

REPORT OF SURVEY FOR REPAIRS, &c., OF ENGINES AND BOILERS

Date of writing Report 7.6.49 (Received at London Office 22 JUN 1949)
 No. in Survey held at Birkenhead When handed in at Local Office 19 Port of LIVERPOOL
 Reg. Book. 95713 on the Machinery of the Woodrow Steel SS THAUMASTUS (No. of Visits 33)
 Tonnage { Gross 10670 Vessel built at Portland, Or. By whom Kaiser Co. Inc. Year. Month.
 Net 6315 Engines made at Lynn, Mass. When 1945
 Nominal { Boilers, when made (Main) 1945 By whom General Elec. Co. When 1945
 Horse Power 2WT (Spt. 468) (Donkey) -
 No. of Main Boilers 2 Owners Anglo-Saxon Pet. Co. Ltd. Owners' Address -
 No. of Donkey Boilers - Managers - (If not already recorded in Appendix to Register Book.)
 Steam Pressure 500 If Surveyed Afloat or in Dry Dock Cammell Laird & Co. Port London Voyage -
 in Main Boilers 500 (State name of Dock.)
 in Donkey Boilers -

Last Report No. - Port -Particulars of Examination and Repairs (if any) Classification LMC

Periodical Surveys, when held, must be reported in detail and serially in the terms of the Rules. State clearly the cause of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be briefly summarised at the end of the report. State also the dates and initials of any letters respecting this case.

damage cases where the Surveyor has not made a special damage report he is required to state whether he offered his services for this purpose, and why they were declined None reported

Is a damage report made by anyone else? If so, by whom? -

Did the Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? Yes

" " Donkey " Yes

not, state for what reasons -

What special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler? -

State latest date of internal examination of each boiler Port 28.4.49 Star 2.5.49

Did the Surveyor examine the Safety Valves of the Main Boilers? Yes

Present condition of funnel Good
 To what pressure were they afterwards adjusted under steam? 500 lb/sq in

Did the Surveyor examine the Safety Valves of the Donkey Boilers? Yes

To what pressure were they afterwards adjusted under steam? -

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? Yes

and of the Donkey Boilers? -

Did the Surveyor examine the drain plugs of the Main Boilers? Yes

and of the Donkey Boilers? -

Did the Surveyor examine all the mountings of the Main Boilers? Yes

and of the Donkey Boilers? -

Has the screw shaft now been drawn and examined? No

Has it a continuous liner? Yes

Is an approved oil retaining appliance fitted at the after end? No

Has the shaft now been changed? No

If so, state reasons -

Has the shaft now fitted been previously used? -

Has it a continuous liner? -

Is an approved oil retaining appliance fitted at the after end? Yes

State date of examination of Screw Shaft -

State the wear down in the bush 5/32"

Is electric light and/or power fitted? Yes

If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? Yes

Has the insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? Yes

Is the survey not complete, state what arrangements have been made for its completion and what remains to be done. Complete

For Classification Survey: -

The Boilers and Machinery opened out as below, examined, sizes and particulars verified, first entry report made out. Examined Both Water-tube boilers complete with drums, tubes, headers, superheater, mountings and doors. Afterwards examined under steam, safety valves adjusted as above, oil burning & fire extinguishing apparatus examined under working condition.

Note: these boilers are each fitted with two independent means of feed, and with Stewart automatic feed water regulators.

The Machinery opened up and examined as follows: -

(For examination of main condenser, sea cocks & main steam pipes see Galveston report No 4992).

CONTINUED

Observations, Opinion, and Recommendation: The Machinery of this vessel is eligible in its present condition, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, BS 9.11, B&MS 9.11 or LMC 9.11 or LMC 140 lb., FD, &c.)
 Opinion to remain as classed, with notation of LMC 6.49.

Subject to a spare propeller being supplied.

(per Section 29) Class. Fee £100 0 0
 Page or Repair Fee (if any) £ -
 Expenses (if chargeable) £1 18 0
 Survey Fee (per Section 29.) £5 5 0
 LIVERPOOL 21 JUN 1949
 CASE. LMC 6.49. Subject.

Fees applied for 15 JUN 1949

Received by me, C. Reed & Co.

19

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C. Reed & Co. Engineers Surveyors to Lloyd's Register of Shipping.

THAUMASTUS.

