

TIMBER FREEBOARDS

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 Index No. **24701**
 (For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey Tönsberg
having Forecastle, Bridge & Raised Quarter Deck					Date of Survey 7th July 1932
(Type of Superstructures.)					Name of Surveyor
Ship's Name NORD	Nationality and Port of Registry Norwegian Tönsberg	Official Number 2042	Gross Tonnage 1916	Date of Build 17	Particulars of Classification + 100 A.1.
Moulded Dimensions: Length 275.0 Breadth 40.0 Depth 20.0					
Moulded displacement at moulded draught = 85 per cent. of moulded depth 4197 tons					
Coefficient of fineness for use with Tables .786					

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth	(a) Where D is greater than Table depth (D - Table depth) R = + 3.64"	Moulded Breadth (B)
Stringer plate	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50}$ =
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam =
Depth for Freeboard (D) = 20.05		Difference
		Restricted to
		Correction = $\frac{\text{Diff}^a}{4} \times \left(1 - \frac{S_1}{L} \right)$ = - .03"

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					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
Fore enclosed					
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total					

Standard Height of Superstructure	
" " R.Q.D.	33.50
Deduction for complete superstructure	
Percentage covered $\frac{S}{L}$ =	
" " $\frac{S_1}{L}$ =	
" " $\frac{E}{L}$ = 70.08	
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	81.55%
Percentage from Table, Line B TIMBER (corrected for absence of forecastle (if required))	
Interpolation for bridge less than .2L (if required)	
Deduction = 33.50 x .8155 = -27.32"	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.		1					1		
$\frac{1}{8}L$ from A.P.		4					4		
$\frac{2}{8}L$ "		2					2		
Amidships		4					4		
$\frac{2}{8}L$ from F.P.		2					2		
$\frac{1}{8}L$ "		4					4		
F.P.		1					1		
Total									

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$$

If limited on account of midship superstructure.

 Mean actual sheer aft =
 Mean standard sheer aft =

 Mean actual sheer forward =
 Mean standard sheer forward =

 Length of enclosed superstructure forward of amidships =
 $\frac{L}{L}$

" " aft of " =

+ 1.12"If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

 Ft.
 Depth to Freeboard Deck = **20.05**
 Summer freeboard = **1.49**
 Moulded draught (d) = **18.56**

Deduction for Tropical freeboard and addition for

 Winter freeboard = $\frac{d}{4}$ inches = **4.64 = 118 $\frac{1}{2}$ mm**

 Addition for Winter North Atlantic Freeboard (if required) = **6.19 = 157 $\frac{1}{2}$ mm**

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ **4640**

Tons per inch immersion at summer load water line

 $T =$ **22.50**Deduction = $\frac{\Delta}{40T}$ inches**= 5.16****= 131 $\frac{1}{2}$ mm**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{1.466}{1.36}$

	+	-
Depth Correction	3.64	<input checked="" type="checkbox"/>
Deduction for superstructures	27.32	<input checked="" type="checkbox"/>
Sheer correction	1.12	<input checked="" type="checkbox"/>
Round of Beam correction03	<input checked="" type="checkbox"/>
Correction for Thickness of Deck amidships		<input checked="" type="checkbox"/>
Other corrections, scantlings, etc.		<input checked="" type="checkbox"/>

37.60
40.53

	+	-
3.64	<input checked="" type="checkbox"/>	
27.32	<input checked="" type="checkbox"/>	
1.12	<input checked="" type="checkbox"/>	
.03	<input checked="" type="checkbox"/>	
	<input checked="" type="checkbox"/>	
	<input checked="" type="checkbox"/>	
4.76	<input checked="" type="checkbox"/>	
27.35	<input checked="" type="checkbox"/>	
-22.59		
Summer Freeboard =	17.94	

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

TIMBER Tropical Fresh Water Line above Centre of Disc

" Fresh Water Line

" Tropical Line

" Winter Line

" Winter North Atlantic Line

15.98 = 406 $\frac{1}{2}$ mm11.34 = 288 $\frac{1}{2}$ mm10.82 = 275 $\frac{1}{2}$ mm... 01 = 0 $\frac{1}{2}$ mm... 6.51 = 166 $\frac{1}{2}$ mm6.18 = 157 $\frac{1}{2}$ mm

Tropical Fresh Water Freeboard

Fresh Water

Tropical

Winter

Winter North Atlantic

8.14 = 207 $\frac{1}{2}$ mm12.78 = 325 $\frac{1}{2}$ mm13.30 = 338 $\frac{1}{2}$ mm24.13 = 613 $\frac{1}{2}$ mm30.63 = 779 $\frac{1}{2}$ mm

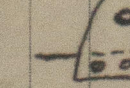
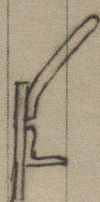
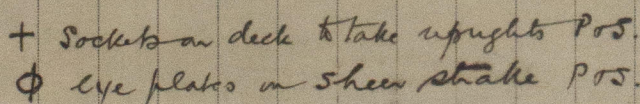
Port of

Continuation of Report No. 3832 dated

on the

S. S. NORD

TIMBER FREEBOARD:-



eye plates on
snout-shake
of strong construction
also holes in bulbarke
stanchions.

Deck Sockets:- of 4"x3" angles (double) 14" long & 8" between sockets to stringer plates.
Some of these are in bad condition & will require to be removed.

It is stated that No 3 & 4 tanks are trimming tanks
Steering rods led alongside hatches a R.R. Dr & protection
Steering steering gear in house at aft end of casing
Hard gear aft.

W542-0046²/₂