TYPE APPROVAL CERTIFICATE

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

Certificate Number: 298

Manufacturer:	ACR Electronics, USA
Beacon Type:	ELT (automatic fixed)
Beacon Model:	Artex ELT 4000, Artex ELT 4000 HM
Test Laboratory:	TÜV SÜD Product Service Ltd., Fareham, UK
Dates of Test:	October – November 2017

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 4 – Rev. 1, May 2017
C/S T.007	Cospas-Sarsat 406 MHz Distress Beacon Type Approval Standard Issue 5, May 2017

Date of Issue: **26 January 2018**

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).

Beacon Model:	Artex ELT 4000, Artex ELT 4000 HM
Beacon Type:	ELT (automatic fixed)
Operating temperature range:	-20°C to +55°C (Class-2)
Battery Details:	Alkaline Manganese Dioxide (Alkaline-MnO_2), Rayovac 813, 8xD-cells;
Operating Lifetime:	24 hours
Transmit Frequency:	406.031 MHz
External antennas:	ACR P/N 110-340 (single-input white blade antenna);

Beacon Model Features:

- 121.5 MHz auxiliary radio-locating device (nominal power: 100 mW, duty cycle 33%);
- Interface to external navigation device: electrical interface: ARINC 429 Label 310 and 311; physical interface: 22 pin Mil-standard circular connector;
- Self-test mode (one burst of 440 ms), GNSS Self-test mode (one burst of 520 ms);
- Manual and automatic activation via a single-axis G-switch (model "Artex ELT 4000") or via six-axis G-switch (model Artex ELT 4000 HM");
- 2-wire remote switch P/N A3-06-2759 Rev. D;
- 5-wire remote switch P/N 345-6196 Rev. F1 (requires external 14/28 VDC power supply);
- External Buzzer P/N 452-6505 Rev. B;
- Programming adaptor (optional) P/N A3-06-2868 Rev. A;
- 406-MHz transmitter automatically switches off after 24 hours of operation.

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