

Marine & Offshore

Certificate number: 27931/B0 BV

File number: RAD7/1062/1

Product code: 3418H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

POLE STAR SPACE APPLICATIONS Ltd.

LONDON - UNITED KINGDOM

for the type of product

SHIP SECURITY ALERT SYSTEMS (SSAS)

DSAS Mk2

Requirements:

BV Rules for the Classification of Steel Ships,
SOLAS 74 Convention, as amended, Reg. XI-2/6 IMO Resolution MSC.136(76), revised by IMO Resolution MSC.147(77) - MSC Circ. 1072 - IEC 60945 Ed. 4.

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 16 Jul 2023

For Bureau Veritas Marine & Offshore, At BV LONDON, on 16 Jul 2018, Spencer Yule





This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The DSAS Mk2 (Discreet Surveillance and Alarm System) consists of the following:

- Inmarsat IsatData Pro satellite transceiver (SkyWave IDP-690)
- DSAS Mk2 power pack with multistage charger
- 18 Ah sealed lead acid battery pack
- 2 x Normally closed (N/C) alert activation points
- Rugged polycarbonate case with Gr.316 stainless steel cover

Vessel power supply : 24 VDC Index of Protection : IP 56

Software Versions

IDP-690 Firmware Version - v4.3.5 IDP-690 Script Version - v1.0.6 DSAS Mk2 PIC Chip Version - E184A16

2. DOCUMENTS AND DRAWINGS:

- 2.1 document ref. SHIP SECURITY ALERT SYSTEM DSAS RANGE ALERT ADVANCED USER GUIDE Issue 3.0 dated 03/2012
- 2.2 document ref. SHIP SECURITY ALERT SYSTEM Installation Guide Version 1.0 dated 03/2012. This document is including the IMO Res. MSC147(77) acceptance matrix
- 2.3 document ref. DSAS Mk2 Hardware Specification ref. SSAS-DSASMk2-HardwareSpecs dated 10/07/2012
- 2.4 Electronical drawings ref. POLE STAR PCB-E184 Rev.B1dated 31/01/2012
- 2.5 document ref. Readme for IDP600 Series Terminal Package v1.1.3 Version 01 dated 05/2012
- 2.6 SkyWave IDP-600 series technical specifications
- 2.7 Letter of agreement between POLE STAR and MARINER SYSTEMS (UK) Ltd dated 31/01/2012

For B0 version:

2.8 - Installation Guide Version 1.1 dated April 2014

3. TEST REPORTS:

- 3.1 IP56 certificate of test ref. ELS 163378/1/C/ID/12 issued by SGS and dated 23/07/2012
- 3.2 INMARSAT Type Approval Certificate IsatData Pro (IDP) UE model : IDP-690 ref.IDP/SW/004 dated 24/02/2012
- 3.3 Test report ref. TL1587 EMC Pole Star issued by MARINER SYSTEMS and dated 27/01/2012
- 3.3 Test report ref. TL1587-ENV Pole Star issued by MARINER SYSTEMS and dated 27/01/2012

4. APPLICATION / LIMITATION:

- 4.1 Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.
- 4.2 The following component(s) shall comply with the requirements of the relevant Bureau Veritas rules and be type approved:
 DSAS Mk2
- 4.3 This certificate is issued by Bureau Veritas as Recognised Organisation of the Administration, as per SOLAS Convention and in compliance with the technical requirements therein, for equipment to be fitted on board ships entitled to fly its flag.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The DSAS Mk2 are to be supplied by POLE STAR SPACE APPLICATIONS Ltd., in compliance with the type described in this certificate.
- 5.2 This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 POLE STAR SPACE APPLICATIONS Ltd., has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
- 5.4 For information, POLE STAR SPACE APPLICATIONS Ltd., has declared to Bureau Veritas the following production site(s):

EXEGON Ltd 1-3 Poulsons Yard Strattons Walk MelkshamWiltshireSN12 6JL

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6. MARKING OF PRODUCT:

- 6.1 Maker's name or trade mark.
- 6.2 Serial number of the units.
- 6.3 Equipment type number or model identification under which it was type-tested.

7. OTHERS:

7.1 - It is **Pole Star Space Applications Ltd, United Kingdom,** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval. 7.2 - .2 - This certificate supersedes the Type Approval Certificate N° 27931/A0 BV, issued on 11 Dec 2012 by the Society.

*** END OF CERTIFICATE ***