

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 27-8-59 19 When handed in at Local Office 3/9/59 19 Port of IPSWICH.

No. in Survey held at WIVENHOE. ESSEX. Date, First Survey 7-5-59 Last Survey 26-8-59
Reg. Book. (No. of Visits 3)

on the MOTOR BARGE "BLACKBIRD C," Tons { Gross 141.0.
Net 75.7

Built at WIVENHOE. By whom built JAS. W. COOK (WIVENHOE) LTD Yard No. 1185 When built 1959-8.

Owners J. W. COOK & CO LTD Port belonging to HULL

Installation fitted by JAMES W. COOK & CO (WIVENHOE) LTD When fitted 1959-8

Is vessel equipped for carrying Petroleum in bulk No Is vessel equipped with D.F. No E.S.D. No Gy.C. No Sub.Sig. No Radar No

Plans, have they been submitted and approved YES System of Distribution TWO WIRE. Voltage of Lighting 110

Heating 110 Power 110 D.C. or A.C., Lighting D.C. Power D.C. If A.C. state frequency -

Prime Movers, has the governing been found as per Rule when full load is thrown on and off YES Are turbine emergency governors fitted with a trip switch NONE. Generators, are they compound wound YES, and level compounded under working conditions YES.

Are the generators arranged to run in parallel No Is the compound winding connected to the negative or positive pole POSITIVE

Have machines 100 kw. and over been inspected by the Surveyors during manufacture and testing NONE. Have certificates of test for machines under 100 kw. been supplied and the results found as per Rule YES

Position of Generators ONE PORT AND ONE STARBOARD

IN ENGINE ROOM DRIVEN BY AUXILIARY ENGINES AND ONE MAIN ENGINE DRIVEN 24 VOLT GENERATOR.

is the ventilation in way of generators satisfactory YES are they clear of inflammable material and protected from mechanical injury and damage from water, steam and oil YES. Switchboards, where are main switchboards placed IN ENGINE ROOM, PORT SIDE AFT.

are they in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water, steam and oil YES, what insulation is used for the panels SYNTHETIC MATERIAL SYDANYO, 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 construction as per Rule, including locking of screws and nuts YES Description of Main Switchgear for each generator and arrangement of equaliser switches 100 AMP DOUBLE POLE ROTARY SWITCHES.

and the switch and fuse gear (or circuit breakers) for each outgoing circuit DOUBLE POLE ROTARY SWITCHES & FUSES.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule YES Instruments on main switchboard 2

ammeters 2 voltmeters No synchronising devices. For compound machines in parallel are the ammeters and reverse current protection devices connected on the pole opposite to the equaliser connection - Earth Testing, state means provided LAMPS

ON SWITCHBOARD. Preference Tripping, state if provided No, and tested -

Switches, Circuit Breakers and Fuses, are they as per Rule YES, are the fuses an Approved Type YES

make of fuses ARTIC, are all fuses labelled YES If circuit breakers are provided for the generators, at what overload do they operate NOT PROVIDED., and at what current do the reverse current protective-devices operate NOT PROVIDED.

Cables, are they insulated and protected as per Rule YES. if otherwise than as per Rule are they of an Approved Type -, state maximum fall of pressure between bus bars and any point under maximum load NIL volts. Are all paper insulated and varnished cambric insulated cables sealed at the ends NONE.

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 any cables laid under machines or floorplates No, if so, are they adequately protected - State type of cables (if in conduit this should also be stated) in machinery spaces V.I.R IN CONDUIT THROUGHOUT.

and laundries - State how the cables are supported or protected IN CONDUIT SECURED BY BRACKETS, SCREWS AND CLIPS TO STRUCTURE.

Are all lead sheaths, armouring and conduits effectually bonded and earthed YES 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 NONE.

Refrigerated chambers, are the cables and fittings as per Rule NONE.

Have refrigeration fan motors been constructed under survey - and test certificates supplied -

Are the motors accessible for maintenance at all times -



Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule YES. Emergency Supply, state position 24 VOLT "NIFE" BATTERY IN ENGINE ROOM ON AFT BULKHEAD.

Navigation Lamps, are they separately wired YES controlled by separate double pole switches and fuses YES. Are the switches and fuses in a position accessible only to the officers on watch YES, is an automatic indicator fitted NO. Is an alternative supply provided YES.

Secondary Batteries, are they constructed, fitted and adequately ventilated as per Rule YES, state battery capacity in ampere hours 120. Where required to do so does it comply with 1948 International Convention YES.

Lighting, is fluorescent lighting fitted NO. If so, state nominal lamp voltage - and compartments where lamps are fitted -.

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof YES.

Searchlights, No. of NONE, whether fixed or portable -, are they of the carbon arc or of the filament type -.

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 and placed in well-ventilated compartments in which inflammable gases cannot accumulate and protected from damage from water, steam and oil NO MOTORS.

