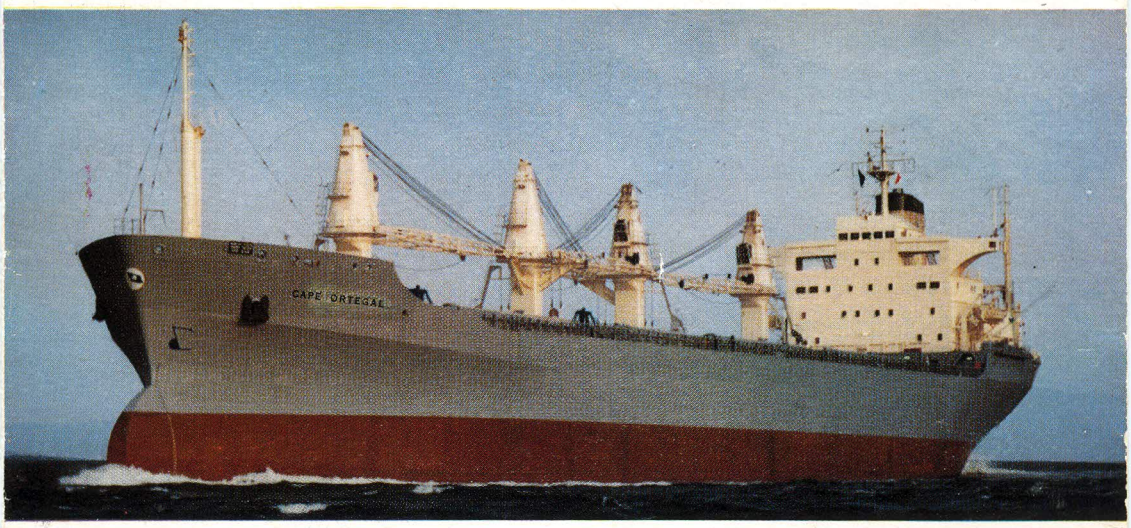
FAST GEARED BULKCARRIER

M/V "CAPE ORTEGAL"



OWNERS:

LYLE SHIPPING COMPANY, LIMITED

GLASGOW

MANAGERS:

SCOTTISH SHIP MANAGEMENT LTD.

40 Buchanan Street, Glasgow, C.1

Telegrams: "MANAGEMENT"

Telephone: 041-248 2333

Telex: 77 81 33

BUILT 1976 BY:

GOVAN SHIPBUILDERS LTD.

GLASGOW — SCOTLAND

CLASS:

LLOYD'S REGISTER OF SHIPPING ✠ 100 A 1 — "UMS"

SIGNAL LETTERS: GUWH

Description:

Steel single deck, single screw bulkcarrier for carrying general bulk cargoes with special facilities for deck cargo.
Machinery and accommodation aft.

Dimensions:

Length overall	175.1	metres
Length between perpendiculars	163.0	,,
Breadth moulded	25.45	,,
Depth moulded to upper deck	14.0	,,
Draught on summer freeboard	10.144	,,
Corresponding deadweight	26,930	tonnes
t.p.c.	37.07	tonnes per CM.
Timber load line deadweight	28,326	tonnes
Summer on	10.518	metres

Tonnage:

Gross	16,646.00
Nett	9,781.97

Main Machinery:

One Harland & Wolff Burmeister & Wain direct reversible, single acting, crosshead type pressure charged, intercooled, two-stroke direct injection oil engine type 6K74E.F. Suitable for burning diesel and heavy oil up to a viscosity of 3500 Redwood No. 1 at 100°F. Crankshaft rotation view from aft, clockwise for ahead rotation.
M.C.R. — 11,600 B.H.P. (Metric) at 124 R.P.M.
C.S.R. — 10,600 B.H.P. (Metric) at 120 R.P.M.

Propeller:

Four-bladed manganese bronze fixed pitch propellor to Meridien design of stone manganese manufacture.
Diameter: 5,700 mm. Mean face pitch: 4,200 mm.

