DNV·GL

Certificate No:
TAA0000271

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Central Alert Management System

with type designation(s)
JRC BAM

Issued to
Japan Radio Co., Ltd.
Mitaka, Tokyo, Japan

is found to comply with
IMO Res. A.694(17) General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids
IMO Resolution MSC.302(87) Performance standards for Bridge Alert Management
MSC.191(79) Performance standards for presentation of navigation-related information on shipborne navigational displays

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Høvik** on **2019-02-26**
This Certificate is valid until **2024-02-25**.
DNV GL local station: **Yokohama**

Approval Engineer: **Frederik Tore Elter**

for **DNV GL**

Marta Alonso Pontes
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Product description

JRC BAM, bridge alert management, consists of following components

Hardware:

Component	Description	Location	Remark
NWZ-208 or NWZ-207 or NWZ-214	Monitor	Protected	26inch or 19inch
NCE-5605	Trackball	Protected	-
NCE-5625	Keyboard	Protected	Option
NDC-1590	Central Control Unit	Protected	-
NBD-913	Power Supply Unit	Protected	-
NQA-2443	Sensor LAN Unit	Protected	-
NQE-1143	Junction Box	Protected	-
NCT-82/83	Digital signal converter	Protected	-

Software:

- OS: Window 7 Embedded.

Application software	Version Number
Application	01.30
BAMS	01.XX

Application/Limitation

- Installation of the system shall be tested and verified in accordance with installation manual (Bridge Alert Management With CONNING).

Type Approval documentation

Tests carried out

- Environment test : IEC 60945 (2002, Ed.4)
- Serial Interface test : IEC 61162-1 (2016, Ed.5)
- Serial Interface test : IEC61162-450 (2011, Ed.1)
- Presentation test : IEC62288 (2014, Ed.2)
- IMO Resolution MSC.302(87)
- DNVGL-RU-SHIP Pt.6 Ch.3. Sec. 3 (Edition January 2018, amended July 2018)

Marking of product

The manufacturer and Type Designation to be applied to the equipment in a clear visible location and in addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

Periodical assessment

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.
The scope of the periodical/renewal assessment is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.