

Lloyd's Register of British & Foreign Shipping.

SURVEYS FOR FREEBOARD.—STEAM SHIPS.

28 NOV 1928

32989.

10.076

PARTICULARS RELATING TO ALL STEAM SHIPS EITHER FLUSH DECKED, OR WITH TOP GALLANT FORECASTLES, SHORT POOPS AND BRIDGE HOUSES DISCONNECTED, OR WITH TOP GALLANT FORECASTLES HAVING LONG POOPS, OR RAISED QUARTER DECKS CONNECTED WITH BRIDGE HOUSES, OR OTHERWISE.

Port of Survey *Belfast.*
Date of Survey *Building*
Name of Surveyor *Gasf Rennie*

Harland & Wolff 14th Nov 806
Ship's Name. *T.M.S. "HIGHLAND CHIEFTAIN"*
Port of Registry and Nationality. *Belfast British*
Official Number.
Gross Tonnage.
Date of Build. *1929*
Particulars of Classification. *+ 100A1 with freeboard (contemplated)*

Registered dimensions from Ship's Register.	LENGTH.	BREADTH.	DEPTH.	UNDER DECK TONNAGE.
	<i>523.4'</i>	<i>69.4'</i>	<i>37.15'</i>	<i>11604.89</i>
Length on LOADLINE.	<i>520.0</i>	Frame Depth 7 Rule " 7- Insulation fitted	Ceiling fitted Sheer + 32 To DB at ends extended 39.96	Peak } Included Tanks } Raised DB in Machinery Space + 89 tons for Grains - 97 tons
CORRECTED DIMENSIONS.	<i>520.0</i>	<i>69.4</i>	<i>40.28</i>	<i>11596.89</i>

Co-efficient of fineness..... *.798.*
Any modification necessary [Para. 4 (a) to (e)]* *DOB*
Co-efficient as corrected *.78.*

Sheer { Stem..... *110"*
at { Sternpost... *45"* } $155.0 \div 2 = 77.5$... Mean *36/11.63*
2 Gradual 42.73
Sheer at $\frac{1}{2}$ of the length from { Stem *57.5*
Sternpost *23.5* } $81.0 \div 2 = 40.5$... Mean *32*
Gradual mean Sheer *72.69 - 50.12*
Standard mean Sheer [Table, Para. 18] *62.7 - 44.95* Correction
Difference..... *17.73* $\div 4 = 4.43$
§ If limited as Para. 18 (f)..... *-3" - 1 1/4"*

Rise in Sheer { At front of bridge house.....
from amidships {
[Para. 18 (e)] { At after end of forecastle
Fall in Sheer {
Para. 18 (d) { $\div 2 =$
Length uncovered Correction

ALLOWANCE FOR DECK ERECTIONS :—
Freeboard, Table C..... *9' - 7 3/4"*
Correction for Length, if required (Para. 12, 13, and 14) *- 0 1/4"*
Freeboard by Table A, corrected for shear, and for length, if required (Para. 12, 13, and 14) *12' - 7 1/2"*
Difference *3' - 2 1/2"*
Percentage as below..... *17.62 21.5%*
Correction for R. Q. Dk. if engine and boiler openings not covered by bridge house (Para. 11) *6 3/4"*
Allowance for Deck Erections *- 7 3/4"*

	Length.	Length allowed.	Height.
Forecastle.....	<i>101.0</i>	<i>96.20</i>	<i>8.0'</i>
Bridge House.....	<i>97.0</i>	<i>85.88</i>	<i>8.5'</i>
† Raised Qr. Dk.....	<i>✓</i>	<i>✓</i>	<i>✓</i>
Poop.....	<i>✓</i>	<i>✓</i>	<i>✓</i>
Total	<i>198.0</i>	<i>182.08</i>	<i>356</i>
Length of Ship	<i>520.0</i>	<i>520.00</i>	<i>278</i>
Corresponding percentage (Para. 12, 13, and 14)	<i>17.62</i>	<i>21.5%</i>	

FREEBOARD recommended amidships from centre of Disc to top of Statutory Deck Line/Wood (Deck) :—
Fresh Water Line above centre of Disc
Indian Summer Line " " "
Winter Line below " " "
Winter North Atlantic Line " " "

Moulded Depth as measured..... *43'-9"*
Rule wood dke less stringer $\frac{3}{4}$ "
Actual " " " " $\frac{2}{4}$ " -1
43'-8"

NOTE.— If the depth is measured when vessel is afloat, the details of measurement should be reported.

