

Japan Radio Co., Ltd.

Mitaka Plant

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YOUR REF :

OUR REF :

TOKYO 7th May 1994

Federal Communication Commission
7435 Oakland Mills Road
Columbia, MD. 21046
U.S.A.

Subject : Type Approval Application for Inmarsat-M Mobile Earth Station

Model : JUE-200M

This equipment has been tested in accordance with the Inmarsat-M System Definition Manuals issued by Inmarsat as well as those contained in the appropriate commission regulations. The necessary measurements have been made by Japan Radio Co., Ltd. (The copy of the Inmarsat approval particulars is attached.)

These tests have been performed using measurement procedures consistent with industry of commission standards and demonstrate that the equipment complies with these technical requirements and regulations.

Each unit manufactured, imported or marketed, as defined in the commission's regulations, will conform to the sample(s) tested within the variations that can be expected due to quantity production and testing on a statistical basis.

Yours sincerely,



Y. Okabe
Assistant General Manager
1st Engineering Department



Inmarsat

TYPE APPROVAL CERTIFICATE FOR A MARITIME MOBILE EARTH STATION MODEL FOR USE WITHIN THE INMARSAT SATELLITE COMMUNICATIONS SYSTEM

WHEREAS, Japan Radio Co., the manufacturer of a Maritime Mobile Earth Station Model identified as J/E-75A has submitted test data which demonstrates that said Maritime Mobile Earth Station Model when operating in the environmental conditions set forth in the manufacturer's application dated 9 July 1990, meets the applicable technical requirements for use with the INMARSAT Satellite Communications System, as issued by INMARSAT in the document entitled "System Definition Manual for the Standard-C Communications System; and

WHEREAS, said Manufacturer has certified that all other units of the same type will meet said technical requirements in a similar manner to the unit subjected to test and that the results of tests conducted in accordance with procedures approved by INMARSAT demonstrate that said Maritime Mobile Earth Station Model and other units of the same type provide the capabilities of a Class 2 Maritime Mobile Earth Station;

- a) 2-way message transfer;
- b) Distress Alerting; and
- c) Enhanced Group Calling.

NOW, THEREFORE, in reliance upon the foregoing, INMARSAT does hereby certify that the Maritime Mobile Earth Station Model identified herein is acceptable for use with the INMARSAT Satellite Communications System as of the date of this Certificate.

International Maritime Satellite Organization
(Inmarsat)

