

25/4/45

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT SURVEY FOR FREEBOARD

STEAMER, ~~TANKER~~, <sup>SS</sup> SAILED: EMPIRE MAYFLOWER ~~WITH~~ WITHOUT TIMBER DECK CARGO  
 Nationality BRITISH Builders' Name and No. of Ship BARTRAM & SONS LTD N° 308  
 Port of Registry JUNDERLAND  
 Official Number 180164. Owners MINISTRY OF WAR TRANSPORT  
 Gross Tonnage 394.1. (MAR) SINGAPORE STRAITS SHIPPING CO LTD  
 Date of Build 6/9/1945 Port and Date of survey JUNDERLAND DURING CONSTRUCTION  
 Name of Surveyor W.H. Stephenson & T.B. TILLERY.  
 Particulars of Classification B.S. \* (WITH FREEBOARD) Names of Sister Ships Poultus No 307 - 'C' TYPE COASTERS.  
(EAST INDIAN ARCHIPELAGO SERVICE)  
 Type of Superstructures OPEN SHELTER DECK - MIDDLE LINE OPENING AMIDSHIPS  
 Trade of Ship  
 Service Endorsement ~~if any~~ AND ONLY SO LONG AS THE SHIP IS ENGAGED IN EAST INDIAN ARCHIPELAGO SERVICE.

ALL SEASONS

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

TROPICAL FRESH WATER LINE above centre of disc	1	Corresponding Freeboard	1'-10"
FRESH WATER LINE " " "	1 1/2	" "	1'-8"
TROPICAL LINE " " "	1	" "	-
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

*[Signature]*  
Chief Surveyor

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

on the 2nd May, 1945.



*[Signature]*  
Secretary  
Foundation

# THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

## SURVEY FOR FREEBOARD CONDITIONS OF ASSIGNMENT

SHIPS NAME *EMPIRE MAYFLOWER* OFFICIAL NUMBER *180164*  
 Nationality and Port of Registry *BRITISH SUNDERLAND.*

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>.25"</i>	<i>.25"</i>	<i>3" x .25" FLATS</i>	<i>2'-6"</i>	<i>BKTS. AT TOP</i>	-	-
R.Q.D. "							
Bridge Aft Bulkhead							
" Forward "							
Forecastle Bulkhead	<i>.25"</i>	<i>.25"</i>	<i>3" x .25" FLATS</i>	<i>2'-6"</i>	-	<i>103'-0" x 2'-0"</i>	<i>36" 7'-0"</i>
Trunk, Aft							
" Forward							
Exposed Machinery Casings on Freeboard or R.Q. Decks							
Exposed Machinery Casings on superstructure decks	<i>3/16"</i>	<i>3/16"</i>	<i>3" x 3" x 30"</i>	<i>30"</i>	<i>BKTS AT TOP</i>	<i>2 @ 4'-9" x 1'-9"</i>	<i>18" 4'-3"</i>
Machinery Casings within Superstructures not fitted with Cl. 1 closing appliances							
Deckhouses on <del>flush</del> <sup>skillet</sup> deck ships	<i>AFT .25"</i>	<i>FORW. .25"</i>	<i>PLATES FRANGED</i>	<i>30"</i>	<i>@TS AT TOP &amp; B.</i>	<i>3 @ 4'-9" x 1'-9"</i> <i>1 @ 4'-9" x 1'-9"</i>	<i>18" 7'-0"</i>

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

Poop Bulkhead	<i>No opening</i>
R.Q.D. "	
Bridge Aft Bulkhead	
" Forward "	
Forecastle Bulkhead	<i>Watertight Bolted Plate</i>
Exposed Machinery Casings on Freeboard or R.Q. decks	
Exposed Machinery Casings on superstructure decks	<i>Steel Hinged Doors. Operated from both sides</i>
Machinery Casings within superstructures not fitted with Cl. 1 Closing Appliances	
Deck houses on <del>flush</del> <sup>skillet</sup> Deck ships	<i>Wood &amp; Steel Hinged Doors. Operated from both sides.</i>

