

8/2/43

B.O.T. ✓

OWNERS. ✓

1952.

Form LL. 4.C. Revised

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

SURVEY FOR FREEBOARD

" ESSO GENESEE

STEAMER, TANKER, SAILER, ~~SALES~~ **EMPIRE HARBOUR**

WITHOUT TIMBER DECK CARGO

Nationality **BRITISH**Builders' Name and No. of Ship **GRANGEMOUTH DRY DOCK LTD.**Port of Registry **GRANGEMOUTH.****NO 446.**Official Number **169098.**Owners **Ministry of War Transport.**Gross Tonnage **797.46.****F.T. EVERARD & SONS LTD 68 Fenchurch St^{OS} (Managers)**Date of Build **28.4.43**Port and Date of survey **Grangemouth. DURING CONSTRUCTION**Name of Surveyor **R. H. Hunter**Particulars of Classification **BS. X Bulk oil Carrier**Names of Sister Ships **Emp. Arthur, Gaurain, Damsel**Type of Superstructures **Poos & Forecastle.**

Trade of Ship —

Service Endorsement if any —

SUMMER FREEBOARD recommended amidships from centre of disc to top of deck line, (.....wood.....steel)

TROPICAL FRESH WATER LINE above centre of disc

6 1/2"

Corresponding Freeboard

0'-11 1/2"

FRESH WATER LINE " " "

3 1/2"

" "

0'-5"

TROPICAL LINE " " "

3"

" "

0'-8"

WINTER LINE below " " "

3"

" "

1'-2 1/2"

WINTER NORTH ATLANTIC LINE " " "

5"

" "

1'-4 1/2"

SUMMER TIMBER FREEBOARD recommended amidships from top of deck line

TROPICAL FRESH WATER Timber line above L.S.

Corresponding Freeboard

FRESH WATER " " " "

" "

TROPICAL " " " "

" "

WINTER " " below "

" "

WINTER NORTH ATLANTIC " " " "

" "

Number of years recommended for load line certificate

Issued 28-4-43
Expiry 27-4-48

D.L. Endorsement

The scantlings and protective arrangements being in accordance with the Load Line Rules it is submitted that the freeboards be assigned

Chief Surveyor

Passed at a meeting of the Committee of Management of the British Corporation Register of Shipping and Aircraft

on the

3rd March 1943

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Secretary

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COMPUTATION OF FREEBOARD

Length on summer load line 190'-0" Moulded Breadth 30'-6" Moulded Depth 13'-11 7/8" Depth of Keel 48
 Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth 1387 Tons
 Co-efficient of fineness for use with tables $\frac{\Delta \times 35}{L \times B \times D \times .85} = 7047$
 Displacement and tons per inch immersion in salt water at summer load line 1556 @ 11.40 T.P.I.
 Moulded depth 13.990 Deduction for Fresh Water $\frac{\Delta}{40T} = 3\frac{1}{2}$ inches
 Stringer Plate .40 .033 Round of Beam Correction
 Sheathing on exposed deck T $\left(\frac{L-S}{L}\right)$ - Ships Round of Beam 7.5 inches
 Rise of floor (in sailers) - Standard Round of Beam $\frac{B \times 12}{50} = 7.32$
 Depth for Freeboard (D) 14.023 Difference .18
 Table Depth 1/15. 12.667 Restricted to
 Depth Correction 1/130 x 1.356 Correction $\frac{\text{Difference}}{4} \times \left(1 - \frac{S_1}{L}\right) = .045 \times 2948$
 If restricted by superstructures = 1.987 (1.987) = .01 OFF.

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)
Poop	67'-8 1/4"	-	7'-6"	65'-81"		67'-06"
Raised Quarter Deck	-	-	-	-	-	-
Bridge	-	F	-	-	-	-
	-	A	-	-	-	-
Forecastle	20'-8 1/4"	-	0'-10"	20'-69"		20'-69"
Trunk Aft	-	-	-	-	-	-
„ Forward	101'-7 1/2"	-	3'-6"	3'-5 x 14.25 / 6 x 30.5		27'-70"
Tonnage Opening Aft	-	-	-	-	-	-
„ „ Forward	-	-	-	-	-	-
Totals				86'-50"		115'-45"

