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.

	Most of them are available as reprints.	
Author	Title	Published
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.	The UK Polaris Project	September 1966
C. W. H. and Harrison, J. E. A.	·	Coptomber 1300
Dorling, E. B. and Hickman, P. L. V	Symposium—Trials Data and their Handling	November 1966
Symposium	Symposium on Management	March 1967
	Assessed December and the Deletion to Universities Industry, and the Patchilch	
Tokaty, G. A.	Aerospace Research and Its Relation to Universities, industry and the Establish-	0-1-1 1007
	ments	October 1967
Pardoe, G. K. C.	ments	December 1967
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M.	ments	December 1967 January 1968
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C.	ments	December 1967 January 1968 February 1968
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium	ments	December 1967 January 1968 February 1968 April 1968
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium	ments	December 1967 January 1968 February 1968 April 1968 July 1968
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Symposium	ments	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Symposium Cadoux, J. E.	ments	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Symposium Cadoux, J. E. Jacob, J. E. B.	ments	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 May 1969
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W.	ments	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 May 1969 June 1969
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium	ments	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 May 1969 June 1969 January 1970
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium Augustine, N. and	ments	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 May 1969 June 1969
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium	ments	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 May 1969 June 1969 January 1970
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium Augustine, N. and Yates, R. M.	ments	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 May 1969 June 1969 January 1970 December 1970 November &
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium Augustine, N. and Yates, R. M. Symposium	Some Technical and Management Considerations in European Space Programmes Symposium—A Progress Report of the ESRO II Programme	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 June 1969 January 1970 December 1970 November & December 1970 January &
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium Augustine, N. and Yates, R. M. Symposium Symposium	ments	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 June 1969 January 1970 December 1970 November & December 1970 January & February 1971
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium Augustine, N. and Yates, R. M. Symposium Symposium Kerr, T. H.	Some Technical and Management Considerations in European Space Programmes Symposium—A Progress Report of the ESRO II Programme	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 May 1969 June 1969 January 1970 December 1970 November & December 1970 January & February 1971 September 1971
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium Augustine, N. and Yates, R. M. Symposium Symposium Kerr, T. H. Childs, D. J.	Some Technical and Management Considerations in European Space Programmes Symposium—A Progress Report of the ESRO II Programme	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 May 1969 June 1969 January 1970 December 1970 November & December 1970 January & February 1971 September 1971
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium Augustine, N. and Yates, R. M. Symposium Symposium Kerr, T. H. Childs, D. J. King, G. E.	Some Technical and Management Considerations in European Space Programmes Symposium—A Progress Report of the ESRO II Programme	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 May 1969 June 1969 January 1970 December 1970 November & December 1970 January & February 1971 September 1971 October 1971
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium Augustine, N. and Yates, R. M. Symposium Symposium Kerr, T. H. Childs, D. J. King, G. E. Evans, L. G. Cleaver, A. V.	Some Technical and Management Considerations in European Space Programmes Symposium—A Progress Report of the ESRO II Programme	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 June 1969 June 1969 January 1970 December 1970 November & December 1970 January & February 1971 September 1971 September 1971 October 1971
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium Augustine, N. and Yates, R. M. Symposium Symposium Kerr, T. H. Childs, D. J. King, G. E. Evans, L. G. Cleaver, A. V. Mathews, Charles W Elliot, H.	Some Technical and Management Considerations in European Space Programmes Symposium—A Progress Report of the ESRO II Programme	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 June 1969 June 1969 January 1970 December 1970 November & December 1970 January & February 1971 September 1971 September 1971 October 1971 November 1971
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium Augustine, N. and Yates, R. M. Symposium Symposium Kerr, T. H. Childs, D. J. King, G. E. Evans, L. G. Cleaver, A. V. Mathews, Charles W Elliot, H.	Some Technical and Management Considerations in European Space Programmes Symposium—A Progress Report of the ESRO II Programme Functional Requirements for Research/Work Submersibles Simulation and Control of Guided Weapons ELDO Commercial Applications of Satellites for Europe The Air-to-Air Missile Matra 530 Vigilant: A Portable Anti-Tank Weapon for Infantry Use The Evolution of Guided Weapons Management Techniques of Guided Weapon Development The Evolution of the US Tactical Missile Programme Space Satellite and Launch Vehicle Technology Operational Research in the Guided Weapons Field Techniques of Measuring Cost-Effectiveness of Weapon Systems Cost Control of Guided Weapons Development Programmes Guided Weapon Design to Meet Cost Requirements Joint Venture and International Collaboration Astronautics After Apollo The Space Shuttle and Its Uses Scientific Deep Space Problems American Space Station Activities	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 June 1969 June 1969 January 1970 December 1970 November & December 1970 January & February 1971 September 1971 September 1971 October 1971 October 1971 November 1971 January 1972
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium Augustine, N. and Yates, R. M. Symposium Symposium Kerr, T. H. Childs, D. J. King, G. E. Evans, L. G. Cleaver, A. V. Mathews, Charles W. Elliot, H. Mathews, Charles W. Tavassoli, A. A.	Some Technical and Management Considerations in European Space Programmes Symposium—A Progress Report of the ESRO II Programme Functional Requirements for Research/Work Submersibles Simulation and Control of Guided Weapons ELDO Commercial Applications of Satellites for Europe The Air-to-Air Missile Matra 530 Vigilant: A Portable Anti-Tank Weapon for Infantry Use The Evolution of Guided Weapons Management Techniques of Guided Weapon Development The Evolution of the US Tactical Missile Programme Space Satellite and Launch Vehicle Technology Operational Research in the Guided Weapons Field Techniques of Measuring Cost-Effectiveness of Weapon Systems Cost Control of Guided Weapons Development Programmes Guided Weapon Design to Meet Cost Requirements Joint Venture and International Collaboration Astronautics After Apollo The Space Shuttle and its Uses Scientific Deep Space Problems American Space Station Activities Metallic Materials for the Space Shuttle	December 1967 January 1968 February 1968 April 1968 April 1969 May 1969 May 1969 June 1969 January 1970 December 1970 November & December 1970 January & February 1971 September 1971 September 1971 October 1971 October 1971 November 1971 January 1972 January 1972 January 1972
Pardoe, G. K. C. Hume, C. R. and Ducamus, P. M. Flemming, N. C. Symposium Symposium Cadoux, J. E. Jacob, J. E. B. Pout, H. W. Symposium Augustine, N. and Yates, R. M. Symposium Symposium Kerr, T. H. Childs, D. J. King, G. E. Evans, L. G. Cleaver, A. V. Mathews, Charles W. Elliot, H. Mathews, Charles W.	Some Technical and Management Considerations in European Space Programmes Symposium—A Progress Report of the ESRO II Programme Functional Requirements for Research/Work Submersibles Simulation and Control of Guided Weapons ELDO Commercial Applications of Satellites for Europe The Air-to-Air Missile Matra 530 Vigilant: A Portable Anti-Tank Weapon for Infantry Use The Evolution of Guided Weapons Management Techniques of Guided Weapon Development The Evolution of the US Tactical Missile Programme Space Satellite and Launch Vehicle Technology Operational Research in the Guided Weapons Field Techniques of Measuring Cost-Effectiveness of Weapon Systems Cost Control of Guided Weapons Development Programmes Guided Weapon Design to Meet Cost Requirements Joint Venture and International Collaboration Astronautics After Apollo The Space Shuttle and Its Uses Scientific Deep Space Problems American Space Station Activities	December 1967 January 1968 February 1968 April 1968 July 1968 April 1969 May 1969 May 1969 June 1969 January 1970 December 1970 November & December 1970 January & February 1971 September 1971 September 1971 October 1971 October 1971 November 1971 January 1972 January 1972 February 1972



