EDO MODEL 185 DEPTH SOUNDER
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The Edo Model 185 depth sounder, now available to commercial operators, features the greatest range of any commercially supplied sonic sounding apparatus. With sufficient acoustic power (1 kilowatt) to reach any known ocean depth, it opens up new possibilities in the use of sonic sounding apparatus to assist the navigator, by permitting him to use the contour of the ocean bottom as a navigational aid. The depth sounder's faculty of providing extremely accurate readings in shoal water as shallow as 4 feet, make it a safety equipment "must" on all commercial vessels. At present, Model 185 is used by the U. S. Navy Hydrographic Office, the U. S. Coast and Geodetic Survey, the U. S. Army Corps of Engineers, and on many U. S. Navy vessels.

The Edo Model 185 operates within a range of zero to 6000 fathoms at a frequency of 12 kilocycles. It is the first sonic sounding apparatus to employ a cathode ray tube to give readings of extreme accuracy in the lower ranges. Two indicator ranges are provided: 0-100 feet and 0-100 fathoms. Depths to 6000 fathoms are permanently recorded by styli on a moving roll of paper on the recorder. The paper surface is visible through an 8-1/2 inch by 10 inch window in the upper part of the front cover. Three recorder ranges are provided: 0-600 feet, 0-600 fathoms, and 0-6000 fathoms. A single switch permits the selection of indicator or recorder operation and range.

The Edo Model 185 equipment consists of two units — the Sonar Receiver-Transmitter and the Sonar Transducer. The Receiver-Transmitter, compact in size, is installed in any convenient location on the bridge. It houses the receiver, transmitter, oscillator, power supply, recorder, indicator and control panel.

The Edo Model 185 equipment requires only a single transducer for operation. The Transducer is designed to be mounted on the bottom at any section of the hull which is relatively free of turbulence, water noise and ship noises. This unit comprises a 9-1/2 inch diameter, 3-3/8 inches deep, ammonium dihydrogen phosphate (ADP) crystal array, weighing 25 pounds, mounted in a pressure-tight flanged housing. The complete Transducer weighs 150 pounds and measures 16 inches in diameter and is 10 inches deep. It is connected to the Receiver-Transmitter by a single transmission cable. The system operates on 115 volt, 60 cycle current, and no additional power supply or units are required. The power requirement is 345 watts. The entire system including the transducer weighs 370 pounds. The stack measures less than two and one-half feet in height. Long continuous operation between routine servicing and simplified maintenance are features of the Edo Model 185 depth sounder.