Machinery: Examined main turbine opened up & examined, rotor lifted, exhaust space stays reinforced by welding. Journals examined.

Main motor with bearings examined, also thrust and intermediate shafting.

The propeller, sea cocks & valves, & fastenings examined.

Examined main condenser, aux condenser (tested).

Both generator engines complete.

Main air ejector, main & aux condensate pumps.

Main & aux. feed pumps.

Main & aux circulating pumps.

Air Compressors, & air receiver (internally).

Lub. oil pumps & standby pumps.

Fuel oil pumps, & transfer pumps.

Fire & GS pumps, ER bilge pumps,

Bilge, ballast & fire pump.

Sanitary, F.W. & drinking water pumps.

Gland seal condenser.

Cargo oil pumps (one) & stripping pumps.

Lub oil coolers, boiler fuel pumps.

Buttworth SW. heater

Fuel oil heaters & pumps.

Evaporators.

Emergency Diesel engines seen working (stated recently overhauled)

Repairs Pumps overhauled & made good as necessary.

Main Circ. pump, new shaft & impeller.

Booster pump (cooling water for alternator) new shaft & impeller.

Both Boilers: Water gauge fittings replaced by new Klingner fittings; drain pipes replaced by solid drawn flanged steel pipes & new drain valves (tested) (Circular N. 1904).

Protection plates fitted in front of pressure fuel filter, and locking device fitted to handle.

Minor repairs effected.

Licence checked.

Various pipes altered & tested. No. of bilge line pipes renewed.

Windlass: cylinder casting & bottom end frames renewed

Main Turbine exhaust belt stays built up by welding.

Evaporator blow down lines made separate.

Main injection valve chest built up where wasted (not steel).

It was stated a spare propeller had been ordered, but did not arrive in time.

THAUMASTUSParticulars of machinery (from name plates).

Kaiser Co. Portland. USMC Hull # 2408

Yard Hull # 125. 3-1-45. TZ-SE-A1

Main turbine: G.E.C., KW 4925/5400. St. Press 435.
 Form W. Speed 3600/3715 Inlet 1.5" abs
 10 stages. # 68268. A.B. Insp. 12-11-44 # 142.
 St. Temp 720°F

Main Propulsion Motor. GEC. Type TSM 80.

KVA 4625. HP 6000 RPM 90. # 6037864

Main Generator: GEC. Form HL. 4925/5400 KVA. # 5727868Thrust by Isaacson Iron Works S.I.E 424-A1-F1.Line Shaft by 80 597 VTail shaft by 80 597 W.Propeller (from records) Doran Settle. AB 634-L. HT 5408

WT 35080 lb. # 125 Pitch 6'-6"/17'-6". Dia 19'-6". 12-19-44

Main Condenser 2 pass. Surface 8280 sq ft Serial # 2835Aux Condenser 80 Ser. # 2905

Air Compressor (Combustion Control). Comp. by Ingersoll Rand 5x5x4x4. Mod 554X15
 Serial # 307-56708

Motor GEC. HP 15. RPM 1770. # 6099004

80 (Ship's service) Ingersoll Rand. 5x3x3 1/2. # 253x5.

Air Receiver (Steel pipe & tank Co) 30 cu ft. WP 125. Ser. # 211.2 BOILERS (Single Pass Straight tube Marine type). 450 WP. 500 lb Design Press

Boiler HS. 4934 sq ft. Air HS 2468 sq ft. ABS Insp. PSN 11-25-44

USCG # 9265 + 9264

CECO # 12019 + 12017

2 Boiler Main Feed Pumps Ingersoll Rand. Size 1 1/2. NTB. Cap 200 gall/min

RPM 4000. (Ford) # C. 443053.

(alt) C 443062. *

Aux. Boiler Feed Pump. Worthington 10x7x24. Vert Simplex 435 lb

(Discharge 575 lb). 130 gall/min. # 1182723

* Note: The after feed pump now replaced by
 Weir's Rotary feed pump # 219881. 2400 Test Eng 29-4-48 ARS.
 Pump 11-11-48

Main Circulating Pump. Ingersoll Rand Cent. 14,000 gall/min. Rev 580. # B. 443129
 GEC Motor. HP 125. # 6100742.

