AMENDED.

Rpt. C.11 (Comp.).

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

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
COPINSAY. ~~RASC~~.		BRITISH.	445	1941.

Port of Survey .....

Date ~~of Survey~~ 17.6.52

Surveyor's Signature .....

Particulars of Classification +100A1

Moulded Dimensions: Length 152·00′ ·96 WL. LENGTH. Breadth 27·50′ Depth 15·0′.

Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 935 tons

Coefficient of fineness for use with Tables ·68 (·616. Actual).

DEPTH FOR FREEBOARD (D).

Moulded depth	15·00
Stringer plate ... ... ·026 ...	·03
2½ Sheathing on exposed deck $T\left(\frac{L-S}{L}\right) = \frac{2.5}{12} \times \frac{59}{152}$	·08
Depth for Freeboard (D) =	15·11

DEPTH CORRECTION.

(a) Where D is greater than Table depth (D—Table depth) R = $(15.11 - 10.13) \frac{1}{4.98} 1.169 = +5.82$

(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)		27·50
Standard Round of Beam = $\frac{B \times 12}{50}$	=	6·60
Ship's Round of Beam	=	7
Difference		·40

Restricted to

Correction = $\frac{\text{Diff}^{e}}{4} \times \left(1 - \frac{S_1}{L}\right)$ = $\frac{.40}{4} \times .8339 = -.08$

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 ...					
F'cle enclosed	25·25	25·25	6·5		25·25
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft ...					
„ „ forward ...					
Total	25·25	25·25			25·25

Standard Height of Superstructure 6·0

„ „ R.Q.D. —

Deduction for complete superstructure 21·2

Percentage covered $\frac{S}{L}$ = } 16·61

„ „ $\frac{S_1}{L}$ = }

„ „ $\frac{E}{L}$ = }

Percentage from Table, Line A. 8·305

~~(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 = 21·2 × ·08305 = 1·74.

SHEER CORRECTION.

Trim by stern 3′-11½″

Station	Standard Ordinate	SM	Product	Actual Ordinate	Effective Ordinate	SM	Product
A.P.	25·20	1	25·20	67	43·25 25·20	1	25·20
⅛L from A.P. ...	11·215	4	44·86	39	23·17 11·215	4	44·86
⅜L „ ...	2·77	2	5·54	15	7·08 2·77	2	5·54
Amidships ...	—	4	—	0	—	4	—
⅜L from F.P. ...	5·54	2	11·08	-6	1·92 1·92	2	3·84
⅛L „ ...	22·43	4	89·72	0	15·83 15·83	4	63·32
F.P.	50·40	1	50·40	17	40·75 40·75	1	40·75
Total ...			226·80				183·51

Mean actual sheer aft / Mean standard sheer aft = Excess

Mean actual sheer forward / Mean standard sheer forward = Deficient.

Length of enclosed superstructure / L forward of amidships = } Deficient sheer.

„ „ aft of „ = }

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L}\right) = \frac{43.29}{18}(.75 - .0831) = +1.60$.
.6669

If limited on account of midship superstructure. If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

		Ft.
Depth to Freeboard Deck	=	15·03
Summer freeboard	=	4·02
Moulded draught (d)	=	11·01
Keel allowance	=	
Extreme draught	=	

uction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 2·75 = 2¾.

Addition for Winter North Atlantic Freeboard ~~(if required)~~ = 4¾″.

Deduction for Fresh Water.

Displacement in salt water at summer load water line

△ =

Tons per inch immersion at summer load water line

T =

Deduction = $\frac{\triangle}{40\ T}$ inches

= 2¾.

TABULAR FREEBOARD ~~corrected for Flush Deck (if required)~~ 15·78

Correction for coefficient NIL. 15·78

	+	−
Depth Correction	5·82	—
Deduction for superstructures	—	1·74
Sheer correction	1·60	—
Round of Beam correction	—	·08
Correction for Thickness of Deck amidships ...	—	·96
Other corrections, scantlings, ~~etc.~~ corresponding to a summer moulded draught.	27·83	—
	35·25	2·78 +32·47

Summer Freeboard = 48·25

A.R. 18.6.52

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

Tropical Fresh Water Line above Centre of Disc		5½″	Tropical Fresh Water Freeboard	4′-0¼″
Fresh Water Line	„ „	2¾″	Fresh Water „	3′-6¾″
Tropical Line	„ „	2¾″	Tropical „	3′-9½″
Winter Line	below „	2¾″	Winter „	3′-9½″
Winter North Atlantic Line	„ „	4¾″	Winter North Atlantic „	4′-1¾″

1.7.52.

T.

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.

Sheer.		Correction for trim		
AP	67	+ 23·75	=	43·25
1/6	39	− 15·83	=	23·17
2/6	15	− 7·92	=	7·08
⊗	0			
2/6	-6	+ 7·92	=	1·92
1/6	0	+ 15·83	=	15·83
FP	17	+ 23·75	=	40·75

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £_____:_____:_____