

# THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

"Andromachi" SURVEY FOR FREEBOARD

1683

STEAMER, TANKER, SAILER: Ex 3.5. HAARLEM

WITH WITHOUT TIMBER DECK CARGO

Nationality BRITISH

Builders' Name and No. of Ship N.V. YSEWERF, KAMPEN.

Port of Registry LEITH

Official Number 145562

Owners Leith Hull & Harbour Steam Packet Co.  
THE FORELAND STEAMSHIP CO. LTD. EC3  
RUSSIA SHIPPING CO LTD. LONDON

Gross Tonnage 970.12

Date of Build 1917.

Port and Date of survey LEITH.

Name of Surveyor A.R. Barker.

Particulars of Classification 100 A & 100 B.S.

Names of Sister Ships "HAGUE"

Type of Superstructures Lanceolate bridge & Raised Quarter Deck.

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	6"	Corresponding Freeboard	1'-4 1/2"
FRESH WATER LINE " " "	4"	" "	0'-10 1/2"
TROPICAL LINE " " "	2"	" "	1'-0 1/2"
WINTER LINE below " "	2"	" "	1'-2 1/2"
WINTER NORTH ATLANTIC LINE " " "	4"	" "	1'-6 1/2"
			1'-8 1/2"

SUMMER TIMBER FREEBOARD recommended amidships from top of deck line 6 1/2" ABOVE CENTRE OF DISC.

TROPICAL FRESH WATER Timber line above L.S.	8"	Corresponding Freeboard	0'-10"
FRESH WATER " " " "	4"	" "	0'-2"
TROPICAL " " " "	4"	" "	0'-6"
WINTER " " below "	5"	" "	0'-6"
WINTER NORTH ATLANTIC " " " "	10 1/2"	" "	1'-3"
			1'-8 1/2"

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

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

on the 10th January 1940

Chief Surveyor

Secretary



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Are battens and wedges efficient and in good condition?

Are lashings provided in accordance with rule requirements?



## COMPUTATION OF FREEBOARD

Length on summer load line **216.4** Moulded Breadth **32.5 3/4** Moulded Depth **16.0** Depth of Keel  
 Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth Tons  
 Co-efficient of fineness for use with tables  $\frac{\Delta \times 35}{L \times B \times D \times .85} =$   
 Displacement and tons per inch immersion in salt water at summer load line

Moulded depth **16.0** Deduction for Fresh Water  $\frac{\Delta}{40 T} =$  inches  
 Stringer Plate  $\frac{1}{2}$  Round of Beam Correction  
 Sheathing on exposed deck T  $\left(\frac{L-S}{L}\right)$  Ships Round of Beam inches  
 Rise of floor (in sailers) Standard Round of Beam  $\frac{B \times 12}{50}$   
 Depth for Freeboard (D) **16.04** Difference  
 Table Depth Restricted to  
 Depth Correction Correction  $\frac{\text{Difference}}{4} \times \left(1 - \frac{E}{L}\right) =$   
 If restricted by superstructures

	Enclosed Length (S)	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)
Poop						
Raised Quarter Deck	67.6		3.75	67.6	3.75	67.6
Bridge Enclosed	53.0	F	7.0 x 9	53.0		47.7
		A				
Forecastle Enclosed	25.0		7.0	25.0		25.0
Forecastle Overhang	2.49		7.0	3.8		2.49
Trunk Aft						
" Forward						
Tonnage Opening Aft						
" Forward						
Totals	148.09			149.4		142.25

Standard Height of Superstructure **16.0**" " R.Q.D. **3.75**Percentage covered S/L = **69.0%**" " E/L = **68.43%**

" from Table line A, B, (corrected for

absence of forecastle if required)

Percentage from Table by interpolation for Bridge

less than .2L if required =

Deduction =

Percentage from Table for Tankers (or Timber ships) =

Deduction =

65.73, 55.74 &amp; 27.64 old Rules 1932

78.94 &amp; 27.64 new " 1932

23.27 &amp; 27.64

Mean Actual shear aft = **6.41 = 6 1/2**

" Standard " "

Mean Actual shear forward =

" Standard " "

Length of enclosed superstructure forward of amidships

Length of Ship

Length of enclosed superstructure aft of amidships

Length of Ship

Shear Correction = Difference  $\times \left(75 - \frac{S}{2L}\right) =$ 

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 =

Correction for co-efficient =

DRAUGHTS AND SEASONAL CORRECTIONS

	+	-	Sailer, Tanker, Steamer	Timber
Depth correction				
Deduction for superstructures				
Shear correction				
Round of Beam correction				
Correction for thickness of deck amidships				
Other corrections, scantlings, etc.				
Summer Freeboard in inches				
Additional allowance for superstructures on				
Timber carrying ships				
Summer Timber Freeboard in inches				

Form LL. 4.D.

# THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

## SURVEY FOR FREEBOARD

### CONDITIONS OF ASSIGNMENT

SHIPS NAME

**"HAARLEM"**

OFFICIAL NUMBER

**145562**

Nationality and Port of Registry

**LEITH.**

## 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. "	None	.25"	BA.7"x2 1/2"x5"	29"	BRACKETS .35	NIL.	-	3.75
Bridge Aft Bulkhead	.25"	.25"	BA.7"x2 1/2"x5"	29"	BRACKETS .35	NIL.	-	7.0
" Forward "	.30"	.25"	BA.7"x2 1/2"x5"	30"	BRACKETS .32	2 @ 5.25x3.3	1.1	7.0
Forecastle Bulkhead	.30"	.25"	A.W.S. STEEL PLATE	8.0"	-	1 @ 5.9'x1.9'	1.1	7.0
Trunk, Aft								
" Forward								
Exposed Machinery Casings on								
Freeboard or R.Q. Decks								
Exposed Machinery Casings on	.35"	.25"	OA. 3"x3"x3"	30"	None	Foiler 4.6'x1.9'	1.5'	8.0
superstructure decks								
Machinery Casings within Super-	.35"	.25"	OA. 2"x3"x3"	30"	None	None	✓	7.0
structures 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	
R.Q.D. "	
Bridge Aft Bulkhead	
" Forward "	
Forecastle Bulkhead	
Exposed Machinery Casings on	
Freeboard or R.Q. decks	
Exposed Machinery Casings on	
superstructure decks	
Machinery Casings within super-	
structures not fitted with Cl. 1	
Closing Appliances	
Deck houses on Flush Deck ships	

Boards in channels and loose plates  
 Hinged steel door .22 on ML. Secured by lock manipulated from both sides  
 Forecastle wings 2 in W. have hinged steel doors .22  
 with 1.0' Sills & ordinary locks.  
 Hinged steel door .22 secured by locked manipulated  
 both sides

