

LLOYD'S REGISTER OF SHIPPING

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, ~~SAILING SHIP, TANKER~~)

Received

Index No.

Govt. Copy

Owners C11

Ship's Name M. H. THAMRIN	Official Number	Nationality and Port of Registry Indonesian Djakarta	Gross Tonnage	Date of Build	Port of Survey Innosshima, Japan
Moulded Dimensions: Length $140^M.26$ Breadth $19^M.40$ Depth $12^M.20$					Date of Survey Whilst building
Freeboard Length					Surveyor's Signature <i>Hector M. Lean</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth. $19,734 M^3$ tons					Particulars of Classification #100A1
Coefficient of fineness for use with Tables. .699					Contemplated

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.		ROUND OF BEAM CORRECTION.	
Moulded depth	$12,200$	(a) Where D is greater than Table depth (D - Table depth) R = $8.33(12,282 - 9,351)30.0 = 732 \text{ mm.}$	Moulded Breadth (B)	$19,400 \text{ mm.}$	
Stringer plate	26 mm	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$	388 mm.	
Wood Sheathing on exposed deck	65 mm		Ship's Round of Beam	0.40	
T $\left(\frac{L-S}{L}\right) = 65(140,260 - 19,365) / 140,260$	56		Difference	12	
Depth for Freeboard (D) =	$12,282$	If restricted by superstructures	Restricted to	3×8619	
			Correction = $\frac{\text{Diff}^n}{4} \times \left(1 - \frac{S_1}{L}\right) =$	-3 mm.	

DEDUCTION FOR SUPERSTRUCTURES.				
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Effective Length (E)
Poop enclosed	8.800	8.800	2.400	8.800
" overhang				
R.Q.D. enclosed				
" overhang				
Bridge enclosed				
" overhang aft				
" overhang forward	$10,565$	$10,565$	2.400	$10,565$
Fore enclosed	$10,305$			
" overhang				
Trunk aft				
" forward				
Tonnage opening aft				
" forward				
Total	$19,365$	$19,365$		$19,365$

Standard Height of Superstructure $2,290 \text{ mm.}$

" " R.Q.D.

Deduction for complete superstructure 1067 mm.

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

" " $\frac{S_1}{L} =$

" " $\frac{E}{L} =$

Percentage from Table, Line A. 13.81

(corrected for absence of forecastle (if required)) $5(14,026 - 10,565) = -1.23$

Percentage from Table, Line B. $14,026$

(corrected for absence of forecastle (if required))

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

Deduction = $1067 \times .0568 = 61 \text{ mm.}$

SHEER CORRECTION.							
Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P.	1,422	1	1,422	1,200	1,200	1	1,200
$\frac{1}{4}L$ from A.P.	632	4	2,528	.514	514	4	2,056
$\frac{2}{8}L$	158	2	316	.132	132	2	264
Amidships	0	4	0	0	0	4	0
$\frac{3}{8}L$ from F.P.	316	2	632	.268	268	2	536
$\frac{1}{4}L$	1,264	4	5,056	1,009	1,009	4	4,036
F.P.	2,845	1	2,845	2,400	2,400	1	2,400
Total			12,799				10,492

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - \frac{S}{2L}}{.75 - \frac{S}{2L}} \right) = \frac{2,307}{18} = 128.28 - 5.06 (1.75 - .6691) = + 84 \text{ mm.}$

If limited on account of midship superstructure.

Mean actual sheer aft =

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

" " aft of " =

Deduction for Tropical Freeboard.		See Over		TABULAR FREEBOARD	
Addition for Winter and Winter North Atlantic Freeboard.		Deduction for Fresh Water.		corrected for Flush Deck (if required)	
Top of SHEATHING ON		Displacement in salt water at summer load water line		Correction for coefficient	
Depth to, Freeboard Deck =	12291	$\Delta = 16,549$			
Summer freeboard =	3591	Tons per inch immersion at summer load water line			
Moulded draught (d) =	8700	T = 22.50			
Keel allowance =		Deduction = $\frac{\Delta}{40 T}$ inches			
Extreme draught =					
Deduction for Tropical freeboard and addition for =					
Winter freeboard = $\frac{d}{48}$ inches =	181 mm.				
Addition for Winter North Atlantic Freeboard (if required) =					

