

# LLOYD'S REGISTER OF SHIPPING

## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received \_\_\_\_\_  
Index No. \_\_\_\_\_  
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L.L. 83

Ship's Name **M.V. "NANAS"** Official Number **-** Nationality and Port of Registry **Indonesian Djakarta** Gross Tonnage **677** Date of Build **Jan. 1961**

Port of Survey **Gdynia**  
Date of Survey **December, 1960**  
Surveyor's Signature *[Signature]*  
Particulars of Classification **+ 100 A1**  
**"Longitudinal Framing at Bottom"**  
Contemplated.

Moulded Dimensions: Length **59.00m** Breadth **10.50m** Depth **3.75m** (as measured)  
Freeboard Length **59.00m** (to centre of rudder stock) **1616.4m**<sup>3</sup>  
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) **814**  
Coefficient of fineness for use with Tables **814**

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth (as measured) <b>3.750</b>	(a) Where D is greater than Table depth (D-Table depth) R =	Moulded Breadth (B) <b>10.50</b>
Stringer plate <b>0.007m</b> <b>.007</b>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{10.50 \times 12}{50} = 2.52$
Wood Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	<b>8.33 (3.933 - 3.757) 14.90 = -2.2 m.m</b>	Ship's Round of Beam = <b>0</b>
Depth for Freeboard (D) = <b>3.757</b>	If restricted by superstructures <b>No</b>	Difference <b>2.52</b>
		Restricted to
		Correction = $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S}{L} \right) = \frac{2.52^2}{4} \times 0.128 = +0.14 m.m$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>e</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed	15.90	15.90	2.23		15.900
" overhang	0.28	0.14	2.20		0.140
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
F'cle enclosed	41.30	41.30	3.00		41.300
" overhang	0.29	0.22	2.20		0.220
Trunk aft					
" forward		DiH 476			
Tonnage opening aft	1.23	685			685
" forward					
Total	59.00	58.245			58.245

Standard Height of Superstructure **1.830**  
" " R.Q.D. **-**  
Deduction for complete superstructure **645**  
Percentage covered  $\frac{S}{L} = 100$   
" "  $\frac{S_e}{L} = 98.72$   
Percentage from Table, Line A. **3 B 98.42**  
(corrected for absence of forecastle (if required))  
Percentage from Table, Line B. **98.42**  
(corrected for absence of forecastle (if required))  
Interpolation for bridge less than 2L (if required)  
Deduction = **645 x 98.42 = 635 m.m**

## SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P.	745	1	745	723	1093	1	1093
$\frac{1}{4}$ L from A.P.	331	4	1324	337	486	4	1944
$\frac{3}{4}$ L	83	2	166	100	120	2	240
Amidships	0	4	0	0	0	4	0
$\frac{3}{4}$ L from F.P.	166	2	332	167	207	2	414
$\frac{1}{4}$ L	663	4	2652	653	839	4	3356
F.P.	1491	1	1491	1515	1885	1	1885
Total			6710	+370			8932

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{75-S}{2L} \right) = \frac{2222}{18} \left( \frac{75-50}{25} \right) = -309 m.m = 31 cm$   
If limited on account of midship superstructure. If limited to maximum allowance of  $\frac{1}{4}$  ins. per 100ft. **No**

Deduction for Tropical Freeboard.  
Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **3.757**  
Summer freeboard = **0.050**  
Moulded draught (d) = **3.707**  
Keel allowance = **-**  
Extreme draught = **-**  
Deduction for Tropical freeboard and addition for = **-**

Winter freeboard =  $\frac{d}{48}$  inches = **778 = 8 cm**

Addition for Winter North Atlantic Freeboard (if required) = **8 + 5 = 13 cm.**

x) = Metric tons.

Deduction for Fresh Water.

