

25/6/42.

Form LL. 4.C. Revised

LRH/0 BOT. ✓
LRH/0 OWNERS ✓

1911

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

"FLYING TEMPEST" SURVEY FOR FREEBOARD

STEAMER, ~~TANKER, SAUER~~: EX. EMPIRE IVY (TUG) ~~WITHOUT~~ TIMBER DECK CARGO

Nationality BRITISH. Builders' Name and No. of Ship GOOLE SHIPBUILDING & REPAIRING CO. LTD. NO 373.

Port of Registry GOOLE. REPAIRING CO. LTD. NO 373.

Official Number 168786 MGRS OWNERS THE OVERSEAS TOWAGE & SALVAGE CO. LTD

Gross Tonnage 262.22 OWNERS M.O.W.T.

Date of Build 742. Port and Date of survey GOOLE DURING CONSTRUCTION.

Particulars of Classification B5 (TOWING PURPOSES) Names of Sister Ships SS EMPIRE BRACKEN

Type of Superstructures BRACKEN BOAT DECK

Trade of Ship TOWING PURPOSES

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	<u>5 1/2"</u>	Corresponding Freeboard	<u>0'-10"</u>
FRESH WATER LINE " " "	<u>2 1/2"</u>	" "	<u>1'-1"</u>
TROPICAL LINE " " "	<u>3"</u>	" "	<u>1'-0 1/2"</u>
WINTER LINE below " "	<u>3"</u>	" "	<u>1'-6 1/2"</u>
WINTER NORTH ATLANTIC LINE " " "	<u>5"</u>	" "	<u>1'-8 1/2"</u>

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

Issue 2/7/42

Expiry 1/7/49

Shipmasters 123.

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

[Signature]
Chief Surveyor

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

on the 15th July 1942

[Signature]
Secretary

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Similar to SS Composite Machine

COMPUTATION OF FREEBOARD

Length on summer load line **107'-0"** Moulded Breadth **26'-0"** Moulded Depth **13'-6"** Depth of Keel **7"**
 Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth **512** Tons
 Co-efficient of fineness for use with tables $\frac{\Delta \times 35}{L \times B \times D \times .85} = .5614$ (**.68 MIN**)
 Displacement and tons per inch immersion in salt water at summer load line **568 TONS AT 5.19 T.P.1.**
 Moulded depth **13.500** Deduction for Fresh Water $\frac{\Delta}{40T} = 2.736 = 2\frac{1}{2}$ inches
 Stringer Plate **37** **.0341** Round of Beam Correction
 Sheathing on exposed deck T $(\frac{L-S}{L})$ **-** Ships Round of Beam **7** inches
 Rise of floor (in sailers) **-** Standard Round of Beam $\frac{B \times 12}{50} = 6.24$
 Depth for Freeboard (D) **13.5341** Difference **.76**
 Table Depth **L/15 = 7.133** Restricted to
 Depth Correction **L/130 x 6.398 = 5.266 ON** Correction $\frac{\text{Difference}}{4} \times (1 - \frac{E}{L}) = .19$ OFF
 If restricted by superstructures **6.398 = 5.266 ON**

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)	
Poop							Standard Height of Superstructure
Raised Quarter Deck							" " R.Q.D.
Bridge	F	A					Percentage covered S/L =
							" " E/L =
Forecastle							" from Table line A, B, (corrected for absence of forecastle if required)
Trunk Aft							Percentage from Table by interpolation for Bridge less than .2L if required =
" Forward							Deduction = NIL
Tonnage Opening Aft							Percentage from Table for Tankers (or Timber ships) =
" " Forward							Deduction =
Totals							

Measured from top of raised keel.

