

Type Approval Certificate



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

Certificate No. **47 167 - 03 HH**

Company **Pole Star Space Applications Ltd.
Compass House
4th Floor 22 Redan Place
London W2 4SA, UNITED KINGDOM**

Product Description **Pole Star Ship Security Alert System (SSAS)**

Type **DSAS**

Environmental Category **C; F (transceiver); EMC1**

Technical Data /
Range of Application **Ship Security Alert System (SSAS) based on Inmarsat-D+ (Isat M2M mode) equipment with an integral GPS receiver consisting of:**

- Skywave Inmarsat D+ transceiver (DMR800D)
- TMC signal conditioner board, Rev. C (E158)
- lead acid battery unit with multistage charger (BP1221A)
- stainless steel casing (CS8099S)
- alert activation points (SW9012A)

Power Supply : 9 V DC to 36 V DC

Software:
Firmware version v2.0; MES SW Versions 2; SW Version 1.2.2.

Tests and evidence according to Requirement Class 1.

Test Standard **IMO Res. MSC.147(77), A.694(17); IMO MSC/Circ.1072; IEC 60945 (2002); Guidelines for the Performance of Type Approvals, Chapter 2 (2003).**

Documents **Test report : Mariner Systems TL703, TL703A; Nemko 112095R1TRFEMC, 41239-08.NEM Revsion 0, 86925R1TRFEMC, 86925R1TRFWL; Inmarsat Cert. DCC010. Dwg. E158 TMC Rev.C and Part List, 30.08.2001; DSAS Installation Guide Issue 1.3:2009-09.**

Remarks **None**

Valid until **2014-10-06**

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File No. **I.E.03**

Hamburg, **2009-10-07**

Type Approval Symbol



Germanischer Lloyd

J. Wittburg
Jürgen Wittburg

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This certificate is issued on the basis of "Guidelines for the Performance of Type Approvals Part 1, Procedure".