

Lucita  
Rpt. C.11  
32160

27 MAY 1932

Index. No. **32409**  
(For London Office only.)

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for mining Tanker  
having Poop, Trunk, Forecastle

Port of Survey Curacao, S. W. I.

(Type of Superstructures.)

Date of Survey April 22<sup>nd</sup> - 23<sup>rd</sup> 1932

Ship's Name T.S.S. "LISETA"  
Nationality and Port of Registry Dutch Willemstad  
Official Number 3644  
Gross Tonnage 2580  
Date of Build 1927-7

Name of Surveyor E. S. Whitham

Moulded Dimensions: Length 305.0 Breadth 50.20 Depth 15.0  
Moulded displacement at moulded draught = 85 per cent. of moulded depth 4622 tons  
Coefficient of fineness for use with Tables .832

Particulars of Classification +100 A1

Carrying petroleum in bulk

Depth for Freeboard (D)			Depth correction		Round of Beam correction	
Moulded depth	...	15.0	(a) Where D is greater than Table depth (D-Table depth) R =	—	Moulded Breadth (B)	50.2
Stringer plate	...	.48			Standard Round of Beam = $\frac{B \times 12}{50}$	12.04
Sheathing on exposed deck	...		(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	$(20.33 - 15.04) 2.346$	Ship's Round of Beam	12.04
$T \left( \frac{L-S}{L} \right) =$				$5.29 \times 2.346 = 12.41$	Difference	Success 50
Depth for Freeboard (D) =		15.48	If restricted by superstructures	$\frac{6.29}{6.55} = 11.92$	Restricted to	
					Correction = $\frac{\text{Diff}^\circ}{4} \times \left( 1 - \frac{S_1}{L} \right)$	$\frac{50}{4} (1 - .8126) = 11.92$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed	88.50	88.50	6.29	6.29	84.98
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge enclosed	14.0		22.0		
„ overhang aft					
„ overhang forward					
Fore enclosed	33.33	33.33	7.5		33.33
„ overhang					
Trunk	126.04	126.04	6.29	6.29	121.04
„ forward					
Tonnage opening aft					
„ forward					
Total	121.83	247.87			239.35

Standard Height of Superstructure 6.55  
„ „ R.Q.D. 35.67  
Deduction for complete superstructure 35.67  
Percentage covered  $\frac{S}{L} = \frac{121.83}{305.0} = 39.94$   
„ „  $\frac{S_1}{L} = \frac{247.87}{305.0} = 81.26$   
„ „  $\frac{E}{L} = \frac{239.35}{305.0} = 78.48$   
Percentage from Table, Line A.  
(corrected for absence of forecastle (if required)) 73.43  
Percentage from Table, Line B.  
(corrected for absence of forecastle (if required))  
Interpolation for bridge less than 2L (if required)  
Deduction =  $35.67 \times .7343 = 26.19$

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	40.50	1		40.50	1.75	7.75	1		7.75
L from A.P.	18.02	4		72.08	0	0.00	4		0
L „	4.45	2		8.90	0	0.00	2		0
Amidships		4			0	0.00	4		0
3/4 L from F.P.	8.91	2		17.82	0	0.00	2		0
1/4 L „	36.05	4		144.20	3	1.67	4		6.68
F.P.	81.00	1		81.00	24	24.00	1		24.00
Total				364.50					38.43

Mean actual sheer aft = Deficient  
Mean standard sheer aft =

Mean actual sheer forward = Deficient  
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = Tanker  
„ „ aft of „ =

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{326.07}{18} (.75 - .1997) = +9.97$

If limited on account of midship superstructure. — 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 = 15.04  
Summer freeboard = 1.55  
Moulded draught (d) = 13.49

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 3.37 = 9cm

Addition for Winter North Atlantic Freeboard (if required) = 3.37 + 3.05 = 6.42 = 16cm

Deduction for Fresh Water.

Displacement in salt water at summer load water line  
 $\Delta = 4926$   
Tons per inch immersion at summer load water line  
T = 31.80

Deduction =  $\frac{\Delta}{40 T}$  inches  
= 3.87 = 10cm

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient 68.832 1.512 46.80

Depth Correction ... 11.92  
Deduction for superstructures ... 26.19  
Sheer correction ... 9.97  
Round of Beam correction ... .03  
Correction for Thickness of Deck amidships ... 5.5  
Other corrections, scantlings, etc. ...

Summer Freeboard = 18.64

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: — 18.64 = 47cm

Tropical Fresh Water Line above Centre of Disc ... 7.24 = 19cm  
Fresh Water Line „ „ ... 3.87 = 10cm  
Tropical Line „ „ ... 3.37 = 9cm  
Winter Line below „ „ ... 3.37 = 9cm  
Winter North Atlantic Line „ „ ... 6.42 = 16cm

Tropical Fresh Water Freeboard ... 28  
Fresh Water „ „ ... 37  
Tropical „ „ ... 38  
Winter „ „ ... 56  
Winter North Atlantic „ „ ... 63

MARKING FORM  
RECEIVED 22 AUG 1933  
RECEIVED 27 APR 1935



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	4 O.T. Hatchway to wing deck upper deck	5 O.T. H. to main deck	1 O.T. H. to main deck	1 W.T. H. to main deck	1 W.T. H. to main deck	1 W.T. H. to main deck	1 W.T. H. to main deck	2 O.T. H. to main deck	2 O.T. H. to main deck
Dimensions of Hatchway	6'6" x 7'7"	6'0" x 4'0"	5'0" x 4'0"	10'0" x 6'0"	2'0" x 3'0"	4'0" x 4'0"	3'0" x 3'0"	6'6" x 2'7"	6'6" x 2'7"
COAMINGS	Height above Deck: 3'9", 9", 9", 9", 9", 9", 9", 9", 9" Thickness: 1/4", 5/8", 5/8", 5/8", 5/8", 5/8", 5/8", 5/8", 5/8" Stiffeners: 1 each end, 1 each end, 1 each end, 1 each end, 1 each end, 1 each end, 1 each end, 1 each end, 1 each end Brackets, Stays: 5 x 5 x 5/8", 5 x 5 x 5/8", 5 x 5 x 5/8", 5 x 5 x 5/8", 5 x 5 x 5/8", 5 x 5 x 5/8", 5 x 5 x 5/8", 5 x 5 x 5/8", 5 x 5 x 5/8"								
HATCH BEAMS	Number: 50 top plate with 3 stiffeners, 50 top plate with 2 stiffeners, 50 top plate with 2 stiffeners, 50 top plate with 2 stiffeners, 50 top plate with 2 stiffeners, 50 top plate with 2 stiffeners, 50 top plate with 2 stiffeners, 50 top plate with 2 stiffeners, 50 top plate with 2 stiffeners Spacing: 4 x 3 x 5/8", 4 x 3 x 5/8", 4 x 3 x 5/8", 4 x 3 x 5/8", 4 x 3 x 5/8", 4 x 3 x 5/8", 4 x 3 x 5/8", 4 x 3 x 5/8", 4 x 3 x 5/8" Scantling and Sketch: none, none, none, none, none, none, none, none, none Bearing Surface: none, none, none, none, none, none, none, none, none								
FORE AND AFTERS	Number: none, none, none, none, none, none, none, none, none Spacing: none, none, none, none, none, none, none, none, none Unsupported Lengths: none, none, none, none, none, none, none, none, none Scantling and Sketch: none, none, none, none, none, none, none, none, none Bearing Surface: none, none, none, none, none, none, none, none, none								
HATCH COVERS	Material: steel, steel, steel, steel, steel, steel, steel, steel, steel Thickness: 5/8", 5/8", 5/8", 5/8", 5/8", 5/8", 5/8", 5/8", 5/8" How fitted: none, none, none, none, none, none, none, none, none Bearing Surface: none, none, none, none, none, none, none, none, none								
Spacing of Cleats	none, none, none, none, none, none, none, none, none								
Number of Tarpaulins	none, none, none, none, none, none, none, none, none								

\*Are wood fore and afters steel shod at all bearing surfaces?  
 Are battens and wedges efficient and in good condition?  
 Are tarpaulins in good condition and in accordance with rule requirements?  
 Are lashings provided in accordance with rule requirements?

