AN/SSQ–36B
Bathythermal Buoy

Water thermal-gradient measurement and transmission

An accurate plot of temperature versus depth is an anti-submarine operator's first step in determining the likely whereabouts of his adversary and, consequently, the optimal sonobuoy depth and life settings to employ. Ultra Electronics' AN/SSQ-36B is the latest generation of bathythermal buoys available on the world market. Providing an accurate temperature measurement to a depth of more than 800 metres allows the operator to update acoustic range predictions for even the newest acoustic sensors in the ASW inventory. Moreover, the addition of a 99 channel capability offers significantly more operational flexibility when compared to the three or four channels available on pervious bathythermal buoys. The AN/SSQ-36B represents Ultra's third generation of "A" size bathythermal buoys, and its proven temperature probe has been utilized on a world-wide basis.

- "A" size micro-processor-controlled bathythermal buoy
- 99 Channel VHF-FM selection capability
- Lithium battery power provides improved operational capability in sub-zero seawater
- Offers continuous linear temperature versus depth transmission from surface to 800 metres in zero flow
- Entire water mass temperature profile completed 10 minutes after water entry
- Compatible with all known acoustic data processor systems

Engineered for accuracy using proven technology

Ultra ELECTRONICS

SPECIFICATIONS

GENERAL DESCRIPTION

Description ..... *Passive, water thermal gradient measurement and transmission*

Applicable Specification ..... *USN Production Sonobuoy Specification dated 19 Oct 00 NSN 6655-01-418-5561*

Dimensions ..... *36.00 in (91.44 cm) long by 4.875 in (12.4 cm) diameter ("A" form factor)*

Weight ..... *12.5 lbs (bare buoy)*

Processor and Display ..... *Radio Receiving Sets: AN/ARR-52A, -72, -75, -76 Aircraft Data Processors: AN/AQA-7, 7(V), OL-82, OL-320, OL-5004, UYS-1, UYS-2.*

Power Source ..... *Five poly-carbon monoflouride lithium cells approved by D.O.T for unrestricted carriage under CFR 49.*

(Lithium content less than 2.5 grams per buoy)

Activation Time ..... *Within 30 seconds of splash*

Operating Life (in water) ..... *12 minutes maximum*

Scuttling Time ..... *Less than 30 hours after splash*

TRANSMITTER CHARACTERISTICS

Transmission Channels *99*

Transmitter RF Power ..... *0.25 watts minimum*

Antenna Directivity ..... *Omnidirectional within ±1 dB in the horizontal plane*

PROBE CHARACTERISTICS

Operating Depth ..... *Continuous 0 to 2626 ft (800m)*

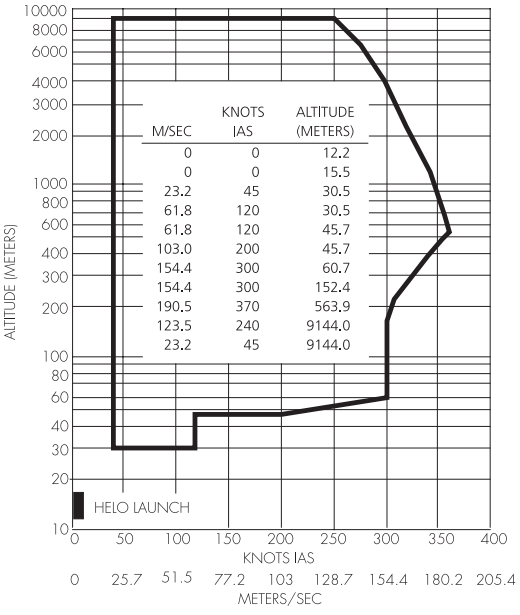
Descent Time (in water) ..... *525 seconds at 5 ft/s (1.5m/s)*

Sensor Type ..... *Thermistor temperature probe*

Sensor Thermal Time Constant ..... *Less than 200 ms*

Sensor Temperature Range ..... *-2°C to + 35°C*

Temperature Accuracy ..... *±0.56°C*



M/SEC	KNOTS IAS	ALTITUDE (METERS)
0	0	12.2
0	0	15.5
23.2	45	30.5
61.8	120	30.5
61.8	120	45.7
103.0	200	45.7
154.4	300	60.7
154.4	300	152.4
190.5	370	563.9
123.5	240	9144.0
23.2	45	9144.0

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