

SARBE® 5 - BE 375



The SARBE 5 Personal Locator Beacon is designed for use as a survival radio by aircrew, mariners and personnel engaged in other hazardous pursuits such as expeditions. When activated, the unit transmits a continuous internationally recognised, swept-tone radio distress signal in the UHF or VHF aviation frequency band. It also provides two-way voice communications between the survivor and approaching rescuers. Built-in 'Test' facilities allow a simple confidence check to be carried out for correct functioning of the unit and battery state.

Operation of the SARBE 5 is initiated by the removal of a pin, whereupon the unit transmits a beacon signal on either the UHF or VHF distress frequencies of 243 MHz or 121.5 MHz, respectively.

Transmission is omnidirectional and continuous for at least 24 hours to facilitate detection by search aircraft or vessels, or by any other land, sea, or airborne installations monitoring these frequencies.

The voice communication mode permits the survivor to talk to the rescue craft when he or she can hear it.

The second frequency channel, usually pre-set to 282.8 MHz UHF or 123.1 MHz VHF, is available for use. Alternative frequencies can be provided if required.

SARBE 5 can be tested quickly and simply before the commencement of a flight or at regular intervals by lifting a lever mounted on the side of the unit. A green or red light gives an instant 'Go / No go' indication.

The SARBE 5 is waterproof to a depth of 10m (33ft) and the battery has an unused shelf life of 5 years when stored in continuous temperate conditions.

Fully approved by the British CAA, and meeting the relevant sections of NATO STANAG 7007 edition 2, 5th edition, SARBE 5 is Cospas-Sarsat compatible.



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Technical Specification

General

Frequency Range

- a) VHF
Channel 1: 117 to 136 MHz by 100kHz with beacon facility.
Channel 2: 117 to 136 MHz.
- b) UHF
Channel 1: 238 to 248 MHz by 100kHz with beacon facility.
Channel 2: 276 to 288MHz.

Modulation

AM.

Antenna

Flexible plug-in vertical monopole.
Optional coaxial cable to connect antenna to life preservers, liferafts etc.

Endurance (dependent on battery age)

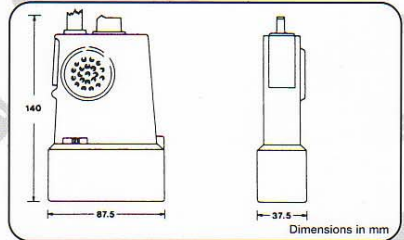
Beacon mode typically more than 48 hours at -20°C.

Design Specification

NATO STANAG 3281, 5th edition, and the relevant sections of STANAG 7007 edition 2.

Weight

638g (22.5oz).



TRANSMITTER

RF Output Power (at 0°C)

Beacon: 200mW mean, 300mW peak.
Voice: 100mW mean on both channels (where fitted).

Modulation (beacon)

AM not less than 85%. Audio frequency swept at 2 to 3 sweeps per second.

Emission (beacon)

A2, with modulation and carrier keyed at 1:1 on/off. Pulse duration 0.75s approx. (Continuous carrier versions available with reduced endurance).

Range

Beacon: at least 110km (60nmi) at 3,000m (10,000ft) with efficient homer.
Voice: at least 18km (10nmi) at 3,000m (10,000ft) on both channels.

RECEIVER

Sensitivity

Better than 20µV terminated, 80% modulation at 1,000Hz or 50mW audio output.

Signal to Noise

S+N/N ratio not less than 10dB with input signal of 20µV terminated, with 30% modulation at 1,000Hz.

Approval British CAA-approved, no. WR 759-1976.

Signatures policy is one of continuous development.
The right is reserved to change specification without notice.

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