

Lloyd's Register of Shipping

SURVEYS FOR FREEBOARD - STEAMERS

(Under the Provisions of the U. S. A. Load Line Act of March 2, 1929)

New York Office Index No. 127

Port of Survey... New York

Date of Survey... 1st March 1924

Name of Surveyor... John S. Heck

Ship's Name <i>Columbia</i>	Port of Registry and Nationality <i>New York</i>	Official Number <i>233677</i>	Gross Tonnage <i>24578</i>	Date of Build <i>1917</i>	Particulars of Classification <i>+1001</i>
Number in Register Book <i>72364</i>					Hull No. <i>391</i>
Owner... <i>Atlantic Transport Co. of Virginia</i>					
Moulded dimensions <i>670 x 78 x 49</i> (85% = <i>41.65'</i>)					
Moulded displacement at a moulded draught of 85 per cent. of moulded depth... <i>42,340 tons at 37' 11 1/2" draft</i>					
Coefficient of fineness for use with tables... <i>Tab.</i>					

DEPTH FOR FREEBOARD.		CORRECTION FOR DEPTH.		CAMBER	
Moulded depth	49.00	(a) When D is greater than $\frac{L}{15}$	$\frac{L}{15} = 44.66$	Standard	$\frac{78 \times 12}{50} = 18.72$
Stringer plate	0.4	$(D - \frac{L}{15}) \times R = (49.00 - 44.66) \times 3 = 13.20$		Ship	6.00
Sheathing in wells	0.2	(b) When D is less than $\frac{L}{15}$ (if allowed).		Difference	12.72
		$(\frac{L}{15} - D) \times R = \dots$		Restricted to	
Depth D =	49.06	If restricted by height of superstructures		Allowance = $\frac{\text{Difference}}{4} \times (1 - \frac{S}{L}) = 3.18 \times 1.45 = 4.61$	

SUPERSTRUCTURES.					
	Mean Covered Length S	Effective Length S _e (Uncorrected for Height)	Height.	Correction for Height.	Effective Length.
Poop enclosed					
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	573.50	572.73	9.5	✓	572.73
" overhang aft					
" overhang forward					
F'cle enclosed					
" overhang					
Trunks forward					
" aft					
Tonnage opening					
TOTAL =	573.50	572.73			572.73
Length of ship (L) =	670	670			670
% Covered... =	85.26	85.48			85.48
Corresponding % corrected for absence of forecastle if required } A =		B = 82.24			
Allowance ... =	4.21	x 12.24		Correction for Bridge less than 2 L if required } = -34.56	48

SHEER.					
Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.
A.P. 1	57.00	77.00	57.00	1	57.00
2	17.50	34.26	17.50	4	70.00
3	1.50	8.47	1.50	2	3.00
4				4	
5	16.50	16.94	16.50	2	33.00
6	60.00	68.52	60.00	4	240.00
F.P. 7	141.50	154.00	141.50	1	141.50
Mean effective sheer ...					18) 544.52
Standard sheer .05 L + 5 =					30.25
Difference (Df) ...					38.50
Allowance = Df x (.75 - $\frac{S}{2L}$) = 8.25 (.75 - $\frac{42.8}{670}$) = 3.22					8.25
If limited on account of amidship superstructure ...					+ 2.65
If limited on account of excess sheer (1 1/2 in. per 100 ft.) ...					✓

If excess sheer forward and deficient sheer aft:-

Actual sheer aft =

Standard sheer aft =

Actual sheer forward =

Standard sheer forward =

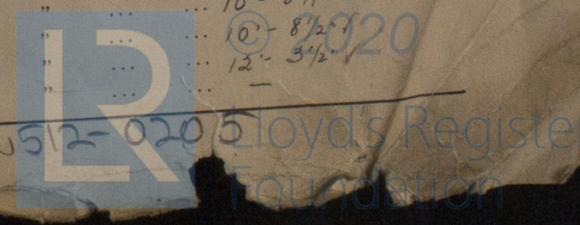
Length of enclosed superstructure L =

Forward of amidships =

Aft of amidships =

DRAFTS.		F. W. ALLOWANCE		TABULAR FREEBOARD (corrected for flush deck if required)	
Moulded Depth D =	49.00	Displacement =	42430	Corrected for Coefficient	$\frac{761 + 68}{1.36} = 1441$
Stringer Plate = <i>+2" kilosils</i>	2 1/2"	Tons per inch =	107.6	Correction for Depth	13.28
Freeboard	11.6"			" Superstructures	34.56
Moulded draught	37.8 1/2"			" Sheer	2.65
Addition for keel below base line	3"			" Camber	.46
Extreme draught	37.11 1/2"			" Thickness of deck	1.88
				" Scantlings, etc.	.52
				Summer Freeboard =	16.57
					137.99
					138.02