Standard Height of Superstructure 6'-0"
 „ „ R.Q.D. -
 Percentage covered S/L = 45.525 %
 „ „ E/L = 60.76 %
 „ from Table line A, B, (corrected for absence of forecastle if required) -
 Percentage from Table by interpolation for Bridge less than 2L if required = -
 Deduction = 52.836
 Percentage from Table for Tankers (or Timber ships) = 7
 Deduction = 25 x 52.836 = 13.21 OFF

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
A.P.	29 1/16	29.0	29.06	1	29.06
1/3 L from A.P.	10 7/16	12.91	10.44	4	41.76
1/3 L from A.P.	-	3.19	-	2	-
Amidships	-	-	-	4	-
1/3 L from F.P.	-	6.38	-	2	-
1/3 L „ „	23 3/8	25.81	23.38	4	93.52
F.P.	57 1/2	58.0	57.50	1	57.50
				18	221.84
Effective Mean Sheer					12.324
Standard „ „ .05L + 5					14.500
Difference					2.176

Mean Actual sheer aft = LESS THAN 1
 „ Standard „ „
 Mean Actual sheer forward = „ „ „
 „ Standard „ „
 Length of enclosed superstructure forward of amidships = -
 Length of Ship
 Length of enclosed superstructure aft of amidships = -
 Length of Ship
 Sheer Correction = Difference X $\left(75 - \frac{S}{2L}\right) = 2.176 \times 52.24 = 1.14$
 If limited on account of midship superstructure = -
 „ to maximum allowance of 1 1/2 ins. per 100 ft. = -

TABULAR FREEBOARD corrected for flush deck if required = 21.5
 Correction for co-efficient = 1.3847 / 1.36 x = 21.89

DRAUGHTS AND SEASONAL CORRECTIONS

	+	-
Depth correction	1.98	-
Deduction for superstructures	-	13.21
Sheer correction	1.14	-
Round of Beam correction	-	.01
Correction for thickness of deck amidships	-	-
Other corrections, scantlings, etc.	3.12	13.22 - 10.10

Sailor, Tanker, Steamer Timber
 Depth to Freeboard Deck in feet 14.023
 Summer Freeboard in feet 9.58
 Moulded Draught (d) 13.065 (d1)
 Addition for Keel .040
 Extreme draught 13'-1 3/16" 13'-1 05"
 Deduction for Tropical and addition for Winter freeboard d/4 = 3.266 ins.
 Addition for Winter North Atlantic (if required) 5.166 ins.
 Deduction for Tropical Freeboard $\frac{d}{4}$ 1 ins.
 Addition for Winter „ „ $\frac{d}{3}$ 1 ins.
 N.A. Timber Freeboard (if required) = - ins.

Summer Freeboard in Inches $S = 0'-11\frac{1}{2}" = 11.79$
 Additional allowance for superstructures on Timber carrying ships = -
 Summer Timber Freeboard in inches = -

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

SURVEY FOR FREEBOARD

CONDITIONS OF ASSIGNMENT

SHIPS NAME *EMPIRE HARBOUR.*OFFICIAL NUMBER *169098*Nationality and Port of Registry *BRITISH**GRANGE MARSH*

PARTICULARS OF SUPERSTRUCTURES, TRUNKS, CASINGS, DECKHOUSES

	Coaming	Plating	Stiffeners	Spacing	End Attachments	No. and size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	-	<i>30</i>	<i>7" x 3" x 3800</i>	<i>30"</i>	<i>8/16</i>	-	-	<i>7'6"</i>
R.Q.D. "								
Bridge Aft Bulkhead								
" Forward "								
Forecastle Bulkhead	-	<i>28</i>	<i>3" x 2 1/2" x 2800</i>	<i>27"</i>	-	<i>2 @ 46" x 20"</i>	<i>15"</i>	<i>6'10"</i>
Trunk, Aft	}							
" Forward		<i>28</i>						
Exposed Machinery Casings on Freeboard or R.Q. Decks								
Exposed Machinery Casings on superstructure decks								
Machinery Casings within Super- structures not fitted with Cl. 1 closing appliances								
Deckhouses on flush deck ships								

PARTICULARS OF CLOSING APPLIANCES (state if capable of being manipulated from both sides)

