

CHELDANE 31625  
BARBARA MARIE 32686  
London 31880

# WRECK SECTION

## Lloyd's Register of Shipping.

### SURVEYS FOR FREEBOARD.

Index. No. **32444**  
(For London Office only.)

**22998**

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having Shelter Deck with Amidsips

(Type of Superstructures.)

Ship's Name FRANCES MASSEY Nationality and Port of Registry British Hull Official Number 160060 Gross Tonnage 4212 Date of Build 1927-9

Moulded Dimensions: Length 364.52 Breadth 51.16 Depth 27.5

Moulded displacement at moulded draught = 85 per cent. of moulded depth 9950 tons

Efficient of fineness for use with Tables 799

Port of Survey NEWPORT, MON.

Date of Survey 4 July 1932

Name of Surveyor R. Macfarlane

Particulars of Classification 100A1

S.S. Reg. No. 1-31 with freeboard.

Depth for Freeboard (D) 27.5

Depth correction

(a) Where D is greater than Table depth  
(D - Table depth) R =  $(27.54 - 24.30) \times 2.804 = +9.09$

(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) 51.16

Standard Round of Beam =  $\frac{B \times 12}{50} = 12.28$

Ship's Round of Beam = 12

Difference Deficient

Restricted to

Correction =  $\frac{\text{Diff}^2}{4} \times (1 - \frac{S_1}{L}) = \frac{28^2}{4} \times .0062 = \text{nil.}$

DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
enclosed ...	<u>28.75</u>	<u>28.75</u>	<u>7.6</u>	<u>-</u>	<u>28.75</u>
overhang ...	<u>6.5</u>	<u>.27</u>	<u>7.6</u>	<u>-</u>	<u>.27</u>
D. enclosed ...	<u>330.79</u>	<u>330.79</u>	<u>7.6</u>	<u>-</u>	<u>330.79</u>
overhang ...	<u>4</u>	<u>.22</u>	<u>7.6</u>	<u>-</u>	<u>.22</u>
overhang forward	<u>30</u>				
enclosed ...					
overhang ...					
k aft ...					
forward ...					
age opening aft ...	<u>4.16</u>	<u>2.25</u>	<u>7.6</u>	<u>-</u>	<u>2.25</u>
forward					
Total ...	<u>364.54</u>	<u>362.28</u>			<u>362.28</u>

Standard Height of Superstructure 7.145

" " R.Q.D. -

Deduction for complete superstructure 39.64

Percentage covered  $\frac{S}{L} = 100.00$

" "  $\frac{S_1}{L} = 99.38$

" "  $\frac{E}{L} = 99.38$

Percentage from Table, Line A. 99.24  
(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 =  $39.64 \times 99.24 = -39.34$

SHEER CORRECTION.							
	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S
...	<u>46.45</u>	<u>1</u>	<u>46.45</u>	<u>43</u>	<u>63.00</u>	<u>67.26</u>	<u>1</u>
P. ...	<u>20.67</u>	<u>4</u>	<u>82.68</u>	<u>26.86</u>	<u>26.86</u>	<u>29.93</u>	<u>4</u>
...	<u>5.11</u>	<u>2</u>	<u>10.22</u>	<u>6.7</u>	<u>6.71</u>	<u>7.40</u>	<u>2</u>
...		<u>4</u>	<u>0</u>	<u>x</u>			<u>4</u>
P. ...	<u>10.22</u>	<u>2</u>	<u>20.44</u>	<u>13.00</u>	<u>13.03</u>	<u>12.90</u>	<u>2</u>
...	<u>41.35</u>	<u>4</u>	<u>165.40</u>	<u>52.14</u>	<u>52.14</u>	<u>52.19</u>	<u>4</u>
...	<u>92.90</u>	<u>1</u>	<u>92.90</u>	<u>113</u>	<u>113.00</u>	<u>114.26</u>	<u>1</u>
...			<u>418.09</u>			<u>553.60</u>	

Mean actual sheer aft = excess

Mean standard sheer aft = excess

Mean actual sheer forward = excess

Mean standard sheer forward = excess

Length of enclosed superstructure forward of amidships = 6.5

" " aft of " = -

Actual sheer deck height = 7.5

Standard " = 7.145

355

4.26

on account of midship superstructure.

If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft.

for Tropical Freeboard.

for Winter and Winter North Freeboard.

Depth to Freeboard Deck = 27.54

Summer freeboard = 2.83

Moulded draught (d) = 24.71

for Tropical freeboard and addition for freeboard =  $\frac{d}{4}$  inches = 6.18 64

for Winter North Atlantic Freeboard (if

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 10634$

Tons per inch immersion at summer load water line

$T = 38.25$

Deduction =  $\frac{\Delta}{40T}$  inches = 6.95

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient  $\frac{799+68}{1.36} = \frac{1.479}{1.36}$

Depth Correction ... 9.09

Deduction for superstructures ... 39.34

Sheer correction ... 1.84

Round of Beam correction ... -

Correction for Thickness of Deck amidships ... -

Other corrections, scantlings, etc. ... -

9.09 41.18 - 32.09

Summer Freeboard = 34.00

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:			
Tropical Fresh Water Line above Centre of Disc	...	<u>13.2</u>	...
Fresh Water Line	"	<u>4</u>	...
Tropical Line	"	<u>6.4</u>	...
Winter Line	below	<u>6.4</u>	...
Winter North Atlantic Line	"	<u>6.4</u>	...

