

REPORT ON ELECTRICAL EQUIPMENT,

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report 26/6/52 When handed in at Local Office 3/7/52 Port of IPSWICH

No. in Survey held at WIVENHOE Date, First Survey 11/2/52 Last Survey 30/4/52 19...
Reg. Book. (Number of Vests 5)

on the MOTOR TANK BARGE "KINGFISHER C" Tons {Gross 73.54
Net 45.96

Built at WIVENHOE By whom built JAS W COOK (WIVENHOE) LTD Yard No. 1048 When built 1952

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

Electrical Installation fitted by JAS W COOK (WIVENHOE) LTD. Contract No. 1048 When fitted 1952

Is vessel fitted for carrying Petroleum in bulk YES Is vessel equipped with D.F. NO E.S.D. NO Gy.C. NO Sub.Sig. NO

Have plans been submitted and approved YES System of Distribution TWO WIRE Voltage of supply for Lighting 24.

Heating ✓ Power 110 Direct or Alternating Current, Lighting D.C. Power D.C. 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 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 ✓,

if not compound wound state distance between generators 2 and from switchboard 2 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 NOISE Have certificates of

test for machines under 100 kw. been supplied ✓ 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 FOR?)

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.

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 SINDANYO, if of synthetic insulating material is it an Approved Type ✓, 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 DOUBLE POLE.

and for each outgoing circuit DOUBLE POLE.

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

ammeters 2 voltmeters 1 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, 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. If circuit breakers are provided for the generators, at what overload current did they open when tested ✓, are the reversed current

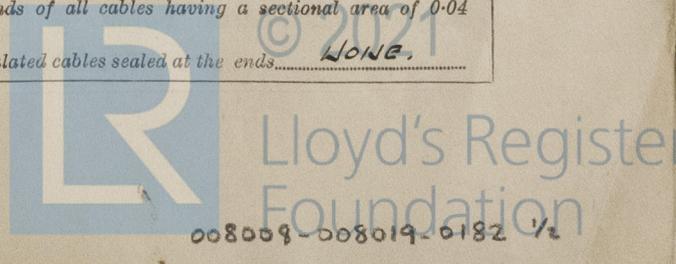
protection devices connected on the pole opposite to the equaliser connection ✓, have they been tested under working conditions, and at what current

did they operate ✓ Joint Boxes, Section Boards and Distribution Boards, is the construction and position as per Rule 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 PYROTANAX

state maximum fall of pressure between bus bars and any point under maximum load ✓, are the ends of all cables having a sectional area of 0.04

square inch and above provided with soldering sockets ✓ Are paper insulated and varnished cambric insulated cables sealed at the ends ✓



with insulating compound or waterproof insulating tape 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. NO, if so, are they adequately protected Are cables in machinery spaces, galleys, laundries, etc., lead covered. PIKOTANAX run in conduit. State how the cables are supported and protected. TRAYS & CLIPS.

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. and with what material. PIKOTANAX Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule. YES Emergency Supply, state position. and method of control.

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. NO Secondary Batteries, are they constructed and fitted as per Rule. YES, are they adequately ventilated. YES what is the battery capacity in ampere hours. 95

Fittings, are all fittings on weather decks, in stowholds and engine rooms and wherever exposed to drip or condensed moisture, weather proof. YES Are fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present. NO, if so, how are they protected.

and where are the controlling switches fitted. are all fittings suitably ventilated.

are all fittings and accessories constructed and installed as per Rule. YES Searchlight Lamps, No. of whether fixed or portable.

are their fittings as per Rule. Heating and Cooking, is the general construction as per Rule. NO

are the frames effectually earthed. YES, are heaters in the accommodation of the convection type. NONE Motors, are all motors constructed and installed as per Rule. NONE and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water, steam and oil.

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.

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.

Control Gear and Resistances, are they constructed and fitted as per Rule. Lightning Conductors, where required are they fitted 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. YES, are all fuses of the cartridge type. YES

are they of an approved type. YES Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships. YES Are the cables lead covered as per Rule. PIKOTANAX Spare Gear, if the vessel is for open sea service have spares been provided as per Rule. are they suitably stored in dry situations. 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	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	1/2	24	8.5	MAIN ENGINE			
Auxiliary	ONE	110			AUX DIESEL ENGINE	DIESEL		
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		ONE	.003	2	10	18	PIKOTANAX	
" " EQUALISER								
Aux	3							
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOE								
" " GENERATOR								

MAIN DISTRIBUTION CABLES.

DESCRIPTION.	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.			
AUX. SWITCHBOARDS AND SECTION BOARDS							

LIGHTING AND HEATING, ETC., CABLES.

DESCRIPTION.	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).	INSULATED WITH.	HOW PROTECTED.
WIRELESS							
NAVIGATION LIGHTS	ONE	.003	2	15	40	PIKOTANAX	
LIGHTING AND HEATING	ONE	.003	2	15	40	"	
COOKING	ONE	.007	?		90	"	Not complete.

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.					

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

[Signature]
GENERAL MANAGER

Electrical Engineers.

Date **23 APR 1952**

COMPASSES. *✓ none.*

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

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

The nearest cables to the compasses are as follows:—

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

A cable carrying Ampères feet from standard compass 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

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

The maximum deviation due to electric currents was found to be degrees on course in the case of the standard compass, and degrees on 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 **"KESTREL C"**

Plans. Are approved plans forwarded herewith. *No* If not, state date of approval. **28-8-51.**

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

General Remarks (State quality of workmanship, whether insulation tests, etc., have been made, 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, insulation tests have been carried out and found to be within rule requirements. The installation has been examined and tested under working conditions, and so far as completed found to be in order.

To complete this electrical installation the 3kw. 110Volt auxiliary dynamo remains to be fitted (to the auxiliary pumping & compressor set) and wired to the switchboard and on completion the 110 Volt installation requires to be operated under working conditions & dynamo power operated.

Subject to satisfactory completion the undersigned considers this installation eligible for inclusion in +LMC - A1. Barge for the carriage of petroleum & petroleum products in bulk for canal & estuary service, including Ave & Balde Hampton.

See attached letter regarding electric cooker fitted in crew space forward.

Total Capacity of Generators *3 1/2* Kilowatts.

The amount of Fee £ **60.0.0** : *When applied for, 3/4/52*

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

[Signature]
Surveyor to Lloyd's Register of Shipping.

FRI. 1 AUG 1952

Committee's Minute

Assigned *See J.E. Rpt.*

5m. 4.34—Transfer. (MADE AND PRINTED IN ENGLAND.)
(The Surveyors are requested not to write on or in the space for Committee's Minute.)

10.7.52

