

Newcastle-on Tyne No. 88356.

9 APR 1932

Rpt. C.11.

Index. No. 30926
(For London Office only.)Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

now named "BALLA" of FARSUND

| | | | | | |
|---|--|--|--|---------------------------------|---|
| Computation of Freeboard for Steamer, Sailing Ship, Tanker having <u>SHELTER DECK WITH FORECASTLE ON SHELTER DECK.</u> | | | | | Port of Survey <u>NEWCASTLE-ON-TYNE</u> |
| (Type of Superstructures.) | | | | | Date of Survey <u>Mar 31st Apr 6th 1932</u> |
| Ship's Name <u>GRESHAM.</u> | Nationality and Port of Registry <u>BRITISH LONDON.</u> | Official Number <u>47845</u> <u>147546</u> | Gross Tonnage <u>2578</u> | Date of Build <u>1923-11</u> | Name of Surveyor <u>John A. Dawson.</u> |
| Moulded Dimensions: Length <u>295.5</u> Breadth <u>43.50</u> Depth <u>24.05</u> | | | | | Particulars of Classification <u>+100 A1. Shells</u> |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>5900</u> tons | | | | | <u>5th with freeboard.</u> |
| Coefficient of fineness for use with Tables <u>.786</u> | | | | | |
| Depth for Freeboard (D) | | | Depth correction | | Round of Beam correction |
| Moulded depth <u>24.04</u> | | | (a) Where D is greater than Table depth (D-Table depth) R = <u>1</u> <u>(24.08 - 19.40) x 2.243 = + 9.96</u> | | Moulded Breadth (B) <u>43.50</u> |
| Stringer plate <u>.04</u> | | | (b) Where D is less than Table depth (if allowed) (Table depth-D) R = | | Standard Round of Beam = $\frac{B \times 12}{50} = \frac{10.44}{50} = 10.44 \checkmark$ |
| Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ | | | If restricted by superstructures | | Ship's Round of Beam = <u>11</u> |
| Depth for Freeboard (D) = <u>24.08</u> | | | | | Difference <u>.56</u> \checkmark |
| | | | | | Restricted to |
| | | | | | Correction = $\frac{\text{Diff}^e}{4} \times (1 - \frac{S_1}{L}) = \frac{.56}{4} \times .0142 = \text{NIL}$ |

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|-------------------------|-------------------------|--|------------|-------------------|----------------------|
| Poop enclosed ... | <u>43.00</u> | | | | |
| " overhang ... | <u>5.25</u> | <u>43.00</u> | <u>8.0</u> | <u>✓</u> | <u>43.00</u> |
| R.Q.D. enclosed ... | <u>8.25</u> | <u>4.12</u> | | | <u>4.12</u> |
| " overhang ... | | | | | |
| Bridge enclosed ... | | | | | |
| " overhang aft ... | <u>240</u> | <u>240.00</u> | <u>8.0</u> | <u>✓</u> | <u>240.00</u> |
| " overhang forward ... | | | | | |
| Fore enclosed ... | | | | | |
| " overhang ... | | | | | |
| Trunk aft ... | <u>26.0</u> | <u>1/2 diff</u> | <u>7.5</u> | | |
| " forward ... | | | | | |
| Tonnage opening aft ... | <u>4.25</u> | <u>4.19</u> | | | <u>4.19</u> |
| " " forward ... | | | | | |
| Total ... | <u>295.50</u> | <u>291.31</u> | | | <u>291.31</u> |

| | |
|---|-----------------------------|
| Standard Height of Superstructure | <u>6.455</u> \checkmark |
| " " R.Q.D. | <u>✓</u> |
| Deduction for complete superstructure | <u>35.03</u> \checkmark |
| Percentage covered $\frac{S}{L} =$ | <u>100.00</u> |
| " " $\frac{S_1}{L} =$ | <u>98.58</u> \checkmark |
| " " $\frac{E}{L} =$ | <u>98.58</u> \checkmark |
| Percentage from Table, Line A. (corrected for absence of forecastle (if required)) | <u>98.25</u> \checkmark |
| Percentage from Table, Line B. (corrected for absence of forecastle (if required)) | |
| Interpolation for bridge less than 2L (if required) | |
| Deduction = $35.30 \times .9825 =$ | <u>- 34.68</u> \checkmark |

SHEER CORRECTION.

