

## STEEL STEAMER or MOTORSHIP.

Received at London Office

State if Report has been sent on the Freeboard of the Vessel *Yes*State if Report is sent on the Machinery of the Vessel *Yes*Date of completion of report *Aug. 18<sup>th</sup>*Port of *Halifax, N.S.*No. *2179*Survey held at *Halifax, N.S.*Date First Survey *July 23<sup>rd</sup>, 1929*Last Survey *August 8<sup>th</sup>* 1930On the *Steel Steam Ship "H.B. McLean"*State Type *Icebreaker, Cruiser stern*State Type of Erections *House*TONNAGE under  
Tonnage Deck...*2906.84*CLASS *100A1 Class Contingent*State if with freeboard  
as condition of ClassBuilt at *Halifax, N.S.*Do. of space or spaces  
between Tonnage Dk.  
and Upper Dk.Length from fore part of stem to after part of stern }  
rest on summer L.W.L. See Sec. 3 (1a) } L *260*Breadth (greatest moulded) ..... B *60*Depth of middle of length from top of keel to top  
of beam at side of uppermost continuous  
deck. See Sec. 3 (1c) ..... D *31*1st Longitudinal Number (L x D) ..... = *8243.5*2nd Numeral L x (B + D) ..... = *24198.7*Framing Depth "d," at middle of length. See  
Sec. 3 (1d) ..... *19.5*Proportions—Depth to Length—Uppermost con-  
tinuous deck to top of keel ..... *8.5*Do. Long Bridge to top  
of keel ..... *31*Draught Moulded ..... *31*Launched *February 17<sup>th</sup>, 1930* Yard No. *5*Builders *Halifax Shipyard, Ltd.*Owners *Canadian Government*

Managers

(Where necessary to be entered in Reg. Book.)

