

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker having <u>a complete Superstructure with Tonnage opening.</u>					Port of Survey <u>Göteborg.</u>
(Type of Superstructures.)					Date of Survey <u>13th Oct. 1931.</u>
Ship's Name <u>Göteborgs 466</u> <u>(Design No 732.)</u>	Nationality and Port of Registry	Official Number	Gross Tonnage <u>approx.</u> <u>4150.</u>	Date of Build <u>Building</u>	Name of Surveyor
Moulded Dimensions: Length <u>372.0</u> Breadth <u>55.0</u> Depth <u>27.5 to 2nd deck.</u>					Particulars of Classification <u>+100 A.1. Letter A</u>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>10510</u> tons					<u>with freeboard.</u>
Coefficient of fineness for use with Tables <u>.769.</u>					

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	<u>27.50</u>	(a) Where D is greater than Table depth (D-Table depth) R = <u>(27.53-24.80) 2.861 = + 7.81.</u>		Moulded Breadth (B)	<u>55.0</u>
Stringer plate	<u>.03</u>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Standard Round of Beam = $\frac{B \times 12}{50}$	<u>= 13.20</u>
Sheathing on exposed deck	<u>✓</u>			Ship's Round of Beam	<u>= 0</u>
$T \left(\frac{L-S}{L} \right) =$				Difference	<u>13.20</u>
				Restricted to	<u>✓</u>
Depth for Freeboard (D) =	<u>27.53</u>	If restricted by superstructures	<u>-</u>	Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right)$	<u>= 3.3 x .006 = +.02</u>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	<u>31.65</u>	<u>31.65</u>	<u>8'-0"</u>	<u>✓</u>	<u>31.65</u>
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge enclosed	<u>335.69</u>	<u>335.69</u>	<u>8'-0"</u>	<u>✓</u>	<u>335.89</u>
„ overhang aft	<u>.27</u>	<u>.26</u>			
„ overhang forward					
F'cle enclosed					
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft ...	<u>4.39</u>	<u>2.23</u>	<u>1/2 diff.</u>		<u>2.23</u>
„ „ forward					
Total	<u>372.00</u>	<u>369.77</u>			<u>369.77</u>

Standard Height of Superstructure 7.22

„ „ R.Q.D. -

Deduction for complete superstructure 40.13

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

„ „ $\frac{S_1}{L} = 99.40$

„ „ $\frac{E}{L} = 99.40$

Percentage from Table, Line A. -

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. 99.26

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = 40.13 x .9926 = - 39.83

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<u>47.20</u>	1		<u>47.20</u>	<u>48.4+9.36</u>	<u>57.76</u>	1		<u>57.76</u>
1/4 L from A.P.	<u>21.00</u>	4		<u>84.00</u>	<u>13.1</u>	<u>22.46</u>	4		<u>89.84</u>
2/4 L „	<u>5.19</u>	2		<u>10.38</u>	<u>.4</u>	<u>6.35</u>	2		<u>12.70</u>
Amidships	<u>-</u>	4		<u>-</u>	<u>-</u>	<u>-</u>	4		<u>-</u>
3/4 L from F.P.	<u>10.38</u>	3		<u>20.76</u>	<u>11.2</u>	<u>11.73</u>	2		<u>23.46</u>
1/4 L „	<u>42.01</u>	4		<u>168.04</u>	<u>43.5</u>	<u>47.43</u>	4		<u>189.72</u>
F.P.	<u>94.40</u>	1		<u>94.40</u>	<u>97.3+9.36</u>	<u>106.66</u>	1		<u>106.66</u>
Total				<u>424.78</u>					<u>480.14</u>

Mean actual sheer aft =

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

„ „ aft of „ = } C.S.S.

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{55.36}{18} (.75 - .50) = -.77$

If limited on account of midship superstructure. C.S.S.