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			<i>Open Rails.</i>		

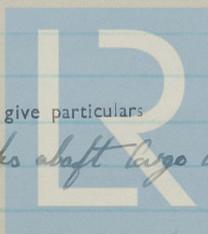
State fore and aft position and height above deck to bottom of port, for each port

} After Well  
} Forward Well

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

*5" S.D. Scupper fitted P.S. in tween Decks abaft cargo door, geared to skillet deck.*

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



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### COMPUTATION OF FREEBOARD

Length on summer load line **140'-5"** Moulded Breadth **27'-0"** Moulded Depth **10'-6"** Depth of Keel **80**  
 Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth **683** Tons  
 Co-efficient of fineness for use with tables  $\frac{\Delta \times 35}{L \times B \times D \times .85} = .7063$   
 Displacement and tons per inch immersion in salt water at summer load line **666 @ 7.51 T.P.I.**

Moulded depth **10.500** Deduction for Fresh Water  $\frac{\Delta}{40T} = 2.22$  inches  
 Stringer Plate **5/16"** **.026** Round of Beam Correction  
 Sheathing on exposed deck T  $\left(\frac{L-S}{L}\right)$  **-** Ships Round of Beam **0.00** inches  
 Rise of floor (in sailers) **-** Standard Round of Beam  $\frac{B \times 12}{50} = 6.48$   
 Depth for Freeboard (D) **10.526** Difference **6.48**  
 Table Depth **4/15** **9.361** Restricted to  
 Depth Correction **4/130** **1.165** Correction  $\frac{\text{Difference}}{4} \times \left(1 - \frac{E}{L}\right) = 1.62 \times .2359 = .382 \text{ ON}$   
 If restricted by superstructures **1.258 ON**

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)	
Poop	5'-5"	28'-0"	7'-0"	48.42		64.42	Standard Height of Superstructure <b>6'-0"</b>
Raised Quarter Deck							" " R.Q.D.
Bridge		F					Percentage covered S/L = <b>100%</b>
		A					" " E/L = <b>76.41%</b>
Forecastle	23'-9"	34'-3"	7'-0"	58.00		40.88	" from Table line A, B, (corrected for absence of forecastle if required) <b>70.88%</b>
Trunk Aft							Percentage from Table by interpolation for Bridge less than .2L if required = <b>-</b>
" Forward							Deduction = <b>20.042 x .7088 = 14.21 OFF</b>
Tonnage Opening Aft	4'-0"			4'-0"	.50	2.00	Percentage from Table for Tankers (or Timber ships) =
" " Forward							Deduction = <b>-</b>
Totals				140.42		107.30	

