



orolia

# SARBE Evo

## Search and Rescue Beacons

---



SARBE Evo Search and Rescue beacons deliver improved operational capabilities to meet current Cospas-Sarsat testability and maintenance requirements.

Rugged and reliable, SARBE Evo beacons are certified MIL-STD-810G to support complex military missions and locate warfighters in distress.



SARBE 6-406G Evo

SARBE G2R ELT Evo

SARBE G2R Evo

## Operational Improvements with SARBE Evo

### Operating Lifetime

- Improved operating lifetime (better than 24 hours) in a scenario that includes 76 minutes of voice transmission and reception.
- Limits voice transmission use after 38 minutes in SAR mode; powering the beacon on/off overrides this limitation.
- 406 MHz transmission is stopped after 24 hours to increase 121.5 MHz and 243 MHz transmitting lifetime.

### Location

- 32 channel GNSS receiver, providing more robust reception from GPS, GALILEO and GLONASS constellations. This provides a better probability of getting a GNSS fix in poor reception situations.
- Updates location every 5 minutes.

### Voice

- The power of the transmitted voice signal is better controlled and results in better quality audio reception for rescue crews.
- Automatic attenuation of the received voice signal keeps clear voice reception when the rescue team is getting close to the beacon.

### Protocol

- Cospas-Sarsat National Location Protocol available as part of 406 MHz transmitted message, and provides flexibility in message content for government organizations.
- User Location Protocol with MMSI (maritime) is now available.

### Testability & maintenance

- Include a GNSS self-test, to test GNSS reception.
- Self-test provides an estimate of remaining battery life via a counter of self-tests and transmission time, meeting the latest Cospas-Sarsat safety requirements.
- Self-test coverage is extended and includes testing of HEXID programming as well as other parameters.
- The user is informed when the battery level allows less than 24 hours transmission, following a self-test.
- More information and alerts are available from the LEDs and the audio buzzer, which makes fault location and diagnostic easier.
- At any battery level, SARBE Evo powers off following a self-test.
- Detailed beacon health and status information via IR interface.

## Key Elements – Improving Safety

1. Exceeds Cospas-Sarsat endurance requirements
2. Improved testability for more efficient maintenance
3. Flexibility to optimize recovery operations
4. More robust GPS and GALILEO position acquisition
5. Audio system improvements to provide clearer audio and avoid saturation
6. Rugged to MIL-STD-810G standards