AN/SSQ-36B EXBT Sonobuoy

Expendable Bathythermograph

The AN/SSQ-36B is a NATO A-size sonobuoy manufactured for the U.S. Navy which provides vertical temperature profiles of the ocean layer for research and ASW purposes. The AN/SSQ-36B is widely used for airborne Anti-Submarine Warfare (ASW) applications to evaluate local effects of seawater temperature on sonar propagation and acoustic range prediction.

Basic capabilities include a 2625 feet (800 meter) temperature profile and the capability to select one VHF transmitter channel out of 99 available channels. A thermistor located in the probe measures the changes in seawater temperature during descent from the surface to a depth of 2,625 ft. The data can be processed and displayed as temperature versus depth via RF transmittal to the launch aircraft.

The AN/SSQ-36B Bathythermograph is air launchable from fixed or rotary-wing aircraft. Descent of the sonobuoy is stabilized and slowed by a parachute. It is also easily deployable from the deck of a surface vessel.

This sonobuoy provides an Electronic Function Select (EFS) for use prior to loading and launching. This allows the operator to select the RF channel.

- Sensor
  - Temperature

- Depth Profile
  - 0 to 800 meters (0 to 2625 ft)

- EFS Selectable
  - RF Channel

- 1/4 Watt 99-channel RF Transmitter
SPECIFICATIONS

NSN 6655-01-475-9479

PHYSICAL CHARACTERISTICS

Weight ........................................................................................................... 7.7 kg (17 lbs)

Sonobuoy Launch Container ................................................................. LAU-126/A

PERFORMANCE DATA

RF Transmitter Power Output ........................................................................ 0.25 W minimum

RF Transmitter Operating Frequency .............................................. 99 Channel Selectable
(136.000 to 173.500 MHz)

Sensor Temperature Range ....................................................................... -2.2°C to 35°C

Temperature Accuracy ............................................................................. ± 0.55°C

Probe Descent Rate .................................................................................... 1.5 m/s (5 ft/s)

Operating Life .......................................................................................... 12 minutes

EFS Selection ........................................................................................... RF Channel

Scuttle ........................................................................................................ Automatic

Launch Altitude ......................................................................................... 12 to 9144 meters (40 to 30000 ft)

Launch Speed .......................................................................................... 0 to 370 KIAS

Shelf Life ................................................................................................. 5 years in sealed container