

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 949

NOV 1945

Received at London Office

Date of writing Report **JAN. 18, 45** when handed in at Local Office 19 *Port of* **CHICAGO, ILLINOS**

No. in Reg. Book. Survey held at **BELOIT, WISCONSIN** Date, First Survey **NOVEMBER 13** Last Survey **JANUARY 11** 19 **45**

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. 863478** When made **1945**

Generators made at **BELOIT, WISCONSIN** By whom made **FAIRBANKS MORSE & COMPANY** **GEN. NO. X-67317** When made **1945**

No. of Sets **1** Engine Brake Horse Power **100** 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"** Crank pin dia. **3.6"** Crank Webs Mid. length breadth **6.5"** Thickness parallel to axis

Flywheel Shaft, diameter as fitted \_\_\_\_\_ Intermediate Shafts, diameter 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. **1/54 GPM** 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.



© 2018 Lloyd's Register Foundation

NOVEMBER 13, DECEMBER 11, 15, AND JANUARY 11.

Dates of Survey while building { During progress of work in shops -- }  
{ During erection on board vessel --- }  
Total No. of visits

Dates of Examination of principal parts—Cylinder **DEC. 11, 1944** Covers **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 - I-56**  
Intermediate shafts, Material Identification Marks  
Identification marks on Air Receivers

ENGINE NO. **848082**  
Is this machinery duplicate of a previous case **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 15th 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.

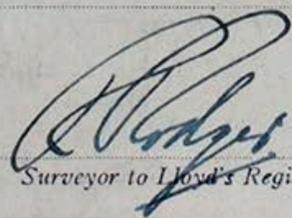
ON COMPLETION THE ENGINE NO. 863478 MOUNTED ON A STEEL SUB BASE AND DIRECT COUPLED TO 60 K.W. GENERATOR NO. X-67317 WAS TESTED FOR ALIGNMENT AND FOUND SATISFACTORY.

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 VECKERS, LTD., MONTREAL, QUEBEC, CANADA.

13. 3-52 Transfer. (Printed in U. S. A.)  
(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

  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute **FRI. 21 DEC 1945**

Assigned **See F.E. machy. sph.**

Dates of Survey while building  
 { During progress of work in shops -- }  
 { During erection on board vessel --- }  
 Total No. of visits

NOVEMBER 13, DECEMBER 11, 15, AND JANUARY 11.

Dates of Examination of principal parts—Cylinder **DEC. 11, 1944** Covers **DITTO** Pistons **DITTO** Piston rods  
 Connecting rods **DITTO** Crank and Flywheel shafts **DITTO** Intermediate shafts  
 Crank and Flywheel shafts, Material **STEEL** Identification Marks **NG-46G - I-56**  
 Intermediate shafts, Material Identification Marks  
 Identification marks on Air Receivers

ENGINE NO. **848082**  
 Is this machinery duplicate of a previous case **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 15th 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. 863478 MOUNTED ON A STEEL SUB BASE AND DIRECT COUPLED TO 60 K.W. GENERATOR NO. X-67317 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.

M. 512. Transfer. (Printed in U. S. A.)  
 (The Surveyors are requested not to write on or below the space for Committee Minute.)

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

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

Committee's Minute **FRI. 21 DEC 1945**  
 Assigned *Sue F.E. machy. sph.*

LR-FAF-TB16-69

Rpt. 4c.

Date of writing Report  
 No. in Survey Reg. Book  
 on the  
 Qu  
 Built at **Mont**  
 Owners  
 Oil Engines made  
 Generators made  
 No. of Sets

OIL ENGINE  
 Maximum pressure  
**M.I.P.**  
 Span of bearings  
 Revolutions per  
 Crank Shaft, di  
 Flywheel Shaft  
 Is a governor or  
 Are the cylinders  
 Cooling Water  
 Lubricating Oil  
 Air Compressor  
 Scavenging Air

AIR RECEIV  
 Is each receiver,  
 Can the internal  
 Is there a drain  
 High Pressure  
 Seamless, lap weld  
 Starting Air Re  
 Seamless, lap weld

ELECTRIC G  
 Pressure of sup  
 If alternating cu  
 thrown on and of  
 regulating resist  
 sockets  
 Are the lubricat  
 certificates of test  
 built and tested u  
 PLANS. Are ap  
 SPARE GEAR  
 The fo  
 SIGNED: E. J