

Certificate number: 22441/A1 EC File number: RAD 1/13481/5 Annex A1 Item number: A.1/5.6

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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Notified Body 0062 - MARINE EQUIPMENT DIRECTIVE 96/98/EC

EC TYPE EXAMINATION CERTIFICATE

as per Module B of European Union Council Directive 96/98/EC on marine equipment as amended by Commission Directive 2011/75/EU

This certificate is issued to

OROLIA S.A.S.

GUIDEL - FRANCE

for the type of product

406 MHZ EPIRB (COSPAS-SARSAT)

Water Activated/Manually released Satellite EPIRB with a float-free mechanism (automatic release mechanism) - Type: SAFELINK AUTO GPS, SAFELINK MANUAL + GPS

Requirements:

SOLAS 74 Convention as amended, Regulations IV/7, IV/14 and X/3

IMO Res. A.662(16), IMO Res. A.694(17), IMO Res. A.696(17), IMO Res. A.810(19), IMO Res. MSC.97(73)-(2000 HSC code) 14, IMO MSC/Circ.862, IMO Comsar Circ.32,

IMO MSC/Circ.862

ITU-R M.633-2 (05/00), ITU-R M.690-1 (10/95)

IEC 60945 (2002) including IEC 60945 Corrigendum 1 (2008), IEC 61097-2 Ed.3 (2008)

This certificate is issued under the French Maritime Authority to attest that BUREAU VERITAS did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Council Directive 96/98/EC of 20 December 1996 as amended.

This certificate will expire on: 02 Apr 2015

For BUREAU VERITAS Notified Body 0062,

At BV NANTES, on 26 Jul 2013,

Joel Gaurin



This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark B) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex B of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. BUREAU VERITAS is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Water Activated/Manually released Satellite EPIRB with a float-free mechanism (automatic release mechanism) -

Type: SAFELINK AUTO GPS, SAFELINK MANUAL + GPS

1.1 - Main Characteristics:

- Beacon type: Maritime

- Antenna model: Antenna integrated within mother PCB.

- Operating temperature range: -20° C to +55° C (class 2)
- Operating lifetime: 48 hrs at -20° C to +55° C

- Beacon Battery type: Li-MnO2

 $\begin{array}{ll} \text{- Frequency:} & 406,037 \text{ Mhz} \pm 1 \text{ kHz} \\ \text{- UHF Output power:} & 5 \text{ W}, 37 \text{ dBm} \pm 2 \text{ dB} \\ \text{- Modulation:} & \text{Biphase L1.1} \pm 0.1 \text{ radians} \end{array}$

- Transmission duration: 520 ms +/-1% -every 50 sec +/-5%.

- Class of Emission: 16 K0G1D

- Programming: Via USB optical pen

1.2 - Physical characteristics:

- EPIRB dimensions: 250x106x83mm

- EPIRB weight: 627g.

- Container dimensions: 287.6x147.5x96.7 mm

- Total weight (EPIRB+container): 1.280 kg

1.3 - Homing device:

- Frequency: $121.5 \text{ Mhz} \pm 6 \text{ kHz}$

- VHF Output power (PERP): $50 \text{ mW} (17 \text{dBm} \pm 3 \text{dB}) \text{ PERP}$

- Modulation: A.M. 1400 to 500 Hz

- Class of Emission: 3K20A3X

1.4 - Stobe light:

- Type: Super LEDs
- Intensity: 0.75 Candela

- Rate: 23 flashes per minute

1.5 - <u>Automatic release system</u>: HAMMAR H20

1.6 - Self-test: One burst of 520 ms

1.7 - <u>Internal GNSS receiver</u>: type GPS model: FASTRAX UC 322

1.8 - Software versions: YLK 2301B

2. DOCUMENTS AND DRAWINGS:

2.1 - In accordance with the manufacturer's drawings and documents, at latest and at any subsequent issue endorsed by Bureau Veritas:

