

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

1404

Computation of Freeboard for Steamer, Sailing Ship, Tanker  
having FORECASTLE ONLY.Port of Survey KARACHI.

(Type of Superstructures.)

Date of Survey 24-2-49.

Ship's Name <b>FRAVARTA</b> (EX. H.M.I.S. KARACHI.)	Nationality and Port of Registry <b>KARACHI</b> (PAKISTAN)	Official Number <b>191028</b>	Gross Tonnage <b>444.76</b>	Date of Build <b>1942</b>
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Name of Surveyor J. JOHNSTON.

Moulded Dimensions: Length 152'-0" Breadth 27'-6" MLD. Depth 15'-0" MLD.  
Moulded displacement at moulded draught = 85 per cent. of moulded depth 830 tons  
Coefficient of fineness for use with Tables 0.68. (54.5 ACTUAL)

Particulars of Classification  
A. WITH FREEBOARD for towing services on the coast of India & Persian Gulf.

Depth for Freeboard (D)  
Moulded depth ... .. 15'-0"  
Stringer plate ... .. 0'-0 3/8"  
Sheathing on exposed deck  
 $T \left( \frac{L-S}{L} \right) =$   
Depth for Freeboard (D) = 15'-0 3/8"

Depth correction  
(a) Where D is greater than Table depth  
(D - Table depth) R =  
 $(1503 - 1013) \times 1.164 = + 5.73$   
(b) Where D is less than Table depth (if allowed)  
(Table depth - D) R =  
If restricted by superstructures ☒

Round of Beam correction  
Moulded Breadth (B) 27'-6"  
Standard Round of Beam =  $\frac{B \times 12}{50} =$  6.6"  
Ship's Round of Beam = 0'-7.0"  
Difference Excess 4.  
Restricted to  
Correction =  $\frac{\text{Diff}^e}{4} \times \left( 1 - \frac{S_1}{L} \right) = 1.4 \times 0.8273 = - 1.16$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..					
" overhang ... ..					
R.Q.D. enclosed ... ..					
" overhang ... ..					
Bridge enclosed ... ..					
" overhang aft ... ..					
" overhang forward ... ..					
Fore enclosed ... ..	<u>26'-3"</u>	<u>26.25</u>	<u>6'-7"</u>	<input checked="" type="checkbox"/>	<u>26.25</u>
" overhang ... ..					
Trunk aft ... ..					
" forward ... ..					
Tonnage opening aft ... ..					
" " forward ... ..					
Total ... ..	<u>26.25</u>	<u>26.25</u>			<u>26.25</u>

Standard Height of Superstructure 6'-0"  
" " R.Q.D. ☒  
Deduction for complete superstructure 21.2"  
Percentage covered  $\frac{S}{L} =$  } 17.27 ✓  
" "  $\frac{S_1}{L} =$  }  
" "  $\frac{E}{L} =$  }  
Percentage from Table, Line A. 8.635  
(corrected for absence of forecastle (if required))  
Percentage from Table, Line B. ☒  
(corrected for absence of forecastle (if required)) ✓  
Interpolation for bridge less than 2L (if required) ✓  
Deduction = 21.20 + 0.04635 = 21.25 ✓

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..	<u>25.2</u>	1		<u>25.20</u>	<u>2'-10"</u>	<u>34.0</u>	1		<u>34.0</u>
1/8 L from A.P. ... ..	<u>11.21</u>	4		<u>44.84</u>	<u>1'-3"</u>	<u>15.0</u>	4		<u>60.0</u>
3/8 L " ... ..	<u>2.77</u>	2		<u>5.54</u>	<u>0'-4"</u>	<u>4.0</u>	2		<u>8.0</u>
Amidships ... ..	<input checked="" type="checkbox"/>	4		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4		<input checked="" type="checkbox"/>
5/8 L from F.P. ... ..	<u>5.54</u>	2		<u>11.08</u>	<u>0'-8"</u>	<u>8.0</u>	2		<u>16.0</u>
1/8 L " ... ..	<u>22.43</u>	4		<u>89.72</u>	<u>2'-3"</u>	<u>27.0</u>	4		<u>108.0</u>
F.P. ... ..	<u>50.4</u>	1		<u>50.40</u>	<u>4'-4"</u>	<u>52.0</u>	1		<u>52.0</u>
Total ... ..				<u>226.78</u>					<u>278.0</u>

Mean actual sheer aft =  
Mean standard sheer aft =  
Mean actual sheer forward =  
Mean standard sheer forward =  
Length of enclosed superstructure forward of amidships =  
" " aft of " =

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( 75 - \frac{S}{2L} \right) = \frac{51.22}{18} \left( 75 - \frac{0.0864}{2} \right) = - 1.89$

If limited on account of midship superstructure. Yes NIL ✓

If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 15.03  
Summer freeboard = 2.02  
Moulded draught (d) = 13.01

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 3.25 = 3 1/4"Addition for Winter North Atlantic Freeboard (if required) = 5 1/4"

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$   
Tons per inch immersion at summer load water line  
 $T =$

Deduction =  $\frac{\Delta}{40 T}$  inches4 1/4 = 3 1/4" ✓

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

Correction for coefficient NIL

	+	-
Depth Correction ... ..	<u>5.73</u>	<input checked="" type="checkbox"/>
Deduction for superstructures ... ..	<input checked="" type="checkbox"/>	<u>1.83</u>
Sheer correction ... ..	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Round of Beam correction ... ..	<input checked="" type="checkbox"/>	<u>0.08</u>
Correction for Thickness of Deck amidships ... ..	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other corrections, scantlings, etc. CORRESPONDING TO A MOULDED SUMMER DRAUGHT OF 13'-0" (12'-0 1/2" ACTUAL).	<u>4.65</u>	<input checked="" type="checkbox"/>
	<u>10.38</u>	<u>1.91</u>

Summer Freeboard = 24.25 ✓SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—

Tropical Fresh Water Line above Centre of Disc ... 6 1/2"  
Fresh Water Line " " ... 3 1/4"  
Tropical Line " " ... 3 1/4"  
Winter Line below " " NOT ASSIGNED.  
Winter North Atlantic Line " " NOT ASSIGNED.

Tropical Fresh Water Freeboard ... 1'-5 3/4"  
Fresh Water " " ... 1'-9"  
Tropical " " ... 1'-9"  
Winter " " NOT ASSIGNED.  
Winter North Atlantic " " NOT ASSIGNED.



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	NO 1 FORD.	NO 2 FORD.	NO 3 AFT.	NO 4 AFT.					
Dimensions of Hatchway	16'-6" x 12'-0"	2'-0" x 5'-0"	3'-0" x 4'-10"	24' x 24'					
COAMINGS	Height above Deck ... 30"	30"	30"	30"					
Thickness Sides ... 1/2"	1/2"	3/8"	3/8"	5/16"					
Stiffeners ... 9" Channel	9" Channel								
Brackets, Stays ... 4" x 4" x 1/2"	4" x 4" x 1/2"								
HATCH BEAMS	Number ... 3								
Spacing ... 4'-0"	4'-0"								
Scantling and Sketch		NIL.	NIL.	NIL.					
Bearing Surface	3"								
FORE AND AFTERS	Number ...								
Spacing ...									
Unsupported Lengths ...									
Scantling and Sketch	NONE.								
Bearing Surface									
HATCH COVERS	Material ... WHITE PINE.								
Thickness ... 2 1/2"	2 1/2"								
How fitted ... F. & A.	F. & A.								
Bearing Surface ... 3" EACH END.	3" EACH END.								
Spacing of Cleats	24" x 8"								
Number of Tarpaulins	3								
	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 :-

E.R. VENTS. 2 @ 12" COAMING 3'-0" x 5/16"  
B.R. - 2 @ 18" - - - x 5/16"

