

STEEL STEAMER or MOTORSHIP.

Received at London Office. 2 DEC 1942

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 September 30th, 1942 Port of Vancouver, B. C. No. 5818

Survey held at Vancouver and North Vancouver, B. C. Date First Survey 19th June, 1942 Last Survey 28th September, 1942

On the (State if Motorship fitted Aft and if Single, Double or Triple Screw) Steel Single Screw Steamer "FORT RELIANCE"

State Type (State if Scantling, Complete Superstructure with or without Tonnage Openings) C.S.S. with T.O. closed

State Type of Erections

TONNAGE under Tonnage Deck... 6704.14

Do. of space or spaces between Tonnage Dk. and Upper Dk.

Total

Gross Tonnage 7133.51

Register Tonnage 4243.49

CLASS *100 A1 with Freeboard corresponding to a Summer Mid. Dft. of 26'-10".

Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a) 416.00

Breadth (greatest moulded) 56.88

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) 37.33

Depth to 2nd Deck 28.58

1st Longitudinal Number (L x D) 15529

2nd Numeral L x (B + D) 39191

Framing Depth "d," at middle of length. See Sec. 3 (1d) 25.08

Proportions—Depth to Length—Uppermost continuous deck to top of keel 11.14

Do. Long Bridge to top of keel

Draught Moulded 26.86

Built at Vancouver and North Vancouver, B.C.

Launched 22nd August, 1942 and No. 145 (South Yd.)

Builders Burrard Dry Dock Co. Ltd.

Owners Minister of Munitions & Supply of Canada.

Managers Allan, Black & Co. (Where necessary to be entered in Reg. Book.)

Residence Sunderland

Port of Registry

If surveyed while building, afloat, or in dry dock

Building and afloat.

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.....	30		Bracket Floors, Frame	-	
" " from $\frac{3}{8}$ length amidships to Collision bulkhead.....	27		" " Reversed Frame	-	
" " in peaks	24		" " Vertical Struts	-	
DE FRAMING.			Centre Girder, depth and thickness amidships	43½ x .54	
Frame Amidships, Angle, [or]	12x4x4x.47		" " top Angles	3½ 3½.44	
" " Extends up to.....	2nd Deck.		" " bottom Angles	4 4 .50	
Reversed Frame Amidships, Angle.....	-		Side Girders, (No. each side and thickness.....	One	
" " Extends up to.....	-		(B.A.S. Top & Bottom	6 3½.44	
Depth of Framing Girder.....	12		Margin Plate depth (excl. of flange) and thickness	40½ x .54	
Frames in Uppermost Continuous 'tween Decks, Angle, [or]	6 3½ .50		" " Vertical Angle to Tank side Bracket abaft ¼ len. from stem	Welded to Tank side Brackets	
" " Second 'tween Decks, Angle, [or]	-		" " Vertical Angle to Tank side Bracket from forward ¼ len. from stem to Panting Area	10½x.40"(FL. 2")	
No.1 Hold (Frs.135-162).....	15x4x4x.625		" " Gussets, spacing and scantling abaft ¼ len. from stem	Continuous	
No.2 Hold (Frs.106-135).....	12x4x4x.625		" " Gussets, spacing and scantling from forward ¼ len. from stem to Panting Area	17"x.40"(FL 2")	
from ½ len. for'd. to 15% len. from Stem	-		" " Frame 144.	Continuous	
in Peaks, Angle or [.....	8 3½ .34		" " FR.144 to F.P. Bnd.	104½ x .45	
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	¾ At 6½ Dias.		Tank Side Brackets, height above base line at toe of Frame and thickness	-	
State if Frame Joggled	No		INNER BOTTOM PLATING.		
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	Yes		Breadth and thickness of Middle Line Strake.....	84 x .48	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	Yes		Thickness of remainder in Holds44	
ANGLE BOTTOM.			Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room?	Yes	
Floors, Depth and thickness at mid-line in Holds			BEAMS.		
Height of Brackets at side above base line at toe of frame			Uppermost Continuous Deck, amidships (in Wells, Angle, [or]	8 3½.46	
Middle Line Keelson, on Floors, Angles, [or]			" " in way of Bridge, Angle, [or]	-	
" " Through Plate or Intercoastal Plate....			Spacing	Every Frame	
" " Foundation Plate on Floors			Second Deck, amidships, Angle, [or]	9x3½x.38	
" " Flat Plate Keel Angles			Spacing	12x4x4x.47	
Side Keelsons, No. each side			Third Deck, amidships, Angle, [or]	Every Frame	
" " thickness of Intercoastal Plate....			Spacing		
" " Angles			Fourth Deck, amidships, Angle, [or]		
DOUBLE BOTTOM.			Spacing		
Solid Floors, thickness and spacing36" at 30"		Poop Deck, Angle, [or]		
" " Are Frame and Reversed Frame joggled?	Yes		Spacing		
Bracket Floors, breadth and thickness at middle line	-		Bridge Deck, Angle, [or]		
" " breadth and thickness at margin plate	-		Spacing		
			Forecastle Deck, Angle, [or]		
			Spacing		

