

# 'CAPE RODNEY'

## Ram Bow Shows 24 Per Cent Improvement



**FURTHER PROOF** of the value of the Trident/Lithgow ram bow was given during the trials of the 'Cape Rodney', a 500 ft. bulk carrier with a deadweight of 17,250 tons. On trials, in the ballast condition, the vessel attained a speed of 17.33 knots in adverse weather conditions with the main engine developing 8,530 b.h.p. This follows the very satisfactory results obtained with the 'Orissa' (see *Shipping World & Shipbuilder*, 6 May) and more than confirms the 24 per cent improvement predicted for the ram bow against a conventional bow.

Built by Lithgows Ltd., Port Glasgow, for the Lyle Shipping Co. Ltd., Glasgow, the *Cape Rodney* has been specially designed for the carriage of all types of grain without shifting boards; she is also self trimming. Other types of bulk cargoes, such as coal, iron ore, etc., can be carried in her spacious holds.

The *Cape Rodney* has been built under the special survey and to the highest classification of Lloyd's Register of Shipping for the classification \*100 AI, strengthened for heavy cargoes—Nos. 2 and 4 holds may be empty. She also meets the requirements of the Board of Trade, the International Load Line and Safety of Life at Sea, Suez Canal and Panama Canal Regulations.

As can be seen from the general arrangement drawing, the vessel has

a single deck, with a rounded sheer-strake in way of the cargo holds, a well raked stem, cruiser stern and is fitted with the new ram bow designed by the Lithgow technical team. She has a single four-bladed propeller and is fitted with a semi-balanced streamlined rudder of the Simplex type; the stern frame and rudder have been supplied by A/S Stommens Vaerksted. The engine room and all the accommodation are situated aft.

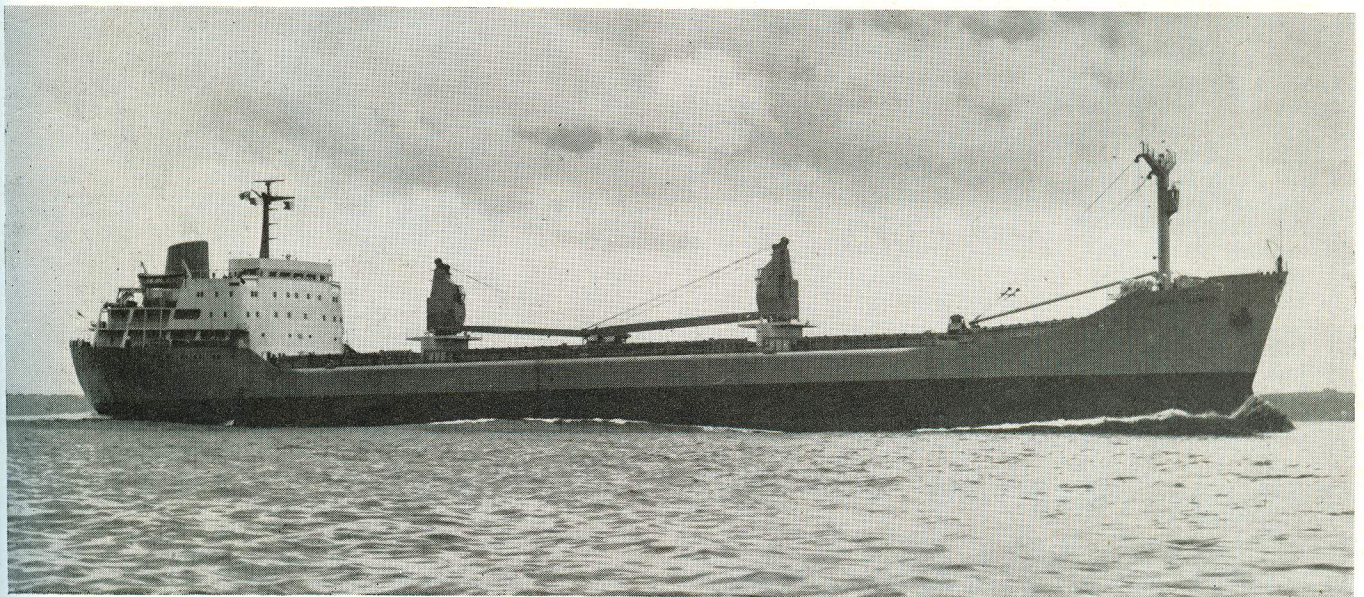
With the exception of two side shell seams, the hull is all welded and is divided into five main cargo holds; the double bottom tanks are carried up the sides to form hoppers. To make the vessel self trimming, top wing ballast or grain tanks, with a 30 deg. slope, are fitted. These tanks are provided with grain hatches.

