

21 DEC 1936

35125

Index. No.  
(For London Office only.)

Rpt. C.11.

San Calisto 35857 (Similar)

San Calisto  
35187

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

S.A. REPORT NO. 20284

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having POOP, BRIDGE AND FORECASTLE

Port of Survey GREENOCK.

Date of Survey WHILE BUILDING.

Name of Surveyor Kenneth Inglis.

Particulars of Classification **+100A.1 (CONTINGENT)**  
"CARRYING PETROLEUM IN BULK"  
"LONGITUDINAL FRAMING AT BOTTOM & DECK"

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
'SAN CALISTO'	BRITISH LONDON.	165406	<del>8010.2</del> APPROX <del>8000</del>	1936
Moulded Dimensions: Length 460 ✓ Breadth 61 ✓ Depth 33.25 ✓				
Moulded displacement at moulded draught = 85 per cent. of moulded depth 17650 tons				
Coefficient of fineness for use with Tables .779 ✓				

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... 33.25	(a) Where D is greater than Table depth (D - Table depth) R = (33.31 - 30.67) 3 = + 7.92	Moulded Breadth (B) 61.0"
Stringer plate ... 75" ... .06	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 14.64$
Sheathing on exposed deck Nil		Ship's Round of Beam = 15"
$T \left( \frac{L-S}{L} \right) =$		Difference .36 excess
Depth for Freeboard (D) = 33.31	If restricted by superstructures	Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.36}{4} \times .591 = -.05$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	96.75	96.75	7'-6"		96.75
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	42.5	42.50	7'-6"		42.50
" overhang aft ...	3.5	2.62			2.62
" overhang forward ...	2.25				
Fore enclosed ...	46.3	46.25	7'-6"		46.25
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	189.00	188.12			188.12

Standard Height of Superstructure	7.5'
" " R.Q.D.	
Deduction for complete superstructure	42.00"
Percentage covered $\frac{S}{L} =$	41.09
" " $\frac{S_1}{L} =$	40.90
" " $\frac{E}{L} =$	40.90
Percentage from Table, Line A. TANKER	
(corrected for absence of forecastle (if required))	31.90
Percentage from Table, Line B.	
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than 2L (if required)	
Deduction = 42 x .3190 =	- 13.40

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	56.00	1		56.00	60	60.00	1		60.00
$\frac{1}{2}L$ from A.P. ...	24.92	4		99.68	26.75	26.75	4		107.00
$\frac{2}{3}L$ " ...	6.16	2		12.32	6.5	6.50	2		13.00
Amidships ...	-	4		0	-	-	4		-
$\frac{2}{3}L$ from F.P. ...	12.32	2		24.64	12.75	12.75	2		25.50
$\frac{1}{2}L$ " ...	49.84	4		199.36	50.5	50.50	4		202.00
F.P. ...	112.00	1		112.00	114	114.00	1		114.00
Total ...				504.00					521.50

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} = \frac{17.50}{18} = .972 \text{ (} \frac{.75 - .2054}{2L} \text{)} = .53"$$

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 =	33.31
Summer freeboard =	6.44
Moulded draught (d) =	26.87

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 6.72 =  $6\frac{3}{4}$ Addition for Winter North Atlantic Freeboard (if required) =  $6.72 + 4.60 = 11.32 = 11\frac{1}{4}$ 

## Deduction for Fresh Water.

Displacement in salt water at summer load water line	26 = 16095
$\Delta = 27 = 16788$	16838
Tons per inch immersion at summer load water line	26 = 57.25
$T = 27 = 57.75$	57.79
Deduction = $\frac{\Delta}{40T}$ inches	
	= 7.28
	= $7\frac{1}{4}$

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

Correction for coefficient  $\frac{.779 + .68}{1.36} = \frac{1.459}{1.36}$ 

	+	-
Depth Correction ...	7.92	-
Deduction for superstructures ...	-	13.40
Sheer correction ...	-	.53
Round of Beam correction ...	-	.05
Correction for Thickness of Deck amidships ...	-	-
Other corrections, scantlings, etc. ...	-	-
	7.92	13.98

Summer Freeboard = 77.30

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

Tropical Fresh Water Line above Centre of Disc ...	14"
Fresh Water Line " " ...	7 $\frac{1}{2}$ "
Tropical Line " " ...	6 $\frac{3}{4}$ "
Winter Line below " " ...	6 $\frac{3}{4}$ "
Winter North Atlantic Line " " ...	11 $\frac{1}{4}$ "

Tropical Fresh Water Freeboard ...	5'-3 $\frac{1}{4}$ "
Fresh Water " " ...	5'-10"
Tropical " " ...	5'-10 $\frac{1}{2}$ "
Winter " " ...	7'-0"
Winter North Atlantic " " ...	7'-4 $\frac{1}{2}$ "

29 DEC 1936

5m.9.32.

