

Rpt. 4c

Date of writing report 25th July, 1958.

23 SEP 1958

YOKOHAMA & SHIMONOSEKI 2595

Survey held at Tokyo & Hiroshima

Received London Tokyo Hiroshima
No. of visits 23 6

Port No. Tokyo 14th April 1958
Hiroshima
First date 31st July 1957 Last date 19th July 1958

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship **M. V. "OCEANIA MARU"** Owners **Mitsubishi Kaiun K.K.**
 (Or Contract No. if name unknown) **Hiroshima, Japan** (Or Consignees) **KK**
 Ship Built at **Hiroshima, Japan** by **Hiroshima Shipyard, Mitsubishi Zosen** when **137** Yard No. **137**
 Auxiliary Engines **3 sets - Yokohama M.A.N. Trunk Piston Precombustion type Diesel Engine** when **4-1958** Eng. Nos. **133194, 133195, 133196**

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine **5** Dia. of cylinders **235mm** Stroke **330mm**
 2 or 4 stroke cycle **4** Maximum approved BHP **300** at **514** RPM Corresponding MIP **9.06 kg/cm2** Maximum pressure **65 kg/cm2**
 Fuel **Diesel Oil** Are cylinders arranged in Vee or other special formation? **No** If so, No. of
 crankshafts per engine **None** Is engine of opposed piston type? **No** No. and type of mechanically driven scavenge pumps or blowers
 per engine **One set** No. of exhaust gas driven blowers or superchargers per engine **One set** Is welded construction
 used for: Bedplate? **No** Entablature? **No** Total internal volume of crankcase (if 20 cu. ft. or over) **38.5 cu.ft.** No. and total area of
 crankcase explosion relief devices **2 x 13.4 in2** Are flame guards or traps fitted? **No** Cooling medium for: Cylinders **Sea Water**
 Pistons **Compressed Air** No. of attached pumps: F.W. cooling **One set** S.W. cooling **One set** Lubricating oil **One set** How is engine started? **by**

SHAFTING. Is a damper or detuner fitted? **No** No. of main bearings **6** Are bearings of ball or roller type? **No** Distance between
 inner edges of bearings in way of cranks **284 mm** Crankshaft: **built / semi-built / solid.** Material of crankshaft **Electric furnace steel** Approved
 minimum tensile strength **55 kg/mm2** Dia. of pins **155mm** Journals **155mm** Breadth of webs at mid throw **273mm** Axial
 thickness **8mm** If shrunk, radial thickness around eyeholes **-** Dia. of flywheel **1300mm** Weight **1600 kgs.** Are balance
 weights fitted? **No** Total weight **-** Rad. of gyration **-** Dia. of flywheel shaft **-**
 Has each engine been tested in shop? **Yes** How long at full power? **2 Hours** Was it tested with driven machinery attached? **Yes** Was the
 governing tested and found satisfactory? **Yes** Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) **4-1-1958** **400D.**

Date of approval of shafting **7-10-1957** Identification marks on shafting **LLOYD'S KOB No. S-CK2460 SM LLOYD'S KOB No. S-CK2466 SM LLOYD'S KOB No. S-CK2515 SM 17-12-57**
 Particulars of driven machinery **Generator: 3 Phase A.C. 60 cycles 445V. 328A. 250K.V.A. Maker: Mitsubishi Electric Mfg. Co., Ltd.,**
 Serial Nos. **536014, 536015 & 536016.**

Port and No. of Certificate for Starting Air Receivers **Kobe AR 49316**

AUXILIARY GAS TURBINES. BHP per set **-** At **-** RPM of output shaft. Open or closed cycle? **-**
 Arrangement of turbines. HP drives **-** at **-** RPM HP gas inlet temp. **-** pressure **-**
 (A small diagram should be attached showing gas cycle) IP **-** at **-** IP **-** at **-** LP **-** at **-** LP **-** at **-**
 No. of air compressors per set **-** Centrifugal or axial flow type? **-** Material of turbine blades **-**
 Material of compressor blades **-** No. of air coolers per set **-** No. of heat exchangers per set **-** How are
 turbines started? **-** Are the turbines operated in conjunction with free piston gas generators? **-**
 Total No. of free piston gas generators **-** Dia. of working pistons **-** Dia. of compressor pistons **-** No. of double strokes
 per minute at full power **-** Gas delivery pressure **-** Gas delivery temperature **-**
 Have the turbines and attached equipment been tested in shop? **-** How long at full power? **-** Were they tested with driven machinery
 attached? **-** Particulars of gearing **-**
 Date of approval of plans **-** Identification marks **-** Particulars of driven machinery **-**

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over **Nagasaki, ACG 2329, ACG 2330, ACG 2331.**
 For generators under 100 Kw., has Makers' Certificate been obtained? **Yes** Are Certificates attached? **Yes**

The foregoing description is correct and the particulars are as approved for torsional vibration characteristics (strike out words not applicable)
Mitsubishi Nippon Hvy. Ind. Ltd., Tokyo Motor Vehicle Works
 Chief of Engine Technical Dept. **K. Okamura**
 Manufacturer **K. Okamura**

Is this machinery duplicate of a previous case? **No** If so, which? **-**

GENERAL REMARKS. State if the machinery has been constructed under special survey in accordance with the Rules, approved plans and Secretary's letters.
 State quality of materials and workmanship. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.
 These oil engine electric generator sets have been constructed under supervision of the Society's Surveyors
 in accordance with the Rules, Approved plans and Secretary's letters. The workmanship and materials have been
 found satisfactory. These Oil Engine Electric Generator sets have been examined during and after shop trial and
 found in order. Crank case explosion relief devices are fitted as per Rules. It is submitted that these oil
 Engine Electric Generator sets are eligible in our opinion to be classed with this Society with the notation of
 LMC with date when satisfactorily installed in the vessel.

Survey Fee **¥ 132,000.-** 16th April, 1958 **YOKOHAMA**
 Expenses **-**
 Date when a/c rendered **-**

Declaration to be signed by Surveyor at fitting-out Port:— The above described machinery has been fitted on board the **M. V. "OCEANIA MARU"**
 at **Hiroshima** in a proper manner and found satisfactory when tested on the (date) **10th July, 1958** under full working conditions.

G. M. Kersey & K. Okada Engineer Surveyor to Lloyd's Register
K. Okada Engineer Surveyor to Lloyd's Register
 Foundation
 013224-013231-0173