If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	<u>63.00</u> ✓
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient <u>.769+.68</u> <u>1.449</u>	<u>67.12</u> ✓
Depth to Freeboard Deck = <u>27.53</u>	Δ =	Depth Correction	<u>7.81</u>
Summer freeboard = <u>2.86</u>	Tons per inch immersion at summer load water line	Deduction for superstructures	<u>- 39.83</u> ✓
Moulded draught (d) = <u>24.67</u>	T =	Sheer correction	<u>- .77</u> ✓
Deduction for Tropical freeboard and addition for	Deduction = $\frac{\Delta}{40 T}$ inches	Round of Beam correction	<u>.02</u>
Winter freeboard = $\frac{d}{4}$ inches = <u>6.17</u>	=	Correction for Thickness of Deck amidships	<u>-</u>
Addition for Winter North Atlantic Freeboard (if required) = <u>✓</u>		Other corrections, scantlings, etc.	<u>- ✓</u>
		<u>7.83</u> <u>40.69</u> <u>- 32.77</u>	
		Summer Freeboard = <u>34.35</u> ✓	

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: - 34.35 = .872 METRES

Tropical Fresh Water Line above Centre of Disc	Tropical Fresh Water Freeboard
Fresh Water Line „ „	Fresh Water „ „
Tropical Line „ „	Tropical „ „
Winter Line below „ „	Winter „ „
Winter North Atlantic Line „ „	Winter North Atlantic „ „

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	...	...	...	...	...	...	...
Dimensions of Hatchway	...	...	...	...	...	...	...	...	...
COAMINGS	Height above Deck	...	...	...	...	...	...	...	...
	Thickness	...	...	...	...	...	...	...	...
	Sides	...	...	...	...	...	...	...	...
	Ends	...	...	...	...	...	...	...	...
HATCH BEAMS	Stiffeners	...	...	...	...	...	...	...	...
	Brackets, Stays	...	...	...	...	...	...	...	...
	Number	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...
FORE AND AFTERS	Scantling and Sketch	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
	Number	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...
HATCH COVERS	Unsupported Lengths	...	...	...	...	...	...	...	...
	Scantling* and Sketch	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
	Material	...	...	...	...	...	...	...	...
Thickness	...	...	...	...	...	...	...	...	...
How fitted	...	...	...	...	...	...	...	...	...
Bearing Surface	...	...	...	...	...	...	...	...	...
Spacing of Cleats	...	...	...	...	...	...	...	...	...
Number of Tarpaulins	...	...	...	...	...	...	...	...	...

*Are wood fore and afters steel shod at all bearing surfaces?
 Are battens and wedges efficient and in good condition?
 Are tarpaulins in good condition and in accordance with rule requirements?
 Are lashings provided in accordance with rule requirements?

Particulars of fiddle, funnel and ventilator coamings :—

Particulars of Flush Bunker Scuttles :—

Particulars of Companionways :—

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

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

Particulars of Gangway Cargo and Coaling Ports :—

Particulars of Scuppers and Sanitary Discharge Pipes

Particulars of Side Scuttles :

