

With or Without  
Disconnected Erections.

STEEL STEAMER.

Received at London Office FRI. 28 JAN. 1921

State if Report is also sent on the Machinery of the Vessel Yes.

Date of completion of report Jan. 27<sup>th</sup> 1921 Port of Aberdeen.  
Survey held at Aberdeen Date First Survey March 19<sup>th</sup> 1920 Last Survey Jan. 25<sup>th</sup> 1921.

On the (State if Single, Twin, or Triple Screw) Single Screw "Harlaw Plain". Rig Schooner.

TONNAGE under 303.65. CLASS 100.A.1. Master Ben Williams.

Do. between Tonnage Dk. and 3rd and 4th Dk. Breadth (greatest moulded) 25.0.

Total under Upper Dk. Depth at middle of length from top of keel to top of upper deck beams at side 12.0.

Do. of Poop Transverse Number 37.0.

Do. of R.Q. Dk. Length on deck from fore part of stem to after part of stern post 150.0.

Do. of Bridge House Longitudinal Number 5550.

Do. of Forecastle UPPER DECK = 9.50.

Do. of Houses on Dk. R.Q. Dk. = 13.00.

Do. of excess of Hatchways Depth "d" at middle of length (See Secs. 2 & 13) 12.50.

Do. above Crown of Engine Room Proportions—Depths to Length—Upper Deck Beam at side to top of keel 9.67.

Gross Tonnage 462.20.

Less Crew Space 33.23.

Net Tonnage 188.96.

Destined Voyage Boasting If Surveyed while Building, Afloat, or in Dry Dock First Entry.

Length on Deck 150.0. Breadth Moulded 25.0. Depth, Actual—Top of Floors to top of Upper Dk. Beams 10.0.

Moulded depth, ft. 19 ins. 0. To Bridge Dk. Round of Upper Dk. Beam, Actual 6 1/2 ins.

Moulded depth, ft. 12 ins. 0. To Upper Dk. Dk. Beam, Actual 6 1/2 ins.

Dimensions of Ship per Register, Length 150.1 breadth 25.2 depth 10.0.

FRAMING. AT UPPER DECK. RAME, Angles, or Bars amidships 1 1/2" 3" 32" 4 1/2" 3" 32".

Do. in peaks FORWARD & AFT 1 1/2" 3" 34" 4 1/2" 3" 34".

Do. in way of Double Bottoms at Solid Floors 1 3/4" 3" 28" 3" 3" 28".

Do. in way of RAISED QUARTER DECK 1 1/2" 3" 30" 4 1/2" 3" 30".

Do. in way of BOILER SPACE 1 1/2" 3" 30" 4 1/2" 3" 30".

INTERMEDIATE FRAMES FORWARD. Spacing of Frames from centre to centre amidships 2 1/2" 2 1/2" 2 1/2".

Do. in way of length to Collision bulkhead 2 1/2" 2 1/2" 2 1/2".

Do. in way of length to Collision bulkhead in peaks 2 1/2" 2 1/2" 2 1/2".

REVERSED FRAME, Angles 1 3/4" 3" 28" 3" 3" 28".

Do. in way of Double Bottoms at Solid Floors 1 3/4" 3" 28" 3" 3" 28".

Do. in way of Double Bottoms at Solid Floors 1 3/4" 3" 28" 3" 3" 28".

FRAMING, depth of girder 4 1/2" x 5" 4 1/2" x 5".

FLOORS, depth and thickness of Floor Plate 1 1/2" x 30" 1 1/2" x 30".

Do. in way of Engine and Boiler Spaces 34 ENGINES. 40 BOILERS.

Do. in way of thickness at the ends of vessel straight across as per plan.

Do. in way of depth at 1/2 the half breadth, as per Rule.

Do. in way of height extended at the Bilges 28" 28".

FLOORS in Cell. Double Bottoms 28" 28".

Do. state if flanged (top & bottom) no. no.

Do. Spacing of Solid floors 2 1/2" 2 1/2".

CENTRE GIRDER, in Dbl. bottom, dpth. & thickness 30" x 36" 30" x 36" to 30".

Do. Angles, Top SINGLE 3 1/2" 3 1/2" 36" 3 1/2" 3 1/2" 36".

Do. Angles, Bottom DOUBLE 3 1/2" 3 1/2" 36" 3 1/2" 3 1/2" 36".

Do. Angles, to Floors SINGLE 3" 3" 28" 3" 3" 28".

Do. Brackets at intermdt. frng. width & thickness 5" 5" 40" SINGLE.

DE GIRDERS, number on each side & thickness ONE 28" ONE 28".

Do. state if flanged (top and bottom) 3" FOR 1/2 L. 3" FOR 1/2 L.

Do. Angles (top and bottom) 3" 3" 28" 3" 3" 28".

Do. to Floors 2 1/2" 2 1/2" 28" 2 1/2" 2 1/2" 28".

MARGIN PLATE, depth (exclusive of flange) 20" x 27" x 30" 20" x 27" x 30".

Do. and thickness 3" 3" 30" 3" 3" 30".

Do. Angle to Outside Plating 3" 3" 28" 3" 3" 28".

Do. Floors SINGLE 3" 3" 28" 3" 3" 28".

Do. Brackets at intermdt. frng. width & thickness 5" 5" 40" SINGLE.

Do. Height of Outside Brackets above at bilge 2" 2".

INNER BOTTOM PLATING, breadth and thickness 30" x 34" FOR 1/2 L. TO 30" AT ENDS 30" x 34" FOR 1/2 L. TO 30" AT ENDS.

Do. in Engine and Boiler space 30" x 34" FOR 1/2 L. TO 30" AT ENDS 30" x 34" FOR 1/2 L. TO 30" AT ENDS.

Do. Remainder in Holds 28" 28".

BEAMS, Upper Deck, Single Angle, Bulb 1.5" 3" 30" 5" 3" 30".

Do. Angle, Plate, Tee Bulb, or Channel 1.5" 3" 30" 5" 3" 30".

Do. In way of Long Bridge HALF BEAMS 1.5" 3" 30" 5" 3" 30".

Do. AT HATCH ENDS 1.5" 3" 30" 5" 3" 30".

Do. Spacing 2 1/2" 2 1/2" 2 1/2" 2 1/2" 2 1/2" 2 1/2".

BEAMS, Second Deck, Single Angle, Bulb 1.5" 3" 30" 5" 3" 30".

Do. Angle, Plate, Tee Bulb, or Channel 1.5" 3" 30" 5" 3" 30".

Do. Spacing 2 1/2" 2 1/2" 2 1/2" 2 1/2" 2 1/2" 2 1/2".

BEAMS, Third and Fourth Deck, Single Angle, Bulb 1.5" 3" 30" 5" 3" 30".

Do. Angle, Plate, Tee Bulb, or Channel 1.5" 3" 30" 5" 3" 30".

Do. Angles on upper edge 1.5" 3" 30" 5" 3" 30".

Do. Spacing 2 1/2" 2 1/2" 2 1/2" 2 1/2" 2 1/2" 2 1/2".

BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate, Tee Bulb, or Channel 1.5" 3" 30" 5" 3" 30".

Do. Angles on upper edge 1.5" 3" 30" 5" 3" 30".

Do. Spacing 2 1/2" 2 1/2" 2 1/2" 2 1/2" 2 1/2" 2 1/2".

Do. on alternate frames 2 1/2" 2 1/2" 2 1/2" 2 1/2" 2 1/2" 2 1/2".

Do. on alternate frames 2 1/2" 2 1/2" 2 1/2" 2 1/2" 2 1/2" 2 1/2".



