

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD. 10.868

Computation of Freeboard for Steamer, Sailing Ship, Tanker  
having Poop, Bridge & Forecastle.

Port of Survey Belfast.

Date of Survey June 1932.

Name of Surveyor Gas. Rennie

Particulars of Classification +100A1  
Carrying petroleum in bulk.

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
"SEMINOLE"	British. Barrow.	125910.	6933.	1921-5.

Moulded Dimensions: Length 424.95 Breadth 56.66 Depth 33.0 tons 15220

Moulded Displacement at moulded draught = 85 per cent. of moulded depth 790

Coefficient of fineness for use with Tables 790

Depth for Freeboard (D)				
Moulded depth	...	...	...	33.0
Stringer plate	...	...	...	.06
Sheathing on exposed deck	...	...	...	.05
$T \left( \frac{L-S}{L} \right) =$				
Depth for Freeboard (D) =				
33.05				

Depth correction	
(a) Where D is greater than Table depth (D - Table depth) R =	$(33.05 - 28.27) \times 3 = 14.34$
(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	
If restricted by superstructures	

Round of Beam correction	
Moulded Breadth (B)	56.66
Standard Round of Beam = $\frac{B \times 12}{50}$	13.60
Ship's Round of Beam	14.14
Difference	.65
Restricted to	
Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right)$	$\frac{.65}{4} \times .573 = .09$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed	92.0	92.00	7.6		92.00
" overhang	6	.25			.25
R.Q.D. enclosed					
" overhang	35.08	35.08	7.8		35.08
Bridge enclosed					
" overhang aft					
" overhang forward	50.49	50.49	7.10		50.49
" enclosed	6.51	3.25			3.25
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	184.58	181.07			181.07

Standard Height of Superstructure	7.50
" " R.Q.D.	42.00
Deduction for complete superstructure	
Percentage covered $\frac{S}{L} =$	43.522
" " $\frac{S_1}{L} =$	42.702
" " $\frac{E}{L} =$	42.702
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	
Percentage from Table, Line B. <u>Tanker</u>	33.702
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than .2L (if required)	
Deduction =	$42 \times 33.702 = -14.15$

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	52.41	1		52.41	63	63.00	1		63.00
$\frac{1}{4}L$ from A.P.	23.32	4		93.28	27.25	27.25	4		109.00
$\frac{2}{4}L$	5.76	2		11.52	6.79	6.81	2		13.62
Amidships		4					4		
$\frac{3}{4}L$ from F.P.	11.53	2		23.06	14	14.02	2		28.04
$\frac{1}{4}L$	46.65	4		186.60	56	56.09	4		224.36
F.P.	104.82	1		104.82	126	126.00	1		126.00
Total				471.69					564.02

Mean actual sheer aft = 4.40  
Mean standard sheer aft = 4.40

Mean actual sheer forward = 4.40  
Mean standard sheer forward = 4.40

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

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{92.33}{18} (.75 - .2176) = -2.73$

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 = 33.05  
Summer freeboard = 5.94  
Moulded draught (d) = 27.11

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = 6.78

Addition for Winter North Atlantic Freeboard (if required) = 4.24

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$  144795

Tons per inch immersion at summer load water line

$T =$  48.57

Deduction =  $\frac{\Delta}{40T}$  inches = 7.59

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

Correction for coefficient  $\frac{790+68}{1.36} =$

	+	-
Depth Correction	14.34	
Deduction for superstructures		14.15
Sheer correction		2.73
Round of Beam correction		.09
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
	14.34	16.97

Summer Freeboard = 71.32

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

Tropical Fresh Water Line above Centre of Disc	...	14.14
Fresh Water Line	"	7.12
Tropical Line	"	6.34
Winter Line	below	6.34
Winter North Atlantic Line	"	11

Tropical Fresh Water Freeboard	...	5'-11 1/4"
Fresh Water	"	4'-9"
Tropical	"	5'-3 3/4"
Winter	"	5'-4 1/2"
Winter North Atlantic	"	6'-10 1/4"

