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and
te of writing report 20 May, 1957
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vey held at Tampa, Florida
of op
1-1/2
Received London 19 SEP 1957
No. of visits In shops
On vessel 15
First date 4 Jan. 1957
Last date 18 April, 1957
REC'D NEW YORK
AUG 13 1957
NEW ORLEANS, LOUISIANA
No. 9044-A

FIRST ENTRY REPORT ON STEAM RECIPROCATING MACHINERY

in R.E. 51028 Name S.S. "ALPHA" Gross tons 4519
Liberian Carriers, Inc. Managers R.J.Chianelly, Inc. Port of Registry Monrovia
Newcastle By Swan, Hunter & Wigham Richardson Year 1928 - 5
Engines made at Maisonneuve, Montreal By Canadian Vickers, Ltd. Eng. No. 1941
Makers made at Montreal By Canadian Vickers, Ltd. Blr. Nos. 5676 & - When 1940
Machinery installed at Tampa, Florida By Tampa Ship Repair & Dry Dock, Co. When 1957 - Conversion
Particulars of restricted service of ship, if limited for classification No limitation

ship to be classed for navigation in ice? No Particulars of vegetable or similar cargo oil notation, if required None
Is ship intended to carry petroleum in bulk? Yes
refrigerating machinery fitted? Yes If so, is it for cargo purposes? No Type of refrigerant Freon
the refrigerating machinery compartment isolated from the propelling machinery space? Yes Is the refrigerated cargo installation intended to be classed? No

The following particulars should be given as fully and as clearly as possible. Dashes, ticks and other signs of doubtful meaning are not to be used. Wording not applicable to the installation may be cancelled with a black line.

ILERS AND OTHER STEAM PRESSURE VESSELS.
of main boilers 2 Type and licence name, if any Scotch-Multitubular Position P&S abreast, Frs. 35-29,
Bottom 18" above tank top
Safety valve pressure 225 P.S.I. Steam temperature if superheated Not superheated Superheater safety valve pressure -
Forced draught Fuel Oil Report on main boilers (Port and No.) 9044-B New Orleans
of aux./donkey boilers None Type - W.P. - Position -
of steam heated steam generators None W.P. - No. of evaporators One W.P. 15 lbs.
Report on aux./donkey boilers or steam generators (Port and No.) None
Oil fired in accord with Rules
boilers are oil fired, is the arrangement of pipes, valves and controls in accordance with the Rules?
and position of oil burning pressure units 2 on bottom platform between boilers
and position of oil fuel settling or service tanks not forming part of hull structure on Main deck frs. 9- 15-1/2, 7 ft. p&s of CL.

of forced draught fans and fan engines Two fans each with its own engine
IN ENGINES (If the main engines have been constructed at another Port and are covered by a separate report, the particulars given in that report need not be repeated below, but the Port and Report No. should be stated)
ription and licence name, if any Steam Reciprocating, 4 cylinder TRIPLE EXPANSION
of main engines one No. of screws one Max. total I.H.P. 2210 with 185 per cent. H.P. cut off at 185 R.P.M.
of cylinders per engine 4 Dia. of cylinders (in sequence from fwd. to aft) LP. 38-1/2", HP 18-1/4", MP 31", LP 38-1/2" Stroke 30"
Machinery numeral 398 Type of valves HP piston, MP & 2 LP Matchbox Slide Type of valve gear Stephenson
a 2SB engine is of enclosed forced lubricated type state crankcase volume Not enclosed No. and total area of explosion relief devices fitted? None
h cylinders operate on Uniflow principle? None Is a steam reheater fitted? No Is a governor fitted? No
he main engine frames or bedplate of welded construction? No Is the main engine secured directly to the tank top
a built-up seating? Built up seating, welded steel
exhaust steam turbine fitted? No S.H.P. None R.P.M. - Description of turbine and

TING
ng pressure for which shafting has been approved 225 Date of approval of torsional vibration characteristics of the propelling machinery system, if
d Not required State barred speed range, if imposed None
K SHAFT type—Built, Dia. of journals 10-1/2" Dia. of pins Both LPs. 10-1/2" with 5" central hole
h of webs at mid length 17" Thickness 6-1/2" If shrunk, thickness around eyeholes 4-7/8"
wel pins fitted? Yes Crank shaft material Forged steel Minimum approved tensile strength Assume 28 tons
ST SHAFT Dia. at collar(s) 10-1/2" Material Forged steel Minimum approved tensile strength Assume 28 tons

