

No. 109063

Received at London Office.....- 2 SEP 1940

Built at <u>Newcastle</u>	By whom built <u>Duran, Hunter & Wigham</u>	Yard No. <u>1640</u>	When built
Engines made at <u>Bedford</u>	By whom made <u>Richardson & Co</u>	Engine No. <u>17/83486</u>	When made <u>1940</u>
Boilers made at <u>✓</u>	By whom made <u>✓</u>	Boiler No. <u>✓</u>	When made <u>✓</u>
Shaft Horse Power at Full Power <u>each 410</u>	Owners <u>British India Steamer Co Ltd</u>	Port belonging to	
Nom. Horse Power as per Rule <u>✓</u>	Is Refrigerating Machinery fitted for cargo purposes <u>✓</u>	Is Electric Light fitted <u>yes</u>	
Trade for which Vessel is intended <u>✓</u>			

Curtis Rating Type

[illegible]

Intermediate Shafts, diameter		as per rule.....		Thrust Shaft, diameter at collars		as per rule.....	
as fitted						as fitted	
Tube Shaft, diameter		as per rule.....		Screw Shaft, diameter		as per rule.....	
as fitted				as fitted		Is the { tube } shaft fitted with a continuous liner { screw }	
Bronze Liners, thickness in way of bushes		as per rule.....		Thickness between bushes		as per rule.....	
as fitted				as fitted		Is the after end of the liner made watertight in the	
propeller boss		If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner					
If the 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							
If two 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							
Length of Bearing in Stern Bush next to and supporting propeller							
Shaft		If so, state type.....					
Propeller, diameter		Pitch.....		No. of Blades		State whether Moveable	
						Total Developed Surface..... square feet	
If Single Screw, are arrangements made so that steam can be led direct to the L.P. Turbine				Can the H.P. or I.P. Turbine exhaust direct to the condenser			
No. of Turbines fitted with astern wheels		Feed Pumps		No. and size			
				How driven			

Pumps connected to the Main Bilge Line	{ No. and size How driven
Ballast Pumps, No. and size	Lubricating Oil Pumps, including Spare Pump, No. and size
Are two independent means arranged for circulating water through the Oil Cooler	Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size
Pumps, No. and size:—In Engine and Boiler Room	In Pump Room
In Holds, &c.	
Main Water Circulating Pump Direct Bilge Suctions, No. and size	Independent Power Pump Direct Suctions to the Engine Room, No. and size
Bilges, No. and size	Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-bores
Are the 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	
Are all Sea Connections fitted direct on the skin of the ship	Are they fitted with Valves or Cocks
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates	Are the Overboard Discharges above or below the deep water line
Are they each fitted with a Discharge Valve always accessible on the plating of the vessel	Are the Blow Off Cocks fitted with a spigot and brass covering plate
What pipes pass through the bunkers	How are they protected
What pipes pass through the deep tanks	Have they been tested as per rule
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times	
Is the 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 compartment to another	Is it fitted with a watertight door
Is the Shaft Tunnel watertight	Is it worked from

4A 109063.

BOILERS, &c.—(Letter for record ✓) Total Heating Surface of Boilers

Is Forced Draft fitted ✓

No. and Description of Boilers ✓

Working Pressure ✓

Is a Report on Main Boilers now forwarded? ✓

Is { a Donkey } Boiler fitted? ✓
{ an Auxiliary }

If so, is a report now forwarded? ✓

Is the donkey boiler intended to be used for domestic purposes only ✓

Plans. Are approved plans forwarded herewith for Shafting ✓
(If not state date of approval)

Main Boilers ✓

Auxiliary Boilers ✓

Donkey Boilers ✓

Superheaters ✓

General Pumping Arrangements ✓

Oil Fuel Burning Arrangements ✓

SPARE GEAR.

Has the spare gear required by the Rules been supplied ✓

State the principal additional spare gear supplied ✓

The foregoing is a correct description,

J. Barker for W. H. Allen Sons & Co. Manufacturer.

Dates of Survey while building

{ During progress of work in shops - - }
{ During erection on board vessel - - }
Total No. of visits

1940 May 24. 27 June 6. 26. July 7. 15. 19. 27. 29.

9.

6. 6. 40. 15. 7. 40

Dates of Examination of principal parts—Casings 7. 7. 40 Rotors 15. 7. 40 Blading 15. 7. 40 Gearing 19. 7. 40

Wheel shaft 26. 7. 40 Thrust shaft ✓ Intermediate shafts ✓ Tube shaft ✓ Screw shaft ✓

Propeller ✓ Stern tube ✓ Engine and boiler seatings ✓ Engine holding down bolts ✓

Completion of fitting sea connections ✓ Completion of pumping arrangements ✓ Boilers fired ✓ Engines tried under steam ✓

Main boiler safety valves adjusted ✓ Thickness of adjusting washers ✓

Rotor shaft, Material and tensile strength *steel*

Identification Mark *LLOYDS 165-166*

Flexible Pinion Shaft, Material and tensile strength ✓

Identification Mark ✓

Pinion shaft, Material and tensile strength *steel*

Identification Mark *LLOYDS 162-3-4*

1st Reduction Wheel Shaft, Material and tensile strength ✓

Identification Mark ✓

Wheel shaft, Material *steel* ✓

Identification Mark *10 H.A.C. 26. 4. 40*

Thrust shaft, Material ✓

Identification Mark ✓

Intermediate shafts, Material ✓

Identification Marks ✓

Tube shaft, Material ✓

Identification Marks ✓

Screw shaft, Material ✓

Identification Marks ✓

Steam Pipes, Material ✓

Test pressure ✓

Date of test ✓

Is an installation fitted for burning oil fuel ✓

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

Have the requirements of the Rules for the use of oil as fuel been complied with ✓

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo ✓

If so, have the requirements of the Rules been complied with ✓

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

Is this machinery a duplicate of a previous case ✓

If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.) *These turbo generators have been constructed under Special Survey in accordance with the requirements of the Rules; hydraulic pressure tests carried out on the steam belts and casings; so far as can be seen the materials are sound and free from defects, the workmanship is good & on completion full power & overload tests were witnessed on the bench with satisfactory results.*

The sets have been dispatched to Newcastle for installing on board

The amount of Entry Fee ... £

When applied for,

Special ...

£18-18-0

- 2 SEP 1940

Donkey Boiler Fee ... £

When received, *on the 10. 12. 1940*

Travelling Expenses (if any) £

4-14-0

Committee's Minute

Assigned

See NWC. J.C. 99303

M. Lamett

Engineer Surveyor to Lloyd's Register of Shipping.

These 3 Turbo-generator sets have been satisfactorily installed on the main engine room of the ship ARONDA, SHMR 1640 & tested under full working conditions.
Adwait. Newcastle on Tyne 11/3/41.