Poop Bulkhead	<i>No openings</i>
R.Q.D. "	-
Bridge Aft Bulkhead	-
" Forward "	-
Forecastle Bulkhead	<i>12" T. Hinged Steel Door.</i>
Exposed Machinery Casings on Freeboard or R.Q. decks	-
Exposed Machinery Casings on superstructure decks	-
Machinery Casings within super- structures not fitted with Cl. 1 Closing Appliances	-
Deck houses on Flush Deck ships	-

PARTICULARS OF FREEING ARRANGEMENTS

	Length of Bulwark	Height of Bulwark	No. and size of Freeing Ports each side	Area each side	Rule Area
After Well					
Forward Well					

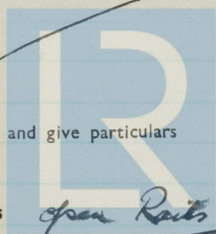
State fore and aft position and height above
deck to bottom of port, for each port

After Well

Forward Well

State whether freeing ports are fitted with shutters, bars or rails, and give particulars

Give particulars of freeing port area, etc., on superstructure decks



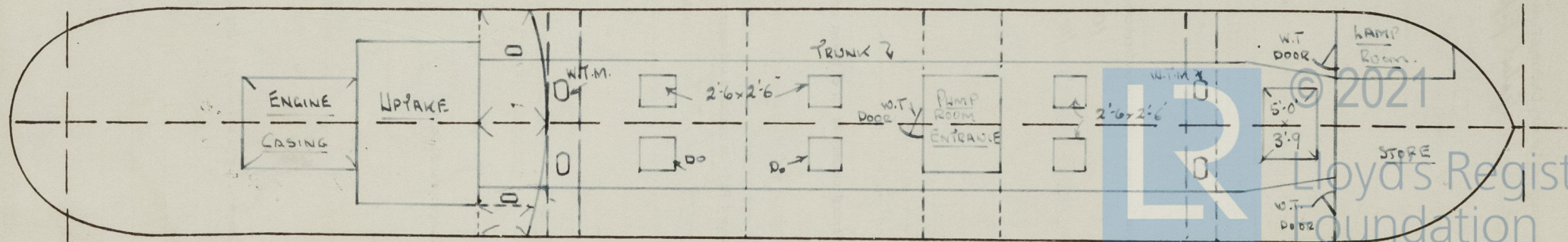
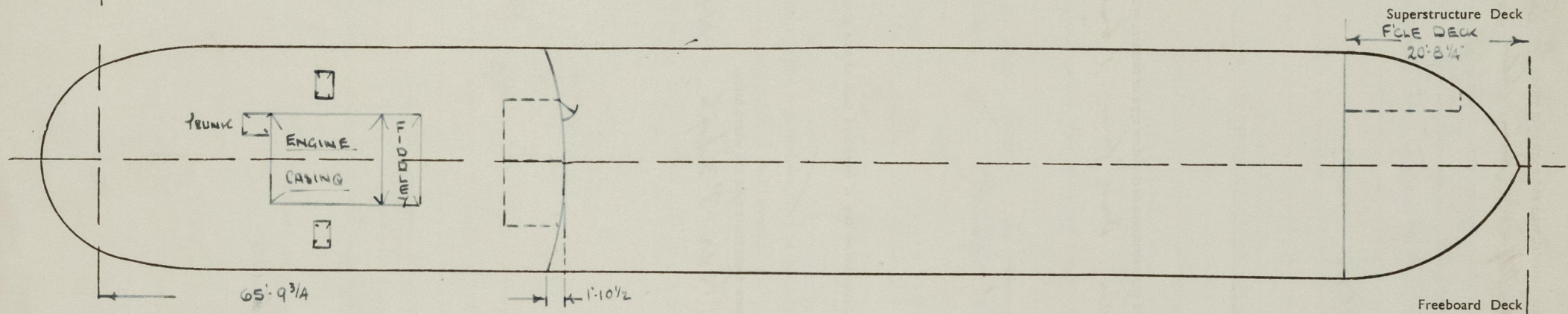
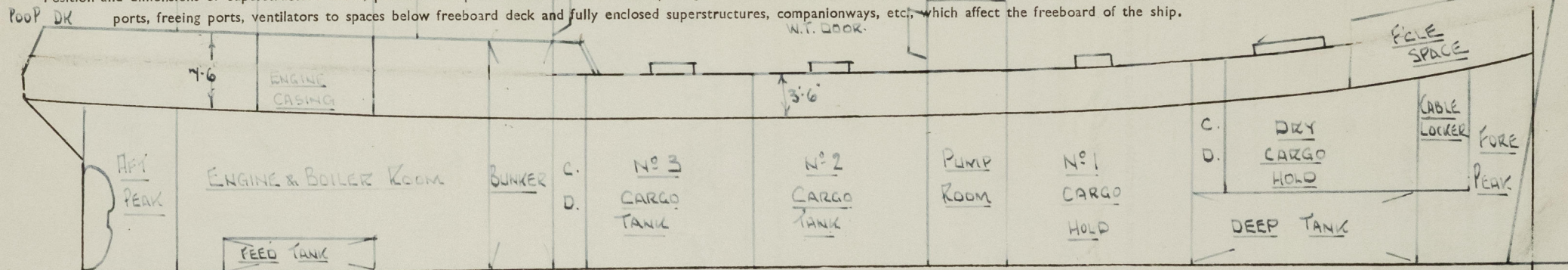
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Boat Dk.

