

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having Long Poop and Forecastle

Port of Survey Detroit, Mich.

Date of Survey 3rd-15th Nov. 1937.

(Type of Superstructures.)

Ship's Name "WIN ON" ex "Lake George"	Nationality and Port of Registry Chinese Shanghai	Official Number 215765	Gross Tonnage 2486	Date of Build 1917
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Name of Surveyor G. Drummond and J. G. Buchanan

Particulars of Classification
Reinstatement of class contemplated.

Moulded Dimensions: Length **253.5** Breadth **43.5** Depth **27.5**
Moulded displacement at moulded draught = 85 per cent. of moulded depth **5740** tons
Coefficient of fineness for use with Tables **.78**

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	27.5	(a) Where D is greater than Table depth (D-Table depth) R =		Moulded Breadth (B)	43.5
Stringer plate	.04	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Standard Round of Beam = $\frac{B \times 12}{50}$	10.5
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$		If restricted by superstructures		Ship's Round of Beam	13.0
Depth for Freeboard (D) =	27.54			Difference	2.5
				Restricted to	
				Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right)$	=

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	116	116	7.5	-	116
„ overhang					
R.Q.D. enclosed	✓				
„ overhang					
Bridge enclosed	✓				
„ overhang aft					
„ overhang forward					
F'cle enclosed	26.25	26.25	7.5	-	26.25
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft					
„ „ forward					
Total					

Standard Height of Superstructure _____
„ „ R.Q.D. _____

Deduction for complete superstructure _____

Percentage covered $\frac{S}{L} =$ _____
„ „ $\frac{S_1}{L} =$ _____
„ „ $\frac{E}{L} =$ _____

Percentage from Table, Line A. _____
(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 = _____

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1		17		1	
$\frac{1}{4}L$ from A.P.		4		1		4	
$\frac{2}{4}L$ „		2		-1		2	
Amidships		4		-		4	
$\frac{3}{4}L$ from F.P.		2		4.5		2	
$\frac{1}{4}L$ „		4		16.6		4	
F.P.		1		55		1	
Total							

Mean actual sheer aft = _____
Mean standard sheer aft = _____

Mean actual sheer forward = _____
Mean standard sheer forward = _____

Length of enclosed superstructure forward of amidships = _____
„ „ aft of „ = _____

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

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. Depth to Freeboard Deck = _____ Ft. Summer freeboard = _____ Moulded draught (d) = _____ Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = _____ Addition for Winter North Atlantic Freeboard (if required) = _____	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 = $\frac{\Delta}{40T}$ inches = _____	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient																				
		<table border="1"> <thead> <tr> <th></th> <th>+</th> <th>-</th> </tr> </thead> <tbody> <tr> <td>Depth Correction</td> <td></td> <td></td> </tr> <tr> <td>Deduction for superstructures</td> <td></td> <td></td> </tr> <tr> <td>Sheer correction</td> <td></td> <td></td> </tr> <tr> <td>Round of Beam correction</td> <td></td> <td></td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td></td> <td></td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td></td> <td></td> </tr> </tbody> </table> Summer Freeboard = _____			+	-	Depth Correction			Deduction for superstructures			Sheer correction			Round of Beam correction			Correction for Thickness of Deck amidships			Other corrections, scantlings, etc.
	+	-																				
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Other corrections, scantlings, etc.																						

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

Tropical Fresh Water Line above Centre of Disc	...	Tropical Fresh Water Freeboard	...
Fresh Water Line	„	Fresh Water	„
Tropical Line	„	Tropical	„
Winter Line below	„	Winter	„
Winter North Atlantic Line	„	Winter North Atlantic	„

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"WIN ON"

