

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker,
having Pooh-bridge & forecastle

(Type of Superstructures.)

Ship's Name "KYLOR" Nationality and Port of Registry British Newcastle Official Number 161548 Gross Tonnage 2820 Date of Build 1930-3.

Port of Survey Newcastle

Date of Survey 14th Oct. 1935

Name of Surveyor P. DeLondace

Particulars of Classification +100A1.

Moulded Dimensions: Length 304'6" Breadth 45'3 1/2" Depth 23'6"

Moulded displacement at moulded draught = 85 per cent. of moulded depth 6100 tons

Coefficient of fineness for use with Tables .775

| Depth for Freeboard (D) | Depth correction | Round of Beam correction |
|--|--|---|
| Moulded depth 23'50" | (a) Where D is greater than Table depth 3'24" (D-Table depth) R = $(23'54" - 20'30") \times 2.342$ = <u>+7'58"</u> | Moulded Breadth (B) <u>45'29"</u> Standard Round of Beam = $\frac{B \times 12}{50}$ = <u>10'87"</u> Ship's Round of Beam = <u>11"</u> Difference <u>Excess 13"</u> |
| Stringer plate 04" | (b) Where D is less than Table depth (if allowed) (Table depth-D) R = <u>✓</u> | Restricted to |
| Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ <u>✓</u> | If restricted by superstructures <u>✓</u> | Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right)$ = $\frac{13}{4} \times .2222 = -2.94"$ |
| Depth for Freeboard (D) = <u>23'54"</u> | | |

DEDUCTION FOR SUPERSTRUCTURES.

See sketch on back

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|----------------------------|-------------------------|--|--------------|-------------------|----------------------|
| Pooh enclosed | <u>22'92"</u> | <u>22'92"</u> | <u>7'6"</u> | | <u>22'92"</u> |
| " overhang | <u>2'28"</u> | | | | |
| R.Q.D. enclosed | | | | | |
| " overhang | | | | | |
| Bridge enclosed | <u>49'50"</u> | <u>49'50"</u> | <u>7'6"</u> | <u>x.9</u> | <u>44'55"</u> |
| " overhang aft | <u>6'41"</u> | <u>4'81"</u> | | <u>x.9</u> | <u>4'33"</u> |
| " overhang forward | <u>6'75"</u> | | | | |
| Fore enclosed | <u>27'33"</u> | <u>27'33"</u> | <u>7'6"</u> | | <u>27'33"</u> |
| " overhang | <u>3'45"</u> | | | | |
| Trunk aft | <u>105'75"</u> | <u>66'67"</u> | <u>3'10"</u> | <u>3'58" x.9</u> | <u>32'87"</u> |
| " forward | <u>99'00"</u> | <u>65'62"</u> | <u>3'10"</u> | <u>3'08" x.9</u> | <u>30'89"</u> |
| Tonnage opening aft | | | | | |
| " forward | | | | | |
| Total | <u>196'16"</u> | <u>236'85"</u> | | | <u>162'84"</u> |

Standard Height of Superstructure 6'54 1/2"

" " R.Q.D. ✓

Deduction for complete superstructure 35'63"Percentage covered $\frac{S}{L} = 34.86\%$ " $\frac{S_1}{L} = 77.78\%$ " $\frac{E}{L} = 53.48\%$ Percentage from Table, Line A. 36.87%
(corrected for absence of forecastle (if required))Percentage from Table, Line B. 39.48%
(corrected for absence of forecastle (if required))Interpolation for bridge less than 2L (if required) $36.87 + \left(\frac{162}{304.5} \times 2.61 \right) = 35.98$ Deduction = $35.63 \times .3898 = -13.89"$

SHEER CORRECTION.