7 JUL 1932

10m,231

RECEIVED 30 DEC 1936

RECEIVED 12 OCT 1932



PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

[illegible]

\* 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 :—

Stokchold gratings covered by strong steel hinged covers.  
Siding, painted, & ventilator openings in efficient condition.  
Engine room skylights of steel strongly constructed.

Particulars of Flush Bunker Scuttles:—

hour.

Particulars of Companionways :—

home. ✓

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

Particulars of Ventilators in exposed positions on freeboard and superstructure

1	1st	6" dia casing	18" high x .25	To Exhauster
1	"	6" "	32" " x .25	Peep
1	"	6" "	32" " x .36	"
1	"	8" "	32" " x .36	Exhaust
1	"	8" "	32" " x .36	Exhaust

14 lents. 17" dia casing 32" high x .14  
2 " 10 " " 32 " x .14  
On sole 2. lents 9" dia casing 30" x .32  
6 " 6 " 20" x .32  
All fitted with wood plugs & canvas cover

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

Particulars of Air Pipes in exposed positions on H.C.C.			
1 C.A. air pipe	2" dia	19' 12" high	To H.P.T.
2 "	3" "	17' 11" "	DB.Ts
6 "	4" "	17' 11" "	Do
1 W.J.	2 1/2" "	36' "	Do

On file 1. U.S. air pipe 1 1/2" dia  
~~No wood plugs fitted~~  
~~no emptying holes.~~

Particulars of Gangway Cargo and Coaling Ports:—

howe.



Francis Massay

Scuppers and Sanitary Discharge Pipes —

All scuppers fitted with storm valves at ship's side /  
- secured plugs at deck level /  
All lat pipes fitted with storm valves at ship's side /

Bars of Side Scuttles:

Side scuttles fitted with hinged deadlights /

Bars of Guard Rails:—

Rails on upper & forecastle decks. 3' 3" high. Stencherous  
space. 5' 3". Three rails. /

Bars of Gangways, Lifelines, etc.:—

None. /

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
... ..	4.16"	7.6"	1.6 x 1.6	1	2.25 sq	
ll ... ..	✓	✓	✓	✓	✓	

on of each freeing port ... .. { After Well:—  
position and height above deck edge) { Forward Well:—  
er the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Shutters /  
area where sheer is less than standard. Height of sill 6 1/2" /

Particulars of Superstructures, Trunks, Casings, Deckhouses.

