

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. **14504**
(For London Office only.)

-1 SEP 1933

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

having *poop and open forecastle*

(Type of Superstructures.)

Port of Survey *Marichamn*

Date of Survey *25/8 33.*

Name of Surveyor *John Tylman*

Particulars of Classification *8100 A1*

Ship's Name *"KILLORAN"*

Nationality and Port of Registry *British Marichamn*

Official Number *766*

Gross Tonnage *1817*

Date of Build *1900-8*

Moulded Dimensions: Length *75.45*, Breadth *11.90*, Depth *7.416*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *4258 m³*

Coefficient of fineness for use with Tables *.745 (72 higher in tables)*

Depth for Freeboard (D) *7.416*

Depth correction (a) Where D is greater than Table depth (D-Table depth) R = *8.33 (7.487-6.357) 20.02 = +189 m*

(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) *11.89*

Standard Round of Beam = $\frac{B \times 100}{50} = 238$

Ship's Round of Beam = *254.50*

Difference *16*

Restricted to

Correction = $\frac{\text{Diff}^2}{4} \times (1 - \frac{S_1}{L}) = \frac{16^2}{4} \times 7198 = -3 m$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	12.44	12.44	2.18		12.44
" overhang ...	1.36	.68	2.18		.68
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
Forecastle enclosed open ...	8.90	8.26	2.18		8.26
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	22.70	21.38			21.38

Standard Height of Superstructure *1831*

" " R.Q.D.

Deduction for complete superstructure *787 509*

Percentage covered $\frac{S}{L} = 29.76\%$

" $\frac{S_1}{L} = 28.02$

" $\frac{E}{L} = 28.02$

Percentage from Table, Line A. *16.21*

(corrected for absence of forecastle (if required))

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = *509 x .1621 = -83 m*

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	889	1		889	4.89	876	1		876
$\frac{1}{4}L$ from A.P. ...	395	4		1580	4.34	321	4		1284
$\frac{2}{4}L$ " ...	99	2		198	4.11	80	2		160
Amidships ...		4			4.11		4		
$\frac{3}{4}L$ from F.P. ...	198	2		396	4.46	221	2		442
$\frac{1}{4}L$ " ...	791	4		3164	4.91	883	4		3532
F.P. ...	1779	1		1779	6.30	1778	1		1778
Total ...				8006					8072

Mean actual sheer aft = *Deficient > .75*

Mean standard sheer aft =

Mean actual sheer forward = *Excess*

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

" " aft of " = *N.L.*Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{66}{18} \left(.75 - \frac{1488}{6012} \right) = -2.2$

If limited on account of midship superstructure.

*Nil*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 = *7*

Summer freeboard =

Moulded draught (d) =

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = *1.75*

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Tons per inch immersion at summer load water line

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

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

	+	-
Depth Correction	189	
Deduction for superstructures		83
Sheer correction		3
Round of Beam correction	27	
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
Summer Freeboard	216	86
		+130
		1453

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 " " ...

Winter North Atlantic Line " " ...

Tropical Fresh Water Freeboard ...

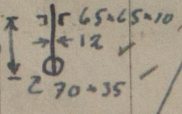
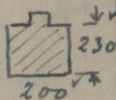

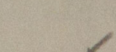
Fresh Water " " ...

Tropical " " ...

Winter " " ...

Winter North Atlantic " " ...

