

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Fd. 1.

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having Poop, Bridge & ForecastlePort of Survey HullDate of Survey Aug. 13th 1931Name of Surveyor MalcolmParticulars of Classification +100A1

(Type of Superstructures.)

Ship's Name "Maplewood" Nationality and Port of Registry British Middlesbrough Official Number 160728 Gross Tonnage 4565 Date of Build 1930-5
(No. 27709 in R.B.)
Moulded Dimensions: Length 382'-8" Breadth 51'-9" Depth 29'-0"
Moulded displacement at moulded draught = 85 per cent. of moulded depth 10600 tons
Coefficient of fineness for use with Tables .761

Depth for Freeboard (D)

Moulded depth 29'-0"
Stringer plate04
Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) = \checkmark$
Depth for Freeboard (D) = 29.04

Depth correction

(a) Where D is greater than Table depth
(D - Table depth) R =
 $(29.04 - 25.47) \times 2.938 = +10.49$
(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) 51.75
Standard Round of Beam = $\frac{B \times 12}{50} = \frac{12.42}{50} = 12.75$
Ship's Round of Beam = .33
Difference
Restricted to
Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.33}{4} \times 523 = -.04$

DEDUCTION FOR SUPERSTRUCTURES.

See Note Letter 24.8.31

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	34.46	34.46	8'-0"	✓	33.46
" overhang ...	nil.				
R.Q.D. enclosed ...					
" overhang ...	117.21	117.21	8'-0"	✓	117.21
Bridge enclosed, equimounted ...	49.17	48.65	8'-0"	✓	1.47
" overhang aft ...	1.86	1.47			
" overhang forward ...	nil.				
Forecastle enclosed ...	29.92	29.92	8'-0"	✓	29.92
" overhang ...	nil.				
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...	182.55	182.06			182.06
Total ...	182.55	182.06			182.06

Standard Height of Superstructure 7.32'

" " R.Q.D. ✓

Deduction for complete superstructure 40.80Percentage covered $\frac{S}{L} = 47.78\%$ " $\frac{S_1}{L} = 47.66\%$ " $\frac{E}{L} = 47.66\%$

Percentage from Table, Line A.

(corrected for absence of forecastle (if required)) ✓

Percentage from Table, Line B.

(corrected for absence of forecastle (if required)) 34.012

Interpolation for bridge less than 2L (if required)

Deduction = $40.80 \times 34.011 = -13.88$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	48.28	1		48.2	55.00	55.00	1		55.00
$\frac{1}{2}$ L from A.P. ...	21.47	4		85.8	25.50	25.50	4		102.00
$\frac{2}{6}$ L " ...	5.38	2		10.6	7.00	7.00	2		14.00
Amidships' ...	0	4		-	-	-	4		-
$\frac{2}{6}$ L from F.P. ...	10.61	2		21.2	12.50	12.50	2		25.00
$\frac{1}{2}$ L " ...	42.94	4		171.6	48.50	48.50	4		194.00
F.P. ...	96.54	1		96.4	111.50	111.50	1		115.00
Total ...				433.8					505.00

Mean actual sheer aft = Excess
Mean standard sheer aftMean actual sheer forward = Excess
Mean standard sheer forwardLength of enclosed superstructure forward of amidships = .13" " aft of " = .18Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{61.7+12}{18} \left(\frac{75-.2389}{18} \right) = -202.192$

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 = 29.04
Summer freeboard = 5.37
Moulded draught (d) = 23.67

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 5.92

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

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 10295 \text{ tons}$

Tons per inch immersion at summer load water line

 $T = 39.32$ Deduction = $\frac{\Delta}{40 T}$ inches $= \frac{10295}{40 \times 39.32}$ $= 6.54$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{.761+.68}{1.36} = \frac{1.441}{1.36} =$ Depth Correction 10.49Deduction for superstructures 13.88Sheer correction 2.02Round of Beam correction04

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. assigned under Board of Trade (1906) rules

Summer Freeboard = 64.48SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: 5'-4 1/4"Tropical Fresh Water Line above Centre of Disc ... 11 1/2"Fresh Water Line " " ... 6 1/2"Tropical Line " " ... 5"Winter Line below " " ... 5 1/2"

Winter North Atlantic Line " " ... ✓

Tropical Fresh Water Freeboard ... 4'-4 3/4"Fresh Water " " ... 4'-9 3/4"Tropical " " ... 4'-11 1/4"Winter " " ... 5'-9 3/4"

Winter North Atlantic " " ... ✓

Maplewood

Particulars of fiddley, funnel and ventilator coamings:—

Particulars of Flush Bunker Scuttles:—

No flush bunker & cattle

Particulars of Companionways :—

One Steel Companionway on poop deck, height 6'-3", riveted to Steel decks,
height of sill 16"
2" leak door, 4'-3" x 2'-3", with Spring lock.

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

All ventilator coamings on floor, in wells & on Bde. deck not less than 36" high + of Steel.
poop " " " " " 30" " " " "
Coamings substantially constructed riveted to steel decks.
plugs + canvas covers provided for all ventilators.

