

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report... 2nd August 42 When handed in at Local Office... 19... Port of... Portland, Maine (New York) U.S.A.

No. in Survey held at... So. Portland, Maine Date, First Survey... 29th March Last Survey... 20th July 19 42
Reg. Book. (Number of Vols... Continuous

on the "OCEAN STRENGTH" Tons { Gross... 7173
Net... 4278

Built at... So. Portland, Maine By whom built... Todd-Bath Iron S.B. Corp. Yard No. 12 When built... 1942-7

Owners... British Ministry of War Transport Port belonging to... London

Electrical Installation fitted by... Todd-Bath Iron Shipbuilding Corporation Contract No. 12 When fitted... 1942

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

Have plans been submitted and approved... Yes System of Distribution... 2 Wire D. C. Voltage of supply for Lighting... 110 V

Heating... None Power... none Direct or Alternating Current, Lighting... D.C. Power... x If Alternating Current state periodicity... x 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... x Generators, are they compound wound... yes are they level compounded under working conditions... yes

if not compound wound state distance between generators... x and from switchboard... x 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

Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing... none Have certificates of test for machines under 100 kw. been supplied... x Yes, but no temperature test and the results found as per rule... x Are the lubricating arrangements and the construction of the generators as per rule... yes

Position of Generators... Star. E. R. Lower 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... x and vertically... 7 ft.

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... Star. E. R. Lower Platform.

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... x and vertically... 7 ft., what insulation material is used for the panels... Ebony Asbestos

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... x 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 Switches and Double Pole Fuses.

and for each outgoing circuit... D. P. Switches and Fuses.

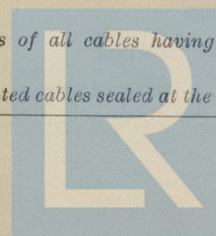
Are compartments containing switchboards composed of fire-resisting material or lined as per Rule... yes Instruments on main switchboard... 2 ammeters... 2 voltmeters... x synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the equaliser connection... x

Earth Testing, state means provided... Earth lamp and voltmeters. 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... x are the reversed current protection devices connected on the pole opposite to the equaliser connection... x have they been tested under working conditions, and at what current did they operate... x

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... x

state maximum fall of pressure between bus bars and any point under maximum load... 2.8 V 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... none



and found satisfactory.....*

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Amperes.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
EMERGENCY ...								
ROTARY TRANSFORMER								

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	15 each	1	168000	136.	139.	40'	V.I.R.	L.C.A.
" " EQUALISER								
EMERGENCY GENERATOR	X							
ROTARY TRANSFORMER: MOTOR	X							
" " GENERATOR	X							

[illegible][illegible][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.

J. E. Trott
TODD BATH IRON SHIPBUILDING CORP.

Electrical Engineers.

Date 8/15/42

COMPASSES.

Minimum distance between electric generators or motors and standard compass 10 feet (Wireless Transformer)

Minimum distance between electric generators or motors and steering compass 6 feet.

The nearest cables to the compasses are as follows:—

A cable carrying 2.15 Ampères 10 feet from standard compass 6 feet from steering compass.

A cable carrying .43 Ampères 3 feet from standard compass 3 feet from steering compass.

A cable carrying .43 Ampères 3 feet from standard compass 3 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 3 degrees on South West course in the case of the standard compass, and 3 degrees on North East course in the case of the steering compass.

Paul S. Kilgus
TODD BATH IRON SHIPBUILDING CORP.

Builder's Signature.

Date 8/15/42

Is this installation a duplicate of a previous case yes If so, state name of vessel "OCEAN LIBERTY" "FREEDOM" "PEACE", Etc.

Plans. Are approved plans forwarded herewith No If not, state date of approval 5th May, 1941

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 Installation of this vessel has been fitted in accordance with the Rules and approved plans. The materials and workmanship are good and the whole has been tested as required by the Rules with good results.

Noted
16/8/42

Total Capacity of Generators 30 Kilowatts.

The amount of Fee \$65.16 See Machinery Report When applied for, 2-9-1942 from London
Travelling Expenses (if any) £ : : When received, 19

Reffaskill & Rodger
Surveyors to Lloyd's Register of Shipping.

Committee's Minute NEW YORK AUG 26 1942

Assigned Elec light