By: *[Signature]*

Name: Olof Lundberg

Title: Director General

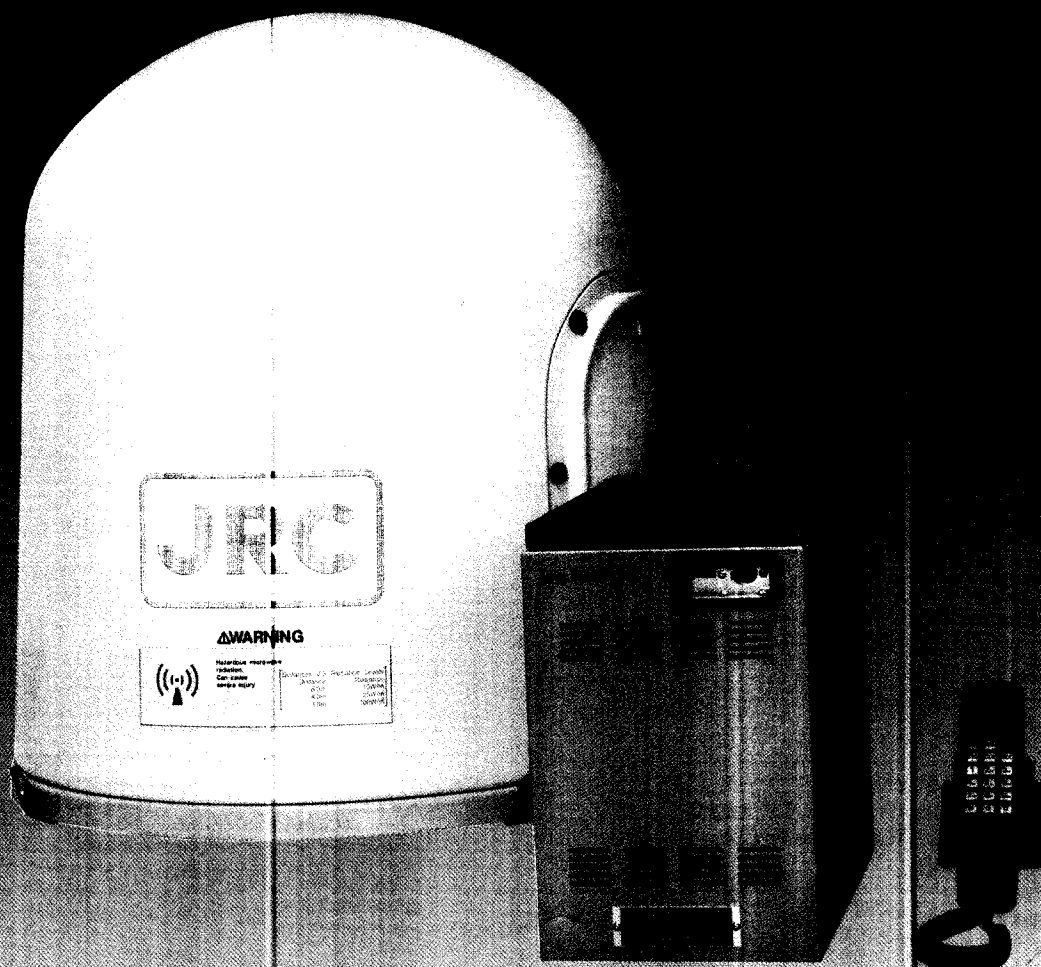
Date: 1 August 1991

NOTE, HOWEVER:

1. This certificate does not authorize the operation of the maritime mobile earth station in the INMARSAT System. Such authorization requires commissioning after installation, in accordance with commissioning procedures established by INMARSAT. In addition, the operation of the maritime mobile earth station may also be subject to national licensing requirements.
2. This certificate is intended only as formal notification to the manufacturer that INMARSAT has determined, on the basis of data submitted by the manufacturer, that maritime mobile earth stations of the type identified herein meet the standards for use with the INMARSAT System. This certificate is not a warranty and INMARSAT hereby expressly disclaims any and all liability arising out of or in connection with the issuance, use, or misuse of this Certificate.

JRC INMARSAT-M MARITIME MOBILE EARTH STATION

JUE-200M MARITIME MOBILE



- Simple operation for international telephone, facsimile and data calls.
- Reliable satellite tracking by a beam-steerable phased array antenna system with lightweight, simple mechanism.
- EME and IME connected via a single coaxial cable.
- Compact handset with liquid crystal display, dialing and, menu keys and speaker.
- Designed to meet the latest INMARSAT-M System Definition Manual.

SPECIFICATIONS

- Frequency Range : TX 1626.5 to 1646.5MHz
RX 1525.0 to 1545.0MHz
- EIRP : 27dBW +2,-3dB(high select)
21dBW+2,-3dB(low select)
-10dBK or more
- G/T : Beam steerable phased array
antenna right-hand circular polariza-
tion and 2-axis stabilization pointing
- Modulation : TX 3kbps BPSK
8kbps O-QPSK
RX 6kbps BPSK
8kbps O-QPSK
- Coding : BPSK convolutional code
(R=1/2,K=7)
O-QPSK convolutional code
(R=3/4,K=7)
- Primary Power supply : 100/120/200/220V AC±10%
- Environmental Conditions
Temperature : -25 to +50°C(EME)-
operational
0 to +45°C(IME)-operational
-40 to +85°C(EME/IME)-
storage
Humidity : Up to 95% at 40°C
Vibrations : INMARSAT specifications
Ship Motions : Roll±30° ; Pitch±15° ; Yaw±8°
Surge±0.2g ; Sway±0.2g ;
Heave±0.5g ; Turnig rate
±12°/s ; Headway 30knots
- DTE Interface : RS-232C,RS-422A(Option)
- Card Reader Interface : RS-232C,RS-422A(Option)
- Printer Interface : Centronics
- GPS Interface : NMEA0183 or JRC standard
format