FIDDERY CASING

Position and dimensions of superstructure decks, position of superstructure bulkheads and openings, extent and thickness of wood sheathing in wells, position of cargo and coaling hatchways, gangway, cargo and coaling ports, freeing ports, ventilators to spaces below freeboard deck and fully enclosed superstructures, companionways, etc., which affect the freeboard of the ship.



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Are lashings provided in accordance with rule requirements? —

Are battens and wedges efficient and in good condition?



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Give full particulars of the following :—

Fiddle, Funnel and Vent Coamings, Engine Room skylight and other openings in Machinery Casing tops and their means of closing (state height of coamings, type of fiddle covers, and if these are permanently attached in their proper positions)

Eng. Room Skylight: 12' Coaming. Hinged Steel
Covers operated by Quadrants.

Flush Bunker Scuttles on freeboard and superstructure decks (state material, type of joints, etc., and if secured by hinge or permanent chain attachment)

Companionways on freeboard and superstructure decks (state material, height of doorway sills, type of doors, and if these can be closed and secured from both sides)

N.T. Hinged Steel Doors to pump Room
& Bridge Space aft. Operate both sides.

Ventilators in exposed positions on freeboard, raised quarter and superstructure decks to spaces below freeboard decks and fully enclosed superstructures enclosed by Class 1 appliances (state height of steel coamings, pitch of rivets in deck connection, type of closing arrangements)

Vents to Acc. in Bridge Deck Space 6" dia.
18" x 30 coaming welded to deck.

Airpipes in exposed positions on freeboard, raised quarter and superstructure decks (state height to opening and if satisfactory closing arrangements are provided)

F.R.	18"	18"	Wood Plug
A.P.	"	"	" "
Offenders.	48"	24"	" "

Air pipes to cargo tanks in Common Main
with relief Valve and led to mast.



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Scuppers and Sanitary Discharge Pipes (state material, type and number of valves)

Sanitary Discharges

Galed pipes till Brass down Valve.

Side Scuttles to spaces below freeboard and superstructure decks (state type or pattern, and if permanent or portable deadlights are supplied)

10' dia Brass frame & brass hinged deadlights
10 " " " " " "

Vertical distance of sill of lowest side scuttle below top of freeboard deck at side amidships

Guard Rails on freeboard and superstructure decks (state type and where fitted)

3 Rds 3'3 hgt - upper Dr Trunk & Fiste

Gangways and Lifelines

Gangway, Cargo and Coaling Ports in sides of ship



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SUPPLEMENTARY REQUIREMENTS FOR STEAMER CARRYING TIMBER DECK CARGOES

Do Superstructure and Machinery Casings comply with rules?

Is provision made for protection of steering gear?

Is emergency steering gear provided?

Are efficient sockets and eyes for lashings provided and properly spaced?

State particulars of longitudinal subdivision in double bottom

State particulars of Bulwarks and Rails

Particulars of any Special Features in the construction of the Ship

Endorsement at first survey and at surveys for Renewal of Certificate:—

The fittings and appliances are in accordance with the particulars shown in the form and are in good condition



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