

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 106387

Received at London Office 20 SEP 1938

11/27/38

Writing Report 15 Sept 1938 When handed in at Local Office 20 SEP 1938 Port of London

Survey held at Bedford Date, First Survey 19 January 1938 Last Survey 16 Sept 1938

Number of Visits 21

on the Single
Twin
Triple
Quadruple
Screw vessel

"SOBIESKI"

Tons { Gross 11030
Net 6351

Newcastle

By whom built Swan Hunter & Wigham Richardson Yard No. 1572 When built 1939-5

Polish Gdynia American Five

Port belonging to

Engines made at Bedford

By whom made W.H. Allen Sons Ltd Contract No. K1/68460 When made 1938

Generators made at do

By whom made do Contract No. When made

Sets 3 Engine Brake Horse Power 660 Nom. Horse Power as per Rule 458 Total Capacity of Generators 450 Kilowatts.

ENGINES, &c.—Type of Engines Heavy Oil 2 or 4 stroke cycle 4 Single or double acting single

Working pressure in cylinders 650 Diameter of cylinders 410 1/2 Length of stroke 600 1/2 No. of cylinders 6 No. of cranks 6

Bearings, adjacent to the Crank, measured from inner edge to inner edge 530 1/2 Is there a bearing between each crank yes

Revolutions per minute 275 Flywheel dia. 2040 1/2 Weight 12600 lb Means of ignition Compression Kind of fuel used Diesel oil

Shaft, dia. of journals as per Rule 250 1/2 Crank pin dia. 250 1/2 Crank Webs Mid. length breadth 360 1/2 Thickness parallel to axis ✓
as fitted 250 1/2 Mid. length thickness 135 1/2 shrunk Thickness around eyehole ✓

Lead Shaft, diameter as per Rule crank shaft Intermediate Shafts, diameter as per Rule ✓ Thickness of cylinder liners 25 1/2
as fitted ✓ as fitted ✓

Governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication Forced.

Exhaust cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material ✓

Sea Water Pumps, No. ✓ Is the sea suction provided with an efficient strainer which can be cleared within the vessel ✓

Lubricating Oil Pumps, No. and size ✓

Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓

Suctioning Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

RECEIVERS:—Have they been made under Survey ✓ State No. of Report or Certificate ✓

Receiver, which can be isolated, fitted with a safety valve as per Rule ✓

Internal surfaces of the receivers be examined ✓ What means are provided for cleaning their inner surfaces ✓

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

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

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

Low Pressure Air Receivers, No. 3 Total cubic capacity 11.2 cu ft each Internal diameter 1'-11 3/8" thickness 5/16"

Seams, lap welded or riveted longitudinal joint Solid drawn Material Steel Range of tensile strength 26-30 Working pressure by Rules 300 lb

ELECTRIC GENERATORS:—Type Open type
Voltage of supply 220 volts Full Load Current 2045 Amperes Direct or Alternating Current Direct

Regulating current system, state the periodicity ✓ Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on and off yes

Generators, are they compounded as per rule yes is an adjustable regulating resistance fitted in series with each

field yes Are all terminals accessible, clearly marked, and furnished with sockets yes

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

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

Generators are 100 kw. or over have they been built and tested under survey yes

Plans. Are approved plans forwarded herewith for Shafting ✓ Receivers ✓ Separate Tanks ✓
(If not, state date of approval)

CRANK AND MAIN GEAR One cylinder liner, one cylinder cover with studs & nuts, 6 fuel
inlet valves with rods, 18 needle valves & nozzles, 6 exhaust valves, 6 inlet
valves spindles & collar, 4 roller spin, 2 starting valves complete, 1 safety
valve complete, 1 piston complete with rings, 3 sets of piston rings, 1 gudgeon
pin, 2 gudgeon bushes, 2 bottom end bearings, 4 bottom end bolts & nuts
main bearing, 2 studs & nuts for main bearing, 3 fuel pump
inlets, spig and valves; many other smaller items.

The foregoing is a correct description,

W. H. ALLEN, SONS & Co., Ltd. Manufacturer.

H. A. Clarke.



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Dates of Survey while building
 During progress of work in shops - - 1938 Jan 19, 31. Feb 11, 29. April 13, 25. July 4, 17, 26. Aug 17, 26. Sept 16. May 4, 11, 22, 30.
 During erection on board vessel - - -
 Total No. of visits 26

Dates of Examination of principal parts - Cylinder 1.4.38 5.4.38 25.4.38 Covers 1.4.38 Pistons 30.5.38 Piston rods -
 Connecting rods 20.4.38 Crank and Flywheel shafts 29.3.38 15.6.38 20.4.38 Intermediate shafts ✓
 Crank and Flywheel shafts, Material steel Identification Marks LLOYD'S 908 HAG 19.3.38 818 LLOYD'S 7.9.37 HAG 15.6.38 HAG
 Intermediate shafts, Material ✓ LLOYD'S TEST Identification Marks ✓ LLOYD'S TEST
 Identification marks on Air Receivers E. 1196 W.P. 3004 HAG 17.8.38 B1208. W.P. 3004 HAG 17.8.38 LLOYD'S TEST B1207 HAG 17.8.38 W.P. 3006

Is this machinery duplicate of a previous case No If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.) The generators have been constructed under Special Survey in accordance with the requirements of the Rules and approved plans; The steel was made at Works approved by the Committee, the workmanship is good and on completion the generators were tested on the bench under full & overload conditions & found satisfactory. They have now been forwarded to Newcastle for fitting on board the vessel.

These 3. Auxiliary Oil Engine Dynamo Sets have been satisfactorily installed on board the T.M.V. SOBIESKI SHORR Yard No 1572.

Arlatt
 Newcastle on Tyne
 25/5/39.

The amount of Fee ... £ 47-5-0
 Travelling Expenses (if any) £ 6:17:2
 When applied for, 20 SEP 1938
 When received, 2. 11. 1938

A. Garnett
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

WED 31 MAY 1939

Assigned

See Nwc. J.C. 97503



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