Residence

Port of Registry *Ottawa*

If surveyed while building, afloat, or in dry dock

*Building.*

## FRAMES, DOUBLE BOTTOM AND BEAMS.

	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
FRAMES, Spacing amidships	<i>24"</i>		Bracket Floors, Frame	<i>L 6 x 3 1/2 x 40 to W.T. side girder</i>	
" " from 3/4 length to Collision bulkhead	<i>18" x 15"</i>		" " Reversed Frame	<i>L 6 x 3 1/2 x 36 W.T.G. 5 margin plate</i>	
" " in peaks	<i>FORE 15"</i> <i>AFT 18" x 15"</i>		" " Vertical Struts	<i>L 6 x 3 1/2 x 40 to W.T. side girder</i>	
IDE FRAMING.			Centre Girder, depth and thickness amidships	<i>ER 4-5 1/2 x 48</i>	
Frame Amidships, Angle, E or C	<i>10 1/2 x 4 x 50</i>		" " top Angles	<i>3 1/2 x 3 1/2 x 44</i>	
" " Extends up to	<i>upper dk</i>		" " bottom Angles	<i>4 x 4 x 54 to 50 aft</i>	
Intermediate Reversed Frame Amidships, Angle	<i>10" x 4" x 60"</i>		Side Girders, No. each side and thickness	<i>2</i>	
" " Extends up to	<i>from A to E stringer</i>		Margin Plate depth (excl. of flange) and thickness	<i>36" x 42"</i>	
Depth of Framing Girder	<i>10 1/2"</i>		" " Vertical Angle to Tank side Bracket abaft 1/4 len. from stem	<i>3 1/2 x 3 1/2 x 46 in way of bunks</i>	
Frames in Uppermost Continuous 'tween Decks, Angle, C or E			" " Vertical Angle to Tank side Bracket forward 1/4 len. from stem	<i>3 1/2 x 3 1/2 x 36</i>	
" " Second 'tween Decks, Angle, C or E			" " Gussets, spacing and scantling abaft 1/4 len. from stem	<i>24 x 16 x 36 every frame</i>	
" " Third " " " "			" " Gussets, spacing and scantling forward 1/4 len. from stem	<i>24 x 16 x 36 " "</i>	
Framing in Peaks, Angle, C or E	<i>10 1/2 x 4 x 50"</i>		Tank Side Brackets, height above base line at toe of frame and thickness	<i>5-6" x 36</i>	
Diameter and Spacing of Rivets through Frame and Shell Plating amid- ships	<i>7/8" dia. in way of ice belt</i> <i>5 1/2" dia. in way of bunks</i> <i>7" channels</i>		INNER BOTTOM PLATING.		
State if Frame Joggled	<i>Yes, except in peaks</i>		Breadth and thickness of Middle Line Strake	<i>48" x 44" to 40 at ends</i>	
ANTING ARRANGEMENTS (Sec. 7), state system and particulars	<i>Deep floors, stringers &amp; webs</i>		Thickness of remainder in Holds	<i>.36</i>	
STRENGTHENING OF BOTTOM FOR- WARD. State Particulars	<i>Side girders, deep floors, etc.</i>		Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunks and Boiler Room? <i>Yes</i>		
DOUBLE BOTTOM.			BEAMS.		
Floors, Depth and thickness at mid-line in Holds			Uppermost Continuous Deck, amidships in Wells, Angle, E or C	<i>10 x 3 1/2 x 52</i>	
Height of Brackets at side above base line at toe of frame			" " in way of Bridge, Angle, E or C	<i>8 x 3 1/2 x 50</i>	
Middle Line Keelson, on Floors, Angles, C or E			Spacing	<i>24"</i>	
" " Through Plate or Intercoastal Plate			Second Deck, amidships, Angle, E or C	<i>9 x 3 1/2 x 50 all the way</i>	
" " Foundation Plate on Floors			Spacing	<i>24"</i>	
" " Flat Plate Keel Angles			Third Deck, amidships, Angle, E or C	<i>9 x 3 1/2 x 50</i>	
Side Keelsons, No. each side			Spacing	<i>24"</i>	
" " thickness of Intercoastal Plate			Fourth Deck, amidships, Angle, C or E		
" " Angles			Spacing		
DOUBLE BOTTOM.			Poop Deck, Angle, C or E		
Solid Floors, thickness and spacing	<i>ER hold .36</i>	<i>floor 24"</i>	Spacing		
" " Are Frame and Reversed Frame joggled? <i>Yes</i>			Bridge Deck, Angle, E or C	<i>8 x 3 x 40</i>	
Bracket Floors, breadth and thickness at middle line	<i>31" x 36"</i>	<i>as in BS.</i>	Spacing	<i>48"</i>	
" " breadth and thickness at margin plate	<i>31" x 36"</i>	<i>as in BS.</i>	Forecastle Deck, Angle, E or C	<i>8 x 3 x 40</i>	
			Spacing	<i>30"</i>	



