

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Ship Security Alert System (SSAS)**with type designation(s)
SeaGuard

Issued to

Stratum Five Ltd.
Shoreham-by-Sea SW, United Kingdom

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft
ISPS Code - SOLAS Chapter XI-2 Regulation 6 Ship Security Alert System
IMO Resolution MSC.147(77) Revised Performance Standards for a Ship Security Alert System
IMO Res. A.694(17) General requirements for shipborne radio equipment forming part of the
global maritime distress and safety system (GMDSS) and for electronic navigational aids**Application :****See page 2**Issued at **Høvik** on **2017-05-26**This Certificate is valid until **2022-05-25**.DNV GL local station: **Southampton**for **DNV GL**Approval Engineer: **Steinar Kristensen**

Jan Tore Grimsrud
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Product description

SeaGuard Ship Security Alert System (SSAS), comprising the following:

Modules	Article no.	Version
- SeaGuard Ship Security Alert System - Antenna box incl IDP transmission terminal, charging circuit and batteries (14Ah) - Interface box 2x Alert buttons (Normally Closed, N/C)	SeaGuard V.4	1.0

Application/Limitation

- The SeaGuard SSAS is to be installed and operated according to the manufacturer's instructions and is not to be used in areas requiring intrinsically safe equipment.
- Coverage area:
The SeaGuard SSAS applies an Inmarsat Type Approved IsatData Pro transmission terminal. Coverage area will be as defined by Inmarsat IsatData Pro service coverage area, roughly corresponding to the between 70° North and 70° South.

Tests carried out

- Environmental testing: IEC 60945 (2002)
- Performance testing: DNV GL Type Approval Programme No 849.01 for SSAS

Type Approval documentation

DNV GL No	Document Id	Rev.	Description
17	StratumFiveSeaGuardV4	2017-05-18	Report: Stratum Five Ltd, Performance test report for SeaGuard V4 Ship Security Alert Systems (SSAS)
16	TL17043		Report: MS Testing, EMC and environmental test report for NSEA-G-SeaGuard SSAS
15	TL17043-SALT	2017-05-19	Report: MS Testing, Salt mist test report for NSEA-G-SeaGuard SSAS
14	SSAS SeaGuard V4.0	1.0	Manual: Stratum Five, Installation Guide for NSEA-G SSAS
11	ENJ907	2013-03-21	Report: Mead Testing Ltd, Environmental testing of SeaGuard 4.0- NSEA-G Ship Security Alert System
10	TL1585-EMC	2012-01-16	Report: Mariner Systems, EMC Test Report for Skywave Satellite Transponder
3	TL1585-ENV	2012-01-24	Report: Mariner Systems, Environmental test report for Skywave Satellite Transponder

Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

Periodical assessment

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

The scope of the periodical/renewal assessment is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.