Diesel Alternators:

3-G.E.C.-Ruston Paxman 6AP2Z auxiliary diesel engines developing 755 B.H.P. C.S.R. at 720 r.p.m. each coupled to a Siemens constant voltage synchronous, drip proof, self ventilated alternator, each having an output of 630kva, 505kw. 440 volts 3 phase 60 cycles.

Remote Control and Instruments:

The ship is built to comply with the requirements of Class "U.M.S." of Lloyds Register of Shipping for periodically unmanned engine room.

Nautical Equipment:

Gyro-Compass — Gyro-Pilot:
S. G. Brown.

Echo-Sounding Apparatus:
Simrad, type EN.

Radar:
Decca 12" RM with auto-pilot.
Decca 9" RM.

Radio Direction Finder:
IMR. ADF 2200. S. G. Brown Magnavox Satellite Navigator.

Wireless Station:
International Marine Radio Co. Limited.
Wireless station, type ST 1600 CAP 1600W VHF equipment type STR24.

Steering Gear:

Four Ram electro hydraulic steering gear.
Makers: John Hastie & Co. Limited.

Deck Machinery:

Windlasses:

Two hydraulically operated combined windlasses/self tensioning mooring winches for studlink chain of special steel—Type "Floryt" U2 —Diameter of cable chain = 66mm.

Makers: A/S Hydraulik Brattvaag Brattvaag, Norway.

Each mooring winch contains one 10-ton self tensioning mooring drum 380mmØ x 910mm. long and one warping end.

Mooring Winches:

Two hydraulically operated self tensioning mooring winches, Type AB-380-C, both placed on poop deck. Both mooring winches are fitted with one 10-ton self tensioning mooring drum, 380mmØ x 910mm. long and one warping end 400mmØ x 450mm. long.

Capacity of each mooring drum = 104 fathoms of 32mm. wire rope.

Cargo Winches:

Two hydraulically operated cargo winches, type A3-300-2N, both placed on Captain's deck. Both winches are fitted with one 2.5-ton centre barrel 300mmØ x 425mm. long and one warping end.

Maximum hoisting speed with maximum load of 2.5 tons = 50 metres/min.

Hatches:

Hatch No. 1 ..... Length 10.29 metres x breadth 12.2 metres
Hatch Nos. 2, 4, 5 Length 19.20 metres x breadth 12.2 metres
Hatch No. 3 ..... Length 10.93 metres x breadth 12.2 metres

Hatch Covers:

MacGregor hydraulically operated steel hatch covers, designed to carry a uniformly distributed load of 2.24 tons/M^2 (450lb./$ft.^2$).

Heavy Cargo

Maximum loading in holds = 0.70M^2/tonnes.

Timber Cargo:

Eyeplates for lashing down timber deck cargo are fitted on upper deck at maximum intervals of 1.5 metres.

CAPACITIES OF CARGO HOLDS

COMPARTMENT	FRAME No.	BULK CARGO CAPACITIES		PACKAGE CARGO CAPACITIES	
		CUB. METRES	CUB. FEET	CUB. METRES	CUB. FEET
HOLD No. 1	159 - 187	4055·6	134,222	3499·5	123,584
" " 2	126 - 159	8032·8	283,676	7613·6	268,872
" 3	104 - 126	5799·0	204,790	5397·8	190,622
" " 4	73 - 104	8292·5	292,847	7887·4	278,541
" " 5	42 - 73	7840·8	276,895	7569·4	267,311
TOTAL IN CARGO HOLD		34020·7	1,201,430	31967·1	1,128,930

Cargo Gear:

Cranes:

Four Brattvaag hydraulic level luffing deck cranes of max. S.W.L. 18 tons with low pressure pump.

