

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

Amil. Rpt. 6709

Date of writing Report **JAN. 17 1945** When handed in at Local Office 19 **CHICAGO, ILLINOIS** Port of **CHICAGO, ILLINOIS** Received at London Office **NOV 1945**

No. in Reg. Book **BELOIT, WISC ONSIN** Survey held at **BELOIT, WISC ONSIN** Date, First Survey **OCTOBER 30** Last Survey **JANUARY 4 1945** Number of Visits **4**

Single on the TWIN Triple Quadruple } Screw vessel **TRANSPORT FERRIES LST (3) 3519** Tons (Gross) _____ (Net) _____

Built at **Montreal, Que.** By whom built **Canadian Vickers Limited** Yard No. **207** When built **1945**

Owners _____ Port belonging to _____

Oil Engines made at **BELOIT, WISCONSIN** By whom made **FAIRBANKS MORSE & COMPANY** ENG. NO. ******* 862292** When made **1945**

Generators made at **BELOIT, WISCONSIN** By whom made **FAIRBANKS MORSE & COMPANY** GEN. NO. ******* M-67315** When made **1945**

No. of Sets **1** Engine Brake Horse Power **100n** Nom. Horse Power as per Rule **17.6** Total Capacity of Generators **60** Kilowatts.

OIL ENGINES, &c.—Type of Engines **AUXILIARY VERTICAL DIESEL** 2 or 4 stroke cycle **4** Single or double acting **SINGLE**

Maximum pressure in cylinders **800** Diameter of cylinders **5 1/2"** Length of stroke **7 1/2"** No. of cylinders **6** No. of cranks **6**

M.I.P. **98.8** Span of bearings, adjacent to the Crank, measured from inner edge to inner edge **5.75"** Is there a bearing between each crank **YES**

Revolutions per minute **1000** Flywheel dia. **21.75"** Weight **275 LBS.** Means of ignition **COMPRESSION** Kind of fuel used **FUEL OIL**

Crank Shaft, dia. of journals as per Rule **3.1"** as fitted **5 5/8"** Crank pin dia. **3.6"** Crank Webs Mid. length breadth **6.5"** Thickness parallel to axis **1.375"** Mid. length thickness _____ Thickness around eyehole _____

Flywheel Shaft, diameter as per Rule _____ as fitted _____ Intermediate Shafts, diameter as per Rule _____ as fitted _____ Thickness of cylinder liners _____

Is a governor or other arrangement fitted to prevent racing of the engine when declutched **YES** Means of lubrication **FORCED**

Are the cylinders fitted with safety valves **YES** Are the exhaust pipes and silencers water cooled or lagged with non-conducting material _____

Cooling Water Pumps, No. **1/** Is the sea suction provided with an efficient strainer which can be cleared within the vessel _____

Lubricating Oil Pumps, No. and size **1 - 19 GPM**

Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____

Scavenging Air Pumps, No. _____ Diameter _____ Stroke _____ Driven by _____

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

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

Can the 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 _____

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

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

Starting Air Receivers, No. _____ Total cubic capacity _____ Internal diameter _____ thickness _____

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

ELECTRIC GENERATORS:—Type **COMPOUND WOUND, PIPE VENTILATED**

Pressure of supply **225** volts. Full Load Current **267** Amperes. Direct or Alternating Current **D.C.**

If alternating current system, state the periodicity _____ Has the Automatic Governor been tested and found as per rule when full 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 shunt 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** If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test **YES** and do the results comply with the requirements **YES** If the generators are 100 kw. or over have they been built and tested under survey _____

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

SPARE GEAR **SUPPLIED AS REQUIRED BY THE RULES.**

The foregoing is a correct description,

SIGNED: E. J. Fish, Ass't, Chief Inspector for Manufacturer.

Dates of Survey while building { During progress of work in shops -- } **OCTOBER 30; NOVEMBER 27; DECEMBER 11; JANUARY 4,**
 { During erection on board vessel --- }
 Total No. of visits

Dates of Examination of principal parts—Cylinders **NOV. 27, 1944** ers **DITTO** Pistons **DITTO** Piston rods
 Connecting rods **DITTO** Crank and Flywheel shafts **DITTO** Intermediate shafts
 Crank and Flywheel shafts, Material **STEEL** Identification Marks **NG-460 - I56**
 Intermediate shafts, Material Identification Marks
 Identification marks on Air Receivers

Is this machinery duplicate of a previous case **engine no. 848082** If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

THE ABOVE MENTIONED AUXILIARY DIESEL ENGINE IS BUILT TO THIS SOCIETY'S SPECIAL SURVEY REQUIREMENTS OF TESTED MATERIALS AND IN ACCORDANCE WITH APPROVED PLANS.

ON THE 11th DAY OF DECEMBER, 1944, FULL RUNNING TESTS WERE CARRIED OUT IN ACCORDANCE WITH THE ENGINE MAKER'S STANDARD PRACTICE. THE ENGINE WAS OPERATED AT LOW, INTERMEDIATE, FULL, AND OVERLOAD BREAK TEST LOADS, UNDER GOVERNOR CONTROL, WITH SATISFACTORY RESULTS.

ON COMPLETION THE ENGINE NO. 862292 MOUNTED ON A STEEL SUB BASE AND DIRECT COUPLED TO 60 K.W. GENERATOR NO. X-67315, WAS TESTED FOR ALIGNMENT AND FOUND SATISFACTORY.

IN MY OPINION THIS GENERATOR SET IS SUITABLE FOR USE ON A VESSEL CLASSED OR INTENDED FOR CLASSIFICATION WITH THIS SOCIETY.

ATTACHED HEREWITH REPORTS 7b and 10. (CRANKSHAFT FORGING REPORT SAME AS ENGINE NO. 848082). THIS GENERATOR SET HAS BEEN SHIPPED TO CANADIAN VICKERS, LTD. MONTREAL, QUEBEC, CANADA.

The Surveyors are requested not to write on or below the space for Committee Minutes.

The amount of Fee	£ 75.00	When applied for, Jan. 17 19 45
Travelling Expenses (if any)	£ 9.50	When received, 19

R. Rodgers
 Surveyor to Lloyd's Register of Shipping.

FRI. 21 DEC 1945

Committee's Minute

Assigned

See F.E. machy. rpt.



mil. Rpt. 6709

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 947

Date of writing Report **JAN. 17** 19**45** When handed in at Local Office **CHICAGO, ILLINOIS** Received at London Office **29 NOV 1945**

No. in Reg. Book. Survey held at **BELOIT, WISCONSIN** Date, First Survey **OCTOBER 30** Last Survey **JANUARY 4** 19**45** Number of Visits **4**

on the Twin } Single } Screw vessel **TRANSPORT FERRIES LST (3) 3519** Tons {Gross }
Triple }
Quadruple }

Built at **Montreal, Que.** By whom built **Canadian Vickers Limited** Yard No. **207** When built **1945**

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Generators made at **BELOIT, WISCONSIN** By whom made **FAIRBANKS MORSE & COMPANY** GEN. NO. ******* E-67315** When made **1945**

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