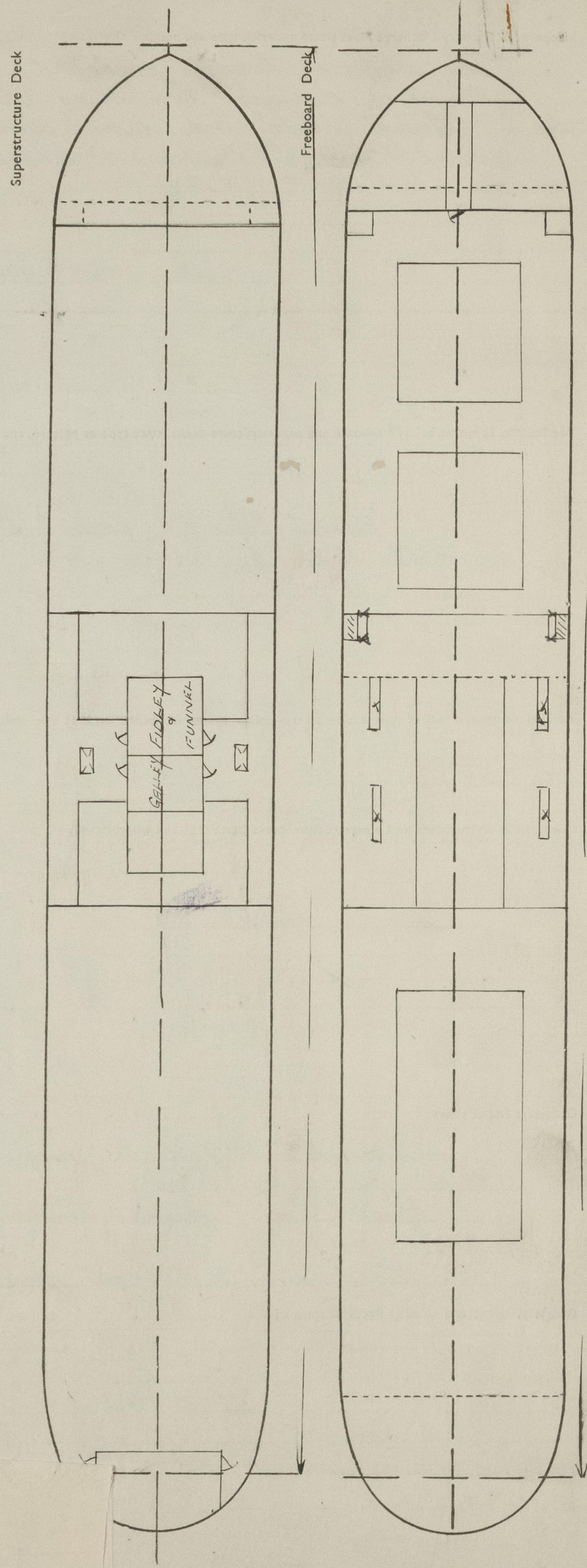
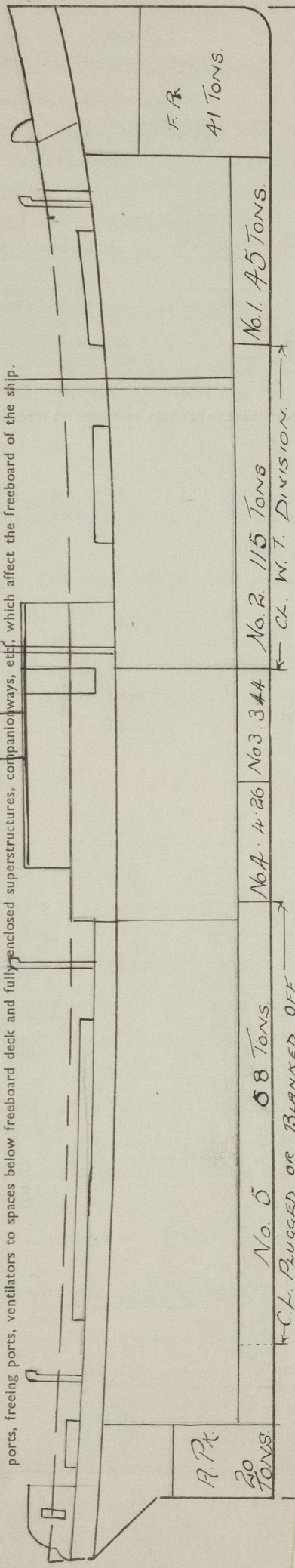
## PARTICULARS OF FREEING ARRANGEMENTS

	Length of Bulwark	Height of Bulwark	No. and size of Freeing Ports each side	Area each side	Rule Area
After Well on R.Q.D.	67.6	4.0	3 @ 2.6 x 1.7	13.26	13.52
SENCE OF WELL DUE TO					
WATER. DOOR AFT END.					
Forward Well	67.0	4.4	3 @ 2.6 x 1.7	13.26	13.4
2 Mooring Pipes. 2 @ 1.6 x 1.1				2.5	
State fore and aft position and height above					
deck to bottom of port, for each port					
After Well	From FE 4.2: 32.4: 54.2: Sills 6 Mooring Pipes 7.2: 51.9: 67.6				
Forward Well	From FE 17.6: 46.9: 63.9: Sills 9. Mooring Pipes 1.6 x 3.1				
State whether freeing ports are fitted with shutters, bars or rails, and give particulars					
Give particulars of freeing port area, etc., on superstructure decks					

Shutters hinged at upper edge  
 Bars fitted.  
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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.



