

Rpt. 1.

STEEL ~~STEAMER~~ or MOTORSHIP.

Received at London Office

-3 JUL 1941

4 JUL 1941

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

25TH JUNE 1941.Port of **GREENOCK.**

No. 21458.

Survey held at **PORT GLASGOW**

Date First Survey

15TH APRIL 1940.

Last Survey

20TH JUNE

1941.

On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw)

SINGLE SCREW MOTORSHIP "EMPIRE SPRING."

State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings)

COMPLETE SUPERSTRUCTURE WITHOUT TONNAGE OPENING.State Type of Erections **FORECASTLE**

TONNAGE under Tonnage Deck...

6487.44CLASS ***100.A.1.**

State if with freeboard as condition of Class

YESBuilt at **PORT GLASGOW**Launched **Mar 18th 1941**Yard No. **944.**Builders **LITHGOWS LIMITED**Owners **MINISTRY OF SHIPPING.**Managers **DONALDSON BROS & BLACK, LTD**

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

Residence **145 VINCENT STREET, GLASGOW.**Port of Registry **GREENOCK**

If surveyed while building, afloat, or in dry dock

BUILDING & AFLOAT.

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

Total

Gross Tonnage

6946.46

Register Tonnage

4147.30REGISTERED DIMENSIONS.
FEET.

Length

432.2

Breadth

56.2

Depth

34.3

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

L 425

Breadth (greatest moulded)

B 56

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

D 36.83

1st Longitudinal Number (L x D)

= 15193

2nd Numeral L x (B + D)

= 38993

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

23.9

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

11.55

Do. Long Bridge to top of keel

Draught Moulded

26-2 1/2

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	31		Bracket Floors, Frame	B.A. 6 3/2 7/16	
" " from 1/2 length amidships to Collision bulkhead	27		" " Reversed Frame	BA. 6 3/2 7/16	
" " in peaks	24		" " Vertical Struts	BA. 10 3/2 7/16	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	43 1/2 x .54	
Frame Amidships, Angle, E or F	12 3 1/2 9/16		" " top Angles	4 4 1/2	
" " Extends up to	SECOND DK		" " bottom Angles	4 4 9/16	
Reversed Frame Amidships, Angle			Side Girders, No. each side and thickness	1 @ .38	
" " Extends up to			Margin Plate depth (excl. of flange) and thickness	44 x .54	
Depth of Framing Girder	12		" " Vertical Angle to Tank side Bracket abaft 1/4 len. from stem	6 1/2 6 1/2 .625 T	
Frames in Uppermost Continuous 'tween Decks, Angle, E or F	6 3 1/2 7/16		" " Vertical Angle to Tank side Bracket from forward 1/4 len. from stem to Panting Area	6 1/2 6 1/2 .625 T	
" " Second 'tween Decks, Angle, E or F			" " Gussets, spacing and scantling abaft 1/4 len. from stem	.42 CONTINUOUS	
" " Third " " "			" " Gussets, spacing and scantling from forward 1/4 len. from stem to Panting Area	.42 CONTINUOUS	
" " from 1/4 len. for'd. to 15% len. from Stem	12 x 3 1/2 x 9/16 BA WITH 4 x 4 x .50 RB ON ALT FRAMES		Tank Side Brackets, height above base line at toe of Frame and thickness	6'-5"	
" " in Peaks, Angle, E or F	8 3 1/2 .35		INNER BOTTOM PLATING.		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7/8 @ 7 DIAS ON BOTTOM. 7/8 @ 6 1/2 " " SIDES.		Breadth and thickness of Middle Line Strake	82 x .50	
State if Frame Joggled	YES		Thickness of remainder in Holds	.44-.40	+ .08 under halloway. see plan as built in ECKET
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	YES		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.	SEE SPECIAL PLAN OF ENGINE SEATING.
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	YES		BEAMS.		
SINGLE BOTTOM.			Uppermost Continuous Deck, amidships in Wells, Angle, E or F	10 3 1/2 .437	
Floors, Depth and thickness at mid-line in Holds			" " in way of Bridge, Angle, E or F		
Height of Brackets at side above base line at toe of frame			Spacing	31	
Middle Line Keelson, on Floors, Angles, E or F			Second Deck, amidships, Angle, E or F	12 3 1/2 .45	
" " Through Plate or Intercostal Plate			Spacing	31	
" " Foundation Plate on Floors			Third Deck, amidships, Angle, E or F		
" " Flat Plate Keel Angles			Spacing		
Side Keelsons, No. each side			Fourth Deck, amidships, Angle, E or F		
" " thickness of Intercostal Plate			Spacing		
" " Angles			Poop Deck, Angle, E or F		
DOUBLE BOTTOM.			Spacing		
Solid Floors, thickness and spacing	.42 EVERY 3 RD FRAME		Bridge Deck, Angle, E or F		
" " Are Frame and Reversed Frame joggled?	YES		Spacing		
Bracket Floors, breadth and thickness at middle line	32 1/4 x .42		Forecastle Deck, Angle, E or F	8 3 1/2 7/16	
" " breadth and thickness at margin plate	32 1/4 x .42		Spacing	27 x 24	

