

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index. No. 34123  
(For London Office only.)

SEP 27 1937

Computation of Freeboard for ~~Steamer~~ Sailing Ship, Tanker

having Forecastle and poop with continuous trunk  
7'-6" high between festle and poop.  
 (Type of Superstructures.)

Port of Survey Loronto, Can.  
while afloat.Date of Survey Aug. 3rd, 1937Name of Surveyor John Stephen

Ship's Name "BRITAMLUBE" Nationality and Port of Registry Loronto British Official Number 157373 Gross Tonnage 1932 Date of Build 1932  
3mo.

Moulded Dimensions: Length 250'-0" Breadth 43'-0" Depth 18'-0" ✓  
 Moulded displacement at moulded draught = 85 per cent. of moulded depth 3490 F.W. tons  
 Coefficient of fineness for use with Tables 83 82T.83

Particulars of Classification +100A1  
Carrying Petroleum in Bulk  
for service on the Great Lakes

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	18.0' ✓	(a) Where D is greater than Table depth (D-Table depth) R = (18.04 - 16.67) 1.923 = + 2.63" ✓ 1.37 ✓		Moulded Breadth (B)	43.0' ✓
Stinger plate	.04' ✓	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = ✓		Standard Round of Beam = $\frac{B \times 12}{50}$	= 10.32" ✓
Sheathing on exposed deck	<u>no sheathing</u>			Ship's Round of Beam	= 11.00" ✓
T $\left(\frac{L-S}{L}\right)$ =				Difference	<u>excess</u> = .68 ✓
Depth for Freeboard (D) =	<u>18.04'</u> ✓	If restricted by superstructures ✓		Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right)$	= $\frac{.68}{4} \times .2837 = -.05"$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	62.0' ✓	62.00	7'-6" ✓	✓	62.00
" overhang ...	✓				
R.Q.D. enclosed ...	✓				
" overhang ...	✓				
Bridge enclosed ...	✓				
" overhang aft ...	✓				
" overhang forward ...	✓				
cle enclosed ...	41.0' ✓	41.00	7'-6" ✓	✓	41.00
" overhang ...	✓				
Exposure Trunk aft <u>47'-2.67'</u>		46.06	7'-6" ✓	✓	46.06
" forward ...	✓				
Tonnage opening aft ...	✓				
" " forward	✓				
Total ...	103.00	149.06			149.06

Standard Height of Superstructure 6.00 ✓  
 " " R.Q.D. ✓  
 Deduction for complete superstructure 31.00" ✓  
 Percentage covered  $\frac{S}{L} = 41.20$  ✓  
 "  $\frac{S_1}{L} = 41.63$  ✓  
 "  $\frac{E}{L} = 41.63$  ✓  
 Percentage from Table, Line A. TANKER 65.01 ✓  
 (corrected for absence of fore-castle (if required)) ✓  
 Percentage from Table, Line B. ✓  
 (corrected for absence of fore-castle (if required)) ✓  
 Interpolation for bridge less than 2L (if required) ✓  
 Deduction = 31.00 × .6501 = 20.15" ✓

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	35.00	1	35.00	24"	24.00	1	24.00
$\frac{1}{2}$ L from A.P. ...	15.575	4	62.30	3.754"	3.75	4	15.00
$\frac{1}{2}$ L " ...	3.85	2	7.70	0	-	2	-
Amidships ...	-	4	-	0	-	4	-
$\frac{1}{2}$ L from F.P. ...	7.70	2	15.40	0	-	2	-
$\frac{1}{2}$ L " ...	31.15	4	124.60	7.508"	7.50	4	30.00
F.P. ...	70.00	1	70.00	48"	48.00	1	48.00
Total ...			315.00				117.00

Mean actual sheer aft = Deficient  
Mean standard sheer aftMean actual sheer forward = Deficient  
Mean standard sheer forward

Length of enclosed superstructure forward of amidships = } Deficient  
 " " aft of " = } shears.

