DET NORSKE VERITAS

PRODUCT CERTIFICATE

Manufacturer:	**SKIPPER Electronics AS**
Manufacturer's order No.:	**79625**
Purchaser:	**Raytheon**
Purchaser's order No.:	

The product is intended for

Yard:	**(TBD)**
Yard No.:	
Name of vessel:	" "
DNV Id. No.:	**P261.1C**

THIS IS TO CERTIFY:

that the product:	**Bottom Penetration for Echo Sounder, Sonar or Log**
Type designation:	**SB-60-SA__X_, DB-60-SA___, SB-100-SB___, DB-100-SB___, ETNSJB/ETNSLB-100mm___**
Intended purpose:	**The gate valve may be used in conjunction with installation of speed log or echo sounder**
Serial No(s):	**11315**

Has been built and tested in accordance with the relevant requirements of:

DNV Rules for Classification: ☒ Ships   ☒ HSLC   ☐ Naval   ☒ Offshore
☐ Other standards:

Remarks (if more than one line, use page 2):

The product was marked: **NV-OSL-11315**	On: **Gate Valve**

This field is only to be filled in when the certification is based on a Manufacturing Survey Arrangement (MSA).

The undersigned manufacturer declares that the product/system has been built and tested in accordance with the specification/standard stated above and the conditions referred to in
Manufacturing Survey Arrangement No: **R-1948**
Quality System Certificate No: **TI 151 ISO 9001:2008**

For Manufacturer:

Place: **Oslo**

Date: **17.10.2011**

Anders Karlstad
Product Technician

This Certificate is only valid when signed by a DNV surveyor.

For **Det Norske Veritas AS**

Place: **Høvik**

Date: **2011-12-06**

Thomas R. Jacobsen
Senior Surveyor

Technical data:

Remarks:
 The valve housing has been subjected to a hydrostatic pressure test, and the valve assembly to a seat leakage test to 5 bar. Holding time 5 minutes.

Marking and certificate numbers for the different parts:

Drawings with dates of approval and/or type approval certificate number:
DNV S-6000