

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

11 AUG 1952

Ship's Name **BANGO** Official Number **✓** Nationality and Port of Registry **Indonesian Djakarta** Gross Tonnage **250** Date of Build **1952**

Port of Survey **Rotterdam**

Date of Survey **July-August 1952**

Surveyor's Signature **Kraayebuit**

Particulars of Classification **+100 A1 for service in Indonesian Archipelago**

Moulded Dimensions: Length **35.00 mtr** Breadth **6.50 mtr** Depth **2.959 mtr**

Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) **360 m³ tons**

Coefficient of fineness for use with Tables **68 (ACTUAL 629) ✓**

| DEPTH FOR FREEBOARD (D). | | DEPTH CORRECTION. | | ROUND OF BEAM CORRECTION. | |
|--|-------|---|-----|--|------|
| Moulded depth | 2959 | (a) Where D is greater than Table depth (D-Table depth) R = | 662 | Moulded Breadth (B) | 6500 |
| Stringer plate | 8 | 8.33(2.996-2.334) 8.838 = (+) 49 | 7 | Standard Round of Beam = $\frac{B \times E}{50}$ | 130 |
| Sheathing on exposed deck | 50 | (b) Where D is less than Table depth (if allowed) (Table depth-D) R = | | Ship's Round of Beam | 130 |
| $T \left(\frac{L-S}{L} \right) = .05 \times \frac{20.45}{35} =$ | 29 | If restricted by superstructures | | Difference | NIL |
| Depth for Freeboard (D) = | 2.996 | | | Restricted to | |
| | | | | Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right)$ | 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 | 3.65 | 1800 | 177 | 3.532 |
| " overhang | | | -29 | wood | |
| Trunk aft | | | | | |
| " forward | | | | | |
| Tonnage opening aft | | | | | |
| " " forward | | | | | |
| Total | 13.650 | 13.650 | | | 13.532 |

Standard Height of Superstructure 1830 m ✓

" " R.Q.D. -

Deduction for complete superstructure 444 m ✓

Percentage covered $\frac{S}{L} = 39.00$ ✓

" " $\frac{S_1}{L} = 38.67$ ✓

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

22.37 ✓

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than .2L (if required)

Deduction = .2237 × 444 = (-) 99 m ✓

SHEER CORRECTION.

| Station | Standard Ordinate | S M | Product | Actual Ordinate | Effective Ordinate | S M | Product |
|-----------------|-------------------|-----|---------|-----------------|--------------------|-----|---------|
| A.P. | 546 | 1 | 546 | 400 | 400 | 1 | 400 |
| 1/4 L from A.P. | 243 | 4 | 972 | 145 | 145 | 4 | 580 |
| 3/4 L | 61 | 2 | 122 | 11 | 11 | 2 | 22 |
| Amidships | - | 4 | - | 0 | - | 4 | - |
| 3/4 L from F.P. | 121 | 2 | 242 | 134 | 121 | 2 | 242 |
| 1/4 L | 485 | 4 | 1940 | 481 | 487 | 4 | 1948 |
| F.P. | 1091 | 1 | 1091 | 1091 | 1095 | 1 | 1095 |
| Total | | | 499 | | | | 4287 |

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{626}{18} \times (.75 - .195) = (+) 19 \text{ m/m}$

If limited on account of midship superstructure.

Mean actual sheer aft = 59.54%

Mean actual sheer forward = excess.

Length of enclosed superstructure forward of amidships =

" " aft of " =

Service trim 300 mm

sheer measured from line parallel to service waterline.

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 = 3017

Summer freeboard = 1020

Moulded draught (d) = 1997

Keel allowance =

Extreme draught =

Deduction for Tropical freeboard and addition for

Winter freeboard = 4 cm

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load waterline

 $\Delta = 276 \text{ tons}$

Tons per inch immersion at summer load waterline

T = 1.77

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

= 4 cm

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

NIL

Depth Correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. to

CORRESPOND TO A SUMMER MOULDED DRAUGHT OF 1.993M. (ACTUAL 1.997)

+ -

49 99

19

21

738

827

99

728

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

Fresh Water Line " 4 "

Tropical Line " 4 "

Winter Line below " NOT ASSIGNED

Winter North Atlantic Line " NOT ASSIGNED

Tropical Fresh Water Freeboard 94

Fresh Water " 98

Tropical " 98

Winter " NOT ASSIGNED

Winter North Atlantic " NOT ASSIGNED

102 CM FOR SERVICE ONLY

Bango.

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 "
 " " 468,0 " " " 3000 "

Service trim 300 mm.

Moulded draught forward : 1830 mm.

" " aft : 2130 mm.

Sheer measured from line parallel to service waterline

SHEER FORWARD:

STANDARD:

1091 ✓ 1
 485 ✓ 3
 121 ✓ 3

1091 ✓
 1455 ✓
 363 ✓
 2909 ✓

ACTUAL

1091 ✓ 1
 481 ✓ 3
 134 ✓ 3

1091 ✓
 1443 ✓
 402 ✓
 2936 ✓

EXCESS = 27 ✓

ALLOWED SHEER = $2909 + (27 \times \frac{9.54}{25}) = 2919.30$ ✓

EFFECTIVE SHEER FORWARD:

1/3

1/6

FP

121

485

1091

2919.30 / 2909

121 ✓

487 ✓

1095 ✓

Trade of ship

Indonesian Archipelago

Names of sister ships

BEO, BETTET, BABUT.

Builder's name and yard number

N.V. Scheepsbouwwerf en Machinefabriek "De Klop", Sliedrecht. n° CO. 180.

Owners

Indonesian Government

Fee

fl. 100,-



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