

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey <i>Abadan</i>	
having <i>Poop - Bridge - Forecastle</i>					Date of Survey <i>28-12-32</i>	
(Type of Superstructures.)					Name of Surveyor <i>Amac Gieinay</i>	
Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build	Particulars of Classification <i>+ 100 A.1.</i>	
<i>"Khuzistan"</i>	<i>British London</i>	<i>147673</i>	<i>871</i>	<i>6 no.-</i>	<i>s.s. Abadan No. 1-29</i>	
Moulded Dimensions: Length	<i>176'-0"</i>	Breadth	<i>32'-6"</i>	Depth	<i>14'-9"</i>	
Moulded displacement at moulded draught = 85 per cent. of moulded depth			<i>1476</i>	tons		
Coefficient of fineness for use with Tables			<i>720</i>			
Depth for Freeboard (D)			Depth correction		Round of Beam correction	
Moulded depth <i>14.75</i>		(a) Where D is greater than Table depth		Moulded Breadth (B) <i>32.5</i>	
Stringer plate <i>46</i>		(D-Table depth) R = <i>(14.79-11.73) 1.354</i>		Standard Round of Beam = $\frac{B \times 12}{50} = 7.8$	
Sheathing on exposed deck	T $\left(\frac{L-S}{L}\right) =$		(b) Where D is less than Table depth (if allowed)		Ship's Round of Beam = <i>8.8</i>	
Depth for Freeboard (D) = <i>14.79</i>			(Table depth-D) R =		Difference <i>8.12</i>	
			If restricted by superstructures		Restricted to	
					Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.32}{4} (.3568) = .03$	

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	62.33	62.33	7'-6"		62.33	Standard Height of Superstructure <i>6.0</i>
" overhang ...						" " R.Q.D. <i>3.51</i>
R.Q.D. enclosed ...						Deduction for complete superstructure <i>23.6</i>
" overhang ...						Percentage covered $\frac{S}{L} = 64.84$
Bridge enclosed ...	20.79	20.79	7'-6"		20.79	" " $\frac{S_1}{L} = 64.32$
" overhang aft ...						" " $\frac{E}{L} = 64.32$
" overhang forward ...						Percentage from Table, Line A. <i>53.34</i>
F'cle enclosed ...	31.80	29.18	7'-6"		29.18	(corrected for absence of forecastle (if required))
" Side Houses ...	28.12	.91			.91	Percentage from Table, Line B. <i>53.34</i>
Trunk aft ...						(corrected for absence of forecastle (if required))
" forward ...						Interpolation for bridge less than 2L (if required)
Tonnage opening aft ...						Deduction = <i>12.59</i>
" " forward						
Total ...	114.12	113.21			113.21	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	27.60	1		27.60	21.75	21.75	1		21.75	Mean actual sheer aft = <i>Deficient</i>
1/2 L from A.P. ...	12.28	4		49.12	9.87	9.87	4		39.48	Mean actual sheer forward = <i>Excess</i>
2/2 L " ...	3.04	2		6.08	2.47	2.47	2		4.94	Mean standard sheer forward
Amidships ...	-1	4		-4			4		-4	Length of enclosed superstructure forward of amidships =
3/2 L from F.P. ...	6.07	2		12.14	5.92	5.92	2		11.84	" " aft of " =
1/2 L " ...	24.56	4		98.24	23.70	23.70	4		94.80	
F.P. ...	55.20	1		55.20	59.25	59.25	1		59.25	
Total ...				248.38					232.06	
Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{248.38 - 232.06}{18} \left(\frac{.75 - .3242}{.4258} \right) = .394$										
If limited on account of midship superstructure.										If limited to maximum allowance of 1 1/2 ins. per 100 ft.