PILLARS AND DECKS.									
		INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.				INCHES IN SHIP.	
PILLARS, No. of Rows.....									
" in 'tween Decks, Size and Spacing.....		CENTRE LINE BULKHEAD WITH							
" " " " " "		REINFORCED HATCH SIDE GIRDERS.							
" " " " " "		HATCH END BEAMS.							
Centre Line Bulkhead.		62" APART.		12 3/4 45 ETC					
Stiffeners and Spacing.....				30					
Plating, thickness of				30					
STRINGERS AND DECKS.									
Uppermost Continuous Deck.									
Stringer Plate, breadth and thickness		66 x 66							
" " " " " "									
" " " " " "									
" Angle in Wells		6 6 5/8							
Thickness of Plating abreast Deck openings/				63-45					
Thickness of Plating abreast Deck openings/									
Thickness of Plating within line of openings...				40-36					
If Sheathed, material and thickness		NOT SHEATHED COMPOSITION		FITTED OVER ACCOMMODATION.					
Second Deck.									
Stringer Plate, breadth and thickness		72 x 40							

SHELL PLATING.									
SCANTLINGS.					RIVETING.				
STRAKES.		AS IN VESSEL.		ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.		EDGES.		BUTTS.	
FLAT PLATE KEEL		52 .78 .68 .68				DOUBLE 7/8 3/4		FOUR 1 4	
" DELG. (if any)		3 STRAKES OF BOTTOM PLATING P&S		69 FROM 1/2 LENGTH FOR TO RULE POSITION OF COLLISION BHP.		DOUBLE 7/8 3/4		FOUR 7/8 3/2	
BOTTOM PLATING, No. of Strakes		63 .50 .50				DOUBLE 7/8 3/4		FOUR 7/8 3/2	
BILGE PLATING, No. of Strakes		63 .50 .50				" " " "		FOUR " " "	
SIDE PLATING, No. of Strakes		62 .46 .46				" " " "		THREE " 3/8	
UPPER DECK, Sheer-strake		58 .69 .46 .46				" " " "		FOUR " 3/2	
UPPER DECK, Sheer-strake in Bridge		✓				" " " "		FOUR " " "	
STRAKE BELOW SHEER-strake		58 .64 .46 .46				" " " "		FOUR " " "	
STRAKE BELOW SHEER-strake in Bridge				SIDE PLATING IN PANTING AREA		58 IN LIEU OF SIDE STRINGERS			
POOP SIDE PLATING									
BRIDGE SIDE PLATING									
FORECASTLE SIDE PLATING		40				SINGLE 7/8 3/2		SINGLE 7/8 3/2	

WATERTIGHT BULKHEADS.						FORGINGS and CASTINGS.				
Total No. of W.T. BULKHEADS in Vessel— 7						Casting or Forging.		Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
Extending to Upper Deck (Sec. 3 c) 6										
" Deck next below 1										
As per Rule 7										
						KEEL, Bar FLAT PLATE KEEL LOWER PORTION ROLLED 10" x 2 1/2" UPPER PORTION PLATES				
						STEM ROLLED 10" x 2 1/2"				
						STERN FRAME { Propeller Post WELDED FABRICATED STERN FRAME Rudder MADE BY COLVILLE CONSTRUCTION CO.				
Speed of Vessel..... 12 KNOTS										
RUDDER—Type..... DOUBLE PLATE STREAM LINED										
" A x D 633.										
" Diam. of head FORGING 12 1/2" DIA										
" Mainpiece at top pintle CASTING, SEE										
" " heel PLAN										
" how constructed FABRICATED WITH PLATES & ANGLES										
" double or single plate DOUBLE 50 THICK										
" coupling, vertical or VERTICAL										
" horizontal.....										
STIFFENERS.										
Plating Thickness.										
VERTICAL.						HORIZONTAL.				
Scantlings.						Spacing.				
Scantlings.						Spacing.				
MIDSHIP BULKH'D, Upper tween decks 26 6 x 3 1/2 x 3/8 OA 30"										
" " Second "										

EQUIPMENT No 40053										LETTER at		ANCHORS.	
Number of Certificate.	Anchor.	WEIGHT, EX. STOCK	WEIGHT OF STOCK	TEST, PER CERTIFICATE	WEIGHT REQUIRED BY TABLE 53.	Description of Anchor.	Makers.	Where and when tested and Superintendent.					
40239	1st Bower	68 2 26	STOCKLESS	53 1 3 14	68	BYERS IMPROVED	PERKINS & CO	SUNDERLAND 1/10/40	NORMAN				
26460	2nd "	68 1 7	"	52 18 3 0	68	"	"	LOWWALKER 20/9/40	GREEN				
	3rd "				58 1/2								
	Collective weight.	137 0 5			194 1/2								
53677	Stream	19 1 21	5 0 7	20 4 0 7	19	ORD F&D YR. IRON	NOT STATED	CRAIG & HART 1/10/40	PAUL				