Grabs: 4

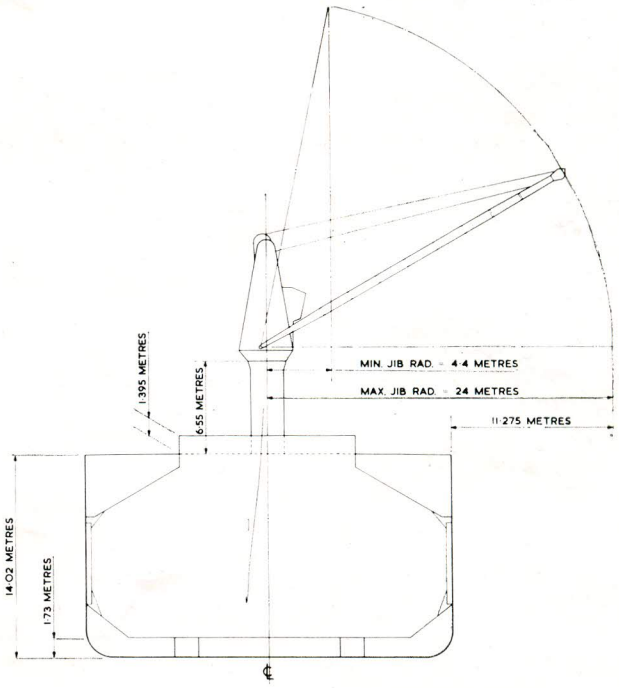
Type and maker—Peiner Electro-hydraulic MZG 5000-3B.
Capacity—5.0m^3 (176.6 c. ft.).
Weight—5.6 long tons.

Crane Capacities:

Max. S.W.L. ..... 18 tons at hook, 16 tons at grab.
Max. jib radius ..... 24 metres
Min. jib radius ..... 4.4 metres

Hoisting Speeds:

With maxm. S.W.L. ..... 30 metres/min.
With 10 tons ..... 45 metres/min.
With 4 tons ..... 90 metres/min.
Slewing speed 0°-360° .....0-1.25 r.p.m. stepless
Luffing time from 30° to min. jib radius ..... 42secs.
Outreach from ship's side ..... 11.275 metres
Max. list of vessell at full load of crane .... 5°



PRINCIPAL SECTION IN HOLDS

Capacities of Fuel and Lubricating Oil, Fresh Water and Ballast Tanks:

OIL FUEL

Compartment		Location (Frs.)	Capacities: 100% Full, Cubic metres	Capacities: 98% Full, Cubic metres	Capacities: 98% Full, Tonnes at S.G.=0.95	Centres of Gravity (100%) (metres): Vertical above base	Centres of Gravity (100%) (metres): Long'l. from A.P.	Change in draught due to filling tanks (See Note 5) (metres): Aft	Change in draught due to filling tanks (See Note 5) (metres): For'd	Free surface mom't. at S.G.=0.95 (tonnes-metres)
No. 4 D.B. Tank	Port	74—104	179.8	176.2	167.4	0.69	73.30	+0.08	+0.02	252.0
No. 4 D.B. Tank	Starb	73—104	185.8	182.1	173.0	0.69	72.84	+0.08	+0.02	259.8
No. 4 D.B./Hopper Tank	P & S	73—104	588.0	576.2	547.4	1.11	73.08	+0.26	−0.06	945.6
No. 5 D.B. Tank	P & S	42—73	308.6	302.4	287.3	0.71	45.70	+0.26	−0.09	345.4
H.F.O. Bunker	Port	35—42	150.2	147.2	139.8	12.32	27.84	+0.17	−0.08	233.0
H.F.O. Bunker	Starb	11—21	157.8	154.6	146.9	12.25	10.92	+0.22	−0.12	170.9
H.F.O. Service Inb'd	Starb	35—41	49.7	48.7	46.3	11.96	27.43	+0.05	−0.04	5.8
H.F.O. Service Outb'd	Starb	35—41	49.2	48.2	45.8	11.94	27.43	+0.05	−0.03	5.8
H.F.O. Transfer Tank	Starb	35—41	51.0	50.0	47.5	12.10	27.51	+0.06	−0.03	13.1
O.F. Drain Tank D.B.	Starb	31—41	19.8	19.4	18.4	1.40	26.46	+0.03	0.	15.7
Sludge Tank D.B.	Port	31—40	28.7	28.1	25.4	1.22	25.98	+0.03	−0.02	20.8
Total Oil Fuel					1645.2					