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|------------------------|-------------------|---|---|----------------|-----------------|--------------------|---|---|----------------|
| A.P. | <u>40'45"</u> | 1 | | <u>40'45"</u> | <u>61'00"</u> | <u>60'75"</u> | 1 | | <u>60'75"</u> |
| 1/2 L from A.P. | <u>18'00"</u> | 4 | | <u>72'00"</u> | <u>25'00"</u> | <u>24'88"</u> | 4 | | <u>99'52"</u> |
| 2/3 L " | <u>4'45"</u> | 2 | | <u>8'90"</u> | <u>7'00"</u> | <u>6'22"</u> | 2 | | <u>12'44"</u> |
| Amidships | <u>✓</u> | 4 | | <u>✓</u> | <u>✓</u> | <u>✓</u> | 4 | | <u>✓</u> |
| 2/3 L from F.P. | <u>8'90"</u> | 2 | | <u>17'80"</u> | <u>10'00"</u> | <u>10'07"</u> | 2 | | <u>20'14"</u> |
| 1/2 L " | <u>36'00"</u> | 4 | | <u>144'00"</u> | <u>41'00"</u> | <u>40'28"</u> | 4 | | <u>161'12"</u> |
| F.P. | <u>80'90"</u> | 1 | | <u>80'90"</u> | <u>103'00"</u> | <u>102'75"</u> | 1 | | <u>102'75"</u> |
| Total | | | | <u>364'05"</u> | | | | | <u>456'72"</u> |

Correction = $\frac{\text{Difference between sums of products}}{18} = \frac{92'67" - 174'33"}{18} = -2'96"$

If limited on account of midship superstructure. $\frac{162}{200} \times 2'96" = -2'38"40$

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 = 23'54"

Summer freeboard = 3'25"

Moulded draught (d) = 20'29"

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 6193$

Tons per inch immersion at summer load water line

 $T = 27.81$ Deduction = $\frac{\Delta}{40T}$ inches = 5 1/2"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{775+68}{136} = \frac{1455}{1360}$

Depth Correction

Deduction for superstructures

Sheer correction

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

7'58"13'89"2'38"4001307'58"16'28"8'70"Summer Freeboard = 38'20"88

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

Tropical Fresh Water Line above Centre of Disc 9 1/2"

Fresh Water Line " " 5 1/2"

Tropical Line " " 4"

Winter Line below " " 3 1/2"

Winter North Atlantic Line " " 5 1/2"

Tropical Fresh Water Freeboard 3'1 3/4"

Fresh Water " " 2'4 1/4"

Tropical " " 2'8 1/4"

Winter " " 2'9 3/4"

Winter North Atlantic " " 3'5 1/4"

Winter North Atlantic " " 3'7 1/4"

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

| PARTICULARS OF PROTECTION | | | | | | | | | | | | | |
|---|-----------------------|--------------|-----------------|-----------------|---------------------|-------------------|---------------|-------------------|---------------------|----------------------|----------------|--------|--|
| HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS | | | | | | | | | | BRIDGE | | CASINO | |
| UPPER DECK | | | | | | | | | | | | | |
| Description of Hatchway | No. 1. | No. 2. | No. 3. | No. 4. | TWO ESCAPE HATCHES. | TWO COAL HATCHES. | TO FORE PEAK. | TWO COAL HATCHES. | CROSS BUNKER HATCH. | TO COAL STORE HATCH. | TO COAL HATCH. | | |
| Dimensions of Hatchway | 36' x 30' 2" | 36' x 30' 2" | 38' 5" x 30' 2" | 42' 9" x 30' 2" | 4' 5" x 24" | 6' 6" x 30" | 1' 8" x 29" | 9' 0" x 34" | 5' 0" x 29' 0" | 3' 4" x 13' 0" | 4' 6" x 13' 0" | | |
| COAMINGS | Height above Deck | 55" | 55" | 61" | 61" | 15" | 30" | 30" | 16" | 12' 3 1/2" B.A. | 9' 1 1/2" B.A. | | |
| | Thickness | 44" | 44" | 44" | 44" | 30" | 30" | 30" | 44" | | | | |
| | Stiffeners | - | - | - | - | - | | | - | | | | |
| | Brackets, Stays | - | - | - | - | - | | | - | | | | |
| HATCH BEAMS | Number | 6 | 6 | 6 | 7 | | | | | | | | |
| | Spacing | 5' 1 1/2" | 5' 1 3/4" | 5' 5 1/2" | 5' 4" | | | | | | | | |
| | Scantling and Sketch | 2 1/2" x 40" | 2 1/2" x 42" | 2 1/2" x 44" | 2 3/4" x 40" | | | | | | | | |
| | Bearing Surface | 3 1/2" | 3 1/2" | 3 1/2" | 3 1/2" | | | | | | | | |
| FORE AND AFTERS | Number | | | | | | | | | | | | |
| | Spacing | | | | | | | | | | | | |
| | Unsupported Lengths | | | | | | | | | | | | |
| | Scantling* and Sketch | | | | | | | | | | | | |
| HATCH COVERS | Material | W.P. | W.P. | W.P. | W.P. | W.P. | W.P. | W.P. | W.P. | W.P. | W.P. | | |
| | Thickness | 2 1/2" - 3" | 2 1/2" - 3" | 2 1/2" - 3" | 2 3/4" - 3" | 2 1/2" - 3" | 2 3/4" | 2 1/2" | 2 3/4" | 3" | 2 3/4" | | |
| | How fitted | F.A. | F.A. | F.A. | F.A. | F.A. | T. | T. | T. | F.A. | F.A. | | |
| | Bearing Surface | 3' x 6" | 3' x 6" | 3' x 6" | 3' x 6" | 2 1/2" | 2 1/2" | 3" | 3" | 3" | 3" | | |
| Spacing of Cleats | 24" | 22" | 22" | 21" | 21" | 19" | 18" | 23" | 22" - 32" | 19 1/2" | 23" | | |
| Number of Tarpaulins | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | | |
| *Are wood fore and afters steel shod at all bearing surfaces? <input checked="" type="checkbox"/> Yes. | | | | | | | | | | | | | |
| Are battens and wedges efficient and in good condition? <input checked="" type="checkbox"/> See above. | | | | | | | | | | | | | |
| Are tarpaulins in good condition and in accordance with rule requirements? <input checked="" type="checkbox"/> Yes. | | | | | | | | | | | | | |
| Are lashings provided in accordance with rule requirements? <input checked="" type="checkbox"/> Yes. | | | | | | | | | | | | | |
| which include special lashings | | | | | | | | | | | | | |

