

## REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 75168

Received at London Office 9 MAR 1950

of writing Report 4/3/50 19 When handed in at Local Office 7/3/ 19 50 Port of Glasgow

Survey held at Glasgow Date, First Survey 4-4-49 Last Survey 22-2- 19 50

Book. Single on the Triple Screw vessel M. P. "British Commander" Tons Gross 8655 Net

at Glasgow By whom built Harland and Wolff Ltd Yard No 13986 When built 1950

ers British Tanker Co Ltd Port belonging to London

Engines made at Glasgow By whom made Harland and Wolff Ltd Contract No 1398 When made 1950

erators made at Belfast By whom made - - - Contract No 1398 When made 1950

of Sets 2 Engine Brake Horse Power 110 M.N. as per Rule 245 Total Capacity of Generators 150 Kilowatts.

Set intended for essential services Yes

L ENGINES, &amp;c.—Type of Engines Heavy Oil Airless Injection 2 or 4 stroke cycle 4 Single or double acting Single

imum pressure in cylinders 800 lbf/sq in Diameter of cylinders 250 mm Length of stroke 300 mm No. of cylinders 3 No. of cranks 3

an indicated pressure 100 lbf/sq in Firing order in cylinders 132 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 308 mm

here a bearing between each crank Yes Moment of inertia of flywheel (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>) 3645 Revolutions per minute 500

wheel dia. 1140 mm Weight RM 1402 Kgs Means of ignition Compression Kind of fuel used Diesel Oil

ank Shaft, dia. of journals as per Rule APP Crank pin dia. 165 mm Crank Webs Mid. length breadth 730 mm Thickness parallel to axis

as fitted 180 mm Mid. length thickness 80 mm Thickness round eyehole

wheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule General armature, moment of inertia (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>)

as fitted Means of lubrication Forced Kind of damper if fitted None

e means provided to prevent racing of the engine when disconnected Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Lagged

e the cylinders fitted with safety valves Yes Driven by Engine 1400 rpm at 1929 RPM

oling Water Pumps, No. 1 Sea Type 2.6 cu ft/hr at 1929 RPM the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

bricating Oil Pumps, No. and size 1000 cc

Compressors, No. Two No. of stages Two Diameters 280-245 mm Stroke 130 mm Driven by 500 rpm

ivenging Air Pumps, No. Diameter Stroke Driven by

R RECEIVERS:—Have they been made under Survey Yes State No. of Report or Certificate X.141.

each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

n the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Inspection

there a drain arrangement fitted at the lowest part of each receiver Yes

gh Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness

unless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

urting Air Receivers, No. One Total cubic capacity 150 litres Internal diameter 14 1/4 inches thickness 3/8 inches

unless, lap welded or riveted longitudinal joint welded Material Steel Range of tensile strength Working pressure by Rules APP

LECTRIC GENERATORS:—Type Strip Proof, Commutator Poles, Compound wound

essure of supply 110 volts Full Load Current 682 Amperes Direct or Alternating Current Direct

alternating current system, state the periodicity Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown

and off Yes Generators, are they compounded as per Rule is an adjustable regulating resistance fitted in series with each shunt field

e all terminals accessible, clearly marked, and furnished with sockets Are they so spaced

shielded that they cannot be accidentally earthed, short circuited, or touched Are the lubricating arrangements of the generators as per Rule

the generators are under 100 kw. full load rating, have the makers supplied certificates of test and do the results comply with the requirements

the generators are 100 kw. or over have they been built and tested under survey

tails of driven machinery other than generator None

ANS.—Are approved plans forwarded herewith for Shafting 19.6.48 Receivers 29.4.49 Separate Tanks 20.4.49

(if not, state date of approval) 29.4.49 (for driving at 500 RPM) Armature shaft Drawing No.

we Torsional Vibration characteristics if applicable been approved 29.4.49 (state date of approval)

PARE GEAR Yes, with additions 12/7/48

The foregoing is a correct description,

For HARLAND AND WOLFF, LIMITED

Wm. J. Wright.

Manufacturer.

Filing Secretary



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Lloyd's Register  
Foundation

002978-002988-0119



Dates of Survey while building { During progress of work in shops - - } Dec 3. E. Machy. Rpt. 1617  
{ During erection on board vessel - - }  
Total No. of visits

Dates of Examination of principal parts—Cylinders 29.8.49 16.9.49 Covers 1.6.49 21.4.49 Pistons 1.9.49 Piston rods 1.9.49

Connecting rods ✓ Crank and Flywheel shafts Combined Intermediate shafts ✓

Crank shaft { Material S.M.S Tensile strength 31.2 - 32.4  
Elongation 33.0 - 33.5 % Identification Marks See Below

Flywheel shaft, Material ✓ Identification Marks ✓

Identification marks on Air Receivers No 452 : Lloyds 166 58H 105/D : W.P. 356 105/D : N.K. 28.4.49

Is this machinery duplicate of a previous case Yes If so, state name of vessel "British Captain" No 13946

GENERAL REMARKS (State quality of workmanship, opinions as to class, etc.)

These Auxiliary engines have been constructed under special survey in accordance with the Rules, approved Plans and Secretary's letter.

Materials and workmanship are good.

These units have been efficiently installed in the vessel, tested under full working conditions satisfactorily.

Torsional vibration characteristics approved for a service speed of 500 R.T.M.

Crankshaft marks:—

Engine No 1606	Engine No 1604
Lloyds	Lloyds
J. 3452	108H
B.H	T.D.S
22.10.48	20.4.49
N.C.S	J.W.W.
23.6.49	22.8.49

Remaining forging reports common to Contract No 1398 and 1399, 1401, 1402/1 to follow, will be forwarded on completion of same

Approved Plans already forwarded with the Rpt 2785 No. for Howland No 1394.1 "British Captain"

The amount of Fee 2 Sets £ 11 : 1 : 6 When applied for 19  
Travelling Expenses (if any) £ : : When received 19

Committee's Minute GLASGOW - 8 MAR 1950 HC

Assigned SEE ACCOMPANYING MACHINERY REPORT

H. Clair Juniper for self & J. W. Wilson.  
Surveyors to Lloyd's Register of Shipping.  
Lloyd's Register Foundation