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product	
A.P.	44	20.7	44	1	44	Mean Actual sheer aft = <i>more than 1</i>
1/3 L from A.P.	24	9.21	24	4	96	Mean Actual sheer forward =
2/3 L from A.P.	9	2.28	9	2	18	" Standard " "
Amidships	-	-	-	4	-	Length of enclosed superstructure forward of amidships
1/3 L from F.P.	4.5	4.55	4.5	2	9	Length of Ship
2/3 L " "	19	18.42	19	4	76	Length of enclosed superstructure aft of amidships
F.P.	42	41.4	42	1	42	Length of Ship
				18	285	
Effective Mean Sheer					15.833	Sheer Correction = Difference X (.75 - $\frac{S}{L}$) = $5.483 \times .75 = 4.112$
Standard " " .05L + 5					16.350	If limited on account of midship superstructure =
Difference					5.483	" to maximum allowance of 1 1/2 ins. per 100 ft. = 1.6 off

TABULAR FREEBOARD corrected for flush deck if required = **12.30**

Correction for co-efficient = **1** = **1** DRAUGHTS AND SEASONAL CORRECTIONS

	+	-		
Depth correction	7			Sailor/Junker Steamer
Deduction for superstructures	5.26			timber
Sheer correction		1.60		
Round of Beam correction				
Correction for thickness of deck amidships		.19		
Other corrections, scantlings, etc.				
	5.26	1.79	3.488	
Summer Freeboard in Inches	(81'-3 1/2")		15.788	Deduction for Tropical and addition for Winter freeboard d/4 3.059 ins.
Additional allowance for superstructures on Timber carrying ships				Addition for Winter North Atlantic (if required) 5.059 ins.
Summer Timber Freeboard in inches				Deduction for Tropical Timber Freeboard $\frac{d}{4}$ = ins.
				Addition for Winter " $\frac{d}{3}$ = ins.
				" " N.A. Timber Freeboard (if required) = ins.

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THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

SURVEY FOR FREEBOARD

CONDITIONS OF ASSIGNMENT

SHIPS NAME "EMPIRE IVY" OFFICIAL NUMBER 168786
 Nationality and Port of Registry BRITISH. GODLE.

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	—	—	—	—	—	—	—	—
R.Q.D. "	—	—	—	—	—	—	—	—
Bridge Aft Bulkhead	—	—	—	—	—	—	—	—
" Forward "	—	.25"	3" x 2 1/2" x 28"	24"	—	NONE	—	—
Forecastle Bulkhead	—	—	—	—	—	—	—	—
Trunk, Aft	—	—	—	—	—	—	—	—
" Forward	—	—	—	—	—	—	—	—
Exposed Machinery Casings on Freeboard or R.Q. Decks	—	.25"	3" x 3" x 30"	24"	—	1-3'-0" x 2'-0"	24"	5'-6"
Exposed Machinery Casings on superstructure decks	—	—	—	—	—	—	—	—
Machinery Casings within Superstructures not fitted with Cl. 1 closing appliances	—	—	—	—	—	—	—	—
Deckhouses on flush deck ships	.3	.25"	6" x 3" x 80"	24"	BKLS.	4-4'-6" x 2'-0"	24"	7'-0"

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

Poop Bulkhead	NONE
R.Q.D. "	NONE
Bridge Aft Bulkhead	—
" Forward "	—
Forecastle Bulkhead	NONE
Exposed Machinery Casings on Freeboard or R.Q. decks	Hinged steel doors operated both sides.
Exposed Machinery Casings on superstructure decks	NONE
Machinery Casings within superstructures not fitted with Cl. 1 Closing Appliances	NONE
Deck houses on Flush Deck ships	Hinged steel doors operated both sides.