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Description of Hatchway			1	2	3	4				
Dimensions of Hatchway			1.07 x 0.81	2.40 x 2.43	4.83 x 3.70	2.38 x 2.45				
COAMINGS	{	Height above Deck	0.37	0.50	0.51	0.60				
		Thickness { Sides	12 Z	12	12	11				
			Ends	12 1/2	12	12	11			
		Stiffeners	—	—	—	—				
		Brackets, Stays	—	—	—	—				
HATCH BEAMS	{	Number	/	/	1	/				
		Spacing	/	/	2.41	/				
		Scantling and Sketch	/	/		/				
		Bearing Surface	/	/	6.5	/				
FORE AND AFTERS	{	Number	/	1	3	1				
		Spacing	/	1.21	0.9	1.22				
		Unsupported Lengths	/	2.40	2.41	2.38				
		Scantling* and Sketch	/							
Bearing Surface		/	70 x 2	70 x 2	50 x 2					
HATCH COVERS	{	Material	wood	wood	wood	wood				
		Thickness	60	75	75	60				
		How fitted	athw.	athw.	athw.	athw.				
		Bearing Surface	65	65	65	65				
Spacing of Cleats			530	640	540					
Number of Tarpaulins			4	4	4					

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

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:— *none fitted* ✓

Particulars of Flush Bunker Scuttles:— *None fitted ✓*

Particulars of Companionways:— See Super Structures.

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

On Forecastle 1 unit $\phi = 200$ in, height = 120 in	} closed by wood ✓ covers & tarpaulins
" " " " $\phi = 280$ in " = 480 in	

3 light trunks (L.T.) one forward, one amidship and one aft 1.2 x 1.2 met. of 8 in steel plate, height 2.3 met and closed by teak skylight and one tarpaulin ✓

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

on the poop dk. 2 vent.	$\phi = 100$	2,	height = 200	mm
" " " " 9 "	$\phi = 80$	7	" = 240	mm

wood plugs & covers provided

Particulars of Gangway Cargo and Coaling Ports:— In the bow on each side one cargo port 1.12×0.76 m
Closed by 122 steel plate, and $\frac{3}{4}$ " screw bolts spaced 707mm

Particulars of Scuppers and Sanitary Discharge Pipes:— Scuppers in the bulwarks $\frac{80}{170}$ " "
One W.C. with outlet below freeb. dk fitted with non-return valve
Other W.C. " " above " " not " " " "
One Penton discharge pipe with outlet above freeb. dk. not fitted with
non-return valve.

Particulars of Side Scuttles:— All side scuttles fitted with deadlights!

Particulars of Guard Rails :—


 930' fore castle.

Diagram showing a cross-section of a roof structure with 4 rafters and a vertical height of 900 mm. The rafters are labeled 1, 2, 3, and 4 from top to bottom.

