

REGULATIONS PRESCRIBED BY THE
“ SERVICE HYDROGRAPHIQUE ” OF THE FRENCH NAVY
FOR THE CARRYING-OUT OF SOUNDINGS
TO BE USED FOR FURTHER IMPROVEMENT OF THE CHART

(Extract from Supplement to Publication No. 1 :
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The acoustic method enables all vessels to sound rapidly and with accuracy at sea speed and consequently without any turning aside from their principal mission.

It is important that these soundings be used to the best advantage to obtain, at least along tracks frequented by navigation such as landfalls, harbour approaches, as complete a knowledge as possible of submarine relief. Apart from its unquestionable importance in relation to oceanography, such knowledge, offering as it does a means of improving the chart, will later facilitate, for vessels fitted with an acoustic sounder, determination of the fix at sea where conditions for astronomic observations are unfavourable and radio-navigation impossible.

The object of the present instruction is to request all vessels that can do so to co-operate and to specify all the data required by the “ Service Hydrographique ” so that the information received may be used to the greatest possible advantage.

Every sounding, no matter where it may be made, is of interest, but that interest is obviously enhanced where it is a question of little-explored areas or the approaches to the continental shelf. In this respect, examination of the chart currently used will be sufficient guide for the navigator.

The documents to be communicated to the “ Service Hydrographique ” will include :

1. The original strips of the sounding records, on which will be shown the indications detailed in Annex I.
2. A graph of the ship's track accompanied by the navigational data mentioned in Annex II.

Any sounding showing peculiarities when referred to existing documents, should be critically examined in order that it may be ascertained whether faulty interpretation of the sounder's indications or possibly a navigation error are involved. If at all feasible, every attempt at verification should be made at that time or during a later crossing, and with a different method of sounding where available.

ANNEX I.

RECORDING THE SOUNDINGS

1. At the beginning of each strip, enter the name of the ship, the type of sounding-machine, area sounded, date, time used and, according to the type of the instrument, either the immersion of the sound transmitter-receiver, or the immersion of the sound-transmitter, the immersion of the sound-receiver and the horizontal distance from the transmitter to the receiver.

The sounding-machine may be adjusted either so that transmission is produced on the zero of the strip or at a calculated depth so that the sounding may be read directly on the graph while under way. The depth at which transmission is adjusted should be entered at the beginning of the strip.

The scale used should be clearly marked, specifying whether metres, feet or fathoms have been used.

Example :

Name of vessel : S.S. XXX ;
 Sounding-machine : C.E.T. 1935 ;
 Off Iceland, 27th July, 1949 ;
 Legal time 22^o time zone (U.T. — 2 hours) ;
 Immersion of transmitter (Hammer) : 4.5 m. ;
 Immersion of receiver (Hammer) : 5.2 m. ;
 Horizontal distance transmitter-receiver : 8.3 m.
 Transmission adjusted to 9 m.
 Scale : from 100 to 200 m.

2. Enter time-marks on the recording paper at intervals (regular if possible). These should also be entered at each change of track or speed.

Test the revolution speed of the instrument from time to time using a stop-watch or any other reliable watch and enter the results on the strip.

Example :

The motor is making n revolutions per 30 seconds instead of 20 revolutions per 30 seconds.

Insert changes of scale on the paper.

3. There should also be entered on the strip any information possibly indicating a shoal : hollow or breaking waters, discoloured water, eddies, lobster-pot buoys, fishermen, etc... as well as wind-force and the state of the sea.

ANNEX II.

POSITION OF SOUNDINGS

1. A graph should be drawn either on a tracing of the chart used for navigating or on a S.H. 10 sheet.

This document should show :

- the number of the chart (if a tracing has been used) ;
- the meridians and parallels of the chart ;
- the ship's course with fixes and times of change of course and of speed.

It is convenient to show on it also the fixes corresponding to the time-marks entered on the strips.

Observed fixes are marked by a special sign accompanied by a short explanatory note.

2. To the above graph should be appended all data relating to navigation, namely :

- (a) Data referring to dead-reckoning (ship's heading by compass, reckoned and observed variation, true heading, drift, true course, speed), and the times, to within one minute, of variation of these data.
- (b) Data concerning fixes observed by the officer on watch (astronomical observations, indications of radio-navigation instruments, land bearing fixes).

The data to be provided taken as a whole should be such as to permit reconstitution and justification of the graph of the ship's course.

Any indications that the navigator may deem necessary concerning the quality and accuracy of the observations may be annexed.

