

22/9/48.

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT SURVEY FOR FREEBOARD

STEAMER, TANKER, ~~SAILER~~ ^{S/S} ALPHA LIMPOPO. E. HADLEY. ~~WITH~~ ^{WITHOUT} TIMBER DECK CARGO
 Nationality SOUTH AFRICAN (BRITISH). Builders' Name and No. of Ship KAISER CO. INC. PORTLAND.
 Port of Registry DURBAN. ORE. NO 10.
 Official Number 172573. Owners ALPHA SOUTH AFRICAN S.S. CO DURBAN.
 Gross Tonnage 10682. MGRS. MOLLER LINES S.A. (PTY) LTD. "
 Date of Build 5/1943. Port and Date of survey
 Name of Surveyor
 Particulars of Classification BS. (TANKER). Names of Sister Ships T.2. TANKERS.
 Oils F.P. Below 150°F.
 Type of Superstructures POOP BRIDGE 2 FOLE.
 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	15 3/4"	Corresponding Freeboard 9'-2 3/4"
FRESH WATER LINE	" " "	8 1/4"	" " 7'-11"
TROPICAL LINE	" " "	7 1/2"	" " 8'-6 1/2"
WINTER LINE	below " "	7 1/2"	" " 8'-7 1/4"
WINTER NORTH ATLANTIC LINE	" " "	12 1/2"	" " 9'-10 1/4"
			10'-3 1/4"

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

Date of issue 22-9-48
 expiry 14-3-53.

The scantlings and protective arrangements being in accordance with the Load Line Rules it is submitted that the freeboards be assigned

[Signature]
 Chief Surveyor

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

on the 6th Oct 1948



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 40.

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COPY OF AMERICAN BUREAU.
COMPUTATION OF FREEBOARD

Length on summer load line **502'-0"** Moulded Breadth **68'-0"** Moulded Depth **39'-3"** Depth of Keel **3/4'**
 Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth **24416.** Tons
 Co-efficient of fineness for use with tables $\frac{\Delta \times 35}{L \times B \times D \times .85} =$ **.748.**
 Displacement and tons per inch immersion in salt water at summer load line
 Moulded depth **39.25.** Deduction for Fresh Water $\frac{\Delta}{40T} =$ inches
 Stringer Plate **.08.** Round of Beam Correction
 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right)$ **-** Ships Round of Beam **19.50.** inches
 Rise of floor (in sailers) **-** Standard Round of Beam $\frac{B \times 12}{50}$ **16.32.**
 Depth for Freeboard (D) **39.33.** Difference **2.18.**
 Table Depth **7/5.** **33.55.** Restricted to
 Depth Correction **3 = 5.78 = 17.34 aft.** Correction $\frac{\text{Difference}}{4} \times \left(1 - \frac{E}{L} \right) = \frac{2.18}{4} \times .6 = .33$
 If restricted by superstructures

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)	
Poop	107.57	2.63	8'-0" 8'-9"	107.57		110.20	Standard Height of Superstructure 7'-6"
Raised Quarter Deck							" " R.Q.D.
Bridge	35.75	2.87	9'-6" 13'-7 1/2"	35.75		38.62	Percentage covered S/L = 39.02%
Forecastle							
Trunk Aft							" from Table line A, B, (corrected for absence of forecastle if required)
" Forward							Percentage from Table by interpolation for Bridge less than .2L if required =
Tonnage Opening Aft							Deduction = .311.
" " Forward							Percentage from Table for Tankers (or Timber ships) =
Totals				195.95		201.83.	Deduction = 427 - 311 = 13.06.

STANDARD	Station	Actual Sheer	Standard Sheer AFT	Effective Sheer	S.M.	Product
	60.2 A.P.	16.0	15.5	31.50	1	31.50
	26.79 1/2 L from A.P.	2.25	75	3.00	4	12.00
	6.62 1/2 L from A.P.	-			2	
	- Amidships	-			4	
	13.24 1/2 L from F.P.	-			2	
	53.58 1/2 L " "	5.44		5.44	4	21.76
	120.4 F.P.	18.00		18.00	1	18.00
					18	83.26.

