

Rpt. C.11.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for ^{motor}Steamer, Sailing Ship, Tanker
having Running on (Super Structure) Deck
Promenade Deck & Bridge Deck.
(Type of Superstructures.)

Port of Survey Bangkok, Siam.

Date of Survey 3/1/33, 4
5/9/33.

Name of Surveyor Thomas A. Ballard

Particulars of Classification +100 A.1.
with Freeboard
S.S. Reg. No. 1-29

Ship's Name M/S. 'MALINI' Nationality and Port of Registry Siamese. Bangkok Office Number 66908 Gross Tonnage 1278 Date of Build 1925

Moulded Dimensions: Length 220 Breadth 35'6" Depth 13'0" 2nd deck
70'0" running deck

Moulded displacement at moulded draught = 85 per cent. of moulded depth 2838 tons

Coefficient of fineness for use with Tables .738 .738

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth 20.00	(a) Where D is greater than Table depth (D-Table depth) R = (20.21 - 14.87) 1.715 = +9.16	Moulded Breadth (B) 35.5
Stringer plate ... .. .03	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 8.52$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) = .21 \times .8531 = .18$	If restricted by superstructures	Ship's Round of Beam = $\frac{9.00}{.48} = 18.75$
Depth for Freeboard (D) = 20.21		Difference
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{48}{4} \left(1 - \frac{14.69}{35.5} \right) = -10$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed						Standard Height of Superstructure 6'
" overhang						" " R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure 28.30
" overhang						Percentage covered $\frac{S}{L} = 14.69$
Bridge enclosed						" " $\frac{S_1}{L} = 14.69$
" overhang aft						" " $\frac{E}{L} = 7.03$
" overhang forward						Percentage from Table, Line A. 3.51
Fore enclosed 32.75	32.75	32.75	2.87	2.87	15.67	(corrected for absence of forecastle (if required))
" overhang						Percentage from Table, Line B.
Trunk aft						(corrected for absence of forecastle (if required))
" forward						Interpolation for bridge less than 2L (if required)
Tonnage opening aft						Deduction = 28.30 x .0351 = -99
" forward						
Total 32.75	32.75	32.75			15.67	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	32.30	1		32.30	27.50	27.50	1		27.50	Mean actual sheer aft = Deficient
1/4 L from A.P.	14.37	4		57.48	14.62	14.62	4		58.48	Mean actual sheer forward = Deficient
2/4 L " "	3.55	2		7.10	3.65	3.65	2		7.30	Mean standard sheer forward
Amidships	-	4		-	-	-	4		-	Length of enclosed superstructure forward of amidships =
3/4 L from F.P.	7.11	2		14.22	6.07	6.07	2		12.14	" " aft of " =
1/4 L " "	28.75	4		115.00	24.30	24.30	4		97.20	
F.P.	64.6	1		64.60	57.25	57.25	1		57.25	
Total				290.68					259.87	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{30.81}{18} \left(.75 - .0734 \right) = +1.16$

If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{738 + 680}{1.36} = \frac{1.418}{1.36}$
Depth to Freeboard Deck = 20.24	$\Delta =$	Depth Correction 9.16
Summer freeboard = 4.87	Tons per inch immersion at summer load water line	Deduction for superstructures ... .. .99
Moulded draught (d) = 15.37	T =	Sheer correction 1.16
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 3.84 + 3 3/4	Deduction = $\frac{\Delta}{40 T}$ inches = 3 3/4	Round of Beam correction 10
Addition for Winter North Atlantic Freeboard (if required) = +2		Correction for Thickness of Deck amidships ... .. .34
		Other corrections, scantlings, etc. 20.66
		34.26 1.09 30.17
		Summer Freeboard = 58.56

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

Tropical Fresh Water Line above Centre of Disc 7 1/2'	Tropical Fresh Water Freeboard 4-3
Fresh Water Line " " 3 3/4	Fresh Water " " 4-6 3/4
Tropical Line " " 3 1/4	Tropical " " 4-6 3/4
Winter Line below " " 3 3/4	Winter " " 5-2 1/4
Winter North Atlantic Line " " 5 3/4	Winter North Atlantic " " 5-4 1/4

