

19 APR 1932

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. **23874**
(For London Office only.)

No. 100200.

D

Computation of Freeboard for Steamer, Sailing Ship, Tanker

Type of Superstructures: Forecastle and Raised Quarter Deck.Ship's Name: TANLANNationality and Port of Registry: British Liverpool.Official Number: 137400 Gross Tonnage: 293 Date of Build: 1914Port of Survey: Liverpool (Birkenhead)Date of Survey: 1st April 1932 & subsequently.Name of Surveyor: C. J. DeanParticulars of Classification: F 100A.1.Moulded Dimensions: Length 128' Breadth 23'0" Depth 10'5"
Moulded displacement at moulded draught = 85 per cent. of moulded depth 523 tons
Coefficient of fineness for use with Tables: .697

Depth for Freeboard (D)

Moulded depth ... 10'5"

Stringer plate03

Sheathing on exposed deck

$T \left(\frac{L-S}{L} \right) =$ ✓

Depth for Freeboard (D) = 10'53"

Depth correction

(a) Where D is greater than Table depth
(D - Table depth) R =
 $(10.53 - 8.53) \cdot 984 = + 1.97"$

(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) 23'0"

Standard Round of Beam = $\frac{B \times 12}{50} = 5.52$

Ship's Round of Beam = 5'5"

Difference .02

Restricted to

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.02}{4} \times (1 - .5645) = .0011$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	-	-	-	-	-
" overhang ...	-	-	-	-	-
R.Q.D. enclosed ...	<u>40.75'</u>	<u>40.75</u>	<u>3.5'</u>	<u>✓</u>	<u>40.75</u>
" overhang ...	-	-	-	-	-
Bridge enclosed ...	<u>8.25'</u>	<u>8.25</u>	<u>7.0'</u>	<u>✓</u>	<u>8.25</u>
" overhang aft ...	-	-	-	-	-
" overhang forward ...	-	-	-	-	-
File enclosed ...	<u>22.0'</u>	<u>22.00</u>	<u>6.75'</u>	<u>✓</u>	<u>22.00</u>
" overhang ...	<u>2.5'</u>	<u>1.25</u>	-	-	<u>1.25</u>
Trunk aft ...	-	-	-	-	-
" forward ...	-	-	-	-	-
Tonnage opening aft ...	-	-	-	-	-
" " forward ...	-	-	-	-	-
Total ...	<u>73.50'</u>	<u>72.25</u>	-	-	<u>72.25</u>

Standard Height of Superstructure 6.0

" " R.Q.D. 3.19

Deduction for complete superstructure 18.8

Percentage covered $\frac{S}{L} = 57.42\%$

" " $\frac{S_1}{L} = 56.45\%$

" " $\frac{E}{L} = 56.45\%$

Percentage from Table, Line A. 41.03%

(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 = $18.8 \times .4103 = -7.71"$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>22.80</u>	<u>✓</u>	<u>1</u>	<u>22.80</u>	<u>21"</u>	<u>22.00</u>	<u>✓</u>	<u>1</u>	<u>22.00</u>
$\frac{1}{2}$ L from A.P. ...	<u>10.15</u>	<u>4</u>	<u>40.60</u>	<u>9"</u>	<u>9.88</u>	<u>9.88</u>	<u>✓</u>	<u>4</u>	<u>39.52</u>
$\frac{2}{3}$ L " ...	<u>2.51</u>	<u>2</u>	<u>5.02</u>	<u>3"</u>	<u>2.47</u>	<u>2.47</u>	<u>✓</u>	<u>2</u>	<u>4.94</u>
Amidships ...	<u>✓</u>	<u>4</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>4</u>	<u>✓</u>
$\frac{2}{3}$ L from F.P. ...	<u>5.02</u>	<u>2</u>	<u>10.04</u>	<u>5"</u>	<u>4.74</u>	<u>4.74</u>	<u>✓</u>	<u>2</u>	<u>9.48</u>
$\frac{1}{2}$ L " ...	<u>20.29</u>	<u>4</u>	<u>81.16</u>	<u>16"</u>	<u>18.96</u>	<u>18.96</u>	<u>✓</u>	<u>4</u>	<u>75.84</u>
F.P. ...	<u>45.60</u>	<u>✓</u>	<u>1</u>	<u>45.60</u>	<u>45"</u>	<u>43.50</u>	<u>✓</u>	<u>1</u>	<u>43.50</u>
Total ...			<u>205.22</u>						<u>195.28</u>

Mean actual sheer aft = DeficientMean actual sheer forward = Deficient

Length of enclosed superstructure forward of amidships =

" " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18}$

If limited on account of midship superstructure.