Mean Actual sheer aft = **LESS THAN 1**
 " Standard " "

Mean Actual sheer forward = **LESS 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 $\times \left(.75 - \frac{S}{2L} \right) = 25.52 \times \left(.75 - \frac{39.25}{2} \right) = 14.18$ ON

Effective Mean Sheer = **4.625.**
 Standard " " .05L + 5 = **30.15.**
 Difference **25.52.**

If limited on account of midship superstructure = -
 " to maximum allowance of 1 1/2 ins. per 100 ft. = -

TABULAR FREEBOARD corrected for flush deck if required = **88.19.**

Correction for co-efficient = $88.19 \times \frac{.748 + .68}{1.26} = 92.52.$ DRAUGHTS AND SEASONAL CORRECTIONS

	+	-		Sailer, Tanker, Steamer	Timber
Depth correction	17.34				
Deduction for superstructures		13.06		Depth to Freeboard Deck in feet 39'-4"	
Sheer correction	14.18			Summer Freeboard in feet 9'-2 3/4.	
Round of Beam correction		.33		Moulded Draught (d) 30'-1 1/4	(d1)
Correction for thickness of deck amidships				Addition for Keel 3/4.	
Other corrections, scantlings, etc.				Extreme draught 30'-2"	
	31.52	13.39	8.13.	Deduction for Tropical and addition for Winter freeboard $d/4 = 7 1/2$ ins.	
Summer Freeboard in inches =			110.65.	Addition for Winter North Atlantic (if required) = 12 1/2 ins.	
Additional allowance for superstructures on				Deduction for Tropical Timber Freeboard $d/4$ = ins.	
Timber carrying ships =				Addition for Winter " " $\frac{d1}{3}$ = ins.	
Summer Timber Freeboard in inches =				" " N.A. Timber Freeboard (if required) = ins.	

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

SURVEY FOR FREEBOARD CONDITIONS OF ASSIGNMENT

SHIP'S NAME

OFFICIAL NUMBER

Nationality and Port of Registry

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		.44.	9x4x7/16.	28"	WELDED ENDS		18"	8'-0"
R.Q.D. " <i>AFT PUMPROOM.</i>							18"	8'-0"
Bridge Aft Bulkhead		.29	4x3x5/16.	30"	"		18"	8'-2"
" Forward "		.44.	9x4x7/16	30"	"		18"	8'-2"
Forecastle Bulkhead		.29.	4x3x5/16.	30"	TOPS BUTD. BTMS. FREE.		17 1/2"	9'-11"
Trunk, Aft								
" Forward								
Exposed Machinery Casings on Freeboard or R.Q. Decks								
Exposed Machinery Casings on superstructure decks								
Machinery Casings within Superstructures not fitted with Cl. 1 closing appliances								
Deckhouses on flush deck ships								

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

Poop Bulkhead	HINGED STEEL DOORS
R.Q.D. "	
Bridge Aft Bulkhead	HINGED STEEL DOORS
" Forward "	HINGED STEEL DOORS
Forecastle Bulkhead	HINGED STEEL DOORS
Exposed Machinery Casings on Freeboard or R.Q. Decks	Steel covers and gratings No Doors 4 P. 25.
Exposed Machinery Casings on superstructure decks	
Machinery Casings within Superstructures 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			Open Rails.		
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

PARTICULARS OF ALL HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Number and description of Hatchway from forward	DRY CARGO HATCH	RESERVE OIL FORD. BUNKERS (IP&IS)	FOR'D. COFFERDAMS (IP&IS)	26 CARGO OIL HATCHES	MAIN OIL BUNKERS (IP&IS)	UPPER DECK IN FORE 1 G4	AFTER COFFERDAM (IP&IS)
Dimensions of Hatchway	11'-3" X 15'-0"	27" DIA	24" DIA	4'-0" DIA	30" DIA	3'-0" X 3'-0"	24" DIA
COAMINGS	Height above steel } deck wood }	30"	24"	30"	30"	30"	24"
	Thickness { sides ends	7/16"	7/16"	9/16"	7/16"	7/16"	7/16"
	Stiffeners	3 1/2" X 3/8 FB.					
Brackets or Stays	FD. PL.						
HATCH BEAMS	Number						
	Spacing						
	Scantling and Sketch						
Bearing Surface and thickness of carriers or sockets							
FORE AND AFTERS	Number						
	Spacing						
	Unsupported lengths						
	Scantling and Sketch						
Bearing Surface and thickness of carriers or sockets							
HATCH COVERS	Material	W.T. STEEL	O.T. STEEL	W.T. STEEL	O.T. STEEL	O.T. STEEL	W.T. STEEL
	Thickness						
	How Fitted	HINGED	HINGED	HINGED	HINGED	HINGED	HINGED
	Bearing Surface						
Spacing of Cleats	WING NUTS	WING NUTS	WING NUTS	STRONGBACK & WING NUTS	STRONGBACK & WING NUTS	WING NUTS	WINGS
Number of Tarpaulins							

