



CERTIFICATE NUMBER
04-YO458544-PDA

DATE
12 August 2004

ABS TECHNICAL OFFICE
Yokohama

EXPIRE DATE
(Subject to the condition stated below)
11 August 2009

CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of
Furuno Electric Co., Ltd.

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate; and it will remain valid for five years from the date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first).

PRODUCT: Ship Security Alert System (SSAS)

MODEL: FELCOM 16/15/12
(See attachment)

ABS RULE: Not Applicable

OTHER STANDARD: Chap. XI-2 / Reg. 6 of SOLAS 2002 Amendments,
IMO Resolution MSC.147(77) adopted on 29 May 2003, and
IEC 60945 (2002)

AMERICAN BUREAU OF SHIPPING

Shigeo Higuchi

Manager - Machinery Engineering

DA Certificate No: 04-YO458544-PDA
Issue Date: 12 August 2004
Expire Date: 11 August 2009
(Subject to the condition stated on the DA Certificate)

Company: Furuno Electric Co., Ltd.
Factory / Office:
Country: Japan
Zip: 662-8580
Address: 9-52, Ashihara-cho, Nishinomiya City
Telephone: +81-798-63-1216
Fax: +81-798-63-1102
Web Site: www.furuno.co.jp
Contact E-mail: kenji.kawabata@furuno.co.jp
Product/Equipment: Ship Security Alert System (SSAS)
Model: FELCOM 16/15/12
Description: FELCOM 12/15 SSAS Facility are based on Inmarsat C Ship Earth Station (SES) which complies with GMDSS Radio Installation in SOLAS. FELCOM 16 with SSAS Facility is based on Inmarsat Mini-C Mobile Earth Station.

FELCOM 16/15/12 consists of the following components:
Antenna Unit : IC-116 / IC-115 / IC-112 ;
Terminal Unit : IC-215 / IB-581 / IB-582 ;
Communication Unit : IC-216 / IC-212 ;
Junction Box : IC-315 ;
Distress Alert/Received Call Unit : IC-305 ;
Alarm Unit : IC-306 ;
SSAS Alert Unit : IC-307 ;
Received Call Unit : IC-303 ;
Distress Alert Unit : IC-302 ;
SSAS Alert Unit Interface : IC-312 ;
Distress Message Controller : DMC-5 ;
AC/DC Power Supply Unit : PR-300, PR-240-CE.

Intended Service: The system is intended for transmitting the security alert when the ship is under attack by pirates, terrorists, etc. It notifies the preset flag administration on land that the ship is under threat, without generating any audio/visual alarms to prevent others onboard from sensing that a security alert is transmitted.

Rating: Power Supply: 12 to 24 VDC
Applicable ABS Rule: Not Applicable
Applicable Other Standard: Chap. XI-2 / Reg. 6 of SOLAS 2002 Amendments, IMO Resolution MSC.147(77) adopted on 29 May 2003, and IEC 60945 (2002)
Service Restrictions: Unit Certification is not required for this product.

Comments:

This DA Certification is based on the following documents:

(a) FELCOM 16

(i) EMC Test Report No. FLI12-02-049 dated 29 November 2002 issued by Furuno Labotech International Co., Ltd. (FLI) ;

(ii) EMC Test Report No. FLI 12-04-008 dated 20 February 2004 issued by FLI ;

(iii) Test Report No. FLI 12-04-013 dated 25 March 2004 issued by FLI ;

(iv) EMC Test Report No. FLI 12-04-033 dated 28 April 2004 issued by FLI.. ;

(v) Type Approval Particulars Inmarsat Mini-C MES, T.A.P. No. 04, Certificate No. 4FE088, dated 11 February 2004, issued by Inmarsat Limited. ;

(b) FELCOM 15

(i) Test Report No. FLI 12-02-047 dated 25 November 2002 issued by FLI. ;

(ii) Test Report No. FLI 12-04-040 dated 3 June 2004 issued by FLI. ;

(iii) Type Approval Particulars Inmarsat-C MES, T.A.P. No. TA-04-089-03, Certificate No. IT-04-089-01, dated 12 February 2004, issued by Inmarsat Limited. ;

(c) FELCOM 12

(i) Test Report No. FLI 12-04-048 dated 16 July 2004 issued by FLI. ;

(ii) Type Approval Particulars Inmarsat-C MES, T.A.P. No. TA-04-072-01, Certificate No. IT-04-072-01, dated 7 June 2004, issued by Inmarsat Limited.

Revision History

Revision No	Rev Description	ABS Letter No	ABS Letter Date
0	Initial	458544	12 August 2004