

cornet above, if the bearing be from the north, but under, if from the south; then the corresponding numbers for the minutes and seconds; with the preparatory pennant, if to the east, or without it, if to the west, thus: the cornet under 56° , would signify S. 56; then 04-26, would correspond, 04' and 26" W., or, the whole being put together, would stand, S. 56° , 04' 26" W.

Each officer, before leaving the ship, will see that his boat is furnished with water and provisions for three days for her crew; that her oars, spars, and sails are in good order, compass, sextant, spy-glass, log-line and current-log, leads and lines, grapnel and lines for mooring, materials for striking a light, lantern, and field-book; also, that their watches have been set to ship's time.

The boats will be divided into parties or divisions; each division will be under the orders of an officer appointed to take the charge, who will receive the general instructions for the day, and who will wear their boat ensigns as a distinguishing mark.

The formula of the field-books will be understood as follows:

At the head of each page the name of the boat and the date will be inserted.

In column 1st. The time of taking the angles.

2d. The soundings, and their nature.

3d. The soundings reduced.

4th. The name of the object and the angle to the left of the observer.

5th. The name of the centre objects only, unless there be three angles measured; then, the centre angle will be inserted with both the centre objects.

6th. The name of the object and the angle to the right of the observer.

Officers are expected to note any observations on the current, soundings, &c., that they may deem necessary to make the results less liable to misconstruction, and obviate explanation.

When a line of soundings extends to, or commences at the shore, the point must be accurately fixed by at least three angles, and the shore sketched in on both sides for some hundred yards, or to some well-defined object.

The daily orders must be carried into strict execution; and if an officer does not clearly understand, or perceive any difficulty therein, he will so state before leaving the vessel.

If a boat should require assistance, she will hoist the blue flag, or No. 5.

After returning on board, each officer will furnish his commanding officer with a copy of his day's work, with the soundings reduced to the standard; a diagram of his boat's track; and, if co-operating with other boats, their relative positions at each anchorage; it being under-