## SOUNDING CLOCK

U. S. Hydrographic Office, Washington, D.C., 1946

In hydrographic surveying a sturdy, accurate clock by which to record the times of positions and soundings is essential. The spacing of soundings between positions, the interval between soundings and other events are all controlled by recorded time.

To be adequate, and to withstand hard usage, the clock must be spray-proof; it should be of the eight-day type with an easily-read six-inch dial and should be enclosed in a trans-parent-faced, nickle-plated case arranged for wall-mounting or for portable use specially in launch hydrography.

The recorded times of soundings should generally be within one minute of correct time.
When coordinate survey operations take place, the several clocks used for recording time must be kept within a few seconds of agreement.


Fig. 2

The hydrographic clock that will ring a bell or "buzzer" at certain selected intervals of time is known as the "Green Hydrographic Clock". The mechanism consists of contacts with which the second hand makes an electric contact at selected intervals. These contacts are connected to a bell or "buzzer" operated by electricity furnished by dry-cell batteries or by ship's current. The box affords protection from the weather and makes the whole a compact unit.

## Description.

Figure 1.-Sounding clock.
Figure 2.--Numbers in parentheses refer to units of circuit.
(1) Batteries, 2 No. 6 dry cells in series- 3 volts. Wire from one battery terminal to
(2) Frame of clock movement.
(3) Second hand shaft.
(4) Brass contact cams secured to second hand shaft.
(a) I contact surface, 60 sec . interval

| (b) 2 | - | 30 | - |  |
| :--- | :--- | :--- | :--- | :--- |
| (c) 3 | - | 20 | - | (shown) |

(d) $4 \quad-\quad 15 \quad-$
(5) Spring brass contact strips. Wires from each contact strip to
(6) Terminal block with conductors between paired terminal screws. Wires from terminal block to
(7) Selector switch with contact arm which pivots around center contact to make contact with any one of the peripheral contact points. Wire from center contact of selector switch to
(8) Bell. Wire from bell to other terminal of batteries.

Batteries and wires not shown. Details forward of mounting panel (Clock, switch knob, etc.) not shown.


