



# Certificate

Of

**EC Type-examination (Module B)**

**Certificate No.: 12212003/AA/02**

Product Category: A.1/5.17

With respect to Marine Equipment Directive 96/98/EC and the amending Directive 2012/32/EU,  
Telefication declares that the equipment:

Product description: **Portable Survival craft VHF radiotelephone**  
Trademark: **McMurdo**  
Family name: --  
Type designation: **R5 GMDSS**  
Serial No: --  
Software release No: **2.00.XX**

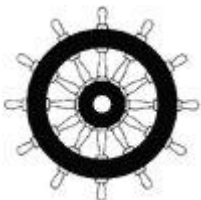
Manufacturer: **Thrane & Thrane A/S**  
Address: **Lundtoftegaardsvej 93D**  
City: **2800 Lyngby**  
Country: **Denmark**

complies with the international instruments and test standards as listed in the Annex.  
This certificate is granted to:

Name: **Orolia Ltd.**  
Address: **Silver Point, Airport Service Road**  
City: **Portsmouth PO3 5PB**  
Country: **United Kingdom**

Validity of this certificate is 5 years; **Expiry date: 16 May 2017**  
This certificate has THREE Annexes.

Zevenaar, 25 November 2013



*i.o.*

W.J.M. Jong  
Manager Product Certification



## General conditions

- Each product to which this certificate relates shall be provided with Marine markings. The Marine marking consist of symbol in the form of a wheel followed by the identification number of the responsible Notified Body for module D, E, F or G, and by the last two digits of the number of the year in which the mark is affixed.
- The holder of this Certificate has drawn up a Declaration of conformity to type with Directive 96/98/EC and amending Directives, declaring that the product(s) described in this EC Type-examination certificate, satisfy the requirements that apply to them.
- Each product shall be identified by means of type, batch and/or serial numbers and the name of the manufacturer and/or importer.
- If the equipment is to be modified, Telefication shall be notified immediately. Depending on the modifications, Telefication may have additional examinations carried out in consultation with the applicant.
- Enforcement of a new amending directive voids the validity of this certificate for (re)placement of the product onboard ships.

## Remarks and observations

*The following conditions are applicable:*

The R5 GMDSS may also be utilized for on-board communication. For this purpose a rechargeable 1800mAh Lithium-ion battery, model TT-1707A, is available.  
The supplied battery charger, model TT-1704A, in combination with AC/DC switching power adapter, model OH-1048A1200500U-VDE or OH-1048A1201200U-VDE and dual battery charger, model TT-1705A, in combination with AC/DC switching power adapter, model OH-1048A1201200U-VDE have been part of the type approval test.

## Documentation lodged for this EC type-examination

### *Test Reports:*

- Delta: Danak-19K0457, 15 June 2007
- Delta: Danak-19K0469, 18 September 2007
- Telefication B.V.: 99788220, 05 April 2007
- Telefication B.V.: 99788230 Rev 2.0, 03 April 2007

### *Product Documentation:*

- Assembly drawings
- Bill of materials
- Block diagram
- Electric diagrams
- Photos
- User manual

## International instruments and test standards

### *The equipment complies with:*

- EN 300 225: December, 2004, V1.4.1
- EN 301 843-2: June, 2004, V1.2.1
- EN 60945: October, 2002, Edition 4
- IEC 60945/Corrigendum 1: April, 2008, Edition 4
- IMO Resolution A.694(17): 1991
- ITU-R M.489-2: October, 1995
- MSC Resolution 149(77): June, 2003

### **Technical features and characteristics**

*The product includes the following features and characteristics:*

VHF equipment:

- Operating frequency range: Transmitter: 155.000-161.450MHz; Receiver: 155.000-163.425MHz
- Modulation method(s): 16K0G3E
- Maximum output power: 2 Watt rated
- Primary battery: Lithium Iron Disulfide 3000mAh
- Temperature range: -20°C to +55°C
- Channel separation: 25 kHz

### Trademarks and Type designations

*The product as described in this EC type-examination includes the following type designations:*

- Product description: Portable Survival craft VHF radiotelephone
- Trademark: McMurdo
- Type Designation: R5 GMDSS
- Software version: 2.00.XX