

DEC 23 1939

36001

Index. No.
(For London Office only).

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

No 32766

Ship's Name "DAYDAWN" (Pickersgills Yard No. 241)	Official Number	Nationality and Port of Registry British Cardiff	Gross Tonnage	Date of Build	Port of Survey Sunderland
Moulded Dimensions: Length 400.0' Breadth 54.5' Depth 28.125' To centre of keelstock.					Date of Survey Whilst building
Moulded displacement at moulded draught = 85 per cent. of moulded depth 11005 tons					Surveyor's Signature Jas Rennie
Coefficient of fineness for use with Tables .739 ✓					Particulars of Classification 100 A1 with freeboard contemplated

Depth for Freeboard (D). Moulded depth ... 28.125 Stringer plate42"04 ✓ Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 28.16 ✓	Depth correction. (a) Where D is greater than Table depth (D - Table depth) R = $(28.16 - 26.67) \times 3 = 4.47$ ✓ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = If restricted by superstructures ✓	Round of Beam correction. Moulded Breadth (B) 54.5' ✓ Standard Round of Beam = $\frac{B \times 12}{50} = 13.08$ ✓ Ship's Round of Beam = 13 1/2" ✓ Difference Excess = .42 ✓ Restricted to Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.42^2}{4} \times .0056 = \text{nil.}$
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	34.46	34.46	8.75	-	34.46
„ overhang ...	✓				
R.Q.D. enclosed ...	✓				
„ overhang ...	✓				
Bridge enclosed...	361.04	361.04	8.75	-	361.04
„ overhang aft ...	✓				
„ overhang forward	✓				
F'cle enclosed ...	✓				
„ overhang ...	✓				
Trunk aft ...	✓				
„ forward ...	✓				
Tonnage opening aft ...	4.50	2.25			
„ „ forward	✓				
Total ...	400.00	397.75			397.75

Standard Height of Superstructure **7.50'** ✓
 „ „ R.Q.D. ✓
 Deduction for complete superstructure **42.00'** ✓
 Percentage covered $\frac{S}{L} = 100.00$
 „ $\frac{S_1}{L} = 99.44$
 „ $\frac{E}{L} = 99.44$
 Percentage from Table, Line A. **99.31** ✓
 (corrected for absence of fore-castle (if required))
 Percentage from Table, Line B. -
 (corrected for absence of fore-castle (if required))
 Interpolation for bridge less than 2L (if required)
 Deduction = **42.00 × .9931 = 41.71'** ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	50.00	1	✓	50.00	45.00	60.00	1	✓	60.00
1/4 L from A.P. ...	22.25	4	✓	89.00	20.00	26.70	4	✓	106.80
3/4 L „ ...	5.50	2	✓	11.00	5.00	6.60	2	✓	13.20
Amidships ...	-	4		-	✓	-	4		-
3/4 L from F.P. ...	11.00	2	✓	22.00	10.00	11.55	2	✓	23.10
1/4 L „ ...	44.50	4	✓	178.00	40.00	46.72	4	✓	186.88
F.P. ...	100.00	1	✓	100.00	90.00	105.00	1	✓	105.00
Total ...			✓	450.00	+15"			✓	494.98

Mean actual sheer aft = **Excess.**
 Mean standard sheer aft

Mean actual sheer forward = **Excess.**
 Mean standard sheer forward

Length of enclosed superstructure forward of amidships =
 „ „ aft of „ = **6.18**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{44.98}{18} \times .25 = -1.25$
 If limited on account of midship superstructure. ✓

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 = 28.16 ✓ Summer freeboard = 3.06 ✓ Moulded draught (d) = 25.10 ✓ Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.27 = 6 1/4" ✓ Addition for Winter North Atlantic Freeboard (if required) = ✓	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 11682$ Tons per inch immersion at summer load water line $T = 43.83$ Deduction = $\frac{\Delta}{40T}$ inches = 6.66" = 6 3/4"	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.739 + .68}{1.36} = \frac{1.419}{1.36}$ <table border="1"> <tr> <th></th><th>+</th><th>-</th></tr> <tr> <td>Depth Correction ...</td><td>4.47</td><td>-</td></tr> <tr> <td>Deduction for superstructures ...</td><td>-</td><td>41.71</td></tr> <tr> <td>Sheer correction ...</td><td>-</td><td>.62</td></tr> <tr> <td>Round of Beam correction ...</td><td>-</td><td>-</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>4.47</td><td>42.33</td></tr> <tr> <td>Summer Freeboard =</td><td></td><td>36.74</td></tr> </table>		+	-	Depth Correction ...	4.47	-	Deduction for superstructures ...	-	41.71	Sheer correction ...	-	.62	Round of Beam correction ...	-	-	Correction for Thickness of Deck amidships ...	-	-	Other corrections, scantlings, etc. ...	-	-		4.47	42.33	Summer Freeboard =		36.74
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:

Tropical Fresh Water Line above Centre of Disc ...	13"
Fresh Water Line „ „ ...	6 3/4"
Tropical Line „ „ ...	6 1/4"
Winter Line below „ „ ...	6 1/4"
Winter North Atlantic Line „ „

Tropical Fresh Water Freeboard ...	1 1/2"
Fresh Water „ „ ...	2 1/2"
Tropical „ „ ...	2 1/2"
Winter „ „ ...	3 1/2"
Winter North Atlantic „ „

5 JAN 1940

W382-0222

RECEIVED
15 JAN 1940

Daydown.

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.

RETAIN

External displacement is 11682 tons at actual draft
of 25'-3 1/4" Tons per Inch = 43.83 tons

RETAIN

Trade of ship

Names of sister ships

Builder's name and yard number

Wm Pickersgill & Sons Yard No 241

Owners

Claymore Shipping Co Ltd Cardiff.

Fee £ 15/-/-

Will be charged on completion



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Foundation