

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 1177

Received at London Office **23 MAY 1956**

by Rules... of writing Report 17.3.55. 19 When handed in at Local Office 19 Port of **NOTTINGHAM**

Actual... in Survey held at **Lincoln** Date, First Survey 25.10.54. Last Survey 14.2.55. 19

Book. Single **519** on the **Triple** Screw vessel **M.V. BONAVISTA** Number of Visits 4.

Actual... **519** on the **Triple** Screw vessel **M.V. BONAVISTA** Tons Gross **1174** Net **575**

to the order of:- **M/S. Hall, Russell & Co. Ltd.,** Aberdeen. Yard No. **852E** When built

ers **CANADIAN NATIONAL RAILWAY Co.** Port belonging to **ST. JOHN'S N.F.L.**

Engines made at **Lincoln** By whom made **Ruston & Hornsby Ltd.** Contract No. **388783-4** When made

Generators made at **Liverpool** By whom made **Campbell & Isherwood Ltd.** Contract No. **50526-7** When made

of Sets **2** Engine Brake Horse Power **170** M.N. as per Rule **34** Total Capacity of Generators **200** Kilowatts.

at intended for essential services.

ENGINES, &c.—Type of Engines **5VCBZ** 2 or 4 stroke cycle **4** Single or double acting **SA**

imum pressure in cylinders **730 ± 3%** Diameter of cylinders **8"** Length of stroke **10 3/4"** No. of cylinders **5** No. of cranks **5**

n indicated pressure **104** Firing order in cylinders **1.3.5.4.2** Span of bearings, adjacent to the Crank, measured from inner edge to inner edge **9.3/16**

ere a bearing between each crank **Yes** Moment of inertia of flywheel **5.3 tons** ft. **2** Revolutions per minute **600**

heel dia **3'9"** Weight **12.3 cwts.** Means of ignition **Compression** Kind of fuel used **Diesel Oil**

ank Shaft, dia. of journals **6"** Crank pin dia **4 3/4"** Crank Webs **8"** Mid. length breadth **8"** Thickness parallel to axis **2 1/2"** shrunk

as per Rule **6"** as fitted **4 3/4"** as per Rule **8"** as fitted **2 1/2"** Thickness round eyehole **2 1/2"**

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

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

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

ling Water Pumps, No. **One** engine driven. Is the sea suction provided with an efficient strainer which can be cleared within the vessel

ricating Oil Pumps, No. and size **One 480 gals per hour.** Engine driven.

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

venting Air Pumps, No. **Diameter** **Stroke** Driven by

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

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

the internal surfaces of the receivers be examined **What means are provided for cleaning their inner surfaces**

here a drain arrangement fitted at the lowest part of each receiver

h Pressure Air Receivers, No. **1** Cubic capacity of each **112 cf** Internal diameter **24"** thickness **1/16"**

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

rting Air Receivers, No. **Total cubic capacity** **Internal diameter** **thickness**

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

ELECTRIC GENERATORS—Type **Open canopy DP. CW. CR. Machines Nos. 50526/7.**

ssure of supply **220** volts. Full Load Current **455** Amperes. Direct or Alternating Current **DC.**

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 **Yes** is an adjustable regulating resistance fitted in series with each shunt field **Yes**

all terminals accessible, clearly marked, and furnished with sockets **Yes** 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 **Yes** and do the results comply with the requirements **Yes**

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

ails of driven machinery other than generator

ANS.—Are approved plans forwarded herewith for Shafting **20.12.38.** Receivers **Separate Tanks**

ve Torsional Vibration characteristics if applicable been approved **27.8.54.** Armature shaft Drawing No.

ARE GEAR Supplied to Rule Requirements.

The foregoing is a correct description,

Ruston & Hornsby, Limited Manufacturer.

Y. M. Churchill



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Lloyd's Register
Foundation

009888-009895-0047

Dates of Survey while building { During progress of work in shops - - } 26.1.55. 25.10.54. 9.2.55. 14.2.55.
{ During erection on board vessel - - }
Total No. of visits 4.

Dates of Examination of principal parts—Cylinders 25.10.54. 26.1.55. Covers As cyls. Pistons — Piston rods —

Connecting rods As cyls. Crank and Flywheel shafts As cyls. Intermediate shafts —

Crank shaft { Material Steel. 30% 32% Tensile strength 34 32 8
Elongation Identification Marks LL. 10134. RG. 4567.
LL. 10133. RG. 4566.

Flywheel shaft, Material Identification Marks

Identification marks on Air Receivers M 5486 21/1/3

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

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

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

The Generating Sets have been tested in the Shops under working conditions and the governors tested with satisfactory results.

The sets have been forwarded for installation in the vessel.

Explosion relief device fitted on each crankcase door. ✓

These engines have been installed in M.V. "BONAVISTA" examined under full working conditions, governing checked and all parts found to operate satisfactorily

T. Shonis

The amount of Fee ... £ 14 : 10 : 0 When applied for 17.3.55. 19 C. 20760. A/C. No.

Travelling Expenses (if any) £ : : When received 19

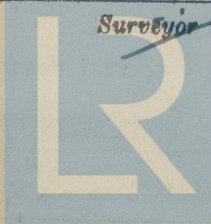
Committee's Minute

Assigned

GLASGOW 22 MAY 1956

SEE ACCOMPANYING MACHINERY REPORT

Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation