

Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.

17 SEP 1932

Computation of Freeboard for Steamer, Sailing Ship, Tanker  
having CLOSED SHELTER DK. Port of Survey NEWCASTLE

Ship's Name AFGHANISTAN (Type of Superstructures.)  
Nationality and Port of Official Number BRITISH NEWMARSH 139801 Gross Tonnage 5616 Date of Build 1917

Moulded Dimensions: Length 385.0 Breadth 52.7 Depth 34.8  
Moulded displacement at moulded draught = 85 per cent. of moulded depth 13560 tons  
Coefficient of fineness for use with Tables 795

Name of Surveyor J. Young  
Particulars of Classification + 100 A.I.  
Sheets OK w/hold  
S.S. Sh. No. 3-8.30

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... .. <u>34.8</u>	(a) Where D is greater than Table depth (D - Table depth) R = <u>(34.72 - 25.64) 2.958 = 26.86</u>	Moulded Breadth (B) <u>52.7</u>
Stringer plate ... .. <u>.05</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <u>12.65</u>
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <u>13</u>
Depth for Freeboard (D) = <u>34.72</u>		Difference <u>.35</u>
		Restricted to
		Correction = $\frac{\text{Diff}^a}{4} \times (1 - \frac{S_1}{L}) =$ <u><math>\frac{.35}{4} \times 1 = .09</math></u>

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Peep enclosed ... ..						Standard Height of Superstructure
„ overhang ... ..						„ „ R.Q.D.
R.Q.D. enclosed ... ..						Deduction for complete superstructure
„ overhang ... ..						Percentage covered $\frac{S}{L} =$
Bridge enclosed ... ..						„ „ $\frac{S_1}{L} =$
„ overhang aft ... ..						„ „ $\frac{E}{L} =$
„ overhang forward ... ..						Percentage from Table, Line A. (corrected for absence of forecastle (if required))
Fore enclosed ... ..						Percentage from Table, Line B. (corrected for absence of forecastle (if required))
„ overhang ... ..						Interpolation for bridge less than .2L (if required)
Trunk aft ... ..						Deduction = <u>NIL</u>
„ forward ... ..						
Tonnage opening aft ... ..						
„ „ forward ... ..						
Total ... ..						

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	Mean actual sheer aft =
A.P. ... ..	48.45	1		48.45	59	59.00	1		59.00	Mean standard sheer aft =
$\frac{1}{2}$ L from A.P. ... ..	21.56	4		86.24	23	22.91	4		91.64	Mean actual sheer forward =
$\frac{2}{3}$ L „ ... ..	5.33	2		10.66	6	5.73	2		11.46	Mean standard sheer forward =
Amidships ... ..		4			0		4			Length of enclosed superstructure forward of amidships =
$\frac{2}{3}$ L from F.P. ... ..	10.66	2		21.32	11	10.86	2		21.72	„ „ aft of „ =
$\frac{1}{2}$ L „ ... ..	43.12	4		172.48	43	43.44	4		173.76	
F.P. ... ..	96.90	1		96.90	111	111.00	1		111.00	
Total ... ..				436.05					468.58	

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{32.53}{18} \times .75 = -1.36$   
If limited on account of midship superstructure. If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft.

## Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 34.72 Ft.  
Summer freeboard = 9.31  
Moulded draught (d) = 25.41

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 6.35 = 6 $\frac{1}{4}$ Addition for Winter North Atlantic Freeboard (if required) = NIL

## Deduction for Fresh Water.

Displacement in salt water at summer load waterline

 $\Delta =$  11670

Tons per inch immersion at summer load water line

 $T =$  40.0Deduction =  $\frac{\Delta}{40 T}$  inches7.287 $\frac{1}{4}$ 

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient  $\frac{.795 \times .68}{1.36} = \frac{1.475}{1.36} =$  1.08Depth Correction ... .. 26.86Deduction for superstructures ... .. -Sheer correction ... .. 1.36Round of Beam correction ... .. .09Correction for Thickness of Deck amidships ... .. -Other corrections, scantlings, etc. ... .. 7.69Summer Freeboard = 111.75

## SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc ... ..	<u>13<math>\frac{1}{2}</math></u>	Tropical Fresh Water Freeboard ... ..	<u>9' - 3<math>\frac{3}{4}</math></u>
Fresh Water Line „ „ ... ..	<u>7<math>\frac{1}{4}</math></u>	Fresh Water „ „ ... ..	<u>8' - 2<math>\frac{1}{4}</math></u>
Tropical Line „ „ ... ..	<u>6<math>\frac{1}{4}</math></u>	Tropical „ „ ... ..	<u>8' - 8<math>\frac{1}{2}</math></u>
Winter Line below „ „ ... ..	<u>6<math>\frac{1}{4}</math></u>	Winter „ „ ... ..	<u>8' - 9<math>\frac{1}{2}</math></u>
Winter North Atlantic Line „ „ ... ..	<u>6<math>\frac{1}{4}</math></u>	Winter North Atlantic „ „ ... ..	<u>9' - 10</u>

20 SEP 1932

DO3599-003604-0196 1/2

MARKING FORM

RECEIVED 2 - AUG 1935

MARKING FORM

RECEIVED 21 SEP 1932

Lloyd's Register  
Classification



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Description of Hatchway	N <sup>o</sup> 1	N <sup>o</sup> 2	N <sup>o</sup> 2A	N <sup>o</sup> 3	N <sup>o</sup> 4	N <sup>o</sup> 5	To Poop Space	To F.P. Store	Side Bunkers	Saddleblack
Dimensions of Hatchway	25'6" x 18'0"	29'9" x 18'0"	10'7" x 17'0"	29'9" x 18'0"	27'7 1/2" x 18'0"	4'2" x 18'0"	8'0" x 8'0"	3'9" x 2'6"	10'7" x 2'10"	4'3" x 16'6"
COAMINGS	Height above Deck	30"	30"	30"	30"	31"	12"	20"	30"	7'2"
	Thickness	.52	.54	.44	.54	.54	.40	.40	.44	.44
	Sides	.44	.44	.44	.44	.44				
	Stiffeners	7" x 3" B.A.	7" x 3" B.A.	7" x 3" B.A.	7" x 3" B.A.	7" x 3" B.A.				
HATCH BEAMS	Brackets, Stays	✓	✓	✓	✓	✓				
	Number	5	5	1	5	5	Covers 3"	Covers 3"	Covers 3"	Covers 3"
	Spacing	4'-3"	4'-11 1/2"	5'-3 1/2"	4'-11 1/2"	4'-7"	B.S. 2 1/4"	B.S. 2 1/2"	B.S. 2 1/2"	B.S. 3"
	Scantling and Sketch	15" to 7 3/4" x .34	13" to 6" x .32	14" to 7" x .34	SAME AS N <sup>o</sup> 2	SAME AS N <sup>o</sup> 2	Cleats 18"	Cleats 24"	Cleats 23"	Cleats 24"
FORE AND AFTERS	Bearing Surface	4' x 3' x .44	3 1/2' x 3 1/2' x .50	SAME AS N <sup>o</sup> 1			Tarps 3	Tarps 3	Tarps 3	Tarps 3
	Number					3				
	Spacing					4'-7 1/2"				
	Unsupported Lengths					5' x 4"				
HATCH COVERS	Scantling* and Sketch					TEE BAR				
	Bearing Surface									
	Material	W.P.				W.P.				
	Thickness	3"				3"				
Spacing of Cleats	How fitted	F.A.				ATH				
	Bearing Surface	3"				3"				
	Number of Tarpaulins	3				3				

\*Are wood fore and afters steel shod at all bearing surfaces? ☒ YES.  
 Are battens and wedges efficient and in good condition? YES.  
 Are tarpaulins in good condition and in accordance with rule requirements? YES.  
 Are lashings provided in accordance with rule requirements? YES.