PARTICULARS OF FREEING ARRANGEMENTS

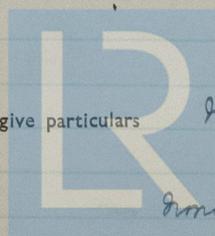
	Length of Bulwark	Height of Bulwark	No. and size of Freeing Ports each side	Area each side	Rule Area
After Well	107'-0"	1-28'-0"	1-43'-0", 1-63'-0", 1-77'-0"	14 sq	
Forward Well			4-7'-0" x 6"		

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

} After Well
8" sill
} 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

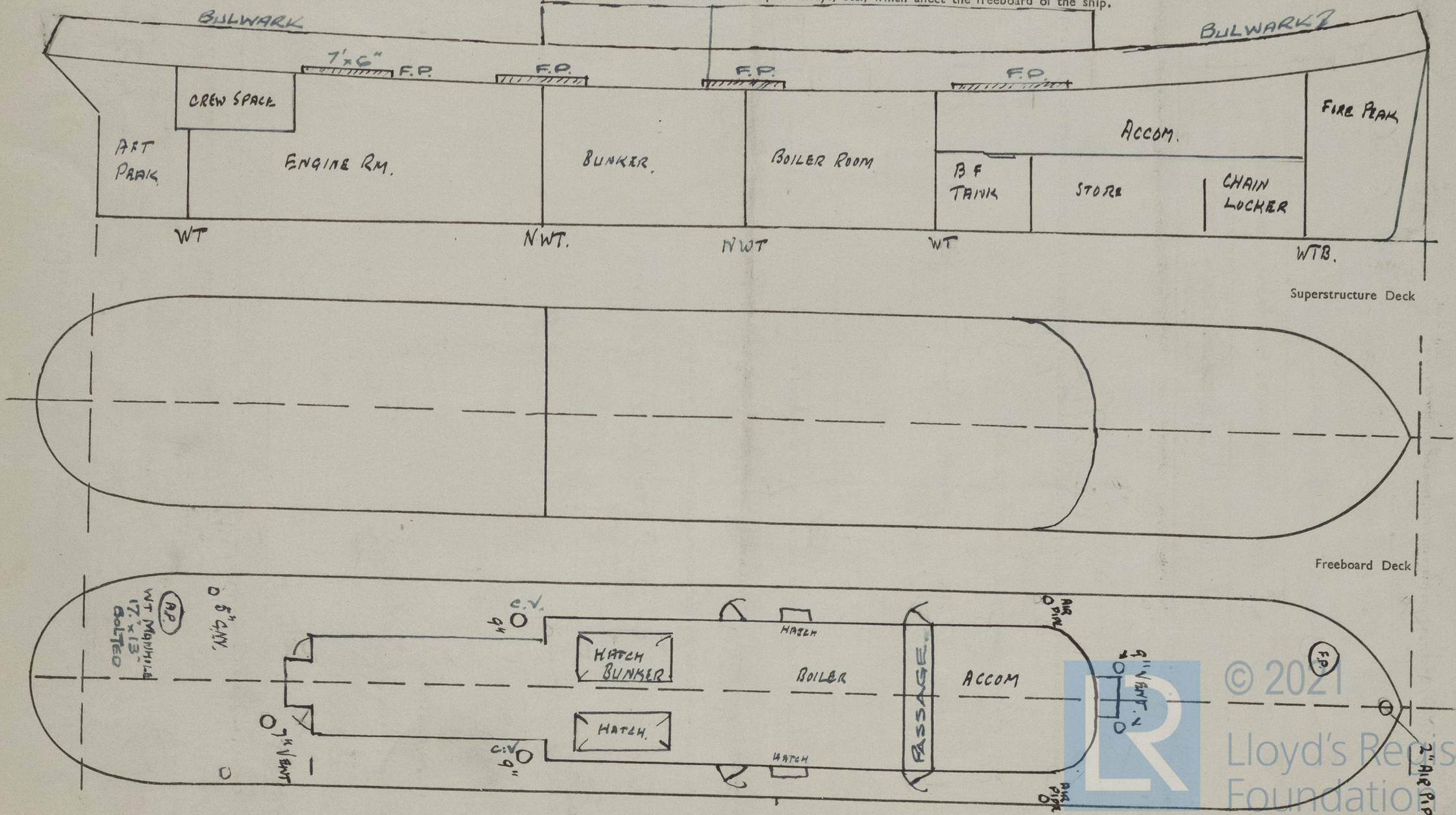


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Position and dimensions of superstructure decks, position of superstructure bulkheads and openings, extent and thickness of wood sheathing in wells, position of cargo and coaling hatchways, gangway, cargo and coaling ports, freeing ports, ventilators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