## PARTICULARS OF ALL HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

[illegible]

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

Are lashings provided in accordance with rule requirements? *Yes*

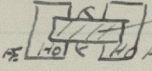
Are battens and wedges efficient and in good condition? *Yes*

Are wood fore and afters shod at all bearing surfaces? *Yes*



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)

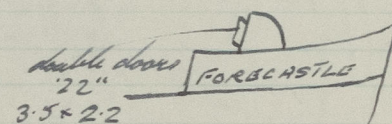
Protected by bridge 9 houses over  Light & Air Casings  
Steel doors in Fiddle Sides - 26" High  
Steel covers over 26" Engine Skylights  
Casing 18" Coamings - 80" 18" Coaming - 25"  
Ship house to top 10' 3' x 3' spaced 30" Plating 25" Steel house 26"  
2 1/2 x 2 1/2 x 3. Top 28" Circular Glass 8" x 1/2" thick

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)

Companion way on fore side 4'0" x 2'8" x 3'8" Steel & Steel 25"  
Branding Bars 2 1/2 x 2 1/2 x 25"  
2 1/2" steel casing



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)

Fore hold 18" coam on fore side 38" coaming x 26"  
After hold 18" coam on R.Q. Deck F.E. 2'6" coaming 3"  
" " " " " " F.E. 2'6" " 28"  
Wood plugs & canvas covers to all vents.

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

2" Swivel necks to all ballast tanks  
To 1st R. on fore side - 2'8"  
C.D. Tank no 1 below fore overboard 2' above upper deck 6'5"  
" " No 2 mid fore well Pass " 4'1"  
" " 3 on Bridge " Bridge 2'8"  
" " 4 R.Q. Deck F.E. R.Q. Deck 3'7"  
" " 5 " " " 3'2"  
To 17 p.k. " " " 1'4"  
WOOD PLUGS TO ALL AIR PIPES.

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

No scuppers through freeboard deck on R.Q. Deck.  
Sanitary discharge from crew WC in fore starboard wing  
drains through ship's side below deck & has non-return valve for  
Remainder of sanitary discharges go out thro' Bridge Sides.

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

7" Diameter in fore sides & B'head. have efficient  
deadlights None in Bridge or R.Q. Deck.

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)

None

Gangways and Lifelines

Efficient platform & gangway with lifelines fitted  
from bridge to fore side.  
Port Side ~~Platform~~ Crew in fore  
Lifelines P & S from bridge to stern on R.Q. Deck.

Gangway, Cargo and Coaling Ports in sides of ship

None.

SUPPLEMENTARY REQUIREMENTS FOR STEAMER CARRYING TIMBER DECK CARGOES

Do Superstructure and Machinery Casings comply with rules?

Yes.

Is provision made for protection of steering gear?

Fitted close to sides of No 3 Hatch protected by  
by horizontal BA & wood plank - Clear of Hatch Steel Plate Trunk. - Accessible.

Is emergency steering gear provided?

Yes.

Are efficient sockets and eyes for lashings provided and properly spaced?

Yes.

State particulars of longitudinal subdivision in double bottom

See L.L.G.C.

State particulars of Bulwarks and Rails

See Sketch on L.L.G.C.

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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190.6. FREEBOARD COMPUTATION FOR SHIP HAVING  
FORECASTLE BRIDGE & RAISED QUARTER DECK.

"HAARLEM"	PORT OF REGISTRY LEITH BRITISH	OFFICIAL NO 45562.	GROSS TONNAGE 970.12	DATE OF BUILD. 1917.	100% GERMANISCHER LLOYD.
ERECTOR'S.	R.Q.DK.	BRIDGE HOUSE	FORECASTLE.		
DO ALL FRAMES EXTEND TO TOP HT.?	YES.	YES.	YES.		
THICKNESS OF SIDE PLATING.	5/20"	9/20" AFT END. 7/20" FORE END.	5/20"		
" " SHEER STRAKE					
ARE EFFICIENT BULKHEADS FITTED AT ENDS?		YES.	YES.		
THICKNESS OF COAMING.		5/20"	5/20"		
" " PLATING.		5/20"	5/20"		
SECTION SPACING & SEAM LINES OF STRENGTHENING.		L 7" x 2 1/2" x 3/16" 29"	L 7" x 2 1/2" x 3/16" 30"	WING BULKHEADS.	
ARE KNEES FITTED AT EACH END OF STIFFENERS?		YES.	YES.		
NO. & SIZE OF OPENINGS.		NONE	5-2" x 3-8" CHANNELS	ONE 5'0" x 23"	
MEANS OF CLOSING "			ON BOARD ALSO STEEL PLATES	HINGED STEEL DOOR.	
			DOOR BOLTED TO BULKHEAD 6 FT. AHEAD.		
HT OF CHANNELS - WHETHER RIVETED.		✓	FULL HT. RIVETED.		
THICKNESS OF BOARDS IN CHANNELS.		✓	2 1/2"		
HEIGHT " " " "		✓	FULL HEIGHT.		