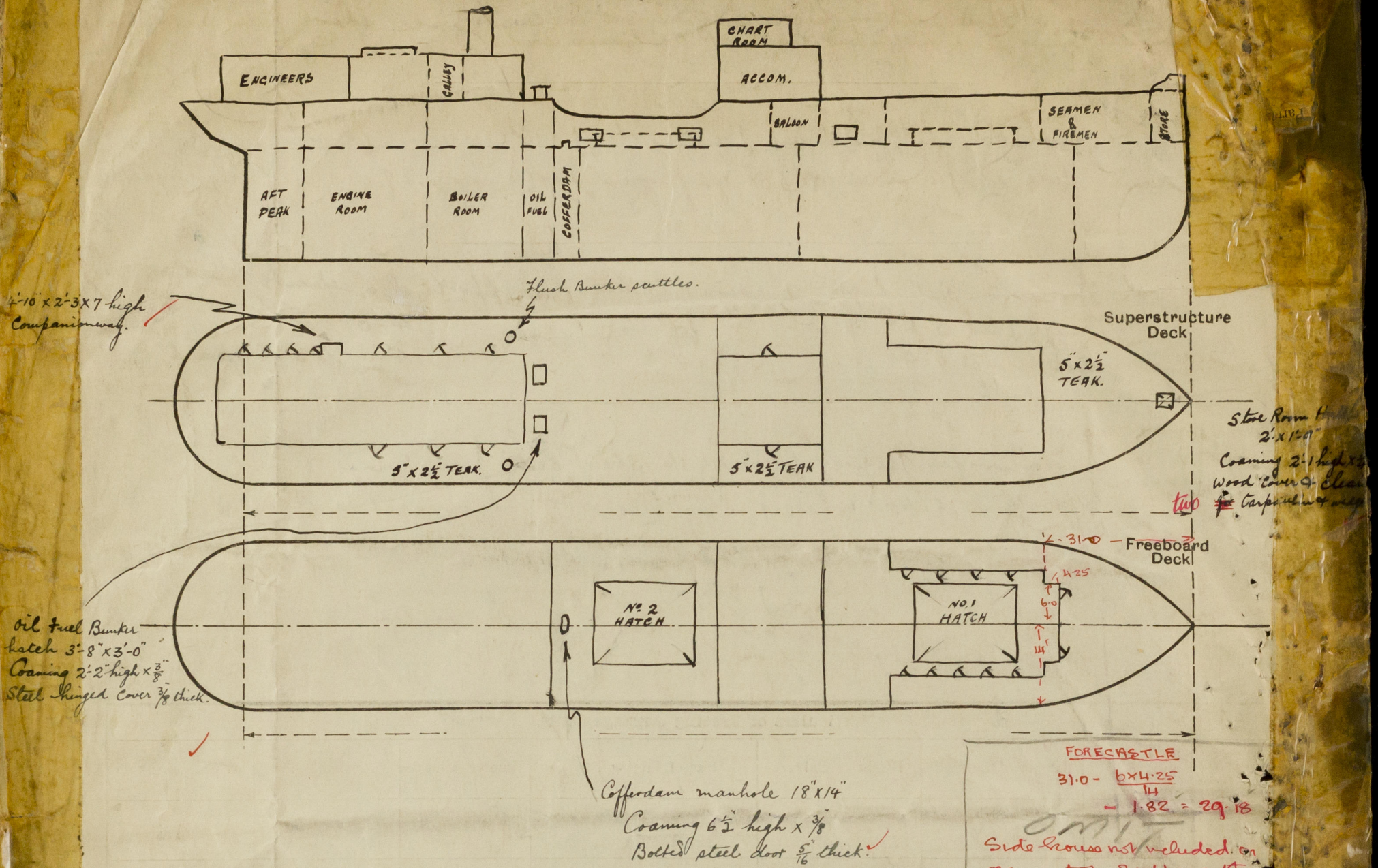
Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	19.20
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{727.68}{1.30} = \frac{140}{136}$	19.76
Depth to Freeboard Deck = <i>14.79</i>	$\Delta =$	Depth Correction 4.14	
Summer freeboard = <i>.98</i>	Tons per inch immersion at summer load water line	Deduction for superstructures 12.59	
Moulded draught (d) = <i>13.81</i>	T =	Sheer correction39	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>3.45 = 3 1/2</i>	Deduction = $\frac{\Delta}{40 T}$ inches = <i>3 1/2</i>	Round of Beam correction03	
Addition for Winter North Atlantic Freeboard (if required) = <i>2</i>		Correction for Thickness of Deck amidships	
		Other corrections, scantlings, etc.	
		4.53 12.62 - 8.09	
		Summer Freeboard = <i>11.7</i>	

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck:—

Tropical Fresh Water Line above Centre of Disc ...	7"	Tropical Fresh Water Freeboard ...	0 - 11 3/4"
Fresh Water Line " " ...	3 1/2"	Fresh Water " " ...	0 - 4 3/4"
Tropical Line " " ...	3 1/2"	Tropical " " ...	0 - 8 1/4"
Winter Line below " " ...	3 1/2"	Winter " " ...	1 - 3 1/4"
Winter North Atlantic Line " " ...	5 1/2"	Winter North Atlantic " " ...	1 - 5 1/4"

Khazistan

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



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

Builder's name and yard number

Names of sister ships

Owners

Fee £ 6 : 6 :

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Particulars of Pumps and Sanitary Discharge Pipes:—

Four sanitary discharge pipes from enclosed fore-castle fitted with brass storm valves on the ships side, & efficient traps at the inner end.
Three sanitary discharge pipes from enclosed Bridge space fitted with brass storm valves on the ships side, & efficient traps at the inner end.

Particulars of Side Scuttles:—

Fore-castle side scuttles are fitted with efficient hinged deadlights.
Side scuttles on mid-ship & after accommodation are not fitted with deadlights.

Particulars of Guard Rails:—

Fore-castle 3'-1" high 2 rows of rails. Supports 4'-6" apart.
Bridge Deck 3'-1" 4'-0" ..
Poop .. 3'-0" 4'-0" to 5'-4" apart.

