

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. 30353
(For London Office only.)

| | | | | | |
|--|--|-----------------|---------------|-------------------------------|---|
| Computation of Freeboard for Steamer, Sailing Ship, Tanker having <u>Forecastle and Raised Quarter Deck.</u> | | | | | Port of Survey |
| (Type of Superstructures.) | | | | | Date of Survey <u>28-8-31</u> |
| Ship's Name <u>ANDELLE</u> | Nationality and Port of Registry <u>LONDON</u> <u>BRITISH.</u> | Official Number | Gross Tonnage | Date of Build <u>1922.</u> | Name of Surveyor |
| Moulded Dimensions: Length <u>259.5</u> Breadth <u>37.25</u> Depth <u>19.67</u> | | | | | Particulars of Classification <u>+100A.1.</u> |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>Not yet received</u> tons | | | | | |
| Coefficient of fineness for use with Tables | | | | | |

| | | |
|--|---|---|
| Depth for Freeboard (D) | Depth correction | Round of Beam correction |
| Moulded depth <u>19.67</u> | (a) Where D is greater than Table depth (D-Table depth) R = <u>(19.71-17.3) x 1.996 = +4.81</u> | Moulded Breadth (B) <u>37.25</u> |
| Stringer plate <u>.04</u> | (b) Where D is less than Table depth (if allowed) (Table depth-D) R = | Standard Round of Beam = $\frac{B \times 12}{50} = \frac{8.94}{50} =$ <u>8.94</u> |
| Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ <u>✓</u> | <u>✓</u> | Ship's Round of Beam = <u>9.25</u> |
| Depth for Freeboard (D) = <u>19.71</u> | If restricted by superstructures | Difference = <u>.31</u> |
| | | Restricted to |
| | | Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.31}{4} \times .293 = -.02$ |

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>154.00</u> | <u>154.00</u> | <u>4'-9"</u> | <u>✓</u> | <u>154.00</u> |
| „ overhang | | | | | |
| Bridge enclosed | | | | | |
| „ overhang aft | | | | | |
| „ overhang forward | | | | | |
| F'cle enclosed | <u>29.50</u> | <u>29.50</u> | <u>7'-6"</u> | <u>✓</u> | <u>29.50</u> |
| „ overhang | | | | | |
| Trunk aft | | | | | |
| „ forward | | | | | |
| Tonnage opening aft | | | | | |
| „ „ forward | | | | | |
| Total | <u>183.50</u> | <u>183.50</u> | | | <u>183.50</u> |

| | |
|---|--|
| Standard Height of Superstructure | <u>6.095</u> |
| „ „ R.Q.D. | <u>4.13</u> |
| Deduction for complete superstructure | <u>31.95</u> |
| Percentage covered $\frac{S}{L} =$ | <u>70.70%</u> NOTE! PARTICULARS OF FORECASTLE SIDE HOUSES TO BE OBTAINED. |
| „ $\frac{S_1}{L} =$ | <u>70.70%</u> |
| „ $\frac{E}{L} =$ | <u>70.70%</u> |
| Percentage from Table, Line A. (corrected for absence of forecastle (if required)) | |
| Percentage from Table, Line B. <u>63.86%</u> (corrected for absence of forecastle (if required)) | |
| Interpolation for bridge less than .2L (if required) | |
| Deduction = <u>31.95 x .6386 = 20.41</u> | |

SHEER CORRECTION.

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|--------------------|-------------------|---|---|---------------|-----------------|--------------------|---|---|---------------|
| P. | <u>35.95</u> | 1 | | <u>35.95</u> | <u>36.00</u> | <u>36.00</u> | 1 | | <u>36.00</u> |
| L from A.P. | <u>16.00</u> | 4 | | <u>64.00</u> | <u>16.59</u> | <u>16.59</u> | 4 | | <u>66.36</u> |
| L „ | <u>3.95</u> | 2 | | <u>7.90</u> | <u>4.15</u> | <u>4.15</u> | 2 | | <u>8.30</u> |
| amidships | - | 4 | | - | - | - | 4 | | - |
| L from F.P. | <u>7.90</u> | 2 | | <u>15.80</u> | <u>9.28</u> | <u>9.28</u> | 2 | | <u>18.56</u> |
| L „ | <u>32.00</u> | 4 | | <u>128.00</u> | <u>37.13</u> | <u>37.13</u> | 4 | | <u>148.52</u> |
| P. | <u>71.90</u> | 1 | | <u>71.90</u> | <u>84.00</u> | <u>84.00</u> | 1 | | <u>84.00</u> |
| Total | | | | <u>323.55</u> | | | | | <u>361.74</u> |

| | |
|---|--|
| Mean actual sheer aft = <u>excess</u> | |
| Mean standard sheer aft | |
| Mean actual sheer forward = <u>excess</u> | |
| Mean standard sheer forward | |
| Length of enclosed superstructure forward of amidships = <u>.093L</u> | |
| „ „ aft of „ = <u>.5L</u> | |

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{38.19}{18} \left(.75 - \frac{353}{20} \right) = -84 \times \frac{19}{20} = -.80$