WEB FRAMES. In Fore Body, No. and spacing. WEB-FRAMES, In E. & B. Space, No. and spacing. WEB-FRAMES, In After Body, No. and spacing. BRACKET PLATES to Stringers between Web Frames, depth and thickness. BULKHEADS. W.T. BULKHEADS. AFTER PEAK. PARTITION. LONGITUDINAL. PLATING. STRAKES. RIVETING. BUTTS. Upper Deck Stringer Plate. Second Deck Stringer Plate. FRAMES extend in one length from centre line to Margin. REVERSED FRAMES on floors and frames extend from centre line to Margin plate in Double Bottom. MASTS, SPARS, &c. TOP MASTS AND LOWER MASTS IN ONE. Bowsprit. Rigging, Material and Size, Shrouds Fore. Sails.

EQUIPMENT No. 6202. LETTER G. ANCHORS. TONNAGE U. K. OR PLATING No. FOR TRAWLERS. CHAIN CABLES. HAWSERS AND WARPS. Boats. Pumps. Windlass. Engine Room Skylights. Coal Bunker Openings. Number of Scuppers. Ceiling in Holds. Cargo Hatchways. State size No. 1 Hatch. Number of Web Plates. Bulwarks. Correspondence. Workmanship. Is the riveted work properly closed? Are the liners between the frames and plates solid single pieces? Are the butts of Plating, Stringers, &c., properly shifted and strapped? Have all the upper and weather decks been tested as required by the Rules (Sec. 26, par. 20)? Have all the gutterways been tested as required by the Rules (Sec. 26, par. 20)? General Remarks. This vessel has been built under Special Survey, and in accordance with the Secretary's letters, the Rules, and approved plans, for the intended class 100.A.1. The Materials and Workmanship are good. The following approved plans are forwarded herewith:- Profile, Midship Section and Deck plan. Stern frame + Rudder. Fore end stiffening, and Pumping arrangement, together with Reports on Screw frame and Rudder. Committee's Minute. Character assigned.



GENERAL REMARKS—(continued).

PARTICULARS FOR RECORD in the REGISTER BOOK. Length of Peep ☒ ft., R.Q.D. 86.16 ft., Bridge 10.91 ft., Forecastle 24.25 ft. (in feet and tenths). When the Peep is joined to the B.D., this should be distinctly stated.

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it should appear in the Register Book). One deck. Steel.

Official No. 144798. ; Signal Letters. State if Machinery is fitted aft Yes.

How are the surfaces preserved from oxidation? Inside Portland cement + paint. Outside Paint.

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system or with girders on floors.

Where Fitted.			*Length.	Water Capacity.	Where Fitted.			*Length.	Water Capacity.
			Feet.	Tons.				Feet.	Tons.
Double bottom, aft,	N <sup>o</sup> 2.		37.62.	51.	Fore peak tank,			18.0.	40.
Double bottom, under Engines and Boilers,			✓	✓	After peak tank,			7.5	17
Double bottom, if under Engines only,			✓	✓	Deep tank, aft,			✓	✓
Double bottom, if under Boilers only,			✓	✓	Deep tank, forward,			✓	✓
Double bottom, forward,	N <sup>o</sup> 1.		46.58.	53.	Other tanks, if fitted,			✓	✓
			Total capacity of double bottom	104.				(If necessary furnish further information by sketch.)	✓

\* The wells are not to be included in the lengths of the tanks.

State whether the above have been tested as required by the Rules. Yes.

Order for Special Survey No. 1663.

Date 4-3-20

No. 89. in builder's yard.

DATES of Surveys held while building

1920 = Mar. 19. 23. 26. Apr. 7. 14. 23. May. 4. 14. 17. 27. June 4. 10. 19. 23. July 8. 15. 29. Aug. 7. 30. Sept. 10. 16. 22. 27. Oct. 7. 11. 21. 22. Nov. 3. 4. 17. 19. 25. Dec. 1. 2. 6. 8. 9. 13. 14. 17. 23. 27. 30. 1921 = Jan. 5. 10. 11. 14. 17. 18. 21. 24. 25.

Surveyor's Signature

J. Richardson

Total No. of Visits 52.