

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 NEWCASTLE-ON-TYNE
 No. in Survey held at WALKER-ON-TYNE Date, First Survey 4th Nov. 1942 Last Survey 8th April 1943
 Reg. Book. (Number of Visits.....10.....)

on the BRITISH RESPECT Tons { Gross.....
 Net.....

Built at WALKER-ON-TYNE By whom built SWAN HUNTER & Wigham Richardson Ltd No. 1424 When built 1943

Owners BRITISH TANKER CO LTD. Port belonging to.....

Electrical Installation fitted by CAMPBELL & ISHERWOOD Contract No. 1424 When fitted 1943

Is vessel fitted for carrying Petroleum in bulk YES Is vessel equipped with D.F. YES E.S.D. YES Gy.C. YES Sub.Sig. —

Have plans been submitted and approved YES System of Distribution TWO WIRE Voltage of supply for Lighting 110

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 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 YES Are the lubricating arrangements and the construction

of the generators as per rule YES Position of Generators ENGINE ROOM. STBD.

....., 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. STBD. ON GALLERY.

SUB MAIN SWITCHBOARD IN MIDSHIP ACCOMMODATION.

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 EBONY SINDANYO, 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 400 AMPERE D.P.

CIRCUIT BREAKER WITH OVERLOAD AND NO VOLT RELEASE.

and for each outgoing circuit SINGLE POLE DOUBLET THROW QUICK BREAK SWITCH AND DOUBLE POLE FUSE.

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

ammeters 2 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 CONNECTED TO E" THROUGH D.P. SWITCH AND FUSE

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 45%, 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.....

state maximum fall of pressure between bus bars and any point under maximum load 4.4 1/2, are the ends of all cables having a sectional area of 0.64

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

supported and protected. MAIN CABLES, L.C.A. + B CLEATED IN STEEL TROUGHING UNDER FORE
AND AFT GANGWAY, ON STEEL TRAY PLATES IN MACHINERY SPACES. L.C.B. CABLES IN
ACCOMMODATION.

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

..... and method of control. —

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

what is the battery capacity in ampere hours, 200

installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present, _____, if so, how are they protected? _____

BRIDGE DECK DIST. 10000

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. — 75A

....., are their fittings as per Rule Heating and Cooking, is the general construction as per Rule

are the frames effectually earthed....., are heaters in the accommodation of the convection type..... Motors, are all motors constructed and

installed as per Rule YF6 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..... Control Gear and Resistances, are they constructed and

fitted as per Rule.....YES..... 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.....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 tested

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 ...	2	30	110	243	600	Steam Engine.		
EMERGENCY ...								
ROTARY TRANSFORMER								

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULA- TED 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	2 x 30	1	34/063	273	296	36/40	V.C.	H.C.A. - B.
" " EQUALISER								
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

[illegible]

WIRELESS	1	4/064	15	46	564	V.I.P.	L.C.
NAVIGATION LIGHTS	1	4/026	1.5	24	450	V.I.P.	LCA - B.
LIGHTING AND HEATING	ALTERNATE SUPPLY FROM NAVIGATING BRIDGE DISTRIBUTION BOARD						
SEARCHLIGHT CIRCUIT.	1	19/052	50	64	580	V.I.P.	L.C.
SHORE CONNECTION BOX	1	34/083		286	242	V.C.	LCA + B.
BRIDGE DECK DIS. FUSE BOARD	1	4/044	16	31	24	V.I.P.	L.C.
UPPER Bd. Dk	1	4/036	14	24	134	V.I.P.	L.C.
FORD CARGO PLUGS	1	4/036	4	24	24	V.I.P.	L.C.
ART	1	4/036	3	24	132	V.I.P.	LCA + B.
BRIDGE SPACE DIS. FUSE BOARD	1	4/044	20	31	24	V.I.P.	L.C.
ECHOMETER.	1	4/036	18	24	180	V.I.P.	L.C.

[illegible]

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.

CARDELL & ISHERWOOD, LTD.

Thomas Cardell

Electrical Engineers.

Date 21 April 1943

COMPASSES.

Minimum distance between electric generators ~~or motors~~ and standard compass 210'

Minimum distance between electric generators ~~or motors~~ and steering compass 200'

The nearest cables to the compasses are as follows:—

A cable carrying .14 Ampères ^{INSIDE} feet from standard compass feet from steering compass.

A cable carrying .14 Ampères 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.

SWAN, HUNTER, & WIGHAM, RICHARDSON, LTD.

John Hunter

Builder's Signature.

Date 23rd April 1943

DIRECTOR.

Is this installation a duplicate of a previous case YES. If so, state name of vessel BRITISH HARMONY.

Plans. Are approved plans forwarded herewith NO. If not, state date of approval 30/6/41.

Certificates. Are certificates of test for motors engaged on essential services and generators forwarded herewith FOLLOWING Recd. 2/5/43

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

INSTALLATION OF THIS VESSEL WAS INSTALLED UNDER SPECIAL SURVEY.

THE WORKMANSHIP AND MATERIALS USED ARE GOOD

GOVERNING AND REGULATION OF THE GENERATORS, OVERLOAD TRIPS OF THE CIRCUIT BREAKERS AND THE INSULATION RESISTANCE, WERE TESTED AND FOUND SATISFACTORY.

IN MY OPINION, THE INSTALLATION OF THIS VESSEL IS SUITABLE FOR CLASSIFICATION.

Noted
4/5/43.

Total Capacity of Generators 17 30 Kilowatts.

The amount of Fee ... £ 28 : 10 : 28 APR 1943

Travelling Expenses (if any) £ : : When received. 19.

Surveyor to Lloyd's Register of Shipping.

TUES. 11 MAY 1943

Committee's Minute

Assigned

See P.E. machy rpt-