STANDARD COMPOSITIONS

- Externally Mounted Equipment(EME)
- Internally Mounted Equipment(IME)
- Single coaxial Cable
(Standard : 50m ; Option : upto 100m)
- Telephone Set
- Voice Distress Button(VDB)

OPTIONS

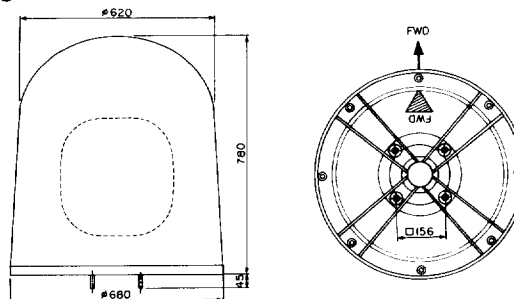
- Remote Telephone Set (Up to 4 sets)
- Facsimile Interface Unit(FIU)
- G3 Facsimile(2400bps)
- Data Terminal Equipment(DTE)
- Card Reader
- Printer
- Buzzer Box (Up to 4 units)
- Voice Distress Button(Available for each
Telephone Set)
- Hand-free Microphone
- GPS Receiver
- DC/AC Converter

Note : JRC reserves the right to change the design and specificatios
of the equipment for improvement without notice.

DIMENSIONS & WEIGHTS

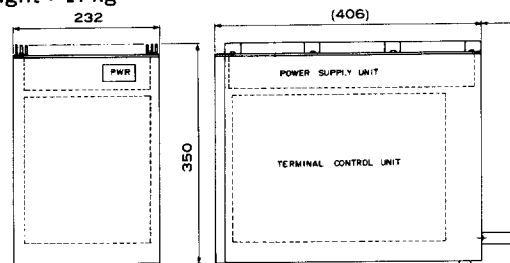
EME

Weight : 37.5kg



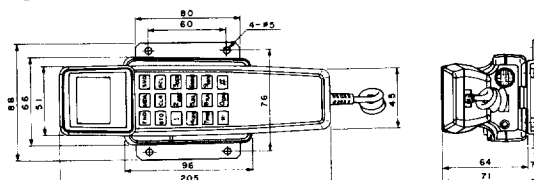
IME

Weight : 17kg



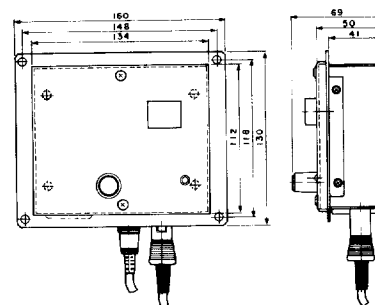
Telephone Set

Weight : 0.4kg



Voice Distress Button

Weight : 0.4kg



Note : COMSAT's Mobile LinkSM Service.COMSAT's LinkSM service, available in the Atlantic and Pacific Ocean regions through the Inmarsat satellite system and COMSAT's Southbury, Conn. and Santa Paula, Calif. land earth stations, now offers any vessels as small as 35ft. the advantage of voice, fax and data communications at the lowest price ever. Through Mobile LinkSM, users can have voice, fax and data communications at sea are same as those in the office or home. For COMSAT's services, call 1-301-428-2222.

For further information, contact:



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Since 1915

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