DIESEL OIL

Compartment		Location (Frs.)	Capacities: 100% Full, Cubic metres	Capacities: 98% Full, Cubic metres	Capacities: 98% Full, Tonnes at S.G.=0.86	Centres of Gravity (100%) (metres): Vertical above base	Centres of Gravity (100%) (metres): Long'l. from A.P.	Change in draught due to filling tanks (See Note 5) (metres): Aft	Change in draught due to filling tanks (See Note 5) (metres): For'd	Free surface mom't. at S.G.=0.86 (tonnes-metres)
D.O. Bunker	Port	11—21	123.4	121.0	104.0	12.11	10.36	+0.16	−0.18	120.1
D.O. Service	Port	17—21	34.3	33.7	29.0	12.71	12.96	+0.04	−0.02	7.0
Total Diesel Oil					133.0					

LUB. OIL

Compartment		Location (Frs.)	Capacities: 100% Full, Cubic metres	Capacities: 98% Full, Cubic metres	Capacities: 98% Full, Tonnes at S.G.=0.90	Centres of Gravity (100%) (metres): Vertical above base	Centres of Gravity (100%) (metres): Long'l. from A.P.	Change in draught due to filling tanks (See Note 5) (metres): Aft	Change in draught due to filling tanks (See Note 5) (metres): For'd	Free surface mom't. at S.G.=0.90 (tonnes-metres)
Lub. Oil Drain Tank—D.B.	CR	31—40	24.0	23.4	21.2	1.45	25.26	+0.03	−0.01	14.5
Lub. Oil Renov'g Tank—Flat	Starb	23—28	24.6	24.1	21.7	12.65	18.02	+0.04	−0.01	9.4
M.E. Lub. Oil Storage—Flat	Starb	23—28	29.4	28.8	26.0	12.24	17.87	+0.03	−0.03	2.6
Diesel Alt. L.O. Storage—Flat	Starb	23—28	12.2	11.9	10.7	12.22	17.84	+0.01	−0.01	0.2
Cyl. Oil Storage Tank—Flat	Starb	23—25½	11.6	11.4	10.2	12.31	16.95	+0.01	−0.01	0.7
Cyl. Oil Storage Tank—Flat	Starb	25½—28	11.6	11.4	10.2	12.31	18.86	+0.01	−0.01	0.7
Total Lub. Oil					100.0					

FRESH WATER

Compartment	Location (Frs.)	Capacities: Cubic metres	Capacities: Tonnes at S.G.=1.00	Centres of Gravity (100%) (metres): Vertical above base	Centres of Gravity (100%) (metres): Long'l. from A.P.	Change in draught due to filling tanks (See Note 5) (metres): Aft	Change in draught due to filling tanks (See Note 5) (metres): For'd	Free surface mom't. at S.G.=1.00 (tonnes-metres)
Fresh Water Tanks	4—10	156.8	156.8	12.8	4.31	+0.20	−0.20	482.4
Feed Water Tank D.B.	13—20	21.1	21.1	1.2	11.39	+0.03	−0.02	15.9
Total Fresh Water			177.9					