## PILLARS AND DECKS.

	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
<b>PILLARS, No. of Rows</b> .....					
" in 'tween Decks, Size and Spacing.....	4 1/2 x 7/16	6 ft apart			
" " " " " ".....	5 1/2 x 7/16	" "			
" in Holds " " " " " ".....	6 1/2 x 9/16	" "			
" " " " " " " ".....					
<b>Centre Line Bulkhead.</b>					
Stiffeners and Spacing.....					
Plating, thickness of .....					
<b>STRINGERS AND DECKS.</b>					
<b>Uppermost Continuous Deck.</b>					
Stringer Plate, breadth and thickness in Wells.....	48" x .52"				
" " " " " in way of Bridge.....	48" x .52"				
" Angle in Wells .....	5" 5" .52"				
Thickness of Plating abreast Deck openings) in way of Wells .....	.30				
Thickness of Plating abreast Deck openings) in way of Bridge .....	.30				
Thickness of Plating within line of openings.....	.30 x .34 over O.F. tanks				
If Sheathed, material and thickness .....	5" x 3 1/2" B.C. Fir				
<b>Main Second Deck.</b>					
Stringer Plate, breadth and thickness in Wells.....	60" x .50"				
Stringer Plate, breadth and thickness in way of Bridge.....					
Thickness of Plating within line of openings.....					
If Sheathed, material and thickness .....					
<b>Third Deck.</b>					
Stringer Plate, breadth and thickness.....	48" x .50"				
If Plated, state thickness.....	.30, and 1 1/8" in way of clew				
<b>Fourth Deck.</b>					
Stringer Plate, breadth and thickness.....					
If Plated, state thickness .....					
<b>Poop Deck.</b>					
Stringer Plate, breadth and thickness .....					
Plating, Sheathing, material and thickness ...					
<b>House Bridge Deck.</b>					
Stringer Plate, breadth and thickness.....	39" x .38"				
Plating, Sheathing, material and thickness ...	tin plates .32" x 5 x 2 1/2 B.C. Fir				
<b>Forecastle Deck.</b>					
Stringer Plate, breadth and thickness.....	39" x .38"				
Plating, Sheathing, material and thickness ...	tin plates .32" x 5 x 3 1/2 B.C. Fir				

## SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES. State if jogged?			BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.		NO. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.			Diam.	Spacing cr. to cr.		Diam.	Spacing cr. to cr.	
	Inches.	Inches.	Inches.	Inches.		Inches.	Inches.		Inches.	Inches.		
FLAT PLATE KEEL .....	48"	.74	.74	.64		#	7/8" 1"	3 1/2" 4"	#	7/8" 1"	3 1/2" 3 1/2"	inside strapped
„ DBLG. (if any)	.56 from 1/2 L aft to stem											
BOTTOM PLATING, No. of Strakes .....	.56	1 1/4	.46			#	7/8" 1 1/8"	3 1/2" 4 1/2"	# 6 #	7/8" 1 1/8"	3 1/2" 3 1/2"	Lapped 30 inside strapped fwd.
BIDGE PLATING, No. of Strakes .....	.56	1 1/4	.52			"	"	"	"	"	"	"
SIDE PLATING, No. of Strakes .....	.56	1 1/4	1 1/8			"	"	"	"	"	"	"
UPPER DECK, Sheer-strake in Wells .....	1.00	1 1/4	1 1/8		Scallop plank plating	#	1 1/2"	4 1/2"	#	1 1/2"	3 1/2"	
UPPER DECK, Sheer-strake in Bridge ...	.58	.42	.42			#	1	4	#	3/4" 7/8"	2 1/8" 3 1/8"	Lapped
STRAKE BELOW Sheer-strake in Wells .....	.80	1.00	1.00			#	1 1/8"	4 1/2"	#	1	3 1/2"	Lapped
STRAKE BELOW Sheer-strake in Bridge ...												
POOP SIDE PLATING .....												
BRIDGE SIDE PLATING ...	.38					+	3/4"	3	#	3/4"	2 1/8"	Lapped
FORE'C'TLE SIDE PLATING	.38					+	3/4"	3	#	3/4"	2 1/8"	Lapped

## WATERTIGHT BULKHEADS.

Total No. of <b>W.T. BULKHEADS</b> in Vessel—				
Extending to Upper Deck (Sec. 3 c)		6		
" Deck next below		1		
As per Rule		As approved		
		Plating Thickness.	STIFFENERS.	
			VERTICAL. Scantlings. Spacing.	HORIZONTAL. Scantlings. Spacing.
MIDSHIP BULKH'D, Upper tween decks		26	L 23 x 34	30"
"	" Second "			
"	" Third "			
"	" Holds .....	26 x 30	L 8 x 2 1/2 x 50	22 15" x 38 gilder
COLLISION	" (in Hold) .....	46	L 9 x 3 x 46	24 L 9 x 3 x 46 48"
AFTER PEAK	" " .....	(see plan)	L 9 x 3 x 50	24

## FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any departure from approved plans to be noted.
<b>KEEL, Bar</b> .....				
<b>STEM</b> .....	Casting	as per plan	Canadian Steel Foundries Ltd	
<b>STERN FRAME</b> { Propeller Post .....	"	"	"	
{ Rudder .....	"	"	"	
<b>RUDDER—A × D</b> ..... 6'00				
<b>Speed of Vessel</b> ..... 15 1/4 kts				
<b>RUDDER</b> mainpiece at head ...	Casting	10 1/2 × 9	as per plan	
" " heel ...	"	5 × 9		
" how constructed .....	Cast Steel	Frame		
" double or single plate .....	Double			
" coupling, vertical or horizontal.....	Horizontal			

## STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) *Open Hearth*  
*B. Whittle Iron Co., Vicksburg Iron Co., Redding Iron Works, Birmingham Iron Works, Cleveland Steel Works, Consett Iron Co. Ltd.*  
*South Durham Steel Iron Co. Ltd. Doncaster, Longdon Co. Ltd. Householder Steel and Coal Co. Ltd.*  
 Has the Steel been tested as required by the Rules? *Yes.*

Has the Steel been tested as required by the Rules?







GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

Particulars of **Drop Test** of Cast Steel Anchors, viz.:—  
Weight, Surveyor's Initials,  
Number of Certificate, Date  
of Test.

1st Bower  
2nd "  
3rd "

*Forged Leads*

**PARTICULARS FOR RECORD in the REGISTER BOOK.**—Length of Poop          ft., R.Q.D.          ft., Bridge          ft., Forecastle 68 ft.  
(in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated

No. and Material of Decks (this information is to be given as it should appear in the Register Book) 2 decks, steel, ft 3<sup>rd</sup> deck, steel

Official No. 156510 ; Signal Letters TRBL

Is bottom of Vessel coated with cement Yes if not give

particulars of composition

**PARTICULARS OF WATER BALLAST.—**

PARTICULARS OF WATER CAPACITY.			PARTICULARS OF WATER CAPACITY.		
Where Fitted.	*Length.	Water Capacity.	Where Fitted.	*Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft,			Fore peak tank,	19	77.7
Double bottom, under Engines and Boilers,			After peak tank,	28	200.2
Double bottom, if under Engines only,	44'	142.37	Deep tank, aft,	24	276.3
Double bottom, if under Boilers only,	78'	261.86	Deep tank, forward,	19	96.19
Double bottom, forward,	42'	71.4	Other tanks, if fitted, Fresh water tanks, aft	5'3	22.56
Total capacity of double bottom		475.63	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. A17

Date

Oct. 22<sup>nd</sup> 1928

Dates of Surveys held while building

1929, May 23-24-25-29-30-31, July 4-6-13-14-21-22, Nov 1-29, Dec 3-5-8-9-10-11-12-15-16-20-22-23, May 3-4-13-14-17-18-29-31, Jun 5-7-10-13-14-17-18-19-20-22-27-28, July 2-3-4-15-17-18-19-23-29-30-31, Aug 1-2-6-7-8-9-19-20-21-22-23-27-29-30, Sept 3-4-5-6-10-12-13-16-18-19-20-23-24-25-26-28-30, Oct 2-3-4-5-8-10-11-21-26, Nov 6-7-8-13-15-16-18-19-23-25-26-29, Dec 2-3-5-10-16-20-21-27-28-30, 1930, Jan 11-13-15-23-24-31, Feb 1-3-4-7-8-10-15-17-18-19-22-24-25-28, Mar 3-4-5-6-11-12-13-14-15-17-22-24-25-29-31, April 1-6-5-7-12-14-17-21-25-26-29-30, May 1-2-3-5-6-7-9-10-12-17-19-20-23-26-28-29-30-31, Aug 1-2-5-6-7-8

Total No. of Visits 261