

16 SEP 1932

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No 21419

| | | | |
|---|--|---|-----------------------------------|
| Computation of Freeboard for Steamer, Sailing Ship, Tanker | | Port of Survey <u>Rothterdam</u> | |
| having <u>POOP, BRIDGE, FORECASTLE</u> | | Date of Survey <u>15-9-32</u> | |
| (Type of Superstructures.) | | | |
| Ship's Name <u>PEEL COUNTY</u> <u>Alaska</u> | Nationality and Port of Registry <u>Norwegian</u> <u>Haugesund</u> | Official Number <u>5681</u> | Date of Build <u>1918/4 mo</u> |
| Moulded Dimensions: Length <u>410'0"</u> ✓ Breadth <u>54'0"</u> ✓ Depth <u>29'75"</u> ✓ | | Name of Surveyor <u>Z. H. WEHRMEIJER</u> | |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth | | Particulars of Classification <u>+100 A1</u> | |
| Coefficient of fineness for use with Tables <u>.813</u> ✓ | | <u>J.S. N.W. No 3-124.</u> <u>J.S. Rot. No 1-28.</u> <i>Sited for oil fuel 7.18 F.P. above 150° F.</i> | |
| Depth for Freeboard (D) | | Depth correction | |
| Moulded depth <u>29'75"</u> | (a) Where D is greater than Table depth | | |
| Stringer plate <u>0'50"</u> <u>.04</u> | (D - Table depth) R = | | |
| Sheathing on exposed deck | <u>(29.79 - 27.33) 3 = 7.38"</u> | | |
| $T \left(\frac{L-S}{L} \right) =$ | (b) Where D is less than Table depth (if allowed) | | |
| | (Table depth - D) R = | | |
| Depth for Freeboard (D) = <u>29.79</u> | If restricted by superstructures ✓ | | |
| Round of Beam correction | | Moulded Breadth (B) <u>54'0"</u> | |
| Standard Round of Beam = $\frac{B \times 12}{50} =$ | | <u>12.96</u> | |
| Ship's Round of Beam = | | <u>13 1/2"</u> | |
| Difference | | <u>.54</u> | |
| Restricted to | | | |
| Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right)$ | | <u>.54</u> × .4988 = <u>-.06</u> | |

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|-------------------------|-------------------------------|--|--------|----------------------|-------------------------|
| Poop enclosed ... | 43.75' | 43.75 | 7.75' | ✓ | 43.75 |
| " overhang ... | ✓ | | | | |
| R.Q.D. enclosed ... | ✓ | | | | |
| " overhang ... | ✓ | | | | |
| Bridge enclosed... | 114.75' | 114.75 | 8.5' | ✓ | 114.75 |
| " overhang aft ... | ✓ | | | | |
| " overhang forward | ✓ | | | | |
| F'cle enclosed ... | 47.0' | 47.00 | 8.0' | ✓ | 47.00 |
| " overhang ... | ✓ | | | | |
| Trunk aft ... | ✓ | | | | |
| " forward ... | ✓ | | | | |
| Tonnage opening aft ... | ✓ | | | | |
| " " forward | ✓ | | | | |
| Total ... | 205.50 | 205.50 | | | 205.50 |

Standard Height of Superstructure 7.50

" " R.Q.D. ✓

Deduction for complete superstructure 42.00

Percentage covered $\frac{S}{L} = 50.12\%$

" " $\frac{S_1}{L} = 50.12\%$

" " $\frac{E}{L} = 50.12\%$

Percentage from Table, Line A. ✓
(corrected for absence of forecastle (if required)) ✓

Percentage from Table, Line B. 36.12%
(corrected for absence of forecastle (if required)) ✓

Interpolation for bridge less than 2L (if required) ✓

Deduction = $42.00 \times .3612 = -15.17$

SHEER CORRECTION.