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INTERMEDIATE SHAFT. Dia. 13" Material Forged steel Original approved
SCREW SHAFT. Dia. of cone at large end 15-3/4" Is screwshaft fitted with a continuous liner? Yes
TUBE SHAFT. Dia. (if these are separate shafts) Not separate Is tube shaft fitted with a continuous liner in way of stern tube? Not separate
Thickness of screw/tube shaft liner at bearings Original Thickness between bearings as original
Is an approved oil gland fitted? No If so, state type
Length of bearing next to and supporting propeller Original Material of bearing Lignum vitae
In multiple screw vessels is the liner between stern tube and A bracket continuous? Single screw
in drydock? Single screw
Material of screw/tube shaft Original Minimum approved tensile strength

PROPELLER
Dia. of propeller 12'-0" Pitch 7'-6" Built-up or solid? Solid Total developed surface 62 sq.ft. No. of blades 4
Blade thickness at top of root fillet 6' 4" thick at 25% Blade material Cast Iron Moment of inertia of dry
if known Not known If propeller is of special design, state type Temporary propeller until reduction gear is
Is propeller of reversible pitch type? No If so, state design? State method of control
Material of spare propeller Moment of inertia of spare propeller, if known

MAIN ENGINE DRIVEN PUMPS. (State No. of each and give capacity of bilge pumps at normal revolutions)
AIR CIRCULATING FEED None LUB. OIL BILGE

Name below each essential pump and state its position. Give capacity of bilge pumps.	Service for which each pump is connected to be marked thus X												
	SUCTION							DELIVERY					
	Bilge Main	Bilge Direct	Ballast Main	Oil Fuel Main	Cond. Extr.	Sea	Feed Tanks	DAILY SER. F.O. TKS	Boiler Feed	Main Cond. Coolg.	Oil Fuel Burners	Oil Fuel Tanks	Fire Main
2. VERT. SIMPLEX FEED (WEIR) BETWEEN BLRS. BTM PLATFORM 1. O.F TRANSFER STM DUPLEX P.S.H 19 - 7' above BASE LINE 2. O.F SERVICE STM SIMPLEX. No 19-31, 3' 5" S of E 9' above BASE LINE FIRE & BILGE STM DUPLEX 6' 6" 6' No 21-22 11' 5" S of E 9' above E FIRE & BILGE SAN. STM DUPLEX No 19-21 11' 5" S of E 9' above E BILGE & AUX COND. R. CIRC. STM DUPLEX No 24-28 11' 5" S of E 10' 3" S of E AUX. COND. R. CONDENSATE No 23-25 17' 5" S of E 9' above E SANITARY No 21-23 15' 3" S of E No 22-24 10' P of E 7' above E MAIN CIRC. 14" centrifugal STM. INDFT STM DRIVEN AIR PUMP (WEIR) No 23 12' 6" P of E 7' above E SIMPLEX					X	X	X		X				
				X				X			X	X	
	X	X				X							X
						X							X
	X	X				X			X				
					AUX X				FLAT TANK				
						X							X
						X			X				
					X				FLAT TANKS ATMOS.				

If the main engine is of forced lubricated type state No. of lubricating oil pumps, including spare pump and No. of oil coolers Drip lubrication

BILGE SUCTIONS
No. and size in each hold, deep tank or pump room 3" p&s in midship 3" p&s in dry cargo hold 1-3" to FP. store
No. and size connected to main bilge line in main engine room 2-3" (lp. & ls.) In aux. engine room none
In boiler room Not separate In tunnel 1-3" Size and position of direct bilge suctions in machinery spaces 5" dia. ss. 3" Size and position of emergency bilge suctions in machinery spaces 10" p.s. In coal burning ships is a flexible bilge hose and connection provided? Oil burning
Is the bilge or ballast system fitted with means for separating oily water on the overboard discharge side? No
Do the pumping arrangements comply with the Rules including special requirements for ships carrying petroleum in bulk, cargo or fuel? (Strike out words not applicable) Yes

SEAMLESS steel Ext. dia. 5" O.D. Thickness .375" How are flanges
al of main steam pipes welded Material of valves and fittings for superheated steam none
ny aux. steam pipes for essential services over 3" bore? Yes If so, what is the material? Seamless steel
ny saturated steam pipes fitted in the smoke boxes of cylindrical boilers? No
g test pressure on steam pipes—main 440 lb. p.s.i. aux. 300 lbs. per sq. inch.
SYSTEM
li boilers provided with two separate means of feed? Yes No. of pressure type feed heaters Two
f direct contact type feed heaters None No. of feed filters—Suction 2 Pressure None
f condensers—main 1 Aux. 2 Is feed system of closed type? No No. of air ejectors None
g surface of main condensers 3300 sq. ft. Material of condenser tubes Bronze
UTRIC GENERATOR ENGINES

