



CERTIFICATE OF TYPE APPROVAL

(EC Certificate of Type Examination - Module B)
(Marine Equipment Directive - 96/98/EC, as amended*1)

Applicant:-
McMurdo Ltd
Silver Point
Airport Service Road
Portsmouth, PO3 5PB
United Kingdom

Manufacturer:-
McMurdo Ltd
Silver Point
Airport Service Road
Portsmouth, PO3 5PB
United Kingdom

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

GMDSS NAVTEX RECEIVER
(COMMISSION DIRECTIVE 2002/75/EC – ITEM A.1/5.3)

Of system types known and designated as:-

McMURDO - NAV-7 Navtex Receiver

(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:

IEC 61097-6:1995 "Equipment for reception of meteorological or Navigational information (NAVTEX)"*2
BS EN 60945:2002 "General Requirements for marine equipment" - EMC Clauses

(being specifications for Technical Characteristics and Methods of measurements, published by the International and the British Standards Institute).

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 Resolutions A525(13), MSC.148(77) and the relevant parts of Resolution A694(17).

*2 The testing of this unit has been aligned with IEC 61097-6 Edition 2 : 2005, and can meet the requirements of both standards (see note 2 on sheet 2).

SIGNED:

P J Goddard Authorised Signatory

DATE of ISSUE:

15th June 2006

DATE of EXPIRY :

14th June 2011

Certificate Number:

QQ-MED-12/06-01

This Certificate is Valid until expiry date shown, subject to the standard conditions of issue printed on the attached schedule
McMurdo Ltd are Module D registered with QinetiQ,
ref; Certificate DQAS-03/01-McM001R3& Condition 3.

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



Maritime and Coastguard Agency
The MCA is an Executive Agency of the
Department for Transport.

*1 Commission Directives 2002/75/EC & 2002/84/EC

Under the terms of the United Kingdom Statutory Instrument, No 1957 : 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 – NAV-7 NAVTEX Receiver

The applicant declared that the following units comprise the Radio equipment of the system designation given above. These units have been assessed & tested, and satisfactory details of these units were included in the technical file. These units form systems consistent with the Item Description A1/5.3, given in Annex A1 of Commission Directive 2002/75/EC.

MAIN UNIT Comprising:-

GMDSS NAVTEX Receiver 6" Colour LCD Display **NAV-7** ***1**

OPTIONAL UNITS:-

Power supply – AC N163S **89-029**

Printer Unit(Seiko Instruments) **DPU-414** ***2**

Active Antenna (Banten) **905-05** ***3**

SOFTWARE:- Receiver software **Release 1** ***4**

----- End of List. -----

***NOTES:-**

- 1 This equipment was tested to IMO Resolution MSC148(77) for fitment in SOLAS convention vessels with installation after 1 July 2005. Additional Testing has confirmed compliance with IEC 61097-6, Edition 2 which was published in December 2005.
- 2 In order to meet the performance standard of IEC 61097-6:1995 and IMO Resolution A525(13) a printer unit is essential for installations before 1 July 2005. After this date IMO Resolution MSC148(77) supersedes IMO Resolution A525(13) and the printer may be considered an optional unit. Until the full publication of IEC 61097-6, Edition 2 and listing in a future Marine Equipment Directive, amending Annex A1, this certification is bound by the existing requirements in IEC 61097-6:1995, edition 1 to have a printer in the basic system.
- 3 Other antenna may be fitted
- 4 Software Modification: This approval is valid for equipment including subsequent software versions only where written details of such versions have been submitted to and accepted by QinetiQ

Technical Characteristics

FREQUENCY OF OPERATION	TRANSMIT:	N/A
	RECEIVE:	518kHz, 490kHz and 4209.5kHz, F1B modulation
CHANNELS	3	3 independent receivers
RF POWER OUTPUT	-	N/A
IEC 61162-1 Interface. IEC 61162-2 Interface	1 (Tx, Rx) 1 (Tx, Rx)	Conforms to IEC 61162-1:2000. (NMEA) – RMC, GLL, ZDA Conform to IEC 61162-2:2001. (INS connectivity) - ALR, ACK, NRX, NRM (Annex C, IEC 61097-6)
Message Memory (scrollable on LCD Display)	≈1000 message	At least 200 messages of 500 characters capacity per receiver plus operator preserved messages
External Printer output	1 (RS422 Serial)	External printer listed is a thermal paper roll printer.
Power Supply	12 to 24V DC	Direct supply to receiver (autosensing). -10% & +30% working range on nominal voltage shown.
Temperature Range - Exposed & IEC 945 Class - Protected	-25°C to +55°C -15°C to +55°C.	-- Active Antenna (operational). -- All other units

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

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) the equipment remains satisfactory in service and the regulations and standards cited in the appropriate Directives do not change.
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 annual renewal and surveillance are maintained.
4. 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.
5. 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.
6. 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;
7. The manufacturer must advise QinetiQ of any intended changes to the design or production of the equipment which might affect the equipment performance.
8. 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.
9. 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
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