W463-0066 (1/2)

RECEIVED  
23 JAN 1937



## PARTICULARS OF PROTECTION TO OPENINGS. ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS OF BUNKER										
Description of Hatchway			...	...	...	CARGO HATCHES 23 HATCHES	HATCH ON FORECASTLE DECK			
Dimensions of Hatchway			...	...	...	4'-0" x 3'-0" AT	10'-10" x 14'-6"			
COAMINGS	{	Height above Deck	...	...	...	30" ✓	30" ✓			
		Thickness	{	Sides	...	40 ✓	44 ✓			
		Stiffeners		...						
		Brackets, Stays		...						
HATCH BEAMS	{	Number	...	...	...	21 CARGO + 27 OF BUNKER.	7-3" x 40 BA. AT SIDES & ENDS. BUNK STIFFS CARRIED UP TO HEIGHT OF BULB ANGLE.			
		Spacing	...	...						
		Scantling and Sketch	...							
		Bearing Surface	...							
FORE AND AFTERS	{	Number	...	...	...					
		Spacing	...	...						
		Unsupported Lengths	...							
		Scantling* and Sketch	...							
HATCH COVERS	{	Material	...	...	...	STEEL W.T. COVER 30" THICK WITH 5 x 3 x 40 ANG. STIFFENERS SPACED 2'-1" APART. * ALSO 2-8 x 3 x 50 BA. ON TOGGLES SPACED 1'-9 1/2" APART.				
		Thickness	...	...						
		How fitted	...	...						
		Bearing Surface	...	...						
Spacing of Cleats			...	...	...					
Number of Tarpaulins			...	...	...					

\*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:— FIDDLE, FUNNEL & VENTILATOR COAMINGS EFFICIENT. ✓  
ENGINE ROOM SKYLIGHT OF STEEL ✓  
STEEL GRATINGS FITTED WITH STRONG HINGED STEEL COVERS. ✓

Particulars of Flush Bunker Scuttles:— NONE.

Particulars of Companionways :- PUMP ROOM ENTRANCES FORWARD & AFT  
DECK OPENINGS ENCLOSED BY STEEL HOUSE WITH HINGED STEEL WATERTIGHT DOORS AT AFTER END.  
DOORS WORKABLE FROM BOTH SIDES - SILLS 18" HIGH. ✓  
PUMP ROOM ENTRANCE TO FORD PUMP ROOM IN COFFERDAIR FORWARD.  
HINGED W.T DOOR FITTED AT LEVEL OF GANGWAY TO TRUNK. DOOR WORKABLE FROM BOTH SIDES.  
TRUNK SIDES 35 STIFFENED WITH 4x3x40 ANGLES SPACED 30" APART.

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—		Upper Deck	
<u>POOP DECK</u>		2 VENTS 12" DIA TO PUMP ROOM COAMING 5'-6" x 34"	* ✓
4-12" DIA VENTS TO POOP TWIN DECKS COAMING 30" ABOVE WOOD Dk.	x 34"	2 " 18" " " FOR MAIN PUMP ROOM " 8'-6" x 40"	* ✓
2-12" DIA " " " " " " 7'-6" " " " 34"		2 " 18" " " AFT " " " 8'-6" x 40"	* ✓
<u>BOAT DECK</u>		* THESE VENTILATORS STAYED OR CONNECTED TO SIDES OF ERECTIONS. VENTILATOR COAMINGS CONSTRUCTED IN ACCORDANCE WITH THE RULES AND FITTED WITH WOOD PLUGS & CANVAS COVERS. ✓	
2-12" " " " ENG <sup>g</sup> WORKSHOP " 30" " " " 34"			
<u>FORECASTLE Dk</u>			
3-10" DIA VENTS TO FORWARD HOLD COAMING 38" x 32"			
UPPER BRIDGE 1-12" DIA VENT TO STEWARDS STORE COAMING 30" x 34"			

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :-			
<u>FORECASTLE Dk</u>			
1-3"	DIA SWAN NECK AIR PIPE	TO FORE PEAK TANK - 18" HIGH	✓
2-4"	" " " " " "	" DEEP TANK - 18" "	✓
<u>UPPER Dk</u>			
2-2"	DIA S.N AIR PIPES	TO FORD COFFERDAM - 36" HIGH.	
2-2"	" " " " " "	" AFTER 36" "	
4-2"	" " " " " "	" SUMMER TANKS 6-6" "	} Fixed To ✓
2-4"	" " " " " "	" O.F. BUNKER 6-6" "	} POOP FRONT ✓
<u>POOP Dk</u>			
2-4"	DIA AIR PIPES	TO O.F. BUNKER IN DOUBLE BOTTOM 78" HIGH	✓
1-3"	" " " " " "	" A. PEAK TANK 18" "	✓
<u>DECK Dk Aft</u>			
4-2"	" TO COFFERDAM.		
2-3 1/2"	" DRAIN TANK		
2-3 1/2"	" COOLING WATER TANK.		
			78" HIGH
			AIR PIPES TO OIL TANKS FITTED WITH GAUGES AND HIGHER COVERS. TO WATER TANKS WITH WOOD PLUGS. ✓