19 OCT 1933

RECEIVED

RECEIVED 4 MAR 1935

(21) 4500-857M

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Awning Deck →					2 nd Deck →				
Description of Hatchway		7 th 1.		7 th 2.		7 th 1.		7 th 2.	
Dimensions of Hatchway		25'-6 3/4" x 12'-0"		19'-7" x 11'-6"		29'-6" x 12'-0"		19'-7" x 11'-6"	
COAMINGS	Height above Deck	2'-9"		2'-9"		2'-9"		2'-9"	
	Thickness	.44		.44		.44		.44	
	Sides	.44		.44		.44		.44	
	Ends	.44		.44		.44		.44	
	Stiffeners	yes. (Bulk angles 7' x 3' x 1/2")		yes. (Bulk angles 7' x 3' x 1/2")		-		-	
HATCH BEAMS	Brackets, Stays	-		-		-		-	
	Number	Two " 4 angles each side.		1. Bracket at each end		5		3.	
	Spacing	8'-1 1/4"		4'-10 3/4"		4'-11"		-	
	Scantling and Sketch								
FORE AND AFTERS	Bearing Surface	4 Cast Steel Angle each side		3. Cast Steel Angles each side		5 Brackets each side		3 Brackets each side	
	Number	9 deep		9 deep		9 deep		9 deep	
	Spacing	-		-		-		-	
	Unsupported Lengths	-		-		-		-	
	Scantling and Sketch								
HATCH COVERS	Bearing Surface	-		-		-		-	
	Material	Mang Yang		Mang Yang		Mang Yang		Mang Yang	
	Thickness	3/4"		3/4"		3/4"		3/4"	
	How fitted	Fore & aft		Fore & aft		Fore & aft		Fore & aft	
Spacing of Cleats		2'-0"		2'-0"		3'-0"		3'-0"	
Number of Tarpaulins		3.		3.		2.		2.	

*Are wood fore and afters steel shod at all bearing surfaces? —

Are battens and wedges efficient and in good condition? Yes.

Are tarpaulins in good condition and in accordance with rule requirements? Yes.

Are lashings provided in accordance with rule requirements? Yes.

Particulars of ~~fiddley, funnel and~~ ventilator coamings:—

Engine Room Ship Lights, on Promenade deck, strongly
constructed of steel
Engine Room Ventilator, on 1st class order,

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways :—

~~To Finsbury, on Finsbury dock,~~
~~of Shal, with Shal door~~

1. Stair Companionway to Forecastle Deck 6'1" x 2'6" x 5'6" leading to Forecastle Deck fitted with Stair Kinged door. Height of sill 15".

1. Stair Companionway to Aft Deck 7'0" x 2'8" x 5'6", leading to Main Deck, fitted with Stair Kinged door. Height of sill 15".

1. Stair Companionway to Aft Deck 7'0" x 2'8" x 5'6", leading to Crews quarters main Deck fitted with Stair Kinged door. Height of sill 17".

Don's expertise at being operated from both sides.

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

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[illegible]

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :—

Examined & all air pipes in good order.

Forecastle Deck		Running Deck, Pt 2.	
1. Air pipe, 19" High x 3" dia.	Fore Cab. Tank	2. Air pipes, 3' 3" High x 3" dia.	from No. 2. D.B. Tank
1. " 5. " 16" " 4" "	" "	2. " " 3' 3" " 3" "	" " " " " "
1. " " 16" " 4" "	" " 2" 1. D.P.T.	2. " " 3' 3" " 3" "	" " " " " "
1. " " 16" " 4" "	" " "	2. " " 3' 3" " 3" "	" " " " " "
1. " " 16" " 4" "	Fore Cabins	2. " " 3' 3" " 3" "	" " " " " "
1. " " 17" " 4" "	Fore W.C.	2. " " 3' 3" " 3" "	" " " " " "
1. " " 14" " 3" "	Wardles, control room	2. Air & filling pipes 7' 6" x 3" dia.	" " " " " "