| Station | Standard Ordinate | S M | Product | Actual Ordinate | Effective Ordinate | S M | Product |
|-------------------------------|----------------------|--------|---------|--------------------|-----------------------|--------|---------|
| A.P. | 51.00 | 1 | 51.00 | 71 | 71.00 | 1 | 71.00 |
| $\frac{1}{8}$ L from A.P. ... | 22.69 | 4 | 90.76 | 32.39 | 32.39 | 4 | 129.56 |
| $\frac{2}{8}$ L " ... | 5.61 | 2 | 11.22 | 8.10 | 8.10 | 2 | 16.20 |
| Amidships ... | ✓ | 4 | ✓ | ✓ | ✓ | 4 | ✓ |
| $\frac{3}{8}$ L from F.P. ... | 11.22 | 2 | 22.44 | 13.82 | 13.82 | 2 | 27.64 |
| $\frac{1}{8}$ L " ... | 45.38 | 4 | 181.52 | 55.30 | 55.30 | 4 | 221.20 |
| F.P. | 102.00 | 1 | 102.00 | 141 | 141.00 | 1 | 141.00 |
| Total ... | | | 458.94 | | | | 606.60 |

$$\frac{\text{Mean actual sheer aft}}{\text{Mean standard sheer aft}} = \text{Excess}$$
$$\frac{\text{Mean actual shear forward}}{\text{Mean standard shear forward}} = \text{Excess}$$
$$\frac{\text{Length of enclosed superstructure}}{L} \text{ forward of amidships} = 0.14$$

“ ” aft of “ ” = > . 1 L

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{147.66}{18} \times (.75 - .2506) = -4.10$$

If limited on account of midship superstructure.

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

| <p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> | <p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>$\Delta =$</p> <p>Tons per inch immersion at summer load water line</p> <p>$T =$</p> <p>Deduction $= \frac{\Delta}{40 T}$ inches</p> <p>$=$</p> | <p>TABULAR FREEBOARD <small>corrected for Flush Deck (if required)</small></p> <p>Correction for coefficient $\frac{.813 + .68}{1.36} = \frac{1.493}{1.36}$</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <th></th> <th style="width: 10%;">+</th> <th style="width: 10%;">-</th> </tr> <tr> <td>Depth Correction</td> <td>7.38</td> <td>✓</td> </tr> <tr> <td>Deduction for superstructures</td> <td>✓</td> <td>15.17</td> </tr> <tr> <td>Sheer correction</td> <td>✓</td> <td>4.10</td> </tr> <tr> <td>Round of Beam correction</td> <td>✓</td> <td>.06</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td>✓</td> <td>✓</td> </tr> <tr> <td></td> <td style="border-top: 1px solid black;">7.38</td> <td style="border-top: 1px solid black;">19.33</td> </tr> </table> <p style="text-align: right;">Summer Freeboard =</p> | | + | - | Depth Correction | 7.38 | ✓ | Deduction for superstructures | ✓ | 15.17 | Sheer correction | ✓ | 4.10 | Round of Beam correction | ✓ | .06 | Correction for Thickness of Deck amidships | ✓ | ✓ | Other corrections, scantlings, etc. | ✓ | ✓ | | 7.38 | 19.33 | <p>74.60</p> <p>81.90</p> <p>11.95</p> <p>69.95</p> |
|---|---|---|--|---|---|-------------------------|------|---|--------------------------------------|---|-------|-------------------------|---|------|---------------------------------|---|-----|---|---|---|--|---|---|--|------|-------|---|
| | + | - | | | | | | | | | | | | | | | | | | | | | | | | | |
| Depth Correction | 7.38 | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deduction for superstructures | ✓ | 15.17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sheer correction | ✓ | 4.10 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Round of Beam correction | ✓ | .06 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Correction for Thickness of Deck amidships | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other corrections, scantlings, etc. | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 7.38 | 19.33 | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Depth to Freeboard Deck = 29.79</p> <p>Summer freeboard = 5.83</p> <p>Moulded draught (d) = 23.96</p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 5.99 = 6</p> <p>Addition for Winter North Atlantic Freeboard (if required) =</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck :— $5' - 10'' =$

| | | |
|--|-------|--------|
| Tropical Fresh Water Line above Centre of Disc | ... | ... |
| Fresh Water Line | „ | ... |
| Tropical Line | „ | ... |
| Winter Line | below | 6" ... |
| Winter North Atlantic Line | „ | ✓ ... |

| | |
|------------------------------------|-------|
| Tropical Fresh Water Freeboard ... | ... |
| Fresh Water | ” ... |
| Tropical | ” ... |
| Winter | ” ... |
| Winter North Atlantic | ” ... |