Particulars of Gangways, Lifelines, etc. :—

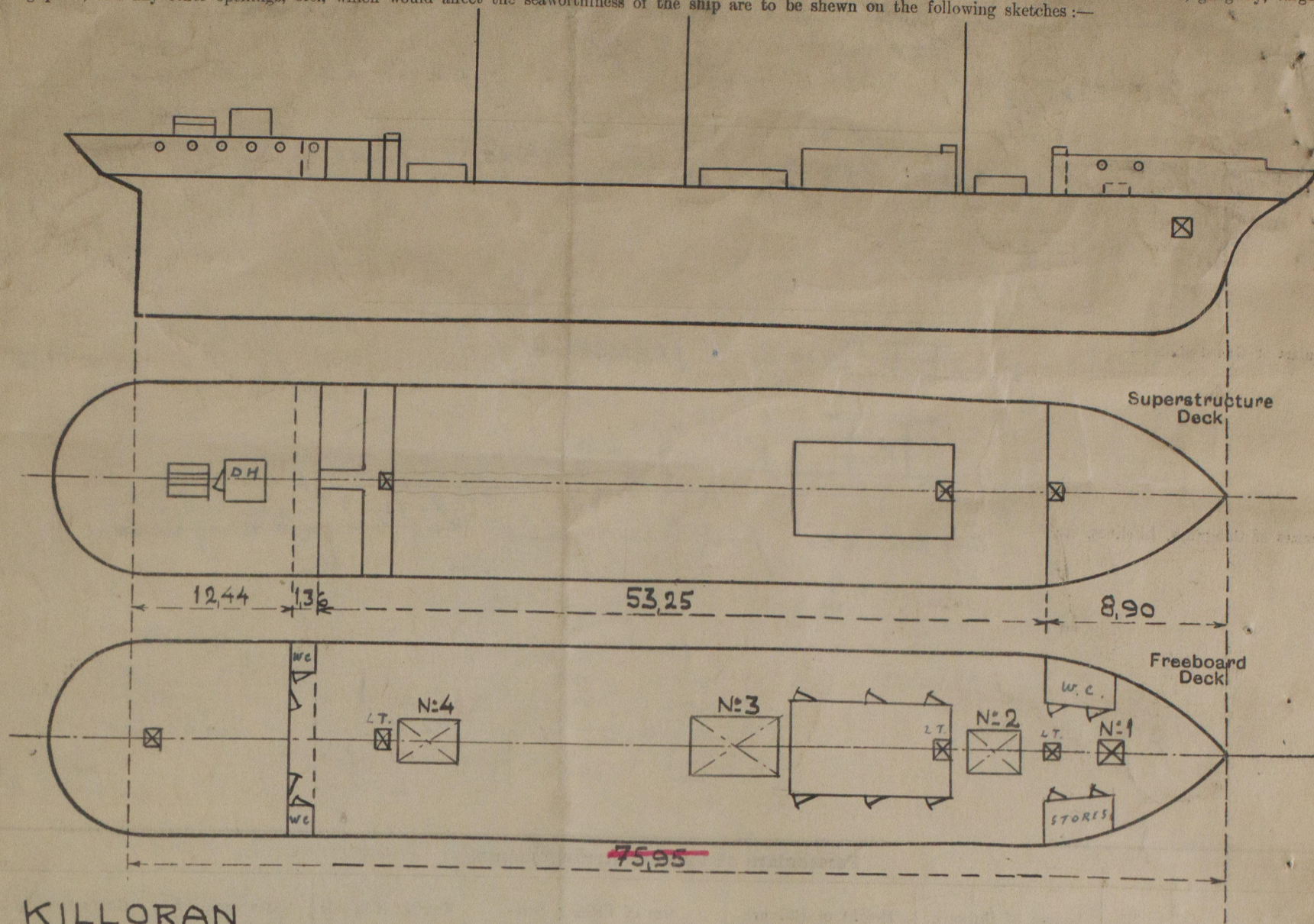
Eyeballs for rigging lifelines fitted.

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	53.25	1.34	0.92 x 0.63	5	2.92 m ²	3.25 m ²
Forward Well						
<p>State position of each freeing port } After Well :— Placed equally in the well. Height above deck 1707m</p> <p>(F. and A. position and height above deck edge) } Forward Well :—</p> <p>State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :— Double shutters of 2 rails</p> <p>Additional area where sheer is less than standard.</p>						

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	12	10	125 x 90 x 12	750	—	2 x 1.26 x 0.64	610	
Backhouse on Poop dk.	wood	wood	wood	850	—	1.70 x 0.58	210	2.0 m.
Raised Quarter Deck Bulkhead ...	200	50	110 x 110					
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super-structure Decks								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships ...	10	8	150 x 80 x 10	790	250 x 250 x 10	6 x 1.51 x 0.66	310	2.14

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	2 hinged teak doors 40" 2" thick operated from both sides.
Backhouse on poop dk.	1 hinged teak door 35" 2" " " " " " "
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead	
Bridge, Forward Bulkhead	
Forecastle Bulkhead	
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	
Exposed Machinery Casings on Super-structure Decks	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses on Flush Deck Ships ...	3 pitch pine & 1 teak door 50" 2" thick operated from both sides and 2 steel doors operated from inside only.

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 sheer has been measured afloat the draught being forward 3.4 met and aft 3.66 met. One skylight placed on the poop deck 2.48 x 2.69 of teak, height 0.26 met to the glasses and provided with one tarpaulin.

Builder's name and yard number. *Ailsa S.B. Co, Green*

Names of sister ships ☒

Owners *Gustaf Erikson*

Fee £ *9 : 7 : 0*

Received by me

Olav Tylén



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