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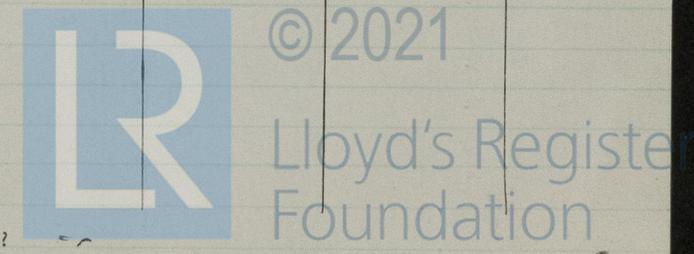
PARTICULARS OF ALL HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Number and description of Hatchway from forward			
Dimensions of Hatchway		CROSS BUNKER 8'-6" x 5'-3"	SIDE POCKETS. 3'-0" x 1'-3"
COAMINGS	Height above steel deck wood	4'-0"	2'-0"
	Thickness sides ends	.38"	3/8"
	Stiffeners	—	—
	Brackets or Stays	—	—
HATCH BEAMS	Number	—	—
	Spacing	—	—
	Scantling and Sketch	—	—
Bearing Surface and thickness of carriers or sockets		—	—
FORE AND AFTERS	Number	—	—
	Spacing	—	—
	Unsupported lengths	—	—
	Scantling and Sketch	—	—
Bearing Surface and thickness of carriers or sockets		—	—
HATCH COVERS	Material	WOOD	WOOD
	Thickness	3"	3"
	How Fitted	THWARTSHIPS.	F 9 A.
	Bearing Surface	3"	3"
Spacing of Cleats		24"	24
Number of Tarpaulins		TWO.	TWO.

*Plated over
200 C 11 (contd)
dated 10.59*

Are tarpaulins in good condition and in accordance with rule requirements? **YES.**
 Are lashings provided in accordance with rule requirements? **YES.**

Are wood fore and afters steel shod at all bearing surfaces? **YES**
 Are battens and wedges efficient and in good condition? **YES**



Give full particulars of the following:—

Fiddley, 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 fiddley covers, and if these are permanently attached in their proper positions)

FIDDLEY STORM COVERS
 VENTILATORS 24" DIA. WOOD COVERS & CANVAS.
 FUNNEL CRAVAT.

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

NONE

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)

24" sills Hinged steel doors operable 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)

No.	DESCRIPTION	DIA	COAM.	PITCH	CLOSING
2	COWL.	9"	2'-10"	3 INCHES.	WOOD PLUGS + canvas cover.
1	"	7"	2'-10"	" "	" " " "
2	"	6"	2'-10"	" "	" " " "
3	MUSHROOM	5"	-	"	SCREW DOWN.

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

	DIA.	COAM.	CLOSING
FORE PEAK	2"	2'-6"	WOOD PLUGS
F.W. TANK.	3"	2'-6"	" "
AFT PEAK.	2"	2'-6"	" "



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

1-1/2" & 1-1/4" STORM VALVES FROM BASIN & GALLEY SCUPPER.

Gunmetal studs & clack valves.

2-4" SOIL PIPES CONTROLLED FROM DECK
1-1/2" STORM VALVE FROM BASIN.

STOOD. 2-4" & 1-1/2" STORM VALVES FROM BASIN.

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

From below freeboard deck ON SHELL.

ER & ACCOM. 9" Dia. brass frames & hinged deadlights. (CASING SIDES)

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)

BOAT DECK AT END STANCHIONS & TWO RAILS.

Gangways and Lifelines

RAILS ON CASING SIDE.



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Gangway, Cargo and Coaling Ports in sides of ship

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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