



## CERTIFICATE OF TYPE APPROVAL

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

**Applicant:-**  
Japan Radio Company Limited  
1-1 Shimorenjaku  
5-chome, Mitaka-Shi  
Tokyo 181-8510  
JAPAN

**Manufacturer:-**  
Taiyo Musen Co., Ltd  
2-11-18, Higashi-Kojiya  
Ota-ku  
Tokyo 144-0033  
JAPAN

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

### 406 MHz EMERGENCY POSITION INDICATING RADIO BEACON (EPIRB) (Commission Directive 2010/68/EU – Item A.1/5.6)

Of a type series known and designated as:-

**JRC JQE-103, 406MHz EPIRB  
(from serial Number GP40001/GX40001)**

(Details, component parts and 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 61097-2 : 2008 “COSPAS-SARSAT Satellite EPIRBs operating on 406 MHz”  
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 Electrotechnical Commission).

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 A810(19), (as amended by MSC 56(66) & MSC 120(74)), Resolution MSC/Circ 862 (as applicable) and the relevant parts of Resolution A694(17).

**SIGNED:**

Notified Body

**DATE of ISSUE:**

**21<sup>st</sup> September 2011**

**DATE of EXPIRY :**

**18<sup>th</sup> September 2016**

**R A Sharp** Authorised Signatory

**Certificate Number:**

**QQ-MED-10/11-02**

**EU/USCG Mutual Recognition Agreement  
Council Decision 2004/425/EC**

*This category of equipment is not currently included in the MRA*

**This Certificate is Valid until expiry date shown, subject to the standard conditions of issue printed on page 4  
Taiyo musen Co Ltd are Module D registered with QinetiQ in accord with standard condition 3, ref Certificate DQAS-18/04-TMC001R4  
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 2010/68/EU, 2009/26/EC, 2008/67/EC & 2002/84/EC

*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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**Notified Body 0191**

# Certificate of Type Approval - Schedule 1

## JRC, JQE-103, 406MHz Emergency Position Indicating Radio Beacon

The applicant declared that the JQE-103 model EPIRB designated on page 1, using the basic assembly (as defined by Assembly drawing -323756, Circuit Schematic 333584 and BoM 043911. Representative units have been assessed & tested, and satisfactory details of these units were included in the main technical file.

**MAIN UNITS** Comprising:-

406MHz TEB-700 EPIRB Beacon	<b>JQE-103</b>	*1, 2
Float-free Auto Housing (Hammar H20 HRU)	<b>NYH-12</b>	*3, 4

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

**\*NOTES:-**

- 1 The JRC JQE-103 beacon unit is identical to the Taiyo-Musen TEB-700 EPIRB, approved under certificate number QQ-MED-10/11-01, dated 19<sup>th</sup> September 2011, except for JRC labels.
- 2 The JRC JQE-103 beacon unit has been tested and assessed to Class 2 temperature requirements and have additionally been assessed to the requirements of IMO A814(19), Annex clause 2.1 to 2.5.
- 3 This Assembly is an automatic float free release EPIRB (Category 1)
- 4 The float free release case assembly has been tested for correct hydrostatic release at temperatures of -30°C and + 65°C.
- 5 Marine COSPAS-SARSAT 406MHz EPIRBs form a distress alerting component of the Global Maritime Distress & Safety System (GMDSS). The TEB-700 series has been granted COSPAS-SARSAT Type Approval certification No.164, dated 28 August 2006.
- 6 This certificate recognises the updated build standard and appropriate retesting from the original JQE-103 EPIRB and supercedes and replaces certificate number QQ-MED-24/06-01R, issued on 29<sup>th</sup> May 2007.

**Technical Characteristics**

PARAMETER	PROVISION	COMMENT
FREQUENCY OF OPERATION	406.028MHz and 121.5MHz	TRANSMIT Only
EMISSION CODE	16K0G1D 3K20A3X	
POWER CHARACTERISTIC	5W 50mW	- 406.028MHz - 121.5MHz
GNSS Location Device fitted	No	Normal beacon location by COSPAS SARSAT orbital satellite method.
TEMPERATURE RANGE Category 1 & Category 2	-20°C to +55°C.	- Class 2 Note: Hydrostatic release operation tested at -30°C and +65°C
POWER SOURCE	8.4V lithium Battery Pack (Part no. P-35)	48hour minimum battery life at -20°C. Label shows expiry date. Manufacturer authorised service centre replacement only

**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-10/11-02**

## 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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