

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

24 DEC 1946

Received at London Office.....

Date of writing Report... 10th Dec 46... 19... 46... When handed in at Local Office... 23rd Dec 46... 19... 46... Port of... MIDDLESBROUGH.

No. in Survey held at... WEST HARTLEPOOL... Date, First Survey... 2. 7. 46... Last Survey... 26-9-1946... Reg. Book... (Number of Visits... 12...)

89557 on the... S/S "WAVE PREMIER" Tons { Gross... 8175 Net... 4552

Built at... HAVERTON HILL... By whom built... FURNESS S.B. CO. LTD... Yard No... 389... When built... 1946

Owners... THE ADMIRALTY... Port belonging to... LONDON.

Electrical Installation fitted by... FURNESS S.B. CO. LTD... Contract No... 389... When fitted... 1946

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... -
RADAR.

Have plans been submitted and approved... YES... System of Distribution... TWO WIRE INSULATED... 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... 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... Are the lubricating arrangements and the construction

of the generators as per rule... YES... Position of Generators... ON GENERATOR FLAT. AFT. OF MAIN BOILERS. PORT AND 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... ON GENERATOR FLAT. AFT. BULKHEAD.

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 SANDANYO... 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 Q.B. SWITCH

AND DOUBLE POLE FUSE

and for each outgoing circuit... DOUBLE POLE, DOUBLE THROW Q.B. 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 SWITCHES AND 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... YES... If circuit breakers are provided for the generators, at what overload current did they open when tested... -... 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... 6V... are the ends of all cables having a sectional area of 0.01

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 LEAD COVERED, ARMoured AND BRAIDED CABLES CLIPPED TO TRAY PLATES

LEAD COVERED CABLES CLIPPED TO WOOD GROUNDS IN ACCOMMODATION

Are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands.....YES....., where unarmoured cables pass through

the groups of lights in the engine and boiler rooms arranged as per Rule.....YES Emergency Supply, state position LOW VOLTAGE

Room 9.

double pole switches YES and fuses YES. Are the switches and fuses in a position accessible only to the officers on watch YES.

automatic indicator fitted.....YES..... Secondary Batteries, are they constructed and fitted as per Rule.....-..... are they adequately ventilated.....-.....

what is the battery capacity in ampère hours.....

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

FLAME PROOF FITTINGS IN CENTRE CASTLE, AND ON DECK. PUMP ROOM FITTINGS IN WELDED STEEL BOXES.

and where are the controlling switches fitted ON AUX. SWITCHBOARD IN MIDSHIP ACCOM., are all fittings suitably ventilated YES.

are all fittings and accessories constructed and installed as per Rule.....YES..... Searchlight Lamps, No. of.....2....., whether fixed or portable.....

FIXED, are their fittings as per Rule. YES 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 729 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.....

Have certificates of test for motors under

fitted as per Rule..... Y3..... 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 they of an approved type? ☒ Yes ☐ No

ships.....YES Are the cables lead covered as per Rule YES Spare Gear if the vessel is for use.....

Rule YES, are they suitably stored in dry situations YES. Insulation Tests. has the insulation resistance of all circuits and apparatus been tested

and found satisfactory. YES 32/

DOUBLE PAGE 2. B. SWITCH

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	685	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 Per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	IN AMPERES				
				In the Circuit.	Rule.			
MAIN GENERATOR	2 x 30	1	37/083	273	296	85/40	V.C.	L.C.A.B.
" " EQUALISER								
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

DESCRIPTION	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES	APPROX. LENGTH	INSULA-
	No. of Wires	Sectional Area or			

[illegible]

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS			1	7/044	50	75 ✓	150	V.C.	L.C.
NAVIGATION LIGHTS			1	7/044	22	42 ✓	140	V.C.	"
LIGHTING AND HEATING									
GYRO COMPASS			1	7/044	15	42 ✓	60	V.C.	L.C.
ECHO SOUNDER			1	7/036	10	28 ✓	130	V.C.	"
RADAR			1	7/044	27	42 ✓	130	V.C.	"
WHEELHOUSE LIGHTING DIS FUSE BOARD			1	7/044	10	42 ✓	100	V.C.	"
MIDSHIP ACCOMMODATION LIGHTING INCORPORATED IN MIDSHIPS SUB-SWITCHBOARD.									
AFT ACCOM. LIGHTING DIS FUSE BOARD PT.			1	7/052	29 ³³	57 ✓	140	V.C.	L.C.A+B.
AFT ACCOM.			1	7/052	34 ²	57 ✓	120	V.C.	"
CARGO LIGHTING			1	7/029	10	18 ✓	120	V.C.	"
ENGINE ROOM LIGHTING			1	7/044	25	42 ✓	200	V.C.	"
"			1	7/044	23	42 ✓	40	V.C.	"
FORD LIGHTING			1	7/044	5	42 ✓	320	V.C.	"
BHORE SUPPLY			1	19/083	-	191	260	V.C.	"

[illegible]

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.						
FORD PORT BOAT HOIST	1	2	1	7/036	14	28	130	V.C. L.C.
FORD STD BOAT HOIST	1	2	1	7/036	14	28	100	V.C. "
MIDSHIPS VENT FAN	1	4.9	1	7/044	33	42	200	V.C. "
AFT PORT BOAT HOIST	1	2	1	7/036	14	28	300	V.C. "
AFT STD BOAT HOIST	1	2	1	7/036	14	28	200	V.C. "
ACCOM. VENT FAN	1	4.9	1	7/044	30	42	120	V.C. "
ACCOM VENT FAN	1	3.25	1	7/044	22	42	220	V.C. "
MACHINERY SPACE VENT FAN	1	3.25	1	7/044	22	42	80	V.C. "
TURNING MOTOR.	1	8	1	7/064	54	75	320	V.C. L.C. A+B.
REFRIGERATOR MOTOR.	1	1	1	7/029	7	17	140	V.C. "
WORKSHOP MOTOR.	1	3	1	7/044	20	42	20	V.C. "
ENGINE ROOM VENT FAN	1	3	1	7/044	20	42	370	V.C. "
ENGINE ROOM VENT FAN	1	3	1	7/044	20	42	370	V.C. "
OIL PURIFIERS.	2	5	1	7/064	4	10	1975	V.C. "
BOILER HOUSE VENT FAN. PORT	1	3	1	7/036	20	28	250	V.C. "
BOILER HOUSE VENT FAN STD	1	3	1	7/036	20	28	250	V.C. "

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.

[Signature] Electrical Engineer. Date 19-12-46.

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 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.

[Signature] Builder's Signature. Date 19-12-46.
[Signature] Secretary.

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

Plans. Are approved plans forwarded herewith..... If not, state date of approval 4-2-1946.

Certificates. Are certificates of test for motors engaged on essential services and generators forwarded herewith GENERATORS.

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 installed in conformity with the Societies
Rules and Regulations, and the arrangements are in accordance with, or equivalent to
those shown on the approved plans.

Materials used are of good quality and the workmanship is satisfactory.

On completion, the insulation resistance of the installation was above Requirement,

and the Generators operated on Load and Governor tests with satisfactory results.

The Equipment as installed is, in my opinion, suitable for a Classed vessel.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

The amount of Fee ... £ 28 : 10 : 0 When applied for, 23-12-1946
4 2/6
SPECIFICATION.
Travelling Expenses (if any) £ : : When received,19.....

Committee's Minute FRI. 17 JAN 1947

Assigned Su F.E. moly. rpt.

[Signature]
Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register
Foundation