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1940

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

"ARGOS HILL" SURVEY FOR FREEBOARD
EX

STEAMER, TANKER, SAILED: EMPIRE TORRENT WITHOUT TIMBER DECK CARGO
 Nationality BRITISH Builders' Name and No. of Ship HARLAND & WOLFF LTD 1168 G.
 Port of Registry GLASGOW GOVAN.
 Official Number 168743. Owners H of W. F. ERNLS SHIPPING CO LTD. 101 LEADENHALL STREET LONDON EC3
 Grps Tonnage 7075.71 (MAR.) THE COUNTIES SHIP MANAGEMENT Co., LTD. LONDON.
 Date of Build 12 / 1942 Port and Date of survey GLASGOW. DURING CONSTRUCTION
 Name of Surveyor J. F. EDGAR.
 Particulars of Classification B.S. * (WITH FREEBOARD) Names of Sister Ships "EMPIRE NERISSA."

Type of Superstructures CLOSED SHELTER DECK WITH FORECASTLE

Trade of Ship

Service Endorsement if any

SUMMER FREEBOARD recommended amidships from centre of disc to top of deck line, (..... wood steel)			10'-8 1/2"
TROPICAL FRESH WATER LINE above centre of disc	13 1/2"	Corresponding Freeboard	9'-7"
FRESH WATER LINE " " "	7"	" "	10'-1 1/2"
TROPICAL LINE " " "	6 1/2"	" "	10'-2"
WINTER LINE below " "	6 1/2"	" "	11'-3"
WINTER NORTH ATLANTIC LINE " " "	—	" "	/

SUMMER TIMBER FREEBOARD recommended amidships from top of deck line			Corresponding Freeboard
TROPICAL FRESH WATER Timber line above L.S.			
FRESH WATER " " " "		" "	
TROPICAL " " " "		" "	
WINTER " " below "		" "	
WINTER NORTH ATLANTIC " " " "		" "	

Number of years recommended for load line certificate 5 YRS.

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 11th November 1942.



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COMPUTATION OF FREEBOARD

Length on summer load line **425.68** Moulded Breadth **56'-0"** Moulded Depth **36'-10"** Depth of Keel **1 1/2"**
 Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth **16400** Tons
 Co-efficient of fineness for use with tables $\frac{\Delta \times 35}{L \times B \times D \times .85} = .769$
 Displacement and tons per inch immersion in salt water at summer load line **13395** **48.00**
 Moulded depth **36.833** Deduction for Fresh Water $\frac{\Delta}{40T} = 7$ inches
 Stringer Plate **.70"** Round of Beam Correction **.058**
 Sheathing on exposed deck T $(\frac{L-S}{L})$ Ships Round of Beam **14.00** inches
 Rise of floor (in sailers) Standard Round of Beam $\frac{B \times 12}{50} = 13.44$
 Depth for Freeboard (D) **36.891** Difference **0.56**
 Table Depth $\frac{L}{15} = 28.379$ Restricted to
 Depth Correction **3** Correction $\frac{\text{Difference}}{4} \times (1 - \frac{E}{L}) = .14 \times .918 = .13 \text{ OFF}$
 If restricted by superstructures

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)
Poop						
Raised Quarter Deck						
Bridge		F				
		A				
Forecastle	34.6 1/2		7'-6"	34.54		34.54
Trunk Aft						
" Forward						
Tonnage Opening Aft						
" " Forward						
Totals				34.54		34.54

Standard Height of Superstructure **7'-6"**
 " " R.Q.D.
 Percentage covered S/L = **8.115%**
 " " E/L = **8.115%**
 " from Table line A, B, (corrected for absence of forecastle if required) **4.058%**
 Percentage from Table by interpolation for Bridge less than .2L if required =
 Deduction = **.04058 x 42 = 1.70 OFF.**
 Percentage from Table for Tankers (or Timber ships) =
 Deduction =

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
A.P.	54.00	52.57	54.00	1	54.00
1/8 L from A.P.	24.18	23.39	24.18	4	96.72
1/8 L from A.P.	6.25	5.78	6.25	2	12.50
Amidships	-	-	-	4	-
1/8 L from F.P.	12.00	11.57	12.00	2	24.00
1/8 L " "	47.72	46.79	47.72	4	190.88
F.P.	108.00	105.14	108.00	1	108.00
				18	486.10
Effective Mean Sheer	=				27.006
Standard " " .05L + 5	=				26.280
Difference					.726

Mean Actual sheer aft = **MORE THAN 1.**
 " Standard " "
 Mean Actual sheer forward = **MORE THAN 1.**
 " Standard " "
 Length of enclosed superstructure forward of amidships =
 Length of Ship
 Length of enclosed superstructure aft of amidships =
 Length of Ship
 Sheer Correction = Difference $\times (.75 - \frac{S}{2L}) = .726 \times .709 = .515 \text{ OFF}$
 If limited on account of midship superstructure = **NIL.**
 " to maximum allowance of 1 1/2 ins. per 100 ft. =