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:-			
Tropical Fresh Water Line (above center of Disc)	19 1/4"	Tropical Fresh Water Freeboard	9.10 3/4"
Fresh Water Line	9 3/4"	Fresh Water	10.8 1/4"
Tropical Line	9 1/2"	Tropical	10.8 1/2"
Winter Line (below " ")	9 1/2"	Winter	12.3 1/2"
Winter North Atlantic Line		Winter North Atlantic	



Note:—The Rules referred to below are the Load Line Regulations of the United States Department of Commerce.
(These should be consulted when completing the report.)

Is the poop or raised quarter deck connected with the bridge? no poop
 Has the poop or raised quarter deck an efficient steel bulkhead at the fore end? ✓
 Give particulars of the means of closing the openings in this bulkhead (Rules 43 and 44) ✓
 Has the bridge an efficient steel bulkhead at the fore end? connected with forecastle
 Give particulars of the means of closing the openings in this bulkhead ✓
 Has the bridge an efficient steel bulkhead at the after end? yes
 Give particulars of the means of closing the openings in this bulkhead Steel hinged doors & wood hinged doors
 Has the forecastle an efficient steel bulkhead at the after end? constructed with bridge
 Give particulars of the means of closing the openings in this bulkhead ✓
 Are the engine and boiler openings covered by a bridge, poop, raised quarter-deck, or enclosed by a strong steel deckhouse? By the bridge
 If the openings are not so protected, are the exposed parts of the casing efficiently constructed? ✓
 Give thickness of plating, scantlings and spacing of stiffeners ✓
 Are Rules Nos. 19, 20, 21 and 22 complied with (where applicable)? yes

Particulars of bulkheads of erections:

	Poop or Raised Quarter-Deck bulkhead	Bridge front bulkhead	Bridge after bulkhead	Forecastle bulkhead
Thickness of bulkhead plating			44	
Scantlings of stiffeners	✓	✓	L 7" x 3" x 1/2"	✓
Spacing of stiffeners, and if bracketed			31" No	
Height of sills of openings above deck			10"	

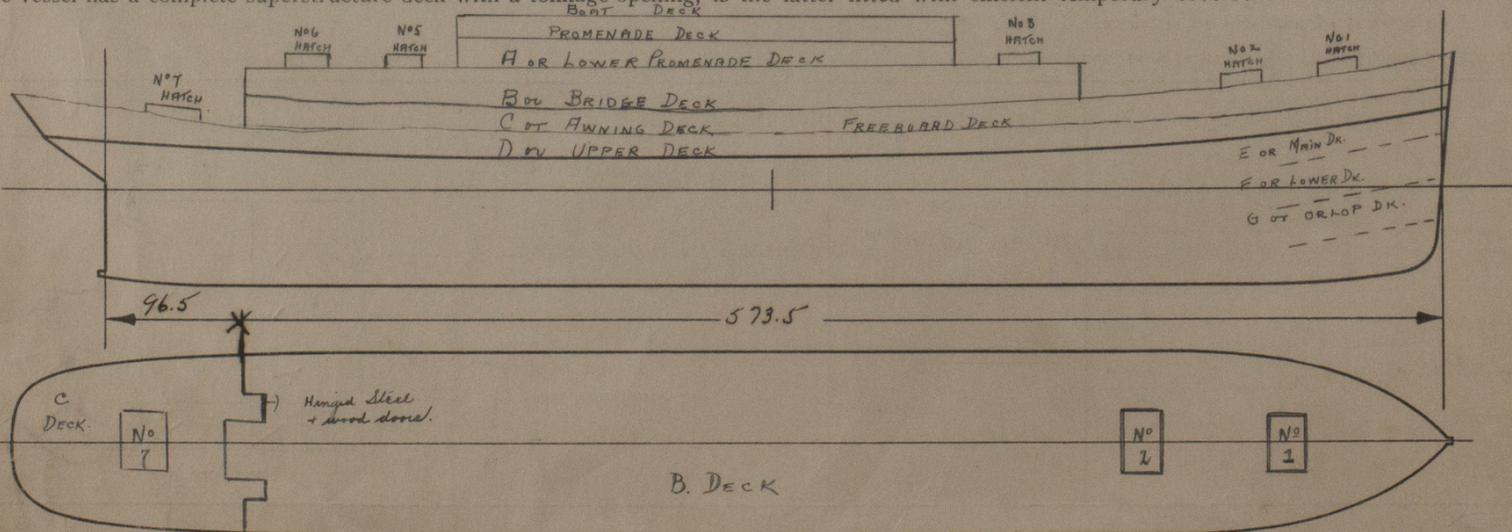
Particulars of weather deck hatchways. (In case of complete superstructure vessels having tonnage openings, give, in addition, particulars of 2nd deck hatchways, and also of those in bridge spaces closed by Class 2 appliances, or in open bridges).

