

28 FEB 1931

Ind FE 13990

Rpt. 4b

# REPORT ON OIL ENGINE MACHINERY.

No. 19133  
18 DEC 1929

Date of writing Report 19. 11. 29 When handed in at Local Office 13<sup>th</sup> Dec. 1929 Port of Greenock

No. in Survey held at Greenock Date, First Survey 12<sup>th</sup> June 1929 Last Survey 13<sup>th</sup> December 1929

Reg. Book. 39307 Sup. Single on the Twin Triple Screw vessel M/s "Athelregent" Tons Gross 8881 Net 5231

Built at Middlesbrough By whom built Furness & Co Ltd Yard No. 153 When built 1929  
Engines made at Greenock By whom made John Kennedy & Co Ltd Engine No. 178 When made 1929  
Boilers made at ditto By whom made ditto Boiler No. 179 When made 1929  
Brake Horse Power 3200 Owners United Motors Co Ltd Port belonging to Greenock  
Nom. Horse Power as per Rule 709 Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted -  
Trade for which vessel is intended Foreign

OIL ENGINES, &c.—Type of Engines Horizontal (2 cyl) 2 or 4 stroke cycle 4 Single or double acting Single  
Maximum pressure in cylinders 500 Diameter of cylinders 630 mm Length of stroke 1300 mm No. of cylinders 12 No. of cranks 12  
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 892 mm Is there a bearing between each crank yes  
Revolutions per minute 110 Flywheel dia. 2620 mm Weight 13,450 lbs Means of ignition Compression Kind of fuel used Diesel

Crank Shaft, dia. of journals as per Rule 40.3.3 mm Crank pin dia. 415 mm Crank Webs shrunk Thickness parallel to axis 270 mm  
Flywheel Shaft, diameter as per Rule 11.26 mm Intermediate Shafts, diameter as fitted 113/4 Thrust Shaft, diameter at collars as per Rule 11.8 mm  
Tube Shaft, diameter as fitted 13 Is the tube shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule 65 Thickness between bushes as per rule 56 Is the after end of the liner made watertight in the  
propeller boss yes 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 shaft no Length of Bearing in Stern Bush next to and supporting propeller 52

Propeller, dia. 13.3 Pitch 11.0 No. of blades 4 Material Brass whether Moveable no Total Developed Surface 52 sq. feet  
Method of reversing Engines air Is a governor or other arrangement fitted to prevent racing of the engine when detached yes Means of lubrication  
forced Thickness of cylinder liners 36/46 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with  
non-conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine -

Cooling Water Pumps, No. 3 (one for each) 2 10" x 8" Is the sea suction provided with an efficient strainer which can be cleared within the vessel -  
Bilge Pumps worked from the Main Engines, No. yes Diameter - Stroke - Can one be overhauled while the other is at work -  
Pumps connected to the Main Bilge Line { No. and Size 2. 8" x 9" x 10" 4 x 4 1/2 x 9" How driven steam

Ballast Pumps, No. and size one 8" x 9" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size 3 (one bottom) 2. 4" x 8"  
Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge  
Pumps, No. and size:—In Machinery Spaces 2. 3 1/2"; 2. 2 1/2"; 2. 3" x 2. 2"

Holds, &c. To forward pump. 2. 2 1/2" in cargo hold, 1. 2 1/2" in chain locker, 1. 2 1/2" in fuel pump store, 1. 2 1/2" Pump Room  
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2. 5 1/2"

Are all the Bilge Suction pipes in Holds and Tunnels fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces  
from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes

Are all Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks both  
Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates yes Are the Overboard Discharges above or below the deep water line above  
Are they 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

At pipes pass through the bunkers none How are they protected -  
At pipes pass through the deep tanks none Have they been tested as per Rule yes

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes  
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 yes Is the Shaft Tunnel watertight none Is it fitted with a watertight door - worked from -

Is the wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork yes

Auxiliary Air Compressors, No. 2 No. of stages 3 Diameters 600-540-420 mm Stroke 480 mm Driven by main engine

Auxiliary Air Compressors, No. one No. of stages 3 Diameters 400-360-320 mm Stroke 260 Driven by steam

Auxiliary Air Compressors, No. - No. of stages - Diameters - Stroke - Driven by -

Refrigerating Air Pumps, No. - Diameter - Stroke - Driven by -

Auxiliary Engines crank shafts, diameter as per Rule  
RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes  
Are the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces manholes  
Is there a drain arrangement fitted at the lowest part of each receiver yes