Particulars of Gangway Cargo and Coaling Ports:— *NONE.*



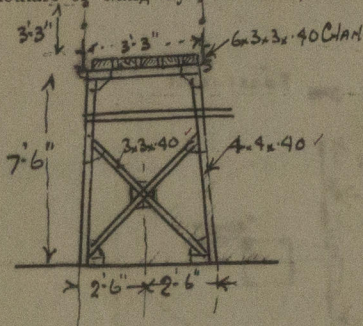
21 DEC 1961

SCUPPERS FROM POOP SPACE SCUPPERS FROM STORES, STEERING GEAR, PASSAGES & BATH ROOMS CARRIED BELOW FREEBOARD DECK  
& FITTED WITH STORM VALVES & ALSO SCREWED PLUG AT INNER END.  
SCUPPERS FROM P/CLE SPACE - 1-3/2" RIS BELOW FREEBOARD DK FITTED WITH STORM VALVES & HAVING WOOD PLUG  
AT INNER END.

FCL. No SIDELIGHTS  
BRIDGE 10" DIA SIDELIGHTS  
POOP 12" " "  
ALL SIDELIGHTS OF SUBSTANTIAL CONSTRUCTION & FITTED WITH HINGED DEADLIGHTS & PLUGS ✓

Particulars of Guard Rails:—  
 ROUND POOP, BRIDGE & FORECASTLE:— 3 RAILS 3'-6" HIGH WITH STANCHIONS 4'-6" APART.  
 OPEN RAILS AT UPPER DECK— LENGTH AS BELOW— 4 RAILS & STANCHIONS. RAILS 3'-6" HIGH & STANCHIONS 5'-0" APART.  
 LENGTH OF OPEN RAILS IN FORWARD WELL = 50'-0"  
 " " " " " AFT " = 95'-6"

EFFICIENT GANGWAY FITTED FROM POOP TO BRIDGE & FROM BRIDGE TO FORECASTLE  
FORE & AFT PLATFORM ANGLES  $6 \times 3 \times 40$  CHANNEL,  
SUPPORT ANGLES  $4 \times 4 \times 40$  SPACED 8' 9" APART.  
CROSS TIE ANGLES  $3 \times 3 \times 40$ .  
FORE & AFT BRACING ANGLES  $3 \times 3 \times 30$ .  
PLATFORM  $5 \times 3$  O.P. SPACED 1' APART.



State position of each freeing port ... } After Well:— ✓  
(F. and A. position and height above deck edge) } Forward Well:— 6' FROM BRIDGE FRONT - 12" ABOVE DECK  
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— ONE HORIZONTAL ROD  
Additional area where sheer is less than standard. ✓

Trunk, Forward ... ..								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...								
Exposed Machinery Casings on Superstructure Decks ... ..	34 ✓	32 ✓	4 in. 3 x 3 x 30 ✓	30"	BRACKETED AT TOP	1. P+S 5'-0" x 25"	21" ✓	7'-6"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..								
PUMP ROOMS Deckhouses on Flush Deck Ships ...	40	35	6 x 3 x 50 BA	30"	BRACKETS	5'-0" x 30"	18" ✓	7'-6"