Particulars of Gangways, Lifelines, etc.:—

Hinged wooden gangway fitted on the Starboard side from Bridge Deck to Fore-castle Deck, efficiently supported & having stanchions & 2 rods on each side.
Two rows of life lines on each side extending from Fore-castle rails to mid-ship rails, with portable supporting stanchions.
Suttable provision is made for lifelines

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	26.25 52-6	3'-9"	3' 08" x 1' 66"	2	10' 22	9.12
Forward Well	7.5 15-0	8'-0"	3' 08" x 2' 41"	1	7' 42	7.25

State position of each freeing port } After Well:— 7'-7" 18'-7½" forward of Poop bulkhead.
(L. and A. position and height above deck edge) } Forward Well:— 2'-0" forward of Bridge bulkhead } 11" above deck edge.
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— } Fitted with hinged shutters.

Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.

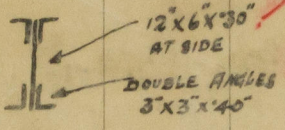
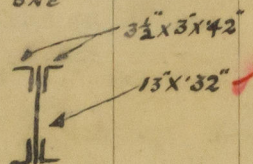
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	3/8"	5/16"	.	24"				7'-6"
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead	5/16"	5/16"	4" x 3" x 5/16"	30"		4'-3" x 3'-	1'-9½"	7'-6"
Bridge, Forward Bulkhead	3/4"	3/16"	6½" x 3" x 3/16" B.H.	26"	Plate Brackets	4'-3" x 3'-	1'-9½"	7'-6"
Fore-castle Bulkhead		5/16"	3" x 3" x 5/16"			4'-9" x 1'-9"	1'-4"	7'-6"
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Deck or Raised Quarter Decks ...	5/16"	1/4"	3" x 3" x 5/16"	36"		4'-8" x 1'-10"	1'-7½"	7'-0"
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	No openings
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead	Storm boards 3' x 9" full height in rivetted channels on Star side. Hinged watertight door on Port side capable of being manipulated from both sides.
Bridge, Forward Bulkhead	Hinged watertight door on Port side capable of being manipulated from both sides.
Fore-castle Bulkhead	Two hinged teak wood doors capable of being manipulated from both sides.
Exposed Machinery Casings on Deck or Raised Quarter Decks ...	Three hinged steel doors on Star side, & 3 steel & 3 Teak wood hinged doors on Port side. Capable of being manipulated from both sides.
Exposed Machinery Casings on Superstructure Decks	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses	
Flush Deck Ships ...	

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

Description of Hatchway	FORE HATCH	AFT HATCH
Dimensions of Hatchway	16'-10 1/2" x 9'-2"	15'-0" x 10'-0"
Height above Deck	2'-6" ✓	2'-6" ✓
Thickness	42" ✓	42" ✓
Stiffeners		
Brackets, Stays		
Number	ONE	
Spacing		
Scantling and Sketch		NONE
Bearing Surface	2" AT EACH END.	
Number		ONE
Spacing		
Unsupported Lengths		
Scantling* and Sketch	NONE	
Bearing Surface		2 1/2" AT EACH END.
Material	STEEL ✓	STEEL
Thickness	37" ✓	37"
How fitted		
Bearing Surface	HINGED & SECURED WITH HINGED BOLTS & NUTS. ✓	
ing of Cleats		
ber of Tarpaulins	NONE ✓	

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

Particulars of fiddle, funnel and ventilator coamings:—

Fiddle openings covered by strong steel hinged covers.
 Engine skylight of steel strongly constructed.
 Stokehold & engine room ventilators in good condition.

Particulars of Flush Bunker Scuttles:—

Two on Poop deck each 1'-9 3/4" dia covered with C.I. Covers with sunk handle. Covers secured in position by means of internal lugs.
 Removed - see C.I. (contd).

Particulars of Companionways:—

One steel companionway on Port side Poop deck 4'-10" x 2'-3" x 7' high leading to store room & Engine room messroom. Teakwood hinged door capable of being operated from both sides. Height of sill 1'-4 1/2".

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

2 Vents on Bridge Deck 7" dia Coaming 30 1/2" x 1/2" led to store rooms.	
3 " " Navigating " 7" " " 12 1/2" x 1/2" " " accommodation.	
1 " " " 7" " " 13" x 1/2" " " " "	
1 " " " 7" " " 12" x 1/2" " " " "	
6 " " Poop " 7" " " 30" x 1/2" " " " "	
3 " " Boat " 7" " " 13" x 1/2" " " " "	
2 " " " 18" " " 37 1/2" x 1/2" " " " "	
2 " " " 20" " " 58" x 1/2" " " " "	

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

pipe on Poop deck 10 1/2" high x 2" dia from engine room tank.	4 Air pipes on Bridge deck 14 1/2" high x 5" dia from store room
" " " 11" " x 2" " " Domestic tank.	1 " " " Forecastle " 12 1/2" " x 2 1/2" " " Forepeak
" " " 12" " x 2 1/2" " " After peak.	
" " " 9 1/2" " x 2" " " Domestic tank.	
" " " 4 1/2" " x 4" " " Oil fuel bunker.	
" " " 13" " x 5" " " Accommodation.	
" " " 12 1/4" " x 2 1/2" " " Cofferdam.	

Particulars of Gangway Cargo and Coaling Ports:—

NONE.



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