



AMERICAN BUREAU OF SHIPPING

Customer Name	SKIPPER ELECTRONICS A/S	Purchase Order No.	033509, Knud Erik Jørgensen
Attending Office	Oslo	Report Number	OS1754187
First Visit Date	16-Nov-2009	Last Visit Date	16-Nov-2009

Certification Of: Echo Sounder Transducer Installation Tank, Quantity: One(1)
ETNSTCLF
Manufacturer: SKIPPER ELECTRONICS A/S

Survey Location: Oslo, Norway

Equipment Data

Model Number ETNSTCLF
Purchaser Name Kongsberg Maritime AS

Design Details

Design State Design Approved/Reviewed
ABS Reviewing Organization London Ship Engineering

Additional Data

Manufacturer Skipper Electronics AS

This is to Certify that the undersigned surveyor(s) to this Bureau did, at the request of the customer, carry out the following survey and report as follows:

Traceability of materials used on this project has been verified.

Welding plans, procedures & welder qualifications have been reviewed as required by Rule/Specifications.

Component/Equipment Examination and Testing

The principal data has been verified in accordance with the applicable Rules/specifications and approved plans, and confirmed to be within acceptable tolerances.

All testing (pressure/load/operational/etc.) has been carried out as applicable and verified in accordance with the applicable Rules/specifications.

Testing machines are maintained in a satisfactory condition and records of their recheck or calibration dates confirmed.

All parts of the machinery/equipment satisfactorily complied with the approved drawings. Amendments, if any, verified to be rectified and considered satisfactory.

Subject to satisfactory installation, testing and trials after installation onboard the vessel.

Manufacturer test records and/or mill certificates were confirmed to comply with specification.

For details of Mechanical Properties and/or Chemical Composition, refer to the mill/manufacture's records.

Final markings for identification confirmed.

Visually inspection of Total Eight (8) Echo Sounder Transducer Installation tank's.

Review of Material certificates and Welder certificate.

NOTE: This report evidences that the survey reported herein was carried out in compliance with one or more of the Rules, guides, standards or other criteria of the American Bureau of Shipping and is issued solely for the use of the Bureau, its committees, its clients or other authorized entities. This Report is a representation only that the vessel, structure, item or material equipment, machinery or any other item covered by this Report has been examined for compliance with, or has met one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping. The validity, applicability and interpretation of this report is governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge thereof. Nothing contained in this Report or in any notation made in the contemplation of this Report shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.

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**Surveyor(s) to The American Bureau of Shipping
Attending Surveyors**

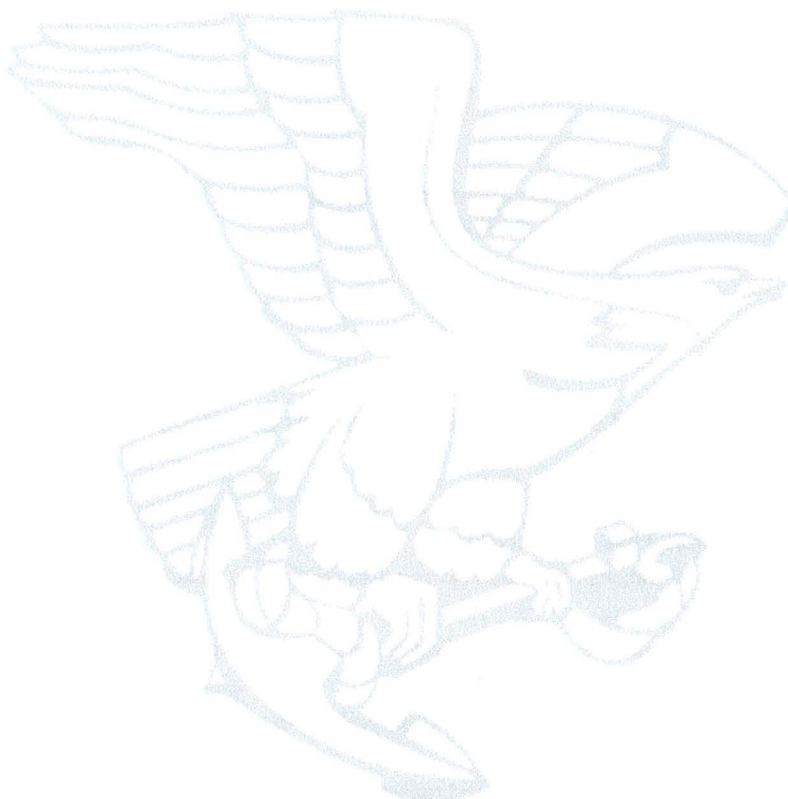
Fuglei Tor Brodde

Electronically Signed on 16-Nov-2009

Reviewed By

Bech, Alexander N

Electronically Signed on 17-Nov-2009, Oslo Port



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