15 APR 1958

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, ~~SAILING SHIP~~, TANKER)

Index No. _____
(For London Office only).

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
" TIRTONADI ".	----	Indonesian Djakarta.	220	1958

Port of Survey Djakarta.

Date of Survey March 1958.

Surveyor's Signature _Harri_

Particulars of Classification ✠ 100 A1

For service in the Indonesian ~~Archipelago.~~

Moulded Dimensions: Length 40.40 m Breadth 7.00 m Depth 2.85 m

Moulded displacement at moulded draught = 85 per cent. of moulded depth 500 m3 tons

Coefficient of fineness for use with Tables .~~736~~ .730

Depth for Freeboard (D) in m.m.		Depth correction	Round of Beam correction	
Moulded depth	2850	(a) Where D is greater than Table depth (D—Table depth) R =	Moulded Breadth (B)	
Stringer plate	8	$8.33(2.896 - 2.693) \, 10.202. = +17$ mm	Standard Round of Beam = $\frac{B \times 12}{50}$ = 140 m.m	
Sheathing on exposed deck	~~50~~ 38	.202	Ship's Round of Beam = 140 mm.	
$T\left(\frac{L-S}{L}\right) = 50\left(\frac{4040 - 9.55}{40.40}\right)$		(b) Where D is less than Table depth (if allowed) (Table depth—D) R =	Difference	
			Restricted to	
Depth for Freeboard (D) =	~~2908~~ 2896	If restricted by superstructures	Correction = $\frac{Diff^e}{4} \times \left(1 - \frac{S_1}{L}\right)$ = Nil.	

DEDUCTION FOR SUPERSTRUCTURES

	Mean Covered Length (S)	Equivalent Enclosed Length (S₁)	Height	Height Correction	Effective Length (E)
Poop enclosed			2 m		
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge ~~enclosed~~ OPEN	5400	2700.	2m		2700.
„ overhang aft					
„ overhang forward					
F'cle enclosed	4150.	4150	2 m		4150.
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft					
„ „ forward					
Total	9550	6850			6850.

Standard Height of Superstructure 1.83 m.

„ „ R.Q.D.

Deduction for complete superstructure 489 mm.

Percentage covered $\frac{S}{L}$ = 23.64 7436

„ „ $\frac{S_1}{L}$ = } 16.96

„ „ $\frac{E}{L}$ = }

Percentage from Table, Line A. 8.48

~~(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 = $489 \times .0848$ = 41 mm.

SHEER CORRECTION

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	591	1	591	607	607	1	607
$\frac{1}{6}$L from A.P.	262	4	1048	220	220	4	880
$\frac{2}{6}$L „	66	2	132	70	70	2	140
Amidships		4		0		4	
$\frac{2}{6}$L from F.P.	131	2	262	100	100	2	200
$\frac{1}{6}$L „	525	4	2100	395	395	4	1580
F.P.	1181	1	1181	890	890	1	890
Total			5314				4297

$\frac{\text{Mean actual sheer aft}}{\text{Mean standard sheer aft}}$ } Def.

$\frac{\text{Mean actual sheer forward}}{\text{Mean standard sheer forward}}$

$\frac{\text{Length of enclosed superstructure}}{L}$ forward of amidships = } Nil.

„ „ aft of =

Correction = $\frac{\text{Difference between sums of products}}{18}\left(.75 - \frac{S}{2L}\right)$ = $\frac{1017}{18}(.75 - .1182)$ = +36 mm

If limited on account of midship superstructure. .6318 If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard Addition for Winter and Winter North Atlantic Freeboard		Deduction for Fresh Water		TABULAR FREEBOARD ~~corrected for Flush Deck (if required)~~	339.	
	M ft	Displacement in salt water at Summer load water line		Correction for coefficient $\frac{.73 + .68}{1.36}$ $\frac{1.41}{1.36}$	351	
Depth to Freeboard Deck =	2.908	Δ = 520 m3			+	−
Summer freeboard =	450	Tons per inch immersion at Summer load water line		Depth Correction	17	
Moulded draught (d) =	2.458	T = Hydrostatic 2.41 curves attached		Deduction for superstructures		41
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{48}$ inches =	51 mm	Deduction = $\frac{\Delta}{40T}$ inches		Sheer correction	36	
				Round of Beam correction		12
Addition for Winter North Atlantic Freeboard (if required) =	54 mm 5 cm.	to correspond to a summer moulded draught of 2.45 m (actual 2.458 m)		Other corrections, scantlings, etc.	75	
					140	41
				Summer Freeboard		450

Depth Correction +17, Deduction for superstructures −41, Sheer correction +36, Round of Beam correction −12, Other corrections +75 : 99. −24+58

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:— 45 cm.

Tropical Fresh Water Line above Centre of Disc	10 cm	Tropical Fresh Water Freeboard	35 cm.	
Fresh Water Line „ „	5 cm	Fresh Water	40 cm	
Tropical Line „ „	5 cm	Tropical	40 cm	
Winter Line below „	not assigned	Winter	not assigned	
Winter North Atlantic Line „ „	not assigned	Winter North Atlantic	not assigned	

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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.

Trade of ship........................coastal trade within Indonesian Archipelago

Names of sister ships........................none

Builder's name and yard number.......ex: Messrs. Verenigde Prauwen Veren yd No. 448.

Owners.........Messrs. Pelajaran Djawa Kalimantan (PEDJAKA) of Djakarta.

Fee £........................:........: