A COMPANY OF THE VICKERS GROUP

# Vickers-Armstrongs Limited

VICKERS HOUSE BROADWAY WESTMINSTER LONDON 8.W.1
Telephone: ABBEY 7777

News Release No.....59/604

27th August 1959.

The following is released for publication at 0901 B.S.T. on 27th August 1959.

#### ORIANA to be launched by H.R.H. Princess Alexandra of Kent

It was learnt from Government House, Brisbane, that the Orient Line's new passenger liner ORIANA will be named and launched by H.R.H. Princess Alexandra at noon on Tuesday, 3rd November. The ceremony will be at the Barrow-in-Furness Shipyard of Vickers-Armstrongs, where the ship is now building.

ORIANA is a liner of 40,000 tons gross and will be the biggest passenger ship launched in Britain since the "Queen Elizabeth", twenty years ago. The principal dimensions are:

Length overall

804 feet

Breadth, moulded

97 feet

Maximum draft

31 feet 6 inches

Maximum horsepower

80,000

ORIANA will have a service speed of  $27\frac{1}{2}$  knots, which will reduce the time of passage from London to Sydney by one week as compared with present ships. She will carry about 600 First and 1,500 Tourist Class passengers. The crew will number 900, all accommodated in single or two-berth cabins. She will be air conditioned throughout.

For relaxation, there will be three swimming pools, a large cinema with a balcony, as well as a ballroom and dance floors, with the usual passenger amenities.

The superstructure of the liner is built of aluminium - 1040 tons of it - and is the largest all-welded aluminium super-structure ever built into a ship.

ORIANA will be fitted with a new system of transverse propulsion, devised by Vickers-Armstrongs, to facilitate manoeuvring in confined waters.

The machinery for ORIANA is also being built by Vickers-Armstrongs at Barrow Works.

It is of interest that all the ships in the Orient Line fleet have been built by Vickers-Armstrongs.

It will be recalled that H.R.H. The Duke of Gloucester, on 7th December 1934, was in Brisbane. He launched from there, by radio impulse to Barrow-in-Furness, the Orient Line's ORION.

ORION is now in Brisbane, the source of today's announcement, for the Queensland Centenary celebrations.

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Telephone: ABBEY 7777

News Release No. 59/615	Dated. 2nd November 1959.
The following is released for publication immediately	

### SCHOOLCHILDREN ARE ATTENDING THE LAUNCH OF ORIANA

A large party of schoolchildren will be attending the launch of ORIANA. About 450 are involved, travelling from local areas and from other parts of Lancashire. A special train from Central Lancashire will bring 330 schoolgirls from St. Anne's, Preston, Garstang, Lancaster and Cartmel and the train is due to arrive at Barrow at 10.30 a.m.

A special enclosure has been arranged for the schoolchildren.

The party from Lancashire has expressed a wish to present a memento to the ship in appreciation of the visit. This will take the form of a solid silver table centre to hold flowers and fruit. It is 14 inches in diameter and 20 inches high.

The local schools in Barrow-in-Furness are on holiday on 3rd November and although it is certain that a great number of the local children will be present, there are no organised parties.

There will be 30 overseas students from the British Council present.

#### NORTHERN ALUMINIUM COMPANY LTD

#### ALUMINIUM SUPERSTRUCTURE

The adoption of weight-saving welded aluminium construction for the whole of the superstructure of the 'Oriana' above the strength deck has allowed the passenger accommodation to be increased to the extent of a complete deck. In the eight tiers of deckhouses, three of which extend the full length of the superstructure, 1,000 tons of aluminium plate and sections were used, about 870 tons being supplied by Northern Aluminium Company Limited.

A high proportion of the plate - which was to the B.S. NP5/6 specification - was in the form of Noral Welded Plate; this is as much as 11 ft wide (as against the usual 6 or 7 ft), and is produced by Northern Aluminium Company by the automatic welding together of two narrower plates in a specially designed jig. The efficient supply of this material was assisted by the availability at Northern's Rogerstone works of a recently-installed 4,000-ton stretcher, in which most of the composite plates were stretched after welding to remove any distortion, and of a 60-ft plate saw capable of cutting plates accurately and with guaranteed edge-straightness. This equipment enabled the aluminium plates to be supplied trimmed to the exact widths specified, so that they could be built into the structure with the minimum of further work.

