TYPE APPROVAL CERTIFICATE

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

Certificate Number: 314

Manufacturer:	ACR Electronics Inc., Fort Lauderdale, USA
Beacon Type:	PLB
Beacon Model(s):	PLB-375 / PLB-375 (ResQLink+)
Additional Model Name:	ResQLink / ResQLink+, 3Si Guardian Buoyant 406 MHz Personal Locator Beacon
Test Laboratory:	TÜV SÜD Product Service Ltd, UK
Date of Test:	January – June 2011

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 - Rev. 11, October 2010
C/S T.007 Cospas-Sarsat 406 MHz Distress Beacon Type Approval Standard, Issue 4 - Rev.5, October 2010

Original TAC 219 issued on **11 July 2011**
First extension TAC 224 issued on **20 January 2012**
Second extension TAC 233 issued on **9 August 2012**
Third extension TAC 241 issued on **3 May2013**
Fourth extension TAC 245 issued on **4 November 2013**
Fifth extension TAC 254 issued on **29 July 2014**
Sixth extension TAC 257 issued on **18 December 2014**
Seventh extension TAC 265 issued on **29 May 2015**
Eighth extension TAC 271 issued on **17 November 2015**
Ninth extension TAC 276 issued on **4 May 2016**
Tenth extension TAC 279 issued on **14 October 2016**
Eleventh extension TAC 287 issued on **12 April 2017**
Twelfth extension TAC 294 issued on **23 October 2017**
Thirteenth extension TAC 301 issued on **21 March 2018**
Fourteenth extension TAC 305 issued on **19 October 2018**
Fifteenth extension TAC 314 issued on **12 March 2019**

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.

6. This certificate authorizes the use of the registered name mark "Cospas-Sarsat" and of registered trademarks for the Programme's logos, for labelling, instruction materials, and marketing of the 406-MHz beacon model identified, but not for other marketing or sales purposes (i.e., not for general uses beyond this specific beacon model).

Certificate Number: 314 **Dated: 12 March 2019**

Beacon Models: PLB-375 / PLB-375 (ResQLink+) [1]

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

Battery Details: Panasonic CR123A, Lithium Manganese Dioxide (3 cells, ⅔ A-size)

Operating Lifetime: 24 hours

Transmit Frequency: 406.037 MHz

Beacon Model Features:

- 121.5 MHz auxiliary radio locating device (80 mW, duty cycle 97%);
- Strobe light, 20 flashes/minute;
- Internal GPS receiver model: GlobalTop Tech Inc., model Gms-hpr, ACR P/N A1-11-0877-1;
- Self-test mode, one burst of 440 ms;
- Integrated antenna;
- GNSS self-test, one burst of 520 ms;
- Beacons were tested in PLB configuration ("on dry ground" and "above ground") only.

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

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

	USER-LOCATION PROTOCOLS
No	Maritime with MMSI
No	Maritime with Radio Call Sign
No	EPIRB Float Free with Serial Number
No	EPIRB Non Float Free with Serial Number
No	Radio Call Sign
No	Aviation
No	ELT with Serial Number
No	ELT with Aircraft Operator and Serial Number
No	ELT with Aircraft 24-bit Address
No	PLB with Serial Number

	LOCATION PROTOCOLS
Yes	**Standard Location: EPIRB with MMSI**
Yes	**Standard Location: EPIRB with Serial Number**
Yes	**Standard Location: ELT with 24-bit Address**
Yes	**Standard Location: ELT with Aircraft Operator Designator**
Yes	**Standard Location: ELT with Serial Number**
Yes	**Standard Location: PLB with Serial Number**
Yes	**National Location: EPIRB**
Yes	**National Location: ELT**
Yes	**National Location: PLB**
No	RLS Location: EPIRB
No	RLS Location: ELT
No	RLS Location: PLB
No	ELT(DT) Location: ELT with Serial Number
No	ELT(DT) Location: ELT with Aircraft Operator and Serial Number
No	ELT(DT) Location: ELT with Aircraft 24-bit Address

NOTE: [1] The model "PLB-375(ResQLink+)" is identical to the base model "PLB-375", but it has a higher volume case, slightly increased weight, changed centre of gravity and added buoyancy. The model "PLB-375 (ResQLink+)" has been approved for use while on ground or above ground, it has not been evaluated nor type approved for use while floating in water.