PILLARS AND DECKS.				
	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.
PILLARS, No. of Rows One- in tween decks only.			Stringer Plate, breadth and thickness in way of Bridge	- - -
" in 'tween Decks, Size and Spacing	6 6 6 on alt. frs.		Thickness of Plating abreast Deck openings in way of Well	.35
" " " "	- - -		Thickness of Plating abreast Deck openings in way of Bridge	- - -
" in Holds	- - -		Thickness of Plating within line of openings	.34
" " " "	- - -		If Sheathed, material and thickness	
Centre Line Bulkhead, in H _o /95.			Third Deck.	
Stiffeners and Spacing	12x4x4x7/16" on alt. frs.		Stringer Plate, breadth and thickness	
Plating, thickness of	.30		If Plated, state thickness	
STRINGERS AND DECKS.			Fourth Deck.	
Uppermost Continuous Deck.			Stringer Plate, breadth and thickness	
Stringer Plate, breadth and thickness in Way	61 x .64		If plated, state thickness	
" " " " in way of Bridge	- - -		Poop Deck.	
" Angle in Well	6 x 6 x 8		Stringer Plate, breadth and thickness	
Thickness of Plating abreast Deck openings in way of Well	.55		Plating, Sheathing, material and thickness	
Thickness of Plating abreast Deck openings in way of Bridge	- - -		Bridge Deck.	
Thickness of Plating within line of openings	.40		Stringer Plate, breadth and thickness	
If Sheathed, material and thickness	- - -		Plating, Sheathing, material and thickness	
Second Deck.			Forecastle Deck.	
Stringer Plate, breadth and thickness in Way	50" x .43"		Stringer Plate, breadth and thickness	
			Plating, Sheathing, material and thickness	

SHELL PLATING.									
SCANTLINGS.				RIVETING.					
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.			
	AMIDSHIPS.		AFT.			State if jogged?	BUTTS.		
	Breadth.	Thickness.	Thickness.	Thickness.			SINGLE OR DOUBLE.	RIVETS.	STRAPPED OR LAPPED.
FLAT PLATE KEEL	52	.78	.68	.68		Double	7/8 3.3"	Butts Welded	
" DBLG. (if any)	-	-	-	-		-	-	-	
BOTTOM PLATING, No. of Strakes	Four	.61	.56	.52		-	-	-	
BILGE PLATING, No. of Strakes	One	.61	.56	.49		Double	7/8 3.3"	Butts Welded	
SIDE PLATING, No. of Strakes	Three	.61	.56	.48		-	-	-	
UPPER DECK, Sheer-strake in Well	84	.70	.50	.50		-	-	-	
UPPER DECK, Sheer-strake in Bridge	-	-	-	-		-	-	-	
STRAKE BELOW SHEER-strake in Well	78	.61	.50	.48		Double	7/8 3.3"	Butts Welded	
STRAKE BELOW SHEER-strake in Bridge	-	-	-	-		-	-	-	
POOP SIDE PLATING	-	-	-	-		-	-	-	
BRIDGE SIDE PLATING	-	-	-	-		-	-	-	
FORECASTLE SIDE PLATING	-	-	-	-		-	-	-	

WATERTIGHT BULKHEADS.					FORGINGS AND CASTINGS.				
Total No. of W.T. BULKHEADS in Vessel—					Casting or Forging.				
Extending to Upper Deck (Sec. 3 c) Seven (7)					Scantlings.				
Deck next below One (1)					Maker's Name.				
As per Rule Seven (7)					Any Departure from Approved Plans to be Noted.				
					KEEL, Flat Plate				
					STEM, Lower-Rolled Bar 10"x24" U.S. Steel Corp.				
					STERN FRAME, Propeller Post C.S. Appd. Vcr. Eng. Wks.				
					Speed of Vessel, Not exceeding 12 Knots				
					RUDDER—Type, Semi-Balanced Streamlined				
					" A x D, 282 - - -				
					" Diam. of head, 9 1/2 Dia.				
					" Mainpiece at top pintle, 12 Dia.				
					" heel, 9 1/2 Dia.				
					" how constructed, Built, Riv., & E.W.				
					" double or single plate coupling, vertical or horizontal, Double Horizontal				
MIDSHIP BULKHEAD, Upper tween decks, Fr. 93					Plating Thickness, Ins.				
" Second, -					Vertical, Scantlings, Ins.				
" Third, -					Horizontal, Scantlings, Ins.				
" Holds, 26/39 12x3x3x30					Spacing, 30				
COLLISION (in Hold), Fr. 162 33/50 7x3x36					24 3 Stgs. 6'-0"				
AFTER PEAK, (Fr. 12) 30/35 7x3x38					24 2 " 6'-6"				
Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) Open Hearth									
The Steel Co. of Canada, Ltd., Manitoba Rolling Mills Co. Ltd., Carnegie-Illinois Steel Corp., The Phoenix Iron Co., Algoma Steel Products Co. Ltd., Bethlehem Steel Co.									
Has the Steel been tested as required by the Rules? Yes									