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

| HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS | | | | | | | |
|---|----------------------|---------------------|------------------|------------------|------------------------|------------------|------------------|
| ← FREEBOARD DECK | | | | → BRIDGE DECK | | | |
| Description of Hatchway | ... | N°1 | N°2 | N°3 | N°4 | N°5 | N°6 |
| Dimensions of Hatchway | ... | 31'-6" 21'-0" | 31'-6" 21'-0" | 15'-9" 17'-0" | 31'-6" 21'-0" | 31'-6" 21'-0" | 15'-9" 17'-0" |
| COAMINGS | Height above Deck | 36" | 36" | 9" | 36" | 36" | 33" |
| | Thickness | .50 | .50 | .46 | .50 | .50 | .46 |
| | Sides | .50 | .50 | .46 | .50 | .50 | .46 |
| | Stiffeners | 7x3 1/2 x 3/4 x .50 | 3 1/2 x .50 | ✓ | 17x3 1/2 x 3 1/4 x .50 | ✓ | ✓ |
| HATCH BEAMS | Brackets, Stays | 3 | 3 | ✓ | 3 | 3 | 2 |
| | Number | 5 | 5 | 3 | 5 | 5 | 3 |
| | Spacing | equal | | | | | |
| | Scantling and Sketch | equal | | | | | |
| FORE AND AFTERS | Bearing Surface | 7/8" 18 1/2 x .36 | 10 1/2 x .36 | 14" x .36 | 10 1/2 x .36 | 10 1/2 x .36 | 17" x .36 |
| | | 4x3x.44 | 4x3x.44 | 4x3x.44 | 4x3x.44 | 4x3x.44 | 4x3x.44 |
| | | 3" | 3" | 3" | 3" | 3" | 3" |
| | | / | | | | | |
| HATCH COVERS | Material | pine | pine | pine | pine | pine | pine |
| | Thickness | 3" | 3" | 3" | 3" | 3" | 3" |
| | How fitted | longitudinal | | | | | |
| | Bearing Surface | 3" | 3" | 3" | 3" | 3" | 3" |
| Spacing of Cleats | ... | 26"x6" | 26"x6" | 4"x7 1/2" | 26"x6" | 26"x6" | 25"x6" |
| Number of Tarpaulins | ... | 2 | 2 | 2 | 2 | 2 | 2 |

DETAIL OF SOCKET FOR HATCH BEAMS.

*Are wood fore and afters steel shod at all bearing surfaces? ✓

Are battens and wedges efficient and in good condition? y ✓

Are tarpaulins in good condition and in accordance with rule requirements? y ✓

Are lashings provided in accordance with rule requirements? y ✓

Particulars of fiddle, funnel and ventilator coamings:—

Stokehold gratings covered by strong steel hinged covers
Fiddle and funnel ventilators in efficient condition
Engine skylight of steel strongly constructed.

Particulars of Flush Bunker Scuttles:—

none fitted

Particulars of Companionways:—

Steel companion on poop deck
size of opening 4'9"x22 1/2" sill 12" steel hinged door operated from both sides

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

On fore-castle deck one vent 11 1/2" coaming 36"x.28" all vents closed by wood plugs and canvas covers
2 vents 11 1/2" " 36"x.32" construction of ventilations in accordance with the Rules.
On freeboard deck 36"x.32"
4 vents 23 1/2" " 10'9"x.36 supported
On bridge deck 2 vents 23 1/2" " 26'7"x.44 stays fitted
2 vents 23 1/2" " 26'7"x.44 stays fitted

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

On fore-castle deck one air pipe 12 1/2" high.
On freeboard deck (in fore and after well) all air pipes closed by wood plugs or canvas covers
4 air pipes 7" high
10 " " 12 1/2" high.
On bridge deck 3 air pipes 6" high
On poop deck 4 air pipes 6 1/2" high.

Particulars of Gangway Cargo and Coaling Ports:—

none fitted

Peel County.

Particulars of Scuppers and Sanitary Discharge Pipes:—

Three scuppers at each side in bridge space filled with storm valves at ships side (see sketch)
In fore and after well drain holes in stringer angle (see sketch)
Sanitary discharge pipes with storm valves at ships side (marked x)

Particulars of Side Scuttles:—

all side scuttles above freeboard deck fitted with hinged deadlights
all side scuttles of substantial construction

Particulars of Guard Rails:—

Guardrail on fore-castle, bridge and poop deck 3'-5" high.
Stanchions 4'-3" apart. 3 rods.
In fore and after well bulwark 3'-8" high. Stanchions 6'9" apart.

