

B. C. base

Rpt. 13.

No. 19062

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

2 JUN 1950

Date of writing Report 19... When handed in at Local Office 26.5.50 Received at London Office Port of MIDDLESBROUGH.

No. in Survey held at SOUTHBANK-ON-TEES. Date, First Survey 4.1.50 Last Survey 2.5.1950 Reg. Book. (No. of Visits 12)

41315 on the WHALER "SOUTHERN GAMBLER" Tons Gross 138 Net 150

Built at SOUTHBANK-ON-TEES. By whom built SMITHS DOCK CO. LTD. Yard No. 1198 When built 1950.

Owners THE SOUTH GEORGIA CO. LD. (CHR. SALVESEN & CO.) Port belonging to LEITH.

Installation fitted by R. PICKERSGILL & SONS LTD., STOCKTON-ON-TEES. When fitted 1950.

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

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 DC Power DC 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 - Generators, are they compound wound YES, and level compounded under working conditions YES.

if not compound wound state distance between generators - and from switchboard - Are the generators arranged to run in parallel YES, 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.

Position of Generators FORE & AFT, INBOARD & OUTBOARD ON GENERATOR FLAT, STBD. SIDE AFT IN ENG. RM.

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 ON GENERATOR FLAT FORE AND AFT ADJACENT TO SHELL FACING PORT AND NEAR GENERATORS.

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 SINDANYO EBDNY FINISH, 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 TRIPLE POLE AIR BREAK CIRCUIT BREAKER WITH OVERLOAD TRIPS AND TIME DELAYS ON TWO POLES, REVERSE CURRENT TRIP, THIRD POLE COUPLED TO EQUALISER.

and the switch and fuse gear (or circuit breakers) for each outgoing circuit DOUBLE POLE SINGLE THROW QUICK BREAK KNIFE SWITCH AND DOUBLE POLE FUSES.

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

ammeters 2 - Are there any devices for compound machines in parallel are the ammeters and reversed current protection devices connected on the pole opposite to the generator connection YES Earth Taping, state mains provided

EARTH LAMPS COUPLED TO EARTH THRO' SWITCHES AND FUSES.

Switches, Circuit Breakers and Fuses, are they as per Rule YES, are the fuses an Approved Type YES, make of fuses G.E.C. are all fuses installed YES If circuit breakers are provided for the generators, at what

overload do they operate 10% and at what current do the reversed current protection devices operate 10%

Joint Boxes, Section Boards and Distribution Boards, is the construction as per Rule YES

Cables, are they insulated and protected as per Rule YES, if otherwise than as per Rule are they of an Approved Type YES, state maximum fall of pressure between bus bars and any other metal machinery lead 46.6Y are the ends of all cables having a sectional

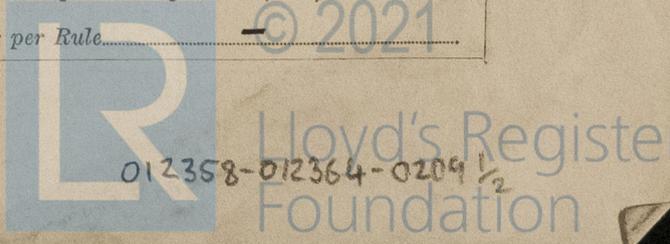
area of 0.01 square inch and above provided with soldering sockets YES Are all paper insulated and varnished cambric insulated cables sealed at the ends - Are all the cable runs in accessible positions, not exposed to dirt or accumulation of water or oil,

high temperatures or risk of mechanical damage YES, are any cables laid under machines or floor plates YES, if so, are they adequately protected YES, Are cables in machinery spaces, galleys, lavatories, etc. lead covered YES or run in conduit YES

or of the "HR" type - State how the cables are supported or protected CABLES IN ENGINE ROOM CLIPPED TO PERFORATED METAL TRAY PLATES. GALLEY RANGE CABLES LED IN PLUMBERS PIPE. FORWARD MAINS THRO' NO. 1 HOLD CLIPPED TO METAL PERFORATED TRAY PLATE. LEAD COVERED CABLES IN ACCOMMODATION CLEATED TO WOOD GROUNDS.

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 YES. Refrigerated chambers, are the cables and fittings as per Rule -



Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule... **YES**... Emergency Supply, state position

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... **YES**... Is an alternative supply provided... **YES**...

Secondary Batteries, are they constructed and fitted as per Rule... are they adequately ventilated... state battery capacity in ampere hours...

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

Searchlight Lamps, No. of... 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... 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... **YES**...

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... 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 sea 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... 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 the cables lead covered as per Rule...

E.S.D., if fitted state maker... 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... **YES**...