	LENGTH			HEIGHT	REMARKS	SKETCHES OR. COMPUTATIONS.
	Actual	PROPORTION	ALLOWED			
FORECASTLE - CLOSED	25.0	SEE		7.0		28.8
" - OPEN.	3.8	MARGIN	28.2	7.0		27.05
BRIDGEHOUSE - CLOSED	53.0	1	33.0	7.0		1.45
" - OPEN.	-	-	-	-		
R.Q.DK	67.6	SEE MARGIN	67.06	3.75		27.05
POOR	-	-	-	-		54.
						27.39
						28.80
Total Length	149.4		148.26.			56.29
Length of Ship	216.4 = .69		216.4 = .685.			28.195
CORRESPONDING PERCENTAGE (PARA 12) = 48.50.						Allow Rate 28.2.



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REGISTERED DIMENSIONS FROM CERTIFICATE OF REGISTRY	LENGTH	BREADTH	DEPTH	UNDER DECK TONNAGE
	216.9	32.6	13.8	775.11
LENGTH ON LOAD LINE	216.4	FORMER DEPTH 3' Rule "4" DEPTH SPREAD 1' ENTERED	CEILING + .25 SHEER + .18	
CORRECTED DIM.	216.4	32.43	14.23	775.11

$$\frac{775.11 \times 100}{216.4 \times 32.43 \times 14.23} = .776$$

CO-EFFICIENT OF FINENESS. .78.  
 MODIFICATIONS UNDER PARA (a) (2) IF REQUIRED -.02.  
 CO-EFFICIENT USED. .76.

#### CORRECTIONS FOR SHEER

FOR DEPTH HOLD.	SHEER AT STERN. = 59.0
MEAN SHEER 41.5 INS.	STERN POST = 24.0
GRADUAT AT ENDS. = 38.18	83.0 ÷ 2 = 41.5
STANDARD " = 31.64	LENGTH FROM STERN = 29.5
3 6.54	STERN POST = 12.5
12 2.18	42.0 ÷ 2 = 21.0
CORRECTION. ADD. .18	EFFECTIVE MEAN SHEER = 38.18
	STANDARD " = 31.64
	DIFFERENCE = 6.54 ÷ 4 = 1.64 off.

#### CORRECTION FOR ROUND OF BEAM.

BREADTH AT GUNWALE AND SHIPS.	= 32.4
ROUND OF BEAM AT SHIP	= 9.0
NORMAL ROUND OF BEAM.	= 8.1
DIFFERENCE	= .9 ÷ 2 = .45

PROPORTION OF DECK UNCOVERED (PARA 13)  $31 \times .45 = .14$  off

#### ALLOWANCE FOR DECK ERECTIONS

TABLE A FREEBOARD CORRECTED FOR SHEER (IF REQUIRED UNDER PARA 12)	31.36
TABLE C FREEBOARD. = 9.5	8.50
DIFFERENCE	22.86
PERCENTAGE AROUND FRONT PAGE.	48.50
	11430
	18288
	9144
	110871.0

ALLOWANCE FOR DECK ERECTIONS. 11.09 off.

MODIFIED DEPTH USED = 16.0.

#### LENGTH CORRECTION

LENGTH OF SHIP ON LOAD LINE	TABLE A.	TABLE C.
" IN TABLE	216.4	216.4
	192.0	192.0
DIFFERENCE.	24.4	24.4
CORRECTION FOR 1 FOOT.	.1	.05
	2.44	1.22
IF % COVERED DIVIDE BY.	ADD.	
PARAGRAPH 12.	1.22.	

CORRECTION FOR UNSHEATHED IRON OR STEEL DECK (PARA 12)  
 RULE THICKNESS OF WOOD DECK, LESS STRINGER FITTED  $3.5 \times .63$   
 $= 2.27$   
 PROPORTION COVERED BY ERECTIONS = .69 ALLOW. 90 per cent  
 CORRECTION 2.76 off.

