

# MK-84 MOD 1 SUS

## Airto Submarine Communications Device

The SUS MK-84 Mod 1 underwater sound signal device is an expendable electro-acoustic device which provides one-way acoustic communications with submarines. It can also be used to simulate the drop of an ASW weapon during a tactical exercise. It may be dropped or deployed from fixed-wing aircraft or helicopters as well as by over-the-side ship-launched methods.

The SUS MK-84 Mod 1 is able to transmit any one of five pre-selected coded acoustic signals, each of which may convey a predetermined message to the submarine. The first four of these coded signals are formed by alternating between two acoustic frequencies for various durations in accordance with a timing sequence that is defined in the code table (see specification). The fifth coded signal consists of only one continuous tone. Third harmonics of the fundamental frequencies are also generated at levels slightly less than those of the fundamentals. A five position switch on the side of the unit accomplishes the settings.

The MK-84 is designed to provide a source level of 160 dB/uPa within 2 seconds of water entry throughout the life of the unit.

- Electronic SUS
  - No Explosives*
- Activation Following Water Entry
  - 2 Seconds (max)*
- Life
  - 70 Seconds*
- Multiple Tone Selections (Codes)
  - Five*
- Under Water Decent Rate
  - 15 ft per Second*



# SPECIFICATIONS

NSN 1360-01-037-0588

## PHYSICAL CHARACTERISTICS

Weight.....2.7 kg (5.9 lbs)

Size ..... 38 cm (15 in) long x 7.6 cm (3 in) diameter

## PERFORMANCE DATA

Sonar Source Level..... 160 dB

Sonar Operating Frequencies..... 3.3, 3.5 KHz  
(plus third harmonics)

Underwater Descent Rate ..... 4.5 m / sec. (15 ft / sec)

Operating Life.....70 Seconds

Launch Altitude .....0 to 3000 meters (0 to 10000 ft)

Launch Speed ..... 0 to 300 KIAS

Shelf Life ..... 10 years in sealed container

Code selections .....(Long 1.5 sec, Short 0.5 sec)

Code	F1 (3.3 kHz)	F2 (3.5 kHz)
1	Long	Long
2	Short	Long
3	Short	Short
4	Long	Short
5	Off	Continuous