Particulars of Guard Rails :—

Particulars of Gangways, Lifelines, etc. :—

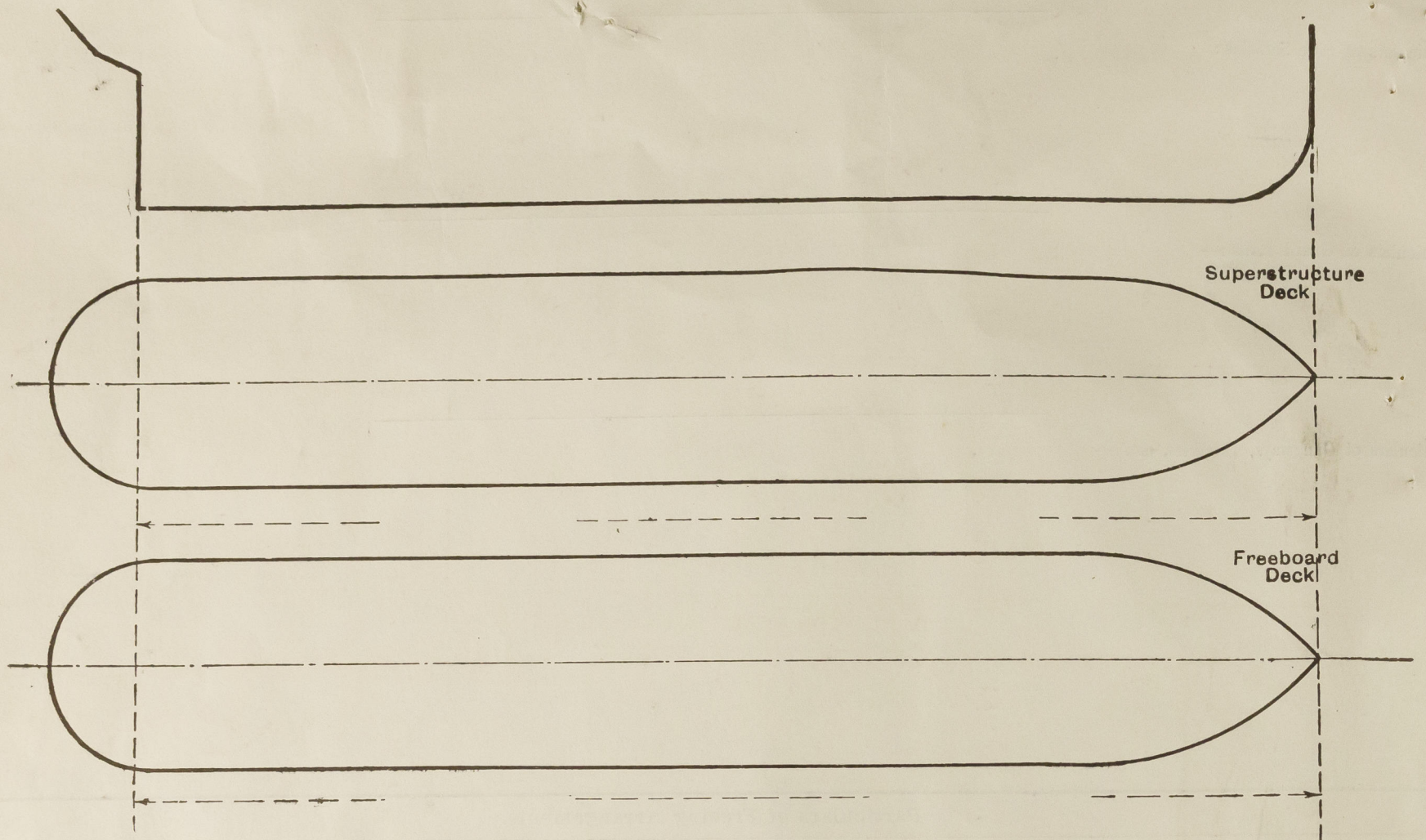
Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well
Forward Well

State position of each freeing port ... } After Well :—
 (P. 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.