Particulars of Gangways, Lifelines, etc.:—

In fore and after well gangways fitted between hatchways on the level of hatches with lifelines on each side.

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 | 102-10 1/2 | 3'-8" | 4.0' x 1.75' | 3 | 21.0 | 21.57 |
| Forward Well | 101-7 1/2 | 3'-8" | 4.0' x 1.75' | 3 | 21.0 | 20.32 |

State position of each freeing port:— After Well:— see sketch.
(F. and A. position and height above deck edge) Forward Well:— height above deck edge 11"
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— no shutters, only vert. rods 6" apart
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 | 18x.34 | .32 | 4 6x3 1/2 x 3/8 | 30" | none | 5'-5 1/2" x 2 5/8" | 13" | 7.75' |
| Raised Quarter Deck Bulkhead | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Bridge, After Bulkhead | 18x.34 | .30 | 4 6x3 1/2 x .30 | 30" | none | 4' 5 1/2" x 5'-10 1/2" | 10" | 8.5' |
| Bridge, Forward Bulkhead | 10"x42" | .30 | 4 8x3 1/2 x 3/8 x .50 | 29" | top & bottom brackets | 4'-5 1/2" x 6'-1 1/2" | 16 1/2" | 8.5' |
| Fore-castle Bulkhead | 10'x32 | .32 | 4 6x3 1/2 x .30 | 26" | none | 3'-2 5/8" x 5'-2 5/8" | 16" | 8.0' |
| Trunk, Aft | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Trunk, Forward | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Exposed Machinery Casings on Freeboard or Raised Quarter Decks | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Exposed Machinery Casings on Superstructure Decks | 30"x.32" | .30 | 4 4x3x.30 | 27" | none | 4'-11" x 2'4" | 18" | 8'-7" |
| Machinery Casings within Superstructures not fitted with Class I Closing Appliances | 35"x.34 | .20 | 4 4x3x.30 | 27" | none | ✓ | ✓ | 8.5' |
| Deckhouses on Flush Deck Ships | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