CHAIN CABLES.										HAWSERS AND WARPS.			
Number of Certificate.	Length and size supplied.	Test per Certificate.	WEIGHT OF CHAIN CABLE.	Length and size per Table 53.	Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Length and size supplied.	Breaking Test of Steel Wire.	Length and size per Table 53.	Breaking Test of Steel Wire.	Length and size per Table 53.
112,866	225 25/16 96 1/4 13 3/4	605.8.0	720 3/4	270 25/16	SPUD LINK	NOT STATED	NETHERTON 30/1/40	RELIF	TOWLINE.	120 4 3/4 64.6	120 4 3/4		
									HAWSERS & WARPS	2090 2 3/4 15.2	2090 2 3/4		
										2090 2 1/2 13.2	2090 2 1/2		

Steering Gear, Type (Power Electric) By HASTIE, GREENOCK. Alternative Means of Steering Block & Tackle LED TO AFTER WINCH

Steering Chains (Size and Test) NONE, STEERING GEAR AFT. Windlass SPERM By CLARKE CHAPMAN. Boats 2-24' 2-17' " AFT.

Ceiling in Holds, thickness and material 2 1/2" W.P. OVER BILGES ONLY. Cargo Battens, thickness, material and spacing NONE.

Cargo Hatchways.—(Upper Deck) 30" COAMINGS STIFFENED Thickness of Hatches 2 1/2" W.P. ON UPPER DECK

Size of Hatchways No. 1 (Fwd.) 31' 6" x 20' No. 2 31' x 20' No. 3 32' 11" x 20' No. 4 41' 0" x 20' No. 5 31' x 20' No. 6 31' x 20'

Number of Shifting Beams NOS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561

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.)

This is a sister vessel of the Empire Comet. Name Lithgow Ltd No 941.9 Greenock first entry report No 21322, constructed for the Ministry of Shipping to the 'X' type design.

Working reports are herewith forwarded but plans of vessel as built are similar to the Empire Comet.

As requested in the London letters, the plans & specifications have been supervised & a copy of the certificate issued is herewith enclosed.

No cleats nor hatch covers have been fitted to the cargo hatches on the second deck.

6 oil fuel (flash point above 150°F) is carried in Nos 2, 3, 4, 6 D.B. tanks and in deep tank & section 20 of the rules has been fully complied with.

The weather decks, W.T. bulkheads & tunnel were hose tested & found satisfactory.

The Managers of this vessel state that arrangements have been made to fit sparring & wood hatches on the second deck as soon as possible abroad.

PARTICULARS OF ELECTRIC WELDING (if employed)

Heads & heels of solid pillars, cruiser stern, bow plating, corners of bulkheads & tank ends, butts of stringer bars, auxiliary engine seats & tunnel stools, Butts of tank top plating, fabricated welded stem frame, ventilator coverings, corners of all hatch coaming bars.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book

Cruiser stern. D.F. Lysht A.C.P.

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

1st Bower 44-3.9 : J.D. : 3165 : 2.8.40.
2nd " 44-3.0 : J.T. : 3305 : 16.7.40.
3rd " ✓

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ✓ ft., R.Q.D. ✓ ft., Bridge ✓ ft., Forecastle 39.4 ft.

(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

Official No. 167,002

Signal Letters ✓

Extreme Breadth over Belting (Circ. 1611) ✓

Over-all Length 447.6 (Circ. 1703)

No. and Material of Decks 2.DKS. ✓

Parts of Bottom of Vessel coated with cement or approved composition

Cement in peaks, cement wash in fresh water & water ballast double bottom tanks, no cement nor cement wash in oil fuel double bottom tanks

Particulars of composition (if fitted) and of approval ✓

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. Feet.	Water Capacity. S.W. Tons.	Where Fitted.	Length. Feet.	Water Capacity. S.W. Tons.
Double bottom, aft,	118.83	340	Fore peak tank,		
Double bottom, under Engines and Boilers, ✓			After peak tank,		
Double bottom, if under Engines only,	38.75	161	Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward, OIL FUEL OR W.B.	25.83	1036
Double bottom, forward,	202	685	Other tanks, if fitted,		
Total length (if continuous) and Capacity	369.6	1186	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 3469

Date 15th APRIL 1940

Dates of Surveys held while building

(1940) APRIL 15. MAY 10. 13. 16. 20. 22. JUNE 4. 11. 13. 18. 19. 24. JULY 2. 5. 14. 22. 26. AUG. 1. 12. 14. 21. 24. 29.
SEPT. 10. 13. 16. 19. 23. 27. OCT. 2. 3. 4. 14. 19. 23. 24. 25. 30. NOV. 1. 5. 4. 12. 15. 19. 22. DEC. 2. 4. 6. 13. 16. 18. 24. 30. 31.
(1941) JAN. 6. 10. 14. 19. 21. 23. 24. 28. 29. 30. FEB. 3. 4. 10. 14. 26. 27. MAR. 3. 4. 13. 14. 17. 18. APL 2. 3. 9. 18. 21. 24. MAY 13. 16. 23.
26. JUNE 2. 5. 6. 13. 14. 18. 19. 20.

Total No. of Visits 94.