

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

26 MAY 1942

Received at London Office

28 MAY 1942

of writing Report

19

When handed in at Local Office

23/5/

#2 Port of NEWCASTLE ON TYNE.

in Survey held at

Newcastle on Tyne

Date, First Survey

26 Aug. 1941

Last Survey

7<sup>th</sup> May 1942

Book.

(Number of Visits 70.)

on the S/S "CONGONIAN."

Tons } Gross 6082  
Net 3452

built at Newcastle

By whom built Swan, Hunter & Wigham Richardson

Yard No. 1708.

When built 1942-

Engines made at ditto

By whom made ditto.

Engine No. 1708

When made 1942-

Boilers made at ditto

By whom made ditto.

Boiler No. 1708

When made 1942

Registered Horse Power

Owners United Africa Co.

Port belonging to LIVERPOOL.

Horse Power as per Rule

548.

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes

Vessel is intended

Ocean going, Carrying Petroleum in bulk

INES, &c.—Description of Engines

3 Cyl. Triple Exp.

Revs. per minute 72.

of Cylinders 23 1/2" x 39" x 66"

Length of Stroke 45"

No. of Cylinders 3.

No. of Cranks 3

shaft, dia. of journals

as per Rule 13.293

as fitted 13 3/8"

Crank pin dia. 13 3/8"

Crank webs

Mid. length breadth

Mid. length thickness

Thrust shaft, diameter at collars

as per Rule 13.293

as fitted 13 3/8"

mediate Shafts, diameter

as per Rule 12.66

as fitted 12 1/16"

Shafts, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule 14.076

as fitted 14 1/8"

Is the ~~tube~~ screw shaft fitted with a continuous liner Yes.

Liners, thickness in way of bushes

as per Rule

as fitted 3/4"

Thickness between bushes

as per Rule 18/32

as fitted 11/16"

Is the after end of the liner made watertight in the

er boss Yes

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner In one piece

liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Close fit.

liners are fitted, is the shaft lapped or protected between the liners

Is an approved Oil Gland or other appliance fitted at the after end of the tube

No

If so, state type

Length of Bearing in Stern Bush next to and supporting propeller 4' 10"

eller, dia. 17' 0"

Pitch

No. of Blades 4.

Material

Bruce (BULL'S METAL)

whether Movable

No Total Developed Surface 102.5 sq. feet

Pumps worked from the Main Engines, No. None

Diameter

Stroke

Can one be overhauled while the other is at work

Pumps worked from the Main Engines, No. 2

Diameter 5 1/4"

Stroke 26"

Can one be overhauled while the other is at work Yes

No. and size Two 7' x 9 1/2' x 21"

How driven Steam

Pumps connected to the Main Bilge Line

No. and size

Ballast Pump 10' x 12' x 12' duplex; Two 9 1/2' dia x 26"; 250 tons/hr each 32 tons/hr

How driven

Steam

Lubricating Oil Pumps, including Spare Pump

No. and size

also Forward Hold Bilge Pump 8' x 8' x 10' duplex 100 tons/hr

st Pumps, No. and size One 10' x 12' x 12' duplex

Oil Cooler

Yes

Suctions, connected to both Main Bilge Pumps and Auxiliary

no independent means arranged for circulating water through the

Oil Cooler

Yes

Pumps;—In Engine and Boiler Room 3 1/2' 3 1/2' and 2 1/2' in only bilge wells.

mp Room Ford Pump Rm. 1 1/2'; aft Pump Rm 2 1/2'.

In Holds, &c.

aft Dry Cargo Hold 2 1/2';

Two 1 + 2 Cargo Holds, 2 1/2' in each;

In No 1 Oil or Cargo Hold, 2 port + 2 star each 2 1/2' dia.

For Cofferdams 1 1/2' + 1 1/2'

Yes

Water Circulating Pump Direct Bilge Suctions, No. and size One 9 1/2' on Port side

nd size One 9 1/2' on Star side

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes

Yes.

Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Sea Connections fitted direct on the skin of the ship

Yes

Are they fitted with Valves or Cocks

both

ey fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Yes

Are the Overboard Discharges above or below the deep water line

below.

ey each fitted with a Discharge Valve always accessible on the plating of the vessel

Yes

Are the Blow Off Cocks fitted with a spigot and brass covering plate

Yes

Pipes pass through the bunkers

None

How are they protected

Yes

pipes pass through the deep tanks

None

Have they been tested as per Rule

Yes

l Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Yes

arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one

ment to another

Yes

Is the Shaft Tunnel watertight

None

(mch. aft).

