

ASTRONAUTICS AND GUIDED FLIGHT SECTION REPRINTS

The following is a list of the Section lectures which have been printed in the *Journal* since 1960.
Most of them are available as reprints.

<i>Author</i>	<i>Title</i>	<i>Published</i>
Nonweiler, T. R. F.	Problems of Interplanetary Navigation and Atmospheric Re-Entry	March 1960
Best, D.	Some Problems of Polar Missile Control	August 1960
Maxwell, W. R. and Young, G. H.	Solid Propellant Rocket Motors	April 1961
Symposium (summarised)	The Training of Guided Missiles Engineers	July 1961
Smelt, R.	The Agena Satellite and Discoverer Programme	November 1962
Smith, K.	A Comparison of the Control Problems of Missiles and Manned Aircraft	March 1962
Neat, W. N. and Page, K. G.	Packaged Liquid Rocket Motors	March 1962
Lane, R. J.	Recoverable Air-Breathing Boosters for Space Vehicles	June 1962
Symposium	The Economics of Astronautics	June 1962
Biggs, A. G. and Cawthorne, A. R.	Bloodhound Missiles Evaluation	September 1962
Davies, H.	The Design and Development of the Thiokol XLR 99 Rocket Engine for the X-15 Aircraft	February 1963
Jefferson, G. R.	The Development of Thunderbird	June 1963
Stauff, E.	Development of Guided, Tactical Missiles in France	August 1963
Francis, R. H.	The Development of Blue Steel	May 1964
Williams, W. C.	Technical History of the Mercury Programme—A Discussion	December 1964
Smith, T. L.	RAE Guided Weapon Test Vehicles in the 1950s	February 1965
Lines, A. W.	Design of Spacecraft for Experiments in the ESRO Scientific Programme	November 1965
Shepherd, Capt. C. W. H. and Harrison, J. E. A.	The UK Polaris Project	September 1966
Dorling, E. B. and Hickman, P. L. V.	Symposium—Trials Data and their Handling	November 1966
Symposium	Symposium on Management	March 1967
Tokaty, G. A.	Aerospace Research and Its Relation to Universities, Industry and the Establishments	October 1967
Pardoe, G. K. C.	Some Technical and Management Considerations in European Space Programmes	December 1967
Hume, C. R. and Ducamus, P. M.	Symposium—A Progress Report of the ESRO II Programme	January 1968
Flemming, N. C.	Functional Requirements for Research/Work Submersibles	February 1968
Symposium	Simulation and Control of Guided Weapons	April 1968
Symposium	ELDO	July 1968
Symposium	Commercial Applications of Satellites for Europe	April 1969
Cadoux, J. E.	The Air-to-Air Missile Matra 530	May 1969
Jacob, J. E. B.	Vigilant: A Portable Anti-Tank Weapon for Infantry Use	May 1969
Pout, H. W.	The Evolution of Guided Weapons	June 1969
Symposium	Management Techniques of Guided Weapon Development	January 1970
Augustine, N. and Yates, R. M.	The Evolution of the US Tactical Missile Programme	December 1970
Symposium	Space Satellite and Launch Vehicle Technology	November & December 1970
Symposium	Operational Research in the Guided Weapons Field	January & February 1971
Kerr, T. H.	Techniques of Measuring Cost-Effectiveness of Weapon Systems	September 1971
Childs, D. J.	Cost Control of Guided Weapons Development Programmes	September 1971