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|---------------------|-------------------|---|---|----------------------------|-----------------|-----------------------|---|---|----------------------------|
| A.P. ... | <u>39.55</u> | 1 | | <u>39.55</u> | <u>46</u> | <u>✓ + 18.54</u> | 1 | | <u>64.54</u> \checkmark |
| 1/2 L from A.P. ... | <u>14.60</u> | 4 | | <u>40.40</u> | <u>172</u> | <u>✓ 14.38 28.72</u> | 4 | | <u>114.88</u> \checkmark |
| 2/3 L " ... | <u>4.35</u> | 2 | | <u>8.40</u> | <u>4</u> | <u>✓ 4.34 4.10</u> | 2 | | <u>14.20</u> \checkmark |
| Amidships ... | | 4 | | | | <u>✓</u> | 4 | | |
| 2/3 L from F.P. ... | <u>8.40</u> | 2 | | <u>14.40</u> | <u>9</u> | <u>✓ 8.89 11.23</u> | 2 | | <u>22.46</u> \checkmark |
| 1/2 L " ... | <u>35.20</u> | 4 | | <u>140.80</u> | <u>352</u> | <u>✓ 35.53 43.42</u> | 4 | | <u>181.68</u> \checkmark |
| F.P. ... | <u>49.10</u> | 1 | | <u>49.10</u> | <u>85.5</u> | <u>✓ 85.50 102.04</u> | 1 | | <u>102.04</u> \checkmark |
| Total ... | | | | <u>355.95</u> \checkmark | | <u>✓ + 18.54</u> | | | <u>499.80</u> \checkmark |

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{143.85}{18} \times (.45 - .50) = -2.00 \checkmark$

If limited on account of midship superstructure.

Mean actual sheer aft = Sum
Mean standard sheer aft = Sum
Mean actual sheer forward = Sum
Mean standard sheer forward = Sum
Length of enclosed superstructure forward of amidships = ✓ C.S.S.
" " aft of " = ✓
Actual sheer deck height = 8.00
Standard " " " = 6.455
1.545
18.540

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

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 24.08 \checkmark
Summer freeboard = 1.58 \checkmark
Moulded draught (d) = 22.50 \checkmark

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 5.62 - 52 \checkmark

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ 6640 \checkmark

Tons per inch immersion at summer load water line

T = 27.15 \checkmark Deduction = $\frac{\Delta}{40T}$ inches= 6.11 \checkmark Tons/" AT LOAD = 27.1 TONS

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

687.786 \checkmark 1.36 \checkmark 1.36 \checkmark Depth Correction 9.96 \checkmark Deduction for superstructures 34.68 \checkmark Sheer correction 2.00 \checkmark Round of Beam correction ✓Correction for Thickness of Deck amidships ✓Other corrections, scantlings, etc. ✓9.96 36.68 -26.4Summer Freeboard = 18.84 \checkmark

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

| | | | |
|--|---------------------------------------|------------------------------------|--|
| Tropical Fresh Water Line above Centre of Disc ... | <u>292</u> <u>11 1/2</u> \checkmark | Tropical Fresh Water Freeboard ... | <u>191</u> <u>0</u> <u>7 1/2</u> \checkmark |
| Fresh Water Line " " ... | <u>152</u> <u>6</u> \checkmark | Fresh Water " " ... | <u>37</u> <u>1</u> <u>1</u> \checkmark |
| Tropical Line " " ... | <u>140</u> <u>5 1/2</u> \checkmark | Tropical " " ... | <u>34 1/2</u> <u>1</u> <u>1 1/2</u> \checkmark |
| Winter Line below " " ... | <u>140</u> <u>5 1/2</u> \checkmark | Winter " " ... | <u>62 3</u> <u>2</u> <u>0 1/2</u> \checkmark |
| Winter North Atlantic Line " " ... | <u>190</u> <u>7 1/2</u> \checkmark | Winter North Atlantic " " ... | <u>67 3</u> <u>2</u> <u>2 1/2</u> \checkmark |

3 APR 1932

13/14

17 AUG 1937

RECEIVED

12 FEB

RECEIVED

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

| HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS | | | | | | | | | | | | | | | | | | | |
|---|---|--|---------------|---------------|---------------|---------------|-----------------|-------------------|-------------------|---------------|---------------|-------------------|-------------|-----------------------|-----------------------|-----------------------|--|--------------|--|
| | | SHELTER DECK | | | | | | UPPER DECK | | | | | | 160FF | | UPPER DECK | | SHELTER DECK | |
| Description of Hatchway | | N ^o 1 | 2 | 3 | 4 | 5 | T. O. | N ^o 1 | 2 | 3 | 4 | 5 | TR. HATCHES | FORE PEAK | FORE PEAK | TO G. L. K. | | | |
| Dimensions of Hatchway | | 18 16 | 24.8 16.0 | 24.6 16.0 | 24.8 16.0 | 24.8 16.0 | 4.3 16.0 | 24.9 16.0 | 31.6 16.0 | 31.6 16.0 | 31.6 16.0 | 31.6 16.0 | 2.3 2.3 | 2.0 2.0 | 2.5 2.6 | 2.0 3.0 | | | |
| COAMINGS | Height above Deck | 33 | 33 | 33 | 33 | 33 | 12 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | | | |
| | Thickness { Sides Ends | 44 | 44 | 44 | 44 | 44 | 44 | 8A | 8A | 8A | 8A | 8A | 8A | 8A | 8A | 8A | | | |
| | Stiffeners | 7" | 3" | 4" | | | | | | | | | | | | | | | |
| | Brackets, Stays | 1 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | |
| HATCH BEAMS | Number | 3 | 4 | 4 | 4 | 4 | | 4 | 5 | 5 | 5 | 5 | | | | | | | |
| | Spacing | 4.6 | 4.11 | 4.10 1/2 | 4.10 1/2 | 4.11 | | 4.11 | 5.3 | 5.3 | 5.3 | 5.3 | | | | | | | |
| | Scantling and Sketch | 13 x 32 3 1/2 x 3 1/2 x 42 | 16 x 36 | 14 x 34 | 14 x 34 | 14 x 34 | | 14 1/2 x 34 | 14 1/2 x 34 | 15 x 34 | 15 x 34 | 14 1/2 x 34 | | | | | | | |
| | Bearing Surface | 3 1/2 | 3 1/2 | 3 1/2 | 3 1/2 | 3 1/2 | | 3 1/2 | 3 1/2 | 3 1/2 | 3 1/2 | 3 1/2 | | | | | | | |
| FORE AND AFTERS | Number | | | | | | 3' 2 1/2" x 30" | | | | | | | | | | | | |
| | Spacing | | | | | | | | | | | | | | | | | | |
| | Unsuported Lengths Scantling* and Sketch | | | | | | 6' x 38" | | | | | | | | | | | | |
| | Bearing Surface | | | | | | | | | | | | | | | | | | |
| HATCH COVERS | Material | WP | WP | WP | WP | WP | WP | WP | WP | WP | WP | WP | WP | WP | WP | WP | | | |
| | Thickness | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 1/2 | 2 1/2 | 2 1/2 | 2 1/2 | | | |
| | How fitted | F.A. | F.A. | F.A. | F.A. | F.A. | MT. W. L. | F.A. | F.A. | F.A. | F.A. | F.A. | 2 1/2 | 2 1/2 | 2 1/2 | 2 1/2 | | | |
| | Bearing Surface | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2" | 2 1/4 | 2 1/4 | 2 | | | |
| Spacing of Cleats | | 24 | 24 | 24 | 24 | 24 | | 24 | 24 | 24 | 24 | 24 | 4 | NO CLEATS NO TARP. | NO CLEATS NO TARP. | NO CLEATS NO TARP. | | | |
| Number of Tarpaulins | | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 4 | NO CLEATS NO TARP. | NO CLEATS NO TARP. | NO CLEATS NO TARP. | | | |
| *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 fiddley, funnel and ventilator coamings :—

Vents & coverings of strong construction good condition ✓
 Skylight of steel of strong construction ✓
 (Motor VESSEL. no FIDLEY). ✓

Particulars of Flush Bunker Scuttles:—

NONE. ✓

iculars of Companionways :—

NONE.

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

SHELTER D^K VENT 15' DIA⁹ COMING 36" 38 TO HOLD. ✓

RECTEE D:-
 ALTER D:-
 2 DERRICK POST 22" DIA. COAMING 36" x 38 TO HOLD. ✓
 1 VENT 15" DIA. COAMING 36" x 38 TO HOLD. ✓
 1 " 15 " " 36" x 38 TO HOLD. ✓
 4 " 8 " " 36" x 38 TO HOLD. ✓
 2 DERRICK POSTS 22" DIA. TO HOLDS. ✓
 2 " " 22 " TO HOLDS. ✓

3. C.I.S. NECK 6" DIA. = 10" ABOVE DE TO UNDERSIDE OF BEND.
LED TO CREW. (UPPER DE) ✓
1 VENT. 8" DIA. CRAWLING 38" = 34 LED TO 9th GEAR COMP. ✓

