

THE BRITISH CORPORATION REGISTER OF  
SHIPPING AND AIRCRAFT  
SURVEY FOR FREEBOARD

STEAMER, TANKER, SAILER, ~~EX~~ S.M. "EMPIRE SEAFARER" ☒ WITH TIMBER DECK CARGO  
Nationality BRITISH ☒ Builders' Name and No. of Ship GOOLE SB & CO LTD No 443.  
Port of Registry GOOLE Owners ~~M. J. T. (S. S. CO LTD)~~ STEATS S.S. Co LTD ~~London~~  
Official Number 180348  
Gross Tonnage 522  
Date of Build 7/1945 21/45 Port and Date of survey GOOLE DURING CONSTRUCT.  
Name of Surveyor E. HENDERSON  
Particulars of Classification B.S. \* (WITH FREEBOARD) Names of Sister Ships "SHELTS"  
Type of Superstructures CLOSED SHELTER DECK  
Trade of Ship

Service Endorsement if any

TEMPORARY ENDORSEMENT

and only whilst engaged on service in the East Indian Archipelago  
THE EXTREME DRAUGHT OF THIS SHIP DURING THE VOYAGE FROM THE UNITED  
KINGDOM TO THE PORT OF DESTINATION MUST NOT EXCEED 8'6"

Further Report 17/11/45

## 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	2 1/2	Corresponding Freeboard	8' - 6 1/2"
FRESH WATER LINE " " "	2 1/2	" "	8' - 4"
TROPICAL LINE " " "	N.L.	" "	1 8' - 0 3/4"
WINTER LINE below " "	4' 6"	" "	2'
WINTER NORTH ATLANTIC LINE " " "	4'	" "	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 20-7-45  
Expire 19-7-50

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

10<sup>th</sup> August 1945

Secretary



© 2020

Lloyd's Register  
Foundation

004300-004307-0043 1/8



# COMPUTATION OF FREEBOARD

Length on summer load line  $140'4\frac{3}{8}"$  Moulded Breadth  $27'6"$  Moulded Depth  $18'6"$  Depth of Keel  $\frac{1}{2}"$   
 Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth  $1523$  Tons @  $15'5\frac{1}{2}"$  S.H.S.

Co-efficient of fineness for use with tables  $\frac{\Delta \times 35}{L \times B \times D \times 85} = .7984$

Displacement and tons per inch immersion in salt water at summer load line  $7430 @ 7.90 \text{ T.P.I.}$

Moulded depth  $18'6"$   $18.000$

Deduction for Fresh Water  $\frac{\Delta}{40T} = 2\frac{1}{2}"$  inches

Stringer Plate  $\frac{1}{4}"$   $.021$

Round of Beam Correction

Sheathing on exposed deck T  $\left(\frac{L-S}{L}\right)$   $-$

Ships Round of Beam  $6" \text{ STRAIGHT BANNER EQUIV. } 7.29$  inches

Rise of floor (in sailers)  $-$

Standard Round of Beam  $\frac{B \times 12}{50} = 6.48$

Depth for Freeboard (D)  $18.021$

Difference  $.81$

Table Depth  $4/15$   $9.358$

Restricted to

Depth Correction  $4/130$   $8.663$

Correction  $\frac{\text{Difference}}{4} \times \left(1 - \frac{E}{L}\right) = .2025 \times .8842$

If restricted by superstructures  $= 9.35 \text{ ON}$

$= .179 \text{ OFF}$

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)
Poop						
Raised Quarter Deck						
Bridge OPEN	32'6"	F	7'-0"	32.5 x .5		16.25
		A				
Forecastle						
Trunk Aft						
" Forward						
Tonnage Opening Aft						
" " Forward						
Totals				32.5		16.25

Standard Height of Superstructure  $6.0'$

" " R.Q.D.

Percentage covered S/L =  $23.16\%$

" " E/L =  $11.58\%$

" from Table line A, B, (corrected for absence of forecastle if required)

Percentage from Table by interpolation for Bridge

less than .2L if required =  $1.67\%$

Deduction =  $20.04 \times .0167 = .3347 \text{ OFF}$

Percentage from Table for Tankers (or Timber ships) =

Deduction =

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
A.P.				1	
$\frac{1}{3}$ L from A.P.				4	
$\frac{1}{3}$ L from A.P.				2	
Amidships				4	
$\frac{1}{3}$ L from F.P.				2	
$\frac{1}{3}$ L " "				4	
F.P.				1	
				18	

Mean Actual sheer aft =

" Standard " "

Mean Actual sheer forward =

" Standard " "

Length of enclosed superstructure forward of admidships  
Length of Ship

Length of enclosed superstructure aft of amidships  
Length of Ship

Sheer Correction = Difference  $\times \left(75 - \frac{S}{2L}\right) = 12.02 \times .6342$   
 $= 7.623 \text{ ON}$

Effective Mean Sheer =

Standard " " .05L + 5 =

If limited on account of midship superstructure =

Difference

" 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 =

$\frac{1.478}{136} = 15.49$

ALL SEASONS DRAUGHTS AND SEASONAL CORRECTIONS

	+	-
Depth correction	9.35	-
Deduction for superstructures	-	.33
Sheer correction	7.62	-
Round of Beam correction	-	.18
Correction for thickness of deck amidships	-	.6"
Other corrections, scantlings, etc. LOW HATCH COAMINGS ETC.	70.55	-
	87.52	.51
		87.01

	Sailor, Tanker, Steamer	Timber
Depth to Freeboard Deck in feet	18.021	
Summer Freeboard in feet	8.542	
Moulded Draught (d)	9.479	(d1)
Addition for Keel $\frac{1}{2}"$	.042	
Extreme draught $9'6\frac{1}{4}"$	9.521	

Deduction for Tropical and addition for Winter freeboard  $d/4 = -$  ins.

