

Rpt. 4c

Date of writing report 29th Aug., 1957

Received London

Port TRIESTE

No.

14646

Survey held at Trieste

No. of visits

See Report 4th date

Last date

4 OCT 1957

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship **S.T. "ADRIANA AUGUSTA"** Owners **PRORA S.p.A. Palermo**
(Or Contract No. if name unknown) (Or Consignees)

Ship Built at **Trieste** by **C.R.D. Adriatico** when **1957** Yard No. **1823**

Auxiliary Engines ~~XXXXXX~~ made at **Trieste** by **C.R.D. Adriatico** when **1957** Eng. Nos. **5681**

Total No. of sets and description (including type name) **One. C.R.D.A.-Sulzer 4.BH 22**

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine **4** Dia. of cylinders **220 mm.** Stroke **320 mm.**
2 or 4 stroke cycle **4** Maximum approved BHP **150** at **500** RPM Corresponding MIP **6.775 kg/cm²** Maximum pressure **60 kg/cm²**
Fuel **Diesel oil** Are cylinders arranged in Vee or other special formation? **No** If so, No. of
crankshafts per engine **No** Is engine of opposed piston type? **No** No. and type of mechanically driven scavenge pumps or blowers
per engine **None** No. of exhaust gas driven blowers or superchargers per engine **None** Is welded construction
used for: Bedplate? **No** Entablature? **No** Total internal volume of crankcase (if 20 cu. ft. or over) **720 litres** No. and total area of
crankcase explosion relief devices **2 - 160sq.cm.** Are flame guards or traps fitted? **No** Cooling medium for: Cylinders **F. water**
Pistons **None** No. of attached pumps: F.W. cooling **1** S.W. cooling **1** Lubricating oil **1** How is engine started? **Compressed air**

SHAFTING. Is a damper or detuner fitted? **No** No. of main bearings **5** Are bearings of ball or roller type? **No** Distance between
inner edges of bearings in way of cranks **238 mm.** Crankshaft: ~~XXXXXX~~ solid. Material of crankshaft **E.F. Steel** Approved
minimum tensile strength **50 kg/mm²** Dia. of pins **145 mm.** Journals **155 mm.** Breadth of webs at mid throw **230 mm.** Axial
thickness **64 mm.** If shrunk, radial thickness around eyeholes **PD2** Dia. of flywheel **1500 mm.** Weight **956 kg.** Are balance
weights fitted? **No** Total weight **1450 kg/M²** Dia. of ~~XXXXXX~~ shaft **110 mm.**
Has each engine been tested in shop? **Yes** How long at full power? **6 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) **4.9.56**
Date of approval of shafting **4.9.56** Identification marks on shafting **LLOYD's Gen. S.S. 5464**
Particulars of driven machinery **One. Self ventilated electric generator 100 Kwt. N° 136458**

Port and No. of Certificate for Starting Air Receivers **Milan Cert. N° A.13** Air bottle N° **3-52855**

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**
IP **at** IP **" " " "**
(A small diagram should be attached showing gas cycle) LP **at** LP **" " " "**
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** Particulars of driven machinery
Date of approval of plans **Identification marks**

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over **Trieste Cert. N° 3328**

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) **Cantieri Grimaldi Dal Adriatico**
FABBRICA LACCORAS ANDREA

Manufacturer

Is this machinery duplicate of a previous case? **Yes** If so, which? **S.T. "MARE ADRIACUM" Tri. Rpt. N° 13965**

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.

This engine has been constructed under special survey of tested materials in accordance with approved plans and the Rule requirements.

The workmanship and materials are good.

This engine has been installed aboard the above vessel in an efficient manner and found satisfactory when tested under full load conditions.

This engine, in my opinion, is eligible for full classification.

Survey Fee **Lt 39.000 Euro 15% = Lt 33.150**

Expenses **see Rpt. Ha**

Date when a/c rendered **27/9/57**

Declaration to be signed by Surveyor at fitting-out Port:— The above described machinery has been fitted on board the **"ADRIANA AUGUSTA"**
at **Trieste** in a proper manner and found satisfactory when tested on the (date) **26.7.57** under full working conditions.

Engineer Surveyor to Lloyd's Register

"ADRIANA AUGUSTA"

Engineer Surveyor to Lloyd's Register