Displacement in salt water at summer load water line  $\Delta = 1664.9 \text{ tons}^x$   
Tons per inch immersion at summer load water line  $T = 5.22 \text{ tons}^x / \text{cm}$   
Deduction =  $\frac{\Delta}{40 T}$  inches = **80 m.m = 8 cm**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient  $\frac{314 + 68}{136} = 1.494 / 1.36$

Depth Correction **22**  
Deduction for superstructures **635**  
Sheer correction **31**  
Round of Beam correction **-**  
Correction for Thickness of Deck amidships **-**  
Other corrections, scantlings, etc. **-**

Summer Freeboard = **-72 m.m.**

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :- Cond. to ship's side

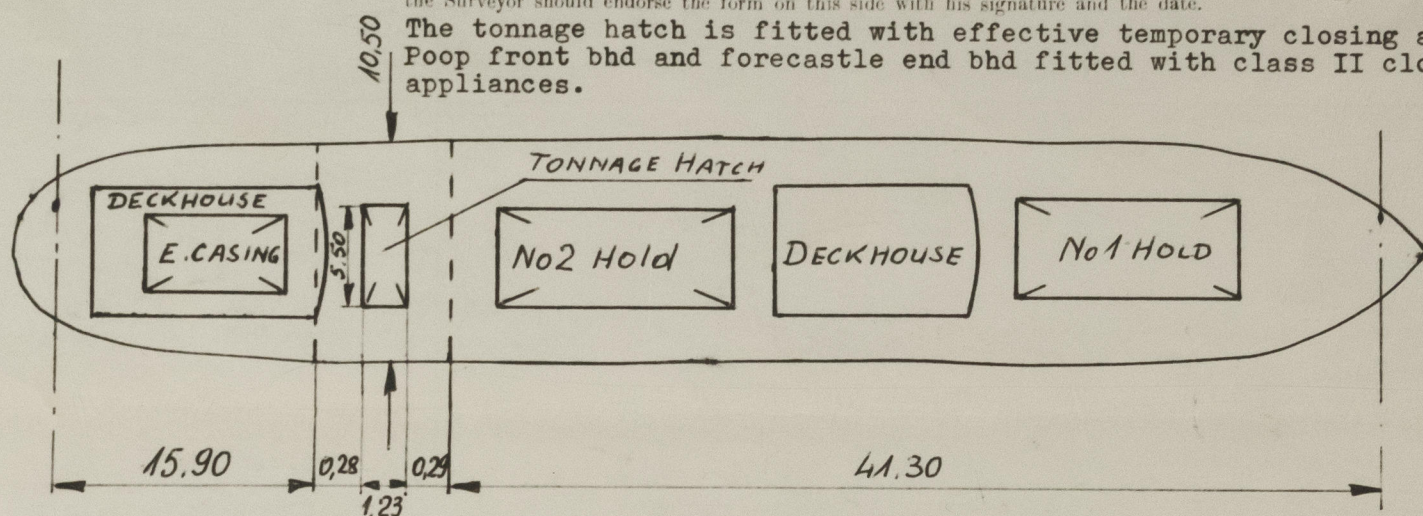
Tropical Fresh Water Line above Centre of Disc **8 cm.**  
Fresh Water Line **8 cm.**  
Tropical Line **0 (Killed)**  
Winter Line below **8 cm.**  
Winter North Atlantic Line **13 cm.**

Tropical Fresh Water Freeboard **5 cm (Killed)**  
Fresh Water **3 cm**  
Tropical **5 cm (Killed)**  
Winter **13 cm**  
Winter North Atlantic **13 cm**



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.

The tonnage hatch is fitted with effective temporary closing appliances. Poop front bhd and forecastle end bhd fitted with class II closing appliances.



All dimensions given in metres.

Trade of ship

Cargo- Passenger Coaster

Names of sister ships

M.V. "RAMBUTAN", M.V. "DUKUH", M.V. "DUREN"  
M.V. "DUWET", M.V. "DJERUK", M.V. "LANGSAT" ( all under construction)  
M.V. "LENGKENG", M.V. "MANGGA"

Builder's name and yard number

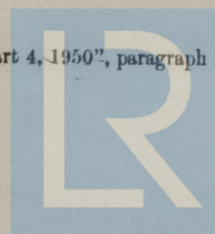
Stocznia im. Komuny Paryskiej, Gdynia, Poland, Yard No. B471/19

Owners

Indonesian Government

Fee £

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950", paragraph 11.)



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