If limited on account of midship superstructure. $.84 \times \frac{19}{20}$

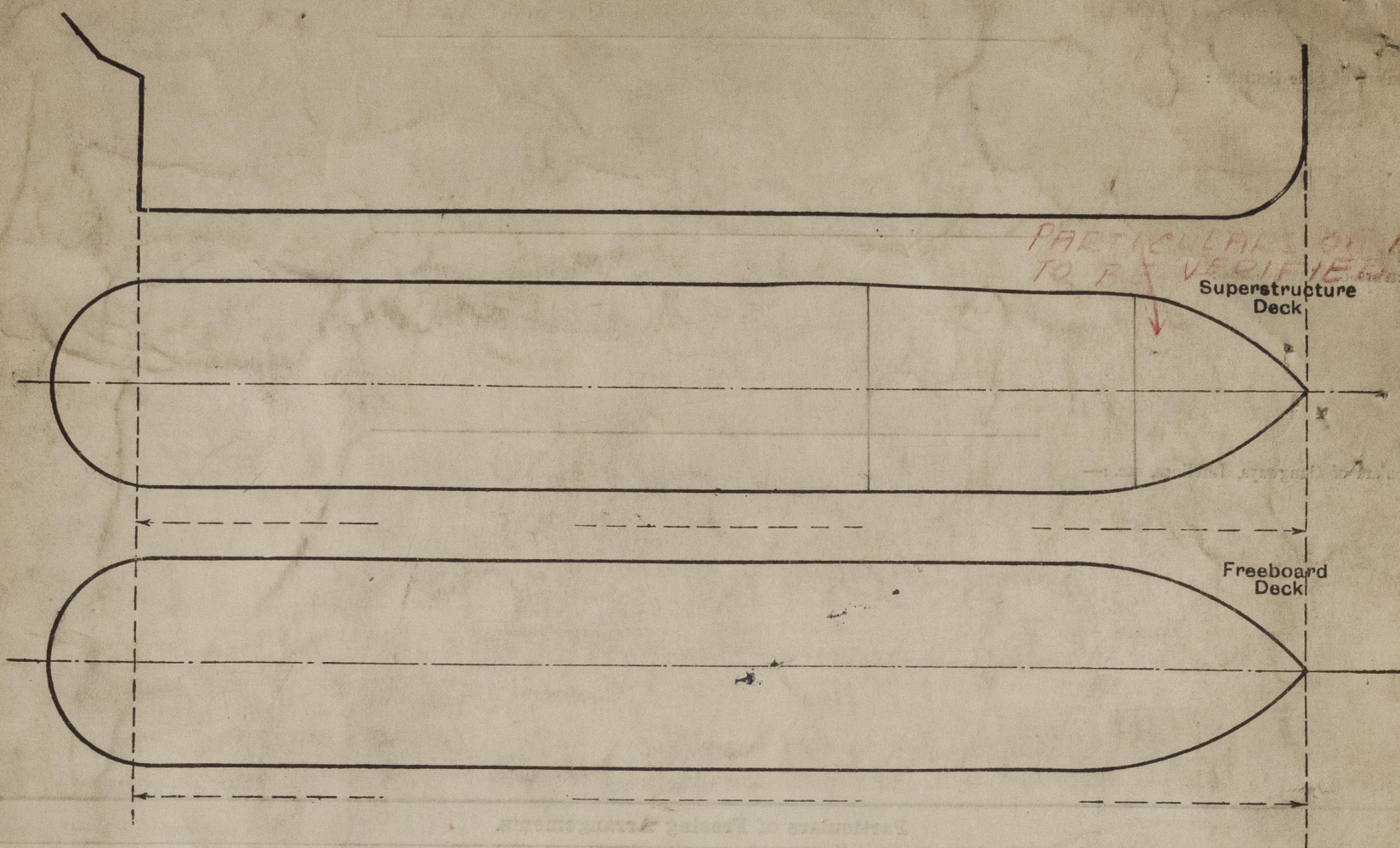
If limited to maximum allowance of 1½ ins. per 100 ft.

| | | | |
|---|--|---|---------------|
| Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. | Deduction for Fresh Water. | TABULAR FREEBOARD corrected for Flush Deck (if required) | <u>34.29</u> |
| Depth to Freeboard Deck = <u>Ft.</u> | Displacement in salt water at summer load water line | Correction for coefficient | |
| Summer freeboard = | $\Delta =$ | Depth Correction | <u>4.81</u> |
| Moulded draught (d) = | Tons per inch immersion at summer load water line | Deduction for superstructures | <u>-20.41</u> |
| | T = | Sheer correction | <u>-.80</u> |
| Deduction for Tropical freeboard and addition for | Deduction = $\frac{\Delta}{40T}$ inches | Round of Beam correction | <u>-.02</u> |
| Winter freeboard = $\frac{d}{4}$ inches = | | Correction for Thickness of Deck amidships | <u>57.00</u> |
| Deduction for Winter North Atlantic Freeboard (if required = | | Other corrections, scantlings, etc. | <u>✓</u> |
| | | Summer Freeboard = | |

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—

| | |
|---|---------------------------------------|
| 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 „ „ |

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

Names of sister ships

Owners

Fee £ : :

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