Particulars of Flush Bunker Scuttles :-

CAST IRON. with bayonet joint and chain attachment

Particulars of Companionways :-

ENTRANCE TO OFFICERS ACCOMMODATION AFT. THROUGH DECKHOUSE.  
WOOD DOOR - COAMING 1'-6" opening both sides  
ENTRANCE TO E.R. & B.R. - W.T. STEEL DOOR OPERATED FROM BOTH SIDES. sill 1'-6"

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

6 @ 9" COAMINGS 2'-6" x 5/16"  
4 @ 6"

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

FOCLE DECK 5 @ 2 1/2" x 1'-6" HIGH.  
FREEBOARD " 2 @ 2 1/2" x 2'-6"

Particulars of Gangway Cargo and Coaling Ports :-

NONE.

Particulars of Scuppers and Sanitary Discharge Pipes :-

2 @ 4" } STORM VALVES.  
3 @ 1 1/2"

Particulars of Side Scuttles :-

UNDER FO'CLE 12 @ 9" WITH DEADLIGHTS.  
- FREEBOARD 18" - - -

Particulars of Guard Rails :-

FO'CLE - STEEL STANCHIONS & WIRE RAILS. 3'-3" HIGH. with attaching screws.  
BULWARK 3'-3" HIGH ALL ROUND FREEBOARD DECK.

Particulars of Gangways, Lifelines, etc. :-

2 FORD. } 1" CIRC. WIRE ROPE.  
2 AFT.

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	138'-0" P. 138'-0" S.	3'-3"	3'-0" x 1'-6"	6	27 sq.	21
Forward Well	105					
State position of each freeing port ... After Well :- 3' ABOVE DECK. (F. and A. position and height above deck edge) } Forward Well :- State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :- 1 @ 1" ROUND BAR. Additional area where sheer is less than standard.						