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

Description of Hatchway	HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS				To Bunker	To Steering Gear Compt.	Access To Holds
	ON UPPER DECK	ON POOP DECK	ON TRUNK TOP				
Dimensions of Hatchway	No.1 29.25' x 24'	No.2 29.25' x 24'	No.3 29.25' x 24'	No.4 29.25' x 24'	21" x 21"	21" x 21"	20" x 18'
COAMINGS	Height above Deck	28"	28"	28"	24"		
	Thickness Sides	.42	.42	.42	.42	3 1/2"	3 1/2"
	Thickness Ends	.38	.38	.38	.42		3 1/2"
	Stiffeners		10' x 3 1/2" x 21.9#				
Brackets, Stays		None					
HATCH BEAMS	Number	5	5	5	5		
	Spacing	4-10 1/2"	4-10 1/2"	4-10 1/2"	4-10 1/2"		
	Scantling and Sketch						
	Bearing Surface	5x3x.44	28x.43	23 1/2x.43	5x3x.44		
FORE AND AFTERS	Number	NONE					
	Spacing	NONE					
	Unsupported Lengths	NONE					
	Scantling and Sketch	NONE					
Bearing Surface	NONE						
HATCH COVERS	Material	Wood			Hinged Steel	Hinged Steel	Hinged Steel
	Thickness	2-3/4"			W.T.	W.T.	W.T.
	How fitted	F&A			Covers	Cover	Cover
	Bearing Surface	3					
Spacing of Cleats	24"						
Number of Tarpaulins	2						

*Are wood fore and afters steel shod at all bearing surfaces? -
 Are battens and wedges efficient and in good condition? Yes
 Are tarpaulins in good condition and in accordance with rule requirements? Yes
 Are lashings provided in accordance with rule requirements? Locking Bars provided

Particulars of fiddle, funnel and ventilator coamings :-
 Fiddle openings closed by strong steel hinged covers and bolt fastenings.
 Engine skylight of steel strongly constructed with bolt fastenings and coal shute closed with hinged steel cover and bolt fastenings.
 Stokehold and engine room ventilators and funnel are in good condition.

Particulars of Flush Bunker Scuttles :-
 NONE

Particulars of Companionways :-
 On poop deck fore end of deck house, steel companionway efficiently constructed leading to stokehold. Hinged steel W.T. doors capable of being opened from both sides.

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :-
 4 Hold vents on trunk top - coamings 12" to 24" x 18" x 3/8"
 2 vents in Poop Deck - 22" x 18" x 3/8"
 Wood plugs and canvas covers provided.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :-
 On trunk top from double bottom tanks - 3" dia. openings 4" above trunk top.
 On well deck from side tanks - 3" dia. openings 4" above deck.
 Wood plugs and canvas covers provided.

Particulars of Gangway Cargo and Coaling Ports :-
 NONE

Particulars of Scuppers and Sanitary Discharge Pipes :-
 One sanitary discharge from enclosed forecandle flap valve on ship side.
 Four sanitary discharges from enclosed poop flap valves on ships side.

Particulars of Side Scuttles :-
 Side scuttles in good condition and fitted with dead lights.

Particulars of Guard Rails :-
 On forecandle 3' 9" high - 3 bar rails - stanchions 4' apart
 On poop deck 3' 9" high - 3 bar rails - stanchions 5' apart.

Particulars of Gangways, Lifelines, etc. :-
 Life line provided across top of trunk.

