

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

 Index No.  
(For London Office only)

Ship's Name <b>GULFDAWN</b>	Official Number <b>238070</b>	Nationality and Port of Registry <b>American Baltimore</b>	Gross Tonnage <b>7096</b>	Date of Build <b>1936</b>	Port of Survey <b>Port Arthur, Texas</b>
					Date of Survey <b>8th October, 1947</b>
Moulded Dimensions: Length <b>425.00</b> Breadth <b>64.00</b> Depth <b>34.00</b>					Surveyor's Signature <i>James H. Taylor</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>16300 163400</b> tons					Particulars of Classification <b>100A1</b>
Coefficient of fineness for use with Tables <b>.725 .727</b>					

  

Depth for Freeboard (D). Moulded depth ... <b>34.00</b> Stringer plate ... <b>.60"</b> ... <b>.05</b> Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <b>34.05</b>	Depth correction. (a) Where D is greater than Table depth (D—Table depth) R= $(34.05-38.33) \times .50 = +17.13$ (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) <b>64.00</b> Standard Round of Beam = $\frac{B \times 12}{50} = 15.36$ Ship's Round of Beam = <b>16.5</b> 15.55 Difference <b>.14</b> Restricted to Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S}{L} \right) = -.03$
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## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>e</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	92'-4"	91.33	6'-0"		42.33	Standard Height of Superstructure <b>7.50</b>
" overhang ...	—	—	—	—	—	" " R.Q.D. <b>—</b>
R.Q.D. enclosed ...	—	—	—	—	—	Deduction for complete superstructure <b>42.00"</b>
" overhang ...	—	—	—	—	—	Percentage covered $\frac{S}{L} = \frac{165.83}{42.5} = .392$
Bridge enclosed ...	35'-0"	35.00	6'-0"		35.00	" " $\frac{S_e}{L} = \frac{165.83}{42.5} = .392$
" overhang aft ...	—	—	—	—	—	" " $\frac{E}{L} = \frac{165.83}{42.5} = .392$
" overhang forward ...	—	—	—	—	—	Percentage from Table, Line A. <b>Table 30.02</b>
Fore enclosed ...	38'-6"	38.50	6'-0"		38.50	(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 = $.3902 \times 42 = -12.01$
" " forward ...	—	—	—	—	—	
Total ...	165'-10"	165.83			165.83	

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	51.50	1	51.50	55.00	52.50	1	52.50			Mean actual sheer aft = <b>52.50</b>
1/4 L from A.P. ...	23.37	4	93.48	23.37	23.37	4	93.48			Mean actual sheer forward = <b>23.37</b>
1/2 L " ...	5.715	2	11.43	5.715	5.715	2	11.43			Mean standard sheer forward = <b>23.37</b>
Amidships ...	—	4	—	—	—	4	—			Length of enclosed superstructure forward of amidships = <b>17.50</b>
3/4 L from F.P. ...	11.55	2	23.10	11.55	11.55	2	23.10			" " aft of " = <b>17.50</b>
1/4 L " ...	46.715	4	186.86	46.715	46.715	4	186.86			
F.P. ...	105.00	1	105.00	105.00	105.00	1	105.00			
Total ...			471.53				471.53			

Correction =  $\frac{\text{Difference between sums of products}}{18} = \frac{18.00}{18} = +1.00$   
 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 = **34.75**  
 Summer freeboard = **6.52**  
 Moulded draught (d) = **27.53**

 Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = **7"**  
 Addition for Winter North Atlantic Freeboard (if required) = **1 1/4"**

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 15440$   
 Tons per inch immersion at summer load water line

 $T = 24.12$   
 Deduction =  $\frac{\Delta}{40T}$  inches = **1 1/4"**

 TABULAR FREEBOARD corrected for Flush Deck (if required)  
 Correction for coefficient. **68 + .121**

	+	-
Depth Correction ...	1.16	
Deduction for superstructures		12.1
Sheer correction ...		
Round of Beam correction ...		.08
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc. ...		
	14.84	12.18
Summer Freeboard = <b>27.53</b>		

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

 Tropical Fresh Water Line above Centre of Disc **1'-2 1/2"**  
 Fresh Water Line " **7 1/4"**  
 Tropical Line " **7"**  
 Winter Line below " **7"**  
 Winter North Atlantic Line " **11 1/4"**

 Tropical Fresh Water Freeboard **5'-4"**  
 Fresh Water " **5'-4"**  
 Tropical " **5'-4"**  
 Winter " **7'-1 1/2"**  
 Winter North Atlantic " **7'-5 1/2"**

 Old A.B. markings  
 on vessel