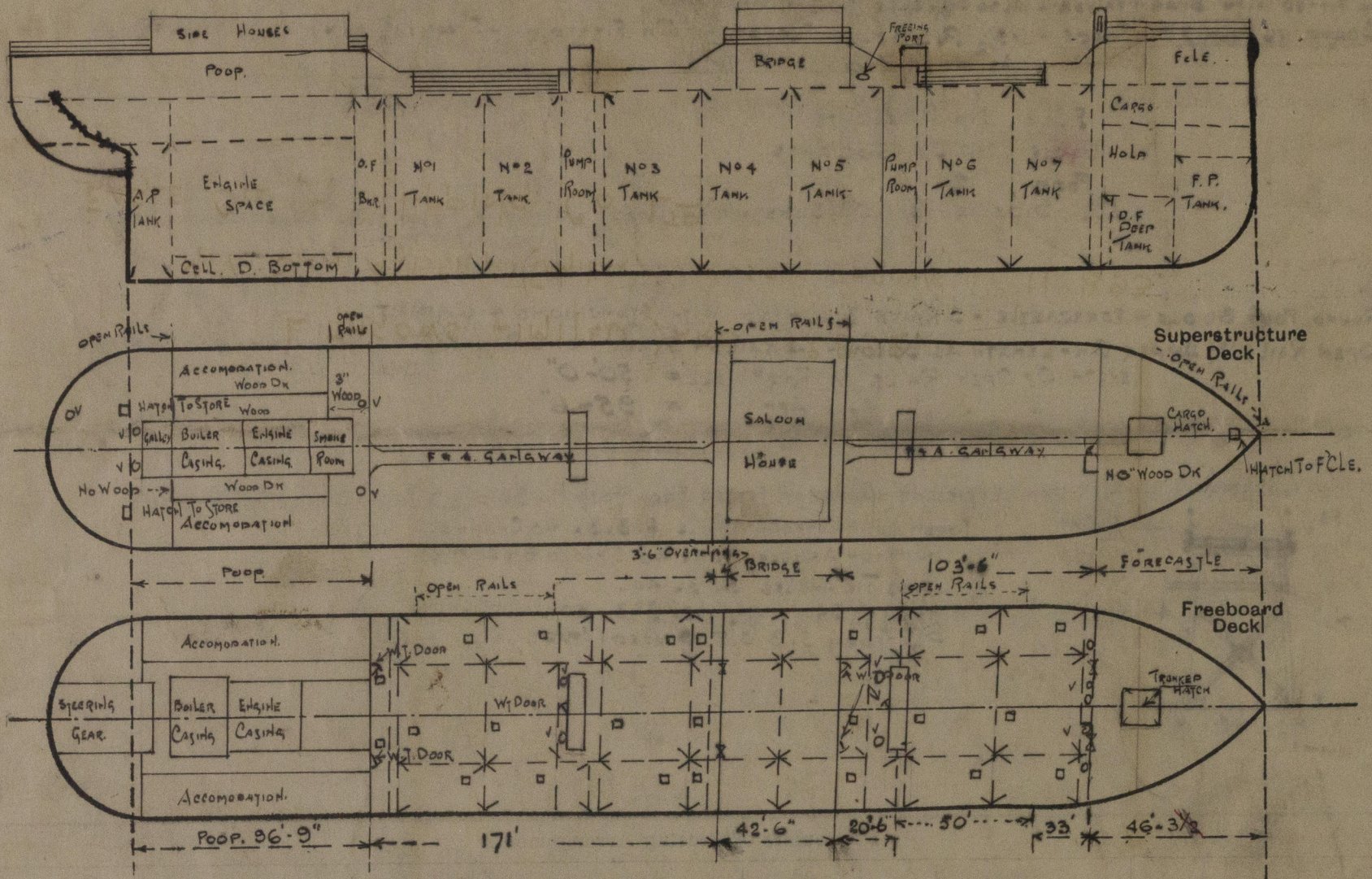
Poop Bulkhead ... ..	2 STEEL WATERTIGHT DOORS WORKABLE FROM BOTH SIDES. ✓
Raised Quarter Deck Bulkhead ...	2. TONNAGE OPENINGS WITH PLATE & HOOK BOLTS SPACED 15" APART ✓
Bridge, After Bulkhead ... ..	2. STEEL WATERTIGHT DOORS WORKABLE FROM BOTH SIDES ✓
Bridge, Forward Bulkhead ... ..	2 TONNAGE OPENINGS FITTED WITH 3" SHIFTING BOARDS FULL HEIGHT IN CHANNELS RIVETED TO BULK HEAD. ✓
Forecastle Bulkhead ... ..	HINGED STEEL WATERTIGHT DOORS ✓
<del>Exposed Machinery Casings on Free-board or Raised Quarter Decks</del> ...	WORKABLE FROM BOTH SIDES ✓
Exposed Machinery Casings on Super-structure Decks ... ..	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ... ..	
<b>Pump Rooms</b>	
Deckhouses on Flush Deck Ships ...	1 WATERTIGHT DOOR AT EACH PUMP ROOM. WORKABLE FROM BOTH SIDES. ✓

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San Calisto

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:—



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

This vessel has been built in accordance with the approved plans & in general conformity with the Society's rules for the class contemplated.

The vessel is to be engaged on international trade.

The approved plans of midship section & Profile & decks are forwarded for reference.

Freeboard request attached.

Builder's name and yard number LITHGOWS LIMITED YARD N° 892.

Names of sister ships M.Y. SAN ALBERTO (SIMILAR). ALSO LITHGOWS LTD N° 893.

Owners EAGLE OIL & SHIPPING CO LTD

APPROX. Fee £ 18 : 0 : 0

Received by me. *[Signature]*



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