AN/SSQ-573
Directional Passive Multi-Mode Sonobuoy

The AN/SSQ-573 Sonobuoy combines the world's leading passive acoustic performance of the AN/SSQ-53D(3) with the digital electronics design of the AN/SSQ-955 Sonobuoy. This buoy takes advantage of its digital signal processing capabilities to offer the user a choice of operational modes. Low-noise DIFAR mode, high dynamic range passive acoustic receiver mode or a narrow band low frequency active receiver with automatic gain control. This buoy is ideal for use in high ambient noise conditions, e.g., in coastal environments, or as an active receiver for multistatic operations. The AN/SSQ-573 also has a GPS kit (FSK on 33/34 kHZ sub-carrier or 7.5 kHz pilot Amplitude Modulated).

Electronic Function Select (EFS) features of the AN/SSQ-573 Sonobuoy include:
- 97 programmable RF channels
- Life
- Depth
- Mode

NATO Stock Number..................5845-20-003-7766
Technical Specifications

AN/SSQ-573

GENERAL DESCRIPTION
Description.................................................. DIFAR, passive, directional
Function.....................................................Search, localization, surveillance

PHYSICAL CHARACTERISTICS
Diameter...........................................................124 mm (4.875 in)
Length............................................................914 mm (36.00 in)
Weight (bare buoy)...........................................7.1 kg (15.6 lbs)
CofG.............................................................38.7 cm (15.25 in) from end

ENGINEERING DATA
RF Command Receiver Format..............................UHF- single channel
Power Source..................................................Seawater activated battery (main power resources)
Operating Depth..............................................30 m, 60 m, 120 m, 300 m preselectable
(65 seconds (medium 1)
100 seconds (medium 2)
180 seconds (deep)
Stabilization Time..............................................Up to 100 seconds (shallow)
(after splash)
125 seconds (medium 1)
160 seconds (medium 2)
240 seconds (deep)
Scuttling Time...............................................At 8 hours, regardless of operating life
Operating Life..................................................0.5, 1, 2, 4 or 8 hours
RF Transmitter Control...................................Supports CFS commandable ON/OFF,
Mode change, RF channel change and Scuttle
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...................................................97 preselectable, with EFS display
RF Transmitter Power Outlet..............................1 Watt minimum
Standard and LFA Receiver Mode.........................FM (conventional DIFAR format)
Digital Mode..................................................Coherent GMSK @ 224 kbps

SENSOR CHARACTERISTICS
(Standard Mode)
Telemetry.....................................................5 - 3375 Hz range
Frequency Response.......................................5 - 2400 Hz range
Sensitivity, Directional.................................122 ± 3 dB re 1 µPa at 100 Hz
= 40 kHz peak dev
Sensitivity, Omnidirectional............................122 ± 3 dB re 1 µPa at 100 Hz
25 kHz peak dev
(LFA Receiver Mode)
Frequency Response......................................1411 - 2188 Hz range
Maximum Deviation, Directional.........................30 kHz peak deviation
Maximum Deviation, Omnidirectional..................16.5 kHz peak deviation
(Digital Mode)
Directional Frequency Range............................5 - 2010 Hz range
Extended Omni...............................................2074 - 4148 Hz range
Sensitivity.....................................................1 MSB ≡ 154.4 dB re 1 µPa
1 LSB (of 14) ≡ 76 dB re 1 µPa
Stabilization Time...........................................Up to 100 seconds (shallow)
(after splash)