DIRECTORY OF ADVERTISERS

AIRCRAFT MATERIALS LTD. Midland Road, London, N.W.1.	01-387 6151	HOBSON, H. M., LTD. Hobson Works, Fordhouses, Wolverhampton.	09078 2381
B.P. AVIATION SERVICE, SHELL-MEX AND B.P. LTD. Shell-Mex House, Strand, London, W.C.2.	01-836 1234	IRVING AIR CHUTE OF GREAT BRITAIN LTD. Icknield Way, Letchworth, Herts.	04626 6282
BRISTOL ENGINE DIVISION, ROLLS-ROYCE London Office: Mercury House, 195 Knightsbridge, S.W.1.	01-589 7090	PERGAMON PRESS LTD. Headington Hill Hall, Oxford.	0092 64881
Bristol: P.O. Box 3, Filton, Bristol.	0272 693871	PITMAN, SIR ISAAC & SONS LTD. 39 Parker Street, London, W.C.2.	01-405 9791
Coventry: P.O. Box 17, Coventry, Warwickshire.	0203 28666	ROBERT RILEY LTD. Milkstone Spring Works, Rochdale.	0706 44551
BRITISH AIRCRAFT CORPORATION 100 Pall Mall, London, S.W.1.	01-930 1020	ROLLS-ROYCE (1971) LTD. P.O. Box 31, Derby DE2 8BJ.	0332 42424
BRITISH OVERSEAS AIRWAYS CORPORATION Head Office: London Airport, Hounslow, Middx.	01-759 5511	14-15 Conduit Street, London, W.1.	01-629 6201
CHATTO & WINDUS 42 William IV Street, London, W.C.2.	01-836 7669	ROSEMOUNT ENGINEERING CO. LTD. Durban Road, Bognor Regis, Sussex.	Bognor Regis 4101-4
CROSS MANUFACTURING CO. (1938) LTD. Combe Down, Bath, Somerset.	02213 2355/8	ROTAX LTD. Willesden Junction, London, N.W.10.	01-965 7777
THE DECCA NAVIGATOR COMPANY LTD. 9 Albert Embankment, London, S.E.11	01-735 8111	SAUNDERS VALVE COMPANY LTD. Aircraft Division, Widemarsh Common, Hereford.	0432 3125-8
DOWTY GROUP LTD. Cheltenham, Glos.	0452 21511	SHELL AVIATION SERVICES, SHELL-MEX AND B.P. LTD. Shell-Mex House, Strand, London, W.C.2.	01-836 1234
THE DUNLOP CO. LTD. AVIATION DIVISION Holbrook Lane, Foleshill, Coventry.	0203 88733	SMITHS INDUSTRIES LTD. (AVIATION DIVISION) Kelvin House, Wembley Park Drive, Wembley, Middx.	01-902 8888
ELECTRO-HYDRAULICS LTD. Liverpool Road, Warrington.	0925 35922	UNION CARBIDE U.K. LTD. Flame Plating Department, Millers Road, Warwick.	0926 41760
HAWKER SIDDELEY AVIATION LTD. Richmond Road, Kingston upon Thames 32 Duke Street, St. James's, S.W.1.	01-546 7741 01-930 2064	UNIVERSITY LIFE ASSURANCE SOCIETY 4 Coleman Street, London, E.C.2.	01-606 6225
HIGH-DUTY ALLOYS LTD. Slough, Bucks.	75 23901	WESTLAND HELICOPTERS LTD. Yeovil, Somerset.	0935 5222

CARPETS

for aircraft, passenger reception, airline offices, flying clubs, etc.

All leading makes of Branded Carpets
WILTONS • AXMINSTERS • TUFTED • ORIENTALS
at Highly Competitive contract prices

Expert fitting service and free delivery throughout UK

Over £200,000 stocks in our London showrooms

Private individuals in the aircraft industry may purchase from us at up to 30% DISCOUNT

DODSON BULL CARPET CO. LTD.

Please write to Dept. R.A.S. LONDON: 5 & 6, Old Bailey, EC4 7JD. Tel: 01-248 7971. BIRMINGHAM: 164, Edmund St., B3 2HB. Tel: (021) 236 5862. BOURNEMOUTH: 268, Old Christchurch Rd., BH1 1PH. Tel: 21248. BRISTOL: 2-3, Royal London House, Queen Charlotte St., BS1 4EX. Tel: 28857. LEEDS: 12, Great George St., LS1 3DW. Tel: 41451. MANCHESTER: 55-61, Lever St., M1 1DE. Tel: (061) 236 3687/8/9. NEWCASTLE-upon-TYNE: 90-92, Pilgrim St., NE1 6SG. Tel: 21428/20321. WESTCLIFF-on-SEA: 495, London Rd., SS0 9LG. Tel: Southend 48569. BRIGHTON: 2-5, North Rd., BN1 1YA. Tel: Brighton 66402.

Open: 9.00-5.30 Mon-Fri. Sat. 9.00-12.00 (Manchester 9.00-4.00)

Advertisements for inclusion in this section are charged at ordinary displayed advertisement rates. (Page £110, $\frac{1}{2}$ page £70, $\frac{1}{4}$ page £50. Odd sizes are charged at £8 psci (min 3 in) part of inch counting as full inch.) Where size is not specified on order, the advertisement will be set to nearest appropriate standard size. Where type sizes and styles are not specified on copy, copy will be laid out and set in accordance with the usual House setting styles.

Orders and copy should be sent to the Advertisement Offices, The Aeronautical Journal of the Royal Aeronautical Society, 184 Fleet Street, London EC4, by the 18th of the preceding month.

Remittances—Cheques and postal orders should be made payable to the Aeronautical Journal of the Royal Aeronautical Society, 184 Fleet Street, London EC4.

The Society reserves the right to decline any copy or advertisement at its discretion and accepts no responsibility for delay in publication or for clerical or printer's errors, although every care is taken to avoid mistakes.

Not a shadow of doubt. The Lynx is a winner!



Fast — 1800 horsepower from twin turbines faired into a low-profile body give a top speed of over 200 m.p.h.

Versatile — planned from the start for a wide range of tasks, including anti-submarine, rescue, cargo, military and executive transport.

Reliable — the advanced technology applied to every important part of the Lynx has an overriding aim: *Reliability and ease of maintenance.*

Lynx — engineered by Westland will be built jointly with Aerospatiale for the World markets of the '70s and '80s.



Westland Helicopters

Yeovil, England

Aérospatiale

2 a 20, Av. Marcel Cachin,
93 la Courneuve, France



Partners in European Co-operation

PRINTED BY THE LEWES PRESS LTD. FRIARS WALK, LEWES, SUSSEX, ENGLAND, AND PUBLISHED
BY THE ROYAL AERONAUTICAL SOCIETY, 4 HAMILTON PLACE, LONDON, W1V 0BQ, ENGLAND.