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OCT 22 1937

Index No. 35206
(For London Office only).

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

N^o 32220

Ship's Name S.S. GWYNWOOD	Official Number 165597	Nationality and Port of Registry BRITISH LONDON	Gross Tonnage 1177	Date of Build 1937	Port of Survey Sunderland
Moulded Dimensions: Length 228.5 Breadth 35.83 Depth 15.5					Date of Survey While Building
Moulded displacement at moulded draught = 85 per cent. of moulded depth 2227 tons					Surveyor's Signature W. C. Miller
Coefficient of fineness for use with Tables .723					Particulars of Classification +100A1

Depth for Freeboard (D). Moulded depth ... 15.50 Stringer plate ... R90-40 .04 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 15.54	Depth correction. (a) Where D is greater than Table depth (D - Table depth) R = $(15.54 - 15.23) \times 1.757 = +.54$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = If restricted by superstructures <input checked="" type="checkbox"/>	Round of Beam correction. Moulded Breadth (B) 35.83 Standard Round of Beam = $\frac{B \times 12}{50} = 8.60$ Ship's Round of Beam = 9" Difference .40 Restricted to Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.40}{4} \times .2663 = -.03$
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...						Standard Height of Superstructure 6.0
„ overhang ...						„ „ R.Q.D. 3.856
R.Q.D. enclosed ...	141.16	141.16	3.75	$\times \frac{3.75}{3.856}$	137.27	Deduction for complete superstructure 28.85
„ overhang ...						Percentage covered $\frac{S}{L} = 73.37$
Bridge enclosed ...						„ „ $\frac{S_1}{L} = 73.37$
„ overhang aft ...						„ „ $\frac{E}{L} = 71.66$
„ overhang forward ...						Percentage from Table, Line A. 65.04
F'cle enclosed ...	26.46	26.46	7.25	+	26.46	(corrected for absence of forecastle (if required))
„ overhang ...						Percentage from Table, Line B. ✓
Trunk aft ...						(corrected for absence of forecastle (if required))
„ forward ...						Interpolation for bridge less than .2L (if required)
Tonnage opening aft ...						Deduction = 28.85 × 65.04 = -18.76
„ „ forward ...						
Total ...	167.62	167.62			163.73	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	32.85	1		32.85	27"	27.00	1		27.00	Mean actual sheer aft = Deficient but > .75 Standard
1/4 L from A.P. ...	14.62	4		58.48	12"	12.00	4		48.00	Mean actual sheer forward = Deficient
1/2 L „ ...	3.615	2		7.23	3"	3.00	2		6.00	Mean standard sheer forward
Amidships ...	-	4		-	0	-	4		-	Length of enclosed superstructure forward of amidships =
3/4 L from F.P. ...	7.23	2		14.46	7"	7.00	2		14.00	„ „ aft of „ = } Sheer Deficient
1/4 L „ ...	29.24	4		116.96	28 3/4"	28.75	4		115.00	
F.P. ...	65.70	1		65.70	64 1/4"	64.25	1		64.25	
Total ...				295.68					274.25	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{21.43}{18} (.75 - .3668) = +.46$
 If limited on account of midship superstructure.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 19.29 Summer freeboard = 4.69 Moulded draught (d) = 14.60 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 3.65 = 3 3/4 Addition for Winter North Atlantic Freeboard (if required) = 5 3/4	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta = 2528$ Tons per inch immersion at summer load water line $T = 16.5$ Deduction = $\frac{\Delta}{40T}$ inches = 3.83 = 3 3/4	TABULAR FREEBOARD corrected for Flush Deck (if required) $\frac{723 + .68}{1.36} = \frac{1.403}{1.36} =$ Correction for coefficient Depth Correction54 Deduction for superstructures ... 18.76 Sheer correction46 Round of Beam correction03 Correction for Thickness of Deck amidships ... 45.00 Other corrections, scantlings, etc. ... 46.00 18.79 + 27.21 Summer Freeboard = 56.32
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Water~~ Steel Deck:

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Tropical Fresh Water Line above Centre of Disc ...	7 1/2"	Tropical Fresh Water Freeboard ...	4'-8 1/4"
Fresh Water Line „ „ ...	3 3/4"	Fresh Water „ „ ...	4'-4 1/2"
Tropical Line „ „ ...	3 3/4"	Tropical „ „ ...	4'-4 1/2"
Winter Line below „ „ ...	3 3/4"	Winter „ „ ...	5'-0"
Winter North Atlantic Line „ „ ...	5 3/4"	Winter North Atlantic „ „ ...	5'-2"

B

GWYNWOOD

1900 7.10

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.

Actual displacement at actual draft 14'-8" = 2520 tons
Tons Per Inch = 16.5

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £

10

Will be charged on completion



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Lloyd's Register
Foundation

Rpt. C.

Ship

Office

Nati

Disp

Poop

Raised

Bridge

Bridge

Foreca

Trunk

Trunk

Expose

boar

Expose

struc

Machin

ture

App

Deckh

Poop

Raised

Bridge

Bridge

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