

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

GRK. REPORT N° 23723.

| | | | | | |
|---|-----------------|---|------------------------------|-------------------------------|--|
| Ship's Name CIS BRØYIG | Official Number | Nationality and Port of Registry NORWEGIAN FARSUND. | Gross Tonnage 8996 | Date of Build 1948. | Port of Survey PORT GLASGOW |
| Moulded Dimensions: Length 470'0.88 Breadth 62'0' Depth 35'3" NET PERP. IS AT CR OF STOCK. | | | | | Date of Survey WHILE BUILDING 1948. |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth 19540 tons | | | | | Surveyor's Signature J. J. J. J. |
| Coefficient of fineness for use with Tables .783 | | | | | Particulars of Classification +100 A.1 CARRYING PETROLEUM IN BULK (CONTAM.) |

| DEPTH FOR FREEBOARD (D). | | DEPTH CORRECTION. | | ROUND OF BEAM CORRECTION. | |
|---|---------------|---|--|--|-----------------------------|
| Moulded depth ... | 35'25" | (a) Where D is greater than Table depth (D-Table depth) R = (35.32 - 31.33) 3 = + 11.97" | | Moulded Breadth (B) | 62'0" |
| Stringer plate ... | .80" | (b) Where D is less than Table depth (if allowed) (Table depth-D) R = | | Standard Round of Beam = $\frac{B \times 12}{50}$ | = 14.88" |
| Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ | | | | Ship's Round of Beam | = 15 1/2" |
| Depth for Freeboard (D) = 35.32' | | If restricted by superstructures | | Difference | .62" |
| | | | | Restricted to | |
| | | | | Correction = $\frac{\text{Diff}^\circ}{4} \times \left(1 - \frac{S_1}{L} \right)$ | = .62 x .6012 = .09" |

| DEDUCTION FOR SUPERSTRUCTURES. | | | | | |
|--------------------------------------|-------------------------|--|-------------|-------------------|----------------------|
| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
| Poop enclosed equiv. CANTRAIL | 101.57 | 101.57 | 7'6" | | 101.57 |
| " overhang 5'10" | 97'4" | | | | |
| R.Q.D. enclosed | | | | | |
| " overhang equiv. CANTRAIL | 42.96 | 42.96 | 7'6" | | 42.96 |
| Bridge enclosed 5'10" | 44'6" | | | | |
| " overhang aft 5'10" | 40'0" | | | | |
| " overhang forward | | | | | |
| F'cle enclosed | 42'11" | 42.92 | 7'6" | | 42.92 |
| " overhang | | | | | |
| Trunk aft | | | | | |
| " forward | | | | | |
| Tonnage opening aft | | | | | |
| " " forward | | | | | |
| Total | 187.45 | 187.45 | | | 187.45 |

Standard Height of Superstructure **7.50'**
R.Q.D. **✓**
Deduction for complete superstructure **42.00"**
Percentage covered $\frac{S}{L} =$
" $\frac{S_1}{L} =$ } **39.88**
" $\frac{E}{L} =$
Percentage from Table, Line A. Tanker. **30.88**
(corrected for absence of forecastle (if required))
Percentage from Table, Line B. **✓**
(corrected for absence of forecastle (if required)) **✓**
Interpolation for bridge less than .2L (if required) **✓**
Deduction = **42.00 x .3088 = 12.97"**

| SHEER CORRECTION. | | | | | | | |
|-------------------|-------------------|-----|---------------|-----------------|--------------------|-----|---------------|
| Station | Standard Ordinate | S M | Product | Actual Ordinate | Effective Ordinate | S M | Product |
| A.P. | 57.00 | 1 | 57.00 | 57" | 57.00 | 1 | 57.00 |
| 1/8 L from A.P. | 25.365 | 4 | 101.46 | 25 3/8" | 25.375 | 4 | 101.50 |
| 1/4 L | 6.27 | 2 | 12.54 | 6 3/8" | 6.375 | 2 | 12.75 |
| Amidships | ✓ | 4 | ✓ | 0" | ✓ | 4 | ✓ |
| 3/8 L from F.P. | 12.54 | 2 | 25.08 | 12 3/4" | 12.75 | 2 | 25.50 |
| 1/2 L | 50.73 | 4 | 202.92 | 50 3/4" | 50.75 | 4 | 203.00 |
| F.P. | 114.00 | 1 | 114.00 | 114" | 114.00 | 1 | 114.00 |
| Total | | | 573.00 | | | | 573.75 |

