

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, ~~SAILING SHIP, TANKER.~~)

Ship's Name S/S 'ODDEVOLD'.	Official Number 4611	Nationality and Port of Registry Swedish, Eksholm	Gross Tonnage 1186	Date of Build 6/1883	Port of Survey Sölvesborg
Moulded Dimensions: Length 224.5 Breadth 33.8 Depth 17.5					Date of Survey 14.10.1942
Moulded displacement at moulded draught = 85 per cent. of moulded depth 2595 tons					Surveyor's Signature A. Börning
Coefficient of fineness for use with Tables .805					Particulars of Classification +100A1.

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth 17.5	(a) Where D is greater than Table depth (D—Table depth) R = (17.53 - 14.96) 1.727 = +4.44	Moulded Breadth (B) 33.8
Stringer plate03	(b) Where D is less than Table depth (if allowed) (Table depth—D) R =	Standard Round of Beam = $\frac{B \times 12}{50}$ = 8.11
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = 5"
Depth for Freeboard (D) = 17.53		Difference 3.11"
		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right)$ = $\frac{3.11}{4} \times .2824 = +.22"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
» overhang					
R.Q.D. enclosed	77.00	77.00	4.0		77.00
» overhang					
Bridge enclosed	57.50	57.50	7.0		57.50
» overhang aft					
» overhang forward25	.12			.12
F'cle enclosed <i>Equiv.</i>	26.48	26.48	7.0		26.48
» overhang					
Trunk aft					
» forward					
Tonnage opening aft ...					
» » forward					
Total	161.23	161.10			161.10

Standard Height of Superstructure..... 6.0'
» » R.Q.D. 3.83'
Deduction for complete superstructure 28.45"
Percentage covered $\frac{S}{L} =$ 71.82
» » $\frac{S_1}{L} =$ 71.76
» » $\frac{E}{L} =$ 71.76
Percentage from Table, Line A. 65.16
(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 = 28.45 × .6516 = -18.54"

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	32.45	1		32.45	27	27	1		27
1/6 L from A.P. ...	14.44	4		57.76	12	12	4		48
2/6 L » ...	3.57	2		7.14	2	2	2		4
Amidships	-	4		-	0	0	4		0
2/6 L from F.P. ...	7.14	2		14.28	10.5	10.5	2		21
1/6 L » ...	28.88	4		115.52	32.0	32.0	4		128
F.P.	64.90	1		64.90	62.0	62.0	1		62
Total ...				292.05					290

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{2.05}{18} (.75 - .3591) = +.04$
If limited on account of midship superstructure. **.3909** If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Mean actual sheer aft = 79.82
Mean standard sheer aft
Mean actual sheer forward = Excess
Mean standard sheer forward
Length of enclosed superstructure forward of amidships = L
» » aft of » = Sheer. deficient

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard.	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ Tons per inch immersion at summer load water line $T =$ Deduction = $\frac{\Delta}{40 T}$ inches $\frac{4}{4} = 4.05 = 103\frac{1}{2}$	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.805 + .68}{1.36} = \frac{1.483}{1.36} =$	27.45" 29.97"
Depth to Freeboard Deck = 17.53		Depth Correction 4.44	
Summer freeboard = 1.34		Deduction for superstructures 18.54	
Moulded draught (d) = 16.19		Sheer correction04	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 4.05 = 103 1/2		Round of Beam correction22	
Addition for Winter North Atlantic Freeboard (if required) = 133 1/2		Correction for Thickness of Deck amidships ...	
		Other corrections, scantlings, etc.	
		4.70	18.54 - 13.84"
		Summer Freeboard = 16.13"	

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

Tropical Fresh Water Line above Centre of Disc	206 1/2	Tropical Fresh Water Freeboard	410 1/2
Fresh Water Line	103	Fresh Water	204
Tropical Line	103	Tropical	307
Winter Line below	103	Winter	513
Winter North Atlantic Line	153	Winter North Atlantic	563

Oddevold.

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.

Forecastle.

Extensions.

$$\frac{3.9 \times 2.95}{16.9} = .68 + 25.8 = 26.48 \text{ Equiv. length.}$$

Trade of ship

General

Names of sister ships

Builder's name and yard number

J.P. Austin & Son, Sunderland, Yard No. 142.

Owners

J. Schander (Ingolf Schander, Mgr), Elleholm.

Fee £

1 (Comp.).

Ship's Name

'ODDEVOLD'

Should Dimensions

Should displacement

Efficient of fineness

Depth for

Should depth

Plating on exposed

$T \left(\frac{L-S}{L} \right) =$

Depth for

Loop enclosed

» overhang

Q.D. enclosed

» overhang

Bridge enclosed

» overhang a

» overhang f

» enclosed

» overhang

Trunk aft

» forward

» opening

»

Total

Station

P.

L from A.P.

L »

midships

L from F.P.

L »

P.

Total

Correction =

If limited on

Deduction for T

Addition for W

Freeboard.

Depth

Summe

Deduction for T

Winter freeboard

Addition for W

(required) =

Summer SUM



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Foundation

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