

AN/SSQ-53F DIFAR Sonobuoy

Passive Directional

The AN/SSQ-53F is a NATO A-size sonobuoy manufactured for the U.S. Navy which combines a passive directional and calibrated wide band omni capability into a single multi-functional sonobuoy. This advanced sonobuoy combines the capabilities of both the AN/SSQ-53D and AN/SSQ-57 sonobuoys.

The Q-53F can operate in three available acoustic sensor modes that are selectable via EFS or CFS. A Constant Shallow Omni (CSO) provides acoustic information at a fixed depth of 45 ft (13.7 m) while a Calibrated Omni (CO) co-located with a DIFAR sensor provides acoustic information at a selectable operational depth. The buoy amplifies the underwater acoustics and provides directional data necessary to establish bearing to the source of the acoustic energy.

This sonobuoy features both Electronic Function Select (EFS) for use prior to loading and launching, and Command Function Select (CFS) to allow the operator to modify the sonobuoy's mode of operation after it has been deployed in the water. These functions allow the operator to select operating mode (sensor selection), buoy life, depth setting, AGC level and RF channel.

The AN/SSQ-53F DIFAR 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.

- Acoustic Sensor Selection
 - CSO, CO, or DIFAR*
- EFS Selectable
 - RF Channel, Life, Depth, Sensor, AGC level*
- CFS Commandable
 - RF Channel, Life, Sensor, AGC Level*
- 1 Watt 96-channel RF transmitter
- Factory configurable to AN/SSQ-53D standard
 - Single Sensor (DIFAR)*
 - 3 Depths (90 ft, 400 ft, 1000 ft)*
 - No CFS*