The aluminium structure was prefabricated, in sections as large as could be conveniently handled. A great deal of preliminary investigation and planning was necessary for aluminium fabrication on the scale of that in the 'Oriana', and as long ago as 1955 an experimental welded panel was constructed, in co-operation between the shipbuilders and Northern Aluminium Company Limited, to assess welding procedures. The welding system eventually adopted was to lay butt welds on to permanent aluminium backing bars, using consumable-electrode argon-shielded-arc welding equipment.

The proportion of extruded sections to plate in the aluminium superstructure is higher than usual, largely because extrusions were chosen, wherever possible, for girders and other members (in preference to plate fabrication) as well as for the usual deck beams and stiffeners. Some of the sections used have a weight per ft of over 15 lb and are about 16 in. in overall dimension, and for beams and stiffeners a special range of tapered-bulb sections was used instead of the more usual square-bulbed British Standard shipbuilding sections. All extruded sections were of alloy to the B.S. NE6 specification, as normally adopted in welded structures to Lloyd's Register requirements.

NORTHERN ALUMINIUM COMPANY LIMITED
Publicity Division
Banbury
Oxfordshire
Tel. 2228

#### LAUNCH OF T.S.S. "ORIANA" BARROW - 3RD NOVEMBER, 1959.

#### GUEST LIST

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Sir Colin & Lady Anderson

Director, Orient Steam Navigation Co. Ltd.

Sir Donald Anderson

Deputy Chairman, P & O Steam Navigation Co.

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Miss Rose Anderson

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Mr. & Mrs. G. S. Harrison

Mr. & Mrs. K. Bayes Architect and Designer, Design Research Unit

Lord & Lady Bicester Director, Vickers Ltd.

Professor & Mrs. Misha Black Partner, Design Research Unit

Mr. & Mrs. A. J. Bott Director, Anderson, Green & Co. Ltd.

Mons. Maurice Brenier-

Estrine Guest of Owners

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Mr. & Mrs. H. E. Gorick General Manager, Chamber of Shipping

Mr. & Mrs. Milner Gray Partner, Design Research Unit

H.E. The Rt. Hon. Sir Eric & Lady Harrison High Commissioner for Australia

Miss J. Hall Secretary, Office of H. R. H. the Duchess

Messrs. Helme & Co.

Mr. & Mrs. A. H. Hird Director, Vickers Ltd.

Mr. & Mrs. Ian Hodgson Partner, R.D. Russell & Partners

Lieut. N. Hunt, R.N. Assistant Private Secretary, Office of

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The Viscount & Lady Knollys	Chairman, Vickers Ltd.
Mr. & Mrs. A. E. Leunig	Deputy General Manager in Australia Orient Steam Navigation Co. Ltd.
Mr. & Mrs. M. M. Millar	General Manager, P & O Steam Navigation Co.
Mr. & Mrs. C. F. Morris	Naval Architect, Orient Steam Navigation Co. Ltd.
Mr. B. O'Rorke	Chartered Architect
Mr. & The Hon. Mrs. Owen	
Mr. D. R. Peters	Assistant to the Directors, Anderson, Green & Co. Ltd.
Mr. & Mrs. D. L. Pelleck	Director, Vickers Ltd.
Sir Leslie & Lady Rowan	Director, Vickers Ltd.
Prefessor & Mrs. R.D. Russell	Architect to Orient Line
Captain P. Sargent	Marine Superintendent, Orient Steam Navigation Co. Ltd.
Mr. & Mrs. R.B. Shepheard	Director, Shipbuilding Conference
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The Rt. Hon. The Viscount & Lady Simon	Chairman, Port of London Authority
The Hen. J. D. Simon	
Captain & Mrs. M. W. Smith	Commodore, Orient Line
Mr. & Mrs. A. M. Stirling	Assistant to the Directors, Anderson, Green & Co. Ltd.
Captain & Mrs. W.A.Sullivan	Office of Naval Attache, U.S. Embassy
Mr. & Mrs. R. M. Thwaites	Director, P & O Steam Navigation Co.
Mr. R. N. Tyrell, M.V.O.	Late clerk to H. R. H. the Duchess of Kent
Mr. Neville Ward	Ward & Austin
Mr. G. C. Watson	Chief Migration Officer, Australia House
Mr. J. N. Wood	Assistant Secretary, Ministry of Transport
Mr. & Mrs. R.P.H. Yapp	Director, Vickers Ltd.