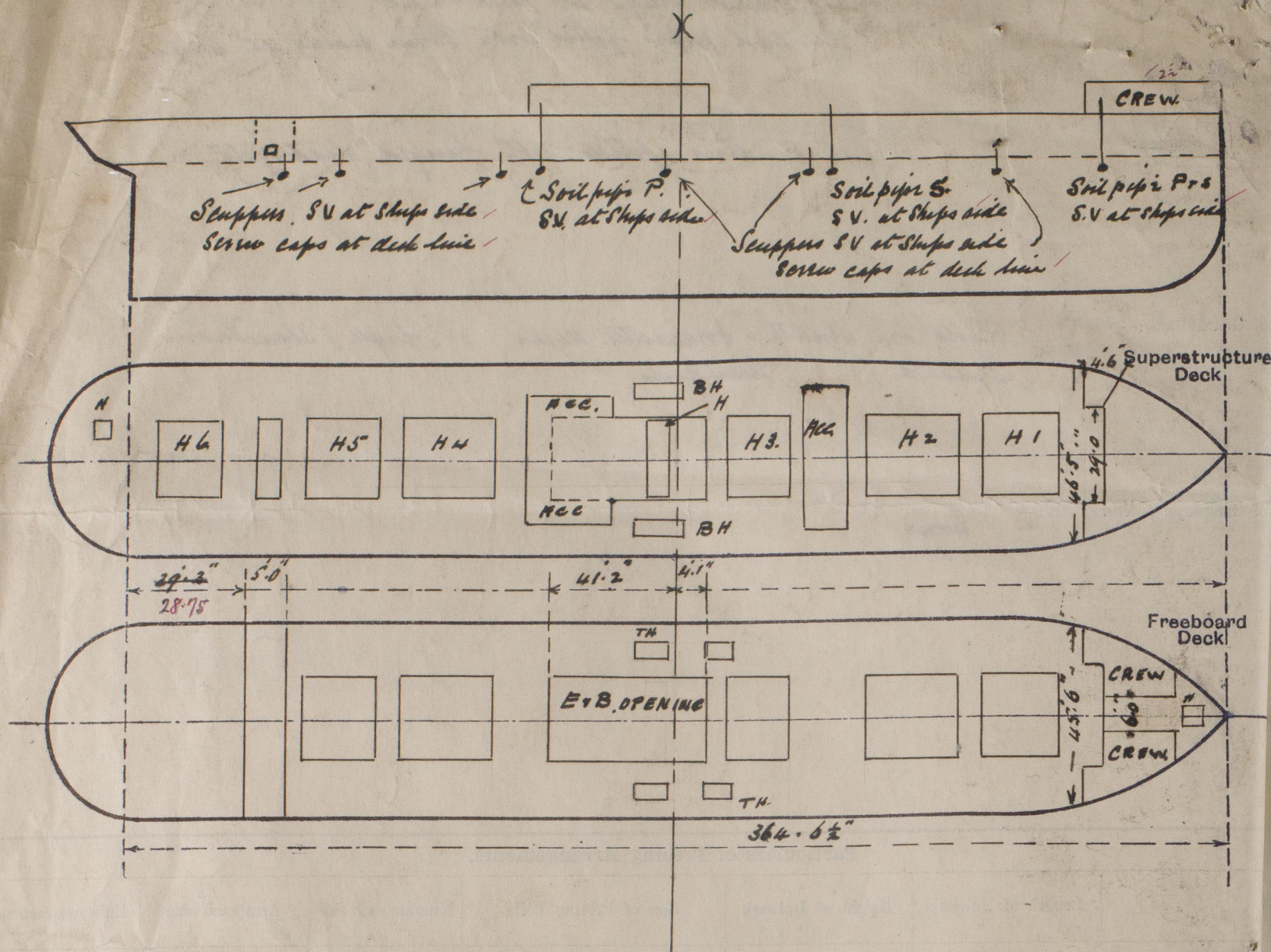
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
ad ... ..	✓	.25"	3 1/2 x 3 1/2 x .38	30"	✓	5' 6" x 3' 6"	11"	7' 6"
er Deck Bulkhead ...								
Bulkhead ... ..	✓	.25"	3 1/2 x 3 1/2 x .38	30"	✓	5' 6" x 3' 6"	11"	7' 6"
ard Bulkhead ... ..								
khead ... ..	✓	.32"	3 1/2 x 3 1/2 x .38	30"	✓	5' 6" x 3' 6"	18"	7' 6"
... ..								
ad ... ..								
inery Casings on Free- ised Quarter Decks ...								
inery Casings on Super- ecks ... ..	✓	.32"	3 1/2 x 3 1/2 x .38	30"	✓	4' 2" x 1' 9"	20"	7' 2 1/2"
ngs within Superstruc- ed with Class I Closing	✓	.32"	3 1/2 x 3 1/2 x .38	30"	✓	2' 0" x 2' 0"	26"	7' 8"
on Flush Deck Ships ...								

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

head ... ..	Storm boards 2 1/2" W.P. fitted for full height of openings in riveted channels /
urter Deck Bulkhead ...	
ter Bulkhead ... ..	Storm boards 2 1/2" W.P. fitted for full height of openings in riveted channels /
ward Bulkhead ... ..	
Bulkhead ... ..	Skeleton wood door. operated from either side /
achinery Casings on Free- aised Quarter Decks ...	
achinery Casings on Super- ecks ... ..	Steel hinged doors operated from either side /
Casings within Superstruc- ed with Class I Closing	Steel hinged doors operated from either side /
on Flush Deck Ships ...	



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

*Handwritten notes:* Passel examined afloat, Newcastle situated for  
length, 2 1/2 P. After Hatch on Prop. 12.6 x 13.6 casing 36" high x 36", one  
12 1/2 x 32" angles in 3 x 4 in one Hatch to Forecastle 2.6 x 2.6 casing 15" high x 38"  
angles 3 1/2", the hatch under Fore Head 3.8 x 3.0 casing 9 x 3 x 46 R.H. rest angles  
Bunker hatch on Shelter Deck at sides of Jolly casing 11.6 x 3.0 casing 32" x 40", one  
2 1/2", Bunker hatch at Jolly Top 16.1 x 5.0 casing 11 x 36" rest angles 3". Two main  
trimming hatches on each side 9.1 x 4.6 x 4.3 casing 9 x 3 x 46 R.H. rest has 2  
All the above hatches are fitted with Chute, bottoms, 2 1/2 H P covers & 2 tarpaulins.  
Escape hatches at corners of main hatches on the deck 2.0 x 2.0 casing 9 x 3 x 46  
with hinged steel covers fitted with blamping rings. Tarpaulins fixed by lashing.  
The fore front opening is fitted with light wood door, operated from within and  
sill 18", opening into alleyway 6.0 wide on sides of which are crew quarters with  
match boarding on steel casing 12" high.

8000 DW at 7' draught = 38 1/2 T.P.  
7750 " " " = 38 1/2 "  
7300 " " 23.0 " = 38 "  
6820 " " 22.0 " = 38 "  
6380 " " 21.0 " = 38 "

Builder's name and yard number Sir J. Priestman & Co.

Names of sister ships

Owners W. A. Massey & Sons Ltd

Fee £ 12 : 15 : 0

Received by me



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Foundation