



## EC Type-Examination Certificate

### N°. MED-B-13274

This is to certify that Nemko AS did undertake the relevant Type Approval Procedures for the product identified below

*The product*

**Portable survival craft two-way VHF radiotelephone apparatus**

*Designated*

**Tron TR20 GMDSS**

*Manufactured by*

**Jotron AS**

*Address*

**Østbyveien 1, P.O.Box 54, NO-3280, Tjodalyng, Norway**

which was found to be in compliance with the requirements of the Navigation equipment of the Marine Equipment Directive (MED) 96/98/EC, as amended, last amended by Directive 2011/75/EU of 2 September 2011, subject to any conditions in the schedule of approval attached hereto. This product also fulfills the requirements of Directive 2012/32/EU of 25 October 2012, which will enter into force 30 November 2013 – see note on limitations in Annex

Specified regulations and standards:

Module B of the Directive. Solas 74 as amended, Reg. III/6, IMO Res. A.694 (17), IMO Res. A.809 (19), IMO Res. MSC.36(63)-(1994 HSC Code) 8,14, IMO Res. MSC.97(73)-(2000 HSC Code) 8, 14, IMO Res. MSC 149(77), ITU-R M.489-2 (10/95), EN 60945:Ed 4 (2002) inc. corr 1 (2008), EN 300 225 V 1.4.1(2004-12), EN 301 843-2 V 1.2.1 (2004)

This certificate replaces certificate NO. MED-B 13261, 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. Before any software changes are implemented, the changes must be recorded and documentation must be provided to Nemko for review and acceptance. Major software changes must be approved by Nemko prior to any implementation. 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.

Place and date of issue: Oslo 02 July, 2013

Issued by: Nemko AS, Notified Body EU Id # 0470

Date of expiry: 02 July, 2018

Signed:

This certificate consists of 2 pages

Name: Roy Uggerud, Authorized Signatory



## SCHEDULE OF APPROVAL

### Product description

- ❑ Main unit: Jotron TRON TR20 GMDSS VHF Radio
- ❑ Primary Emergency Lithium Battery TRON TR20, type 80060 (Jotron)
- ❑ Battery charger: Jotron RCH-20 (optional)
- ❑ Secondary rechargeable NiMH battery, type 80059 (Jotron), 7,2V/1500 mAh (optional)

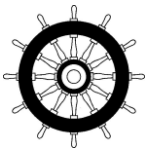
### Any limitations on the acceptance or use of the product or specific requirements

- ❑ Used for on-scene communication with dedicated sealed battery type 80060 (Jotron), and general communication with approved rechargeable batteries as listed above.
- ❑ Battery charger RCH-20 to be supplied according to the manufacturers installation manual
- ❑ With regards to the Directive 2012/32/EC, the manufacturer cannot issue a Declaration of Conformity with reference to this directive before 30 November 2013, subject to any national delays in the implementation of the Directive

### The approval documentation

- ❑ Jotron AS – User Manual TRON 20 GMDSS handheld VHF radio, 80078\_UM\_TR290\_G, rev 18 April 2007
- ❑ Jotron AS – TRON TR 20 GMDSS Technical Manual, 82701\_TM\_TR20\_A, rev. 12 April 2007
- ❑ Jotron AS – TRON TR20 with Palm display, IEC 60945 ed.4, issue 8.6.1 and 8.9.2.2, of 26 October 2006
- ❑ Jotron AS – Software functionality TRON TR20 GMDSS upgrade, rev. A, of 14 June 2006
- ❑ Nemko Comlab - Test report no. 95134/4, of 30 October 2007, part of EN/IEC 60945:Ed 4 (2002) and EN 301 843-2 V 1.2.1 (2004)
- ❑ Jotron AS – Change Note, CN05238, of 4 May 2006
- ❑ Nemko Comlab – Selected parts of ETSI EN 300 225 V1.4.1, project no. 70999/03, of 28 July 2006
- ❑ DNV technical report: Jotron Electronics AS type testing of handheld VHF radio type TRON TR20 GMDSS, report no. 2001-3269 rev no. 01
- ❑ DNV technical report: Jotron Electronics AS, Type testing of handheld VHF radio type TRON TR20 GMDSS, report no. 2001-3269 rev no. 02
- ❑ Instituto de Pesquisas Eldorado – Ensaio de Conformidade EM Transceptor Portatil (Voz 117-470 MHz), Radio VHF Jotron TRON TR20 GMDSS, IPE-RE 46-080-1A/2003, of 12 August 2003
- ❑ DNV technical report: Jotron Electronics AS, Type testing of battery charger model RCH-20, report no. 2002-3063, rev. no. 1
- ❑ DNV technical report: Jotron Electronics AS EMC testing of battery charger model RCH-20, report no. 2003-3235, rev. no. 1

### 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."

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