Particulars of fiddley, funnel and ventilator coamings:—

Particulars of fiddle, funnel and ventilator coverings:—
 Fiddle gratings are fitted with hinged steel covers.
 E.R. skylight is steel with glass lights.
 E. & B. vents good.

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways :—

Particulars of Companionways:—
Poop deck - entrance house to crew's quarters with solid $1\frac{3}{4}$ " teak door.
Sill 13" ✓

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

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

| | | |
|--|---|---|
| Poof deck - 4 @ 6" dia. Coamings 33" x 26" | Bridge - 2 @ 12" dia. Coamings 31" x 38" | ^{Woods} ^{cooper} Plugs fitted as necessary |
| 1 @ 10" " " 28" x 36" | 1 @ 15" " " 30" x 38" | |
| 1 @ 15" " " 34" x 40" | Forecastle - 1 @ 15" " 30" x 38" | |
| 2 M. Vents 6" x 6" C.I. | | |
| Wells - 4 @ 15" dia. Coamings 36" x 38" | The ventilators are in accordance with Rule requirements. | |

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

Particulars of Air Pipes in exposed positions on freeboard, 1911

Poop - 1 @ 6" dia x 7" to mouth. C.1. ✓
Wells - 10 @ 3"-4" dia x 31" to 36" to mouth. C.1.
Bridge - 2 @ 4" x 11" to mouth. C.1. ✓
Yacht - 1 @ 4" x 17" " " C.1. ✓

wood plugs provided
~~No closing.~~

Particulars of Gangway Cargo and Coaling Ports :—

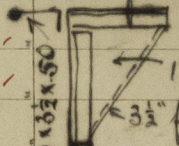
Nare. ✓

Particulars of Scuppers and Sanitary Discharge Pipes:—
 4 1/2" discharges fitted above freeboard decks. Storm valves fitted.
 Sink & bath discharges are above freeboard decks.

Particulars of Side Scuttles:—
Poop space - hinged dead-lights fitted.
There are no lights in the bridge or fore spaces.