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

2 1/2" to 3"	Joose neck air pipes fitted on side deck in wells of substantial construction	436 in.
3"	Bridge deck	"30"
	poop	"24"

Wood plugs provided for all air pipes

Particulars of Gangway Cargo and Coaling Ports:—

No layway Cargo or Coaling Ports.

Particulars of Scuppers and Sanitary Discharge Pipes

Scupper. Ford. Well : 3 each side 6' x 5' in funnel bar.
Aft. 4
Bde. Inwells. 1 Scupper p. + S. with non-return valves.
Sanitary Discharge pipes : 3 each side in poop. with non return valves.

File. 1 overflow pipe
on port side from
F.P. tank with non-
return valve discharges
2'-0" below upper deck.

Particulars of Side Scuttles:

No Side Scuttles

Particulars of Guard Rails :—

efficient guard rails (3 rail stanchion) fitted on poop, bridge end of deck.

Particulars of Gangways, Lifelines, etc. :—

Crew berths in poop. - no fanways.

Lifelens are fished in the wells as and then recovered

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	107'-0"	3'-5"	9'-0" x 7"	4	20.88	21.40
Forward Well	92'-0"	3'-5"	8'-0" x 7"	4	18.56	18.40

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	40	40	6 x 3 x 35 L	30"	lapped top & bottom	2, 4'-6" x 2'-1"	18"	
Raised Quarter Deck Bulkhead ...	40	40	Inaccessible			2, 5'-0" x 2'-6"	18"	
Bridge, After Bulkhead	44	40	9 x 3 x 40 L	29"	lapped top & bottom	no openings	—	
Bridge, Forward Bulkhead	44	40	3 1/2 x 3 x 35 L	30"	none	2, 4'-2" x 3'-2"	18"	
Forecastle Bulkhead	44	40	6 1/2 x 3 x 45 L	30"				
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super-structure Decks (Bridge) ...	35	30	3 1/2 x 3 x 30	2'-0" 1/2 x 2'-6"	altern & bolts	4'-6" x 2'-0"	18"	8'-0"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	32	32	2 1/2 x 3 1/2 x 32	23"	-	24" x 28"	21"	8'-0"
Deckhouses on Flush Deck Ships ...								

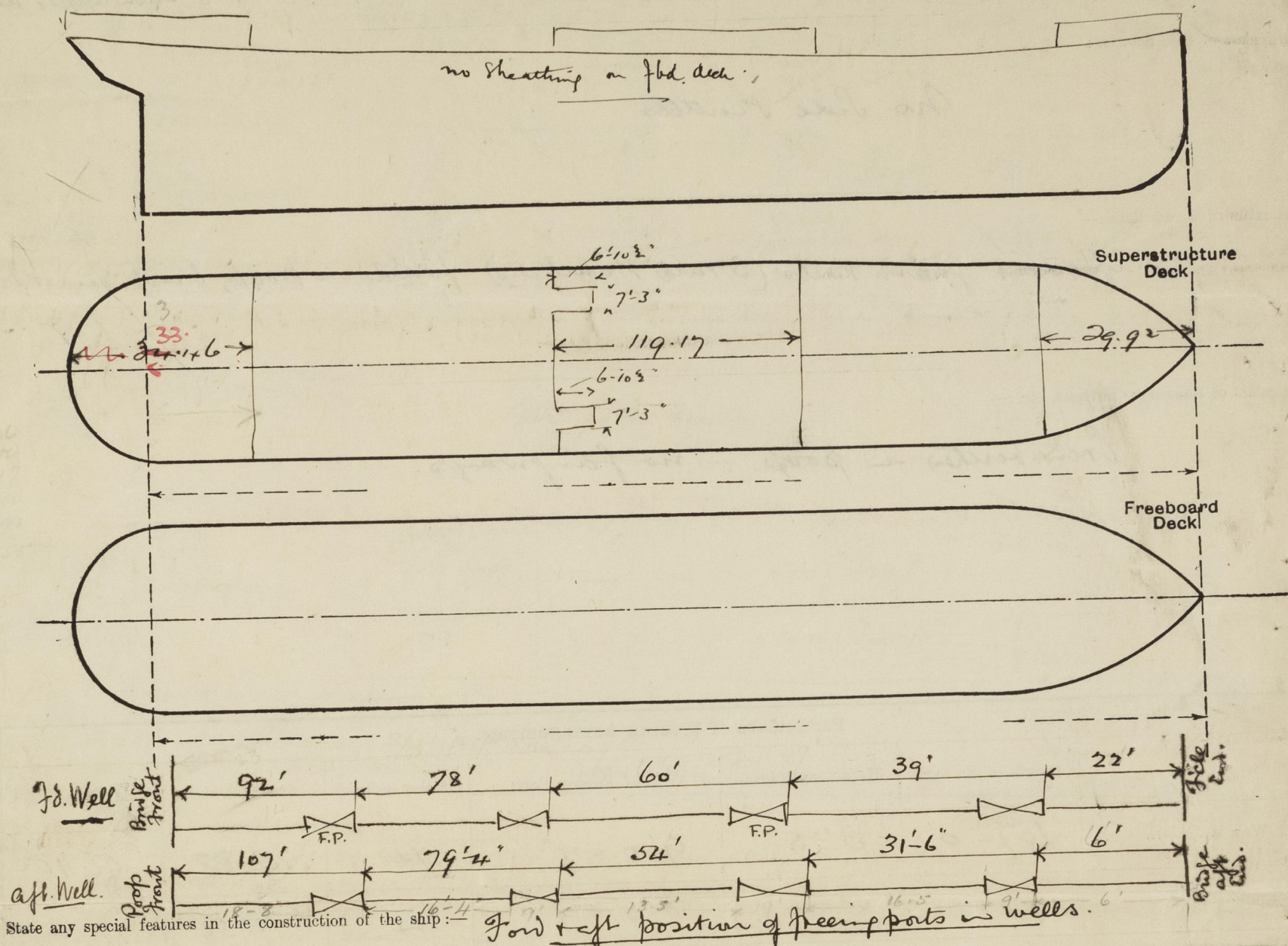
Particulars of Closing Appliances (state if ...)	
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Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Location	Appliances (state if capable of being manipulated from both sides).	Yes	No
Poop Bulkhead			
Raised Quarter Deck Bulkhead	hinged Steel doors with spring locks.	yes.	
Bridge, After Bulkhead			
Bridge, Forward Bulkhead	portable Steel plates with hook bolts spaced about 15" apart.		No
Forecastle Bulkhead	no openings.		
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	portable Steel plates with hook bolts spaced about 18" apart.		No
Exposed Machinery Casings on Superstructure Decks			
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	4 Steel hinged doors with spring locks, manipulated from both sides.	yes.	
Deckhouses on Flush Deck Ships	2 Steel Vertical Sliding doors operated from both sides. Also fitted with steel wedges attached by chains.		