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

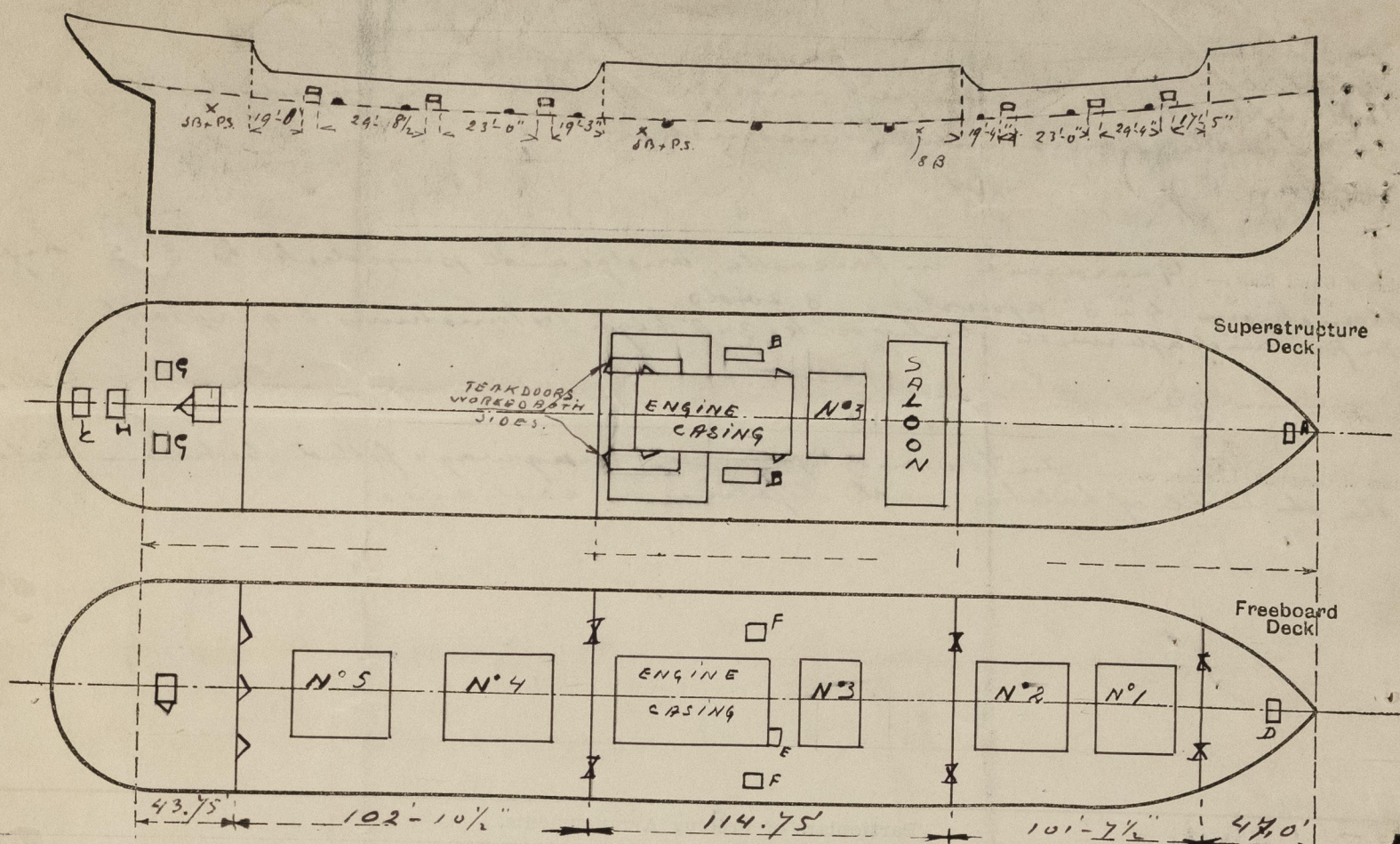
| | |
|---|---|
| Poop Bulkhead | steel hinged doors operated from one side |
| Raised Quarter Deck Bulkhead | ✓ |
| Bridge, After Bulkhead | steel plates secured by bolts through plate and cross members |
| Bridge, Forward Bulkhead | steel hinged doors operated from one side (weatherlight) |
| Fore-castle Bulkhead | shipping boards 4" in channels riveted bars full height |
| Exposed Machinery Casings on Freeboard or Raised Quarter Decks | ✓ |
| Exposed Machinery Casings on Superstructure Decks | steel hinged doors operated from both sides |
| Machinery Casings within Superstructures not fitted with Class I Closing Appliances | ✓ |
| Deckhouses on Flush Deck Ships | ✓ |



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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:—



HATCH A SIZE 35"x35" coaming 18"x.36" woodhatch 2 7/8" rest angle 1 1/2" cleats 24"x6" 2 tarpaulins
 " B " 21"x9-1" " 31"x.30" " " 2 7/8" " " 15/8" " 24"x6" 2 tarpaulins
 " C " 21"x20" " 0"x.32" hinged wood cover 2"
 " D " 31-3/4"x2-11" " 10"x.32" woodhatch 2 1/2" no cleats
 " E " 27"x27" " C 10"x3 1/2"x.44 " 2 1/2" cleats 24"x6" rest angle 6 1/2" 2 tarpaulins
 " F " 31-10"x2-10" " C 10"x3 1/2"x.44 " 2 7/8" cleats 24"x15" rest angle 2 1/2" 2 tarpaulins
 " G " 51-5"x2-5" " 10"x23"x.32" " steel covers
 " H " 31-8 1/2"x3-8 1/2" " 10"x24"x.20" " steel covers

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

The particulars for this report have been taken, whilst vessel placed in dry dock for damage repairs and special survey N°2. It is stated by the owners representative that neither a timber freeboard is desired, nor a computation of same for their information only. The particulars of the freeboard certificate on board, which has been issued by the Norwegian Veritas N°2912, ship's name "Alaska", dated 25-9-1926, signed by J. Bruhn, are as follows.

FW. 5'-4"
 T. 5'-4 1/2"
 S. 5'-10"
 W. 6'-3"
 B.O.T. 5'-10"

Builder's name and yard number J. Coughlan & Sons Vancouver BC

Names of sister ships

Owners D/S A/S. Alaska (C. HAALAND)

Fee £ 163.20 will be Received by me L. H. Schmeijer



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