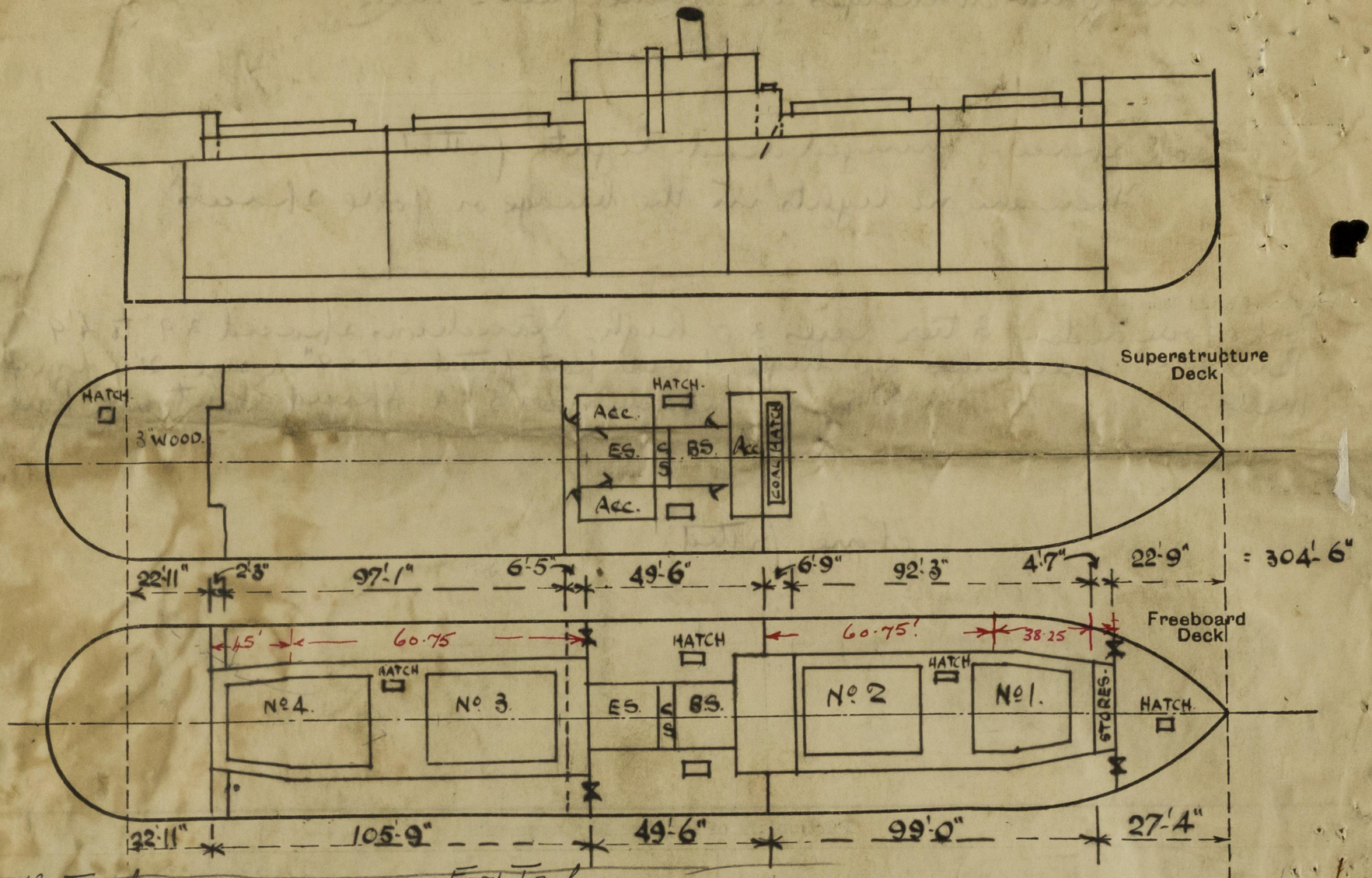
Particulars of Guard Rails:—
 Poop & fore decks - 3 tier rails 3' 0" high. Stanchions spaced 3' 9" to 4' 9" ✓
 Bridge - bulwarks 3' 0" high. 1 wash port fitted 6' 8" x 9" in size. 21' 0" from fore end. ✓
 Wells - " 3' 5" " Stanchions 6" x 3" B.A. Spaced about 6' 9". Rail 6" x 3" B.A. ✓

~~Kane fitted.~~
Lefelius fitted on trunk deck
as necessary.