### Principal Particulars

Length o.a.	...	526 ft. 11½ in.
Length b.p.	...	495 ft. 0 in.
Breadth extreme	...	68 ft. 0 in.
Depth, moulded	...	41 ft. 6 in.
Load draught	...	29 ft. 11¼ in.
Corresponding deadweight	...	17,250 tons
Water ballast	...	5,547 tons
Grain capacity	...	878,983 cu. ft.
Bale capacity	...	790,248 cu. ft.
Machinery output	...	9,600 b.h.p.
Corresponding r.p.m.	...	119

The hold bulkheads are corrugated vertically, while the top wing tanks are plane with bulb plate longitudinals scalloped to allow grain to run freely. There is no wood sheathing in the holds, but the tank top plating is suitably increased in thickness. A further Owners' increase has been introduced above the requirements for carrying heavy cargoes.

Paints for the *Cape Rodney* have been supplied by Camrex Paints Ltd., W. J. Leigh Ltd. and Federation Paints Ltd. All steel plates received a coat of Shot-o-kote primer immediately after shotblasting and extensive



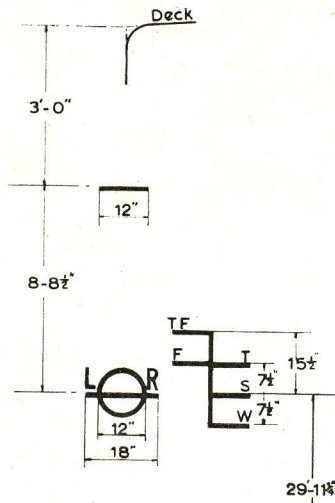
use has been made of epoxy type paints throughout the vessel. This treatment should undoubtedly reflect in reduced maintenance costs.

**Equipment**

Each hold is served through a large hatchway, fitted with a MacGregor patent single-pull steel watertight cover. Ventilation of the cargo holds is by natural means, ventilators being fitted in each cargo hatch.

The ground tackle comprises three Byer's stockless anchors, each weighing 90½ cwts., 330 fathoms 2½ in. Floryt chain cable, five 110 fathom lengths of 3¼ in. circ. 6/12 steel mooring wire and 130 fathoms of 6 in. circ. 6/24 steel towline.

For handling the anchors there is one Clarke Chapman electrically driven, totally enclosed anchor and mooring windlass. There is also a



**Deadweight scale. The "Cape Rodney" carries her full load deadweight of 17,250 tons on a draught of 29 ft. 11½ in.**

Free Board	Draft	Deadweight		Tons per Inch
		Salt Water	Fresh Water	
6				
7	32			70.25
8	31		177.69	69.75
9	30	172.50	172.50	69.25
10	29	170.00		
11	28	160.00	160.00	68.83
12	27	150.00		
13	26	140.00	140.00	68.33
14	25	130.00		
15	24	120.00	120.00	67.75
16	23	110.00		
17	22	100.00	100.00	67.33
18	21	90.00		
19	20	80.00	80.00	66.83
20	19	70.00		
21	18	60.00	60.00	66.50
22	17	50.00		
23	16	40.00	40.00	65.92
24	15	30.00		
25	14	20.00	20.00	65.58
26	13	10.00		
27	12	0	0	65.08
28	11			
29	10			64.83
30	9			
31	8			64.50
32	7			

