

STEEL ~~STEAMER~~ MOTORSHIP.

Received at London Office 1 OCT 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 9th October, 1941.

Port of DUNDEE

No. 9256

Survey held at DUNDEE

Date First Survey 29th JULY, 1940

Last Survey 29th September 1941.

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

SINGLE SCREW MOTORSHIP "GRAY RANGER" (MACHINERY AFT.)

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

FULL SCANTLING

State Type of Erections POOP & F'SCLE

TONNAGE under Tonnage Deck

2557.68

CLASS 100 A-1. CARRYING OIL FUEL IN BULK F.P. ABOVE 150° F.

State if with freeboard as condition of Class

NO

Built at DUNDEE

Launched 24th May, 1941 Yard No. 390

Builders The Caledon S.B. & Co. Ltd.

Owners The Admiralty

Managers

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

Residence

Port of Registry

If surveyed while building, afloat, or in dry dock

Building & afloat.

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

Total

2557.68

Gross Tonnage

3313.33

Register Tonnage

1506.30

REGISTERED DIMENSIONS. FEET.

Length

339.40

Breadth

48.35

Depth

22.60

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

L 336.0

Breadth (greatest moulded)

B 48.0

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

D 22.5

1st Longitudinal Number (L x D)

= 4560

2nd Numeral L x (B + D)

= 23688

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

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

14.93

Do. Long Bridge to top of keel

Draught Moulded

20'-15/8

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.
LONGITUDINAL FRAMING AS PER PAGE 5					
FRAMES, Spacing amidships	27 1/2 AS APPROVED	✓	Bracket Floors, Frame	✓	
" " from 1/2 length amidships to Collision bulkhead	24	✓	" " Reversed Frame		
" " in peaks	24	✓	" " Vertical Struts		
SIDE FRAMING.					
Frame Amidships, Angle, E or F	8 3 1/2 40	✓	Centre Girder, depth and thickness amidships	45 1/2 40	✓
" " Extends up to BILGE TO UPPER DECK WITH ONE		✓	" " top Angles	3 1/2 3 1/2 40	✓
Reversed Frame Amidships, Angle	SIDE STRINGER AS APPROVED	✓	" " bottom Angles	3 1/2 3 1/2 44	✓
" " Extends up to			" " CLEAR OF ENGINE IN WAY OF ENGINE ONE 34 TWO 625		✓
Depth of Framing Girder	8	✓	Margin Plate depth (excl. of flange) and thickness	✓	
Frames in Uppermost Continuous 'tween Decks, Angle, E or F	4 3 1/2 33 WITH 3 1/2 3 34L ALTERNATELY.	✓	" " Vertical Angle to Tank side Bracket abaft 1/2 len. from stem		
" " Second 'tween Decks, Angle, E or F	9 3 1/2 44 BA WITH STRINGERS	✓	" " Vertical Angle to Tank side Bracket from forward 1/2 len. from stem to Panting Area		
" " NO. 1 TANK	9 3 1/2 38 BA AS APPROVED	✓	" " Gussets, spacing and scantling abaft 1/2 len. from stem		
" " NO. 2 TANK			" " Gussets, spacing and scantling from forward 1/2 len. from stem to Panting Area		
" " Third			Tank Side Brackets, height above base line at toe of Frame and thickness	✓	
" " IN FORD DEEP TANK	9 3 1/2 38 BA	✓	INNER BOTTOM PLATING, MOTOR ROOM		
" " from 1/2 len. forward to 15% len. from Stem			Breadth and thickness of Middle Line Strake	43 CLEAR OF ENGINE	✓
" " AFT PEAK	7 3 33	✓	Thickness of remainder in Holds	1 1/8 PLATING UNDER ENGINES	✓
" " in Peaks, Angle, E or F	7 3 32	✓	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	✓
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7/8 47/8 AS PER MULTIPLE PUNCHING DIAGRAM	✓	BEAMS.		
State if Frame Joggled	YES	✓	Uppermost Continuous Deck, amidships in Walls, Angle, E or F	LONG BEAMS AS PER PAGE 5	✓
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	AS APPROVED	✓	" " in way of Bridge, Angle, E or F	8 1/2 3 36 2 AS APPROVED	✓
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	AS APPROVED	✓	" " IN CARGO SPACE FORD Spacing	7 3 32 B.A. EVERY FRAME	✓
DOUBLE BOTTOM. IN DEEP TANK FORD.					
Floors, Depth and thickness at mid-line in Holds	28 43	✓	Second Deck, amidships, Angle, E or F	7 3 36 2 AS APPROVED	✓
Height of Brackets at side above base line at toe of frame	39	✓	Spacing	EVERY FRAME	✓
Middle Line Keelson, on Floors, Angles	LAPPED TO CR. LINE BND.	✓	DEEP TANK FLAT FORWARD		
" " Through Plate	60 40	✓	Third Deck, amidships, Angle, E or F	8 3 34	✓
" " Intercoastal Plate			Spacing	EVERY FRAME	✓
" " Foundation Plate on Floors			Fourth Deck, amidships, Angle, E or F	✓	
" " Flat Plate Keel Angles	3 1/2 3 1/2 42	✓	Spacing		
Side Keelsons, No. each side	TWO	✓	Poop Deck, Angle, E or F	7 3 32 2 AS APPROVED	✓
" " thickness of Intercoastal Plate	40	✓	Spacing	EVERY FRAME	✓
" " TOP	5 3 38	✓	Bridge Deck, Angle, E or F	✓	
" " BOTTOM	3 1/2 3 1/2 40	✓	Spacing		
DOUBLE BOTTOM. IN MOTOR ROOM ONLY					
Solid Floors, thickness and spacing	36 EVERY FRAME INCREASED UNDER ENGINES	✓	Forecastle Deck, Angle, E or F	7 3 32 2 AS APPROVED	✓
" " Are Frame and Reversed Frame joggled?	YES	✓	Spacing	EVERY FRAME	✓
Bracket Floors, breadth and thickness at middle line	✓				
" " breadth and thickness at margin plate					