Position of each	Prime Mover	Made by	Port and No. of Rpt. or Cert.	Output in kW.	Volts	Amps.
Platform deck) S	Steam 1 cyl.	Troy, Engberg		20	120	167
After part of) C	Steam 1 cyl.	Troy	400 RPM	20	120	167
R. 18' above E) P	Diesel	Hill	1200	25	125	200

Electric current used for essential services at sea? Yes If so, state the minimum No. and capacity of generators required in order that the ship may operate at sea 15 KW.

STEERING GEAR (State type and No. of steam engines, electric motors, hydraulic pumps and other particulars) Hele-Shaw Hydraulic pump driven by 15 KW electric motor with spare pump and motor in steering engine room ready for installation. Secondary gear of wire rope tackles and winch in good working condition.

COMPRESSORS AND RECEIVERS FOR ESSENTIAL SERVICES (State purpose, capacity, prime mover, position in ship and Port and No. of certificate) None

Has the Rule Requirements for fire extinguishing arrangements been complied with? Yes Brief description of arrangements Steam Smothering in E.R. 10 gall. Foam.

Has all the machinery been tried under full working conditions and found satisfactory? Yes Date and duration of full-power sea trials of main engines 14 April 6 hrs. Dock trial

Does this machinery installation contain any features of a novel or experimental nature? (State particulars) No

Is the installation a duplicate of a previous case? No Date of approval of plans for main boilers Jan. 21, 1957 Drafting Jan. 21, 1957 Pumping arrangements Oil fuel burning arrangements Separate oil fuel tanks Boiler feed system
The foregoing description of the main engine and installation is correct and approved for registration characteristics (Strike out words not applicable)

GENERAL REMARKS

State if the machinery has been constructed and/or installed under special survey in accordance with the Rules, approved plans and Secretary's letters. State quality of materials and workmanship and give recommendations for classification, including any special notation to be assigned. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.

The main engines were constructed under special survey of British Corporation B.C. 25.6.40 H.W.M. and were fitted in HMCS "Dauphin" afterwards named S.S. "CORTES" and have now been examined and installed under survey in the Steel Single Screw Tanker "ALPHA" intended for use in conjunction with reduction gearing, Main Engine 185 r.p.m., propeller shaft 105 ppm. but as the reduction gearing will not be completed until 8.57 the engine is directly coupled with the intermediate shaft through a short adapter shaft (see approved Drwg. No. 2045-15, stated of O.H. steel though no forging cert. procured) to the existing line and propeller shaft, on which a smaller cast iron propeller has been fitted. The main and auxiliary Diesel engines and Scotch Donkey boiler had been removed, the inner bottom altered, boiler cradles, built up foundations for main engine and thrust fitted in accordance with approved Drwgs. Nos. 2045 - 5 Rev. B. - 3 Rev. C, -4 Rev. C.

Wm. B. Conwin

Engineer Surveyor to Lloyd's Register of Ships

PARTICULARS OF IDENTIFICATION MARKS (Including Port of origin) of important Forgings and Castings. (Copies of certificates should be forwarded with report.)

RODS Conn. rods BC, T 333, T.W.M., 2.6.40 (LPF): BC T 195, LDM, 13.6.40 CF 1829 H 3.171 (HP): (MP) 5834, (LPA) 5834, BC, T 332, HWM, 25.3.40, CF 826

CRANK SHAFT

THRUST SHAFT Original
Original
INTERMEDIATE SHAFTS

SCREW AND TUBE SHAFTS Original

PROPELLERS

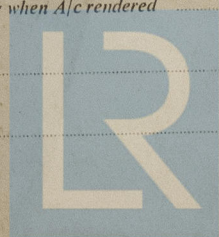
OTHER IMPORTANT ITEMS

Dates of examination of principal parts:—

Fitting of stern tube	Original	Fitting of propeller	27 March	Completion of sea connections	28 March	Alignment of crank shaft in main bearings	10 April
Engine chocks & bolts	Feb. 19	Alignment of straight shafting	Original	Testing of pumping arrangements	17 April		
Oil fuel lines	15 April	Boiler supports	Feb. 18	Steering machinery	10 April	Windlass	Original
Date of Committee	NEW YORK	AUG 21 1957		Special Survey Fee	Charged on Rpt. 9		
Decision	See Rpt 9. Nos. 9044						

Expenses

Date when A/c rendered



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