

AN/SSQ-53D(3)

Directional Passive Sonobuoy

Search, localization, and tracking of sub-surface and surface targets of interest

Ultra Electronics AN/SSQ-53D(3) DIFAR sonobuoy offers world-leading passive acoustic performance. Optimized for low frequency detection, this sonobuoy is an enhancement of Ultra's AN/SSQ-53D(2) sonobuoy. Using its proven 'ambient noise limited' directional hydrophone and complementary suspension system, the AN/SSQ-53D(3) is qualified for operation in Sea State Six. For improved performance in the littoral environment, a fourth operating depth has been implemented, allowing operator selection of sensor deployment to 30, 60, 120, or 300 metres.

- g "A" size high-performance DIFAR sonobuoy
 - Exceeds requirements of MIL-S-81487E (AS)
 - Lightest weight "A" size DIFAR available
 - Compatible with all known airborne acoustic processors
- g Proven reliability
- g Competitively priced with lesser capable passive sonobuoys
- g Electronic Function Select (EFS) permits operator predeployment selection of:
 - One of 99 VHF-FM data uplink frequencies;
 - One of five different operating periods; and
 - One of four hydrophone depths.



Reliable, high performance at a competitive price



SPECIFICATIONS

GENERAL DESCRIPTION

Description DIFAR, passive, directional

Function Search, localization, surveillance

Applicable Specification .. US Navy Production Sonobuoy Specification dated 26 Oct 94 as modified by the Canadian Armed Forces

Dimensions 36.00 in (914 mm) long by 4.875 in (124 mm) diameter

Weight 16.5 lbs (7.5 kg)

Power Source Seawater activated battery (main power source)
Lithium battery (EFS display and memory)

Stabilization Time Up to 100 seconds (shallow)
(after splash) 125 seconds (medium 1)
160 seconds (medium 2)
240 seconds (deep)

Operating Life 0.5, 1, 2, 4, or 8 hours preselectable

Scuttling Time At 8 hours, regardless of operating life

NATO Stock Number 5845-21-921-2055

Shelf Life 5 years in sealed container

Unpacked Storage Life (minimum) 90 days

TRANSMITTER CHARACTERISTICS

Frequency Range 136 MHz to 173.5 MHz

Transmission Channels 99 preselectable, with EFS display

Transmitter RF Power 1 W minimum

SENSOR CHARACTERISTICS

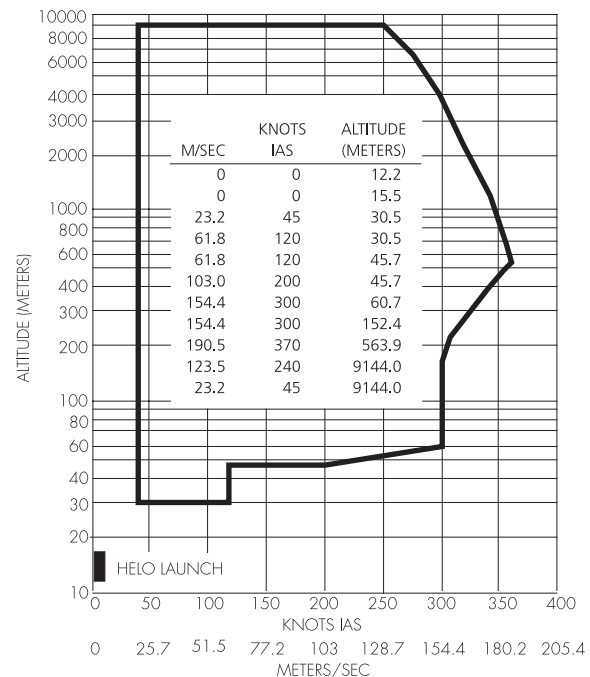
Acoustic Frequency 5-2400 Hz Range

Sensitivity, Directional 122 ± 3 dB rel 1 µPa at 100 Hz = 40kHz pk dev

Sensitivity, Omnidirectional 122 ± 3 dB rel 1 µPa at 100 Hz = 25 kHz pk dev

Operating Depth 30 metres, 60 metres, 120 metres, and 300 metres preselectable

Descent time (in water) 40 seconds (shallow)
65 seconds (medium 1)
100 seconds (medium 2)
180 seconds (deep)



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