

CERTIFICATE OF TYPE APPROVAL

This is to certify that

The product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer C.M Hammar AB

Address August Barksgata 15
SE-421 32 Vastra Frolunda
Sweden

Product Type HYDROSTATIC RELEASE UNITS

Product Description Disposable automatic hydrostatic release unit for use with EPIRBS, with optional electrically initiated remote operation - Types: "H20 for EPIRB" and "H20 ERU for EPIRB"

Specified Standards IMO Resolution MSC.81 (70) Part 1, as amended by MSC.226 (82)


The attached Design Appraisal Document forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.

Date of issue 2 July 2008 Expiry date 1 July 2013

Certificate No. SAS S080073

Signed

Endorsed 2008-07-03



Sheet No 1 of 3

Name

K. Gupta
Surveyor to Lloyd's Register EMEA
A Member of the Lloyd's Register Group

Note:

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Lloyd's Register of any modification or changes to the equipment in order to obtain a valid certificate.

"Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract."

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Document number SAS S080073
Issue number 1

DESIGN APPRAISAL DOCUMENT

Date 2 July 2008	Quote this reference on all future communications LDSS/PAS/LSA/KG/1-22771087
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS S080073

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions, and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

<u>Drawing No.</u>	<u>Rev No</u>	<u>Issue Date</u>	<u>Drawing Title</u>
A000164	1	16-09-2002	Hydrostatic release unit Hammar H20 for EPIRB's
A000166	1	18-09-2002	Hydrostatic/electric release unit Hammar H20 ERU for EPIRB's

TEST REPORTS

<u>Report Author & description</u>	<u>Report Nos.</u>	<u>Dates</u>
<i>SP Sveriges Provnings-och Forskningsinstitut:</i>	-	-
Complete units: Corrosion resistance tests/temperature cycling test/release test at +65°C.	KmyP03765	2002-09-05
Complete units: Corrosion resistance tests/temperature cycling test/release test at -1°C.	KmyP203085b	2002-08-06
Original Tests: Conducted under the auspices of the National Swedish Administration of Shipping and Navigation	Gothenburg	1985-10-01
Solar Radiation Test: Conducted at SP Technical Research Institute of Sweden	P801304	2008-03-13

Note: a). The basic design of this HRU was first Approved by LR in December 1994 under Certificate No. SEQ/94/152, the release unit itself is not under load from the EPIRB.

CONDITIONS OF CERTIFICATION

1. The Hammar H20 HRU is disposable with an 'in-service' life of not more than 2 years, the expiry date being markable on the body of the unit when first put into service. This Approval is only valid when units installed on ships are marked with their expiry date.
2. Every Hammar H20 HRU is to be removed from service on or before its expiry date and replaced.
3. If the specified standards are amended during the validity of this certificate, this product type is to be re-approved prior to it being supplied to vessels to which the amended standards apply.
4. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure compliance with SOLAS Regulation III/5.

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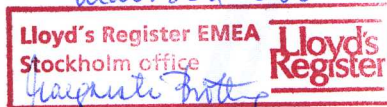
- Production tests are to be conducted in accordance with the applicable requirements of IMO Resolution MSC.81(70), Part 2 and each item, batch, or lot be delivered with an LR Certificate of SOLAS Production Testing issued by the attending LR Surveyors following their witness of the tests. This does not preclude any further testing to additional requirements of the Marine Administration of the country where the ship is registered (i.e. the flag state) or those acting on behalf of that Administration.
- Should a change of Place of Production from that stated below be required i.e. where the stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place. This Certificate will require to be updated for Approval to be maintained.

PLACE OF PRODUCTION

C.M Hammar AB
August Barks gata 15
SE - 421 32 Västra Frölunda
Sweden



K. Gupta
Surveyor
Product Approval Services
London Design Support Services
Lloyd's Register EMEA



Supplementary Type Approval Terms and Conditions

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s).