JUN 1932

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# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Foreboard Deck			Poop Deck							
Description of Hatchway	01. Cargo	Summer	Off. Deck	Fore	Fore	Fore	Fore	Fore	Fore	Fore
Dimensions of Hatchway	6' x 3' 9"	2' 6" x 2' 10"	2' 1' x 9"	6' x 10'	2' x 2'	2' x 2'	2' 6" x 2' 6"	2' 6" x 2' 6"	2' x 1' 8"	4' 3" x 2' 6"
COAMINGS	Height above Deck	36"	36"	31"	9" B.A.	9" B.A.	9" B.A.	9" B.A.	6" x 3" x 2' 6"	30"
	Thickness	9" 3/4" x 1/4"	40"	44"						40"
	Stiffeners		9" 3/4" x 1/4"	3 1/2" x 1/4"						
	Brackets, Stays									
HATCH BEAMS	Number									
	Spacing									
	Scantling and Sketch									
	Bearing Surface									
FORE AND AFTERS	Number									
	Spacing									
	Unsupport Lengths									
	Scantling and Sketch									
	Bearing Surface									
HATCH COVERS	Material	O.T. Steel	O.T. Steel	W.T. Steel	W.T. Steel	W.T. Steel	Wood	O.T. Steel	O.T. Steel	W.T. Steel
	Thickness	1/4" Plated	1/4" Plated	3/8" Plated	1/4"	1/4"	2"	3/8"	1/4"	3/8" Plated
	How fitted	Toggles	Toggles	Toggles	Toggles	Toggles	Laid in	Toggles	Toggles	Toggles
	Bearing Surface						Laid in			
Spacing of Cleats	15"	15"	24"	14"	18"	22"	14"	21"		
Number of Tarpaulins										

\*Are wood fore and afters steel shod at all bearing surfaces? none.  
 Are battens and wedges efficient and in good condition? no. none for hatchways in fore.  
 Are tarpaulins in good condition and in accordance with rule requirements? do.  
 Are lashings provided in accordance with rule requirements? not required.

Particulars of fiddle, funnel and ventilator coamings:— On high casing on Poop Deck.  
 Indley, funnel & ventilator coamings of steel, riveted, efficient.  
 Engine room skylight of steel, efficient, bolted.  
 Indley opening protected by hinged steel cover, efficient.

Particulars of Flush Bunker Scuttles:— none.

Particulars of Companionways:— Entrance way to poop space, at aft end of casing on Poop Deck.  
 of steel, riveted, with steel hinged W.T. door operating both sides. 12" sill above wood deck.

Position	Space	No.	Height	dia.	Thickness	Dr. Att.	Closing Appl.
Foreboard	Foreboard	1	2' 11"	6"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	2	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	3	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	4	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	5	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	6	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	7	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	8	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	9	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	10	3' 6"	18"	3/8"	Roller	Canvas cover.

Efficient closing appliances fitted to all vents without Boyle heads.

Position	Space	No.	Height	dia.	Thickness	Dr. Att.	Closing Appl.
Foreboard	Foreboard	1	2' 11"	6"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	2	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	3	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	4	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	5	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	6	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	7	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	8	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	9	3' 6"	18"	3/8"	Roller	Canvas cover.
Foreboard	Foreboard	10	3' 6"	18"	3/8"	Roller	Canvas cover.

\* Canvas covers & wood plug provided

Particulars of Gangway Cargo and Coaling Ports:— none.