EQUIPMENT No. 39800										LETTER A										ANCHORS.									
Number of Certificate.		Anchors.		WEIGHT, EX. STOCK.		WEIGHT OF STOCK.		TEST, PER CERTIFICATE.		WEIGHT REQUIRED BY SPECIFICATION.		Description of Anchor.		Makers.		Where and when tested and Superintendent.													
F4046		1st Bower		7660 lbs.		Cwts. qrs. lbs.		Tons. cwt. qrs. lbs.		680		C.S. BALOT TYPE STOCKLESS.		VULCAN IRON WORKS LTD. MANITOBA		WINNIPEG, JUNE 1942													
F4046		2nd "		7645 "						680						J.F. HIND.													
		3rd "																											
F4047		Collective Weight		15,295 lbs.						13600		C.S. BALOT TYPE STOCKLESS.		VULCAN IRON WORKS LTD. MANITOBA		WINNIPEG, JUNE 1942													
		Stream		2910 lbs.						2394						J.F. HIND.													
CHAIN CABLES.										HAWERS AND WARPS.																			
Number of Certificate.		Length and size supplied.		Test per Certificate.		WEIGHT OF CHAIN CABLE.		Length and size specified.		Description.		Makers of Cables.		Where and when tested, and Superintendent.		Material.													
1548		225 fms. 2 1/2" Dia.		A303, 320, 6424, 630		1/2260		600.		225 fms. 2 1/2" Dia.		C.S. NATIONAL HAWK CABLES LTD. ST. LOUIS, MO.		SHARON, PA. 27.8.42.		TOWLINE													
																HAWERS & WARPS													
Stream (Steel Wire)		92 1/2" 5"		Tens 898		1/2 F.S.W.R.		90		5		6x12 S.W.R.																	
Steering Gear, Type (Power or hand) Steam with telemotor control										(Efficient arrangement of blocks and tackle led to after warping winch.)																			
Steering Chains (Size and Test)										Windlass Steam - 11" x 13"																			
Ceiling in Holds, thickness and material										2 1/2" thk. B.C. Fir																			
Cargo Hatchways—(Upper Deck)										Strong steel plates and angles																			
Size of Hatchways No. 1 (Fwd.)										33'9"x20' No. 2 35'x20' No. 3 15'x20' No. 4 35'x20' No. 5 35'x20' No. 6 8'x20'																			
Number of Shifting Beams										Nos. 1, 2, 4 and 5 -- each 5. No. 3 - 2. No. 6 - 1.																			
Builder's Signature										Burrard Dry Dock Company, Limited																			
GENERAL DECLARATION. It should be stated (a) whether the vessel (if not a motorship) is fitted for the carriage and burning of oil used as fuel. No										(b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo. No																			
This ship has been constructed in accordance with the approved plans, instructions and printed Rules of the Society. The materials and workmanship are of good quality.																													
The double bottom, peaks, deep and fresh water tanks, decks, bulkheads, tunnels, watertight doors, steering gear, and windlass have been tested and found satisfactory. The freeboards assigned by the Committee have been marked on the ship's sides and verified. The ship has also been surveyed during construction on behalf of the Minister of Munitions and Supply of Canada in accordance with the Hull Specification requirements which have been carried out to our satisfaction.																													
The equipment of anchors and chain cables is in accordance with the War Emergency Reduction of Equipment requirements. Regarding the anchors all the requirements of Sections 12 and 13 of the Rules for Quality and Testing of Materials have been carried out except the Statutory Tests of Section 12 for which tensile tests on the materials of each head and shank were substituted, (28 tons per sq. inch minimum, with the usual extension). It is recommended that a suitable Notation be entered on the First Entry Certificate because of these departures from the Rules.																													
The amount of Entry Fee										£ 50.00																			
Special Survey Fee										£ 2145.00																			
Travelling Expense, if any										£ 50.00																			
Owners' Rep.										\$ 1000.00																			
State whether the Vessel has been built under Special Survey										Yes																			
Certificate to be sent to										Date of issue																			
Committee's Minute										FRI. 4 DEC 1942																			
Character assigned										+100 A1																			
With freeboard																													
Built of shell with fully Elec. Weld.																													
OK, E.S.D.																													
Write R&M note for S.P.L.																													
Signature										J. Perry and J. Sinclair																			
Surveyor to Lloyd's Register of Shipping.																													