CORRECTION FOR LENGTH.

Length of Ship on Loadline..... *520.0'*
Length in Table *524.0'*
Difference *4.0'*
Correction for 10ft., Table A. *1.7* Table C. *.8*
× Difference divided by 10 *.68* (if required.) *.32*
If $\frac{1}{10}$ ths length covered divide by 2 *-3 1/4"* *-1/4"*

CORRECTION FOR IRON DECK.

Proportion covered, if less than $\frac{1}{10}$ ths length covered *En reduced*
Thickness of usual wood deck, less stringer *3 1/2"* *Mld Depth*
2 1/2" wood sheathing in Bridge etc 1 1/2" Asphalt where exposed.

CORRECTION FOR ROUND OF BEAM.

NOTE.— The round of beam should be reported on the full breadth of vessel at the gunwale.

Breadth at Gunwale amidships..... *69'-0"*
Round of Beam *6"*
Normal round..... *17 1/2"*
Difference *11 1/4" ÷ 2 = 5 3/8"*
Proportion of Deck uncovered (Para. 19) *6.19*
= 3.48 *+ 3 1/2"*

Freeboard, Table A *12' - 10 3/4"*
Correction for Sheer *- 2" - 1 1/4"*
12' - 7 3/4"
Correction for Length *- 0 3/4"*
12' - 7 1/2"
Allowance for Deck Erections *- 7 3/4"*
11' - 11 1/2"
Correction for Round of Beam..... *+ 3 1/2"*
12' - 23 1/2"

Correction for fall in Sheer (if any).....
2 1/2" Wood on Steel in Bridge etc 1 1/2" Asphalt
Correction for Deck (if required) *Allowed in Reduced Mld Depth*

Additions for non-compliance with provisions of Para. 11 (d) and (e) †
Other Corrections (if any) for Plankings and to correspond to approved moulded and subdivision draught of 28'-0" for all seasons *3' - 2 1/2" 6 1/2"*
16'-0"

Winter Freeboard
Summer Freeboard *16'-0"*
Indian Summer Freeboard
N. A. Winter Freeboard

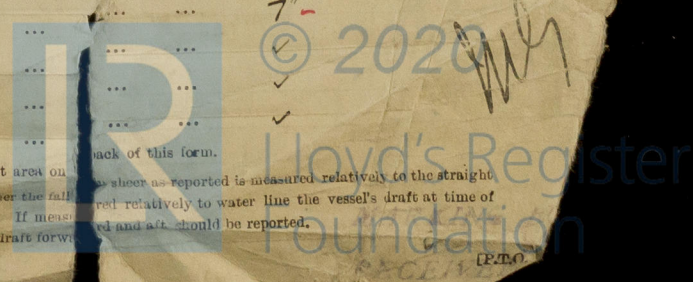
Correction necessary because clearside amidships, measured in accordance with the Statute is not taken at the intersection of the wood deck with side. *+ 1/2"*

Winter Freeboard from deck line
Summer " " " " *16'-0 1/2"*
Indian Summer " " " "
N. A. Winter " " " " *16'-0 1/2" for all seasons*

† If the frames, skin planking, or ceiling are of unusual thickness the breadth of vessel to inside of ceiling should be reported if possible.
† In vessels obtaining an allowance for deck erections under Para. 12, 13, and 14, the height of the R.Q.D. is to be taken from the level of the top of the amidship beam.
† In final-decked vessels the total standard mean sheer means the sheer measured at the stem and stern-post. In vessels having poops and forecastles, it means the sheer measured at points distant one eighth of the vessel's length from stem and stern-post.

† State dimensions of freeing port area on each side of the vessel as reported is measured relatively to the straight line of keel or to the water line. The Surveyor should state whether the freeing port area is measured relatively to the straight line of keel or to the water line. If measured relatively to the water line, the draft of vessel and draft should be reported.