**TANK CAPACITIES**

Compartment	Capacity in tons				
	W.B.	F.W.	O.F.	DO	LO
No. 1 wing tank P .. .. .	189				
No. 1 wing tank S .. .. .	189				
No. 2 wing tank P .. .. .	247				
No. 2 wing tank S .. .. .	247				
No. 3 wing tank P .. .. .	250				
No. 3 wing tank S .. .. .	250				
No. 4 wing tank P .. .. .	250				
No. 4 wing tank S .. .. .	250				
No. 5 wing tank P .. .. .	249				
No. 5 wing tank S .. .. .	249				
No. 1 D.B. tank P .. .. .	461				
No. 1 D.B. tank S .. .. .	461				
No. 2 D.B. & Hopper P .. .. .	320				
No. 2 D.B. & Hopper S .. .. .	320				
No. 3 hopper side P .. .. .	121				
No. 3 hopper side S .. .. .	121				
No. 4 hopper side P .. .. .	119				
No. 4 hopper side S .. .. .	119				
No. 5 hopper side P .. .. .	83				
No. 5 hopper side S .. .. .	83				
No. 5 D.B. tank P .. .. .	189				
No. 5 D.B. tank S .. .. .	189				
Fore peak tank .. .. .	490				
Aft peak tank .. .. .	101	99			
No. 3 D.B. tank P .. .. .			202		
No. 3 D.B. tank S .. .. .			202		
No. 4 D.B. tank P .. .. .			202		
No. 4 D.B. tank S .. .. .			202		
No. 5 D.B. tank P .. .. .			169		
No. 5 D.B. tank S .. .. .			169		
D.O. D.B. tank P .. .. .				27	
D.O. D.B. tank S .. .. .				44	
Overflow tank .. .. .			9		
H.O. fuel supply S .. .. .			68		
Purified H.O. tank P .. .. .			34		
P .. .. .			34		
Lub. oil drain tank .. .. .					11
Lub. oil renov. tank .. .. .					11
Lub. oil renov. tank .. .. .					11
Lub. oil storage tank .. .. .					11
Piston water drain tank .. .. .		6			
Jacket water drain tank .. .. .		11			
Feed water tank .. .. .		26			
Fresh water tank P .. .. .		73			
S .. .. .		73			
	5547	288	1291	71	44

Clarke Chapman electrically driven, totally enclosed warping winch with two warping ends. Two Clarke Chapman 7½-ton electrically driven level luffing grabbing type deck cranes are fitted, one between Nos. 2 and 3 hatches and one between Nos. 4 and 5 hatches. These units are complete with grabs and are capable of working through an angle of 360 deg. The vessel is also fitted with a Velle crane and for operating this unit there are three Clarke Chapman electrically driven totally enclosed cargo winches

m.v. CAPE RODNEY Built by Lithgows Limited, Port Glasgow for The Lyle Shipping Company Limited, Glasgow



# STEM-TO-STERN TRUCK-TO-KEEL PROTECTION BY CAMREX

All paints, compositions and tank coatings used on the m.v. Cape Rodney have been supplied by Camrex. The steelwork was pre-shotblasted and immediately primed with CAMREX SHOT-O-KOTE. Special advanced systems used throughout the vessel include

**BOTTOM:** Camrex D.T. Kote pitch epoxy coating followed by special Camrex Longlife Anti-fouling Composition.

**BOOTTOPPING & TOPSIDES:** A four coat system of Camrex Camolite.

**MAIN WEATHER DECKS:** Four coat system of Camrex Camolite slip retardent deck coating.

**ALL UPPER WING TANKS FOR THE CARRIAGE OF GRAIN.** Camrex D.T. Kote pitch epoxy tank coating.

**ALL WATER BALLAST TANKS - UNDER WOOD DECKS BEHIND ACCOMMODATION LININGS AND HOLD CEILINGS.** Camrex Non-Oxidising-Preservatives.

**ALL ACCOMMODATION - HOLDS - ENGINE ROOMS, etc.** are painted throughout with Camrex Marine Paints.

All tank coatings were applied by Camrex Contracts Division, supervised by Camrex Technical Service Division.



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