

25/6/42.

Form LL. 4.C. Revised

LRH 10 Bot. ✓
LRH 10 Owners ✓

1911

THE BRITISH CORPORATION REGISTER OF
SHIPPING AND AIRCRAFT
"FLYING TEMPEST" SURVEY FOR FREEBOARD

STEAMER, ~~TANKER~~, ~~SAILER~~: 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. THE OVERSEAS TOWAGE & SALVAGE CO. LTD
Official Number 168786 M.O.W.T.
Gross Tonnage 263.22
Date of Build 742. Port and Date of survey GOOLE DURING CONSTRUCTION.
Name of Surveyor Robt. H. Greig
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

5 1/2"

Corresponding Freeboard

1'-3 1/2"

FRESH WATER LINE " " "

2 1/2"

" "

0'-10"

TROPICAL LINE " " "

3"

" "

1'-1"

WINTER LINE below " "

3"

" "

1'-0 1/2"

WINTER NORTH ATLANTIC LINE " " "

5"

" "

1'-6 1/2"

1'-8 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

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

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

on the

15 July 1942

Chief Surveyor

Secretary



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010545-010553-0054

Similar to SS "Compass" Bremen.

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.I.**
Moulded depth **13.500** Deduction for Fresh Water $\frac{\Delta}{40 T} = 2.736 = 2\frac{1}{2}$ 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 $\frac{\text{Difference}}{4} \times (1 - \frac{F}{L}) = .19 \text{ OFF}$
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					Percentage covered S/L =
		A					" " E/L =
Forecastle							" from Table line A, B, (corrected for
Trunk Aft							absence of forecastle if required)
" Forward							Percentage from Table by interpolation for Bridge
Tonnage Opening Aft							less than .2L if required =
" " Forward							Deduction = NIL
Totals							Percentage from Table for Tankers (or Timber ships) =
							Deduction =

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

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

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

	+	-	
Depth correction	7		Sailor's Tanka Steamer
Deduction for superstructures	5.26		timber
Sheer correction		1.60	Depth to Freeboard Deck in feet 13.534
Round of Beam correction		.19	Summer Freeboard in feet 1.292
Correction for thickness of deck amidships			Moulded Draught (d) 12.239 (d1)
Other corrections, scantlings, etc.			Addition for Keel .583
	5.26	1.79	Extreme draught 12'-9 7/8" 12.822

Summer Freeboard in Inches **(51'-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 = **1** Addition for Winter North Atlantic (if required) **5.059** ins.
Summer Timber Freeboard in inches = **1** Deduction for Tropical Timber Freeboard $\frac{d}{d} =$ ins.
Addition for Winter " " $\frac{d}{3} =$ ins.
" " N.A. Timber Freeboard (if required) = **1** ins.

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.

GOBLE.

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"x2 1/2"x28"	24"	—	NONE	—	—
Forecastle Bulkhead	—	—	—	—	—	—	—	—
Trunk, Aft	—	—	—	—	—	—	—	—
" Forward	—	—	—	—	—	—	—	—
Exposed Machinery Casings on Freeboard or R.Q. Decks	—	25"	3"x3"x30"	24"	—	1-3'-0"x2'-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"x3"x88"	24"	BKLS.	4-4'-6"x2'-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"	4-7'-0"x6"	14 sq	
Forward Well					

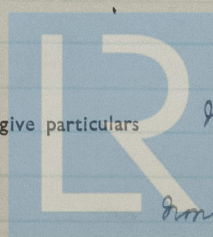
State fore and aft position and height above deck to bottom of port, for each port