Position and Size.	No. 1		No. 2		No. 3, 4, 5, 6		No. 7		Ship.	Rule.
	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.		
COAMING. Height above top of DECK	30	30	30	30			30	30		
Thickness	Sides.....	44	44	44	44		44	44		
	Ends.....	40	40	40	40		40	40		
SHIFTING BEAMS OR WEB PLATES.	Number.....	4	4	4	4	3	3			
	Section and Scantlings.....	6" F	12x6 x .44	12x6 x .44	12x6 x .44	12x6 x .44	12x6 x .44			
	Material.....	Steel	Steel	Steel	Steel	Steel	Steel			
* FORE AND AFTERS.	Number.....									
	Section and Scantlings.....									
	Material.....									
HATCHES Thickness	40		3"	3"			3"	3"		
Remarks.....	Steel		Wood	Wood			Wood	Wood		

* The depth of Fore and Afters should be stated from the underside of the hatches in all cases.

Are Rules 12, 13, 14, 15, 16, 17, 18 complied with as far as practicable? yes
 Are hatchway coamings stiffened in accordance with Rule 9? yes
 Length of bulwarks in wells—forward: _____ feet; aft: _____ feet. Open rails
 Area of freeing ports required by regulations (Rules 30 and 100) forward: _____ sq. ft.; aft: _____ sq. ft.
 No. Ft. x Ft.
 Particulars of freeing ports fitted on each side of vessel
 forward well } _____ sq. ft. ✓
 after well } _____ sq. ft. ✓
 Are Rules 23 and 24 complied with as far as practicable? yes
 Are air pipes to tanks in accordance with Rule 25? yes
 Are all scuppers and sanitary discharge pipes in accordance with Rule 27? yes
 In oil tankers, what is the extent of the fore and aft gangway? ✓ Are the crew berthed in the forecastle? (Rule 96) ✓
 Is the gangway strong and efficiently braced fore and aft? ✓ State spacing of supports _____ feet. ✓
 In oil tankers, are the bulwarks open for at least half the length of the exposed portion of the weather deck? (Rule 100) ✓
 Are Rules Nos. 95, 97, 98 and 99 complied with as far as practicable? ✓

If the vessel has a complete superstructure deck with a tonnage opening, is the latter fitted with efficient temporary covers?



Indicate thickness and extent of any deck covering, and extent of erections, with dimensions, showing overhang (if any).
 Indicate position of scuppers from tonnage-exempted spaces above freeboard deck.

Sister vessels: None

Fee: \$130.00

Expenses (if any): \$900

Signed: John S. Heck
 Surveyor to Lloyd's Register of Shipping.

Enclosure
 Dear Sir
 F.
 as below
 steamer
 original
 letter of
 Cablegram
 COLUMBIA
 PLEASE C
 OF SUPER
 FOR REPO
 Cablegram
 COLUMBIA
 6 FORECA
 5 SHEERS
 141 POIN
 42430 TO
 OF TWO I
 James Fr
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