Depth Correction 732

Deduction for superstructures 61

Sheer correction 84

Round of Beam correction 3

Correction for Thickness of Deck, amidships 9

Other corrections, scantlings, etc. 496

CORRESPOND TO A SUMMER MOULDED DRAFT OF 8.70 METRES

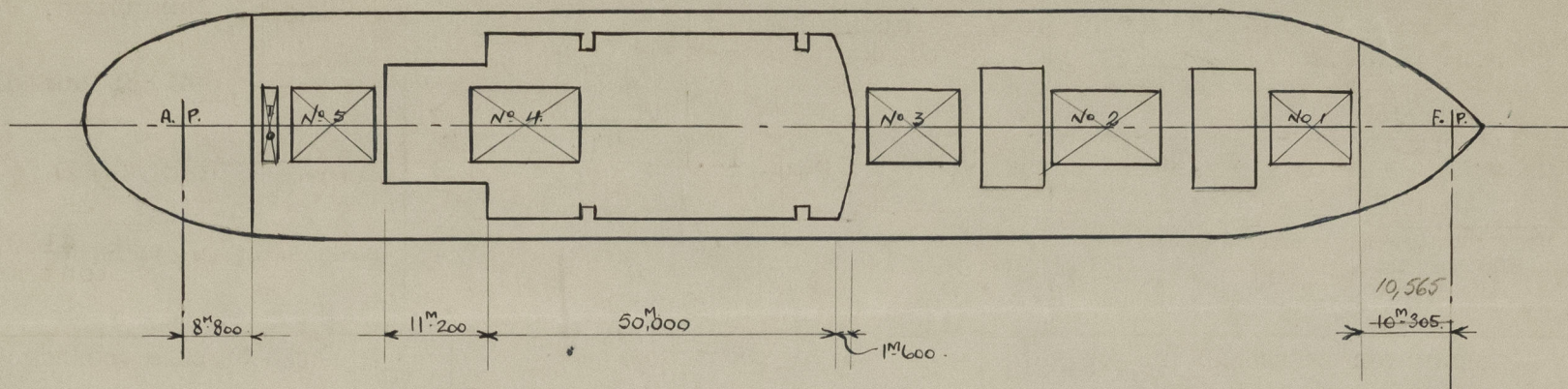
Summer Freeboard = $3,591$

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

Tropical Fresh Water Line above Centre of Disc	...	365 mm.	Tropical Fresh Water Freeboard	...	3591 mm.
Fresh Water Line	"	184	Fresh Water	"	3226
Tropical Line	"	181	Tropical	"	3407
Winter Line below	"	181	Winter	"	3410
Winter North Atlantic Line	"	-	Winter North Atlantic	"	3772

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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.



Draft Mtd.	Displacement incl. APP in K.T.	T/cm
7.5 M	13,890	21.72 K.T.
8.0 M	14,990	22.05 K.T.
8.5 M	16,100	22.37 K.T.
9.0 M	17,240	22.70 K.T.

<i>SHEER ALLOWANCE</i>	<i>FORECASTLE</i>	$\frac{(2400 - 2290) \times 10,565}{3} = 36.67$	$\times \frac{10,565}{140,260} = 2.76 \text{ mm.}$
	<i>POOP.</i>	$= 36.67$	$\times \frac{8,800}{140,260} = 2.30 \text{ mm.}$
		<i>TOTAL</i>	<i>5.06 mm.</i>

Trade of ship International

Names of sister ships "Setia Budhi" Mitsubishi, Hiroshima No. 144: H.O.S. "Thokroaminoto" N.K.K., Yokohama No. 768

Builder's name and yard number Hitachi Shipbuilding & Eng. Co., Ltd., Innoshima Shipyard, Japan No. 3902.

Owners The Government of the Republic of Indonesia.

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

Midship Section.
Scantling & Deck Plans (3 sheets)
Hydrostatic Curves.



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