TABULAR FREEBOARD corrected for flush deck if required = **79.56 + 1.21 = 80.77**

Correction for co-efficient = **10.66**

= **86.10** DRAUGHTS AND SEASONAL CORRECTIONS

	+	-		Sailer, Tanker, Steamer	Timber
Depth correction	25.54				
Deduction for superstructures		1.70		Depth to Freeboard Deck in feet 36.891	
Sheer correction				Summer Freeboard in feet 10.708	
Round of Beam correction		0.13		Moulded Draught (d) 26.183	(d1)
Correction for thickness of deck amidships				Addition for Keel .130	
Other corrections, scantlings, etc.	18.83			Extreme draught 26.3 3/4	26.313
	44.37	1.83	42.54	Deduction for Tropical and addition for Winter freeboard d/4 6.546	
Summer Freeboard in inches 10'-8 1/2"			128.64	Addition for Winter North Atlantic (if required)	ins.
Additional allowance for superstructures on Timber carrying ships				Deduction for Tropical Timber Freeboard $\frac{d1}{d}$	ins.
Summer Timber Freeboard in inches				Addition for Winter " $\frac{d1}{3}$	ins.
				" " N.A. Timber Freeboard (if required)	ins.

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

SURVEY FOR FREEBOARD

STEAMER, TANKER, SAILER: "EMPIRE TORRENT" ~~WITH~~ WITHOUT TIMBER DECK CARGO

Nationality Builders' Name and No. of Ship
 Port of Registry
 Official Number Owners
 Gross Tonnage
 Date of Build Port and Date of survey
Name of Surveyor
 Particulars of Classification Names of Sister Ships

Type of Superstructures

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	Corresponding Freeboard
FRESH WATER LINE " " "	" "
TROPICAL LINE " " "	" "
WINTER LINE below " "	" "
WINTER NORTH ATLANTIC LINE " " "	" "

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

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



THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

SURVEY FOR FREEBOARD CONDITIONS OF ASSIGNMENT

SKOTIA
"SCOTIA"

SHIPS NAME EMPIRE TORRENT

OFFICIAL NUMBER 168743.

Nationality and Port of Registry BRITISH GREEK, GLASGOW ANDROS

PARTICULARS OF SUPERSTRUCTURES, TRUNKS, CASINGS, DECKHOUSES

Particulars	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 "								
Forecastle Bulkhead		VERT. PLATING .30	4"x2 1/2"x250A	21"	NONE	1 at 5'3"x4'1"	18"	4'-6"
Trunk, Aft								
" Forward								
Exposed Machinery Casings on Freeboard or R.Q. Decks		VERT. PLATING .30	4" FRANGES	31"	BKT. at TOP	2 at 4'9"x24"	24"	4'-9"
Exposed Machinery Casings on superstructure decks								
Machinery Casings within Superstructures not fitted with Cl. 1 closing appliances								
Deckhouses on flush deck ships		V. PLAT. .32 F. .26 A.	3"x2 1/2"x350A	31"	BKTS. TOP BOT.	3 at 4'9"x24" 1 at 4'9"x48"	24"	4'-6"
Aft		3/8 TO 1/4"	3"x2 1/2"x30"	{ 30" at 25" 36" at 38"	" " "	3 at 4'9"x24"	24"	7'-6"

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

Poop Bulkhead	
R.Q.D. "	
Bridge Aft Bulkhead	
" Forward "	
Forecastle Bulkhead	1 OPENING at CR. WITH BOLTED PLATE COVER.
Exposed Machinery Casings on Freeboard or R.Q. decks	
Exposed Machinery Casings on superstructure decks	2 STEEL DOORS (YES).
Machinery Casings within superstructures not fitted with Cl. 1 Closing Appliances	
Deck houses on Flush Deck ships	2 W/T. STEEL DOOR WITH TURNBUCKLES (YES). 2 STRONG WOOD DOORS (YES)
" Aft "	3 STRONG WOOD DOORS (YES)

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

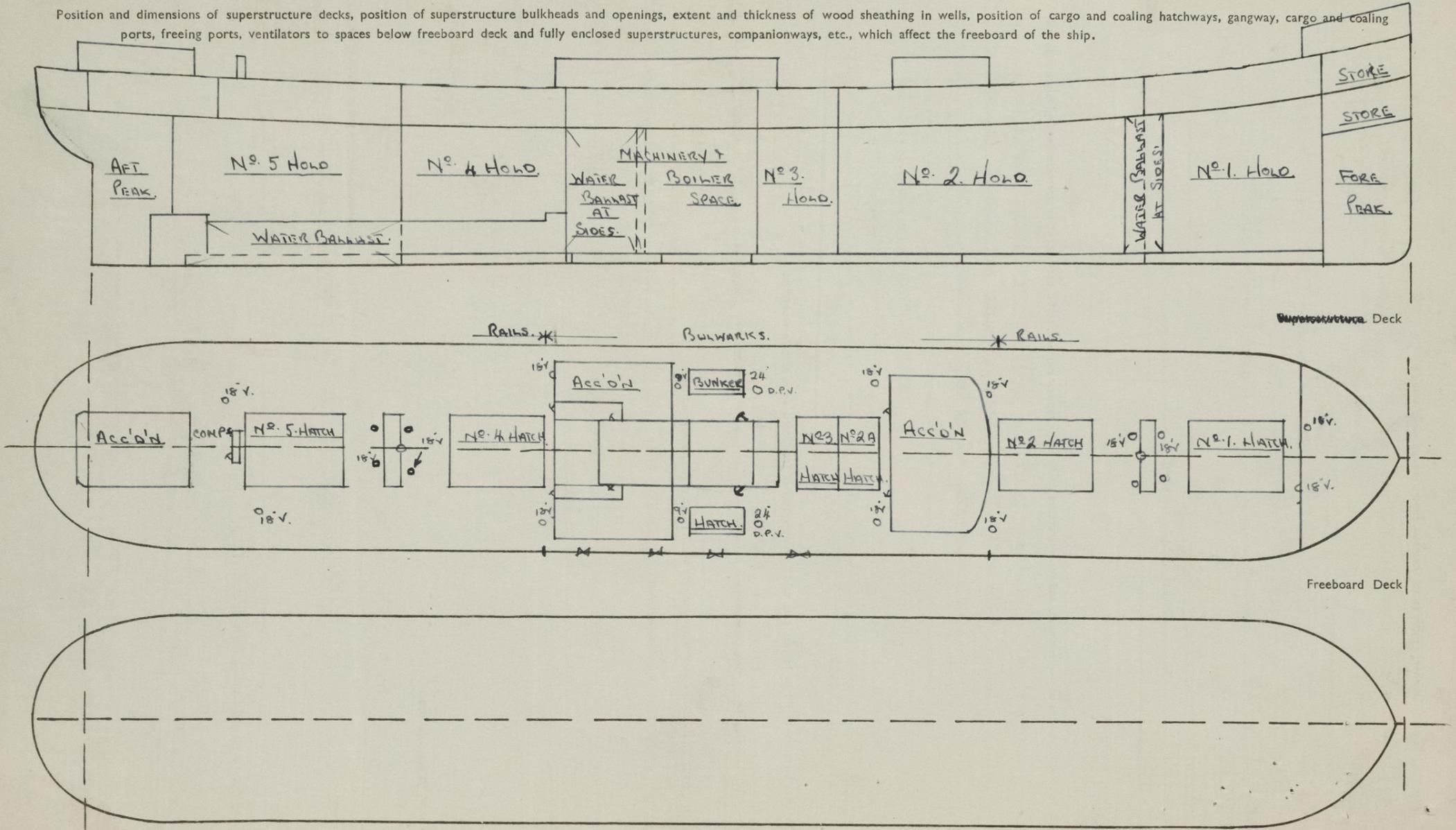
Give particulars of freeing port area, etc., on superstructure decks



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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	No 1	No 2	No 2A	No 3	No 4	No 5	Bunker	Coal	
Dimensions of Hatchway	31'-0" x 20'-0"	31'-0" x 20'-0"	12'-11" x 20'-0"	12'-11" x 20'-0"	31'-0" x 20'-0"	31'-0" x 20'-0"	15'-6" x 5'-0"	18'-0" x 5'-3"	
COAMINGS	Height above deck	30"	30"	30"	30"	30"	30"	9"	
	Thickness	.44	.44	.44	.44	.44	.44	—	
	Stiffeners	10 x 3 1/2 x 1/16 B.A.							—
HATCH BEAMS	Brackets or Stays	7 x 3 x 3/8 B.A. at Ends							—
	Number	5	5	2	2	5	5	—	
FORE AND AFTERS	Spacing	5'-2"	5'-2"	4'-3 3/4"	4'-3 3/4"	5'-2"	5'-2"	—	
	Unsupported lengths	—							—
	Bearing Surface and thickness of carriers or sockets	3"	3"	3"	3"	3"	3"	(See Coaming Above).	
HATCH COVERS	Material	2 1/2 W.P.	—	—	—	—	—	2 1/2 W.P.	
	Thickness	2 1/2"	—	—	—	—	—	2 1/2"	
	How Fitted	F & A	—	—	—	—	—	Thwartships	
	Bearing Surface	3"	—	—	—	—	—	3"	
	Spacing of Cleats	24"	—	—	—	—	—	24"	
Number of Tarpaulins	2	—	—	—	—	—	2		

Yes

Are wood fore and afters steel shod at all bearing surfaces?

Are battens and wedges efficient and in good condition?

Yes

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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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