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

Are lashings provided in accordance with rule requirements? -

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

Are battens and wedges efficient and in good condition? -



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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)

OPENING IP&IS 0'-0" X 2'-0" - 6" CMA - HINGED STEEL COVER
" " 2'-0" X 2'-0" 6" " " " " " " " " " "

ESCAPE SCUTTLE 21" X 21" WITH HINGED STEEL COVER - 3" COAMING
6-30" DIA. CONW VENTS 11'-6" HIGH WELDED TO DECK
2-30" X 30" INTAKE VENTS
ENGINE ROOM SKYLIGHT FITTED WITH HINGED STEEL FLAPS

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)

FORWARD/AFT PUMP ROOMS - STEEL STIFFENED WITH W.T. STEEL HINGED DOORS
MANIPULATED BOTH SIDES - 18" SILLS

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)

FORECASTLE DECK 1-12' CV 6" COAMING WELDED TO DECK - WT HINGED STEEL COVER
" " 1-12" MV 3' " " " " - SCREEN DOWN TYPE
UPPER " 1-12" CV " " " FORECASTLE BH) - W.T. HINGED STEEL COVER
1-15" CV 10' " " " DECK " " " "
2-15" CV 10' " " " AT PUMPROOM W.T. " " "
1-8" CV 10' " " " " " " " " " "
2-24" CV 27'-6" " " AND STAYED ON KINGPOSTS TO AFT PUMP ROOM
BRIDGE " 4-12" CV 3' " " TO DECK - WT HINGED STEEL COVER
POOP " 1-10" GNV 3' " " " " " " " " " "
1-18" GNV 3' " " " " " " " " " "
1-9" X 14" GNV 3' " " " " " " " " " "

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

UPPER DECK 4-6" AIR PIPES FROM MAIN AND RESERVE D.F. BUNKER 9'-0" WITH PATENT SAFETY FITTING
" " 4-2 1/2" " " " COFFERDAMS 3'-6" " " " " " "
" " 4" " " " ALL CARGO TANKS LED UP MASTS - WITH AUTOMATIC PRESSURE AND VACUUM VALVES
AT GANWAY LEVEL

FORECASTLE " 1-4" " " 4' HIGH WITH PATENT SAFETY FITTING
POOP " 1-4" " " 3'-6" " " " " " " " "



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

4-4", 5-2" / 6-1 1/2" FITTED IN ENGINE ROOM WITH NON RETURN BRASS CLACK VALVES AT SHIPSIDE AND SHUT OFF GATE VALVES

Side Scuttles to spaces below freeboard and superstructure decks (state type or pattern, and if permanent or portable deadlights are supplied)
15" DIA. SIDE SCUTTLES WITH HINGED DEADLIGHT PERMANENTLY FITTED TO POOP ACCOMMODATION

Vertical distance of sill of lowest side scuttle below top of freeboard deck at side amidships

NONE BELOW FREEBOARD DECK

Guard Rails on freeboard and superstructure decks (state type and where fitted)

2 PIPE RAILS WITH FLAT BAR STANCHIONS FITTED ON UPPER, FORECASTLE AND POOP DECKS

BRIDGE DECK FITTED WITH 5/16" STEEL BOLWARK

Gangways and Lifelines

FORE & AFT GANGWAY (PERMANENT) FITTED BETWEEN POOP, BRIDGE AND FORECASTLE

Gangway, Cargo and Coaling Ports in sides of ship



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SUPPLEMENTARY REQUIREMENTS FOR STEAMER CARRYING TIMBER DECK CARGOES

Do Superstructures 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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