

# EC TYPE EXAMINATION CERTIFICATE

## MED-B-16291

In compliance with Module B of Council Directive 96/98/EC of the European Parliament and as amended by the Council Directive (EU) 2015/559 of 9 April 2015, this certificate is issued to the manufacturer:

**Thrane & Thrane A/S  
Lundtoftegaardsvej 93 D  
DK-2800 Kgs. Lyngby, Denmark**

And applies to the product

**Portable survival craft VHF radiotelephone  
SAILOR 3520 VHF**

This certificate attest that provisions according to type examination requirements given in

SOLAS 74 as amended, Regulation III/6, IV/14, X/3  
IMO Res. MSC.36(63)-(1994 HSC code) 8  
IMO Res. MSC.36(63)-(1994 HSC code) 14  
IMO Res. MSC.97(73)-(2000 HSC code) 8  
IMO Res. MSC.97(73)-(2000 HSC code) 14  
IMO Res.A.694(17)  
IMO Res.A.809(19)  
IMO Res. MSC.149(77)  
ITU-R M.489-2 (10/95)

EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008)  
ETSI EN 300 225 v1.4.1 (2004-12)  
ETSI EN 300 843-2 v1.2.1 (2004-06)

The equipment also comply with  
EN 61097-12 (1996)

This certificate replaces certificate no MED-B-15463, which is revoked.

This certificate loses its validity if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to and agreed upon with Nemko. Software changes and updates: - See Product description in the Annex. Should the specified regulations or standards be amended during the validity of this certificate, the products are to be re-approved prior to them being placed on board vessels to which the amended regulations or standards apply.

The attached Schedule of Approval forms part of this certificate. The certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

Oslo, 2016-07-18

Date of expiry: 2021-07-18

Notified Body Id. no. 0470  
Nemko AS  
P.O. Box 73 Blindern  
NO-0314 Oslo, Norway



Roy Uggerud  
Nemko AS

## Annex I to EC Type-Examination Certificate, No. MED-B-16291

### SCHEDULE OF APPROVAL

#### Product description

Portable Survival craft VHF Radiotelephone

Operating frequency range: Transmitter: 155.000-161.450MHz, Receiver 155.000-163.425MHz

Maximum output power: 2 Watt rated

The products covered by this certificate are marketed under the brand SAILOR

The EC Type-Examination Certificate covers the products listed below.

Software version: 2.00.xxx

Minor software changes are given version number as shown above, with a notification to Nemko.

Major software changes, version number e.g. 2.00.xx, must be recorded and documentation must be provided to Nemko for review and acceptance before implementation.

| Item no. | Type     | Designation                    | Manufacturer        | Option |
|----------|----------|--------------------------------|---------------------|--------|
| 1        | SP3520   | SAILOR 3520 VHF Survival Craft | Thrane & Thrane A/S |        |
| 2        | TT-3590A | SAILOR 3590 Handset            | Thrane & Thrane A/S |        |
| 3        | TT-3595A | SAILOR 3595 Handset            | Thrane & Thrane A/S |        |

#### Type approval documentation

SAILOR 3520 VHF User Manual Document number: 98-124294-J, July 2014

3520 Block diagram: HW\_Blockdiagram\_A

BOM, Product description, assembly drawings, photos, marketing material

Telefication Test report no.:99788220 EMC based on EN 60945:2002 (ed. 4). Dated 5 April 2007

Telefication Test report no.:99788230 Rev 2.0 based on EN 300 225 V1.4.1 (2004-12). Dated 3 April 2007

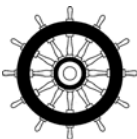
Delta: Danak-19K0457, 15. June 2007

Delta: Danak-19K0469, 18. September 2007

Nemko Test report no.: E11128.00 EN 60945 Environmental

Nemko Test report no.: 180514 EN 60945 EMC, rev 04

#### Limitations/restrictions



"The Mark of Conformity" (i.e. the Wheel mark) may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production control phase module D (Production Quality Assurance), E (Product Quality Assurance), or F (Product Verification), of Annex B of the Directive (MED) is fully complied with and controlled by a written inspection agreement with a notified body."

## **Annex II to EC Type-Examination Certificate, No. MED-B-16291**

### **Comments**

The SP3520 may also be utilized for on-board communication.

For this purpose a rechargeable Lithium-ion battery is available.

Following specialized accessories have been part of the type approval test and can be used together with the Sailor 3520.

Rechargeable lithium battery with battery charger, model CH3507, in combination with AC/DC switching power adapter model OH-1048A1200500U-VDE or OH-1048A1201200U-VDE.

Dual battery charger model CH3508, in combination with AC/DC switching power adapter, model OH-1048A1201200U-VDE.

Interface cable Savox 400E in combination with Savox NC/400 headset, Savox HC-E helmet unit or Sovox HC1 helmet unit

Interface cable Savox C500 in combination with Savox NC/400 headset, Savox HC-E helmet unit or Savox HC1 helmet unit.

Interface cable Peltor FL5214 in combination with Peltor MT7H79 headset.

3595 Handset with Peltor Headset MT7H79

3595 Handset with Savox Skull Headset

3590 Handset with OTTO Throat Microphone

----- End of certificate -----