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Do all the Frames extend to the top height in the Poop? ☒ Raised Quarter Deck? ☒ Bridge House? *Yes* Forecastle? *Yes*
 To what height do the Reverse Frames extend? *Channel & Bulk Angle frames*
 Has the Poop or Raised Quarter Deck an efficient Iron Bulkhead at the fore end? ☒
 Give particulars of the means for closing the openings in Bulkhead ☒
 Is the Poop or Raised Quarter Deck connected with the Bridge House? ☒ Has the Bridge House an efficient Bulkhead at the fore end? *Yes*
 Give particulars of the means for closing the openings in Bulkhead *Open alleyway at starboard side*
 What is the thickness of the Bridge Front plating? *.40* and Coaming plate? *.44*
 Give scantlings and spacing of the Stiffeners *9 1/2" x 3" x 50 Bulk Angles spaced 30" & 3 webs 30" x 40"*
 Are bracket plates fitted at each end of the Stiffeners? *Yes* Are hor'l. brackets fitted connecting Bridge Bulk'd. with Bulwarks? *No*
 Has the Bridge House an efficient Iron Bulkhead at the after end? *Yes with open alleyway*
 How are the openings closed? *Leak Doors open alleyway*
 Is the Forecastle at least as high as the main or top-gallant rail? *Yes* Has the Forecastle an efficient Iron ~~or Wood~~ Bulk'd. at after end? *Yes*
 Are the Engine and Boiler openings covered by a Bridge, Poop, Raised Quarter Deck, or enclosed by a Strong Iron or Steel Deckhouse? *Yes*
 If the openings are not so protected are the exposed parts of the Casings efficiently constructed? ☒
 Give thickness of plating; scantlings and spacing of Stiffeners ☒
 What is the height of the exposed Casings? ☒ Are suitable means provided for closing all openings in them in bad weather? ☒
 Are the Weather Deck Hatchways efficiently constructed and at least equal to the requirements of Section 28 of the Rules for 1904-5? Give particulars below:—

Requirements of Section 28 of the Rules of 1901 for Hatchways											
Position and Size.		N°1 22'-6" x 16'-0" on Fore Deck		N°2 24'-9" x 16'-0"		N°3 24'-9" x 16'-0"		N°4 20'-3" x 16'-0"		N°5 20'-3" x 16'-0"	
Item.		Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.
COAMING.	Height above top of DECK	21" <i>(Approved. (see letter 12/1/28))</i>		24"		18"		18"		18"	
	Thickness {	Sides.....	.44	.44		.44		.44		.44	
		Ends.....	.44		.44		.44		.44		.44
SHIFTING BEAMS OR WEB PLATES.	Number	5		5		5		2		2	
	Section and Scantlings	12 x 5 x 39 lbs I		2 webs 3 1/2" x 50 3 beams 12 x 5 x 39 lbs		2 webs 3 1/2" x 50 3 beams 12 x 5 x 39 lbs		2 webs 3 1/2" x 50		2 webs 3 1/2" x 50	
	Material	Steel.		Steel		Steel.		Steel.		Steel.	
* FORE AND AFTERS.	Number										
	Section and Scantlings	None		None		None		None		None	
	Material										
HATCHES Thickness		3"		3"		3"		3"		3"	
Remarks.....		Good		Good		Good		Good		Good.	

* When the Fore and Afters are of wood the depth should be stated from the underside of the hatches.

(If the sill of the lowest side scuttle will be less than 6 inches above the Indian Summer Load Line if assigned under the tables, state vertical distance from top of deck at side amidships to lower edge of lowest side scuttle.)