#### <u>S T O P P R E S S</u>

#### ADD TO GUEST LIST

Alderman T.R. Groom (Lord Mayor of Brisbane) and Mrs. Groom

Mr. W. Monslow, Member of Parliament for Barrow-in-Furness.

#### "ORIANA" NO. 1061

#### List of Main Sub Contractors

#### Name

The English Steel Forge & Engineering Corpn. Ltd., Foster Wheeler Ltd., Chesterfield Tube Co. Ltd., Cockburns Limited., Yorkshire Imperial Metals Ltd., Michell Bearings Ltd., Serck Radiators Ltd., J. H. Carruthers & Co. Ltd., Auto-Klean Strainers Ltd., Drysdale & Co., Ltd., James Howden & Co. Ltd., Siemens Edison Swan Ltd., C.A. Parsons & Co. Ltd., G. & J. Weir Ltd., Clyde Blowers Ltd., W. H. Allen Sons & Co. Ltd., Industrial & Mining Supplies Co. Ltd., Marshall & Anderson Ltd., Alfa-Laval Co. Ltd., Thermotank Limited., Smith, Lemon & Stewart Ltd.. Chadburns (Liverpool) Ltd., Ferguson & Timpson Ltd., Babcock & Wilcox Ltd., Metropolitan-Vickers Elec.Co.Ltd., Plibrico Co. Ltd., Tubes Ltd., James Gordon Co. Ltd., Hopkinsons Ltd., Bailey Meters & Controls Ltd. . Aspinalls Patent Governor Ltd., Crane Packing Ltd., Hadfields Ltd., Joseph Lucas (Hydraulic & Combustion Equipment) Ltd., Kelvin & Hughes (Marine) Ltd., Broom & Wade Ltd., Mather & Platt Ltd., County Water Softener Co. Ltd., Manganese Bronze & Brass Co. Ltd., J. Stone & Co. (Charlton) Ltd.,

#### Address

River Don Works, Sheffield.

3, Ixworth Place, London, S.W.3. Chesterfield. Cardonald, Glasgow, S.W.2. Leeds. South Benwell, Newcastle-on-Tyne, 5. Warwick Road, Birmingham, 11. Hamilton Street, Glasgow, S.2. Hounslow, Middlesex. Yoker, Glasgow, W.4. 195, Scotland Street, Glasgow, C.5. Woolwich, London, S.E.18. Heaton Works, Newcastle-on-Tyne, 6. Cathcart, Glasgow, S.4. Clydebank, Nr. Glasgow. Queen's Engineering Works, Bedford. 4, Lloyds Avenue, London, E.C.3. Manse Road, Motherwell. Great West Road, Brentford, Middlesex. Helen Street, Govan, Glasgow, S.W.1. 6, Nixon Street, Newcastle-on-Tyne, 1. Park Lane, Aintree, Liverpool, 10. 48, Stanley Street, Liverpool, 1. 209, Euston Road, London, N.W.1. Trafford Park, Manchester, 17. Westmorland Road, London, N.W.9. Aston, Birmingham, 6. Stanmore, Middlesex. Huddersfield. Purley Way, Croydon. 10, Strand Street, Liverpool, 1. Slough, Bucks. East Hecla Works, Sheffield, 9.

The Radleys, Marston Green, Birmingham, 33.
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Park Works, Manchester, 10.
112, Tamworth Lane, Mitcham, Surrey.
Dock Road, Birkenhead.
Oceanic House, la Cockspur St., London, S.W.1

Andersons Insulation Co. Ltd., Fisher Governor Co. Ltd., 102 Duke Street, Liverpool, 1.
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#### MAIN CONTRACTORS (HULL) "ORIANA".

