

Amended. (for lengthening).

For LONDON OFFICE ONLY

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received
 Index No.
 Govt. Copy
 Owners C11

Ship's Name * BERNY * (EX BERGO)	Official Number	Nationality and Port of Registry FINNISH MARIEHAMN	Gross Tonnage 603.36	Date of Build 1950	Port of Survey AALBORG
Moulded Dimensions: Length 53935 X Breadth 8850 X Depth 4142 ✓ Freeboard Length Moulded displacement at moulded draught = 85 per cent. of moulded depth 1207.5 m³ tons (excluding bossing) .719 Coefficient of fineness for use with Tables .740					Date of Survey 7.56 Surveyor's Signature M.B. Christensen Particulars of Classification + 100 A.I.

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 4142 ✓	(a) Where D is greater than Table depth (D - Table depth) R = .555 8.33 (4.151 - 3.596) 13.621 = + 63 mm	Moulded Breadth (B) 8850 ✓
Stringer plate ... 9 ✓	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{8850 \times 12}{50} = \mathbf{177}$ ✓
Wood Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ R.Q.D. 50 mm.	If restricted by superstructures,	Ship's Round of Beam = 200 ✓
Depth for Freeboard (D) = 4151 ✓		Difference + 23 ✓
		Restricted to
		Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{23^2}{4} \times \left(1 - \frac{50}{8850} \right) = \mathbf{-4 mm.}$

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 ...	11979 ✓	11975 ✓	1680 ✓	---	11975 ✓
" overhang ...	---	---	---	---	---
Bridge enclosed ...	---	---	---	---	---
" overhang aft ...	---	---	---	---	---
" overhang forward ...	---	---	---	---	---
F'cle enclosed ...	7310 ✓	7310 ✓	2150 ✓	---	7310 ✓
" overhang ...	260 ✓	130 ✓	2150 ✓	---	130 ✓
Trunk aft ...	---	---	---	---	---
" forward ...	---	---	---	---	---
Tonnage opening aft ...	---	---	---	---	---
" " forward ...	---	---	---	---	---
Total ...	19545 ✓	19415 ✓	---	---	19415 ✓

Standard Height of Superstructure **1830** mm. ✓
 " " R.Q.D. **1069** mm. ✓
 Deduction for complete superstructure **602** mm. ✓
 Percentage covered $\frac{S}{L} = \frac{19415}{53935} = \mathbf{36.24}$ ✓
 " " $\frac{S_1}{L} = \frac{19415}{53935} = \mathbf{36.00}$ ✓
 Percentage from Table, Line A. **20.10** ✓
 (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 = **602 x .2010 = 121** mm. ✓

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	703 676	1	703	724 ✓	724	1	724
$\frac{1}{4}$ L from A.P. 312 280	4	1248	263 ✓	263	263	4	1052
$\frac{2}{4}$ L " 78 58	2	156	45 ✓	45	45	2	90
Amidships ...	0	0	0	0	0	4	0
$\frac{3}{4}$ L from F.P. 156 412	2	312	132 ✓	132	132	2	264
$\frac{4}{4}$ L " 625 563	4	2500	543 ✓	543	543	4	2172
F.P. ...	1407 1552	1	1407	1420 ✓	1420	1	1420
Total ...			6326 ✓				5722 ✓

Mean actual sheer aft =
 Mean standard sheer aft =

Mean actual sheer forward =
 Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =
 L

" " aft of " = DEFICIENT SHEERS.

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{604}{18} \times \left(.75 - \frac{5688}{2 \times 53935} \right) = \mathbf{+19 mm.}$
 If limited on account of midship superstructure.

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

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **4151** ✓
 Summer freeboard = **499** ✓
 Moulded draught (d) = **3652** ✓
 Keel allowance =
 Extreme draught =

Deduction for Tropical freeboard and addition for =

Winter freeboard = $\frac{d}{48}$ inches = **76** mm. ✓

Addition for Winter North Atlantic Freeboard (if required) = **76 + 51 = 127** mm. ✓

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta = \mathbf{1298 m^3}$
 Tons per cm immersion at summer load water line
 $T = \mathbf{4.03 t/cm.}$

Deduction = $\frac{\Delta}{40 T}$ inches
 = **81** mm. ✓

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.719 + .68}{1.36} = \mathbf{1.399}$ ✓
 $\frac{1.36}{1.36}$

Depth Correction ... **63** ✓
 Deduction for superstructures ... **121** ✓
 Sheer correction ... **19** ✓
 Round of Beam correction ... **4** ✓
 Correction for Thickness of Deck amidships ...
 Other corrections, To CORRESPOND WITH ...
 A SUMMER MOULDED DRAUGHT OF **3.652 M.** ✓

489 ✓

503 ✓

15.8.56

Summer Freeboard = **499** ✓

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

Tropical Fresh Water Line above Centre of Disc ... **157** mm. ✓
 Fresh Water Line " " ... **81** mm. ✓
 Tropical Line " " ... **76** mm. ✓
 Winter Line below " " ... **76** mm. ✓
 Winter North Atlantic Line " " ... **127** mm. ✓

Tropical Fresh Water Freeboard ... **499** mm. ✓
 Fresh Water " ... **418** mm. ✓
 Tropical " ... **423** mm. ✓
 Winter " ... **575** mm. ✓
 Winter North Atlantic " ... **626** mm. ✓

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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.

DISPL. AT MOULDED DRAUGHT 3246 mm: 1172 TONS SW.
— " — " — 3042 mm: 1050 — " — " , m³ per cm: 3.86.
— " — " — 4258 mm: m³ per cm: 4.20.

Trade of ship INTERNATIONAL.

Names of sister ships ✓

Builder's name and yard number BODEWES SCHEEPSWERVEN, MARTENSHOEK, YARD N° 377.

Owners REDERIAKTIEBOLAGET SALLY, MARIEHAMN.

Fee £ : :

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



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