TYPE APPROVAL CERTIFICATE

For a 406 Megahertz Distress Beacon for use with the Cospas-Sarsat Satellite System

Certificate Number: 248

Manufacturer: Wamblee s.r.l., Italy

Beacon Type(s):   Float Free EPIRB/ Non Float Free EPIRB

Beacon Model: W100

Additional model name: W100Epirb

Test Laboratory: Test Centre OMEGA, Sevastopol, Ukraine

Date of Test: July 2012 – December 2013

Details of the beacon features and battery type are provided overleaf.

The Cospas-Sarsat Council hereby certifies that the 406 MHz Distress Beacon Model identified above is compatible with the Cospas-Sarsat System as defined in documents:

C/S T.001   Specification for Cospas-Sarsat 406 MHz Distress Beacon
                 Issue 3 – Revision 12, October 2011

C/S T.007   Cospas-Sarsat 406 MHz Distress Beacon Type Approval Standard
                 Issue 4 – Revision 6, October 2011

TAC 248 issued on: 16 January 2014

Steven W. Lett
Head of Cospas-Sarsat Secretariat

NOTE, HOWEVER:
1. This certificate does not authorize the operation or sale of any 406 MHz distress beacon. Such authorization may require type acceptance by national administrations in countries where the beacon will be distributed, and may also be subject to national licensing requirements.
2. This certificate is intended only as a formal notification to the above identified manufacturer that the Cospas-Sarsat Council has determined, on the basis of test data of a beacon submitted by the manufacturer, that 406 MHz distress beacons of the type identified herein meet the standards for use with the Cospas-Sarsat System.
3. Although the manufacturer has formally stated that all beacons identified with the above model name(s) will meet the Cospas-Sarsat specification referenced above, this certificate is not a warranty and Cospas-Sarsat hereby expressly disclaims any and all liability arising out of or in connection with the issuance, use or misuse of the certificate.
4. This certificate is subject to revocation by the Cospas-Sarsat Council should the beacon type for which it is issued cease to meet the Cospas-Sarsat specification. A new certificate may be issued after satisfactory corrective action has been taken and correct performance demonstrated in accordance with the Cospas-Sarsat Type Approval Standard.
5. Cospas-Sarsat type approval testing requirements only address the electrical performance of the beacon at 406 MHz. Conformance of the beacon to operational and environmental requirements is the responsibility of national administrations.

Certificate Number: 248   Dated: 16 January 2014

Beacon Model: W100

Manufacturer: Wamblee s.r.l., Italy

Operating temperature range: -20°C to +55°C (Class 2)

Battery Details: Lithium/Iron Disulphide (Li/FeS$_2$), Energizer L91, 2x8 AA-size cells.

Operating Lifetime: 48 hours

Transmit Frequency: 406.040 MHz

Beacon Model Features:

- 121.5 MHz auxiliary radio locating device (power: 21.5 - 22.0 dBm, duty cycle: 99%);
- Strobe light (brightness: > 0.75 cd, duty cycle: 20 flashes/minute);
- Message of short format;
- Self-test mode, one burst of 440 ms;
- Integrated antenna P/N MLB.2.940.000;
- Automatic beacon activation (via water-sensor);
- Beacon was tested only in all EPIRB configurations, corresponding to beacon operating while floating in water, in a safety raft and above ground.

Approved Beacon Message Protocols: Beacon is approved for encoding with the message protocols indicated with "Yes" and black text below:

USER PROTOCOLS	USER-LOCATION PROTOCOLS	LOCATION PROTOCOLS
Yes **Maritime with MMSI**	No Maritime with MMSI	No Standard Location: EPIRB with MMSI
Yes **Maritime with Radio Call Sign**	No Maritime with Radio Call Sign	No Standard Location: EPIRB with Serial Number
Yes **EPIRB Float Free with Serial Number**	No EPIRB Float Free with Serial Number	No Standard Location: ELT with 24-bit Address
Yes **EPIRB Non Float Free with Serial Number**	No EPIRB Non Float Free with Serial Number	No Standard Location: ELT with Aircraft Operator Designator
Yes **Radio Call Sign**	No Radio Call Sign	No Standard Location: ELT with Serial Number
No Aviation	No Aviation	No Standard Location: PLB with Serial Number
No ELT with Serial Number	No ELT with Serial Number	No National Location: EPIRB
No ELT with Aircraft Operator and Serial Number	No ELT with Aircraft Operator and Serial Number	No National Location: ELT
No ELT with Aircraft 24-bit Address	No ELT with Aircraft 24-bit Address	No National Location: PLB
No PLB with Serial Number	No PLB with Serial Number	
No National (Short Format Message)		
No National (Long Format Message)		