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 List of the Plans should be embodied.)

This ship is the eighteenth of this type to be built by Burrard Dry Dock Co. Ltd., and is a sistership to their Yard No. 130, S.S. "FORT ST. JAMES" (Vancouver Report No. 5718).

The approved plans have been retained for dealing with sisterships building and to be built.

Blue print of plan of Midship Section is forwarded herewith.

Interim Certificate issued - Copy attached.

A copy of each of the following Certificates attached hereto.

Certificate No. F-3299 for Cast Steel Stern frame.

Certificate No. F-3842 for Rudder.

Certificate No. F-3739 for steam steering engine, quadrant and tiller.

Certificate No. F-3875 for steam windlass.

Certificate Nos. F-1626, F-1695, F-4271, F-4242, F-1569, F-1607, F-3785, F-3786, F-1574, F-1608, & F-3582 for Winches.

Certificate Nos. F-4045, F-4046 & F-4047 for Anchors.

Tonnage openings in tween deck bulkheads have all been efficiently closed with steel plates, rivetted on bulkheads Nos. 19 and 135 and bolted elsewhere as per approved plans. All tween deck bulkheads have been hose tested and found satisfactory.

PARTICULARS OF ELECTRIC WELDING (if employed) All connections to double bottom tanks' margin plates, watertight floors and gusset plates; 2nd deck stringer closing plates all welded; plate butts of shell plating, tank top (part), tunnel, 2nd and upper decks, centre girder and hatch side girders; hold bhd. and tunnels' sides to tank top plating; other items of minor importance; Electrodes, complying with section 4 paras. 1 - 9 of the Rules have been employed for manual welding and the Rules for the Application of Electric Arc Welding to Ship Construction have been complied with where applicable. Upper Deck Stringer plate welded shell sheer strake - no gunwale bar.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book Cruiser stern; Direction Finder; Echo Sounder; Wireless.

Particulars of Drop Test of Cast Steel Anchors, viz: Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	5500 lbs.	J.F.H.	F-4045	18-6-42
	2nd "	5650 lbs.	J.F.H.	F-4046	18-6-42
	Stream	1970 lbs.	J.F.H.	F4047	18-6-42

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop — ft., R.Q.D. — ft., Bridge — ft., Forecastle — ft. (in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated. — Official No. — Signal Letters. — Extreme Breadth over Belting No belting. Over-all Length 441.5' (Circ. 1611) (Circ. 1703) No. and Material of Decks Two- (2) steel. (Nos. 5 & 6 double bottom tanks and peaks cemented in bottom Parts of Bottom of Vessel coated with cement or approved composition (shell and cement washed elsewhere, except, under E & B space where there is bitumastic solution and enamel on girders and floors and bitumastic solution on underside of tank top plating. Steelwork in bilges, bitumastic solution and enamel throughout. Particulars of composition (if fitted) and of approval Bitumastic Solution and Enamel.

PARTICULARS OF WATER BALLAST:—(Comprising all tanks which may be used for Water Ballast. (Circ. 1284) Wells are not to be included in the lengths of the tanks, but Cofferdams and Dry Tanks (if tested) are to be included.)

Where Fitted.	Length.	Water Capacity.	Where Fitted.	Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft, (Nos. 7 and 8) S.W.	135.0	306.	Fore peak tank, S.W.	22.	145.
Double bottom, under Engines and Boilers.	--	--	After peak tank, S.W.	24.	160.
Double bottom, if under Engines only, No. 6 S.W.	25.0	106.	Deep tank, aft, Port S.W.	20.	390.
Double bottom, if under Boilers only, No. 5 (dry) S.W.	20.0	89.	Deep tank, forward, Star'd. S.W.	20.	375.
Double bottom, forward, Nos. 1, 2, 3, & 4 S.W.	188.25	648.	Other tanks, if fitted,		
Total length (if continuous) and Capacity S.W.	368.25	1149	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 51 Date July 31st, 1941. Dates of Surveys held while building 1942 - June 19, July 24, Aug. 3, 4, 5, 6, 8, 10, 11, 13, 14, 15, 18, 19, 20, 21. Sept. 1, 4, 10, 16, 17, 21, 22, 24, 25, 26, 28. Total No. of Visits 27