

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

20 APR 1942

Received at London Office.....

Date of writing Report... 27th March 1942 When handed in at Local Office... 17th April 1942 Port of... Belfast

No. in Survey held at... Belfast Date, First Survey... 11th Oct. 1941 Last Survey... 11th April 1942
Reg. Book. (Number of Visits... 17)on the... M.V. "Dinsdale" Tons { Gross... 8213.9
Net... 4780.89

Built at... Belfast By whom built... Messrs Harland & Wolff Ltd Yard No... 1078 When built... 1942-4

Owners... Admiralty Port belonging to... London

Electrical Installation fitted by... Messrs Harland & Wolff Ltd Contract No... 1078 When fitted... 1942-4

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... No

Have plans been submitted and approved... Yes System of Distribution... Two Wire System Voltage of supply for Lighting... 110

Heating... Power... 110 Direct or Alternating Current, Lighting... D.C. Power... D.C. If Alternating Current state frequency... Prime Movers,

has the governing been tested and found efficient when the whole 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... No, 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... None 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... Starboard Side of Motor Room.

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 Platform, Starboard Side of

Motor Room.

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... Interolm, 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... ~~One 300 amp. Double pole change over knife switch, slow break, with~~

250 amp. fuse on each pole

and for each outgoing circuit... Double pole changes over switches with fuses on each pole.

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... Two earth lamps with two way and off switch

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 the Circuit.	Rule.			
MAIN GENERATOR	25	1	37/103	227	240 ✓	45	Rubber	L.S.A.B.
" " EQUALISER								
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

MAIN DISTRIBUTION CABLES

AUX. SWITCHBOARDS AND SECTION BOARDS							
Section Box No. 1. Ford & Midship Lighting	1	37/064	97.4	130 ✓	620	Rubber	L.S.A.B.
No. 2. Portable Connections	1	19/052	18.	64 ✓	180	"	"
No. 3. Aft. Lighting	1	19/052	48	64 ✓	168	"	"
No. 4 Motor Room Lighting	1	19/044	50.5	53 ✓	90	"	"
No. 5 Vent Fans	1	19/064	52	83 ✓	150	"	"
Dist. Box M.I. Motor Room Motors	1	19/064	42	83 ✓	250	"	"
Signalling Projector	1	7/036	18.5	24 ✓	700	"	L.S.A.B. Resistance in Co
D.C. Panel fitted to Busbars on main board with double pole change over switch							

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS	(Duplicated)	1	19/064	23	83	675	Rubber	L.S.A.B.
NAVIGATION LIGHTS	(Duplicated)	1	7/029	2	15	675	"	"
LIGHTING AND HEATING										
Disc. Box.	No. 1	Lighting & Navigating		1	7/052	32.5	37	90	Rubber	L.C.
"	"	No. 2	Lighting Accommodation	1	7/029	11.5	15	50	"	"
"	"	No. 3.	" "	1	7/044	30	31	28	"	"
"	"	No. 4	" "	1	7/036	15	24	28	"	"
"	"	No. 5	Portable Connections	1	7/044	11.5	31	460	"	L.S.A.B.
"	"	No. 6	Lighting Fockle	1	7/044	4.4	31	320	"	"
"	"	No. 7.	Portable Connections	1	7/029	6.5	15	50	"	L.C.
"	"	No. 8	Lighting Accommodation	1	7/044	25.5	31	195	"	"
"	"	No. 9	" "	1	7/044	22.5	31	30	"	"
(continued on fly)										

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
Turning Motor	1	10	1	19/064	80	83	120	Rubber	L.S.A.B.
Workshop Motor	1	3	1	7/044	26	31	195	"	"
F.O. Purifier	1	3	1	7/044	25.1	31	180	"	"
Standby F.O. Pump	1	1.75	1	7/086	15.9	24	165	"	"
L.O. Purifier	1	2.5	1	7/086	21.3	24	180	"	"
Supply Fan No.1. Ford.	1	3	1	7/064	26	46	480	"	"
No.2 aft.	1	3	1	7/044	26	31	80	"	"
Decontamination Fan	1	.125	1	3/036	2	10	75	"	L.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.



Electrical Engineers.

Date 13-4-42.

COMPASSES.

Minimum distance between electric generators or motors and standard compass Eighteen Feet

Minimum distance between electric generators or motors and steering compass Twenty Feet.

The nearest cables to the compasses are as follows:—

A cable carrying 0.13 Ampères on ~~from~~ standard compass 8 feet from steering compass.

A cable carrying 0.13 Ampères 8 feet from standard compass on ~~from~~ steering compass.

A cable carrying 18 Ampères 8 feet from standard compass 10 feet from steering compass.

Have the compasses been adjusted with and without the electric installation at work at full power Yes, & calibrated with D.f. on and off.

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 no. degrees on any course in the case of the standard compass, and no degrees on any course in the case of the steering compass.



Builder's Signature.

Date 13.4.42.

Is this installation a duplicate of a previous case Yes. If so, state name of vessel "EMPIRE DIAMOND"

General Remarks (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.)

The installation has been tested under full working conditions and found satisfactory. The materials and workmanship are good.

The equipment has been fitted on board under Special Survey, and in accordance with the approved plans.

Total Capacity of Generators 50 Kilowatts.

The amount of Fee ... £ 27 : 10 : 18.4.42
To Credit of ... £ 13-15-0
Bel. £ 13-15-0
Travelling Expenses (if any) £ : :
When received. : : 19.....

John M. Lee & for H. Haffner.
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 1 MAY 1942

Assigned

See Bel. 2E 13221