Messrs. Samuel Taylor (Brierley Hill) Ltd., Brierley Hill, Staffs. -Brown Bros. & Co. Ltd., Rosebank Iron Works, Edinburgh, 7. . Clark Chapman & Co. Ltd., Victoria Works, Gateshead, 8. Mono Pumps Limited, Mono House, 1, Sekford Street, London E.C.1. J. Stone & Co. Ltd., Woolwich Road, Charlton, London S.E.7. Munro & Miller Ltd., Moorepark Tube Works, Edmiston Drive, Glasgow, S.W.1. Turn-Over Filter Co.Ltd., Prince Regent Road, Castlereagh, Belfast Drysdale & Co. Ltd., Bon-Accord Works, Yoker, Glasgow. Malone Instruments Co. Ltd., West Chirton Trading Estate, N. Shields. 11 Royles Ltd., Dalham Engineering Works, Irlam, Lancs. Sover Ltd., St. Johns Road, Erith, Kent. Jas. Birrell Son & Co., St. Andrews Works, Barrow. Quadavit House, 13, Fitzroy Place, Welin MacLachlan Davits Ltd., Glasgow. Newalls Insulation Co. Ltd., Maling Street, Newcastle-on-Tyne, 6. J. & E. Hall Ltd., Dartford, Kent. W. & J. Tod Ltd., Ferry Bridge, Wyke Regis, Weymouth. 99 Fuller Elec. & Mfg.Co., Town Road, Edmonton, London, N.9. Pyrene Co. Ltd., Great West Road, Brentford. Short Bros. & Harland Ltd., 17, Grosvenor Street, London, W.1. Mather & Platt Ltd., Park Works, Manchester, 10. Bulls Metal & Marine Ltd., Yoker, Glasgow. John Boby Ltd., Rainhill, Liverpool. N.F. Ramsay & Co. Ltd., Charlotte Square, Newcastle-on-Tyne. William McGeoch & Co. Ltd., 28, West Campbell Street, Glasgow, C.2. Carron Company,, Carron, Falkirk. Dixon Corbitt Ltd., Teams Rope Works, Gateshead-on-Tyne. Kelvin & Hughes Ltd., 91, Hope Street, Glasgow, C.2. Moorwoods Ltd., Harleston Works, Carlisle Street, Sheffield. . Henry Wilson & Co. Ltd., Kirkby Trading Estate, Liverpool. 11 L. Keizer & Co. Ltd., 66/72, St. Anne Street, Liverpool. -Shapland & Petter Ltd., Raleigh Works, Barnstaple. Light Alloys Products Ltd., Forge Lane, Kingsbury Road, Minworth, Nr. Birmingham. J.D. Insulating Co. Ltd., Hawthorne Road, Bootle, Liverpool. Beckett, Laycock & Watkinson Ltd., Acton Lane, Harlesden, London, N.W.10. Associated Metal Wks(Glasgow)Ltd., 30, St. Andrews Square, Glasgow, W.C.1. Northern Aluminium Co. Ltd., 23, Princess Street, Manchester, 2. Argyle Street Works, Nechells, James Booth & Co. Ltd., Birmingham. British Aluminium Co. Ltd., Woolwich House 59/61, Mosley Street, Manchester, 2. Hoskins & Sewell Ltd., Bordesley, Birmingham, 12.

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North Road, Lancaster.

130/8, Hackney Road, London, E.2.

Byot Works, Eyot Gardens, Hammersmith,

London, W.6.

109, Farringdon Road, London, E.C.1.

21, John Street, London, W.C.1.

123, Deansgate, Manchester, 3.

Solastos Works, Yiewsley, West Drayton.

102/4, Tamworth Road, Hove, 3.

Helen Street, Glasgow, S.W.1.

Adelphi Works, Cobbold Road., Willesden,

N.W.10.

Gnome House, Blackhorse Lane, Walthamstow.

Quay, Wallsend-On-Tyne.

Carlsberg Lager, Carlsberg House, Ponton Road, Vauxhall, London, S.W.8.

Luton Road, Works, Dunstable, Beds.

Semtex House, The Broadway, Welsh Harp,

London, N.W.9.

845, London Road, Thornton Heath, Surrey.

Century Works, Lewisham, London, S.E. 15.