 $\left(\frac{.75 - \frac{S}{2L}}{.75} \right) = \frac{9.94}{18} \times (.75 - .2871) = + .26"$ 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 = 10'53"
Summer freeboard = .62
Moulded draught (d) = 9'91"

Correction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 2.48Addition for Winter North Atlantic Freeboard (if required) = 2"

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

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.697 + .68}{1.36} = 1.377$

	+	-
Depth Correction ...	<u>1.97</u>	<u>✓</u>
Deduction for superstructures ...	<u>7.71</u>	<u>✓</u>
Sheer correction ...	<u>.26</u>	<u>✓</u>
Round of Beam correction ...	<u>✓</u>	<u>✓</u>
Correction for Thickness of Deck amidships ...	<u>✓</u>	<u>✓</u>
Other corrections, scantlings, etc. ...	<u>✓</u>	<u>✓</u>

2.23 7.71 - 5.48

Summer Freeboard = 7.48

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 " " ...

1906 assigned

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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	No 1 FORE WELL								
Dimensions of Hatchway	42'-0" x 12'-0"								
COAMINGS	Height above Deck	30"	✓						
	Thickness	5/8"	✓						
	Stiffeners	40"	✓						
	Brackets, Stays	none	✓						
HATCH BEAMS	Number	9	✓						
	Spacing	4'-2"	✓						
	Scantling and Sketch	T.B. 2 6"x4"x48" 21'-13"x34" ✓ 2 1/2" SOLID COPE ✓							
	Bearing Surface	3	✓						
FORE AND AFTERS	Number								
	Spacing								
	Unsupported Lengths								
	Scantling* and Sketch	none							
HATCH COVERS	Material	W.P.	✓						
	Thickness	3	✓						
	How fitted	F.A.	✓						
	Bearing Surface	2"	✓						
Spacing of Cleats	24"	✓							
Number of Tarpaulins	2	✓							
*Are wood fore and afters steel shod at all bearing surfaces? <input checked="" type="checkbox"/> Yes Are battens and wedges efficient and in good condition? <input checked="" type="checkbox"/> Yes Are tarpaulins in good condition and in accordance with rule requirements? <input checked="" type="checkbox"/> Yes Are lashings provided in accordance with rule requirements? <input checked="" type="checkbox"/> Yes									

Particulars of fiddle, funnel and ventilator coamings:— The stokehold gratings are covered by steel hinged covers. ✓
 The fiddle and Engine Room Ventilators and funnel are in good condition. ✓
 The Engine Room skylight is of steel strongly constructed and is in good condition. ✓

Particulars of Flush Bunker Scuttles:—

one - Port & starboard 18 1/2" DIA. cast iron Bayonet joint. on Raised Quarter Deck. ✓

Particulars of Companionways:—

From Bridge deck to accommodation on upper decks. (see sketch on back page). ✓

AIR PIPES

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

TO F.P. ON FORE DECK. 6" HIGH. 2 1/2" DIA. C.I. ✓
 TO AFT. PE TANK. BRASS SCREW PLUG TO FLUSH PIPE.

CANVAS COVER SUPPLIED TO CLOSE AIR PIPE ON FORE DECK. ✓

VENTS.

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

2 - VENTILATORS ON FORE HEAD 16" HIGH x 30". 6" DIA. TO CREW SPACE. ✓
 1 - VENTILATOR " " 24" " x 36". 12" " " HOLD. ✓
 2 - VENTILATORS " BRIDGE DE 10" " x 30". 5" " " ACCOMMODATION. ✓
 1 - VENTILATOR " FLYING BOGE 9" DIA. 12" HIGH x 32" " HOLD. ✓

VENTS ARE CLOSED WITH WOOD PLUGS & CANVAS COVERS. ✓

Particulars of Gangway Cargo and Coaling Ports:—

none. ✓



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Particulars of Scuppers and Sanitary Discharge
all Sanitary discharge pipes

Particulars of Side Scuttles:
Side Scuttles to Aero's accommodation in forecabin are of substantial

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COPY OF FREEBOARD REPORT.

Official Number 137400

Ship's Name "TANLAN"

Type Raised Quarter Deck, Bridge and Forecastle.

PARTICULARS OF SUPERSTRUCTURES.

Poop enclosed

" overhang

R.Q.D. enclosed

" overhang

Bridge enclosed

" overhang aft

" overhang forward

Fore enclosed

" overhang

Trunk aft

" forward

Tonnage opening aft

" " forward

TOTAL

Mean covered length.

