Check on A.B. computation

31005

Report No. 11b (Spl).

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD—STEAMERS.

Index No. _____ (For London Office only.)

Port of Survey _____

Date of Survey _____

Name of Surveyor _____

Ship's Name.	Port of Registry and Nationality.	Official Number.	Gross Tonnage.	Date of Build.	Particulars of Classification.
City of San Francisco ✓	Panama.		3643·94	1924	+100 A1 with freeboard

Number in Register Book _____

Moulded dimensions 300 × 45·75 × 21·5

Moulded displacement at a moulded draught of 85 per cent. of moulded depth _____

Coefficient of fineness for use with tables assumed ·70

DEPTH FOR FREEBOARD.

Moulded depth	21·50
Stringer plate	·04
Sheathing in wells $T\left(\frac{L-S}{L}\right)$ = ...	✓
Depth **D** = ...	21·54

CORRECTION FOR LENGTH.

(*a*) When **D** is greater than $\frac{L}{15}$

$\left(D-\frac{L}{15}\right)\times R$ = (21·54 − 20·00) × 2·308 = ... + 3·55

(*b*) When **D** is less than $\frac{L}{15}$ (if allowed).

$\left(\frac{L}{15}-D\right)\times R$ = ...

If restricted by height of superstructures ... ...

SUPERSTRUCTURES.

	Mean Covered Length S.	Equivalent Enclosed Length S_1.	Height.	Correction for Height.	Effective Length.
Poop enclosed	44·50	44·50	8·5	-	44·50
„ overhang	2·33	1·16			1·16
R.Q.D. enclosed					
„ overhang					
Bridge enclosed	248·50	248·50	8·5 to B·25	-	248·50
„ overhang aft	·25	·19			·19
„ overhang forward ...					
F'cle enclosed					
„ overhang					
Trunks forward					
„ aft					
Tonnage opening	4·42	+ 2·82 = ½ 8·11			2·82
TOTAL =	300·00	297·17			297·17
Length of ship (**L**) =	300·00	300·00			300
% Covered ... ... =	100%	99·062			99·062

Actual height of superstructure 8'-6"
Standard - - - 6'-6"
Diff. 2'-0"
= 24"

Tween-decks parallel aft but rises to 13'-3" forward
6'-6"
6'-9" = 81"

Corresponding %, corrected for absence of forecastle if required } **A** = ✓ . **B** = 98·842 .

Allowance ... = 35·33 × ·9884 = − 34·92

Correction for Bridge less than ·2**L** if required

SHEER.

Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.
A.P. 1	35+24 = 59	40·00	59·00	1	59·0
2			26·25	4	105·0
3			6·50	2	13·0
4			-	4	-
5			11·00	2	22·0
6			44·50	4	178·0
F.P. 7	19+81 = 100	80·00	100·00	1	100·0
				18	477·0

Mean effective sheer ... ... = 26·50

Standard sheer ·05**L** + 5 = = 20·00

Difference (**D**f) ... ... = 6·50

Allowance = **D**f × $\left(\cdot 75-\frac{S}{2L}\right)$ = 6·50 × ·25 = − 1·62

If limited on account of amidship superstructure ... ... =

If limited on account of excess sheer ($1\frac{1}{2}$ in. per 100 ft.) ... =

If excess sheer forward and deficient sheer aft :—

$\frac{\text{Actual sheer aft}}{\text{Standard sheer aft}}$ = -

$\frac{\text{Actual sheer forward}}{\text{Standard sheer forward}}$ = -

$\frac{\text{Length of enclosed superstructure}}{L}$ -

Forward of amidships =

Aft of amidships =

ROUND OF BEAM.

Standard	10·98"
Ship	11·33
Difference	·35
Restricted to	

Allowance = $\frac{\text{Difference}}{4}\times\left(1-\frac{S_1}{L}\right)$ = $\frac{35}{4}$ × ·01 = Nil.

21·54 + 1·14 = 20·40 ÷ 4 = 5·08

13·67 − 5·08 = 8·59 SW = 1'-6¾"

13·67 − 5·08 = 8·59 ? = 8½

TABULAR FREEBOARD (corrected for flush deck if required) = 43·40

Corrected for Coefficient ·70 + ·68 / 1·36 = 138/136 = 44·04

	+	−
Correction for Length	3·55	-
„ Superstructures	-	34·92
„ Sheer	-	1·62
„ Round of beam		-
„ Thickness of ~~deck~~ bitumlo ...	2·62	
„ Scantlings, etc.		
„ Statutory deck line		
	6·17	36·54

= − 30·37

Summer Freeboard = 13·67

2½" bitumlo

FREEBOARD recommended amidships from centre of Disc to top of Statutory Deck Line, ~~Wood~~ (Steel) Deck :—

Fresh Water Line	above centre of Disc	1'-1¼"	1'-1¾"
Indian Summer Line	„ „ „	0'-7¼"	0'-8½"
Winter Line	below „ „	0'-7¼"	0'-8½"
Winter North Atlantic Line	„ „ „	5"	1'-6¾"
		7"	1'-8¾"

© 2021 Lloyd's Register Foundation

005840-005848-0144