



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:-**  
Japan Radio Co., Ltd  
C/O Amsterdam Branch  
Cessnalaan 40-42  
1119 NL Schiphol-Rijk  
The Netherlands

**Manufacturer:-**  
Japan Radio Co., Ltd  
1-1 Shimorenjaku  
5-chome, Mitaka-Shi  
Tokyo 181-8510  
JAPAN

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

**GMDSS NAVTEX RECEIVER**  
(COMMISSION DIRECTIVE 2010/68/EU – ITEM A.1/5.3)

Of system types known and designated as:-

**JRC Navtex Receiver - Type – NCR-333**

(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 61097-6:2005 "Equipment for reception of meteorological or Navigational information (NAVTEX)"  
IEC 60945 : 2002 "General Requirements for marine equipment" (Inc. Corr. 1:2008)

(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).

**SIGNED:**

**R A Sharp** Authorised Signatory

**DATE of ISSUE:** 13<sup>th</sup> June 2011

**DATE of EXPIRY :** 12<sup>th</sup> June 2016

**Certificate Number:** QQ-MED-04/11-01

This Certificate is Valid until expiry date shown, subject to the standard conditions of issue printed on Page 4  
Japan Radio Co. Ltd are Module D registered with QinetiQ in accord with standard condition 3, ref Certificate DQAS-01/10-JRC002

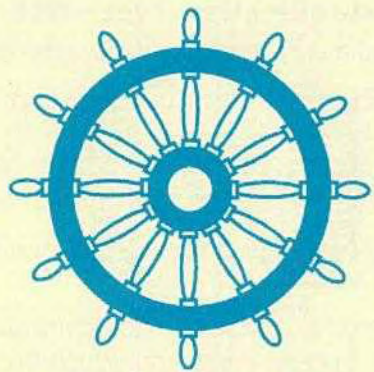
QinetiQ  
Cody Technology Park  
Ively Road, Farnborough  
Hampshire. GU14 0LX



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

*Under the terms of the United Kingdom Statutory Instrument, No 1957 : 1999, QinetiQ Ltd 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 (as amended) on Marine Equipment and issue Certificates of Type Approval.*

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# Certificate of Type Approval - Schedule 1

## JRC – NCR-333, 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 2010/68/EU.

MAIN UNIT Comprising:-	GMDSS NAVTEX Receiver 5.7" LCD Display	<b>NCR-333</b>
OPTIONAL UNITS:-	Printer Unit	<b>NKG-91 or DPU-414</b>
	Power Supply Unit DC/DC	<b>NBG-319 *1</b>
	or Power Supply Unit AC/DC	<b>NBG-320</b>
	Active Antenna	<b>NAW-333</b>
SOFTWARE:-	Receiver Firmware	<b>Version 2.00 *2</b>
----- End of List. -----		

**\*NOTES:-**

- 1 The NBG-319 DC/DC power supply is required to provide the low voltage supply for the external printer.
- 2 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
- 3 This certificate supersedes and replaces Certificate number QQ-MED-11/08-01R3 issued on 09/05/2008.



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**Technical Characteristics**

FREQUENCY OF OPERATION	<b>TRANSMIT:</b>	N/A
	<b>RECEIVE:</b>	518kHz, 490kHz and 4209.5kHz, F1B modulation
CHANNELS	<b>3</b>	3 independent receivers
RF POWER OUTPUT	-	N/A
IEC 61162-1 Interface.	<b>Listener 1 Talker 1</b>	Conformity to IEC 61162-1:2000. Listener to messages:- RMC, VTG, GLL, HDT, ROT, ACK, DTM, NRM Talker for messages ALR, NRX (Annex C, IEC 61097-6)
Message Memory (scrollable on LCD Display)	<b>3 x 200 message</b>	Each receiver channel has a 200 message memory for 500 character long messages.
External Printer output	<b>1 (RS232 Serial)</b>	External printer listed is a thermal paper roll printer.
Power Supply	<b>12 to 24V DC</b>	Direct supply to receiver. -10% & +30% working range on nominal voltage shown.
Temperature Range - Exposed & IEC 945 Class - Protected	<b>-25°C to +55°C -15°C to +55°C.</b>	--- Active Antenna (operational). --- All other units

**Conditions of Issue of this certificate are printed on page 4.**

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

**Certificate Number      QQ-MED-04/11-01**



## 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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