Particulars of fiddle, funnel and ventilator coamings:-

Engine and Funnel room ventilators, also funnel and covers for funnel openings in efficient condition.  
 Engine Room skylights of steel strongly constructed and in good condition.

Particulars of Flush Bunker Scuttles:-

None

Particulars of Companionways:- one (1) steel companionway in Forecastle deck 3'0" x 3'9" x 6'6" leading to enclosed Forecastle, door of steel with 15" sill capable of being manipulated from both sides.  
 one (1) steel companionway on Trunk deck 5'0" x 9'6" x 7'6" leading to Pump Room, door of steel with 18" sill, capable of being manipulated from both sides.

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

Forecastle Deck: 15" dia. 15" coaming x 1/2" (B.L.) to crew spaces & store.  
 Trunk Deck: 15" dia. 15" coaming x 1/2" (B.L.) to crew spaces & store.  
 Poop Deck: 15" dia. 15" coaming x 1/2" (B.L.) to crew spaces & store.  
 Trunk Deck: 15" dia. 15" coaming x 1/2" (B.L.) to crew spaces & store.

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

Forecastle Deck: 1-1/2" dia. 6" above deck to Fore Peak.  
 Poop Deck: 1-1/2" dia. 2 1/4" above deck to A.P. tank.  
 Trunk Deck: 1-1/2" dia. 2 1/4" above deck to A.P. tank.  
 Freeboard Deck: 6-3" dia. 6'0" above deck from Wing Tanks.  
 Trunk Deck: 3-3" dia. 15" above deck to oil Fuel Tanks.

Particulars of Gangway Cargo and Coaling Ports:-

None

Particulars of Scuppers and Sanitary Discharge Pipes - 2-1/4 inch and 3-1/4 inch storm discharge valves on ship's side from W.C.s, all discharges from wash basins etc in Poop, Captain's Quarters and Forecastle fitted with storm valves on ship's side and efficient traps at the inboard end. all scupper and storm valve chests of cast iron with steel covers, copper valves and pins.

Particulars of Side Scuttles:-

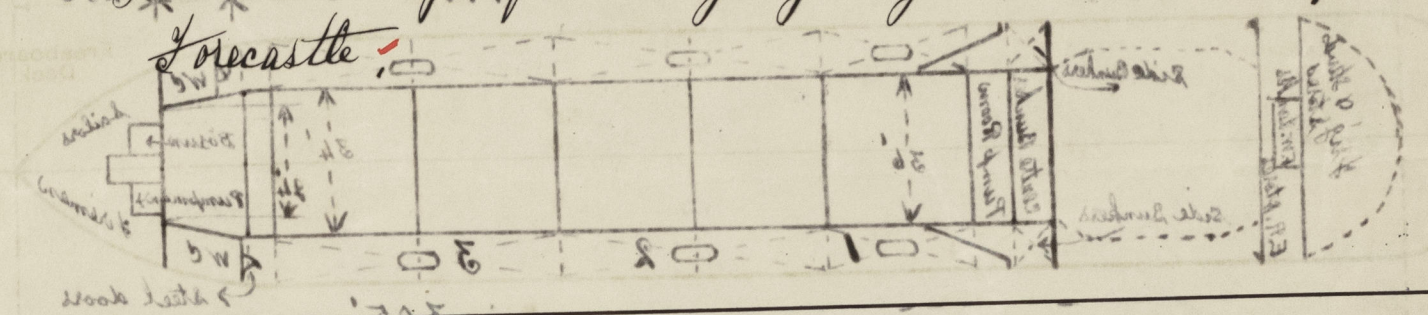
all side scuttles in Forecastle and Poop fitted with efficient hinged dead-lights permanently attached.

Particulars of Guard Rails:-

Freeboard Deck 3'6" high - 3 rails, stanchions spaced 5'0"  
 Trunk Top 3'6" high - 3 rails, stanchions spaced 5'0"  
 Poop Deck 3'6" high - 3 rails, stanchions spaced 5'0"  
 Forecastle Deck (part rail) 3'6" high - 3 rails, stanchions spaced 5'0"

Particulars of Gangways, Lifelines, etc:-

The Trunk Top forms a gang-way between the Poop and the Forecastle.