| | Coaming | Plating | Stiffeners | Spacing | End Attachments of Stiffeners | Size of Openings | Height of Sills | Height of Casings |
|---|---------|---------|---|---------|-------------------------------|--------------------------------|------------------|-------------------|
| Poop Bulkhead | — | 40" | 6" x 3½" x 40" | 30" | None. | None. | — | — |
| Raised Quarter Deck Bulkhead | ✓ | — | — | — | — | — | — | — |
| Bridge, After Bulkhead | — | 36" | 4½" x 3" x 36" | 32" | None. | 2) 4'3" x 36" | 21" | — |
| Bridge, Forward Bulkhead | — | 40" | 8" x 3" x 40" B.A. | 28" | Brackets | None | — | — |
| Forecastle Bulkhead | — | 28" | 3½" flange | 42" | None. | 2) 4'1" x 37" | 18" | — |
| Trunk, Aft | — | 56" |  | 54" | — | — | — | 3'10" |
| Trunk, Forward | — | 56" | — | 54" | — | — | — | 3'4" |
| Exposed Machinery Casings on Free-board or Raised Quarter Decks | — | — | — | — | — | — | — | — |
| Exposed Machinery Casings on Superstructure Decks | — | 36" | 3 x 3 x 32" | 27" | None | 1) 5'0" x 24" 2) 4'8" x 24" | 15'9" 19" 18" | 7'4" |
| Machinery Casings within Superstructures not fitted with Class I Closing Appliances | — | 36" | 3" x 3" x 32" | 27" | None | None | — | — |
| Deckhouses on Flush Deck Ships | — | — | — | — | — | — | — | — |

| Particulars of Closing Appliances (state if capable of being manipulated from both sides). | |
|--|---|
| Poop Bulkhead | No openings. ✓ |
| Raised Quarter Deck Bulkhead ... | ✓ |
| Bridge, After Bulkhead | Full height riveted channels & 3" boards. ✓ |
| Bridge, Forward Bulkhead | No openings. ✓ |
| Forecastle Bulkhead | Full height riveted channels & 2 3/4" boards. ✓ |
| Exposed Machinery Casings on Free-board or Raised Quarter Decks ... | ✓ |
| Exposed Machinery Casings on Superstructure Decks | 4 hinged steel & 2 solid 1 3/4" teak doors. ✓ |
| Machinery Casings within Superstructures not fitted with Class I Closing Appliances | No openings. ✓ |
| 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:—



$$\frac{45 \times 27.33}{45.29} = 27.15$$

$$\frac{55.94 \times 32}{45.29} = 39.52$$

$$\frac{66.67}{45.29} = 1.47$$

Height 5' 08" - 1' 5" = 3' 58"

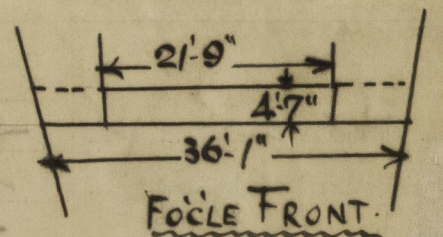
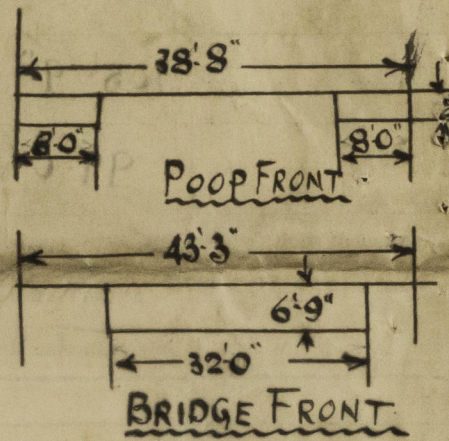
State any special features in the construction of the ship:—

$$\frac{60.75 \times 32}{45.29} = 42.93$$

$$\frac{38.25 \times 26.87}{45.29} = 22.69$$

$$\frac{65.62}{45.29} = 1.45$$

Height 4' 58" - 1' 5" = 3' 08"



Note The Assignment is requested as early as possible as vessel will be sailing towards the end of ship weeks.

Builder's name and yard number Smith's Dock Co. Ltd. Middlesbrough

Names of sister ships

Owners Shank S. S. Co. Ltd.

Fee £ 13 : 0 : 0

Received by me