#### SUMMARY.

	+	-	INCHES.
FREEBOARD BY TABLE A.			33.0
CORRECTION FOR SHEER	-	1.64	
" " LENGTH	1.22		
ALLOWANCE FOR DECK ERECTIONS	-	11.09	
LESS CORRECTION " ROUND OF BEAM	-	.14	
" " FALL IN SHEER	-	-	
" " UNSHEATHED DECK	-	2.76	
" " THICKNESS OF WOOD	-		
	1.22	15.63	14.41

WINTER FREEBOARD 13.59

STATUTORY DECK LINE CORRECTION 1.50

DEDUCTION IN SUMMER	WINTER
TABLE A $1\frac{1}{2}$ } 1.85	20.09
TABLE C 2" }	SUMMER 18.24
	INDIAN SUMMER 16.39
	NORTH ATLANTIC WINTER 1.5
	14.89
	= 15"

#### ENGINE, BOILER OR MOTOR CASINGS, SKYLIGHTS, VENTILATORS, ETC.

Closed Bridge and Engine Casing by house on bridge protecting Casings.

Casings above Bridge Deck 7'-0"  
 Hinged steel doors close openings in sides and ends.  
 Steel storm covers + steel skylight close openings on top.  
 Vents fitted with efficient casings.  
 Above Bridge deck lt. of side of openings in casing sides = 18"  
 no special arrangements in connection with openings.

#### ENGINE OR MOTOR ROOM SKYLIGHTS.

Casing plate. Thickness + 1/2" above casing 5/16" 18"  
 Steel covers 5/16" thickness  
 Glass. 12 bulls'eyes. 8" x 9/20"  
 no wood covers or tarpaulins

#### CASINGS.

THICKNESS OF CASING PLATE = 5/16"  
 " " SIDE PLATING = 5/16"  
 " " TOP " = 5/16"

GENERAL CONDITION OF CASINGS. - GOOD.

SIZE OF STIFFENERS TO SIDE PLATING 3" x 3" x 5/16" WITH Rd. Ho.  
 SPACING " " " " " 2'-6"  
 SIZE OF BEAMS TO TOP PLATING 8" x 5 1/2" x 5/16"  
 SPACING " " " " " 2'-3"  
 No (EFFICIENT) BRACKETS REQUIRED.

LENGTH ON LOAD LINE = 216.4'  
 GROSS LENGTH OF ERECTIONS = 149.4'  
 LENGTH OF WELL = DIFFERENCE = 67.0.

FREEDING PORT AREA REQUIRED ON EACH SIDE OF VESSEL UNDER PARA 11c. 13.4 SQ. FT.

FREEDING PORTS FITTED ON EACH SIDE IN VESSELS OF ALL TYPES.

LENGTH	BREADTH	NUMBER	AREA
3'	1.75'	3	15.75 SQ. FT.

TOTAL AREA = 15.75

FREEDING PORTS FITTED WITH HINGED SHUTTERS. EXCESS OF FREEDING PORT AREA. = 2.35 SQ. FT.

CREW BERTHED IN FORECASTLE.

ARRANGEMENTS COMPLY WITH REQUIREMENTS FOR CREW TO GET TO + FROM THEIR QUARTERS. (PARA 11d)  
 B.R. CAN BE ENTERED FROM BRIDGE DECK.

All companionway, stairway, skylight bunker hatch way + other openings situated in the upper + weather decks provided with efficient casings or weatherboards of suitable lt. fitted with efficient means of closing.

SCUPPERS DRAINING DECK ERECTION SPACES: - Forecastle drained to deck by valves. no scuppers in closed bridge.

no scuppers, sanitary or other discharges fitted below upper decks.  
 All vents substantially constructed + secured + fitted with wood covers.  
 Vessel engaged in Carrying Cargo. Foreign going.

Vessel is in seaworthy condition

Onboard certificate for 4 Years. Jan Nov 1928.

FREEBOARD APPROVED AMIDSHIPS FROM CENTRE OF DISC TO TOP OF STATUTORY DECK LINE STEEL DECK

REDUCTION FOR FRESH WATER	= 4" 4"
" " T.F.	= 6"
" " T	= 2"
ADDITION " WINTER	= 2"
" " W.N.A	= 4" 4"

1932. 13.59 WINTER 18 1/2"

Less 1.85 = 16.74 SUMMER 16 3/4"  
 16' 1/2"

Disc in same position



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