Aux. Circ. Pump Cent. (Ingersoll Rand) # B. 443366. 3000 gall/min.
 GEC Motor 30 HP. # 6098312

2 Main Condensate pumps: Ingersoll Rand. 180 gall/min. 1760 Rev
 Inboard B. 443040.
 Outboard A. 443238.

Aux Condensate pump Ing. Rand. 90 gall/min 1750 Rev # A. 443171Lub oil service pump (Electric) Rotex by Quincy Pump Co 60 gall/min. # B. 6492/26.Lub. oil standby pump Worthington Vert Simplex 6x7x8. # 1183026

Fuel oil service pump Quincy Pump Co (Screw type) 7 1/2 HP. 15 gall/min. 1150 Rev
 Ford # B. 6491-25.
 alt # B. 6491-35.

3-200 KVA Cargo pump motor transformers GEC. # Ford 7328662
 Cent 7328709
 alt 7328721

Continued

THAUMASTUS

3 lighting transformers GEC. 15 KW. KVA 450/120. } Star 7575113
 } Cent 7575114
 } Port 7575148

2 Comp. Turbo Generators G.E.C. 525 KW. 435 lbs. 5645 RPM. } Int. η : 65963.
 } Out η : 65961.

(see electrical report)

W/air air ejector Graham Mfg Co. η : 2868

Comp. do " η : 2942

De-aerating heater. Cochran Corp. η : A 15499/1

Second stage feed heater Ross Heater Co. η : 6969-A-99.

Atmospheric drain pump Fairbank Morse η : E 159. BFD 20110-17

2 Evaporators Standard Heater Co η : 5817-142 & 5817-143

2 Distillers Heat Transfer products η : 2055-17(F) + 2055-20 (A/E)

2 Fuel oil Heaters Davis Eng Co η : 42199 (Int) + 42177 (Out)

2 Lub oil heaters & Lub-oil pump

Fuel oil transfer Pump (Fuel Eng Room) Whiting Mach Works (Screw type) Size 3 1/2
 η : 11550

do (Steam Vent Duplex) Leyman Mfg Co. 14 x 14 x 12. 700 gpm.
 η : 28667.

Exp feed pump Turbo flo. Deming Co. 20 gpm. η : 9100-444

2 Fire & GS Pumps Ingersoll Rand 450 gpm. 3500 RPM
 A/E η : 014 53065.
 Fuel η : B 443317.

Bilge Ballast & Fire Pump (Pump Room) Worthington Vent Duplex. 10 x 7 x 10. 300 gpm.
 η : 1179553.

2 E.R. Bilge Pumps Labow Co Size 20. η : A/E 48460-2
 Fuel 48469-2

E.R. Sanitary Pump Ingersoll Rand. 120 gpm. η : C. 445349.

E.R. SW Service pump do 120 gpm. η : B. 445988.

2 Drinking Water Pumps { A/E. Joshua Hendy η : C. 77 BFD 20112-3
 { Fuel, Fuel, Morse C 77 BFD 20112-16

D.W. Lin Pump η : 17082 (?)

2 F.W. Pumps Fairbank Morse (Hornig. Cent) 20 gpm. O/B. η : D. 97 BFD 20111-17
 I/B. do -27.

Refrig Lin. pump Weinman Pump Co 15 gpm. η : 35507-2

Butterworth SW Heater Ross Heater Co. 450 gpm. SW. Jan 97 to 200°
 η : 60974-A-70

Butterworth SW Heater, Drain Cooler. η : 6974-B-70

Windlars. Hesse-Evated Iron Works. Ord η : 49900. Mail η : 115

Steamy gear Stetson Ross Mach Co Rams η : 2316
 Pump η : 2316-2 (Star) + 2316-3 (Port)

Gland Seal Condenser Foster Wheeler 84.5 ft η : 29139-B-6

Steam jet ejector Ross Heater Co. η : 29139-A6

Fuel oil Heater, condensate cooler Davis Eng Co η : 46383

Elliott Desuperheater η : 8209. { S A. 20813 N.
 { C A. 20700 N.
 { P A. 20700 N.