Stoneferry Works, Hull.

Whaddon Works, Cheltenham.

Industrial Road, Sowerby Bridge, Yorks.

Scotstoun Iron Works, Glasgow, W.4.

Temple Chambers, 33, Brazennose Street,

Manchester.

Netherton Works, Anniesland, Glasgow.

#### MAIN CONTRACTORS (ELECTRICAL) "ORIANA".

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	Marconi International Marine Communication Co. Ltd.	Marconi House, 38, Pall Mall, Liverpool, 3.
н	General Electric Co. Ltd.	Magnet House, 8/12, Mincing Lane, Blackburn.
	Evershed & Vignoles Ltd.,	Acton Lane Works, Chiswick, London, W.4.
	W.T. Glover & Co. Ltd.,	170, Corporation Street, Preston.
	Laurence, Scott & Electromotors Ltd.,	Gothic Works, Norwich.
	Kelvin Hughes (Marine) Ltd.,	91, Hope Street, Glasgow, C.2.
	Whipp & Bourne Ltd.,	Switchgear Works, Castleton, Rochdale.
	Measurement Ltd.,	P.O. Box 2, Dobcross, Oldham.
	Chilton Electric Products Ltd.,	Hungerford, Berks.
"	Redifon Ltd.,	Broomhill Road, Wandsworth, London, S.W.18.
•	British Insulated Callenders Cables Ltd.,	49/51, Fylde Road, Preston.
	Britannia Batteries Ltd.,	53, Victoria Street, London, S.W.1.
n	Sperry Gyroscope Co. Ltd.,	Great West Road, Brentford.
	Clifford & Snell Ltd.,	Carshalton Road, Sutton, Surrey.
	Artic Fuse & Elec. Mng. Co. Ltd.,	Birtley, Co. Durham.
n	Vosper Ltd.,	Hamilton Road, Paulsgrove, Portsmouth.
n	Z Electric Lamps & Supplies Ltd.,	105, New Bridge Street, Newcastle-ON-Tyne.
	Thomas Mercer Ltd.,	Eywood Road, St. Albans, Herts.
	Reliance Telephone Co. Ltd.,	43/47, Parker Street, London, W.C.2.
•	William McGeoch & Co. Ltd.,	28, West Campbell Street, Glasgow, C.2.

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Staverton, Gloucestershire.

#### PRESS RELEASE FROM

## JOSEPH



### LUCAS LIMITED

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GREAT KING STREET, BIRMINGHAM 19, ENGLAND

FURTHER-INFORMATION FROM:

CENTRAL ADVERTISING DEPARTMENT

TELEPHONE: NORTHERN 5252 EXT 129

#### OIL BURNING INSTALLATION FOR T. S. S. 'ORIANA'.

The boilers are fired by manually operated Air Registers of the Lucas Suspended Flame Type.

Considerable development work has been carried out to produce a Suspended Flame Register providing a stable flame with complete and efficient combustion at all operating conditions and of optimum shape to obviate flame impingement on quark boiler brickwork and tubes.

A fuel system incorporating two stage pumping and heating delivers the residual fuel to the sprayers at the correct pressures and viscosity for atomisation, 68 secs. Redwood No. 1.

Each of the four boilers is fitted with eight - 15" Registers and one - 10" Register designed to burn 1,880 lbs/hour and 855 lbs/hour each respectively at a fuel pressure of 500 p.s.i. with a Register draught loss of 7.8" W.G. the air being preheated to 290°F. The resultant combustion intensity is 400,000 B.T.U./ft³/hour. Turn down fuel flows for the 15" and 10" registers are 1,400 lbs/hour and 640 lbs/hour each respectively at a pressure of 275 p.s.i. with a Register draught loss of 4.3" W.G. and air temperature of 290°F.

The fuel is sprayed by means of Lucas Simplex Type atomisers affording the turn down required with excellent atomisation at all conditions and the maximum handling simplicity.

Electrical heaters are to be employed for preheating the fuel when starting up from cold, and ignition of the first register in each boiler is effected by a Lucas Hand Operated Torch Igniter. The 10" Registers only have fittings attached for this purpose. Atomisers of lower capacity than those used when steaming are provided for boiler light up.