Height.

40.75'

8.25'

22.00'

2.50

73.50'

3.50'

7.00'

6.75'

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5m, 4.37.

Bridge, After Bulkhead

Forward Bulkhead

28"

25"

25"

25"

5' x 3' x 40" B.A.

3' x 2 1/2' x 25"

30"

30"

30"

Back. Cdp

4-STEEL DOORS.
4'6" x 2'0" HINGED

2 STEEL DOORS. 4'6" x 2'0"

21"

21"

19"

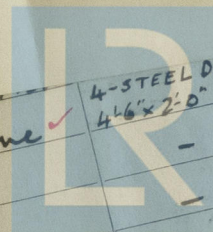
19"

6'9"

6'9"

7'0"

7'0"



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Particulars of Scuppers and Sanitary Discharge Pipes —

Tanlan ex Wheatfeed
all Sanitary discharge pipes are fitted with clack valves at Ship's Side. ✓

Particulars of Side Scuttles:

Side Scuttles to Crew's Accommodation in fore-castle are of substantial construction and are fitted with hinged C.I. deadlights. ✓

Particulars of Guard Rails:—

Guard rails round fore-castle deck are 24' high, 4'-0" apart, 2 rods. ✓

Particulars of Gangways, Lifelines, etc.:—

Gangway arranged over the top of hatchway in fore well with wood platform from end of hatch to ladder rungs. Stanchions fitted on hatch side coaming and steel wire rope lifeline reeved thro' same and made taut by means of rugging screw.

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 BULWARK.	40.75 44.0	3'-0"	$\left\{ \begin{array}{l} 3'-6" \times 9" \\ 2'-3" \times 1'-2" \end{array} \right.$	$\left\{ \begin{array}{l} 3 \\ 2 \end{array} \right.$	$\frac{10\frac{1}{2}}{5.26\phi}$	10.575 ϕ
Forward Well ...	54.5 57.6	3'-6"	2'-6" x 1'-3"	4	12.5 ϕ	12.0 ϕ
<p>State position of each freeing port (F. and A. position and height above deck edge) { After Well:— Forward Well:—</p> <p>State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—</p> <p>Additional area where sheer is less than standard.</p>						
<p>Diagram showing freeing port positions and dimensions:</p> <p>Diagram 1 (After Well): 3'-4" x 10'-1" x 9"</p> <p>Diagram 2 (Forward Well): 2'-9" x 13'-10" x 9'-1" x 9'-8" x 9"</p> <p>FREEING PORTS ARE FITTED WITH SHUTTERS HINGED AT TOP</p>						

Particulars of Superstructures, Trunks, Casings, Deckhouses.

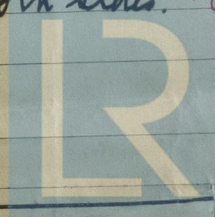
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ...	-	-	-	-	-	-	-	-
Raised Quarter Deck Bulkhead ✓	28" ✓	25" ✓	5" x 3" x 40" B.A. ✓	30" ✓	Bkt. C/p r Bottom ✓	none ✓	none ✓	3'-3" ✓
Bridge, After Bulkhead ...	28" ✓	25" ✓	5" x 3" x 40" O.A. ✓	30" ✓	none ✓	none ✓	none ✓	7'-0" ✓
Bridge, Forward Bulkhead ...	28" ✓	25" ✓	5" x 3" x 40" B.A. ✓	30" ✓	Bkt. C/p r Bottom ✓	none ✓	none ✓	7'-0" ✓
Fore-castle Bulkhead ...	25" ✓	25" ✓	3" x 2½" x 25" ✓	30" ✓	none ✓	4-STEEL DOORS, 4'-6" x 2'-0" HINGED ✓	21" ✓	6'-9" ✓
Trunk, Aft ...	-	-	-	-	-	-	-	-
Trunk, Forward ...	-	-	-	-	-	-	-	-
Exposed Machinery Casings on Fore-castle Bulkhead ✓	30" ✓	25" ✓	3" x 2½" x 25" ✓	30" ✓	Bkt. C/p ✓	2-STEEL DOORS, 4'-6" x 2'-0" ✓	19" ✓	7'-0" ✓
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 Bulkhead ...	none ✓
Raised Quarter Deck Bulkhead ...	none ✓
Bridge, After Bulkhead ...	none ✓
Bridge, Forward Bulkhead ...	none ✓
Fore-castle Bulkhead ...	steel hinged doors manipulated both sides. ✓
Exposed Machinery Casings on Fore-castle Bulkhead ✓	steel & wood hinged doors manipulated both sides. ✓
Exposed Machinery Casings on Super-structure Decks ...	-
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	-
Deckhouses on Flush Deck Ships ...	-