Particulars of fiddle, funnel and ventilator coamings:—

Fiddle Gratings are protected by hinged steel covers  
 Funnel & Vents in efficient condition  
 E.R. Skylight of steel (one flap to repair)

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways:—

To Crew Space forward. 4'-6" x 3'-6" x 6'-0" of steel  
 opening 2'-10" x 4'-8" Sill 13" Door 1 1/2" Solid teak. operated both sides.

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

To F.P. Store.	8" diam	16" high.	
To Crew	6" x 7"	18"	
To Holds	18"	36"	
To Bh <sup>d</sup> Air Space	7"	11"	G.N.
To Bunkers	16"	25"	
To Tunnel	6"	36"	
To aft Store	7"	21"	

Vents are well constructed to Rule requirements.  
 Wood Plugs and Canvas Covers are on board.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—

To Fore Peak. 5 1/2" diam. 10 1/4" high.  
 To Aft Peak 5" " 10 1/2" "  
 Remainder are flush with screw cap covers. } closed with canvas covers

Particulars of Gangway Cargo and Coaling Ports:—

None.



Afghanistan

Particulars of Scuppers and Sanitary Discharge Pipes :-

Weather deck scuppers are bent pipe thro. deck and shell. no scuppers elsewhere. -

Sanitary discharges :- Iron pipe all fitted with storm valves. -

Particulars of Side Scuttles :-

In Crew space 9" diam all fitted with hinged iron deadlights -

Particulars of Guard Rails :-

Weather Deck 3'-4" high. Stanchions 4'-3" apart 3 Rails  
Bulwark amidships 3'-4" high Stays 6" B.P. 5'-0" apart Rail 6"x3" B.A.

Particulars of Gangways, Lifelines, etc. :-

None. Lifelines rigged at fore and after ends of the ship.

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well ... ..						
Forward Well ... ..						

State position of each freeing port  
(E. and A. position and height above deck edge) } After Well :-  
Forward Well :-  
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :-  
Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ... ..								
Raised Quarter Deck Bulkhead ... ..								
Bridge, After Bulkhead ... ..								
Bridge, Forward Bulkhead ... ..								
Forecastle Bulkhead ... ..								
Trunk, Aft ... ..								
Trunk, Forward ... ..								
Exposed Machinery Casings on Free-board or Raised Quarter Deck ... ..	.42 -	.40 -	3"x3"x.40	2'-10" -	Bkts lfp. -	2'-1"x 4'-7" -	18" -	7'-3" -
Exposed Machinery Casings on Superstructure Decks ... ..								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..								
Deckhouses on Flush Deck Ships ... ..								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead ... ..	
Raised Quarter Deck Bulkhead ... ..	
Bridge, After Bulkhead ... ..	
Bridge, Forward Bulkhead ... ..	
Forecastle Bulkhead ... ..	
Exposed Machinery Casings on Free-board or Raised Quarter Deck ... ..	Hinged Steel Doors operated both sides (locks to repair)
Exposed Machinery Casings on Superstructure Decks ... ..	1 1/2" Solid Leak door " " "
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	
Deckhouses on Flush Deck Ships ... ..	