Is it fitted with a watertight door

Yes

N BOILERS, &c.—(Letter for record S.)

Total Heating Surface of Boilers

8682 sq. ft.

reed Draft fitted

Yes, to all 3 Blos

No. and Description of Boilers

3, S.E. Blos.

Working Pressure

220 lbs.

4 REPORT ON MAIN BOILERS NOW FORWARDED? Yes

A DONKEY BOILER FITTED? No

If so, is a report now forwarded?

Yes

donkey boiler intended to be used for domestic purposes only

Yes

4NS. Are approved plans forwarded herewith for Shafting

4/4/41

Main Boilers

10/4/41

Auxiliary Boilers

Donkey Boilers

(If not state date of approval)

reaters

General Pumping Arrangements

26/7/41

Oil fuel Burning Piping Arrangements

23/6/41

Pumping Arrgt in machy Space

17/6/41

SPARE GEAR.

ie spare gear required by the Rules been supplied

Yes

he principal additional spare gear supplied

2 main Bearing Bolts & nuts, 6 studs & nuts for Proton Jack Rings.

The foregoing is a correct description.

SWAN, HUNTER, & WIGHAM RICHARDSON, LTD.

G. J. Sweeney

Manufacturer.

DIRECTOR.



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Lloyd's Register Foundation

004091-004100-0171



1941  
 Aug. 26. 29. Oct. 10. 22. 24. Nov. 5. 14. 19. 21. 28. Dec. 1. 3. 5. 8. 12. 16. 18. 19. 23. 24. 29. 30. 31. 1942  
 Jan. 2. 13. 15. 19. 23. 27. 28. 29. 30. Feb. 2. 4. 6. 9. 13. 18. 20. 24. 26. 27. Mar. 9. 11. 17. 18. 19. 20. 24. 26. 27. 11. 17. 18. 19. 20. 24. 25. 27. Apr. 1. 3. 7. 14. 28. May 7.  
 Total No. of visits 70.

Dates of Examination of principal parts—Cylinders 19/1/42 Slides 30/1/42 Covers 19/1/42  
 Pistons 30/1/42 Piston Rods 30/1/42 Connecting rods 30/1/42  
 Crank shaft 15/1/42 Thrust shaft 28/1/42 Intermediate shaft 30/1/42  
 Tube shaft none Screw shaft 19/1/42 Propeller 19/1/42 + 26/2/42  
 Stern tube 30/1/42 + 2/2/42 Engine and boiler seatings 26/2/42 + 12/3/42 Engines holding down bolts 9/3/42  
 Completion of fitting sea connections 26/2/42  
 Completion of pumping arrangements 28/4/42 Boilers fixed 12/3/42 Engines tried under steam 14/4/42  
 Main boiler safety valves adjusted 14/4/42 Thickness of adjusting washers 13/32 7/8 3/8 1/2 1/4 1/8 1/16 1/32 1/64 1/128 1/256 1/512 1/1024 1/2048 1/4096 1/8192 1/16384 1/32768 1/65536 1/131072 1/262144 1/524288 1/1048576 1/2097152 1/4194304 1/8388608 1/16777216 1/33554432 1/67108864 1/134217728 1/268435456 1/536870912 1/1073741824 1/2147483648 1/4294967296 1/8589934592 1/17179869184 1/34359738368 1/68719476736 1/137438953472 1/274877906944 1/549755813888 1/1099511627776 1/2199023255552 1/4398046511104 1/8796093022208 1/17592186044416 1/35184372088832 1/70368744177664 1/140737488355328 1/281474976710656 1/562949953421312 1/1125899906842624 1/2251799813685248 1/4503599627370496 1/9007199254740992 1/18014398509481984 1/36028797018963968 1/72057594037927936 1/144115188075855872 1/288230376151711744 1/576460752303423488 1/1152921504606846976 1/2305843009213693952 1/4611686018427387904 1/9223372036854775808 1/18446744073709551616 1/36893488147419103232 1/73786976294838206464 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