High Pressure Air Receivers, No. 4 Cubic capacity of each 150 litres Internal diameter 12 thickness 12  
Unless, lap welded or riveted longitudinal joint seamless Material S Range of tensile strength 29.33 Working pressure by Rules 1.000 lbs  
Working Air Receivers, No. 2 Total cubic capacity 1300 CF Internal diameter 6. 4 1/16 thickness 1 1/16 1432  
Unless, lap welded or riveted longitudinal joint seamless Material S Range of tensile strength 28.32 Working pressure by Rules 356

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~~auxiliary~~ **BOILERS** ~~FITTED?~~ *yes* *yes* If so, is a report now forwarded? *yes*  
*PLANS.* Are approved plans forwarded herewith for Shafting (If not, state date of approval) *yes* Receivers *yes* Separate Tanks *-*  
*auxiliary* Boilers *yes* General Pumping Arrangements *-* Oil Fuel Burning Arrangements *-*  
**SPARE GEAR** *see separate list*

The foregoing is a correct description,  
For **JOHN G. KINCAID & CO. LIMITED**  
*W. G. Carter* Director. Manufacturer.

Dates of Survey while building { During progress of work in shops - - (1929) June 12 July 18-26-30 Aug 1-5-8-9-16-19-26-30 Sept 11-18-19-20-23-24-25-26-27 Oct 2-4-8-9-10-14-16-17-23-24-25-29-30-31 Nov 1-4-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29 Dec 3-4-6-13 1929/ Dec 9 13 23 1930/ Jan 7 8 22 24 27 31 Feb 4 12 13 15 17 18 21  
During erection on board vessel - - - 8-11-12-14-18-20-21-22-25-26-28-29 Dec 3-4-6-13 1929/ Dec 9 13 23 1930/ Jan 7 8 22 24 27 31 Feb 4 12 13 15 17 18 21  
Total No. of visits *54*  
Dates of Examination of principal parts { Cylinders 14-10-29 Covers 24-9-29 Pistons 10-10-29 Rods 10-10-29 Connecting rods 23-10-29  
Crank shaft 22-11-29 Flywheel shaft 25-11-29 Thrust shaft 25-11-29 Intermediate shafts 25-11-29 Tube shaft 24-1-30  
Screw shaft 25-11-29 Propeller 25-11-29 Stern tube 6-12-29 Engine seatings 13-12-29 Engines holding down bolts 21-2-30  
Engines tried under working conditions 21-2-30  
Completion of fitting sea connections 13-12-29 Completion of pumping arrangements 21-2-30  
Crank shaft, Material *S* Identification Mark *K 48-HRWGM* Flywheel shaft, Material *S* Identification Mark *LR 1371.1372 WGM*  
Thrust shaft, Material *S* Identification Mark *LR 1371.1372 WGM* Intermediate shafts, Material *S* Identification Marks *LR 1371.1372 WGM*  
Tube shaft, Material *✓* Identification Mark *LR 3001.138 H1* Screw shaft, Material *S* Identification Mark *LR 3001.138 H1*  
Is the flash point of the oil to be used over 150° F. *Yes*

Is this machinery duplicate of a previous case *yes* If so, state name of vessel *"Alhe Sultan" Lk Regd 9:19126*  
General Remarks (State quality of workmanship, opinions as to class, &c.) *These engines have been built under special survey in accordance with the approved plans. The workmanship is of a high standard and of good quality. They have been tested on the Brake of good quality. They have now been shipped to London satisfactory. I have now been shipped to Middlesbrough, at which port they will be fitted on board. The machinery, when fitted on board, tried under working conditions, will be entitled to my opinion for the record of L.M.C. with date.*

This machinery has been securely fitted aboard and tested with satisfactory results under working conditions and is, in my opinion, eligible for classification with class *+ L.M.C. 2.30.*

The amount of Entry Fee ... £ 6 : - : When applied for, *13th DECEMBER 1929*  
Special ... £ 88 : - :  
Boiler Fee ... £ 25 : 3 : When received, *27-12-29*  
Travelling Expenses (if any) £ 8 : 8 :  
Committee's Minute *GLASGOW 17 DEC 1929*

*P. J. Macdonald*  
*Alfred Gordon Macdonald*  
Engineer Surveyor to Lloyd's Register of Shipping.

FRI. 7 MAR 1930  
*Lloyd's Register Foundation*

*Quenoch*  
Certificate (if required) to be sent to  
(The Surveyors are requested not to write on or below the space for Committee's Minute.)  
Manufactured by *SOU CAR*  
Has the S...