

Rpt. 13.

No. 48057

## REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 30 JAN 1952

Date of writing Report 7<sup>th</sup> JANUARY 1952 When handed in at Local Office 28.1. 1952 Port of GLASGOW  
 No. in Survey held at GREENOCK Date, First Survey 7<sup>th</sup> NOVEMBER Last Survey 21<sup>st</sup> DECEMBER 1951  
 Reg. Book. (No. of Visits 6)

35992 on the M.V. 'HOLMGAR' Tons { Gross... Net...

Built at PORT GLASGOW By whom built W<sup>m</sup> HAMILTON & CO LTD Yard No. 486 When built 1951

Owners STAMERS REDERI A/S Port belonging to BERGEN

Installation fitted by SUNDERLAND FORGE & ENGINEERING CO LTD When fitted 1951

Is vessel equipped for carrying Petroleum in bulk YES Is vessel equipped with D.F. YES E.S.D. YES G.Y.C. YES Sub. Sig. YES Radar ONLY WIRING.

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 YES 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 YES Have certificates of

test for machines under 100 kw. been supplied YES and the results found as per Rule YES

Position of Generators STEAM SETS - ON FLAT, PORT SIDE OF ENGINE ROOM DIESEL SET - PORT SIDE OF ENGINE ROOM

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 ADJACENT TO STEAM SETS

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, 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 YES 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 400 AMP TRIPLE POLE CIRCUIT BREAKERS FITTED WITH OVERLOAD

AND REVERSE CURRENT TRIPS

and the switch and fuse gear (or circuit breakers) for each outgoing circuit DOUBLE POLE KNIFE PATTERN SWITCHES

WITH FUSES

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

ammeters THREE voltmeters YES synchronising devices For compound machines in parallel are the ammeters and reversed current

protection devices connected on the pole opposite to the equaliser connection YES 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

make of fuses SIEMENS, are all fuses labelled YES If circuit breakers are provided for the generators, at what

overload do they operate 150% FULL LOAD, and at what current do the reversed current protective devices operate 10%-15% F.L.

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 point under maximum load 6.2 VOLTS, 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 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 any cables laid under machines or floorplates NO, if so, are they

adequately protected YES Are cables in machinery spaces, galleys, laundries, etc., lead covered YES or run in conduit YES

or of the "HR" type YES State how the cables are supported or protected MAINS L.C.B. CABLES IN GALVANISED

PIPES MACHINERY SPACE L.C.B. CABLES CLIPPED TO TRAY OR STEELWORK ACCOMMODATION

L.C. CABLE CLIPPED TO WOODWORK

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 YES



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. YES are they adequately ventilated. YES 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. YES

if so, how are they protected. CENTRECASTLE SPACE - FLAMEPROOF FITTINGS. PUMPROOMS - IN ACCORDANCE WITH RULE REQUIREMENTS and where are the controlling switches fitted. IN ACCOMMODATION SPACE Are all fittings suitably ventilated. YES

Searchlight Lamps, No. of 1, whether fixed or portable. YES are they of the carbon arc or of the filament type. 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 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. 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 sea 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 an Approved Cartridge Type. YES make of fuse. SIEMENS 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 E.S.D., if fitted state maker. KELVIN HUGHES location of transmitter. FRAME SPACE 37-38 P. and receiver. FRAME SPACE 39-40 STBD

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		Revs. per Min.	TYPE.	MAKER.
			Kilowatts per Generator.	Volts.			
MAIN	2	SUNDERLAND FORGE & ENG. CO. LTD.	40	110	364	600	STEAM
	1	SUNDERLAND FORGE & ENG. CO. LTD.	40	110	364	600	DIESEL
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	40	2	19/083	364	404	112	V.C.	L.C.A.B.
" " EQUALISE		1	19/083	-	202	56	V.C.	L.C.A.B.
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