WATER BALLAST

Compartment		Location (Frs.)	Capacities: Cubic metres	Capacities: Tonnes at S.G.=1.025	Centres of Gravity (100%) (metres): Vertical above base	Centres of Gravity (100%) (metres): Long'l. from A.P.	Change in draught due to filling tanks (See Note 5) (metres): Aft	Change in draught due to filling tanks (See Note 5) (metres): For'd	Free surface mom't. at S.G.=1.025 (tonnes-metres)
Fore Peak Tank		187—Stem	459.4	471	5.83	158.80	−0.42	+0.65	334.0
No. 1 Double Bottom	Port	159—187	190.3	195	0.99	143.93	−0.13	+0.23	836.0
No. 1 Double Bottom	Starb	159—187	194.7	200	0.99	143.78	−0.13	+0.24	847.0
No. 2 Double Bottom	CR	126—159	365.7	375	0.69	121.53	−0.11	+0.32	2,208.8
No. 2 D.B./Hopper Tank For'd	P & S	141—159	270.0	277	1.31	127.53	−0.11	+0.26	308.8
No. 2 D.B./Hopper Tank Aft	P & S	126—141	295.8	303	1.19	114.03	−0.06	+0.22	472.4
No. 3 Double Bottom	CR	104—126	257.8	264	0.69	97.30	+0.03	+0.13	1,577.5
No. 3 D.B./Hopper Tank	P & S	104—126	425.8	436	1.10	97.09	+0.04	+0.21	777.6
No. 5 D.B./Hopper Tank For'd	P & S	59—73	216.8	222	1.20	52.60	+0.18	−0.04	283.6
No. 5 D.B./Hopper Tank Aft	P & S	42—59	227.0	232	1.73	38.82	+0.27	−0.09	204.6
Aft Peak Tank		Stern—10	234.7	241	9.76	1.96	+0.39	−0.23	1,337.3
No. 1 Topside Tank	P & S	159—187	433.8	445	12.86	142.97	−0.29	+0.51	594.0
No. 2 Topside Tank	P & S	126—159	1,038.9	1,065	12.49	121.18	−0.31	+0.90	1,387.2
No. 3 Topside Tank	P & S	104—126	746.4	765	12.47	97.07	+0.06	+0.36	995.4
No. 4 Topside Tank	P & S	73—104	1,051.8	1,078	12.47	72.84	+0.52	+0.13	1,402.4
No. 5 Topside Tank	P & S	42—73	1,016.6	1,042	12.52	44.84	+0.99	−0.31	1,381.2
No. 3 Hold/Deep Tank		104—126	5,799.0	5,944	7.50	97.51	+0.53	+2.88	28,329.2
Total Water Ballast				13,555					