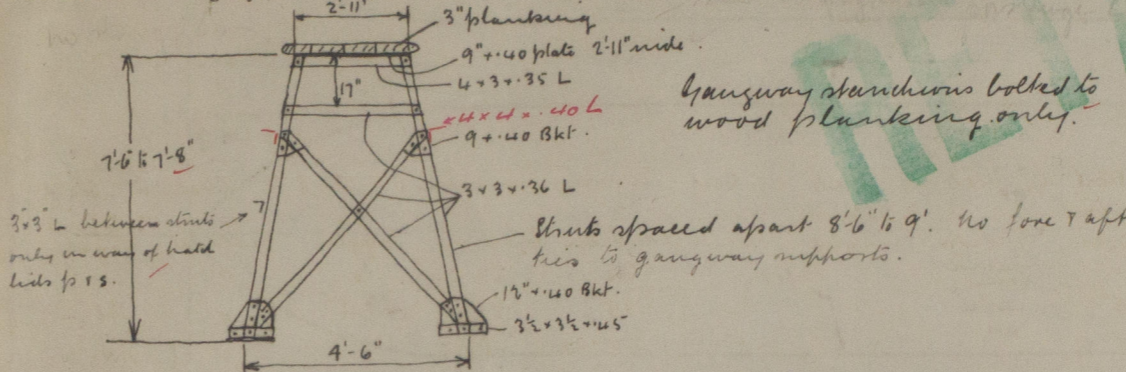
Particulars of Scuppers and Sanitary Discharge Pipes	Space from	Shell	Run end	No.
Scuppers	2' 6" 1/2" 1/2"	do.	do.	2
San. Disch.	9' - do.	do.	do.	3
San. Disch.	9' - do.	do.	do.	4

Note: 3 storm valves at present missing.

Particulars of Side Scuttles:— All situated in sides of forecabin, bridge & poop. All fitted with hinged deadlights except one (deadlight missing). A number of deadlights require to be made workable.

Particulars of Guard Rails:—  
 Fore Deck: 3' 3" high 2 rows of rails. Stanchions spaced approx. 5' 4" apart.  
 Poop Deck: 3' 5" " 2 " do. do. 5' 3" " "  
 Bridge Deck: 3' 6" " 2 " do. do. 5' 3" " "  
 4th A. Gangway 3' 1" " 2 rows steel wire stanchions spaced approx 5' apart.

Particulars of Gangways, Lifelines, etc.:



The crew are berthed forward. 7 have access to quarters by means of gangway in forward & after wells.

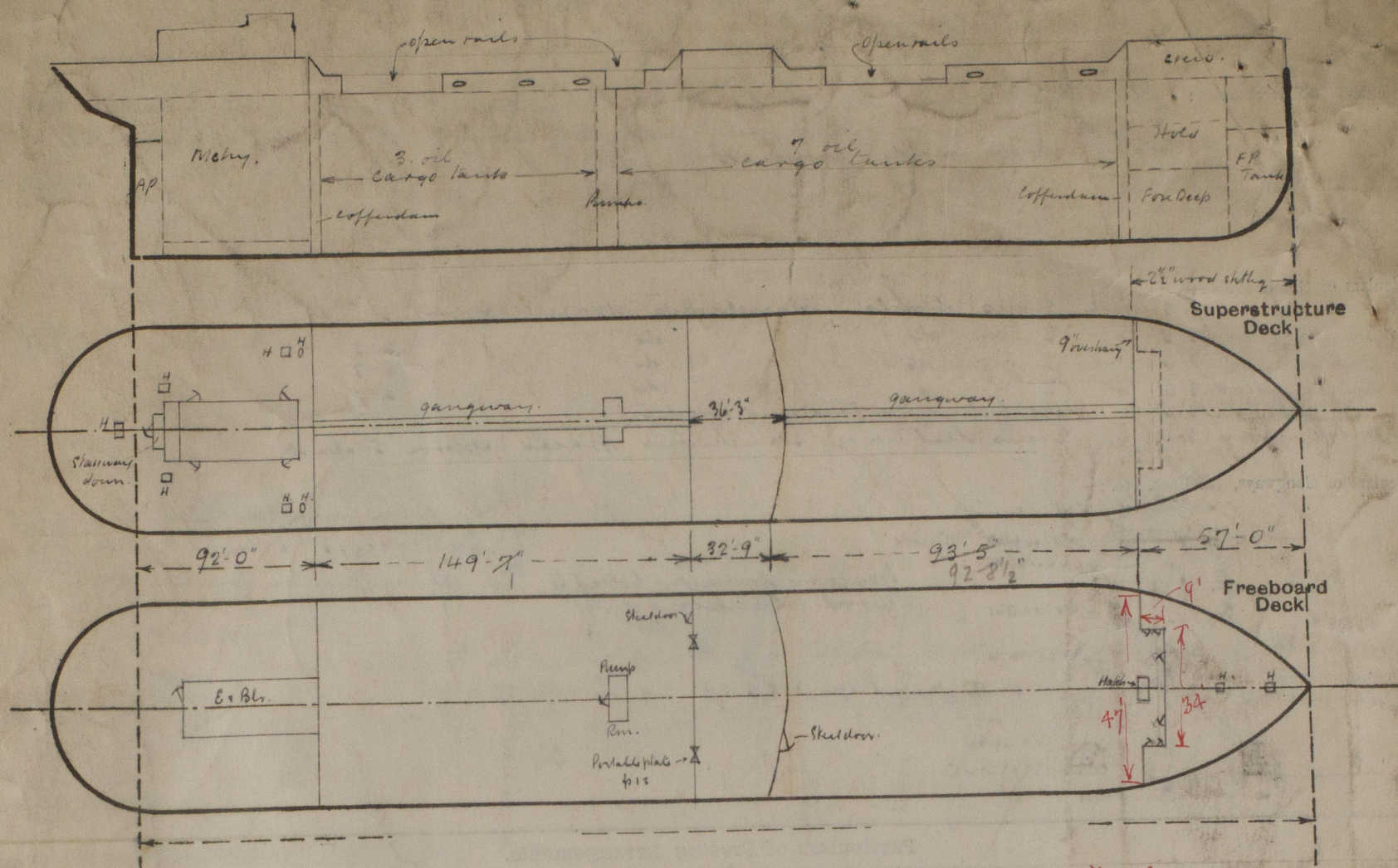
Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	78' 4"	3' 5"	open rails	27' 0" of open rails		
Forward Well	68' 6"	3' 5"	open rails	27' 0" of open rails		

