

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the LR Type Approval System.

This certificate is issued to:

PRODUCER	Thrane & Thrane A/S
PLACE OF PRODUCTION	Lundtoftegaardsvej 93D DK-2880 Kgs. Lyngby Denmark
DESCRIPTION	Ship Security Alert system based on Inmarsat mini-C services with Thrane & Thrane SAILOR Ship Alert Messages routed through message protocol allowing up to three destinations to be addressed. Additional to any GMDSS system. Option 913 for latched push buttons (International version) Option 916: for instant activation push buttons and yellow coloured test push button (US version)
TYPE	TT-6120A, SSA stand-alone system consisting of the main components, SAILOR 3027 SSA Terminal, Thrane 6194 Terminal Control Unit, SSA Alarm and - Test push buttons; options: 913 for International 916 for US Tee connection and cables with end connectors. external power supply is required
APPLICATION	Marine and Offshore applications for use in environmental categories ENV2; ENV5*) in "Bridge and Deck Zone" as defined in LR Specification No.1, 2002 where the Specification is satisfactory for the intended operation. ENV5: Sailor 3027 SSA terminal only

Certificate No.	11/70011
Issue Date	25 July 2011
Expiry Date	24 July 2016
Sheet	1 of 2

Lloyd's Register EMEA
Strandvejen 104A, DK-2900 Hellerup


Poul Erik Hansen
Copenhagen Plan Approval Office

"Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract."

ADDITIONAL TESTS

Extreme Power Supply
Compass Safe Distance
Acoustic Noise and Signals
Ingress Protection
Salt Mist / Corrosion

STANDARD

Res MSC: 136(76) Recommendation on Performance Standard for a Ship Security Alert System
Res MSC: 147(77) Revised Recommendation on Performance Standard for a Ship Security Alert System
IEC60945

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The Design Appraisal Document No. 11/70011 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 11/70011
Issue Date 25 July 2011
Expiry Date 24 July 2016
Sheet 2 of 2


Poul Erik Hansen

Copenhagen Plan Approval Office

Lloyd's Register EMEA
Strandvejen 104A, DK-2900 Hellerup

"Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract."

COPY

Document no: TA11/70011
Issue number 00
Page 1 of 1



Marine Design Appraisal Document

Lloyd's Register EMEA
Copenhagen Design Support Office
Strandvejen 104A-DK 2900 Hellerup
Denmark

Date
19 July 2011

Quote this reference on all future communications
TA/I097480/1100807/PEH

THE LR TYPE APPROVAL SYSTEM 2002.

Issued to: Thrane & Thrane A/S, Denmark
for: Stand-alone Ship Security Alert System type: TT-6120A
TYPE APPROVAL CERTIFICATE No. 11/70011

The undernoted documents have been reviewed for compliance with the requirements of the LR Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

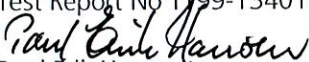
Request form for Type Approval
TT Doc "Sailor 6110 Mini C GMDSS" (Parts List)

06.04.2011
No date

APPROVAL REPORTS

NEMKO Test Report no E10178.00
Test Report No TT99-134015A " TT-6110A & TT6120A System 6000 SSA Conformance Testing"

17.02.2010
30.06.2011


Poul Erik Hansen

Senior Surveyor, Electrical Section

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

Lloyd's Register EMEA
is a member of the Lloyd's Register Group

Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Part 3
Control System - Convert Ships Security Alert System

Producer/Licence No.	Item Description	Technical Details	Category/Additional Tests	Remarks	Cert. No.
Thrane & Thrane A/S Lundtoftegaardsvej 93D DK-2880 Kgs. Lyngby Denmark	Ship Security Alert system based on Inmarsat mini-C services with Thrane & Thrane SAILOR Ship Alert Messages routed through message protocol allowing up to three destinations to be addressed. Option 913 for International Option 916 for US Type: SAILOR 6120A SSA (stand-alone system) consisting of - SAILOR 3027 SSA Terminal - Thrane 6194 Terminal Control Unit - Alert buttons (2 off) w/ cable (International or US variant) - Test button (1 off) w/ cable (International or US variant) - Tee connection and cables with end-connectors	External power supply - 10.5V -32VDC is required. Software version DCE: 1.01 or higher	ENV2 ENV5 *) (2002) *) Thrane 6194A Terminal Control Unit only IEC 60945 IACS E10	Expires: 24 July 2016 Installation onboard to comply with: SOLAS regulation XI-2/6 IMO Res MSC: 136(76) IMO Res MSC: 147(77) revised The Equipment is also supplied Under the brands: Highlander SAM	11/70011