Maplewood.

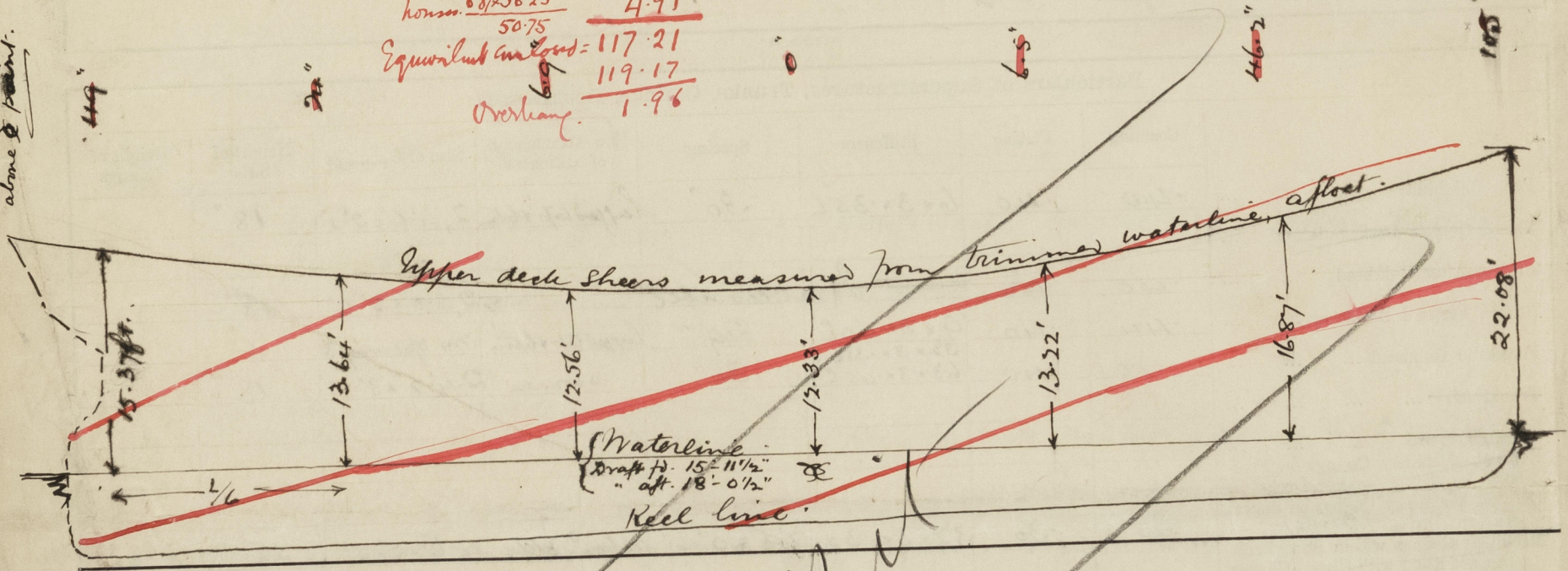
Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches:—



Bridge Total 119.17
 houses 6.87
 112.30
 houses 6.87 x 36.25
 50.75
 4.91
 Equilibrium = 117.21
 119.17
 Overhang 1.96

should have 2/3 area
 of F.P. aft.

Sheer. lead with keel
 alone & paint.



Builder's name and yard number

Names of sister ships

Owners

Fee £

Received by me