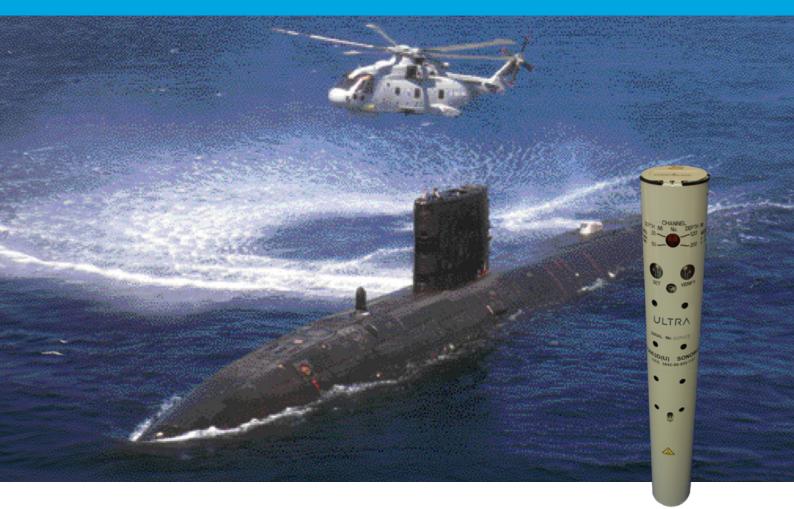
UM SONOBUOYS

Command Active Multi-Beam Sonobuoy (CAMBS)

AN/SSQ 963D



Key features

- ITAR-free
- High performance commandable active localisation buoy
- Monostatic
- 'A' size
- Multiple acoustic frequencies
- Dual mode selectable telemetry
- Extended operating life for training
- Autonomous Function Select (AFS)
- Provision for GPS

Overview

The Ultra Maritime SSQ 963D Command Active Multi-Beam Sonobuoy (CAMBS) is the latest version of Ultra Maritime's gravity-launched, localisation, tracking and attack sonobuoy. Featuring a state-of-the-art, fully digital design, the SSQ 963D is a powerful active sonobuoy.

- Higher power setting offers greater detection ranges.
- Improved localisation accuracy in operational scenarios.
- Selectable lower power setting gives a longer life for training purposes and active barrier operations.
- Digital telemetry offers (in the digital mode) significant scope to combatacoustic countermeasures.
- The sensitive command downlink enables the buoy to be commanded at long-range.

Technical Specification

The high acoustic output and bearing accuracy make the SSQ 963D ideal for the localisation and attack role. The SSQ 963D also complements the low frequency active dipping sonars on Anti-Submarine Warfare (ASW)



Key benefits

- For operator convenience, SSQ963D has intuitive
- Autonomous Function Select to input sonobuoy settings.
- After release from the aircraft, a parachute limits the rate of descent to approximately 30m/s.
- On water entry, asurface float is deployed, containing a VHF antenna or elemetry transmission.
- The buoy is controlled by commands transmitted from the aircraft over a UHF radio link.
- Safety mechanisms are included to prevent inadvertent actuation or deployment.

Sonobuoy Characteristics

Description Directional, monostatic, active localisation,

tracking and attack sonobuoy

Dimensions 'A' size Length: 914.0 mm (36.0 in)

Diameter: 123.825 mm (4.875 in)

Weight: 13.2 kg (29.0 lbs)

Deployment (gravity

launch)

Platform speed: 50 kts to 300 kts
Platform altitude: 55 m to 3048 m

55 m to 3048 m (180 ft to10,000 ft)

Operating Depth 4 selectable depths (via AFS or command)

Operating Life AFS programmable

Full Power: 1 hour automatic or command scuttle **Low Power:** 4 hours automatic or command scuttle

RF Channel AFS programmable Channels 1 to 99

(136MHz to 173.5MHz, 375kHz spacing)

VHF Radiated RF Power 1 Watt nominal

Modulation AFS programmable

'S': FM with TDMA multiplexed signal
'H': Coherent Gaussian FSK @ 224kbps

Compass Accuracy $\pm 5^{\circ}$

Temperature Range Seawater operating: - 2°C to + 35°C

Un-packaged non-operating - 20°C to + 55°C

Packaged: - 50°C to + 70°C

Sea StateOperate:Sea State 5

Survive: Sea State 7

Seawater Salinity 1.5% to 3.6% by weight

Storage Life Packaged: 7 Years

Un-packaged: 90 Days