- 2.1.1 Technical presentation ref.: DOC09074 Index A dated 13/11/2009
- 2.1.2 Service letter ref: DOC09085 Index A dated 26/10/2009
- 2.1.3 Technical data ref.: DOC09060 Index B dated 16/09/2009
- 2.1.4 User manual ref.: DOC09028B dated 18/03/2010
- 2.1.5 ETSI EN 300 066 compliance analysis ref.: DOC05267 index A dated 21/06/2006
- 2.1.6 Bill of materials ref.: GSAVOJAC-movex v12.4 dated 05/Nov./2009
- 2.1.7 Drawings N°s: 010.11.967/B, K23.01.101/B, K23.01.102/B, K23.01.103/B, K23.01.104/B, K23.01.105/B,

K23.01.106/B, K23.01.107/B, K23.01.108/B, K23.01.109/B, K23.01.110/B, K23.01.111/A, K23.01.112/C, K23.01.113/A, K23.01.114/A, K23.01.115/A, K23.01.116/A, K23.01.117/A, K23.01.118/A, K23.01.119/A, K23.01.120/A, K23.01.121/B,

K23.01.122/A, K23.01.123/A, K23.01.124/A, K23.01.125/B, K23.01.201/B(1to3), K23.01.301/B, K23.01.401/B,

K23.01.701/B, K23.01.802/A, K23.01.803/A, K23.01.804/A, K23.01.807/A, K23.01.901/A, K23.01.902/A,

2.1.8 - 121.5 MHz output power analysis ref.: DOC09260A dated 22/12/2009,

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- 2.1.9 Analysis of conformity to IEC 61108-1ref.: DOC09259A dated 22/12/2009
- 2.1.10 Software revision ref: Intespace E9788-CS rev3

Nb: This above list can be revised to show changes to drawings and documents issue status.

Before changes can be implemented, new drawings and documents must be provided to Bureau Veritas for review and acceptance. The new documents and drawings list will be stamped and endorsed accordingly.

3. TEST REPORTS:

3.1 - Test report N°: E.09788.A ETSI/IEC
- Dated: 12/Nov./2009
- Issued by: Intespace - France

3.2 - Type approval certificate N°: 201

- dated: 28/Jan./2010- Issued by: COSPAS-SARSAT

3.3 - Test report N°: BSH/46162/4141559/10

- Dated: 21/Jan.2010 - Issued by: BSH

3.4 - Test report N°: 75908586 report 01 issue 1

- Dated: 23/Mar./2010

- Issued by: TÜV

4. APPLICATION / LIMITATION:

As per requirements of Regulations stated on front page of this certificate.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 This certificate does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D "Production Quality Assurance" or E "Product Quality Assurance" or F "Product Verification" of Annex B of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.
- 5.2 For information concerning the production phase modules, **OROLIA S.A.S.** has declared that the product may be manufactured at the following manufacturing places:

OROLIA Ltd, Silver Point, Airport Service Road, Portsmouth, Hampshire, PO3 5PB, UK

6. MARKING OF PRODUCT:

Provided with a label or labels containing the following information at least in English:

- Type designation, serial number, type of battery specified
- Date of battery replacement
- Adequate instruction to enable manual activation, deactivation and self test
- A warning to the effect that the satellite EPIRB shall not be operated except in an emergency
- A warning to limit testing to the first five minutes of the hour, as the satellite EPIRB emits a 121,5 MHz signal during self-test.
- The manufacturer shall clearly mark the position of the internal navigation device antenna on the exterior of the satellite EPIRB casing together with a warning not to cover or obstruct this area during use.
- Ship name / Call sign / MMSI N°
- Class of the EPIRB
- Identity code programmed, namely hexadecimal representation of bits 26 to 85 of the digital message
- The compass-safe distance
- Markings as per MED 96/98/EC:
- $\mbox{\sc in}$ YYYY/XX where YYYY is the number of the Notified Body undertaking surveillance module (when BV, 0062) and where XX are the last two digits of year mark affixed.

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7. OTHERS: 7.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the EPIRB at any time, and that **OROLIA S.A.S.** will accept the responsibility for informing shipbuilders or their sub-contractors of the proper methods of use and general maintenance of the EPIRB and of the conditions of this approval.

7.2 - This Certificate supersedes EC Type Examination Certificate n° 22441/A0 EC issued on 02/04/2010 by the Society.

*** END OF CERTIFICATE ***