Are motors coupled to oil fuel transfer and pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment NONE. Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing NONE.

Have certificates of test for motors under 100 BHP intended for essential sea services been supplied and the results found as per Rule NONE.

Lightning Conductors, where required are they fitted as per Rule NONE FITTED.

Ships carrying Oil having a Flash Point of less than 150° F. Have all the special requirements of the Rules for such ships been complied with -, are all fuses of an Approved Cartridge Type - make of fuse -. Are the fittings for pump rooms, tween deck spaces, etc., in accordance with the special requirements for such ships -. Are all cables lead covered as per Rule -.

E.S.D., if fitted state maker NONE. location of transmitter and receiver -.

Spare Gear, if the vessel is for open sea service have spares been provided as per Rule and suitably stored in dry situations NOT SUPPLIED.

Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory YES.

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	MAKER.	RATED AT				TYPE.	PRIME MOVER.	
			Kw. per Generator.	Volts.	Ampères.	Revs. per Min.		MAKER.	
MAIN	1	STARBOARD. DAVID Mc LURE LTD	7.5	110	64	1000	3 CYL.	LISTER. DIESEL ENGINE.	
	2	PORT. DAVID Mc LURE LTD	7.0	110	64	1000	3. CYL.	LISTER DIESEL ENGINE.	
	3	MAIN ENGINE. C.A.V. LTD	0.6.	24.	25	600		MAIN ENGINE.	
EMERGENCY ROTARY TRANSFORMER									

GENERATOR CABLES.

DESCRIPTION.	No. of	Kw.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
			No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR	1	7.5	ONE	19/.052	59	64	35	V.I.R.	IN CONDUIT.
	2	7.0	ONE	19/.052	59	64	4	V.I.R.	IN CONDUIT.
	3.	0.6	ONE.	7/.044.	25	31	15	V.I.R.	IN CONDUIT.
EMERGENCY GENERATOR									
ROTARY TRANSFORMER : MOTOR									
GENERATOR									

MAIN DISTRIBUTION CABLES (to Auxiliary Switchboards, etc.).

DESCRIPTION.	No. of	Kw.	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.	APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
FORWARD CABIN.	1			7/.044	30	31	110	V.I.R.	IN CONDUIT.
FLASH BOILER	1			7/.044	28	31	40	V.I.R.	IN CONDUIT.
ENGINE ROOM LIGHTS.	1			3/.029.	1	5	40	V.I.R.	IN CONDUIT.
24 VOLT CIRCUITS.	1			7/.044	26	31.	40	V.I.R.	IN CONDUIT.



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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
 GENERAL MANAGER
 JAMES W. COOK & Co. (Wivenhoe) LTD.

Electrical Contractors. Date

JAMES W. COOK & Co. (Wivenhoe) LTD.
 GENERAL MANAGER

COMPASSES.

Have the compasses been adjusted under working conditions. ADJUSTED DURING TRIALS. 6-8-59.

for and on behalf of
 JAMES W. COOK & Co. (Wivenhoe) LTD.

Builder's Signature. Date

JAMES W. COOK & Co. (Wivenhoe) LTD.
 GENERAL MANAGER

Have the foregoing descriptions and schedules been verified and found correct. YES.

Is this installation a duplicate of a previous case. YES If so, state name of vessel. "BLACKMARTIN C."

Plans. Are approved plans forwarded herewith. YES If not, state date of approval.

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

General Remarks. (State quality of workmanship and materials, opinions as to class, etc.)

THIS ELECTRICAL INSTALLATION HAS BEEN CARRIED OUT IN ACCORDANCE WITH PLANS APPROVED AND THE REQUIREMENTS OF THE RULES.
 THE WORKMANSHIP IS GOOD THROUGHOUT AND INSULATION TESTS ON ALL CIRCUITS FOUND TO BE WITHIN RULE REQUIREMENTS.

THE COMPLETED INSTALLATION HAS BEEN TESTED UNDER WORKING CONDITIONS WHEN THE GENERATORS, GOVERNORS AND SWITCHBOARDS WERE FOUND IN ORDER AND ALL OPERATED SATISFACTORILY.
 THIS ELECTRICAL INSTALLATION IS IN MY OPINION ELIGIBLE FOR INCLUSION IN THE VESSEL'S CLASS. * L.M.C.

Total Capacity of Generators 15 Kilowatts.

The amount of Fee ... £ 15 : 0 : 0 When applied for, 9 SEP 1959

Travelling Expenses (if any) £ 3 : 0 : 0 When received, 19

L. P. Jones J. Porteus
 Surveyors to Lloyd's Register of Shipping.

TUESDAY - 6 OCT 1959

Committee's Minute

Assigned

See Rpt. 1

5m, 6.56 - Transfer. (MADE AND PRINTED IN ENGLAND)
 (The Surveyors are requested not to write on or below the space for Committee Minutes.)

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