

# Certificate

of

## EC Type-examination (Module-B)

Certificate N°: 02212010/AA/03

Product Category A.1/5.14 A.1/5.15

With respect to Marine Equipment Directive 96/98/EC and the amending Directive 2002/75/EC, Telefication declares that the equipment:

Product description: **GMDSS MF/HF SSB-Radio telephone with integrated DSC and NBDP and DSC watchkeeping receiver**  
Trademark: **Furuno**  
Family name: **--**  
Type designation: **See Annex 3**  
Serial N°: **See Annex 3**  
Software release N°: **See Annex 3**  
  
Manufacturer: **Furuno Electric Co., Ltd.**  
Address: **9-52 Ashihara Cho**  
City: **662-8580 Nishinomiya City**  
Country: **Japan**

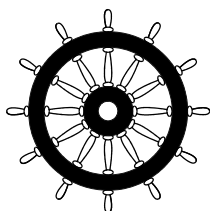
complies with the international instruments and test standards as listed in the Annex.


This certificate is granted to:

Name: **Furuno Electric Co., Ltd.**  
Address: **9-52 Ashihara Cho**  
City: **662-8580 Nishinomiya City**  
Country: **Japan**

Validity of this certificate is 5 years; **Expiry date: 19 September 2012**  
. This certificate has THREE Annexes.

Zevenaar, 19 September 2007



*i.o.*  


M.H. Koop  
Manager Certification



### General conditions:

- Each product to which this certificate relates shall be provided with Marine markings.

The Marine marking consist of symbol in the form of a wheel followed by the identification number of the responsible Notified Body (Telefication - 0560 -), and by the last two digits of the number of the year in which the mark is affixed.

- The holder of this Certificate has drawn up a Declaration of conformity to type with Directive 96/98/EC and amending Directives, declaring that the product(s) described in this EC Type-examination certificate, satisfy the requirements that apply to them.
- Each product shall be identified by means of type, batch and/or serial numbers and the name of the manufacturer and/or importer.
- If the equipment is to be modified, Telefication shall be notified immediately. Depending on the modifications, Telefication may have additional examinations carried out in consultation with the applicant.

### Remarks and observations

*The following conditions are applicable:*

#### System related equipment

The product to which this certificate relates includes to following units or equipment:

- FS-2570C: Control Unit for FS-1570/FS-2570      \*\* see note 1 \*\*
- FS-2571C: Control Unit for FS-1570/FS-2570
- FS-1570T: Transceiver Unit 150W
- FS-2570T: Transceiver Unit 250W
- HS-2001: Handset/Bracket
- HS-2003: Handset/Bracket
- AT-1560-15: Antenna coupler 150W
- AT-1560-25: Antenna coupler 250W
- IC-303-DSC: Incoming call indicator
- IC-302-DSC: Telex distress alert button
- IB-581: NBDP-controller, monochrome display
- IB-582: NBDP-controller, color display
- IB-583: NBDP-controller, color display
- PP-510: Printer
- IF-8500: Printer switch box
- DMC-5: Distress message controller
- FAX-5: 2.6m Active whip antenna for WKR
- HCS701K-B20: Handset/Bracket
- SEM-21Q: External loudspeaker
- PR-300: AC-power supply
- PR-850A: AC-power supply

### Remarks and observations (continued)

*The following conditions are applicable:*

With the use of control unit FS-2571C, DSC compliance has been accomplished according to ITU-R M.493-11, ITU-R M.493-12 (partly) and ITU-R M-541-9.

In order to cover Annex 3 and 4 of ITU-R M.493-12, document Annex A, draft 17 January 2006, (recently renamed to Draft IEC 61097-300) has been utilized for the performance tests of the (new) DSC-protocol.

This document will be supplemented to EN 300 338 and IEC 61097-3 in the future.

Performance testing of multiple automated procedures and parallel event handling according to chapter 11 of this document has not been carried out as the equipment does not have these abilities (yet).

Note 1: DSC functionality of controller FS-2570C complies with ITU-R M.493-10 / ITU-R M.541-8. Therefore new installations of this controller should not be permitted after 31 December 2008.

## Documentation lodged for the EC type-examination

### *Testreports:*

- Telefication: 98752230, 17 Juni 2002
- Telefication: 98752231, 17 Juni 2002
- Telefication: 98752232, 17 Juni 2002
- Telefication: 98752233, 17 Juni 2002
- Telefication: 98752234, 17 Juni 2002
- Telefication: 98752235, 17 Juni 2002
- Labotech: FLI 12-02-019, 20 May 2002
- Labotech: FLI 12-02-036, 30 August 2002

### *Product documentation:*

- Bill of materials
- Electric diagrams
- Installation manual
- Photos
- User manual

## International instruments and test standards

### *The equipment complies with:*

- |                            |               |         |
|----------------------------|---------------|---------|
| - ETS 300 067              | October 1993  | A1      |
| - EN 300 338               | April 1999    | V1.2.1  |
| - ETS 300 373              | August 1997   | A1      |
| - EN 61162-1               | July 2000     | 2nd Ed. |
| - EN 301 033               | August 1998   | V1.1.1  |
| - EN 60945                 | January 1997  |         |
| - IMO Resolution A.694(17) | 1991          |         |
| - IMO Resolution A.806(19) | 1995          |         |
| - ITU-R M.1082-1           | October 1997  |         |
| - ITU-R M.1173             | October 1995  |         |
| - ITU-R M.476-5            | October 1995  |         |
| - ITU-R M.491-1            | July 1986     |         |
| - ITU-R M.492-6            | October 1995  |         |
| - ITU-R M.493-10           | May 2000      |         |
| - ITU-R M.493-11           | May 2004      |         |
| - ITU-R M.493-12           | March 2000    |         |
| - ITU-R M.541-8            | October 1997  |         |
| - ITU-R M.541-9            | May 2004      |         |
| - ITU-R M.625-3            | October 1995  |         |
| - ITU-R M.821-1            | February 1994 |         |
| - MSC Resolution 36(63)    | May 1994      |         |
| - MSC Resolution 68(68)    | 1997          | A3      |
| - MSC Resolution Cir. 862  | 1998          |         |

## Technical features

*The product includes the following features:*

- FS-1570, RF output power: 150 W Pep rated
- FS-2570, RF output power: 250 W Pep rated
- Class of emission: J3E and J2B
- Receiver frequency range: 0.1 to 29.9999 MHz
- Transmitter frequency range: 1.6 to 27.5 MHz
- DSC Class A and NBDP-operation

## Trademarks and type designations

*The product as described in this EC type-examination includes the following type designations:*

Type designation: FS-1570  
Trademark: Furuno  
Serial No: 3535-0002  
Software release No: With controller FS-2570C:  
Main: 0550205-01.xx; Control: 0550206-01.xx; DSC: 0550207-01.xx  
NBDP: 0550208-01.xx  
With controller FS-2571C:  
Main: 0550225-01.xx; Control: 0550222-01.xx; DSC: 0550207-01.xx  
NBDP: 0550208-01.xx

Type designation: FS-2570  
Trademark: Furuno  
Serial N<sup>o</sup>: 3536-0002  
Software release No: With controller FS-2570C:  
Main: 0550205-01.xx; Control: 0550206-01.xx; DSC: 0550207-01.xx  
NBDP: 0550208-01.xx  
With controller FS-2571C:  
Main: 0550225-01.xx; Control: 0550222-01.xx; DSC: 0550207-01.xx  
NBDP: 0550208-01.xx