

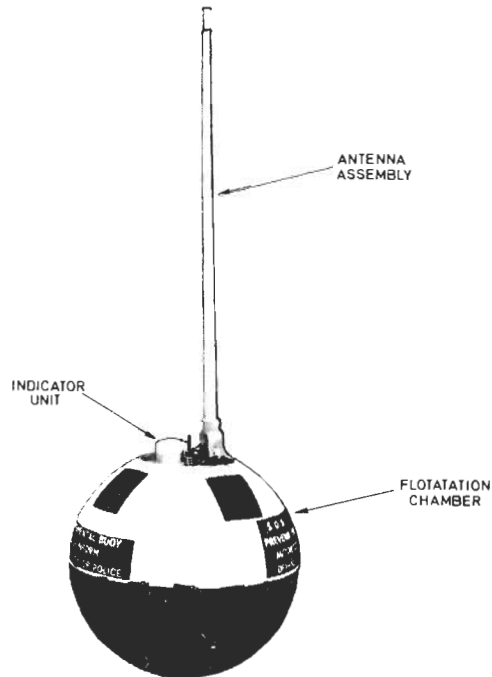
SUBMARINE INDICATOR BUOY

TYPE 639

639

NSN 5895-99-521-7733

SUMMARY OF DATA



SUBMARINE INDICATOR BUOY
TYPE 639

PURPOSE

To provide HF and UHF transmissions plus a flashing lamp indicating a submarine in distress at a recoverable depth.

DESCRIPTION

Type 639 is a submarine emergency transmitter operating in the HF and UHF bands. Normally housed in the casing superstructure it can be released to the surface from a submerged submarine.

The HF transmitter is a solid state electronic unit which transmits a distress message at a frequency of 4.340 MHz. The UHF transmitter is a crystal controlled mcw radio beacon transmitting at a frequency of 243 MHz to assist homing by UHF equipped aircraft. A Keyer Unit provides a coded sequence keying input to the HF transmitter while the Light Marker Distress Unit keys the UHF transmitter, flashes the lamp and switches the 12 V positive supply to the HF transmitter.

The Antenna Assembly, which is self erecting, is bolted to the cover assembly of the Indicator Unit.

Power is provided by a Mallory type battery divided into two networks to supply the lamp separately from the electronic units.

MAJOR UNITS

NSN	DESCRIPTION	PHYSICAL DATA			
		HEIGHT	WIDTH	DEPTH	WEIGHT
5825-99-521-5217	HF Transmitter Assembly	7 in.	2 $\frac{3}{8}$ in.	3 $\frac{3}{8}$ in.	2 $\frac{3}{8}$ lb
5825-99-521-2547	UHF Transmitter Assembly	6 in.	2 $\frac{3}{8}$ in.	2 $\frac{1}{2}$ in.	2 $\frac{1}{2}$ lb
6350-99-520-3685	Keyer Unit Assembly	6 $\frac{1}{2}$ in.	3 $\frac{2}{5}$ in.	3 in.	2 lb
5895-99-520-5219	Light Marker Distress Unit	4 $\frac{1}{2}$ in.	2 $\frac{3}{8}$ in.	1 $\frac{1}{2}$ in.	1 $\frac{1}{2}$ lb
5895-99-521-7734	Isolator Radio Frequency	-	-	-	-
5895-99-520-5215	Antenna Assembly	-	-	-	-
5825-99-521-2548	Wiring Harness	-	-	-	-

PERFORMANCE

(1) Transmits on the 4.340 MHz distress frequency the following:-

- (i) Identification No. 3 times in 30 seconds
- (ii) Distress call SOS 6 times in 30 seconds
- (iii) Codeword SUB SUNK 3 times in 30 seconds
- (iv) DF transmissions Long Mark Lasting for 30 seconds

(2) Transmits on the 243 MHz distress frequency a series of 1020 Hz tone bursts for DF purposes.

(3) A lamp, flashing synchronously with the tone bursts described in (2).

POWER SUPPLY

Battery, Mallory type, low temperature zinc mercuric oxide cells
Capacity 72 hours at 11 V - 13 V.

HANDBOOK

BR 4122

ESTABLISHMENT LIST

E1385

INSTALLATION SPECIFICATION

B1199