Addition for Winter North Atlantic (if required) = - ins.

Deduction for Tropical Timber Freeboard  $\frac{d}{4} = -$  ins.

Addition for Winter " "  $\frac{d}{3} = -$  ins.

" " N.A. Timber Freeboard (if required) = - ins.

Summer Freeboard in inches  $8'6\frac{1}{2}" = 102.50$

Additional allowance for superstructures on

Timber carrying ships =

Summer Timber Freeboard in inches =

0043 218



# THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

## SURVEY FOR FREEBOARD CONDITIONS OF ASSIGNMENT

SHIPS NAME "EMPIRE SEAFARER"

OFFICIAL NUMBER

180378

Nationality and Port of Registry BRITISH. GOOLE

## 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 "								
Forecastle Bulkhead								
Trunk, Aft								
" Forward								
Exposed Machinery Casings on } Freeboard or R.Q. Decks	.28	.25	4" x 3/8"	1'-9"	GUSSET WELDED AT TOP & BOTTOM	1 @ 19" x 19" 1 @ 3'-0" x 2'-7"	1'-6"	7'-6" 7'-3"
Exposed Machinery Casings on } superstructure decks								
Machinery Casings within Super- structures not fitted with Cl. 1 closing appliances			4 x 5/16			1 @ 19" x 19"		
Deckhouses on flush deck ships	.28	.25	3 x 5/16	1'-4"	GUSSET WELDED AT TOP	1 @ 3'-5" x 2'-2"	1'-6"	7'-3"

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

Poop Bulkhead	
R.Q.D. "	
Bridge Aft Bulkhead	
" Forward "	
Forecastle Bulkhead	
Exposed Machinery Casings on } Freeboard or R.Q. decks	STEEL DOORS OPERATED BOTH SIDES
Exposed Machinery Casings on } superstructure decks	
Machinery Casings within super- structures not fitted with Cl. 1 Closing Appliances	
Deck houses on Flush Deck ships	

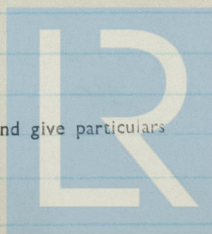
## PARTICULARS OF FREEING ARRANGEMENTS

	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 } After Well  
deck to bottom of port, for each port }  
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



© 2020

Lloyd's Register  
Foundation

0043 3/8







# PARTICULARS OF ALL HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Number and description of Hatchway from forward		No 1 HATCH	No 2 HATCH	FORE DECK HATCH	HATCH TO FORWARD STORE PORT	HATCH TO FORWARD STORE STARBOARD	HATCH TO STORE AT 26 FRAME	HATCH TO MAGAZINE	HATCH TO AFTER STORE			
Dimensions of Hatchway		20'-0" x 16'-0"	20'-0" x 16'-3 1/4"	2'-3" x 1'-9"	2'-7" x 2'-2 1/2"	2'-7" x 2'-2 1/2"	2'-6" x 2'-6"	2'-1" x 2'-10"	2'-0" x 1'-10"			
COAMINGS	Height above steel deck	10" x 3 1/2" BA	10" x 3 1/2" BA	2'-0"	2'-0"	2'-0"	1'-6"	1'-6"	1'-6"			
	Thickness sides ends	1/2"	1/2"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"			
	Stiffeners	-	-									
	Brackets or Stays	-	-									
HATCH BEAMS	Number	2	2									
	Spacing	6'-8"	6'-8"									
	Scantling and Sketch	10" x 6" x 40 lbs R.S.J.	10" x 6" x 40 lbs R.S.J.									
	Bearing Surface and thickness of carriers or sockets											
FORE AND AFTERS	Number											
	Spacing											
	Unsupported lengths											
	Scantling and Sketch											
HATCH COVERS	Bearing Surface and thickness of carriers or sockets											
	Material	WOOD	WOOD	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL			
	Thickness	2 1/8"	2 1/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"			
	How Fitted	F&A	F&A	HINGED WITH	HINGED WITH	HINGED WITH	HINGED WITH	HINGED WITH	HINGED WITH			
HATCH COVERS	Bearing Surface	2 1/2"	2 1/2"	HEMP PACKING	HEMP PACKING	HEMP PACKING	HEMP PACKING	HEMP PACKING	HEMP PACKING			
	Spacing of Cleats	1'-11"	1'-11"	& SECURED BY	& SECURED BY	& SECURED BY	& SECURED BY	& SECURED BY	& SECURED BY			
	Number of Tarpaulins	2	2	BUTTERFLY BOLTS	BUTTERFLY BOLTS	BUTTERFLY BOLTS	BUTTERFLY BOLTS	BUTTERFLY BOLTS	BUTTERFLY BOLTS			

Are tarpaulins in good condition and in accordance with rule requirements?