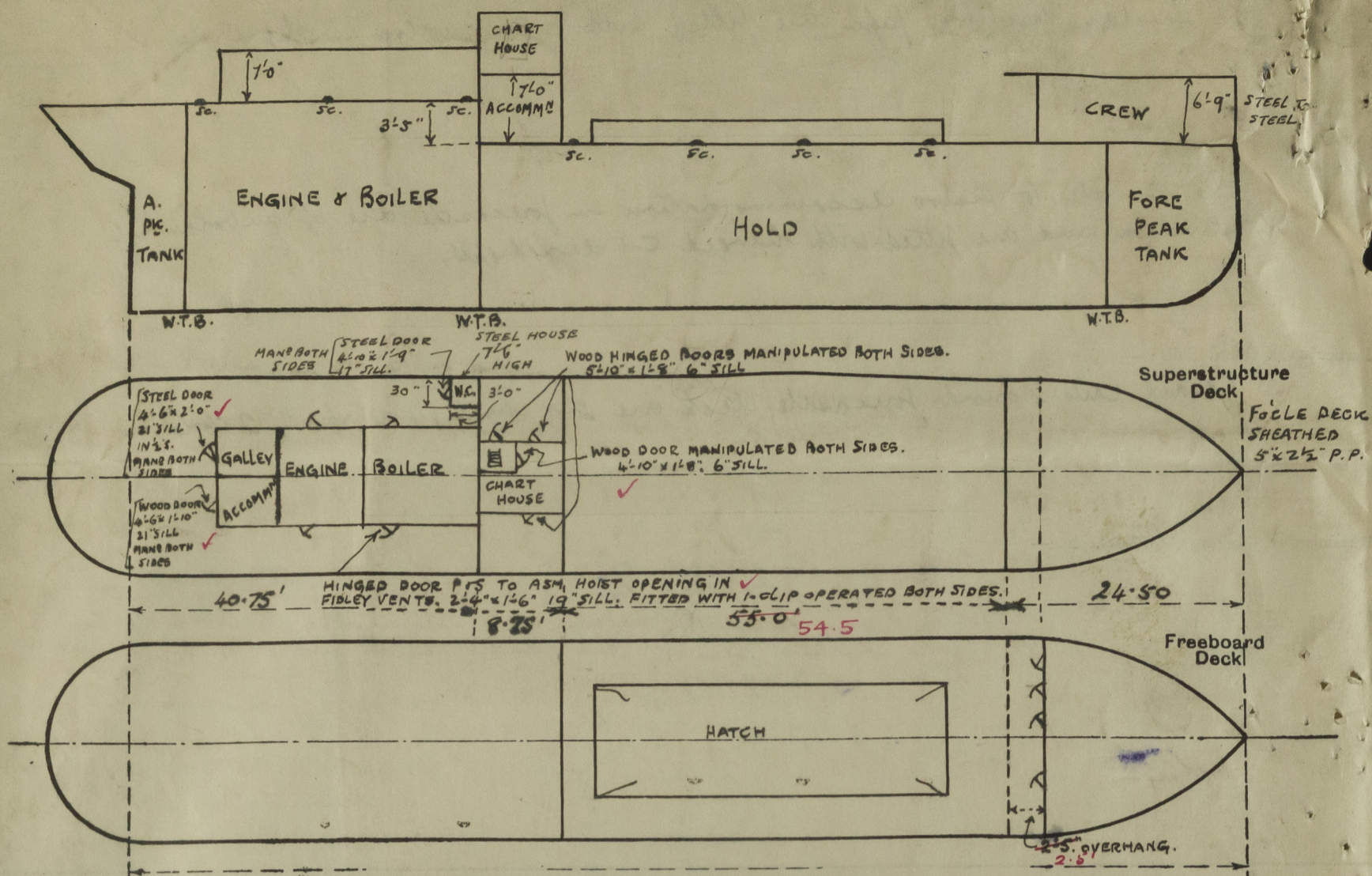
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Doors which lead directly to mach. spaces are of steel.



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Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cat 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:—

Builder's name and yard number

C. Kennoldson & Co. No. 166.

Names of sister ships

Owners

Spillers Ltd.

Fee £

3 : 8 : 0

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