



NOTIFIED BODY
No 0191

CERTIFICATE OF TYPE EXAMINATION

(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:-

Bridge Navigational Watch Alarm System (BNWAS)
(COMMISSION DIRECTIVE 2011/75/EU – ITEM A.1/4.57)

Of system type known and designated as:-

JRC – JCX-151 BNWAS

(Comprising component parts and having technical characteristics shown in shedule 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 appropriate parts of:

IEC 62616 : 2010 “Bridge Navigational Watch Alarm Sysytem (BNWAS)”

IEC 60945 : 2002, “General Requirements for Marine Navigation Equipment” (Inc. Corr1:2008)

IEC 62288 : 2008 “Presentation of navigation-related information on shipborne navigational displays”

(being testing standards listed in column 5 of Annex A.1 of Directive 2011/75/EU for Item 4.57)

Note: IEC 62288:2008 covers the presentation standard of all navigational equipment and appropriate assessment for this equipment has confirmed minimum harmonised standards required for IMO Resolution MSC.191 (79).

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.128(75), Resolution MSC.191(79) and the relevant parts of Resolution A694(17).

SIGNED:

R A Sharp

Authorised Signatory

DATE of ISSUE: 13th December 2011

DATE of EXPIRY : 12th December 2016

Certificate Number: QQ-MED-19/11-01

This Certificate is Valid until expiry date shown, subject to the standard conditions of issue printed on page 4

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 - JCX-151 : BNWAS

The applicant declared that the following units comprise the BNWAS equipment of the designation given on page 1. These units in a typical configuration have been assessed & tested, and satisfactory details of these units were included in the technical file.

MAIN UNIT*¹ Comprising:-

Main Control Unit	NCK-169	*2
LED Display Unit	NCD-2189	
Reset Button	NCJ-878	*3
Audible Alarm Buzzer	NVS-765	*4

OPTIONAL UNITS:-

LED Visual Alarm Unit	NCD-2191	
Waterproof Reset Button	NCJ-879	*3
Motion Sensor (PIR)	NYG-4	
Emergency Call Unit	NCJ-880	
Contact Input Unit	NQA-2290	*5
Contact Output Unit	NQB-1029	*5
Ethernet Connection Unit	NHA-337	*5

Software configuration:-

NCK-169 software (Firmware)	Version 1.x
NCD-2189 software (Firmware)	Version 1.x

*NOTES:-

- 1 This equipment is a Bridge Navigational Watch Alarm System using the component parts listed above and capable of versatile configuration to suit a ships operating plan in respect of IMO Resolution MSC.128(75). All items have been tested and are recognised as compliant with the relevant requirements of IEC 60945: 2002.
- 2 The NCK-169 can accept Unacknowledged Alarm transfer and will sound BNWAS alarms after a settable delay. No specific performance standards exist for this so is not included in this type approval. May be acceptable on a ship by ship basis.
- 3 Up to 8 Reset Buttons can be connected to suit the number of stations selected on the Bridge for reset points. The exact number used would be in accordance with the ships operating plan agreed with the Flag administration.
- 4 Up to 4 Buzzer Units can be installed in the Officers quarters for the second stage Alert and further Buzzer units can be installed in the Crew quarters/public areas for the third stage Alert.
- 5 These units provide additional facilities for larger installations and have only been tested to IEC 60945 environmental & EMC requirements and clause 4.1.2 applies. Installation acceptance in accord to the ships installation plan may be required.

Technical Characteristics

PARAMETER	PROVISION	COMMENT
Security	Removable key	Operational mode & time settings can only be changed when keyswitch is in 'SET' position
Dormant Period (Td)	Default period 3 minutes	Can be preset up to 12 minute in 9steps
First Stage Indication	Active from end of Td	All Reset Buttons flash with yellow illumination
First Stage Alarm	At Td + 15 second	Audio sounders in Display & Reset units
Second Stage Alarm	Fixed delay 15 seconds	Red LED indication & Buzzer in NVS-765 Unit. Up to 4 officers can be individually addressed.
Third Stage Alarm	Default delay 90seconds	Red LED indication & Buzzer in NVS-765 Unit Delay adjustable in 9 steps up to 180 seconds
Audio alarm sounders	Measured sound level 75.9 to 78.9dB(A) at 1 m.	Identical sounder units in Display, Reset and Buzzer units. Tone pattern can be changed.
IEC 61162-1 SERIAL PORTS	Listener - 2 Talker - 1	Conformity to IEC 61162-1:2000.
TEMPERATURE RANGE Exposed & IEC 60945 CLASS Protected	-25°C to +55°C (operational) -15°C to +55°C.	-- NCJ-879 Waterproof Reset Button -- All other units
POWER SOURCES	110 /230V AC, 50/60Hz 24V DC (back-up)	Relies on external 24V DC supply to provide back-up operation of all circuitry for greater than 6 hrs operation if main AC power fails.

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

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Certificate Number QQ-MED-19/11-01

Certificates of Type Approval Conditions of Issue

1. Each Certificate will be used in its entirety and not reproduced in part.
2. The choice of Notified Body under the Marine Equipment Directive is that of the Manufacturer/Applicant and the following conditions apply whilst the QinetiQ Notified Body fulfils that role.
This certificate remains fully valid all the time the conditions stated below remain true, Should any change a new Notified Body should be consulted to ascertain their standard conditions appertaining to new or continued MED certification.
3. 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.
4. The mark of conformity (Wheelmark) 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.
This certificate alone gives no authority to Affix the Wheelmark or use the QinetiQ Notified Body Number (0191) in combination with it. The manufacturer is responsible for ensuring that Production Quality Assurance requirements & appropriate certification renewal and periodic surveillance are maintained.
5. 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 on page 1 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. Where the QinetiQ Notified Body is also the Quality Module (D, E or F) assessor for the production year this number is complete. When another notified body performs the Quality module this body should be consulted to ascertain the complete number for the production year. Applicants/manufacturers are advised to consult MarED document 05-163r2 from WWW.mared.org for guidance.
6. This certificate does not confer any approval status to this equipment other than defined by, and tested according to the MED Item Number, IMO Resolutions and specifications listed on sheet 1.
7. 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.
8. 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;
9. The manufacturer must advise QinetiQ or another MED Notified Body of any intended changes to the design or production of the equipment which might affect the equipment performance. Minor Modifications to the equipment will be considered on a case-by-case basis. The Notified Body will review any factory test results, in consultation if necessary, with the test facility that conducted the original Type Approval testing on the equipment. The Notified Body 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 made to a MED Notified Body.

QinetiQ Ltd
Marine Approval and Testing Service
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