ot. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS. No. 13395

Date of writing Report 4-4-34 19 When handed in at Local Office 18-5-34 19 Received at London Office 22 MAY 1934 Port of Genoa

No. in Reg. Book. Survey held at Turin Date. First Survey 30/1/31 Last Survey 6/3/1934 Number of Visits Twelve

✓ on the Single / ~~Twin~~ / ~~Triple~~ / ~~Quadruple~~ Screw vessel Tons { Gross ✓ / Net ✓

Built at Palermo By whom built Cantieri Navali Riuniti Yard No. 111 When built ✓

Owners ✓ Port belonging to ✓

Oil Engines made at Turin By whom made FIAT Stabilimento Grandi Motori Contract No. 2137 When made 1934

Generators made at ✓ By whom made ✓ Contract No. ✓ When made ✓

No. of Sets One Engine Brake Horse Power 30 Nom. Horse Power as per Rule 6 Total Capacity of Generators ✓ Kilowatts.

OIL ENGINES, &c.—Type of Engines FIAT V.123 ✓ 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 40 Kgs/cm² Diameter of cylinders 120 m/m Length of stroke 230 m/m No. of cylinders 3 No. of cranks 3

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 143 m/m Is there a bearing between each crank Yes

Revolutions per minute 800 Flywheel dia. 750 m/m Weight 250 Kgs. Means of ignition Compression Kind of fuel used Diesel oil

Crank Shaft, dia. of journals as per Rule 70.6 m/m as fitted 80 m/m Crank pin dia. 80 m/m Crank Webs Mid. length breadth 135 m/m Thickness parallel to axis ✓ Mid. length thickness 37 m/m shrunk Thickness around eyehole ✓

Flywheel Shaft, diameter as per Rule ✓ as fitted ✓ **Intermediate Shafts**, diameter as per Rule ✓ as fitted ✓ Thickness of cylinder liners 10 m/m

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

Lubricating Oil Pumps, No. and size One Gear wheel

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

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

~~AIR RECEIVERS:~~ ~~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

Pressure of supply volts. **Load** Amperes. **Direct or Alternating Current**

If alternating current system, state frequency of periods per second

Has the **Automatic Governor** been tested and found efficient when the whole load is suddenly thrown on or off

Generators, do they comply with the requirements regarding rating are they compound wound

Are they over compounded 5 per cent. , if not compound wound state distance between each generator

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~~

PLANS. Are approved plans forwarded herewith for Shafting (If not, state date of approval) 30/7/29 Receivers ✓ Separate Tanks ✓

SHARE GEAR TO BE PLACED ON BOARD AT PALERMO

L.J. 23/5/34

The foregoing is a correct description.

FIAT
STABILIMENTO GRANDI MOTORI
Il Direttore
ING. GIOVANNI CHIESA

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } 1931 Jan. 30: Feb. 6, 10, 20: Apr. 22: May 8, 12, 19, 29: Sept. 11, 15. 1934 Mar. 6.
{ ~~During erection on board vessel~~ - - - }
Total No. of visits 12.

Dates of Examination of principal parts—Cylinders 8/5/31 Covers 29/5/31 Pistons 12/5/31 Piston rods ✓

Connecting rods 19/5/31 Crank and Flywheel shaft 29/5/31 Intermediate shaft ✓

Crank and Flywheel shafts, Material Steel Identification Mark 0461 G.B. 29/5/31

Intermediate shafts, Material ✓ Identification Marks ✓

Is this machinery duplicate of a previous case Yes If so, state name of vessel "TRANSOIL"

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

This Auxiliary Engine, Nº 2137, Type Y.123, has been constructed under Special Survey, of tested materials and is in accordance with the Secretary's Letters, Approved plans and Rule requirements.

The Materials and Workmanship are of good quality and the Motor when tested under load conditions on the Test Bed at the Maker's Works gave satisfactory results.

It is, in our opinion, eligible to be fitted on board a vessel classed with this Society and is suitable for it's special purpose, namely, driving an electric generator and a small auxiliary compressor.

It is understood that it is the Owner's intention to fit this engine on board an unclassed vessel m/v 111. now being built by The Cantieri Navali Riuniti at Palermo

The amount of Fee ... ... £ : : SEE MAIN ENGINE REPORT ATTACHED

Travelling Expenses (if any) : :

When applied for, ✓ 19.....

When received, 19.....

A. A. Griffith & G de C Ballardie
Surveyors to Lloyd's Register of Shipping.

Committee's Minute TUE. 29 JAN 1935

Assigned See other Rpt Gn. 13295 | See Gn. F.C. 13728

1m.4,28—Transfer.

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