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.
PILLARS , No. of Rows.....	<u>CONTINUOUS LONGITUDINAL</u>				Stringer Plate, breadth and thickness in way of Bridge	✓			
" in 'tween Decks, Size and Spacing.....	<u>O.T. BULKHEADS IN WAY OF</u>				Thickness of Plating abreast Deck openings in way of Wells .....	.30 & .34,	<u>.40 IN WAY OF BOILER</u>		
" " " " " "	<u>OIL TANKS & ENGINE ROOM</u>				Thickness of Plating abreast Deck openings in way of Bridge				
" in Holds " "	<u>PILLARING AT ENDS</u> ✓				Thickness of Plating within line of openings ..				
" " " " " "	<u>AS APPR.</u> ✓				If Sheathed, material and thickness				
<u>LONGITUDINAL</u> Centre Line Bulkhead. P&S OILTIGHT	8	3	.40 B.A. ✓		<u>DEEP TANK FLAT FORD.</u>				
Stiffeners and Spacing..... (27" APART)	9	3	.38 B.A. NO 2 TANK ✓		<u>Third Deck.</u>				
WITH ONE STRINGER 22"x36" & 4½" FL. ✓	9	3	.41 B.A. NO 1 TANK ✓		Stringer Plate, breadth and thickness.....	.36	✓		
Plating, thickness of .....	.43	-	.36 ✓		If Plated, state thickness.....	.36	✓		
STRINGERS AND DECKS.					Fourth Deck.				
Uppermost Continuous Deck.					Stringer Plate, breadth and thickness.....	✓			
Stringer Plate, breadth and thickness in Wells	54	.74	✓		If Plated, state thickness				
AT POOP		.89	✓		Poop Deck.				
AT F'SCLE ✓		.80	✓		Stringer Plate, breadth and thickness	73½	.34	✓	
" " " " in way of Bridge					Plating, Sheathing, material and thickness ...	.30,	<u>2¼ TEAK WHERE EXPOSED</u>		
" Angle in Wells	6	6	.74 ✓		Bridge Deck.				
Thickness of Plating abreast Deck openings in way of Wells .....		.50	✓		Stringer Plate, breadth and thickness.....	✓			
Thickness of Plating abreast Deck openings} in way of Bridge .....		.57	AT PUMP ROOM. ✓		Plating, Sheathing, material and thickness ...				
Thickness of Plating within line of openings...		✓			Forecastle Deck.				
If Sheathed, material and thickness		✓			Stringer Plate, breadth and thickness.....	.32	✓		
Second Deck. IN ENGINE SPACE					Plating, Sheathing, material and thickness ...	.32	✓		
Stringer Plate, breadth and thickness in Wells..		.34	✓						

SHELL PLATING.

SCANTLINGS.					RIVETING.								
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.			BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if joggled? <u>NO</u>	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	46	.46	.59	.59		DOUBLE	7/8	3 3/8	QUADRUPLE	1"	3 5/8 3/4	STRAPPED	
„ DBLG. (if any) A2B	78	.53	.50 & .59	.44 & .48									
BOTTOM PLATING, No. 4 of Strakes 3	70	.51	.50	.51		DOUBLE	7/8	3 3/8	TREBLE	7/8	3 1/6	LAPPED	
BILGE PLATING, No. of Strakes 1	94	.51	.50	.48		DOUBLE	7/8	3 3/8	TREBLE	7/8	3 1/8	STRAPPED	
SIDE PLATING, No. of Strakes 1	88	.48	.49	.41		DOUBLE	7/8	3 3/8	TREBLE	7/8	3 1/8	LAPPED	
UPPER DECK, Sheer strake in Wells..... 5	61	.44	.41	.41		DOUBLE	7/8	3 3/8	QUADRUPLE	1	4	LAPPED	
UPPER DECK, Sheer strake in Bridge ...	AT POOP 96					ELECTRIC WELDING 2 QUADRUPLE							
STRAKE BELOW Sheer strake in Wells.....	89	.48	.49	.41		DOUBLE	7/8	3 3/8	TREBLE	7/8	3 1/8	LAPPED	
STRAKE BELOW Sheer strake in Bridge ...													
POOP SIDE PLATING H.T.			.45	.36		SINGLE	3/4	3	SINGLE	3/4	2 5/8	LAPPED	
BRIDGE SIDE PLATING ...													
FOREC'TLE SIDE PLATING		.38				SINGLE	3/4	3	SINGLE	3/4	2 5/8	LAPPED	

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—

Extending to Upper Deck (Sec. 3 c)

Deck next below

As per Rule **APPROVED**

12 BH *12 BH*

13 *13*

13 *13*

		Plating Thickness.	STIFFENERS.			
			VERTICAL.		HORIZONTAL.	
			Scantlings.	Spacing.	Scantlings.	Spacing.
	<i>CENTRE TANK</i>					
MIDSHIP BULK'D,	<i>Upper tween decks</i>	<i>44-37</i>	<i>9x3x36 B.A.</i>	<i>29</i>	<i>STRINGER</i>	
"	<i>Second</i>				<i>54" x 42"</i>	<i>1 IN NO</i>
"	<i>WING TANK</i>				<i>WITH 9" FL.</i>	
"	<i>Third</i>	<i>43-36</i>	<i>8x3x40 B.A.</i>	<i>27</i>	<i>STRINGER</i>	
"	<i>Holds</i>				<i>30" x 40"</i>	<i>1 IN NO</i>
					<i>WITH 8x3x36 B.A.</i>	
COLLISION	<i>(in Hold)</i>	<i>46-30</i>	<i>8x3x46 B.A.</i>	<i>24</i>	<i>3 SENT. BOX BEAMS</i>	
AFTER PEAK		<i>40-36</i>	<i>10x32x50 B.A.</i>	<i>24</i>		
			<i>70</i>			

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar	FLAT PLATE KEEL ✓			
STEM	ROUNDED PLATE 50 THK ✓ FABRICATED STERNFRAME AS APPROVED ✓ CASTINGS BY MESSRS. WEST LOTHIAN STEEL FOUNDRY CO. LTD OF ARMADALE.			
STERN FRAME	Propeller Post			
	Rudder "		C SECTION ✓	
Speed of Vessel	13 KNOTS			
RUDDER—Type	FABRICATED OERTZ STREAMLINE RUDDER ✓			
" A × D	401 ✓			
" Diam. of head STOCK	FORGING 1 1/4 DIA BY DENNYSTONN FORGE CO ✓			
" Main piece at top pintle	CAST STEEL TOP & BOTTOM ARMS BY WEST			
" " heel	LOTHIAN STEEL FOUNDRY LTD OF ARMADALE ✓			
" how constructed	STEEL PLATES & ANGLES BY CALEDON S. B. & CO. LTD.			
" double or single plate	50			
" coupling, vertical or				
" horizontal	8-2 7/8 DIAR. FITTED BOLTS ✓			

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)
Steel Coy of Scotland Ltd. Dorman Long & Co Ltd. The Lanarkshire steel Coy
steel Coy Ltd. open Hearth Process
 Has the Steel been tested as required by the Rules? *Yes*

Has the Steel been tested as required by the Rules?

