





**AIR RECEIVERS:**—Have they been made under survey Yes ✓ State No. of report or certificate AR-107/12-3  
Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes ✓  
Can the internal surfaces of the receivers be examined and cleaned Yes ✓ Is a drain fitted at the lowest part of each receiver Yes ✓  
Injection Air Receivers, No. — Cubic capacity of each — Internal diameter — thickness —  
Seamless, welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure —  
Starting Air Receivers, No. 2 ✓ Total cubic capacity 2 x 12 M<sup>3</sup> Internal diameter 1.800 m. thickness 2.163/16 mm End: 1.5 mm  
Seamless, welded or riveted longitudinal joint Riveted Material Boiler quality steel Range of tensile strength End: 26-30/10 Working pressure Actual 3.0 kg/cm<sup>2</sup>

**IS A DONKEY BOILER FITTED** Yes ✓ If so, is a report now forwarded Yes ✓  
Is the donkey boiler intended to be used for domestic purposes only and for fuel oil tank heating  
**PLANS.** Are approved plans forwarded herewith for shafting Kobe 12 Sep. 1952 Receivers Kobe 28 April 1952 Separate fuel tanks Kobe 22 June 1952  
(If not, state date of approval)  
Donkey boilers Kobe 28 April 1952 General pumping arrangements London 17 July 1952 Pumping arrangements in machinery space London 4 July 1952  
Oil fuel burning arrangements London 4 July 1952  
Have Torsional Vibration characteristics been approved Yes ✓ Date of approval London 26 Aug 1952

### SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes ✓  
State the principal additional spare gear supplied Four - Fuel oil needle valves. Five set - Piston rings. Five set - Rubber rings for liner joint. Two - Main bearing bolts and nuts.

The foregoing is a correct description,  
**NAGASAKI WORKS**

Manufacturer.

**MITSUBISHI SHIPBUILDING & ENGINEERING CO., LTD.**  
During progress of work in shops -- Dec. 7, 4, 5  
Dates of Survey while building {  
During erection on board vessel -- {  
Total No. of visits 9.7

Dates of examination of principal parts—Cylinders 9-9-52 Covers 11-7-52 pistons 26-9-52 Rods — Connecting rods 11-10-52  
Crank shaft 1-9-52 Flywheel shaft — Thrust shaft 1-9-52 Intermediate shafts 1-12-52 Tube shaft —  
Screw shaft 2-11-52 Propeller 2-11-52 Stern tubes 2-11-52 Engine seatings 28-11-52 Engine holding down bolts 22-1-53  
Completion of fitting sea connections 4-12-52 Completion of pumping arrangements 20-2-53 Engines tried under working conditions 25-2-53  
Crank shaft, material Forged Steel Identification mark M.F. 774.775.767.778 Flywheel shaft, material — Identification mark —  
Thrust shaft, material Forged Steel Identification mark M.F. 597.768 Intermediate shafts, material Forged Steel Identification marks M.S.F. 835  
Tube shaft, material — Identification mark — Screw shaft, material Forged Steel Identification mark Y.20448 M.F. 835-15  
Identification marks on air receivers AR-107/1A LLOYD'S TEST 45kg W.P. 30kg Y.H.R. 25-11-52 AR-107/1B LLOYD'S TEST 45kg W.P. 30kg Y.O.R. 27-11-52  
AR-107/2 LLOYD'S TEST 45kg W.P. 30kg Y.O.R. 22-12-52 (For Dynamo engine use)

Welded receivers, state Makers' Name Nagasaki Wks. Mitsubishi Shipbuilding & Engineering Co., Ltd. (AR-1082 For Emergency.)

Is the flash point of the oil to be used over 150°F Yes ✓

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with Yes ✓

Description of fire extinguishing apparatus fitted Extinguishers: 4 x 70mm bore water hose connection 2 x 25mm bore water hose nozzles. 6 portable bottles, each 2 lengths x 30mm steam smothering pipes under DB.

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo Yes ✓ If so, have the requirements of the Rules been complied with Yes ✓

If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with —

Is this machinery duplicate of a previous case Yes ✓ If so, state name of vessel ASO-MARU, ARIMA-MARU, TOMISHIMA-MARU, AWATA-MARU

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

These machines have been constructed under Special Survey in accordance with the Rules, Approved plans and Secretary's letter.  
The material and workmanship are good.  
On completion these machines were installed in the vessel in accordance with the Rules.  
Appliances tested under full power working condition and eligible in our opinion for classification with the records of + L.M.C. 2.53 DBS 2.53 7Kgs per sq. cm. and T.S.(CL) 2.53  
A notice board has been fitted and the tachometer marked warning against continuous operation of the engines below 30 R.P.M.

The amount of Entry Fee ... £1,151,200-  
Special ... £  
Donkey Boiler Fee ... £  
Travelling Expenses (if any) £  
When applied for ES61 '18 JAN 19  
When received 19

Committee's Minute FRIDAY 18 SEP 1953

Assigned + LMC 2.53 Oil Eng.

WTDB 100 lbs. CL

**Lloyd's Register Foundation**