1 VENT. 8" DIA. COAMING 38" - 34 LED TO 9th GEAR Comp. ✓

ALL VENTS CONSTRUCTED IN ACCORDANCE WITH RULES AND COAMINGS
CLOSED WITH WOOD PLUGS - CANVAS COVERS.
SWAN NECK VENTS HAVE ~~NO MEANS OF CLOSING.~~ *wood plugs*

wood plugs attached

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

DISTANCES GIVEN ARE TO UNDERSIDE OF BEND
AND NO SNIFFING HOLES ARE IN PIPES.

M.I. 3 6-0 " " LED TO D.B. TANK.
6 C.I. SWAN NECK VENTS 3" DIA. 10" ABOVE DH LED TO D.B. TANKS.
8 M.I. AIR PIPES 3" DIA. 6'-6" ABOVE DH LED TO D.B. TANKS.
5 M.I. " 3' 6'-6 " " " "
1 M.I. " 3' 3' " " " " A.P. TANK

✓ *non-detachable*
(SCREENED COVER FITTED. ✓
~~NO SECURING CHAIN~~)

all air-pipes from tanks used or fitted
for oil fuel. fitted with wire gauze
 & canvas covers.

culars of Gangway Cargo and Coaling Ports:— NONE.

Gresham

Particulars of Scuppers and Sanitary Discharge Pipes — Lavatory discharge forward has best steel storm valve fitted below 2nd Deck. (P.S.) ✓
Lavatory discharge from officers and crew spaces fitted with C.S. storm valves below freeboard deck. ✓
Scuppers from shelter tween decks have storm valves fitted.

Particulars of Side Scuttles: Side Scuttles of strong construction with permanently attached deadlights. ✓

Particulars of Guard Rails: — Forecasts on shells 3 tier rail: 3'-6" high: stanchions 5 feet apart. ✓
Shells 3 " " 3'-7" " " 5 feet " ✓

Particulars of Gangways, Lifelines, etc.: — none fitted. ✓

2/2
0034

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 | ✓ | open rail | | | | |
| Tonnage Opening | 4'25 | | 2'-0" x 1'-3" 30" above 5" | 1 off | 2.5 sq | ✓ |
| Forward Well | ✓ | open rail | 2'-2" from forward bulkhead. | | | |
| 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 | 30 ✓ | 30 ✓ | 3 1/2 x 3 x 35 L 5 ft atty | 21 x 36 ✓ | ✓ | 5'0" x 3'0" ✓ | 12" ✓ | ✓ |
| Raised Quarter Deck Bulkhead ... | ✓ | | | | | | | |
| Bridge, After Bulkhead | | | | | | | | |
| Bridge, Forward Bulkhead | | | | | | | | |
| Forecastle Bulkhead | 30 ✓ | 30 ✓ | 5 x 3 x 30 L ✓ | 33 ✓ | ✓ | 4'6" x 3'6" ✓ | 18 ✓ | ✓ |
| Trunk, Aft | | | | | | | | |
| Trunk, Forward | | | | | | | | |
| Exposed Machinery Casings on Free-board or Raised Quarter Decks ... | 40 ✓ | 30 | 4 1/2 x 3 x 34 L | 27 | ✓ | | | |
| Exposed Machinery Casings on Super-structure Decks | 34 ✓ | 30 ✓ | 4 1/2 x 3 x 34 L ✓ | 54 ✓ | ✓ | 5'0" x 2'0" ✓ | 18 ✓ | 7'-6" |
| Machinery Casings within Superstruc-tures not fitted with Class I Closing Appliances | 40 ✓ | 40 ✓ | 7 x 3 x 46 L ✓ | 30 ✓ fore and casing | | | ✓ | 8'0" |
| Deckhouses on Flush Deck Ships ... | ✓ | | | | | | | |

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

| | |
|---|--|
| Poop Bulkhead | Port Side, intact. S.S. W.T. door operated aft side only to store. ✓ |
| Raised Quarter Deck Bulkhead ... | ✓ |
| Bridge, After Bulkhead | ✓ |
| Bridge, Forward Bulkhead | ✓ |
| Forecastle Bulkhead | 2' buttons in channels full height. Operated to bulkheads. ✓ |
| Exposed Machinery Casings on Free-board or Raised Quarter Decks ... | none. ✓ |
| Exposed Machinery Casings on Super-structure Decks | Ordinary steel hinged door. Operates both sides. ✓ |
| Machinery Casings within Superstruc-tures not fitted with Class I Closing Appliances | ✓ |
| Deckhouses on Flush Deck Ships ... | ✓ |

