

Hand Lead

6-61. The hand lead line (Figure 6-12, page 6-20) is the oldest and most reliable depth-finding device for shallow depths. It consists of a lead weight (7 to 14 pounds) attached to a 20-fathom line marked as follows:

2 fm	2 strips of leather
3 fm	3 strips of leather
5 fm	white rag
7 fm	red rag
10 fm	leather with hole
13 fm	same as 3 fm
15 fm	same as 5 fm
17 fm	same as 7 fm
20 fm	line with two knots

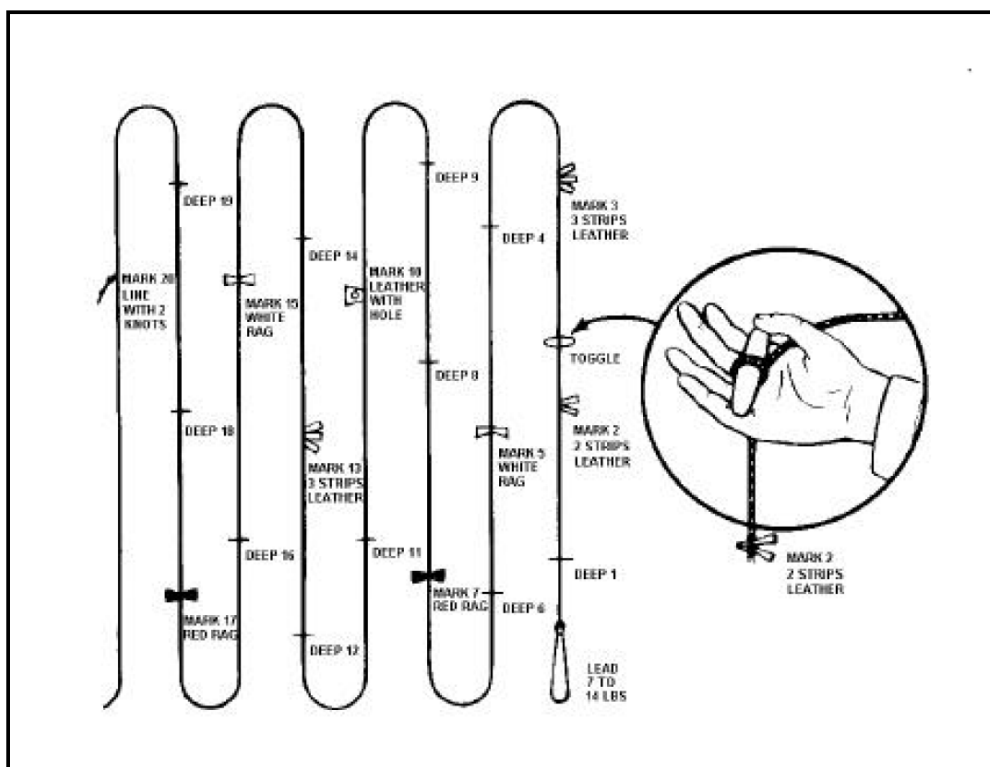


Figure 6-12. Hand Lead Line

6-62. Swing the hand lead in a pendulum motion to produce momentum for two complete turns. Then let it go to allow the lead to sink ahead of the chains (station on ship from which soundings are taken). The leadsmen call out depths referring to definite markings as “by the mark . . .” and other depth values as “by the deep . . .” Phraseology for fractions are “and a half,” “and a quarter,” or “a quarter less” as appropriate; for example, “and a half five” (5 1/2 fm) or “a quarter less four” (3 3/4 fm). The lead line should be measured and marked when wet. A hollow indentation in the end of the lead permits “arming”. Arming is the application of tallow or other sticky substance to the lead in order to sample the bottom to determine the type of bottom you are over.