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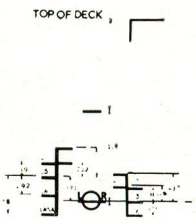
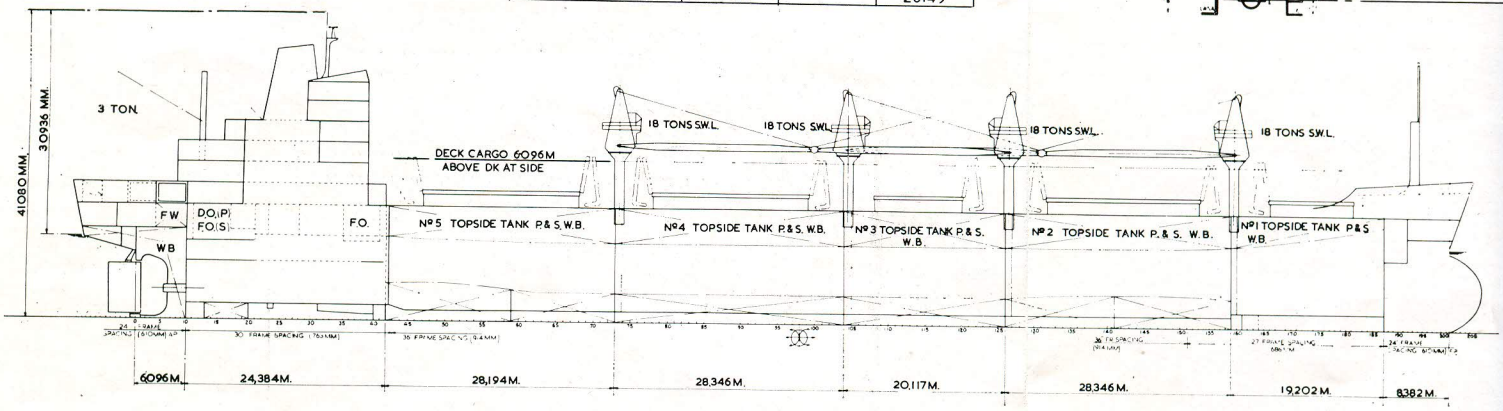
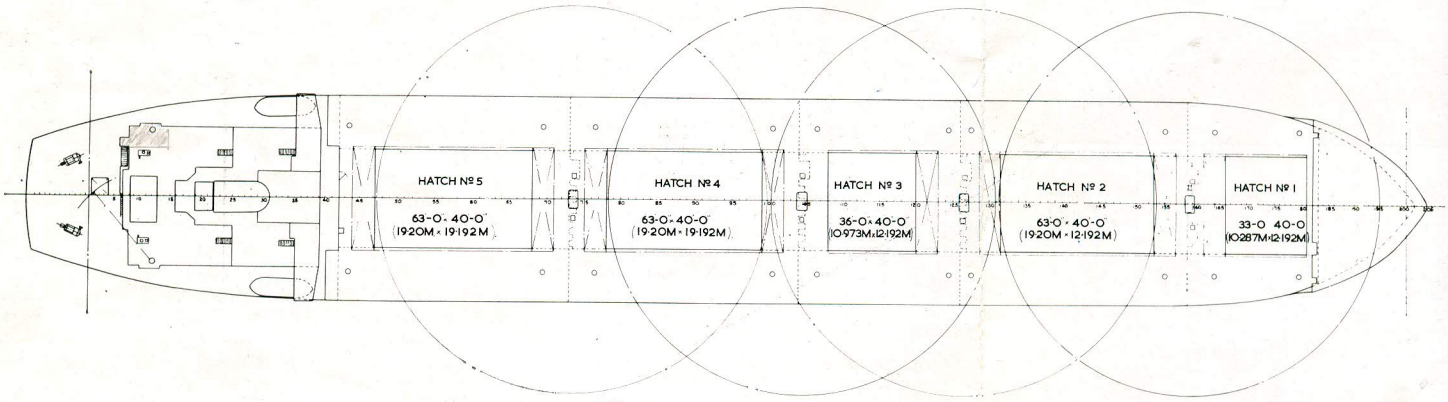
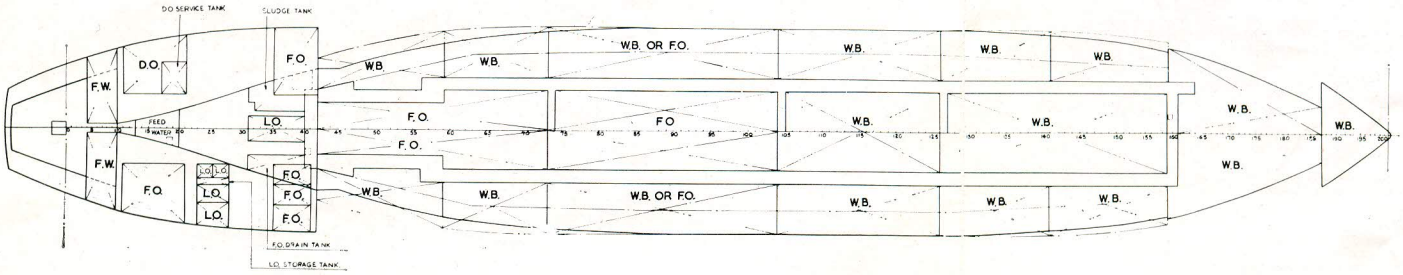
FREEBOARD		DRAFT.	DEADWEIGHT TONNES.	
MARK.	METRES.	METRES.	F.W.	S.W.
T.F.	3·482	10·581	27705	
F	3·693	10·370	26933	
T	3·708	10·355		27715
S	3·919	10·144		26930
W	4·130	9·933		26149

FREEBOARD		DRAFT	DEADWEIGHT-TONNES	
MARK	METRES	METRES	F.W.	S.W.
LTF	3·094	10·969	29139	
LF	3·313	10·750	28328	
LT	3·326	10·737		29152
LS	3·545	10·518		28326
LW	3·837	10·226		27234
LWNA	4·130	9·933		26149