## Particulars of Freeing Arrangements.

Particulars of Freeing Ports						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well ... ..	open rails on Freeboard Deck and Trunk Top ✓					
Forward Well ... ..						
State position of each freeing port ... .. } After Well :— (F. 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	1'40"	1'34"	7 x 3 x 3/8"	24"	Bkt	2' x 5'	18"	7'6"
Raised Quarter Deck Bulkhead	1'30"	1'26"	4 x 3 x 1/4"	limit 142"	Bkt	2' x 5'	18"	7'6"
Bridge, After Bulkhead								
Bridge, Forward Bulkhead	1'30"	1'26"	3 x 2 1/2 x 3/8"	24" to 36"	Bkt	2'3" x 5'3"	18"	22'0"
Forecastle Bulkhead	1'34"	1'30"	4 x 3 x 3/8"	24"	Bkt	2'3" x 5'3"	15"	
Trunk, Aft	1'44"	1'34"	5 1/2 x 3 x 3/8"	24"	none			
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks								
Exposed Machinery Casings on Superstructure Decks	1'34"	1'30"	4 x 3 x 1/4"	24"	Bkt	2'3" x 4'6"	18"	7'6"
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).

Poop Bulkhead	No openings
Raised Quarter Deck Bulkhead	Steel door capable of being manipulated from both sides
Bridge, After Bulkhead	
Bridge, Forward Bulkhead	
Forecastle Bulkhead	No openings. Steel door on companionway capable of being manipulated from both sides, also steel doors on W.C.s on freeboard deck in efficient condition.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	
Exposed Machinery Casings on Superstructure Decks	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses on Flush Deck Ships	

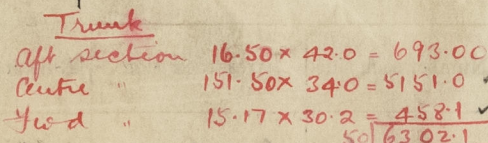
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Lloyd's Register Foundation



Hand-drawn plan of the USS Albatross (1859) showing deck layout, dimensions, and compartment names. The plan includes the following details:

- Dimensions:**
  - Overall length: 106' 0"
  - Overall beam: 28' 6"
  - Forecastle beam: 16' 0"
  - Trunk beam: 11' 0"
  - Midship beam: 63' 6"
  - After beam: 84' 6"
  - Trunk length: 92' 0"
- Deck Layout and Compartments:**
  - Forecastle:** Stores, Chain, Stores, F.P.
  - Trunk:** 1, 2, 3, 4, 5
  - Midship:** Engines & Boilers, Oil Fuel Pump Room, A.P.
  - After:** Poop, Wheel House, Capt.
- Other Features:**
  - Left Hand
  - Fore Hold
  - Right Hand



Male Equus Bhd.  
Length to bhd. 28-50  
Additional.  $\frac{26 \times 6.5}{28} = \frac{4.83}{33.33}$  - Equus Bhd. ✓

A hand-drawn diagram of a rectangular area with a curved corner on the right side. The diagram is divided into sections by vertical lines. The dimensions are as follows:

- Leftmost section: 15' ~~15~~ 7 3/4" (with a red correction from 15 to 7 3/4)
- Second section: 15' 0"
- Third section: 15' 0"
- Fourth section: 15' 0"
- Fifth section: 15' 0"
- Sixth section: 15' 3" (with a red correction from 3 to 1.67)
- Rightmost section: 17' 0"

The diagram includes arrows indicating the vertical extent of each section and a curved line on the right side.

Summe nach dt =  $13.49 = 13.54 = 13.578K - 12.0 = 19 \text{ T.R.I.} = 31.80 = 604 \text{ km}$

[illegible]

$18.5 \times 10.5$

$\frac{157.9}{157.9} \times 100 = 100$

Owners *Curaçao'sche Scheepvaart Maatschappij, N. V. I*

Cco 16/5/32