Calvilles Ltd. The
Appleby Frodingham

Goodingham
Lloyd's Register
Foundation

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.)

SISTER VESSEL: 'GOLD RANGER' DUNDEE REPORT No. 9234.

List of Approved Plans.

Sternframe & Rudder
Fly to Sternframe & Rudder
Midship Section
Profile & Decks
Midship Bulkheads
Scantlings in way of Petrol Tanks
Strengthening of Bottom Forward
Fore end Scantlings
Aft end Framing
Multiple Punching Diagram
Scantlings of oil Fuel Tanker
Engine Seating
After Cofferdam
Alt. to flow holes in Longitudinals
Bottom framing in no. 1 side tank
Strong Beams in way of Boiler Casing
Fore & aft Gangway
Particulars of Arc welding
Oil Tight hatch covers
Cargo Hatch
Detail of Hatch on Fish Deck
Forged steel Liller
Alterations to Boiler Casing

Pumping arrangements
Emergency steering gear.

Steel Invoices & Forging Reports Herewith.

PARTICULARS OF ELECTRIC WELDING (if employed)

Sternframe & part of Rudder. Transverses to shell & F&A bulkheads. Bulkhead stiffener brackets to bulkhead & longitudinals. Horizontal stringers to shell & bulkheads. F&A bulkhead stiffener brackets to bulkhead & shell. Oil tight hatches. Bilge keel also minor details.

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

Carrying oil fuel in bulk, F.P. above 150°F. Longitudinal framing at bottom & at Deck, Canister Stern oil engine. Machinery aft, Lloyd's A&C.P., Wireless, Echo Sounding device. Direction Finding.

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

1st Bower 33-2-4, J.T. 3399, 23-8-40.
2nd „ 33-1-18, J.D. 3155, 27-7-40.
3rd „ 29-3-0, J.D. 2931, 29-5-40.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 129.16 ft., R.Q.D. ✓ ft., Bridge ✓ ft., Forecastle 80.33 ft.

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

Official No. 168210 Signal Letters ✓ Extreme Breadth over Belting ✓ Over-all Length 355.33

No. and Material of Decks 1 Deck (steel) & 2nd Deck (stl) clear of Cargo tanks

Parts of Bottom of Vessel coated with cement or approved composition Cement in Feed tank & F.W. tanks, Fore & aft peak tanks & Forward Deep tank bituminous Composition

Particulars of composition (if fitted) and of approval Briggs Bituminous.

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, IN ENGINE SPACE			Fore peak tank,	16.0	49 ✓
Double bottom, under Engines and Boilers, FRS. 99-111	27.0	65	After peak tank,	12.0	24 ✓
Double bottom, COFFERDAM, FRS. 111-112	2.25		Deep tank, aft, FRS. 129-135	13.5	114 ✓
Double bottom, if under Engines only, FRS. 112-125	29.25	45	Deep tank, forward, FRS. 10-24	31.5	152 ✓
Double bottom, if under Boilers only, FRS. 125-129	9.00		Other tanks, if fitted, NO. AT SIDES FRS. 29-36	15.75	164 ✓
Double bottom, forward, COFFERDAM			(If necessary, furnish further information by sketch.)		
Total length (if continuous) and Capacity	67.50	110			

Order for Special Survey No. 1604

Date 22ND SEPT. 1939

Dates of Surveys held while building

1940, JULY 29, AUG. 6, 9, 15 SEPT. 4, 9, 10, 18, 24, 27, 30 OCT. 2, 4, 14, 18, 24, 31 NOV. 1, 6, 7, 11, 12, 15, 18, 20, 21
25, 26, 27, 28, 29 DEC. 2, 3, 6, 10, 12, 16, 19, 24, 26, 27. 1941 Jan. 3, 9, 14, 15, 17, 24, 28, 30 Feb. 4, 11, 14, 19, 24
Mar. 3, 5, 11, 13, 17, 21, 26, 27, Apr. 2, 3, 11, 17, 21, 25, 28, 29, 30 May 1, 2, 3, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 19
20, 21, 22, 27, 30 June 5, 18, 20, 27, July 1, 22, 25, Aug. 4, 5, 7, 8, 29, Sept. 8, 9, 10, 11, 16, 17, 18
19, 22, 23, 25, 29

Total No. of Visits 115

PARTICULARS OF LONGITUDINAL FRAMING.

