

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index No.

44131

(For London Office only.)

REGISTRY

N^o 36667

Ship's Name "BALAM"	Official Number —	Nationality and Port of Registry Indonesian Djakarta	Gross Tonnage 194.	Date of Build 1953	Port of Survey Rotterdam
Moulded Dimensions: Length 35.00^m Breadth 6.50^m Depth 2.959^m					Date of Survey while building
Moulded displacement at moulded draught = 85 per cent. of moulded depth 360^{m³} tons					Surveyor's Signature <i>W. J. J. J.</i>
Coefficient of fineness for use with Tables .68 (ACTUAL .629)					Particulars of Classification 100 A1 For service in Indonesian Archipelago.

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth 2.959	(a) Where D is greater than Table depth (D—Table depth) R = 8.33(2.996 - 2.334) 8.838 = + 49.1	Moulded Breadth (B) 6500
Stringer plate 0.008	(b) Where D is less than Table depth (if allowed) (Table depth—D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{6500 \times 12}{50} = 1560$
Sheathing on exposed deck 50^{mm}	If restricted by superstructures	Ship's Round of Beam = 130
$T \left(\frac{L-S}{L} \right) = 50 \times \frac{20.45}{35} = .029$		Difference = NIL
Depth for Freeboard (D) = 2.996		Restricted to
		Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right) = \text{NIL}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	10000	10.000	2100	—	10,000
" overhang aft			+21		
" overhang forward					
F'cle enclosed	3650	3650	1800	-29	3,532
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	13650	13650			13,532

Standard Height of Superstructure	1830 m/m.
" " R.Q.D.	
Deduction for complete superstructure	444 m/m.
Percentage covered $\frac{S}{L} = \left\{ \begin{array}{l} 39.00 \\ S_1 \\ L = 38.67 \end{array} \right.$	
" " $\frac{E}{L} = 38.67$	
Percentage from Table, Line A.	22.37
(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 = $2237 \times 444 = - 99 \text{ m/m.}$	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	546	1	546	400	400	400	1	400	400
$\frac{1}{4}L$ from A.P.	243	4	972	145	145	145	4	580	580
$\frac{2}{4}L$ "	61	2	122	11	11	11	2	22	22
Amidships	—	4	—	0			4		
$\frac{3}{4}L$ from F.P.	121	2	242	134	121	121	2	242	242
$\frac{1}{4}L$ "	485	4	1940	481	481	481	4	1948	1948
F.P.	1091	1	1091	1091	1095	1095	1	1095	1095
Total			4913					4287	

Correction = $\frac{\text{Difference between sums of products}}{18} = \frac{626}{18} = +19$

If limited on account of midship superstructure. ✓

Mean actual sheer aft = **5954**

Mean standard sheer aft =

Mean actual sheer forward = **>1**

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = **SHEER DEFICIENT.**

" " aft of " =

service trim **300^{mm}**

sheer measured from line parallel to service waterline.

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 =	3017
Summer freeboard =	1020
Moulded draught (d) =	1997
Keel allowance =	
Extreme draught =	

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d \text{ cm}}{48} = 4 \text{ cm.}$

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = \text{cm } 276$

Tons per inch immersion at summer load water line

$T = 1.77$

Deduction = $\frac{\Delta}{40 T} \text{ inches} = 4 \text{ cm}$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient **NIL.**

	+	-
Depth Correction	49	✓
Deduction for superstructures	✓	99
Sheer correction	19	✓
Round of Beam correction	✓	✓
Correction for Thickness of Deck amidships	21	✓
Other corrections, scantlings, etc. to	438	✓
CORRESPOND. TO SUMMER MOULDED DRAUGHT OF 1.993 M (1.997 METRIC)	827	99
Summer Freeboard =	1020	

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

Tropical Fresh Water Line above Centre of Disc	8 cm	Tropical Fresh Water Freeboard	94 "
Fresh Water Line " "	4 "	Fresh Water " "	98 "
Tropical Line " "	4 "	Tropical " "	98 "
Winter Line below " "	NOT ASSIGNED	Winter " "	NOT ASSIGNED
Winter North Atlantic Line " "	NOT ASSIGNED	Winter North Atlantic " "	NOT ASSIGNED

Balam

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.

Displacement in salt water: 279.5 tons (of 1000 kg) at draught 2000 mm
 " " " " : 371.3 " " " " " " 2500 mm
 " " " " : 468.0 " " " " " " 3000 mm

Service trim 300 mm. Moulded draught forward 1830 mm, aft 2130 mm
 Sheer measured from line parallel to service waterline.

Sheer aft.

Standard

546	1	546
243	3	729
61	3	183
		<u>1458</u>

Actual

400	1	400
145	3	435
11	3	33
		<u>868</u>

$\frac{868}{1458} = .5954$

Sheer forward.

Standard

1091	1	1091
485	3	1455
121	3	363
		<u>2909</u>

Actual

1091	1091
481	1443
134	<u>402</u>
	<u>2936</u>

Excess = 27.

Allowed Sheer = $2909 + (27 \times \frac{7.84}{25}) = 2919.30$

Effective Sheer forward.

121	485	1091	x	2919.30
				<u>2909</u>

= 121 487 1095.

Trade of ship

Indonesian Archipelago

"BAJAN"

Names of sister ships

"BANGO", "BEO", "BABUT", "BETET", "BLIBIS", "BENDALU",
 with modification of ER casing

Builder's name and yard number

Jongens & Sons ; 241

Owners

Indonesian Government

Fee

121.00



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