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 qualified to MIL-STD-810G to support complex military missions in harsh environments.
Operational Improvements with SARBE Evo

Operating Lifetime
- Improved operating lifetime >24 hours
- Improved power management to optimize voice communication
- 406 MHz transmission management to increase 121.5 MHz and 243 MHz transmitting lifetime

Location
- 50 channel GNSS receiver, providing more robust reception from GPS, GALILEO and GLONASS constellations. This improves time to first fix under varying sky access conditions.
- Location updates every 5 minutes.

Voice
- Automatic attenuation of the received voice signal keeps clear voice reception when the rescue team is getting close to the beacon.
- The power of transmitted voice signals is digitally controlled and results in a more stable level of audio modulation and enhances the SAR crew's audio reception.

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

Testability & Maintenance
- **Includes 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.
- 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/GNSS position acquisition with GPS, GALILEO and GLONASS satellite constellations
5. Audio system improvements to provide clearer audio and avoid saturation
6. Rugged to MIL-STD-810G standards