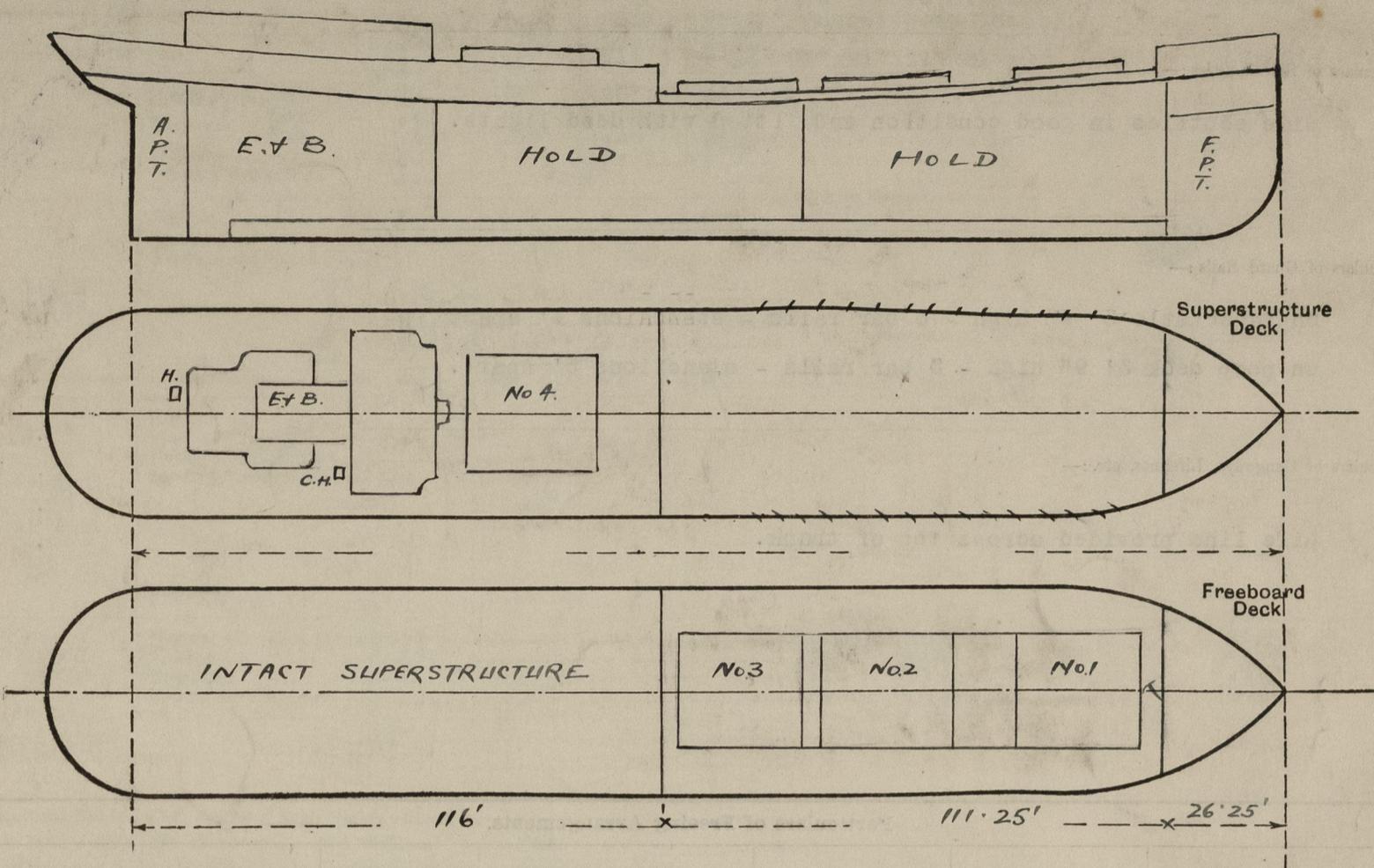
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	111' 0"	3' 0"	40" x 17" oval	4	17.4 sq.ft.	22 sq.ft.
Forward Well						

State position of each freeing port ... } After Well:- Lower edge 10" above deck
 (F. and A. position and height above deck edge) } Forward Well:-
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :- 4 vertical round bars on each
 Additional area where sheer is less than standard.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	.40	.36	8x3 1/2 x 21.5#	27"-29"	EKts. top & bottom	None	-	7.5
Raised Quarter Deck Bulkhead								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecandle Bulkhead	.32	.28	4x3 x 3/8 L	24"-26"	None	4'6"x2'3"	8" above trunk top	7.5
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Freeboard or Raised Quarter Decks								
Exposed Machinery Casings on Superstructure Decks	.30	.30	3x3 x 3/8 L	27"	EKts. at top extending below	None	-	7.5
Machinery Casings within Superstructures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships								

Poop Bulkhead	None
Raised Quarter Deck Bulkhead	-
Bridge, After Bulkhead	-
Bridge, Forward Bulkhead	-
Forecandle Bulkhead	Hinged steel W.T. door. Can be opened from both sides.
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	-
Exposed Machinery Casings on Superstructure Decks	-
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	-
Deckhouses on Flush Deck Ships	-

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



State any special features in the construction of the ship:—

Builder's name and yard number **Great Lakes Engineering Works No. 173**

Names of sister ships

Owners **Win On Steam Ship Co., Shanghai, China**

Fee **\$60.00**

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