Correction =  $\frac{\text{Difference between sums of products}}{18} \left(75 - \frac{S}{2L}\right) = \frac{198.00}{18} (.75 - .206) = + 5.98"$   
5.44

If limited on account of midship superstructure. ✓

If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft. ✓

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 18.04 Ft.  
 Summer freeboard = 1.58  
 Moulded draught (d) = 16.46

Deduction for Tropical freeboard and addition for INTERMEDIATE Winter freeboard =  $\frac{d}{4}$  inches = 4.11 = 4"Addition for Winter North Atlantic Freeboard (if required) =  $\frac{d}{2} = 8.23 = 8\frac{1}{4}"$ 

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ 

Tons per inch immersion at summer load water line

T =

Deduction =  $\frac{\Delta}{40T}$  inches =

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient 83  
 $\frac{-827 + 68}{1.36} = \frac{-504}{1.36} = -1.51$ 

Depth Correction ... 2.63 ✓  
 Deduction for superstructures ... 20.15 ✓  
 Sheer correction ... 5.98 ✓  
 Round of Beam correction ... .05 ✓  
 Correction for Thickness of Deck amidships ...  
 Other corrections, scantlings, etc. ...

Summer Freeboard = 18.46.95.SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:-

Tropical Fresh Water Line above Centre of Disc ... ✓  
 Fresh Water Line " " ... ✓  
 Tropical Line " " ... ✓  
 Winter Line below CENTRE OF DIAMOND. ... 4"  
 Winter North Atlantic Line " " " ... 8 1/4"

Tropical Fresh Water Freeboard ... ✓  
 Fresh Water " " ... ✓  
 Tropical " " ... ✓  
 Winter INTERMEDIATE " " ... 1 1/4"  
 Winter North Atlantic " " ... 2 3/4"

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INTERMEDIATE

01197-011206-0018 1/2



## PARTICULARS OF PROTECTION TO OPENINGS, ETC.

Particulars of fiddle, funnel and ventilator coamings:— Fiddle 2'-6" coaming  $\frac{3}{8}$ " plating on poop deck, strongly built.  
Funnel securely riveted to fiddle. ✓  
One grating in fiddle top 3'x6' each side of funnel, one 2'-3"x6'-6" forward of funnel, one 2'-3"x4'-0" aft.  
Set of funnel, all fitted with steel covers, rubber gaskets, and dogs. ✓  
Two 36" dia. cowls vents to B.R., coamings  $\frac{1}{4}$ "x6'-6" }  
Four 20" " " " to E.R., " 3/16"x5'-0" } Fitted with canvas covers for cowl opening only.  
E.R. skylight strongly built of steel, with steel covers and bullseyes, rubber gaskets, and secure fastenings.

Particulars of Flush Bunker Scuttles:— none

Particulars of Companionways:—Two steel companionways on poop deck to accommodations, and two on fore-castle deck to pump room and fore-castle, strongly built. All fitted with steel doors at aft end, 24"x5ft. 5 1/2" plating, 12" coaming, rubber gaskets, and six dogs to each door. ✓  
One hatchway on poop deck to steering gear space, 2'x4' with 12" bulb angle coaming, steel door, rubber gaskets and six butterfly nuts. ✓  
Skylights on poop deck to accommodations fitted with steel cones, rubber gaskets, secure fastenings, and also canvas cones, cleats and battens. ✓  
Skylights on fore-castle deck to pump room, fitted with steel cones, rubber gaskets and secure fastenings, and strongly built woodwork. ✓  
Particulars of Ventilators in exposed positions on fore-bow and superstructure decks:—  
Two 24" dia. cowl vents, 36" coaming on pump room, on fore-castle deck. Canvas cones and wood plugs. ✓  
Ten 6" dia. cowl vents 30"x1/4" coaming on fore-castle deck, and fifteen 6" dia cowl vents, 21"x1/4" coamings on poop deck, all fitted with wood plugs and canvas cones. ✓

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:— none on freeboard deck.  
 one  $3\frac{1}{2}$ " dia. gooseneck to forepeak, 24" high ✓  
 one 6" " " \* Chain locker 26" high } fitted with wood plugs. ✓  
 one 6" m.v. to dry cargo hold, fore-castle deck.  
 Five  $2\frac{1}{2}$ " goosenecks 24" high on poop deck, fitted with wood plugs. ✓

Particulars of Gangway Cargo and Coaling Ports:— *none* ✓

## Particulars of Scuppers and Sanitary Discharge Pipes

**BRITAM LUBE.**

no scuppers on forecastle deck. Plug in forecastle bld to drain forecath.  
three 3" 4" openings in structure P. & S. foreboard deck.  
Foredeck scuppers drain over board start 4 ft above F. B. deck.  
Two 2" galley scuppers fitted with non-return valves.  
all scuppers in poop accommodation drain to E. R. bilges.  
all toilets and wash basins are on or above foreboard deck. All fitted with non-return valves.  
one 4" dia. soil pipe P. & S. aft.  
one 4" " " P. & S. fwd.  
one 4" " " P. only amidships  
Two 1 1/2" wash basin discharges S. S. aft and one 2".  
one 3" " " + shower P. S. amidships  
Two 2" " " discharges P. & S. forward.

Particulars of Side Scuttles

Particulars of Side Scuttles:— Eleven 12" port lights, poop sides P. & S.  
Two 10" " " " front P. & S.  
Six 12" " " " fore-castle sides, P. & S. } all fitted with cast iron covers. ✓

Particulars of Guard Rails:— On foreboard deck. Two lines  $\frac{3}{16}$ " dia. chain 3ft high carried on wrought iron stanchion spaced 7ft apart. ✓

Particulars of Gangways, Lifelines, etc.:— 2" plank runway 24" wide, 15" above top of trunk, P. & S. permanently fixed. Two  $\frac{1}{2}$ " dia wire cables 36" high carried on  $2\frac{1}{2} \times \frac{1}{2}$ " iron bar stanchions spaced 5 ft. apart.

Gangway between

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 ... ..	<i>none</i>						
Forward Well ... ..	<i>none</i>						

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 ... ..	24" x 3/8"	3/8"	9' x 3" B.A.	30"	6' x 4" ang. clip bottom 12' x 12" end top	10" ports	✓	7'-6"
Raised Quarter Deck Bulkhead ...	✓							
Bridge, After Bulkhead ... ..	✓							
Bridge, Forward Bulkhead ... ..	✓							
Forecastle Bulkhead ... ..	25" x 3/8"	5/16"	could not section sheathed in cabin.	30"	✓	25' x 5'-2"	15" ✓	7'-6"
Trunk, Aft ... ..	✓							
Trunk, Forward ... ..	✓							
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	enclosed in poop. ✓							
Exposed Machinery Casings on Super-structure Decks ... ..								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..								
Deckhouses on Flush Deck Ships ...	✓							

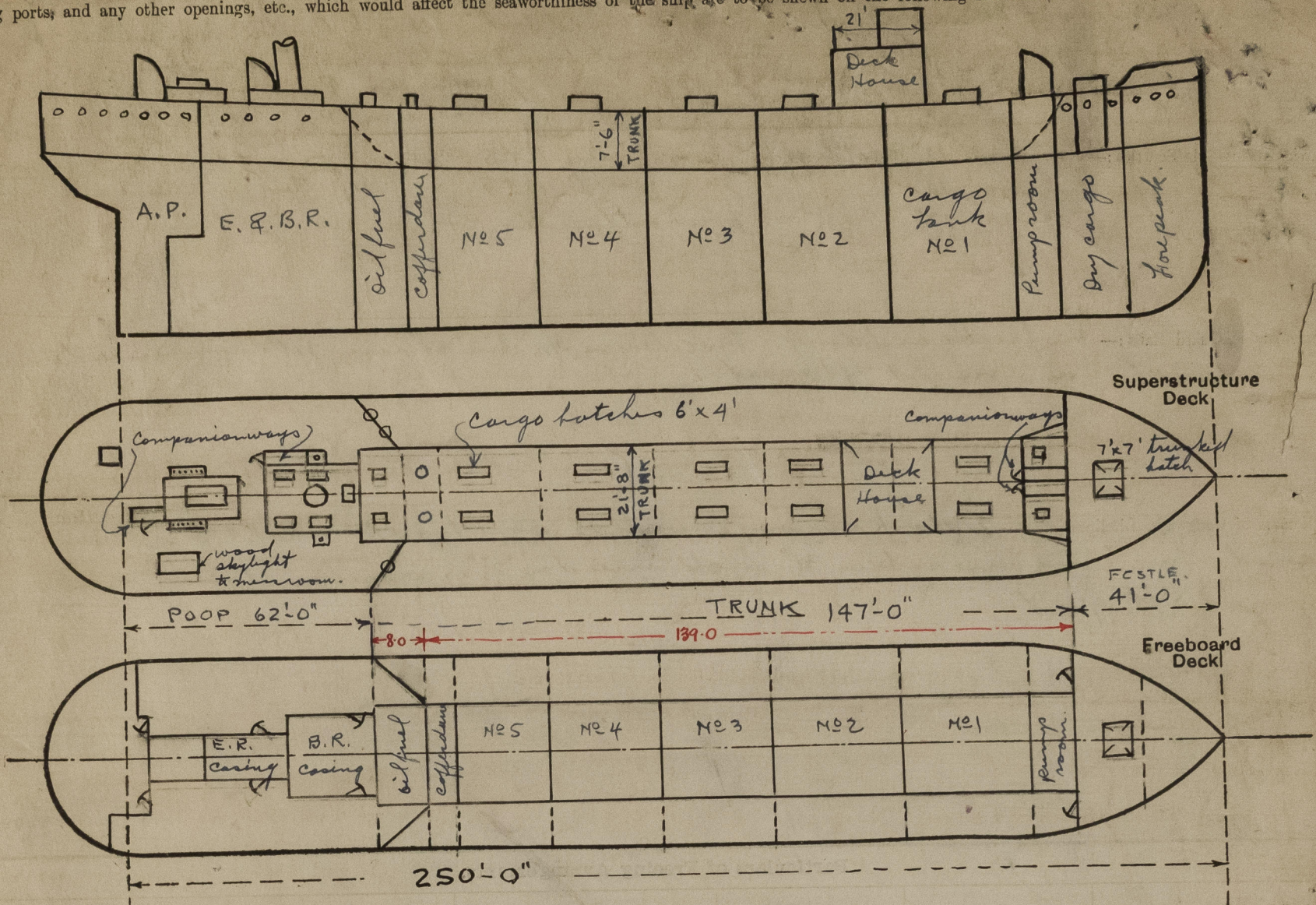
Particulars of Closing Appliances (state if capable of being manipulated from both sides).

POOP		FORECASTLE		DECKHOUSES	
Poop Bulkhead ... ..	✓	Forecastle Bulkhead ... ..	✓	Deckhouse on Flush Deck Ships ...	✓
Raised Quarter Deck Bulkhead ...	✓	Forecastle Machinery Casings on Freeboard or Raised Quarter Decks ...	✓	Deckhouse on Flush Deck Ships ...	✓
Bridge, After Bulkhead ... ..	✓	Exposed Machinery Casings on Superstructure Decks ... ..	✓	Deckhouse on Flush Deck Ships ...	✓
Bridge, Forward Bulkhead ... ..	✓	Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	✓	Deckhouse on Flush Deck Ships ...	✓
Forecastle Bulkhead ... ..	✓	Steel doors 26" x 5'3", P. & S. 7/8" plate, rubber gaskets, six dogs	✓	Deckhouse on Flush Deck Ships ...	✓
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	✓	Enclosed in poop. Steel doors in casings. 18" rails.	✓	Deckhouse on Flush Deck Ships ...	✓
Exposed Machinery Casings on Superstructure Decks ... ..	✓		✓	Deckhouse on Flush Deck Ships ...	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	✓		✓	Deckhouse on Flush Deck Ships ...	✓



# BRITAMLUKE

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 shown on the following sketches:—



$$\text{Trunk} \quad 80 \times \frac{21.67 + 43.0}{2 \times 43.0} = 6.02$$

$$\frac{139 \times 21.67}{43.0} = \frac{70.04}{76.06}$$

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

Builder's name and yard number Sumner Shipbuilding Co. Ltd. Yard no. 212.

Names of sister ships "Britamoco"

Owners "Britamluke", Ltd.

Fee £

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