FRAMING.	AMIDSHIPS.			ENDS.			Any Departure from Approved Plans to be Noted.	RIVETING.				
	In Ship.			In Ship.				Rivets in Longitudinal Frames.		Spacing of Rivets on each side of Transverses and Bulkheads. Inches.	Rivets in Brackets to Bulkheads.	
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.		Diam.	Speng.		Number.	Diameter.
Framing of E , L E												
Frames in Bridge 'tween Decks	TRANSVERSE FRAMING IN POOP & FORECASTLE											
CENTRE GIRDER	11	3 1/2	.55	11	3 1/2	.55	IN NOS. 3 & 4 TANKS	7/8	AS MULT.	9 @ 3 3/8		
Frames from Uppermost Continuous Deck To BILGE	11	3 1/2	.43	11	3 1/2	.43	IN NOS. 1, 2 & 5 TANKS	7/8	AS MULT.	9 @ 3 3/8	WELDED	
No. 1												
" 2												
" 3												
" 4												
" 5	LONGITUDINAL O.T. BULKHEAD (P&S)											
" 6	11	3 1/2	.49	11	3 1/2	.49	IN NOS. 3, 4 & 5 TANKS	7/8	AS MULT.	9 @ 3 3/8	WELDED	
" 7	11	3 1/2	.43	11	3 1/2	.43	IN NOS. 1 & 2 TANKS	7/8	AS MULT.	9 @ 3 3/8	WELDED	
" 8												
" 9												
" 10												
" 11												
" 12												
" 13												
" 14												
" 15												
" 16												
Spacing of Longitudinal Frames	28 3/4 IN CENTRE TANKS 27 IN WING TANKS											
At Ends	28 3/4 IN CENTRE TANKS 27 IN WING TANKS											
Double Bottoms	TRANSVERSE FRAMING IN DOUBLE BOTTOM											
L.E. or C	AS PER PAGE 1.											
Spacing of Longitudinals	Amidships At Ends...											
Transverses.												
Side	TRANSVERSE FRAMING IN POOP & F'SCLE											
Depth and Thickness	30 X .40 IN NOS. 3, 4 & 5 TANKS											
Face Angles	28 X .40 IN NOS. 1 & 2 TANKS											
Lugs to Shell*	6" FLANGE											
Bottom	WELDED											
Depth and Thickness	38 X .44											
Face Angles	7 3 1/2 .50BA DOUBLE IN NOS. 3, 4 & 5 TANKS											
Lugs to Shell*	6 3 .50BA " " NOS. 1 & 2 TANKS											
Bottom	WELDED											
Centre Tanks	.44											
Brackets	9'-0" IN NOS. 3, 4 & 5 TANKS											
Spacing of Transverse Frames	9'-0", 6'-9", 9'-0" IN NOS. 1 & 2 TANKS											
* State if joggled or liners.												
Longitudinal Beams of	Bridge Deck											
E, L, E	Upper											
	Second											
	Third											
Transverse Beams.	UPPER DECK											
	CENTRE											
	24 X .40 6" FLANGE IN NOS. 1 & 2 TANKS											
	20 X .40 6" " IN NOS. 3, 4 & 5 "											
	WING											
	22 X .40 6" FLANGE IN NOS. 1 & 2 TANKS											
	23 X .40 " IN NOS. 3, 4 & 5 "											

The particulars of framing in peaks (if ordinary), Floors, Centre Girder, Side Girders and Margin Plate and their angle attachments, etc., to be entered in their respective places provided for on the Report Forms.

NOTE:—This slip to be pasted on the fourth page of the Report, and reference to same to be made under framing, etc., on the first page.