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Certificate number: 05786/C0 EC

File number: PYR 2466/01

Annex A1 Item number: A.1/1.10

USCG Module B number: 160.122 / EC0062

*This certificate is not valid when presented without the full attached schedule composed of 7 sections***EC TYPE EXAMINATION CERTIFICATE***as per Module B of European Union Council Directive 96/98/EC on marine equipment
as last amended by Commission Directive 2002/75/EC**This certificate is issued to***Nammo LIAB AB**
Lindesberg - SWEDEN*for the type of product***BUOYANT SMOKE SIGNALS (PYROTECHNICS)****"IKAROS Buoyant Smoke, Orange"**
Art.N° 342 130**Regulations and standards:**SOLAS 74 Convention as amended, Regulation III/4 and III/34
IMO Resolution MSC.48(66) amended by MSC.207(81) and MSC.218(82)
IMO Resolution MSC.97(73) (2000 HSC Code) 8.1, 8.10
IMO Resolution MSC.81(70) amended by MSC.200(80) and MSC.226(82)*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 is valid until: 26 Mar 2014**

At Neuilly, on: 26 Mar 2009

For BUREAU VERITAS, Notified Body N°0062
By order of the Secretary

Approval office

Local office: BV GOTHENBURG
Surveyor: M. Moller

L.COURREGELONGUE

**This certificate does not allow 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, 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. 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.*

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

"IKAROS Buoyant Smoke,Orange" - Art.N° 342 130

- Diameter : 95 mm
- Height : 101 mm

2. DOCUMENTS AND DRAWINGS :

- Drawings and specifications:

Number	Title	Edition	Date
342 130	General drawing	A	990412
611005	Etikett	C	040903
TB 3421	Manufacturer's Technical Specification	-	30/01/95

- Manual(s) for installation use and maintenance.

No departure from these documents is permitted without the prior consent of the society.

3. TEST REPORTS :

The product has been type tested by the manufacturer and witnessed by Bureau Veritas as per test reports listed :

DATE	TEST
23/09/1994	TB 2421/6.3 Initial type tests
23/09/1994	TB 3421/95 Initial type tests
23/09/1994	TB 3421/9.2.5 Initial type tests
23/09/1994	TB 3421/9.4 Initial type tests
28/06/1994	94 M 51609 Salt spray test by the Swedish National Testing and Research Institute
14/03/1998	Fully retested for approval of a modification
03/11/2004	Evaluation and Type report as per IMO Circ.980
16/10/2008	Annual Tests 2008 - Taking into account the amended IMO resolutions

4. APPLICATION / LIMITATION :

4.1 Approved for use as Buoyant Smoke Signal onboard ships as per Regulations stated on the front page of this certificate.

4.2 Each Buoyant Smoke Signal will be supplied with its instructions for use, inspections and on-board maintenance complying with Regulations stated on the front page of this certificate.

Application / Limitation of use

- Expiration date not to exceed 48 months after month of manufacture
- Shall be used as per Manufacturer's operational instructions.
- The equipment shall be replaced prior the date of expiry which is marked on the signal casing.

Materials and/or components

As per the specifications listed on the drawings.

On board installation requirements

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

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 The manufacturer shall institute a quality control procedure to ensure that the Buoyant Smoke Signals are produced to the same standard as the approved prototype and shall keep records of any production tests carried out in accordance with instructions given in IMO Resolution MSC.81 (70) Part 2.

5.2 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 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.

5.3 Each equipment or batch of equipment is to be supplied with its manual(s) for installation, use and maintenance.

6. MARKING OF PRODUCT :

6.1 Brief instructions or diagrams clearly illustrating the use of the Buoyant Smoke Signal shall be indelibly marked on the casing.

6.2. The signal body shall bear the following marks

- Manufacturer name or logo
- Trade name
- SOLAS approved.
- Lot number
- Means of determining its age or the date by which they must be replaced
- Markings as per MED 96/98/EC ☒ YYYY/XX where YYYY is the number of the Notified Body undertaking surveillance module (where BV, 0062) and XX are the last two digits of year mark affixed.

In pursuance of the EU/US MRA+, and in accordance with the Council Decision 2004/425/EC of 21 April 2004, the manufactured item(s) can be affixed with the USCG conformity marking, subject to the authorization of the Conformity Assessment Body undertaking surveillance module.

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 at any time and that the manufacturer will accept full responsibility for informing Shipowners or their sub-contractors of the proper methods of use, storing and maintenance of the approved life-saving appliances and of the conditions of this approval.

7.2 This certificate supersedes the EC Type Examination Certificate No 05786/B1 EC issued on 02/09/2004 by the Society.

***** END OF CERTIFICATE *****