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

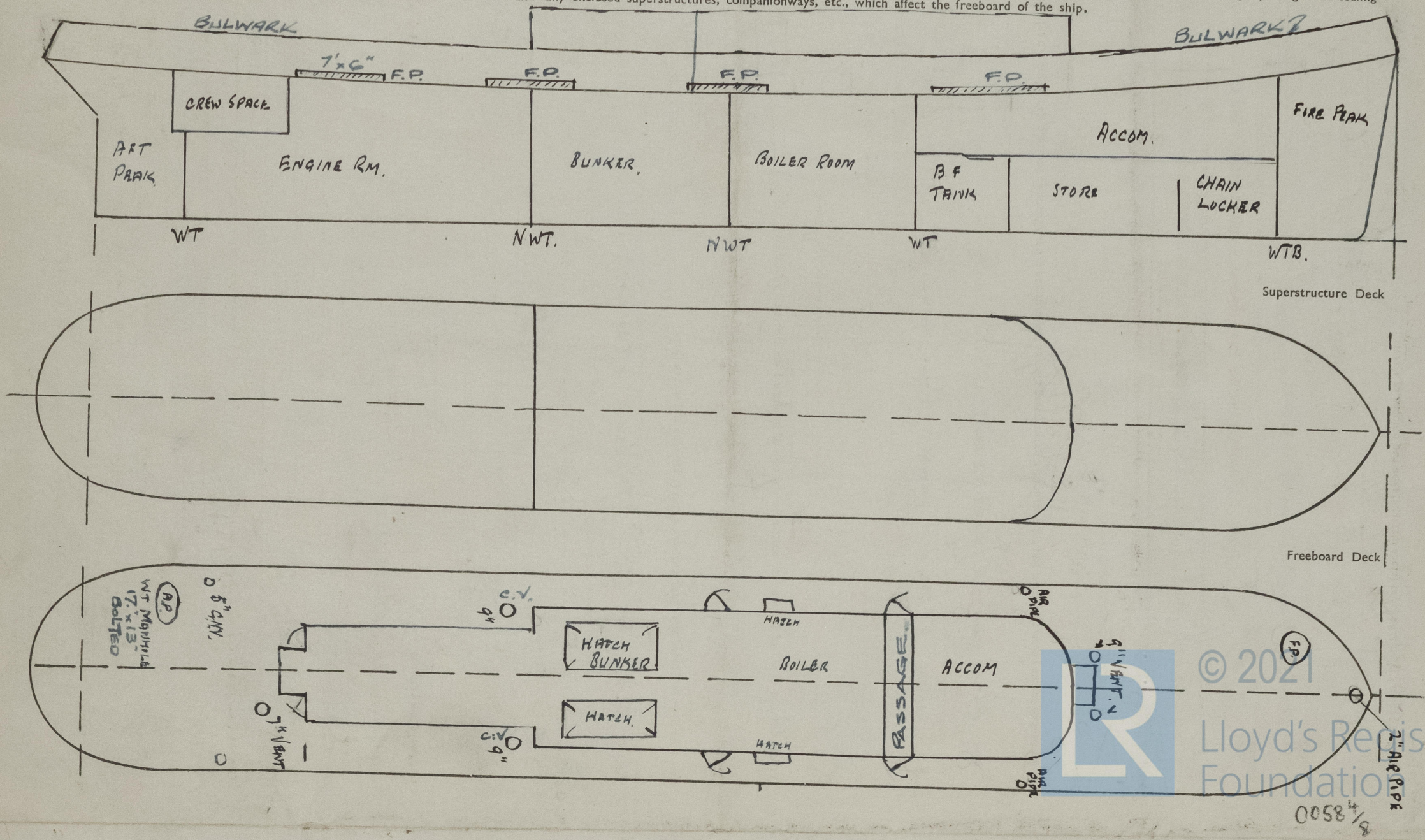


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Position and dimensions of superstructure decks, position of superstructure bulkheads and openings, extent and thickness of wood sheathing in wells, position of cargo and coaling hatchways, gangway, cargo and coaling ports, freeing ports, ventilators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



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.	Work 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. 2. 3. 4. 5. 6. 7. 8. 9. 10.

Gunmetal studs & clack valves.

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

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

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

None 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 AFT 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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