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				PRIME MOVER.	
			Kilowatts per Generator.	Volts.	Amps.	Revs. per Min.	TYPE.	MAKER.
MAIN	2	SUNDERLAND FORGE & ENGINEERING CO.	15	110	136.5	550	STEAM.	SUNDERLAND FORGE.
EMERGENCY ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	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	15	1	37/072	136.5	152	36	Y.I.R.	LEAD COVERED.
" " EQUALISER	15	1	19/064	68	83	18	Y.I.R.	LEAD COVERED.
" " "	15	1	37/072	136.5	152	30	Y.I.R.	LEAD COVERED.
" " "	15	1	19/064	68	83	15	Y.I.R.	LEAD COVERED.
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

MAIN DISTRIBUTION CABLES (to Section Boards, Distribution Fuse Boards, etc.).

DESCRIPTION.	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
MAIN SWITCHBOARD TO ELEC. GALLEY RANGE 124KN.	1	19/083	112.8	118	150	Y.I.R. PLUMBERS PIPE.
MAIN SWITCHBOARD TO VENT SYSTEM. S.B.	1	7/036	20	24	160	Y.I.R. L.C.A.+B.
MAIN SWITCHBOARD TO MESS ROOM S.B.	1	7/064	36	46	160	Y.I.R. L.C.A.+B.
MAIN SWITCHBOARD TO ENGINE ROOM S.B.	1	7/036	18	24	24	Y.I.R. L.C.A.+B.
MAIN SWITCHBOARD TO ENG. & BOILER ROOM.	1	7/036	12.5	24	24	Y.I.R. L.C.A.+B.
MAIN SWITCHBOARD TO RADAR.	1	7/052	25	37	196	Y.I.R. L.C.A.+B.

LIGHTING, HEATING, WIRELESS, NAVIGATION LIGHTS, ETC., CABLES.

DESCRIPTION.	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 SWITCHBOARD TO WIRELESS.	1	7/052	12	37	208	Y.I.R.	L.C.A.+B.
MAIN SWITCHBOARD TO NAVIGATION.	1	7/029	2.5	15	188	Y.I.R.	L.C.A.+B.
ALTERNATIVE NAVIGATION SUPPLY.	1	3/036	2.5	10	18	Y.I.R.	L.C.
MESS ROOM S.B. TO CHARTROOM.	1	7/036	18	24	64	Y.I.R.	L.C.
MESS ROOM S.B. TO MESS ROOM.	1	7/036	9	24	4	Y.I.R.	L.C.
MESS ROOM S.B. TO FORWARD ACCOM.	1	7/036	9	24	144	Y.I.R.	L.C.A.+B.
ENGINE ROOM S.B. TO AFT ACCOM.	1	3/036	5	10	48	Y.I.R.	L.C.
ENGINE ROOM S.B. TO AFT UPPER DECK.	1	7/029	7	15	76	Y.I.R.	L.C.A.+B.

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
FORWARD VENT FAN.	1	0.6	3/036	5.0	10	144	Y.I.R. L.C.A.+B.
MIDSHIPS VENT FAN.	1	0.6	3/036	5.0	10	86	Y.I.R. L.C.
AFT VENT FAN.	1	0.6	3/036	5.0	10	290	Y.I.R. L.C.A.+B.
GALLEY.	1	0.5	3/036	4.0	10	40	Y.I.R. L.C.
HYDROFORS.	2	0.5	3/036	5.0	10	70/70	Y.I.R. L.C.A.+B.

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.

RICHARD PICKERSGILL & SONS, LTD.

Electrical Contractors.

Date

COMPASSES.

Have the compasses been adjusted under working conditions

YES.

For SMITH'S DOCK CO. LTD.

O.E. Hunter

Builder's Signature.

Date 9-5-50.

SHIPYARD 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

SOUTHERN GUIDER.

Plans. Are approved plans forwarded herewith

NO

If not, state date of approval

30.7.1949.

Certificates. Are certificates of test for motors engaged on essential sea 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 FOR THIS VESSEL HAS BEEN INSTALLED UNDER SPECIAL SURVEY AND THE ARRANGEMENTS ARE IN ACCORDANCE WITH OR EQUIVALENT TO THOSE SHOWN ON THE APPROVED PLANS AND THE RULES FOR ELECTRICAL EQUIPMENT.

THE MATERIALS USED ARE OF GOOD QUALITY AND THE WORKMANSHIP IS GOOD.

ON COMPLETION THE EQUIPMENT WAS OPERATED UNDER WORKING CONDITIONS, THE VARIOUS PROTECTIVE DEVICES WERE ADJUSTED AND OPERATED AND THE INSULATION RESISTANCE OF ALL CIRCUITS MEASURED AND FOUND GOOD.

THIS INSTALLATION IS IN MY OPINION SUITABLE FOR A CLASSED VESSEL.

Noted and 19/6/50.

Total Capacity of Generators 30.1 Kilowatts.

The amount of Fee ...

£ 37 : 10

When applied for,

1.6.1950

When received,

19

Travelling Expenses (if any) £

Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI, 23 JUN 1950

Assigned

S. F. E. mchey. opt.

2m 9.46.—Transfer. (MADE AND PRINTED IN ENGLAND.) (The Surveyors are requested not to write on or below the space for Committee's Minute.)



© 2021

Lloyd's Register Foundation