



MARINE DIVISION

Certificate number: 12826/C0 BV

File number: RAD 07/52772/01

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)

Pole Star DSAS (Discreet Surveillance and Alarm System).

Requirements:

SOLAS Convention, Reg. XI-2/6, IMO Resolution MSC.136(76) revised by IMO Resolution MSC.147(77), MSC Circ. 1072, IEC 60945(2002), IEC 60533(1999), R&TTE Directive 1999/5.

This certificate is issued to attest that BUREAU VERITAS 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: 09 Nov 2014

For BUREAU VERITAS,

At BV LONDON, on 09 Nov 2009,

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. 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 Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS 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.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

1.1 - Description:

- Pole Star DSAS (Discreet Surveillance and Alarm System)

The equipment consists of the following:

- TMC Signal Conditioner Board version E158 including multistage charger unit
- DMR-800D SkyWave Mobile Communications Inmarsat IsatM2M Transceiver.
- YUASA 12 Volt Battery x 3 (21 Ah)
- External N/C alert buttons

1.2 - Technical Data:

- Pole Star DSAS

- Vessel power supply 9 - 30 V dc
- Batteries Autonomy 7 days
- Index of Protection IP 68
- Chip set and software version: ADC: AD7478, DSP: AD2186, Software Version: 5.00

1.3 - Software versions:

- MES: Version 2
- Firmware version 1.5.6

2. DOCUMENTS AND DRAWINGS :

2.1 - Manual for installation, use and maintenance ref.:

CD131202PL1(DSAS) dated May 2003.

2.2 - Bill of Materials Rev. C dated 30 Aug. 2001.

2.3 - File N° RAD 07/52772/01.

3. TEST REPORTS :

3.1 - Mariner Systems test reports N°s:

- TL703 dated 13/Feb./2003 and 29/Jan./2003
- TL703A dated 17/Mar./2003
- TL 619.61 dated 29/Jan./2003

3.2 - QinetiQ test report ref. QinetiQ/S&E/SPS/CR050205/1.0 Dated 26/Jan./2005.

3.3 - Inmarsat Type Approval particulars issue N°: 001- date: 05/08/04 (DMR-200D Tx/Rx).

3.4 - Nemko letter of opinion R&TTE Directive ref. N° 38720- date 09/02/2005 (DMR-200D Tx/Rx).

3.5 - SkyWave Declaration of DMR-800D and DMR-200 compatibility dated 6/Jul./2009.

3.6 - Nemko letter of opinion R&TTE Directive ref. N° 1456- dated 16/Apr./2008 (DMR-800D Tx/Rx).

3.7 - Nemko letter of compliance N° 112095 rev 1.1 dated 22/Jan./2009.

3.8 - Inmarsat Type Approval particulars issue N°: 004- dated: 02/Dec./2008 (DMR-800D Tx/Rx).

3.9 - Nemko test report N°112095R1TRFEMC dated 01/Jun./2009.

3.10 - National Technical Systems test report N° 41239-08 dated 10/Jun./2008.

4. APPLICATION / LIMITATION :

4.1 - The ship security alert system, when activated, shall:

- initiate and transmit a ship-to-shore security alert to a competent authority designated by the Administration, which, in these circumstances, should include the Company, identifying the ship 2), its location with date and GMT time and indicating that the security of the ship is under threat or has been compromised 1) ;
- not send the ship security alert to any other ships ;
- not raise any alarm on-board the ship ;
- continue the ship security alert until deactivated and/or reset ;
- the alert shall be confirmed by the Company (also receiving the alert message) to the Administration.

Notes:

1) In all cases, the transmission should include a unique code/identifier indicating that the alert has not been generated in accordance with GMDSS distress procedures.

2) MMSI and IMO Numbers.

4.2 - Alert deactivation / Re-setting:

- reset or deactivation of the alert shall be possible from the ship via a confidential procedure ;
- the Administration shall be notified of the end of an alert or any false alert.

4.3 - The security alert system shall:

- be capable of being activated from the navigation bridge and in at least one other location ;
- be designated so as to prevent the inadvertent initiation of system.

4.4 - Power supply:

- The system shall be powered continuously and without power line disturbance, from the ship's main source of electrical power and in addition from another appropriate source of power.

4.5 - Testing procedure:

- the testing procedure is to be approved by the company ;
- the system shall be tested annually by the Administration representatives or on their behalf by the recognized Classification Societies Surveyors.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The above systems are to be manufactured, examined and tested by **POLE STAR SPACE APPLICATIONS Ltd.** in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.

5.2 - Production sites are to be recognized by Bureau Veritas as per NR320 for HBV products. To this end **POLE STAR SPACE APPLICATIONS Ltd.** has to make the necessary arrangements for a Society's Surveyor to perform visits and product audits at the production sites.

5.3 - **POLE STAR SPACE APPLICATIONS Ltd.** has declared to Bureau Veritas that the type of product described in this certificate are manufactured at the following production site:

**Exegon Ltd
1-3 Poulson's Yard,
Strattons Walk
Melksham,
Wiltshire,
SN12 6JL**

6. MARKING OF PRODUCT :

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

7. OTHERS :

7.1 - This approval is given with the understanding that the Society reserves the right to require check tests to be carried out on the system at any time and that **POLE STAR SPACE APPLICATIONS Ltd., LONDON - UNITED KINGDOM** will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the system and the conditions of this approval.

7.2 - This Certificate supersedes the Type Approval Certificate N° 12826/B0 BV issued on 17/06/2008 by the Society.

***** END OF CERTIFICATE *****