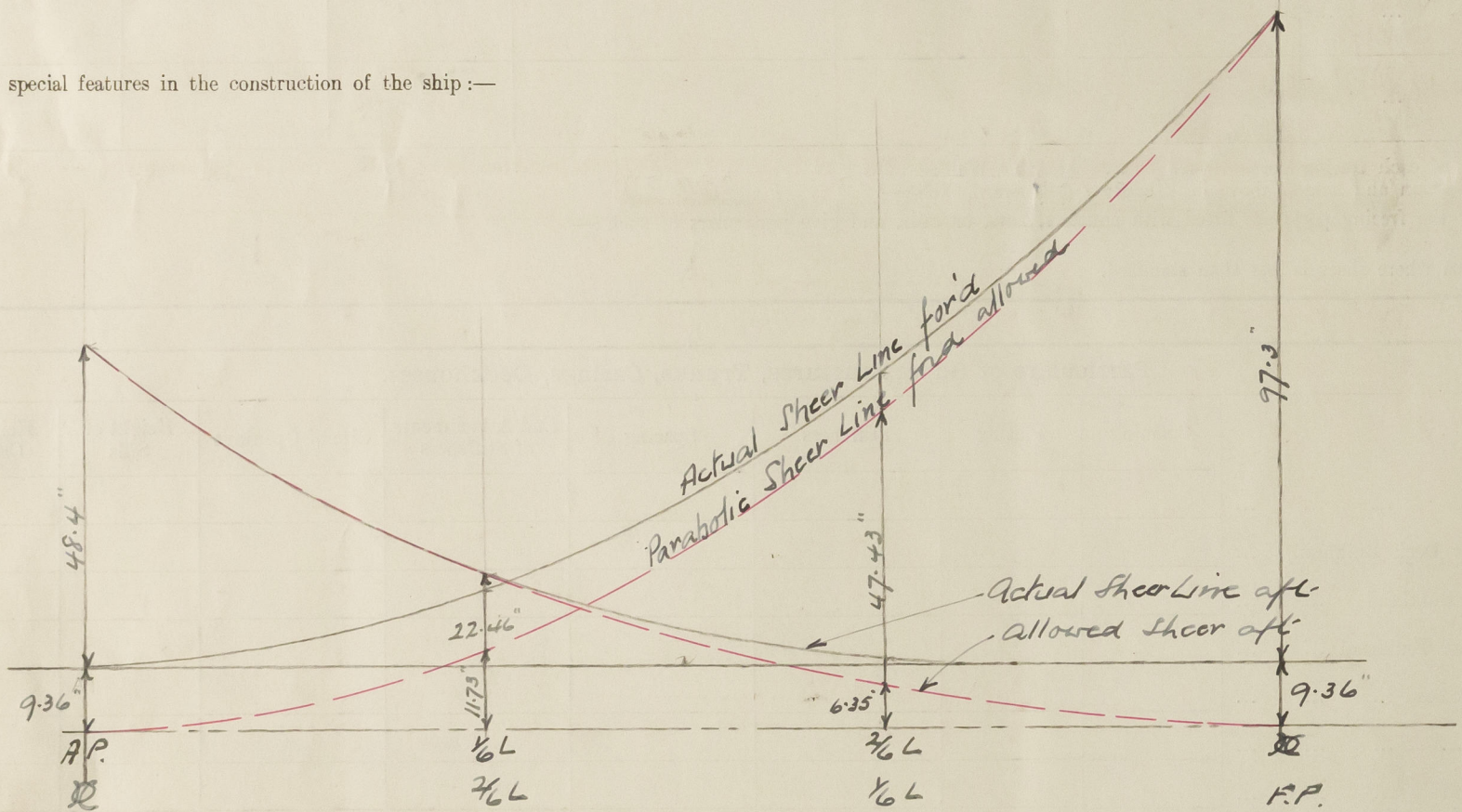
Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead
Raised Quarter Deck Bulkhead
Bridge, After Bulkhead
Bridge, Forward Bulkhead
Forecastle Bulkhead
Trunk, Aft
Trunk, Forward
Exposed Machinery Casings on Freeboard or Raised Quarter Decks
Exposed Machinery Casings on Superstructure 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	...
Raised Quarter Deck Bulkhead	...
Bridge, After Bulkhead	...
Bridge, Forward Bulkhead	...
Forecastle Bulkhead	...
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	...
Exposed Machinery Casings on Superstructure Decks	...
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...
Deckhouses on Flush Deck Ships	...

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:—



Builder's name and yard number

A.B. Götaverken Yard no 466

Names of sister ships

There are copies of the approved plans in the London Office

Owners

Fee £

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