© 2020

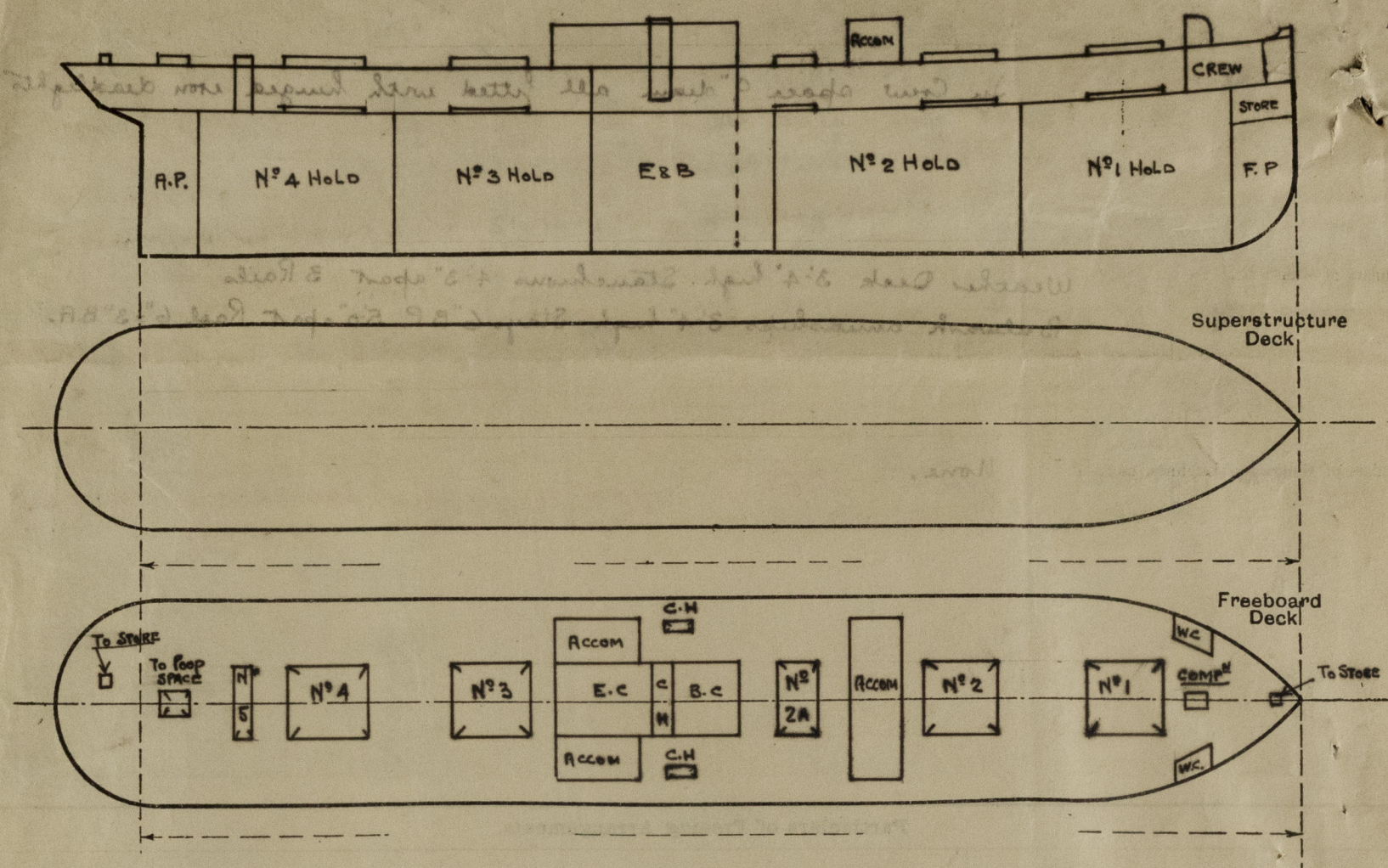
Lloyd's Register Foundation



Afghanistan

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches:—

containing details of the ship's structure:—



STEEL DECK AT AMIDSHIPS.

State any special features in the construction of the ship:—

VESSEL SURVEYED AFLOAT  
WHILE LAID UP.

*omit*  
 $85\frac{1}{2} \times 34.67 = 29.47$   
 $29.47 \times 16 = 471.52$   
 $25.9 \times 16 = 414.4$   
 $3.10, 46 \times 40.3 = 1858$   
 $11790 - 68 = 11722$   
 $11722 - 100 = 11622$   
 $11622 \times 1.01 = 11738$

RECEIVED FROM OWNERS		
SUPERINTENDENT.		
DRAFT	$\Delta$	T.P.L.
25-9 1/2	11770	
24-0 1/2	10930	40.0
22-3 1/2	10080	

Builder's name and yard number. **SUNDERLAND SHIPBUILDING Co.**

Names of sister ships.

Owners. **HINDUSTAN SHIPPING Co. (MESSRS COMMON BROS NEWCASTLE)**

Fee £ **13 . 12 . 0** Received by me *[Signature]*