

## REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report.....19..... When handed in at Local Office.....19..... Port of HULLNo. in Survey held at Hull & Selby Date, First Survey 4. 12. 42. Last Survey 24. 3. 1943.  
Reg. Book. (Number of Vicks.....20.....)on the H.M. Reserve Ldg SAUCY Tons { Gross 597  
Net.....Built at Selby By whom built Cochrane & Sons Ltd Yard No. 1257 When built 1943Owners The Admiralty Port belonging to.....Electrical Installation fitted by William Brady & Son Ltd Contract No. .... When fitted 1943Is vessel fitted for carrying Petroleum in bulk no Is vessel equipped with D.F. Yes E.S.D. Yes Gy.C. no Sub.Sig. noHave plans been submitted and approved Yes System of Distribution two wire Voltage of supply for Lighting 110Heating 110 Power 110 Direct or Alternating Current, Lighting DC Power DC If Alternating Current state periodicity..... Prime Movers,

has the governing been tested and found as per Rule when full load is suddenly thrown on and off..... Are turbine emergency governors fitted with a

trip switch as per Rule..... Generators, are they compound wound Yes, are they level compounded under working conditions Yes,

if not compound wound state distance between generators..... and from switchboard..... Where more than one generator is fitted are they

arranged to run in parallel no, are shunt field regulators provided Yes Is the compound winding connected to the negative or positive poleNegative Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing..... Have certificates oftest for machines under 100 kw. been supplied Yes and the results found as per rule Yes Are the lubricating arrangements and the constructionof the generators as per rule Yes Position of Generators Starboard side of engine room on platform....., is the ventilation in way of generators satisfactory Yes are they clear of inflammable material Yes, if situated

near unprotected combustible material state distance from same horizontally..... and vertically....., are the generators protected from mechanical

injury and damage from water, steam and oil Yes, are the bedplates and frames earthed Yes and the prime movers and generators in metalliccontact Yes Switchboards, where are main switchboards placed Forward bulkhead in engine room neargenerators.are they in accessible positions, free from inflammable gases and acid fumes Yes, are they protected from mechanical injury and damage from water, steamand oil Yes, if situated near unprotected combustible material state distance from same horizontally..... and vertically....., what insulationmaterial is used for the panels "Lindamys", if of synthetic insulating material is it an Approved Type Yes, if ofsemi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule..... Is the frame effectually earthed YesIs the construction as per Rule Yes, including accessibility of parts Yes, absence of fuses on the back of the board Yes, individual fusesto pilot and earth lamps, voltmeters, etc., Yes locking of screws and nuts Yes, labelling of apparatus and fuses Yes, fuses on the "dead"side of switches Yes Description of Main Switchgear for each generator and arrangement of equaliser switches Double pole,quick break, knife switches, and double pole fuses.

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and for each outgoing circuit Double pole, quick break, knife switches, and double polefuses.

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Are compartments containing switchboards composed of fire-resisting material or lined as per Rule Yes Instruments on main switchboard.....

ammeters..... voltmeters..... synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection..... Earth Testing, state means provided Lamps coupled to earth via switches & fuses.Switches, Circuit Breakers and Fuses, are they as per Rule Yes, are the fuses an approved type Yes, are all fuses labelled asper Rule Yes If circuit breakers are provided for the generators, at what overload current did they open when tested....., are the reversed current

protection devices connected on the pole opposite to the equaliser connection....., have they been tested under working conditions, and at what current

did they operate..... Joint Boxes, Section Boards and Distribution Boards, is the construction and position as per Rule YesCables, are they insulated and protected as per the appropriate Tables of the Rules Yes, if otherwise than as per Rule are they of an approved type Yes,state maximum fall of pressure between bus bars and any point under maximum load 3V, are the ends of all cables having a sectional area of 0.04square inch and above provided with soldering sockets Yes Are paper insulated and varnished cambric insulated cables sealed at the ends.....



