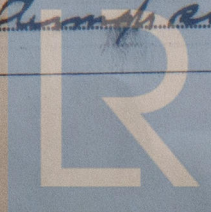


## REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

APR 25 1940

Received at London Office.....

Date of writing Report 6th April, 1940, When handed in at Local Office 2nd APR 1940 Port of SunderlandNo. in Survey held at Sunderland Date, First Survey 5th Dec, 1939 Last Survey 5th April, 1940  
Reg. Book. Supp. (Number of Visits 2)39375 on the S.S. "HARPAGUS" Tons { Gross 5173  
Net 2980Built at Sunderland By whom built Barton & Co, Ltd. Yard No. 282 When built 1940Owners Bowland S.S. Co. Ltd. Port belonging to LondonElectrical Installation fitted by Barton & Co, Ltd. Contract No. 282 When fitted 1940Is vessel fitted for carrying Petroleum in bulk No Is vessel equipped with D.F. No E.S.D. No Gy.C. No Sub.Sig. NoHave plans been submitted and approved No System of Distribution house wire Voltage of supply for Lighting 110Heating 110 Power 110 Direct Alternating Current, Lighting No Power No If Alternating Current state frequency Prime Movers,has the governing been tested and found efficient when the whole load is suddenly thrown on and off No Are turbine emergency governors fitted with atrip switch as per Rule Generators, are they compound wound No, are they level compounded under working conditions No,if not compound wound state distance between generators and from switchboard Where more than one generator is fitted are theyarranged to run in parallel No, are shunt field regulators provided No Is the compound winding connected to the negative or positive polePositive Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing Have certificates oftest for machines under 100 kw. been supplied No and the results found as per rule No Are the lubricating arrangements and the constructionof the generators as per rule No Position of Generators Main: Engine room starboard side aftAuxiliary - Engine, is the ventilation in way of generators satisfactory No are they clear of inflammable material No, if situatedroom situated in recess at forward level near unprotected combustible material state distance from same horizontally and vertically, are the generators protected from mechanicalinjury and damage from water, steam and oil No, are the bedplates and frames earthed No and the prime movers and generators in metalliccontact No Switchboards, where are main switchboards placed Main: Engine room starboard side onafter bulkhead Auxiliary - Engine room in recess near engineare they in accessible positions, free from inflammable gases and acid fumes No, are they protected from mechanical injury and damage from water, steamand oil No, if situated near unprotected combustible material state distance from same horizontally and vertically, what insulationmaterial is used for the panels Linoleum, if of synthetic insulating material is it an Approved Type No, if ofsemi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule Is the frame effectually earthed NoIs the construction as per Rule No, including accessibility of parts No, absence of fuses on the back of the board No, individual fusesto pilot and earth lamps, voltmeters, etc. No locking of screws and nuts No, labelling of apparatus and fuses No, fuses on the "dead"side of switches No Description of Main Switchgear for each generator and arrangement of equaliser switches double pole ondouble pole double throw knife switch and double pole fuseand for each outgoing circuit double pole double throw knife switch anddouble pole fuseAre compartments containing switchboards composed of fire-resisting material or lined as per Rule Instruments on main switchboard Twoammeters Two voltmeters Two synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to theequaliser connection Earth Testing, state means provided Edwards coupled G. & A. amp. and 10000Lloyd's Register  
Foundation

W43 - 0017 (1/2)



ROTARY TRANSFORMER

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
Refing. M/c.	1	3	1	7/03/4	25	46	296	V.I.R.	L.C.A.B. in pipe
Refing. Pump	1	1	1	7/03/6	9	24	320	V.I.R.	in pipe
Washing main	1	3	1	7/03/4	25	31	160	V.I.R.	L.C.A.B.

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Amperes.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN ... ..	Two	16	110	146	500	Single cylinders Steam engine		
Assisting	One	10	110	91	850	Three cylinders Diesel engine	Fuel oil	Above 150°F
EMERGENCY ...								
ROTARY TRANSFORMER								

W43-0017 (2/2)



The Electrical Equipment is installed in accordance with the approved plans and the requirements of the Rules.

All Insulated Conductors are guaranteed to have been tested at the maker's works as specified in the Rules.

The foregoing is a correct description.

FOR AND ON BEHALF OF  
BARTRAM and SONS LTD.

*Cecil McFetrich*

Electrical Engineers.

Date *13/4/40*

(CECIL MCFETRICH)  
DIRECTOR & SECRETARY

#### COMPASSES.

Minimum distance between electric generators or motors and standard compass *128 feet*

Minimum distance between electric generators or motors and steering compass *124 feet*

The nearest cables to the compasses are as follows:—

A cable carrying *114* Ampères *on the* feet from standard compass *7* feet from steering compass.

A cable carrying *14* Ampères *7* feet from standard compass *on the* feet from steering compass.

A cable carrying Ampères feet from standard compass feet from steering compass.

Have the compasses been adjusted with and without the electric installation at work at full power *Yes*

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted *Yes*

The maximum deviation due to electric currents was found to be *Nil* degrees on *Every* course in the case of the standard compass, and *Nil* degrees on *Every* course in the case of the steering compass.

BARTRAM and SONS LTD.

*Cecil McFetrich*

Builder's Signature.

Date *13/4/40*

DIRECTOR & SECRETARY

Is this installation a duplicate of a previous case *No* If so, state name of vessel

General Remarks (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.) *The electrical*

*equipment of this vessel has been installed under special survey. The materials used are of good quality and the workmanship is good. On completion the equipment was run under working conditions with satisfactory results, the governing, regulation and compounding of the generating sets were tested, the insulation resistance of all circuits was measured and the space was inspected. This installation is in my opinion suitable for a second vessel.*

*Noted*

*L.Y.*

*26/4/40*

Total Capacity of Generators *42* Kilowatts.

The amount of Fee ... £ *25 : 10 : 2* *3 APR 1940*

Travelling Expenses (if any) £ : : *10/5/1940* *14/5*

*D. Harrison*

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

*TUE. 30 APR 1940*

Assigned

*see minute on*

*Meby Rpt*