3 F.D. Fans, Buffalo Forge.

3 Cargo oil pumps Ing. Rand. 2000 gpm. 1750 RPM

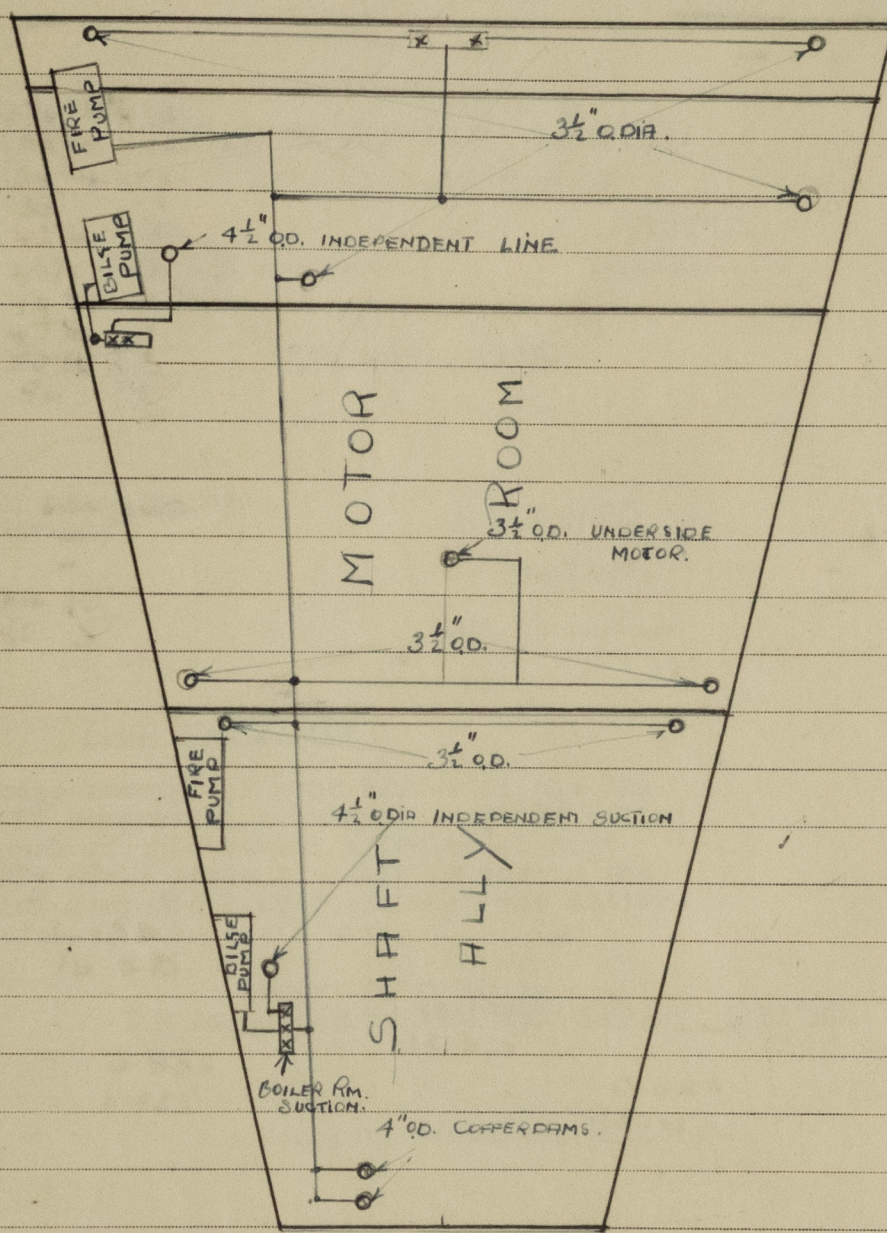
Hornig. Cent: η { St. B 443377
 { Cent. B 443379
 { Port B 443378.

3 Cargo oil Stripping pumps National Transit & Pump Co. Hornig Rotary
 400 gpm. { St. R. 3651.
 { Port R 4802.

Cargo oil Stripping Pump. Steam Vent Duplex. Worthington DA. 14 x 14 x 12
 700 gpm.
 η : 1182801

Continued

THAUMASTUS

Emergency Diesel EnginesVern Secon Mach Co. 190 H.P. 900 R.P.M. η : V. 5804.75 KW Generator ~~GEN~~. (η : 124542)2 KW Generator DC. (Ident Elec Mfg)
 η : 124542 A.SKETCH OF BILGE CONNECTIONS IN MACHINERY SPACE.
So far as can be ascertained.

C. Reed