QinetiQ

NOTIFIED BODY
No 0191

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:-

a)	**McMurdo**	**ICS NAV5plus**	**NAVTEX Receiver**
b)	**Radio Holland**	**ICS NAV5plus**	**NAVTEX Receiver**

(Comprising component parts and having technical characteristics shown in schedules 1 & 2)

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 300-065 : 2001 "Narrow-band direct-printing telegraph equipment for receiving meteorological or Navigational information (NAVTEX)"

BS 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 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 the relevant parts of Resolution A525(13), as amended by Resolution MSC 148(77) for an integrated printing NAVTEX, and Resolution A694(17).

SIGNED: P Goddard

P J Goddard Authorised Signatory

DATE of ISSUE: ***19th July 2004***

DATE of EXPIRY : ***18th July 2009***

Certificate Number: QQ-MED-12/04-01R

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 in accord with standard condition 3, ref Certificate DQAS-03/01-McM001R2.

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

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

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.

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

Certificate of Type Approval - Schedule 1
McMURDO – ICS NAV5plus NAVTEX Receiver

The applicant declared that the following units comprise the Radio equipment of the system designation a) given on sheet 1. 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		**28-224A**
or	GMDSS NAVTEX Receiver including pack list	**915-05A**
or	GMDSS NAVTEX Receiver including pack list (MoD)	**915-04A**
or	GMDSS NAVTEX Receiver (Cyrillic) including pack list	**915-06A**

SOFTWARE:- Receiver Firmware **Version 2.10** ***4**

OPTIONAL UNITS:-

Power supply - AC **N163S** McMurdo Part Number **89-029A**

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

*NOTES:-

1 The revision testing was conducted to IEC 61097-6:1995 and in parallel to EN 300-065:2001.
2 The EMC tests were conducted to IEC 60945:2002 at the manufacturers request, this latest standard is equal and not inferior to EN 301-011:1998
3 This certificate is related to that of the ICS Nav 5 (DERA-MED-68/99-01, update QQ-MED-18/04-01) which this equipment supersedes.
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
5 Production Facility, the NAV5plus receiver is produced at:

Offshore Electronics Ltd.
Guelles Lane
St. Peter Port
Guernsey
GY1 2RAC1

Technical Characteristics

FREQUENCY OF OPERATION	**TRANSMIT:**	N/A
	RECEIVE:	490kHz and 518kHz (Dual receiver standard)
Integrated Printing device	**Paper Printer**	40 characters per line, continuous printing as received.
Dedicated Display	**Option not used**	
INS Connection & Memory	**Option not used**	
Non volatile memory	**Paper roll printout**	Plain paper roll printer allows continuous lines of print.
IEC 61162-1 Interface. Other Serial Interfaces	**None** **1**	RS-422, Proprietary protocol
Power Supply	**24V DC** **or 220/110V AC**	Direct to receiver. Via N163S Power supply
Temperature Range & IEC 945 Class -	**-15°C to +55°C** **Protected**	Operational

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

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

Certificate Number **QQ-MED-12/04-01R**

QinetiQ

Certificate of Type Approval - Schedule 2
Radio Holland – ICS NAV5plus, NAVTEX Receiver

The applicant declared that the following units comprise the Radio equipment of the system designation b) given on sheet 1. 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	**28-224A**	
or GMDSS NAVTEX Receiver including pack list	**915-09A**	
or GMDSS NAVTEX Receiver (Cyrillic) including pack list	**915-10A**	
SOFTWARE:- Receiver Firmware	**Version 2.10**	***4**

OPTIONAL UNITS:-

Power supply - AC **N163S** McMurdo Part Number **89-029A**

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

*NOTES:-

1. The revision testing was conducted to IEC 61097-6:1995 and in parallel to EN 300-065:2001.
2. The EMC tests were conducted to IEC 60945:2002 at the manufacturers request, this latest standard is equal and not inferior to EN 301-011:1998
3. This certificate is related to that of the ICS Nav 5 (DERA-MED-68/99-01, update QQ-MED-18/04-01) which this equipment supersedes.
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
5. Production Facility, the NAV5plus receiver is produced at:

Offshore Electronics Ltd.
Guelles Lane
St. Peter Port
Guernsey
GY1 2RAC1

Technical Characteristics

FREQUENCY OF OPERATION	**TRANSMIT:**	N/A
	RECEIVE:	490kHz and 518kHz (Dual receiver standard)
Integrated Printing device	**Paper Printer**	40 characters per line, continuous printing as received.
Dedicated Display	**Option not used**	
INS Connection & Memory	**Option not used**	
Non volatile memory	**Paper**	Plain paper roll printer allows continuous lines of print.
IEC 61162-1 Interface. Other Serial Interfaces	**None** **1**	RS-422, Proprietary protocol
Power Supply	**24V DC** **or 220/110V AC**	Direct to receiver. Via N163S Power supply
Temperature Range & IEC 945 Class -	**-15°C to +55°C** **Protected**	Operational

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

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

Certificate Number **QQ-MED-12/04-01R**

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 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 labelling 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 labelled 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 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.