Are all lead sheaths, armouring and conduits effectually bonded and earthed. Yes Refrigerated chambers, are the cables and fittings as per Rule. \_\_\_\_\_

Are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands. Yes, where unarmoured cables pass through beams, etc., are the holes effectively bushed. Yes and with what material. Lead Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule. \_\_\_\_\_ Emergency Supply, state position. \_\_\_\_\_ and method of control. \_\_\_\_\_

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof Yes. Are fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present Yes, if so, how are they protected \_\_\_\_\_

Administrative type fittings for magazines and spirit rooms

and where are the controlling switches fitted On mess decks above, are all fittings suitably ventilated Yes

are all fittings and accessories constructed and installed as per Rule. Yes Searchlight Lamps, No. of 1-10, whether fixed or portable portable  
Yes, are their fittings as per Rule. Yes Heating and Cooking, is the general construction as per Rule. Yes  
Yes are the frames effectually earthed. Yes, are heaters in the accommodation of the convection type. No Motors, are all motors constructed and

installed as per Rule Yes and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water, steam and oil Yes, if situated near unprotected combustible material state minimum distance from same horizontally        and vertically       . Are motors coupled to oil fuel transfer and unit pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment Yes.

Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing..... Have certificates of test for motors under 100 BHP intended for essential services been supplied and the results found as per Rule 200.....

*Almestry* Control Gear and Resistances, are they constructed and

100 BHP intended for essential services, then supplied and the residue from a separate engine.

fitted as per Rule as Lightning Conductors, where required are they fitted as per Rule as per Rule Ships carrying Oil having a Flash Point less than 150° F. Have all the special requirements of the Rules for such ships been complied with —, are all fuses of the cartridge type —

are they of an approved type..... Are the fittings for pump rooms, tween deck spaces, etc., in accordance with the special requirements for such ships..... Are the cables lead covered as per Rule..... Spare Gear, if the vessel is for open sea service have spares been provided as per

Rule Yes, are they suitably stored in dry situations Yes. Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory Yes.

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	N <sup>o</sup> 1	1	15	110	136	500	Steam engine	
	N <sup>o</sup> 2	1	7.5	110	65	500	" "	
EMERGENCY ...								
ROTARY TRANSFORMER								

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
		No. in Parallel For Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR ... .. N <sup>o</sup> 1..	15	1	37/072	156	152	40'	VIR.	L.C.A.P. 6187A
" " EQUALIZER N <sup>o</sup> 2..	7.5	1	19/066	65	83	24'	" "	" 6189A
EMERGENCY GENERATOR ... ..								
ROTARY TRANSFORMER: MOTOR ...								
" " GENERATOR ...								

[illegible][illegible]

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.								
4 Fan 12 1/2"	1	1 1/2	1	7/039	14	18	✓	50'	VIIIP	LC. AP6194A W/L
" 10"	2	3/4	1	7/039	11	18		60'	"	"
4 Refrigerators	2	3/4	1	1/044	2.5	5	✓	30'	"	6196A
2 Fan 5"	2	1/2	1	1/044	2	5	✓	100	"	"



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.

WM BROADY & SON LTD.  
BROAD STREET,  
HULL.

Electrical Engineers.

Date 25. 2. 43.

#### COMPASSES.

Minimum distance between electric generators or motors and standard compass 90 ft

Minimum distance between electric generators or motors and steering compass 85 ft

The nearest cables to the compasses are as follows:—

A cable carrying 1 Ampères inside feet from standard compass 5 feet from steering compass.

A cable carrying 25 Ampères 5 feet from standard compass inside 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.

FOR CUSHMAN & SONS LTD.  
V. Gray  
DIRECTOR

Builder's Signature.

Date

Is this installation a duplicate of a previous case Yes If so, state name of vessel Horsa

Plans. Are approved plans forwarded herewith No If not, state date of approval 10.9.41

Certificates. Are certificates of test for motors engaged on essential services and generators forwarded herewith Yes

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

equipment of this vessel was installed under special survey and in accordance with the approved plans and with the specification. The materials used are of good quality and the workmanship is good. On completion the equipment was operated under working conditions with satisfactory results and the insulation resistance of all circuits and apparatus was measured and found good. This equipment is in my opinion suitable for a classed vessel.

Notes

L.H.

5/4/43

Total Capacity of Generators 22.5 Kilowatts.

The amount of Fee ... £ 30: 0 :

When paid for

Travelling Expenses (if any) £ :

When received

19

Surveyor to Lloyd's Register of Shipping.

TUES. 6 APR 1943

Committee's Minute

Assigned

See H/L 26 51952