YES

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

NO

Are lashings provided in accordance with rule requirements?

YES

Are battens and wedges efficient and in good condition?

YES

© 2020

Lloyd's Register Foundation

0043 S/B



Give full particulars of the following:—

Fiddle, 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 fiddle covers, and if these are permanently attached in their proper positions)

2 HINGED STEEL FLAPS TO ER SKYLIGHT P&S 2'-9 1/4" x 2'-5 1/2" NO BULLS EYES ON CASING TOP 8 FT ABOVE DECK  
4 HINGED " GALLEY SKYLIGHT FLAPS P&S 15" x 10" ON CASING TOP 8 FT ABOVE DECK

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)

ENTRANCE TO OFFICERS ACCOMMODATION	18" COAMING WOOD DOOR	OPERATED BOTH SIDES
" " " ENGINE ROOM	" " STEEL "	" " "
" " GALLEY	" " " "	" " "

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)

POOP DECK

1'-9" COWL VENT PORT	3'-0" COAMING	WELDED TO DECK	TO AFTER STORE
1'-9" M	" STAR <sup>BD</sup>	" " STUDDED "	" " "
1'-8" COWL	" ON CENTRELINE "	" " WELDED "	EXHAUST FROM ACCOMMODATION
1'-8" "	" STAR <sup>BD</sup>	" " " "	" " MAIN DECK
1'-10" "	" PORT "	" " " "	" " " " CABINS
1'-7" "	" STAR <sup>BD</sup>	" " " "	" " ENGINEERS "
1'-9" "	" " "	" " " "	PROVISION STORE HATCH

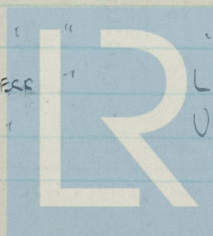
2'-14" "	" PORT STAR <sup>BD</sup> 2'-6	" " " "	TO NO 2 HOLD
1'-14" "	" PORT "	" " " "	" " 1 "
1'-14" "	" STAR <sup>BD</sup> 3'-0"	" " " "	" " 1 "

ALL COWL VENTS SUPPLIED WITH WOOD FRAMES & CANVAS COVERS.

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

1'-3" G.H. AIRPIPE STAR <sup>BD</sup> SIDE	3'-0" ABOVE POOP DECK	WELDED TO DECK	TO AFTER PEAK
1'-3" " " " P&S	" " " " " "	" " " "	NO 4 DB TANK
1'-3" " " " " " "	" " " " " "	" " " "	COFFERDAM DB
1'-6" " " " " " "	" " " " " "	" " " "	NO 3 DB TANK
1'-6" " " " " " "	" " " " " "	" " " "	" 2 " "
1'-3" " " " " " "	" " " " " "	" " " "	" " " "
1'-3" " " CENTRELINE	" " " " " "	FORE DECK STUDDED TO DECK	LOWER FORE PEAK
1'-3" " " " " " "	" " " " " "	" " " "	UPPER " " "

ALL AIR PIPES FITTED WITH PLUGS AND CANVAS COVERS



© 2020

Lloyd's Register Foundation

0043 618



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

PORT	1-4"	GUNMETAL	BALANCED	CHECK	VALVE
"	1-1 1/2"	"	"	"	"
"	1-4"	"	"	"	"
"	1-3 1/2"	"	"	"	"
STAR	1-4"	"	"	"	"
"	1-5"	"	"	"	"

SCUPPERS IN ACCOMMODATION DRAINED INTO ENGINE ROOM BILGES

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

10" DIA GLASS SIDE LIGHTS IN POOP SIDES WITH PERMANENT DEADLIGHTS

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)

3" x 2 1/2"	STANCHIONS	FITTED	AROUND	SIDES	AND	AFTER	END	OF	POOP	DECK	(RAILS	13"	APART)
"	"	"	ON	SHELTER	DECK	FROM	POOP	FRONT	TO	FORECASTLE	BULWARK		
"	"	"	"	BOAT	DECK								

Gangways and Lifelines

1 1/2"	STEEL	WIRE	LIFELINE	FROM	POOP	TO	FORECASTLE	ON	STARBOARD	SIDE	ONLY
1 1/2"	"	"	"	FITTED	AROUND	EACH	HATCH				

Gangway, Cargo and Coaling Ports in sides of ship

OPENING IN SHEEL PORT & STAR<sup>BD</sup> TO TWEEN DECKS 4'-9" X 3'-6" BETWEEN FRAMES 30 & 31



© 2020

Lloyd's Register  
Foundation

0043 7/8

✓



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



© 2020

Lloyd's Register  
Foundation

0043 8/8