



## CERTIFICATE OF TYPE APPROVAL

(EC Certificate of Type Examination - Module B)  
(Marine Equipment Directive - 96/98/EC)

**Applicant:-**  
Navico UK LTD  
Unit 4, Ocivan Way  
Star Lane, Margate  
Kent, CT9 4NN  
United Kingdom

**Manufacturer:-**  
Navico UK LTD  
Unit 4, Ocivan Way  
Star Lane, Margate  
Kent, CT9 4NN  
United Kingdom

This is to certify that the applicant has submitted details of a:-

### PORTABLE SURVIVAL CRAFT TWO-WAY VHF RADIOTELEPHONE APPARATUS (Commission Directive 2002/75/EC – Item A.1/5.17)

Of system type known and designated as:-

#### McMURDO – R1, Marine Band Handheld Survival Craft radio

(Comprising component parts and having technical characteristics shown in schedule 1)

and that this has been tested and assessed, and when used in a combination of component parts as described in the attached schedules, is CERTIFIED as complying with:

**EN 300 225 V1.4.1:2004 "Survival craft portable VHF radiotelephone apparatus"**  
**EN 60945:2002 "General Requirements for marine equipment" - EMC Clauses "**  
(being specifications for Technical Characteristics and Methods of measurements published by the European Telecommunications Standards Institute and CENELEC).

It is also RECOGNISED that the equipment conforms to performance standards not inferior to those adopted by the International Maritime Organisation, and which are contained in Resolution MSC.149(77), Annex 1 and the relevant parts of Resolution A694(17).

Note: The EMC requirements of EN 60945:2002 equal or exceed those of EN 300 828:1998 and testing to EN 300 828 was brought forward/assessed together with EN 60945 as appropriate.

**SIGNED:**

**DATE of ISSUE:** 5<sup>th</sup> October 2007

**DATE of EXPIRY:** 4<sup>th</sup> October 2012

**P J Goddard** Authorised Signatory

**Certificate Number:** QQ-MED-06/03-03R2

This Certificate is Valid until expiry date shown, subject to the standard conditions of issue printed on the attached schedule. Simrad Ltd are Module D registered with QinetiQ in accord with standard condition 3, ref Certificate QQAS-04/01-SNL001R

QinetiQ  
Cody Technology Park  
Ively Road, Farnborough  
Hampshire. GU14 0LX



*Under the terms of the United Kingdom Statutory Instrument, No: 1997 : 1999, the QinetiQ Group PLC (formerly known as DERA) has been Notified to the European Commission by the Maritime and Coastguard Agency as a Body authorised to conduct Conformity Assessment procedures under the provisions of the European Council Directive 96/98/EC on Marine Equipment and issue Certificates of Type Approval.*

# Certificate of Type Approval - Schedule 1 McMurdo, VHF Radiotelephone – R1

The applicant declared that the following units comprise portable Survival Craft Two-Way Vhf Radiotelephone Apparatus equipment of the designation given on page 1. These units have been assessed & tested, and satisfactory details of these units were included in the technical file. These units form a waterproof VHF Radiotelephone as listed in Item Description A1/5.17 given in Annex A1 of Directive 2002/75/EC

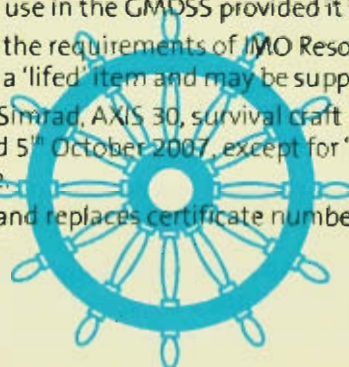
## MAIN UNIT Comprising:-

VHF Receiver	McMurdo R1	*1, 3
Lithium Battery	LTB2.	*2
Weak link equipped lanyard	LYD1	*1

----- End of List.