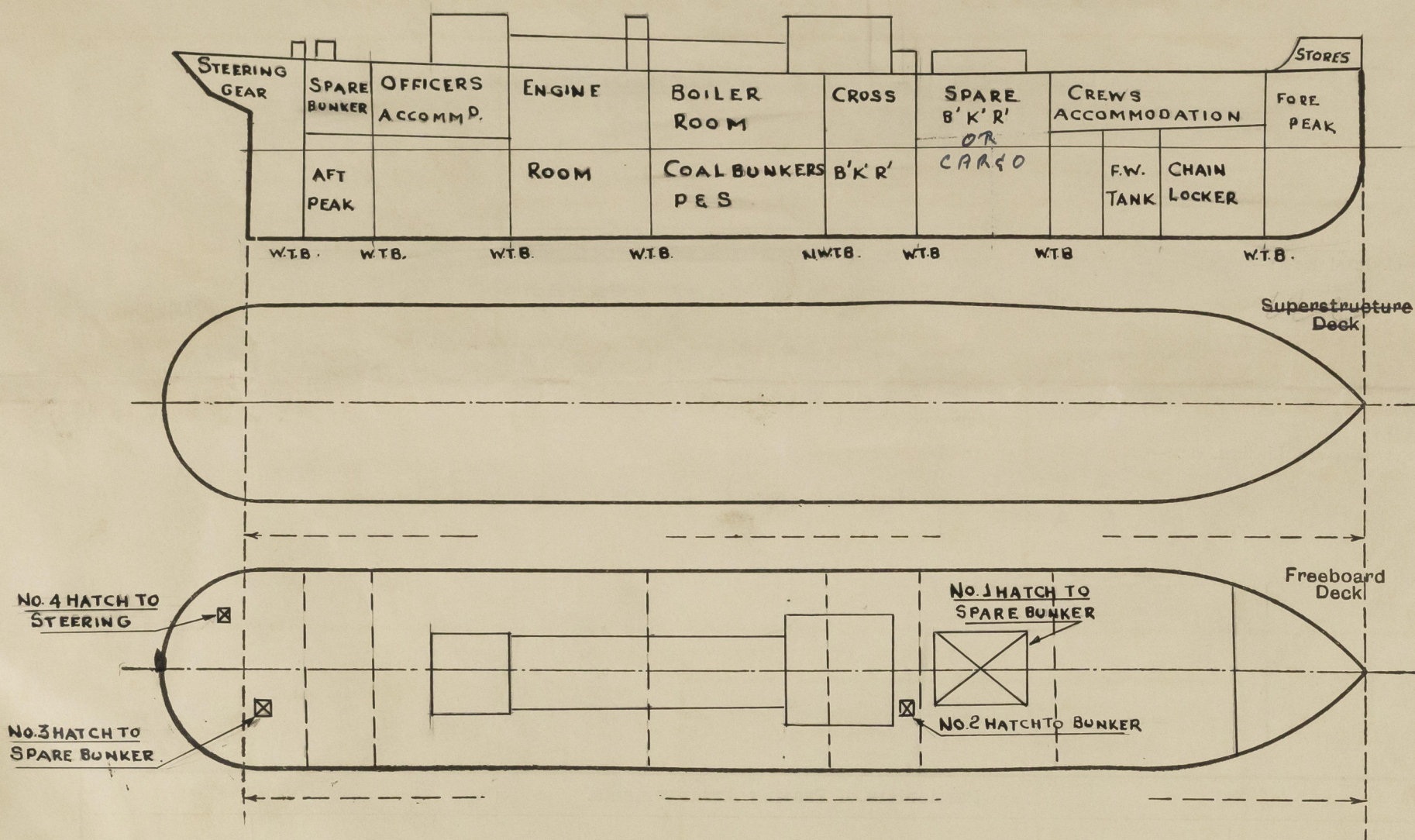
Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead								
Raised Quarter Deck Bulkhead								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead	1/4"	1/4"	2 1/2" x 2 1/2" x 1/4"	2'-9"	9" x 9" x 1/4" BRACKETS	1 @ 4'-6" x 2'-3"	1'-6"	6'-7"
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Deck	5/16"	E.R. 5/16" B.R. 1/4"	3" x 3" x 1/16"	2'-7"	BRACKET TOP LUG. BOT.	E.R. 20" x 14" B.R. 12" x 12"	1'-6"	2'-9" AT SIDES
Exposed Machinery Casings on Superstructure Decks								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships	1/4"	1/4"	4" x 3" x 5/16"	2'-3"	BKT. T. & B.	4'-9" x 2'-2"	1'-6"	F. 8'-0" A. 6'-7"

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 Freeboard or Raised Quarter Decks	STEEL WEATHERTIGHT DOOR MANIPULATED FROM BOTH SIDES
Exposed Machinery Casings on Superstructure Decks	- WATERTIGHT DOORS
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses on Flush Deck Ships	TEAKWOOD DOORS. OBS



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 shewn on the following sketches:—



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

The Vessel is converted from H.M. Basset Trawler KARACHI.

All Ventilators & Air pipes are provided with efficient plugs & canvas covers ✓

All overboard discharges from spaces on or above the freeboard deck are fitted with storm Valves. ✓

The Minimum distance between the lower edges of side scuttles & the 13' ft mean draft line is 22 inches.

All deadlights are bronze

The freeing port area on each side is 27 sq. ft. ✓

All Hatches are provided with cleats, battens and tarpaulins except the steering gear space hatch which has a steel hinged cover. ✓

Builder's name and yard number ALCOCK ASHDOWN & Co. LTD., BOMBAY - N.C.P.B.  
CONVERTED BY BRITISH INDIA ENGINEERING WORKS, KARACHI.

Names of sister ships \_\_\_\_\_

Owners EAST & WEST STEAMSHIP CO, KEAMARI, KARACHI, PAKISTAN.

Fee Rs 310-0-0

Received by me \_\_\_\_\_



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