

18/4/47.

THE BRITISH CORPORATION REGISTER OF  
SHIPPING AND AIRCRAFT

MALIN.

## SURVEY FOR FREEBOARD

STEAMER, TANKER, SAILER: ~~E.S.S. EMPIRE~~ *MARYFLOWER*~~WITH~~ WITHOUT TIMBER DECK CARGONationality *BRITISH*Builders' Name and No. of Ship *BARTON & SONS LTD NO 308.*Port of Registry *SINGAPORE*Official Number *180164.*Owners *M.O.T. [Mars] SINGAPORE STRAITS STEAMSHIP CO. LD.*Gross Tonnage *394.10.*Date of Build *9/1945.*

Port and Date of survey

Name of Surveyor

Particulars of Classification *BS\* (WITH FREEBOARD. Names of Sister Ships "C. TYPE COASTERS.**EAST INDIAN. ARCHIPELAGO SERVICE).*

Type of Superstructures

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

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

© 2021

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

on the *7th May, 1947*Lloyd's Register  
Foundation  
Secretary

003450-003457-0037



# 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

Moulded depth  $10.500$ . Deduction for Fresh Water  $\frac{\Delta}{40 T} =$  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  $4/16$ .  $9.361$ . Restricted to  
 Depth Correction  $4/30$ .  $1.165$ . Correction  $\frac{\text{Difference}}{4} \times \left(1 - \frac{E}{L}\right) = 1.62 + .2359$ .  
 If restricted by superstructures  $1.258$  on.  $= .382$  on.

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)
Poop	50'-5"	28'-0"	7'-0"	78.42	-	64.42
Raised Quarter Deck						
Bridge		F				
		A				
Forecastle	23'-9"	34'-3"	7'-0"	58.00		40.88
Trunk Aft						
" Forward						
Tonnage Opening Aft	4'-0"			4.00	.5	2.00
" " Forward						
Totals				140.42		107.30

Standard Height of Superstructure  $6'-0"$   
 " " R.Q.D.  
 Percentage covered S/L =  $100\%$ .  
 " " E/L =  $76.41\%$ .  
 " from Table line A, B, (corrected for absence of forecastle if required)  $70.88\%$ .  
 Percentage from Table by interpolation for Bridge less than .2L if required =  
 Deduction  $= 20.042 + .7088 = 14.21$  off.  
 Percentage from Table for Tankers (or Timber ships) =  
 Deduction =

12" EXCESS TON ON HT. Station	SHUTTER	DECK LEVEL	FRS	24-56
ACTUAL BOUN. SHEAR	Actual Sheer	Standard Sheer	Effective Sheer	S.M. Product
28. A.P.	1'-4"	24.04	24.04	1 24.04
12.44. $\frac{1}{8}$ L from A.P.		10.70	10.70	4 42.80
3.11 $\frac{1}{8}$ L from A.P.		2.64	2.64	2 5.28
- Amidships	-	-	-	4 -
389. $\frac{1}{8}$ L from F.P.		5.29	3.89	2 7.78
15.56. $\frac{1}{8}$ L " "		21.40	15.56	4 62.24
34.98. F.P.	2'-8"	48.08	34.98	1 34.98
				18 177.120

Effective Mean Sheer =  $9.840$ .  
 Standard " "  $.05L + 5$  =  $12.020$ .  
 Difference  $2.180$ .

Mean Actual sheer aft = MORE THAN 1.  
 " Standard " "  
 Mean Actual sheer forward = LESS THAN 1 ( $72.84\%$ )  
 " Standard " "  
 Length of enclosed superstructure forward of amidships =  
 Length of Ship  
 Length of enclosed superstructure aft of amidships =  
 Length of Ship  
 Sheer Correction = Difference  $\times \left(75 - \frac{S}{2L}\right) = 2.180 \times .25 = .545$  on.  
 If limited on account of midship superstructure =  
 " to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft. =

TABULAR FREEBOARD corrected for flush deck if required =  $14.25$ .

Correction for co-efficient =  $1.3863/1.36 = 14.53$ . DRAUGHTS AND SEASONAL CORRECTIONS

	+	-		Sailer, Tanker, Steamer	Timber
Depth correction	1.26				
Deduction for superstructures		14.21			
Sheer correction	.54				
Round of Beam correction	.38				
Correction for thickness of deck amidships					
Other corrections, scantlings, etc.					
	2.18	14.21	-12.03		
Summer Freeboard in inches	2.1		2.50		
Additional allowance for superstructures on Timber carrying ships					
Summer Timber Freeboard in inches					

Depth to Freeboard Deck in feet  $10.526$ .  
 Summer Freeboard in feet  $.208$ .  
 Moulded Draught (d)  $10.318$ .  
 Addition for Keel  $.067$ .  
 Extreme draught  $10'-4\frac{1}{2}"$   $10.385$ .  
 Deduction for Tropical and addition for Winter freeboard  $d/4 = 2\frac{1}{2}"$  ins.  
 Addition for Winter North Atlantic (if required) = ins.  
 Deduction for Tropical Timber Freeboard  $d/4$  = ins.  
 Addition for Winter " "  $\frac{d}{3}$  = ins.  
 " " N.A. Timber Freeboard (if required) = ins.