

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, ~~SAILING SHIP, TANKER.~~ *Coasting vessel in coastal trade.*)

Ship's Name <b>JOAN.</b>	Official Number	Nationality and Port of Registry <b>INDONESIAN SOURABAYA.</b>	Gross Tonnage	Date of Build <b>10, 58</b>	Port of Survey <u>SOURABAYA.</u>
Moulded Dimensions: Length <u>38.422 m</u> , Breadth <u>8.0 m</u> , Depth <u>2.25 m</u>					Date of Survey <u>23<sup>RD</sup> SEPT 1958</u>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>496.6 m</u> tons					Surveyor's Signature <u>Not Assigned</u>
Coefficient of fineness for use with Tables <u>0.818</u>					Particulars of Classification <u>* 100A BARGE. C.P. 13</u> <u>for service in the North Coast</u> <u>of Java including Madura Straights.</u>

<b>DEPTH FOR FREEBOARD (D).</b> <u>m</u> Moulded depth ... <u>2,250</u> Stringer plate ... <u>8.7 mm</u> Sheathing on exposed deck <u>0,009</u> $T \left( \frac{L-S}{L} \right) =$ <u>-</u> Depth for Freeboard (D) = <u>2,259</u>	<b>DEPTH CORRECTION.</b> <u>4/15 = 2,581</u> (a) Where D is greater than Table depth (D-Table depth) R = <u>-</u> (b) Where D is less than Table depth (if allowed) (Table depth-D) R = <u>833(2,581-2,259)9,748 = -26,2 mm</u> <u>605/1830 X -26,2 mm = -9 mm</u>	<b>ROUND OF BEAM CORRECTION.</b> Moulded Breadth (B) <u>8,0 m</u> Standard Round of Beam = $B \times \frac{1}{50}$ = <u>SEE 160 mm</u> Ship's Round of Beam (equivalent) = <u>OVER 75 mm</u> Difference <u>85 mm</u> Restricted to <u>85 mm</u> Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right)$ = <u>+7 mm</u>
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## 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 ...	<u>7.035 m</u>	<u>7,035</u>	<u>0.605 m</u>	<u>605/966</u>	<u>4,406</u>
„ overhang ...					
Bridge enclosed ...					
„ overhang aft ...					
„ overhang forward ...					
R.F.D. enclosed ...	<u>6.687 m</u>	<u>6,687</u>	<u>0.605 m</u>	<u>605/1830</u>	<u>2,211</u>
„ overhang ...					
Trunk aft ...	<u>25.0 m</u>	<u>12,500</u>	<u>0.605 m</u>	<u>605/1830</u>	<u>4,133</u>
„ forward ...					
Tonnage opening aft ...					
„ forward ...					
Total ...	<u>13,722</u>	<u>26,222</u>			<u>10,750</u>

Standard Height of Superstructure	<u>1,830 m</u>
„ „ R.Q.D.	<u>0,966 m</u>
Deduction for complete superstructure	<u>475 mm</u>
Percentage covered $\frac{S}{L} =$	<u>35,44 %</u>
„ „ $\frac{S_1}{L} =$	<u>67,72 %</u>
„ „ $\frac{E}{L} =$	<u>27,46 %</u>
Percentage from Table, Line A.	<u>13,88 %</u>
(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 =	<u>0,1388 X 475 = 66 mm</u>

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>577</u>	1		<u>577</u>			1		
$\frac{1}{2}L$ from A.P. ...	<u>256</u>	4		<u>1024</u>			4		
$\frac{2}{3}L$ „ ...	<u>64</u>	2		<u>128</u>	<u>No</u>		2		
Amidships ...	<u>0</u>	4		<u>0</u>	<u>SHEER.</u>	<u>0</u>	4		<u>0</u>
$\frac{2}{3}L$ from F.P. ...	<u>128</u>	2		<u>256</u>			2		
$\frac{1}{2}L$ „ ...	<u>513</u>	4		<u>2052</u>			4		
F.P. ...	<u>1153</u>	1		<u>1153</u>			1		
Total ...				<u>5190</u>					<u>0</u>

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{75-S}{2L} \right) = \frac{5190(975-0,1742)}{18 \times 95728} = +165 \text{ mm}$   
 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.

Scantlings suitable for 1,799 m  
 Depth to Freeboard Deck = 2,259  
 Summer freeboard = 0,450  
 Moulded draught (d) = 1,809

Deduction for Tropical freeboard and addition for  
 Winter freeboard =  $\frac{d}{48}$  inches = 4 cm

Addition for Winter North Atlantic Freeboard (if required) = Not assigned.

## Deduction for Fresh Water.

Displacement in salt water at summer load water line  
 $\Delta = 467.7 \text{ m TONS}$   
 Tons per inch immersion at summer load water line  
 $T = 9.3 \text{ m TONS}$

Deduction =  $\frac{\Delta}{40 T}$  inches  
 $= 1.257''$   
= 3 cm

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

Correction for coefficient 1,36

Depth Correction ... -9  
 Deduction for superstructures ... -66  
 Sheer correction ... 165  
 Round of Beam correction ... 7  
 Correction for Thickness of Deck amidships ... -  
 Other corrections, scantlings, etc. ... -

323 mm  
356 mm

21-10-58  
453 mm  
 Summer Freeboard = 453 mm

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

Tropical Fresh Water Line above Centre of Disc ... 7 cm  
 Fresh Water Line „ „ „ 3 cm  
 Tropical Line „ „ „ 4 cm  
 Winter Line below „ „ „ Not assigned  
 Winter North Atlantic Line „ „ „ Not assigned

Tropical Fresh Water Freeboard ... 38.2 cm  
 Fresh Water „ „ „ 42 cm  
 Tropical „ „ „ 41 cm  
 Winter „ „ „ Not assigned  
 Winter North Atlantic „ „ „ Not assigned

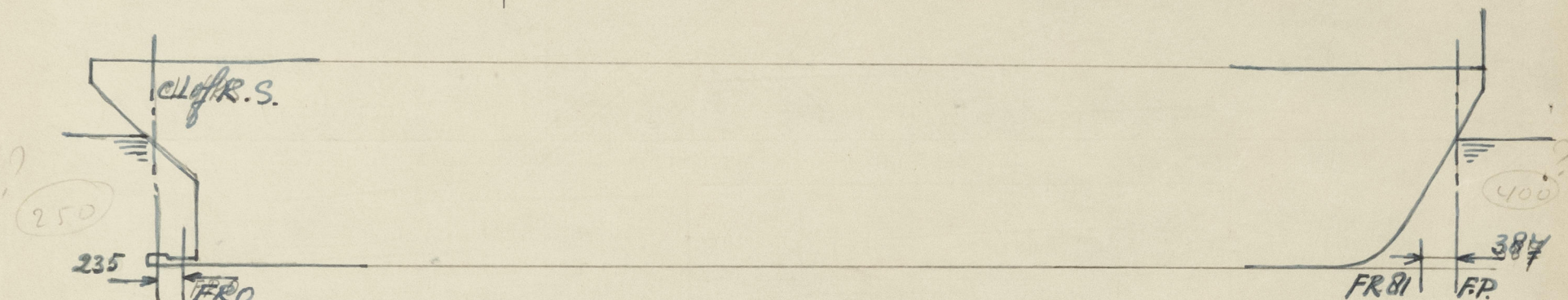
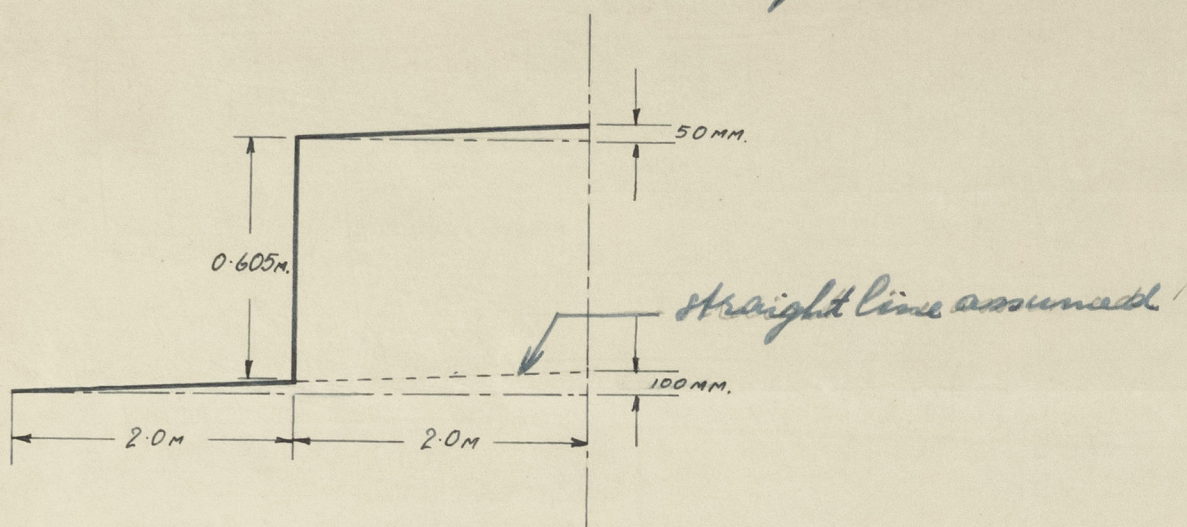
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Joan.

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

equivalent camber:  $\frac{4000 \times 100}{\frac{2}{3} \times 8000} = 75 \text{ mm}$



length of raised foredeck:  $FR 66 - FR 69 @ 0.50 = 1,500 \text{ m}$   
 $FR 69 - FR 81 @ 0.40 = 4,800 \text{ m}$   
 $FR 81 - FP = 0,387 \text{ m}$   
 $\underline{6,687 \text{ m}}$

length of raised afterdeck:  $CL \text{ of R.S. to } FR 0 = 0,235 \text{ m}$   
 $FR 0 - FR 12 @ 0.40 = 4,800 \text{ m}$   
 $FR 12 - FR 16 @ 0.50 = 2,000 \text{ m}$   
 $\underline{7,035 \text{ m}}$

Trade of ship FOR SERVICE ON NORTH COAST OF JAVA INCLUDING MADURA STRAIT.

Names of sister ships NONE

Builder's name and yard number DROOGDOK MAATSCHAPPIJ SOURABAYA. N° 413.

Owners JAVA TRANSPORT AND TRADING COMPANY.

Fee RP 1,100.-



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