

3 - JUL 1947

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 165.

Received at London Office 2 - APR 1947

Date of writing Report 19... When handed in at Local Office 19... Port of NOTTINGHAM.

No. in Survey held at... Date, First Survey... Last Survey... 19... Reg. Book.

on the ^{Single} ~~Double~~ ~~Triple~~ ~~Quadruple~~ Screw vessel *trawler "Egill Raudi"* Tons {Gross 648 Net 217.31

Built at *C. Aberdeen* By whom built *Alex. Hall & Co., Ltd.* Yard No. *716* When built *1947*

Owners *Icelandic Government* Port belonging to *Neskaupstadur*

Oil Engines made at *Lincoln* By whom made *Ruston & Hornsby Ltd.* Contract No. *450664/5* When made *1947*

Generators made at... By whom made *British Thomson-Houston Co., Ltd.* Contract No. ... When made...

No. of Sets *2* Engine Brake Horse Power *120* M.N. as per Rule *30* Total Capacity of Generators *160* Kilowatts.

Is Set intended for essential services...

OIL ENGINES, &c.—Type of Engines *6VPHZ.* Engine Nos. *247245-6.* 2 or 4 stroke cycle *4* Single or double acting *SA.*

Maximum pressure in cylinders *1000 lbs.* Diameter of cylinders *5 3/8"* Length of stroke *8"* No. of cylinders *6* No. of cranks *6*

Mean indicated pressure *109 lbs.* Firing order in cylinders *1-2-4-6-5-3* Span of bearings, adjacent to the Crank, measured from inner edge to inner edge *6 25/32"*

Is there a bearing between each crank *Yes* Moment of inertia of flywheel *1870 lbs. ft.²* Revolutions per minute *1000*

Flywheel dia. *26"* Weight *630 lbs.* Means of ignition *Compression.* Kind of fuel used *Diesel Oil.*

Crank Shaft, dia. of journals *4.3/16"* Crank pin dia. *3 1/4"* Crank Webs *5 3/4"* Mid. length breadth *1 3/4"* Thickness parallel to axis *1 1/4"*

Flywheel Shaft, diameter *C' Shaft.* Intermediate Shafts, diameter... General armature, moment of inertia (16 m² or Kg.-cm.²)...

Are means provided to prevent racing of the engine when declutched *Yes* Means of lubrication *Forced* Kind of damper if fitted...

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. ... Is the sea suction provided with an efficient strainer which can be cleared within the vessel...

Lubricating Oil Pumps, No. and size *one 557 gallons/hour.* engine driven.

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... Machine No. *474362/1/08 - /07.*

Pressure of supply *220* volts. Full Load Current *367.* 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...

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

Are all terminals accessible, clearly marked, and furnished with sockets... Are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched...

Are the lubricating arrangements of the generators as per Rule...

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

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

Details of driven machinery other than generator...

PLANS.—Are approved plans forwarded herewith for Shafting *Standard Approved.* Receivers... Separate Tanks...

Have Torsional Vibration characteristics if applicable been approved... Armature shaft Drawing No. ...

SPARE GEAR *? Spares.*

Ruston & Hornsby Limited,
The foregoing is a correct description,
Hans 26 IV 47 Manufacturer.
Oil & Gas Engine Dept.



002401-002409-0132

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—Cylinders 6.12.46; 11.12.46; Covers 6.12.46; 11.12.46; Pistons 6.12.46; 11.12.46; Piston rods.....

Connecting rods..... 6.1.47; Crank and Flywheel shafts..... 6.1.47; Intermediate shafts.....

Crank shaft { Material..... Tensile strength..... LL.1016. T.D.S. RD.8466.
 { Elongation..... Identification Marks..... LL.1017. T.D.S. RD.1336.

Flywheel shaft, Material..... Identification Marks.....

Identification marks on Air Receivers.....

*Certificates for air receivers to be forwarded with next duplicate vessel
 C.B. Aberdeen*

Is this machinery duplicate of a previous case. Yes..... If so, state name of vessel..... Standard Type.....

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

These engines have been built under Special Survey in accordance with the approved plans and Regulations of the Society, materials and workmanship being good.

On completion the sets were tried in the Shops under working conditions and found to be satisfactory.

The sets have been forwarded to Aberdeen for installation on board the vessel.

*Personals approved for these engines
 See Nos letters 22, 5, 47 attached*

*These engines have now been securely fitted on board the vessel,
 tried under working conditions & found satisfactory
 Clive Bell
 C. Aberdeen*

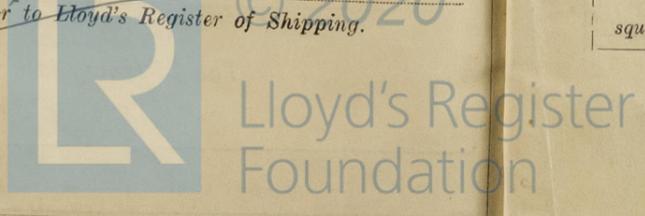
ML-D
 111,846-T. (MADE AND PRINTED IN ENGLAND)

(The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 4 : 10 : 0 { When applied for 31-3-1947.
 per engine.
 Travelling Expenses (if any) £ : : { When received 19.....

Committee's Minute..... FRI, 1 AUG 1947
 Assigned..... *See F.E. mch. rph*

W. Dent
 Surveyor to Lloyd's Register of Shipping.



Rpt. 1
 Date of
 No. in
 Re.
 Built
 Own
 Electr
 Is ve
 Have
 Heat
 has th
 trip s
 if not
 arrang
 test fo
 of the
 near v
 injury
 contac
 are th
 and o
 mater
 semi-t
 Is the
 to pil
 side o
 cil
 and f
 Are c
 amme
 equal
 Switc
 per R
 prote
 did ti
 Cable
 state
 squar