State position of each freeing port (F. and A. position and height above deck edge) After Well:— 12' 1/2"  
 Forward Well:— 11' 1/2"  
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Steel bars.  
 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	50"	35"	3" x 3" x 36"	30"	Brackets	none	17"	7' 6"
Raised Quarter Deck Bulkhead								
Bridge, After Bulkhead	25"	25"	3" x 3" x 36"	35"	Brackets	10' 5" x 2'	17"	7' 8"
Bridge, Forward Bulkhead	48"	44"	3" x 3" x 36"	35"	Brackets	10' 5" x 2'	21"	7' 8"
Forecastle Bulkhead	30"	30"	3" x 3" x 36"	27" x 36"	Deck bars	4' 5" x 20"	15"	7' 7 1/2"
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks								
Exposed Machinery Casings on Superstructure Decks	40"	35"	3" x 3" x 40"	27"	Brackets	4' 5" x 2'	19"	7' 6" x 11' 0"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships	36" x 30"	30"	3" x 3" x 32"	32"	Deck bars	10' 5" x 2'	21"	7' 6"

Particulars of Closing Appliances (state if capable of being manipulated from both sides).						
Poop Bulkhead						none
Raised Quarter Deck Bulkhead						One steel hinged door operating from both sides.
Bridge, After Bulkhead						2 portable plates (stiffened) secured by strongbacks from inside.
Bridge, Forward Bulkhead						One steel hinged W.T. door operating from both sides.
Forecastle Bulkhead						Six hinged link doors, parallel, 2' x 1 1/2" thick, securing from both sides.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks						
Exposed Machinery Casings on Superstructure Decks						Four steel hinged doors W.T. operating from both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances						
Deckhouses on Flush Deck Ships						One W.T. steel hinged door operating from both sides.

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:—



$$\begin{array}{r} \text{Bridge } 36.25 \\ 32.75 \\ \hline 3.5 \times 2 = 2.33 \\ 32.75 \\ \hline 35.08 \end{array}$$

$$\begin{array}{r} \text{Fore } 57.00 \\ - 34 \times 9 = -6.51 \\ 47 \\ \hline 50.49 \end{array}$$

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

Vessel examined in drydock for docking survey  
Bottom & midles examined, also decks, casings, coamings,  
ventilators,

External Displ. 27' WL 14600 tons.  
Tons P. I. 27' " 48.7 "

Builder's name and yard number

Vickers Ltd. Barrow

Names of sister ships

Owners

Anglo American Oil Co

Fee £

14 : 9 : 0

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