Mean actual sheer aft = **EXCESS**
Mean standard sheer aft = **EXCESS**
Mean actual sheer forward = **EXCESS**
Mean standard sheer forward = **EXCESS**
Length of enclosed superstructure forward of amidships = } **Tanker.**
" " aft of " = }
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{.75 - .1994}{18} = -.02"$
If limited on account of midship superstructure. **✓**
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) | |
|--|--|--|--|---|----------------------------------|
| Addition for Winter and Winter North Atlantic Freeboard. | | | | Correction for coefficient $\frac{.783 + .68}{1.36} = 1.465/1.36$ | |
| Depth to Freeboard Deck = 35.32 | | Displacement in salt water at summer load, water line 28'0" 18206 | | Depth Correction | 11.97 |
| Summer freeboard = 7.10 | | Tons per inch immersion at summer load, water line 29'0" 18936 | | Deduction for superstructures | 12.97 |
| Moulded draught (d) = 28.22 | | T = 28'0" 60.33 | | Sheer correction | .02 |
| Deduction for Tropical freeboard and addition for | | Deduction = $\frac{\Delta}{40 T}$ inches | | Round of Beam correction | .09 |
| Winter freeboard = $\frac{d}{4}$ inches = 7.05" = 7" | | = 7.61" | | Correction for Thickness of Deck amidships | ✓ |
| Addition for Winter North Atlantic Freeboard (if required) = 4.70" + 7.05" = 11.75" = 11 3/4" | | = 7 1/2" | | Other corrections, scantlings, etc. | ✓ |
| | | | | | 11.97 13.08 - 1.11" |
| | | | | | Summer Freeboard = 85.17" |

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

| | | | |
|--|---------------------------|--------------------------------|--------------------------|
| Tropical Fresh Water Line above Centre of Disc | 14 1/2" = 368 m/m. | Tropical Fresh Water Freeboard | 5' 10 3/4" = 1797 |
| Fresh Water Line | 7 1/2" = 190 | " Fresh Water | 6' 5 3/4" = 1975 |
| Tropical Line | 7" = 178 | " Tropical | 6' 6 1/4" = 1987 |
| Winter Line below | 7" = 178 | " Winter | 7' 8 1/4" = 2343 |
| Winter North Atlantic Line | 11 1/4" = 298 | " Winter North Atlantic | 8' 1" = 2463 |

C15 BRØY19.

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Poop! -

| ends. | S.M. | Prods. |
|-------|------|--------|
| 6.25 | 1 | 6.25 |
| 6.185 | 4 | 24.74 |
| 6.0 | 2 | 12.00 |
| 5.705 | 4 | 22.82 |
| 5.29 | 2 | 10.58 |
| 4.76 | 4 | 19.04 |
| 4.104 | 2 | 8.21 |
| 3.31 | 4 | 13.24 |
| 2.39 | 2 | 4.78 |
| 1.35 | 4 | 5.40 |
| 0 | 1 | 0 |
| | | 127.06 |

$$\text{Area} = 127.06 \times \frac{30.265}{10 \times 3} = 128.18 \text{ sq. ft.}$$

$$\therefore \text{Equiv. bhd. for'd 40 ft.} = \frac{128.18}{30.265} = 4.24'$$

$$\text{Length at side} = 97.33'$$

$$\therefore \text{Equiv. encl. Poop.} = \sqrt{101.57'}$$

Bridge! -

| ends. | S.M. | Prods. |
|-------|------|--------|
| 4.42 | 1 | 4.42 |
| 4.37 | 4 | 17.48 |
| 4.25 | 2 | 8.50 |
| 4.05 | 4 | 16.20 |
| 3.78 | 2 | 7.56 |
| 3.35 | 4 | 13.40 |
| 2.85 | 2 | 5.70 |
| 2.28 | 4 | 9.12 |
| 1.60 | 2 | 3.20 |
| .80 | 4 | 3.20 |
| 0 | 1 | 0 |
| | | 88.78 |

$$\text{Area} = 88.78 \times \frac{3.1}{3} = 91.74 \text{ sq. ft.}$$

$$\therefore \text{Equiv. bhd. for'd 127 ft.} = \frac{91.74}{31} = 2.96'$$

$$\text{Length at side} = 240.00'$$

$$\therefore \text{Equiv. encl. Bridge} = 42.96'$$

Trade of ship INTERNATIONAL

Names of sister ships ANDREA BRØY16

Builder's name and yard number WM HAMILTON & CO. LTD. YARD NO 477

Owners TH BRØY16 FARSUND NORWAY

APPROX.

Fee £ 34 : 0 : 0



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