

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

14 APR 1948

Received at London Office.....

Date of writing Report. 8.4.48 When handed in at Local Office. 13th April 1948 Port of Sunderland

No. in Survey held at Sunderland. Date, First Survey. 9.3.48 Last Survey. 6.4.1948
Reg. Book. (Number of Visits.....5.....)on the S.S. "CYRUS SEARS" Tons { Gross.....1814
Net.....1019

Built at San Francisco Cal. U.S.A. By whom built Pacific Bridge Co. Yard No. - When built 1943

Owners Stephenson & Clarke Ltd Port belonging to London

Electrical Installation fitted by - Contract No. - When fitted 1943

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

Have plans been submitted and approved. Slips plans examined at this port. System of Distribution Two wire insulated Voltage of supply for Lighting 110

Heating - Power 110 Direct or Alternating Current, Lighting Yes Power Yes 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 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 No 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 on raised platform

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 on angle frame next generators

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 strong "Aindanyo" 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 double pole air -

break circuit breakers with off 1 A.R. trips and a separate linked equalising switch

and for each outgoing circuit a double pole Rief's 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 Yes Earth Testing, state means provided E lamps connected to E through bus & fuses

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 - If circuit breakers are provided for the generators, at what overload current did they open when tested full load the reversed current

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

did they operate 57 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 6 P.E.E. Standards 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 - are the ends of all cables having a sectional area of 0.04

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



Lloyd's Register Foundation

PARTICULARS OF GENERATING PLANT.

PARTICULARS OF GENERATING PLANT.						WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
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	25	120	208	400	Steam Engine	
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 For Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR 1.	25	1	37/064	208	210	48	V.C.	L.C. & B.W.R.
" " EQUALISER		1	37/064		210	24	"	"
" " 2.	25	1	37/064	208	210	36	"	"
" " E.Q.		1	37/064		210	18	"	"
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

MAIN DISTRIBUTION CABLES.

[illegible]

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS	...	...	...	...	...
NAVIGATION LIGHTS	...	...	...	...	...
LIGHTING AND HEATING	...	...	...	...	...
Off Deck Ltg Panel.	'L-18'	1	7/064	30 ✓ 75	180 V.C.
Ind " " "	'L-14'	1	7/029	6 ✓ 15	" "
Handlight's Panel	'R'	1	7/029	5 ✓ 15	V.C. L.C. & B.W.A.
D.S. Supply.		1	7/052	24 ✓ 5Y	108 "
		1	7/064	62 ✓ 75	18 "

MOTOR CABLES.

[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.

Sunderland Forge & Eng Co Ltd

Electrical Engineers.

Date *12-4-1948*

J. S. Swan

COMPASSES.

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 Amperes feet from standard compass feet from steering compass.

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

A cable carrying Amperes 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.....

DESIGN N.3-S-A1. CARGO VESSELS U.S.A.

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

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

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.).....

The electrical equipment of this vessel has been examined, tested, and found to comply in general principle with the Society's "Rules for Electrical Equipment". The ship's set of plans was examined and found to be a true record of the installation as fitted. The cables are to the standards of the R.I.E.E. and of adequate current-carrying capacity for their several duties. The generators and motors were operated on load with satisfactory results and the insulation resistance of all circuits was found good. This equipment is in my opinion suitable for a vessel bearing the Society's class.

-noted

[Signature]

9.5.48.

Total Capacity of Generators *(2x25)* *50* Kilowatts.

The amount of Fee £ : When applied for,19.....

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

Committee's Minute.....

Assigned.....

S. S. Swan

Surveyor to Lloyd's Register of Shipping.

14 MAY 1948

See minute on p. 11.



© 2021

Lloyd's Register Foundation