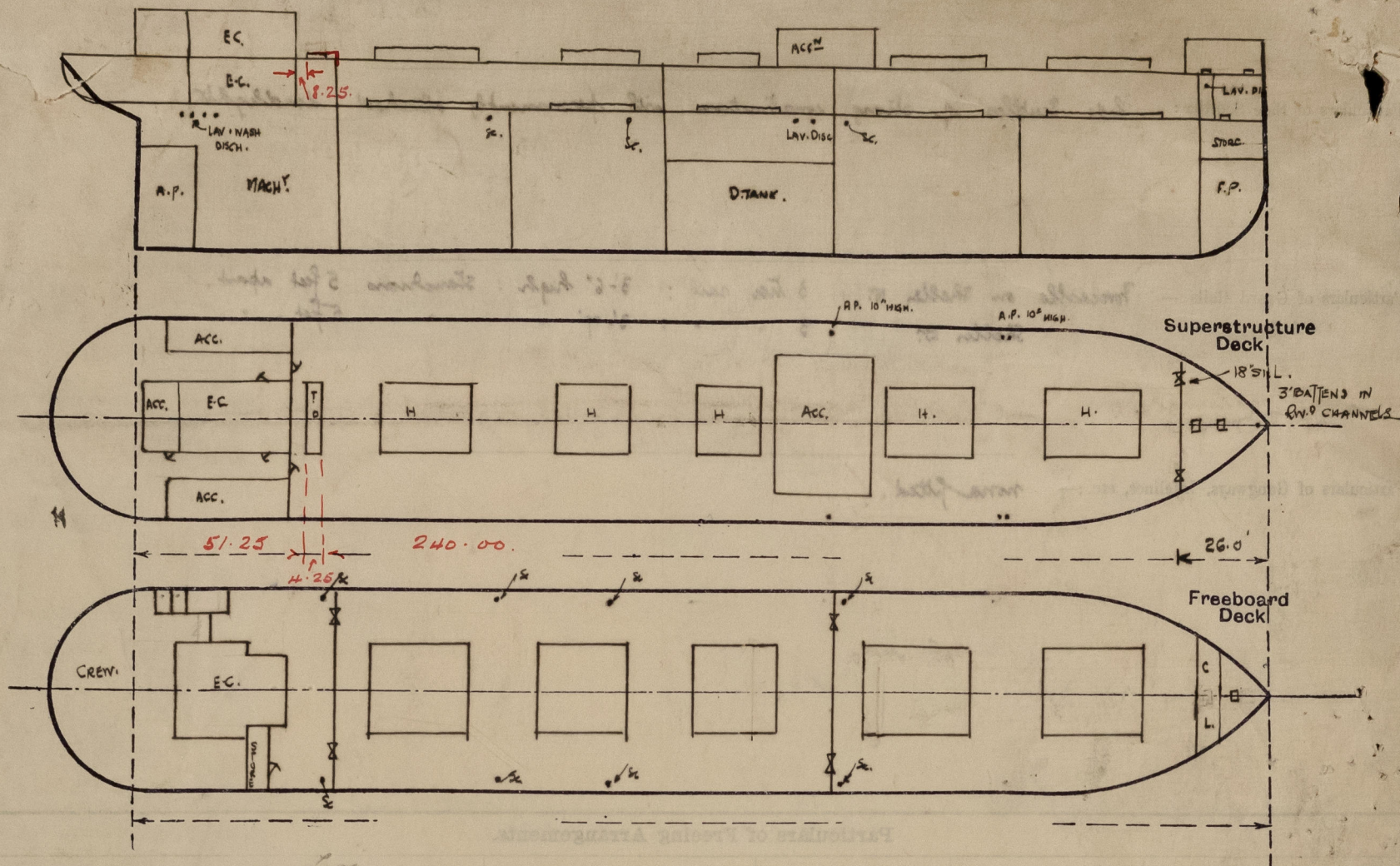


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Gresham

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:—



State any special features in the construction of the ship:—

Builder's name and yard number *C. Shee & Sons, Ltd Bristol.*

Names of sister ships.

Owners *Gresham Shipping Co. Ltd.*

Fee £ *11* : *1* : Received by me

APPLIED FOR *18 APR 1932*



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