim when it got two-thirds of the way to the horizon. It then stopped and hovered for about one minute and then climbed rapidly, going toward the southwest and getting brighter. In less than thirty seconds, it had climbed to an elevation of approximately 60 degrees, and then the light went out abruptly.

b. Pictorial Description of the Sighting: By referring to the example sheet, notice how simply the above sighting can be portrayed and described, without words, on the example diagram attached here. Note the starting point at bearing 135 degrees (southeast) and elevation 45 degrees (half-way up from the horizon) at 10:45 PM (military time, 2245), and the arrow marking direction of flight. Note also the varying thickness of the line to denote changes in brightness, and the use of the dotted line to indicate its path in the western part of the sky. The "time indications" along the path - 2 minutes to get to the meridian (the north-south overhead line), the hovering for 1 minute, and the ascent in 30 seconds to its complete disappearance, are all shown with a few lines. Thus, the entire sighting can be represented easily on one diagram.

4. FURTHER INSTRUCTIONS AND INFORMATION:

a. Relatively complex trajectories can easily be shown on a diagram of this type. A number of objects sighted can also be indicated, as can any changing formation. The apparent size and shape of the object should be drawn in, preferably by the observer. In the case of an object changing shape or color, this likewise can be drawn in. As previously pointed out, the use of colored pencils to indicate change of color is very desirable.

b. The landscaping in the sky diagram is placed there to help visualization. If any prominent landmarks such as known mountains, buildings, water towers, or specific installations, trees, etc., are part of the sighting area, they should be incorporated into the drawing. These landmarks may later prove to be invaluable as location, plotting or reference points.

c. If you are familiar with the constellations or other heavenly bodies, indicate if possible, the relationship (and movements) of the object with respect to these bodies. This can be sketched on either page 6, item 33 or pages 9-10 of "Summary Data" sheet. Typical examples that can be easily illustrated: "...The object seemed to pass very slowly between the two bottom stars on the handle of the Big Dipper, which was in a vertical position, with the handle pointing down," or "...Object was about the size of a tennis ball -- and remained slightly below and about 15 degrees to the left of the moon."