The following information is to be given in all Cases of vessels dealt with under Paras. 11, 12 (under 15 feet moulded depth) and under Shelter Deck Rules.
 What is the thickness of the Bridge Sheerstrake? *Strake between Main and Bridge Sheerstrakes?*

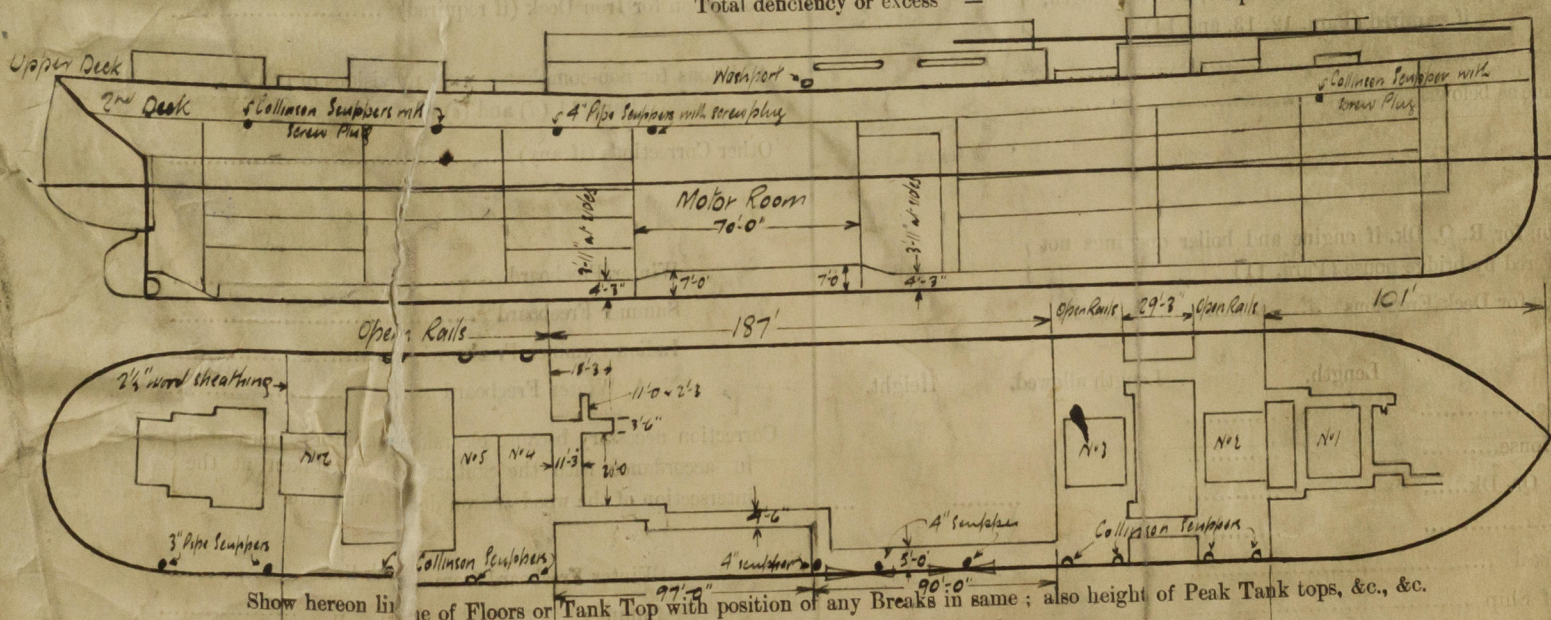
Delete the words { The Crew are, are not, berthed in the bridge house.
 that do not apply { The arrangements to enable them to get backwards and forwards from their quarters are, are not satisfactory.

Length of Bulwarks in well *Open Rails 90'-0" & Bulwark on Starboard side of Bridge*

Area of Freeing Ports required by Para. 11 (e) each side of vessel = *1.75* Sq. ft.

Ft. Tenths. Ft. Tenths. No. } Freeing Ports *(each side of vessel)* = *1.75* Sq. ft.

Total deficiency or excess = *1.75* Sq. ft.



State any special features in the construction of the Vessel. *(Sister vessel T.M.S. "Highland Monarch") - This vessel has a complete superstructure with tonnage opening with long bridge & forecastle above. All scuppers & discharges from 2nd deck are wrought iron pipes with brass strainers & valves on ship's side, discharging 30'-0" to 34'-0" above base line except as shown above. A sixth division load line of 28'-0" moulded has been assigned by the Board of Trade. See letter 4/7/28.*

Address

Fee £

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