AN/SSQ-125 Sonobuoy

Active Source

The AN/SSQ-125 is a NATO A-size sonobuoy manufactured by STS for use as a source in a multi-static sonobuoy field.

The AN/SSQ-125 is capable of generating a variety of waveforms upon command and is designed to work with the AN/SSQ-53F/G and AN/SSQ-101 (ADAR) sonobuoys.

Prior to deployment, the AN/SSQ-125’s RF channel can be programmed to any of the standard sonobuoy operating channels. At any time after deployment, the AN/SSQ-125 can be commanded to change its operating parameters or depth (deeper only), generate a ping, or scuttle.

The AN/SSQ-125 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.

- All Digital Design
- High-power 96-channel RF Transmitter
- High-power LiSO2 power source
- CF5 Commandable
  - RF channel, Depth, Scuttle, Waveform type, Output power
- Waveform types include
  - CW, Shaded Hanning CW, Hyperbolic-FM (HFM), HFM train, Sinusoidal FM (SFM), Linear FM up/down, Costas SONAR
SPECIFICATIONS

PHYSICAL DESCRIPTION

Weight...............................................................................................................................16.3 kg (36 lbs)
Sonobuoy Launch Container...............................................................................................LAU-126/A

PERFORMANCE DATA

RF Command Receiver...............................................................................................UHF – single channel
RF Transmitter Power Output........................................................................................1 W minimum
RF Transmitter Operating Frequency .................................................................................96 Channel selectable
(136.000 to 173.500 MHz)
RF Transmitter Stability......................................................................................................+/-25 kHz
Sonic Frequency.................. Baseline 950 Hz, other frequencies available (1 kHz to 5 kHz)
Operating Life......................................................................................................................8 hours
Duty Cycle.................................................................................................................................10% maximum
Ping-seconds .........................................................................................................................140
Operating Depth....................................................................................................................Selectabe
  d1: 19.8 meters (65 ft)
  d2: 53.3 meters (175 ft)
  d3: 91.4 meters (300 ft)
  d4: 152.4 meters (500 ft)
Launch Altitude.................................................................12 to 9144 meters (40 to 30,000ft)
Launch Speed......................................................................................................................0 to 370 KIAS
Transducer Array.................................................. Piezoelectric Ceramic, Omni directional
Shelf Life ...............................................................................................................................5 years in sealed container