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

DESCRIPTION.								
MIDSHIP LIGHTING & POWER PANEL	2	37/103	290	816	640	V.C.	LCAB.	
CREW AFT LIGHTING & POWER BOARD	1	19/083	148	202	180	V.C.	LCAB.	
ENGINE ROOM LIGHTING SECTION	1	19/064	41	143	40	V.C.	LCAB.	
ENGINE ROOM AUXILIARY SECTION N°1	1	7/064	50	80	220	V.C.	LCAB.	
ENGINE ROOM AUXILIARY SECTION N°2	1	19/064	86	143	84	V.C.	LCAB.	
ENGINE ROOM AUXILIARY SECTION N°3	1	7/064	62	80	40	V.C.	LCAB.	
ENGINE ROOM AUXILIARY SECTION N°4	1	7/064	48	80	222	V.C.	LCAB.	
LAUNDRY POWER	1	19/064	94	143	320	V.C.	LCAB.	
REFRIG. MACHINERY	1	7/064	56	80	312	V.C.	LCAB.	
SHORE SUPPLY	1	31/103	290	408	300	V.C.	LCAB.	

#### 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.			
WIRELESS	1	7/064	15	80	136	V.C.	L.C.
NAVIGATION	1	7/064	30	80	128	V.C.	L.C.
UPPER BRIDGE LT'S D.B.	1	7/064	20	31	80	RUBBER	L.C.
BRIDGE DECK LT'S D.B. PORT.	1	7/064	15	31	100	RUBBER	L.C.
FORECASTLE D.B.	1	7/064	4	31	312	RUBBER	LCAB.
FLOODLIGHT D.B.	1	7/064	15	31	128	RUBBER	LC
POOP DECK LT'S D.B. STBD.	1	7/064	15	31	144	RUBBER	LC
UPPER DECK LT'S D.B. PORT	1	7/064	15	31	168	RUBBER	LC
UPPER DECK LT'S D.B. AFT.	1	7/064	11	31	284	RUBBER	LC
ENGINE ROOM LT'S D.B. TOP STBD	1	7/064	9	31	300	RUBBER	LCAB.
ENGINE ROOM LT'S D.B. BOTTOM PORT.	1	7/064	10	31	24	RUBBER	LCAB.
MIDSHIP BOILER	1	7/064	27.3	31	112	RUBBER	LC
GALLEY RANGE	1	19/064	126	143	288	V.C.	LCAB.
GALLEY AND PANTRY POWER D.B.	1	7/064	49	80	316	V.C.	LCAB.
BOAT WINCH PLUGS.	1	7/064	35	80	172	V.C.	LCAB.

#### MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.						
STEERING GEAR.	1	25	1	19/083	194	202	270	V.C.
DOMESTIC REFRIG. COMP.	1	5	1	7/064	42	80	260	V.C.
AFT ACCOM. VENT FANS.	2	3.75	1	7/064	31	80	72	V.C.
MID. ACCOM. VENT FANS.	2	1.45	1	7/064	13.5	31	150	RUBBER
ENGINE ROOM VENT FANS.	2	2.75	1	7/064	25	31	76	RUBBER
PURIFIERS.	3	3.5	1	7/064	28.7	31	24	RUBBER
F.W. AND SANITARY PUMPS.	3	2	1	7/064	16	31	84	RUBBER



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.

p.p. THE SUNDERLAND FORGE & ENG. CO. LTD.,

Electrical Contractors.

Date 14.1.1952

#### COMPASSES.

Have the compasses been adjusted under working conditions.

YES

Builder's Signature.

Date 21 Jan 1952

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

YES

Is this installation a duplicate of a previous case.

No

If so, state name of vessel.

Plans. Are approved plans forwarded herewith.

No

If not, state date of approval.

23<sup>rd</sup> OCTOBER 1951

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 installation of this vessel has been fitted on board under Special Survey tested under working conditions and found satisfactory. The quality of materials and workmanship is good.

Noted 6.2.52

Total Capacity of Generators

120

Kilowatts.

The amount of Fee ...

£ 60 : 0

When applied for,

as per 19

When received,

19

Travelling Expenses (if any) £

: 18 :

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

GLASGOW 29 JAN 1952

Assigned

See Grcs. F.E. Machy Rpt 24558



© 2021

Lloyd's Register Foundation