

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

30 JAN 1942

Received at London Office

Date of writing Report.....19..... When handed in at Local Office 27 JAN 1942 Port of HULL
 No. in Survey held at Hull Date, First Survey 1.10.41 Last Survey 3.11.1941
 Reg. Book. (Number of Visits 9)
 on the Single Screw Tug JAUNTY Tons { Gross 601
 Net 3
 Built at Selly By whom built Cochrane & Sons Ltd Yard No. 1233 When built 1941-11
 Owners The Admiralty Port belonging to.....
 Electrical Installation fitted by Wm. J. Goady & Sons Contract No. When fitted 1941-11
 Is vessel fitted for carrying Petroleum in bulk No Is vessel equipped with D.F. E.S.D. Gy.C. Sub.Sig.

Have plans been submitted and approved Yes System of Distribution Installed previous Parallel 240v Voltage of supply for Lighting 110
 Heating ✓ Power 110 Direct or Alternating Current, Lighting DC Power DC 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 Yes 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 pole
Negative Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing..... Have certificates of
 test for machines under 100 kw. been supplied Yes and the results found as per rule..... Are the lubricating arrangements and the construction
 of the generators as per rule Yes Position of Generators Engine Room Starboard Side
 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 metallic
 contact Yes Switchboards, where are main switchboards placed Engine Room adjacent to Generators
 are they in accessible positions, free from inflammable gases and acid fumes Yes, are they protected from mechanical injury and damage from water, steam
 and oil Yes, if situated near unprotected combustible material state distance from same horizontally..... and vertically..... what insulation
 material is used for the panels Sundays, if of synthetic insulating material is it an Approved Type Yes, if of
 semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule..... Is the frame effectually earthed Yes
 Is the construction as per Rule Yes, including accessibility of parts Yes, absence of fuses on the back of the board Yes, individual fuses
 to 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.....
DP Switches & fuses & DP change over switch to either dynamo
 and for each outgoing circuit DP Switches & fuses
 Are compartments containing switchboards composed of fire-resisting material or lined as per Rule..... Instruments on main switchboard One
 ammeters One 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 Earth lamps & switches

Switches, Circuit Breakers and Fuses, are they as per Rule Yes, are the fuses an approved type Yes, are all fuses labelled as per Rule Yes, are the reversed current protection devices connected on the pole opposite to the equaliser connection Yes, have they been tested under working conditions Yes. Joint Boxes, Section Boards and Distribution Boards, is the construction and position as per Rule Yes. Cables, 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 4 volts, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets Yes, Are paper insulated and varnished cambric insulated cables sealed at the exposed ends Yes, with insulating compound Yes or waterproof insulating tape Yes. Are all the cable runs in accessible positions, not exposed to drip or accumulation of water or oil, high temperatures or risk of mechanical damage Yes, are cables laid under machines or floorplates Yes, if so, are they adequately protected Yes. Are cables in machinery spaces, galleys, laundries, etc., lead covered Yes or run in conduit No. State how the cables are supported and protected Clipped to steel & wood work.

Are all lead sheaths, armouring and conduits effectually bonded and earthed Yes. Refrigerated chambers, are the cables and fittings as per Rule None. 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 Yes. Emergency Supply, state position None and method of control None.

Navigation Lamps, are they separately wired Yes controlled by separate double pole switches Yes and fuses Yes. Are the switches and fuses in a position accessible only to the officers on watch Yes, is an automatic indicator fitted Yes. Secondary Batteries, are they constructed and fitted as per Rule Yes, are they adequately ventilated Yes. 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 Yes.

and where are the controlling switches fitted Yes, are all fittings suitably ventilated Yes, are all fittings and accessories constructed and installed as per Rule Yes. Searchlight Lamps, No. of One, whether fixed or portable Portable. Supplied by Admiralty Yes, are their fittings as per Rule Yes. Heating and Cooking, is the general construction as per Rule Yes, are the frames effectually earthed Yes, are heaters in the accommodation of the convection type Yes. 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 Yes and vertically Yes. Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing Yes. Have certificates of test for motors under 100 BHP intended for essential services been supplied and the results found as per Rule Yes. Control Gear and Resistances, are they constructed and fitted as per Rule Yes. Lightning Conductors, where required are they fitted as per Rule Yes. 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 Yes, are all fuses of the cartridge type Yes, are they of an approved type Yes. If portable lamps for use in dangerous spaces are supplied, are they of a self-contained battery-fed flameproof type Yes. 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 megger tested and found satisfactory Yes.

PARTICULARS OF GENERATING PLANT.

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 ...	One	20	110	182	500	Steam Engine		
HARBOR	"	10	"	92	"	"		
EMERGENCY ...								
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
		No. in Parallel Per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR ...	20	One	37/103	182	240	40	V.I.R.	L.C. & Ground
EQUALISER ...	1	One	19/083	92	118	20	"	"
" Harbor General ...	10	One	19/083	92	118	20	"	"
EMERGENCY GENERATOR ...								
ROTARY TRANSFORMER: MOTOR ...								
" " GENERATOR ...								

MAIN DISTRIBUTION CABLES.

AUX. SWITCHBOARDS AND SECTION BOARDS ...							
Navigation	One	7/029	3	15	220	V.I.R.	L.C. & Ground
Food Accommodation & Refrigerator	"	7/064	30	46	190	"	"
Wheel House, Cabins, etc.	"	7/029	5	5 1/2	220	"	"
Police lights	"	3/036	2	2 1/2	200	"	"
Engine Room, Boiler Room & other Accommodation direct from main board.							

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS ... (Direct from main board)	One	7/044	25	31	180	V.I.R.	L.C. & Ground
NAVIGATION LIGHTS	"	3/029	5	5	"	"	"
LIGHTING AND HEATING (Sub-circuit)	"	"	3.5	"	100	"	L.C.
Search light (direct from main board)	"	7/036	20	24	200	"	L.C. & Ground

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.						
Steering Motor	1	8	One	19/064	63.5	83	280	V.I.R. L.C. & Ground
Hauschke Lamps	1	3	"	3/086	2.5	10	80	" L.C.
Refrigerator	1	1/4	"	"	20	10	80	" L.C.
5th Battery Fan	1	1/4	"	"	2.0	10	50	" L.C.

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.
ENGLAND
J. B. Broad
MULL

Electrical Engineers.

Date 20. 11. 41.

COMPASSES.

Minimum distance between electric generators or motors and standard compass. 90 feet

Minimum distance between electric generators or motors and steering compass. 80 feet

The nearest cables to the compasses are as follows:—

A cable carrying 5 Ampères 3 feet from standard compass 3 feet from steering compass.

A cable carrying 5 Ampères 10 feet from standard compass 8 feet from steering compass.

A cable carrying 3 Ampères 10 feet from standard compass 8 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 any course in the case of the standard compass, and Nil degrees on any course in the case of the steering compass.

Builder's Signature.

Date

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

Similar to ASSURANCE except for power of 2nd General

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

This installation has been fitted on board under Special Survey, in accordance with the approved plans & the Rules.

The workmanship & materials are good & when tried under working conditions & when tested as prescribed by the Rules it was found satisfactory in every respect.

Noted
L.Y.
3/2/42

Total Capacity of Generators 30 Kilowatts.

The amount of Fee ... £ 30: 0: When applied for, 2.1.19.42

Travelling Expenses (if any) £ : : When received, 5.1.19.42

Committee's Minute

Assigned

See Sub 26. 51475

Surveyor to Lloyd's Register of Shipping.

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