Particulars of Gangway Cargo and Coaling Ports:—

4. each side, between second (main)

Particulars of Gangway Cargo and Coaling Ports:—

his pipes are ^{downing bulk} & upper ducts =
his saw caps
a plug, attached
in chains!
1. each side at N^o. 1. Hatch = 4' 10" x 3' 8"
2. " " " " " " " " = 4' 10" x 3' 8"
3. " " " " " " " " = 2' 10" x 2' 4"
All in good order. Fitted with Speck Hinged Doors,
with brass bars & screws made
water tight with rubber jointing.

Particulars of Scuppers and Sanitary Discharge Pipes

Particulars of Scuppers and Sanitary Discharge Pipes

5 each side, discharging below line of second deck (main deck).

From Bathrooms W.Cs, Galleys etc → 3 discharging below line of third deck (awning deck) (12 each side.) (not fitted with Eternal valves)

Particulars of Side Scuttles: 2 of Brass.

24 on Port side, between main & awning deck

Scupper
Sanitary
discharge
from deck
below running
deck are
not necessary
by quarter
plate
Many deck
to awning deck

Particulars of Side Scuttles: *2 of Brass.*

Particulars of Guard Rails :—

Particulars of Guard Rails:—

	Height	Number of rails	Standard	Spacing	Remarks
on raised Footpath.	3' 8"	4	rows of rails,	standards 4' 0" apart.	✓
on running track.	"	"	"	"	✓
on Platform track.	"	"	"	"	✓
on other Road track	"	"	"	"	✓

All in good order

Particulars of ~~Gangways~~, Lifelines, etc.:—

~~gongwan prot. citi.~~
Haplomis can be fitted, if necessary,
No permanent fittings.

Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well						
Forward Well						

State position of each freeing port { After Well :—
(P, and A. position and height above deck edge) { Forward Well :—

State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :—

Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	—	—	—	—	—	—	—	—
Raised Quarter Deck Bulkhead ...	—	—	—	—	—	—	—	—
Bridge, After Bulkhead	—	—	—	—	—	—	—	—
Bridge, Forward Bulkhead	—	—	—	—	—	—	—	—
Forecastle Bulkhead	—	—	—	—	—	—	—	2' 9 1/2"
Trunk, Aft	—	—	—	—	—	—	—	—
Trunk, Forward	—	—	—	—	—	—	—	—
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	all casings constructed to Rule Requirements & are in 1st class condition.							
Exposed Machinery Casings on Superstructure Decks								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	—	—	—	—	—	—	—	—
Deckhouses on Flush Deck Ships ...								

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Peep Bulkhead	} all doors etc, are in 1 st class working order & can be manipulated from both sides. ✓
Raised Quarter Deck Bulkhead	...	...
Bridge, After Bulkhead	...	...
Bridge, Forward Bulkhead	...	...
Forecastle Bulkhead	} No opening
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	...	...
Exposed Machinery Casings on Superstructure Decks	} Steel Bungie Doors. ✓
Machinery Casings within Superstructures not fitted with Class 1 Closing Appliances	...	...
Deckhouses on Flush Deck Ships	...	...

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



State any special features in the construction of the ship:—

The owners wish to retain the present Freeboard (Certificate N.º 29929, dated London 14 July 1925) until the vessel undergoes Special Survey, required by the Rules of the Society.

The Survey is confined to an examination of the means for closing the openings in the decks & sides of the vessel.

Application dated 17th December 1933, is enclosed.

Builder's name and yard number

A/S. Nak-Skov Skibsværft. Nakskov. Denmark

Names of sister ships

Owners

The Siam Steam Navigation Co. Ltd. Bangkok.

Fee £

9 - 9 - 0

Received by me

Thomas H. Ballard

Expenses 4 - 9
(air mail).



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