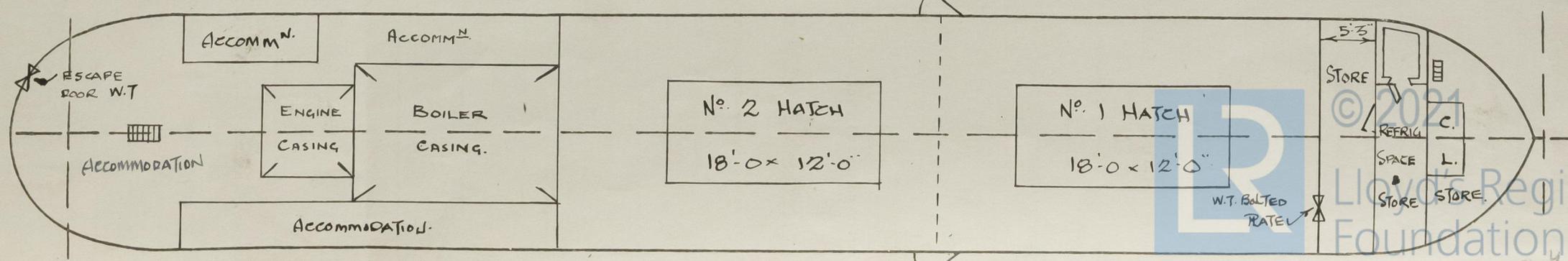
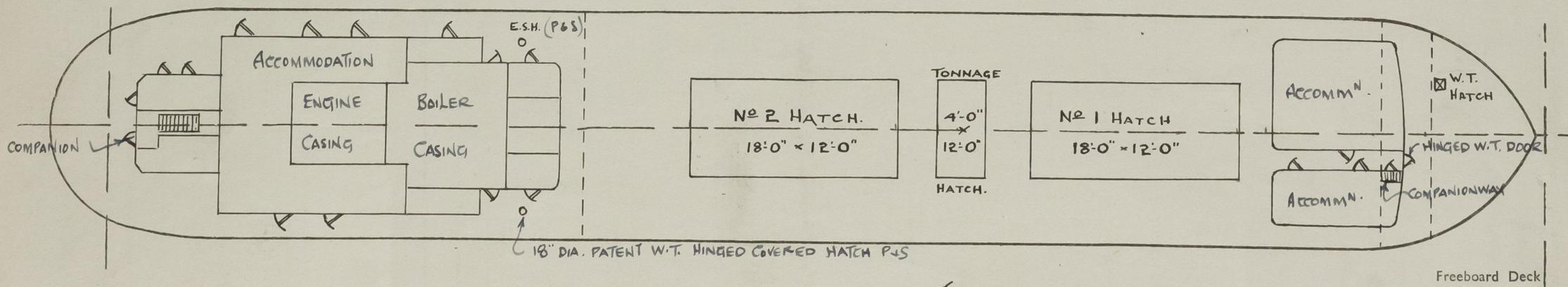
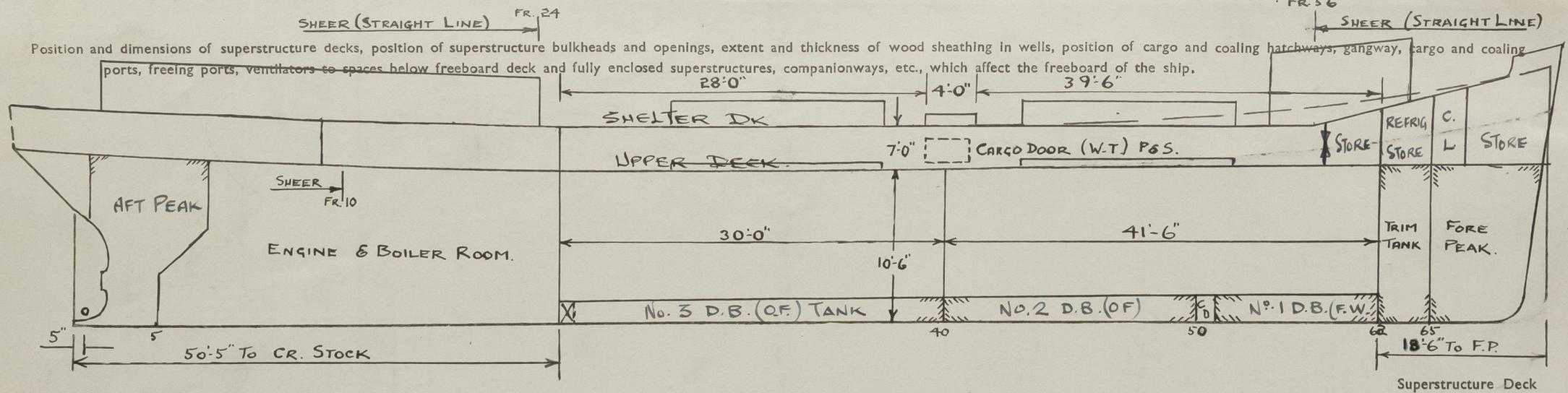
Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product	Mean Actual sheer aft	Mean Actual sheer forward
12" EXCESS SHEER DECK HT. 2B A.P. SHEERS	1'-4"	24'-04"	24'-04"	1	24'-04"	= MORE THAN 1	
12-44 1/2 L from A.P.		10'-70"	10'-70"	4	42'-80"		= LESS THAN 1. (72.84%)
3-11 1/2 L from A.P.		2'-64"	2'-64"	2	5'-28"		
- Amidships				4		Length of enclosed superstructure forward of amidships =	Length of Ship =
3-89 1/2 L from F.P.		6'-29"	3'-89"	2	7'-78"		
15-56 1/2 L " "		21'-40"	15'-56"	4	62'-24"	Length of enclosed superstructure aft of amidships =	Length of Ship =
34-90 F.P.	2'-8"	48'-08"	34'-98"	1	34'-98"		
Effective Mean Sheer				18	177'-120"	Sheer Correction = Difference X $\left(75 - \frac{S}{2L}\right) = 2.180 \times .26 = .545 \text{ ON}$	
Standard " " .05L+5					12'-020"	If limited on account of midship superstructure =	
Difference					2'-180"	" to maximum allowance of 1 1/2 ins. per 100 ft. =	

TABULAR FREEBOARD corrected for flush deck if required = **14.25**  
 Correction for co-efficient =  $\frac{13863}{136} = 14.53$

	+	-		Sailer, Tanker, Steamer	Timber
Depth correction	1.26	-			
Deduction for superstructures	-	14.21		Depth to Freeboard Deck in feet <b>10.526</b>	
Sheer correction	.54	-		Summer Freeboard in feet <b>1.833</b>	
Round of Beam correction	.38	-		Moulded Draught (d) <b>8.693</b>	(d1)
Correction for thickness of deck amidships	-	-		Addition for Keel <b>0.67</b>	
Other corrections, scantlings, etc.	19.50	-		Extreme draught <b>8'-9"</b> <b>8.760</b>	
Summer Freeboard in inches	1'-10"		7.47	Deduction for Tropical and addition for Winter freeboard d/4 =	ins.
Additional allowance for superstructures on Timber carrying ships				Addition for Winter North Atlantic (if required)	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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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	6th DECK				2 <sup>ND</sup> DECK						
	N <sup>o</sup> 1	N <sup>o</sup> 2	TONNAGE HATCH	W.T. HATCH TO STORE FOR <sup>d</sup>	N <sup>o</sup> 1	N <sup>o</sup> 2					
Dimensions of Hatchway	18' x 12'	18' x 12'	4' x 12'	2'-6" x 2'-6"	18' x 12'	18' x 12'					
COAMINGS	Height above steel deck wood	18"	18"	9"	9"	9"					
	Thickness {sides ends}	.38"	.38"	9" x 3" .375 BA	.31"	9" x 3" .375 BA					
	Stiffeners (at sides)	9" x 3" x .375 BA	9" x 3" x .375 BA	-	-	9" x 3" x .375 BA					
	Brackets or Stays	3 BKTS. EACH SIDE 1 @ 5" x 3" x .375 ANGLE EACH END	3 BKTS. EACH SIDE 1 @ 5" x 3" x .375 ANGLE EACH END	-	-	-					
HATCH BEAMS	Number	3	3	-	3	3					
	Spacing	4'-6"	4'-6"	-	4'-6"	4'-6"					
	Scantling and Sketch	6" x 3/8" WELDED FLATS 12" x .375 C <sup>s</sup> 6 1/2" x .375 SIDE As No. 1	-	-	6" x 3/8" WELDED FLATS 8 1/2" x .375 C <sup>s</sup> 6 1/2" x .375 SIDE As No. 1	-					
Bearing Surface and thickness of carriers or sockets	3"	3"	-	-	3"	3"					
FORE AND AFTERS	Number	/									
	Spacing										
	Unsupported lengths										
	Scantling and Sketch										
Bearing Surface and thickness of carriers or sockets	/										
Material						W.P.	W.P.	W.P.	HINGED W.T. STEEL	W.P.	W.P.
Thickness						2"	2"	2"	.25"	2"	2"
How Fitted						F x A.	F x A.	F x A.	F x A.	F x A.	F x A.
Bearing Surface	2 1/2"	2 1/2"	2 1/4"	-	2 1/2"	2 1/2"					
Spacing of Cleats	22"	22"	BOLTED 22"	7 Toggles	29"	29"					
Number of Tarpaulins	2	2	2	-	1	1					

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? -

Are battens and wedges efficient and in good condition? YES







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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