## \*NOTES:-

1. This Unit is approved as a portable (handheld) survival craft radio complying with Annex 1 of IMO Resolution MSC.149(77) for use in the GMDSS provided it is fitted with the weak link lanyard.
2. This item is essential under the requirements of IMO Resolution MSC.149(77) to provide a suitable primary battery source. It is a 'lifed' item and may be supplied separately as a service replacement..
3. This Unit is identical to the Simrad, AXIS 30, survival craft radio approved under certificate number QQ-MED-06/02-01R2, dated 5<sup>th</sup> October 2007, except for "McMurdo" labels, "R1" designator and a case colour of bright orange.
4. This certificate supersedes and replaces certificate number QQ-MED-06/03-03R.



Notified Body 0191

## Technical Characteristics

FREQUENCY OF OPERATION	<b>TRANSMIT:</b>	156.3MHz TO 156.85MHz
	<b>RECEIVE:</b>	156.3MHz TO 156.85MHz
CHANNELS	<b>3</b>	25kHz spacing
EMISSION CODE	<b>16K0G3E1N</b>	
DSC CLASS	<b>None</b>	
RF POWER OUTPUT	<b>0.5 Watt</b>	switchable
IEC 61162-1 SERIAL PORTS	<b>None</b>	Not require for this equipment.
Temperature Range & IEC 945 Class	<b>-20°C to +55°C Portable</b>	Operational

**Conditions of Issue of this certificate are printed the reverse of this sheet.**

QinetiQ  
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Hampshire. GU14 0LX

Certificate Number **QQ-MED-06/03-03R2**

**Certificates of Type Approval**  
**Conditions of Issue**

1. Each Certificate will be used in its entirety and not reproduced in part.
2. This certificate remains valid until the date shown (normally 5 years) unless cancelled or revoked, provided:-
  - i) the design and manufacture remain unmodified from the specimen tested and recorded in the Technical Construction File;
  - ii) any conditions contained in the schedule are complied with;
  - iii) 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;
  - iv) and, the equipment remains satisfactory in service.
3. The mark of conformity may only be affixed to the equipment listed on this certificate and a manufacturer's Declaration of Conformity issued when the production Quality Assurance requirements laid down in Annex B, of the Directive (96/98/EC) is fully complied with and controlled by a written inspection agreement with a Notified Body. The use of the QinetiQ Notified Body Number (0191) in combination with the Wheelmark implies that the manufacturer is Registered with the QinetiQ Quality Assurance Scheme. A Certificate of Registration is issued to the manufacturer and should be made available on request. The manufacturer is responsible for ensuring that certification renewal and periodic surveillance are maintained.
4. USCG Approval Number: A Mutual Recognition Agreement (MRA) on marine equipment exists between the European Commission and the US Coastguard but only applies to equipment types included in the listing of marine equipment annexed to the MRA. For included equipment a USCG Approval number may be issued and can be found under the MED certificate number on the first page and should be used on the main identity label of the equipment. Radio and Radar equipment continues to need separate or additional approval by the USA FCC.
5. This certificate does not confer any approval status to this equipment other than defined by, and tested according to the specifications listed on sheet 1.
6. The labeling requirements of IMO Resolution A694(17) shall be met. Descriptions of each unit of apparatus forming part of the equipment will be as given on this Certificate. Each unit of equipment will be marked with the minimum safe distance at which it should be mounted from a standard and steering magnetic compass.
7. No unit of apparatus shall be advertised or labeled as "approved" or "certified" on behalf of the Maritime and Coastguard Agency, the Department of Transport or the QinetiQ Group in any sense other than that it is a type that has been assessed as satisfactory against the specification;
8. The manufacturer must advise QinetiQ of any intended changes to the design or production of the equipment which might affect the equipment performance.
9. Minor Modifications to the equipment will be considered on a case-by-case basis. QinetiQ will review any factory test results, in consultation if necessary, with the test facility that conducted the original Type Approval testing on the equipment. QinetiQ will advise the manufacturer if any further testing is required to maintain valid certification.
10. If an equipment manufacturer wishes to have the type approved equipment designated under alternative names (e.g. agent/distributor's name and model number), a separate application should be completed and sent to QinetiQ.

QinetiQ Ltd  
Marine Approval and Testing Service  
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