MILITARY AFFAIRS

Department of History Kansas State University Manhattan, Kansas 66502, USA

RECENT ARTICLES

Andrade: Submarine Policy in the United States Navy

Woodward: Britain's "Brass Hats" and the Question of a Compromise Peace, 1916–1918

Steele: Political Aspects of American Military Planning, 1941-42

Bell: Frustration of Insurgency: the Rhodesian Example in the Sixties

Higgins: The Anglo-American Historians' War in the Mediterranean, 1942–1945

Callahan: Cornwallis and the Indian Army

Paret: Nationalism and the Sense of Military Obligation

Connelly: Vicksburg: Strategic Point or Propaganda Device?

Maslowski: A Study of Morale in Civil War Soldiers

Millar: The Landsknecht

Annual Membership \$7.50 (U.S.) Plus \$1 Overseas Postage.



LECTURESHIP IN AERODYNAMICS

Applications are invited for this appointment in the Department of Mechanical Engineering. The successful applicant will be required to lecture in aerodynamics at under-graduate and post-graduate level and Aeronautical Engineering courses and to undertake and supervise research.

A primary interest requirement is External Aerodynamics, but related inte ests in Propulsion and Project aspects would be especially advantageous.

Initial salary within the range £1764-£4299 p.a. FSSU.

Further particulars and application forms may be obtained from the Registrar, University of Salford, Salford, M5 4WT, to whom completed applications should be returned by 15th December 1972 quoting reference ME/284/TAJ.

Informal enquiries may be made in confidence by writing (including a resume) or telephoning J. L. Livesey, Professor of Fluid Mechanics (061-736 5843).

Advertisements for inclusion in this section are charged at ordinary displayed advertisement rates. (Page £110, ½ page £70, ½ 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.

Somewhere on this page is one of the best business decisions you'll ever make.

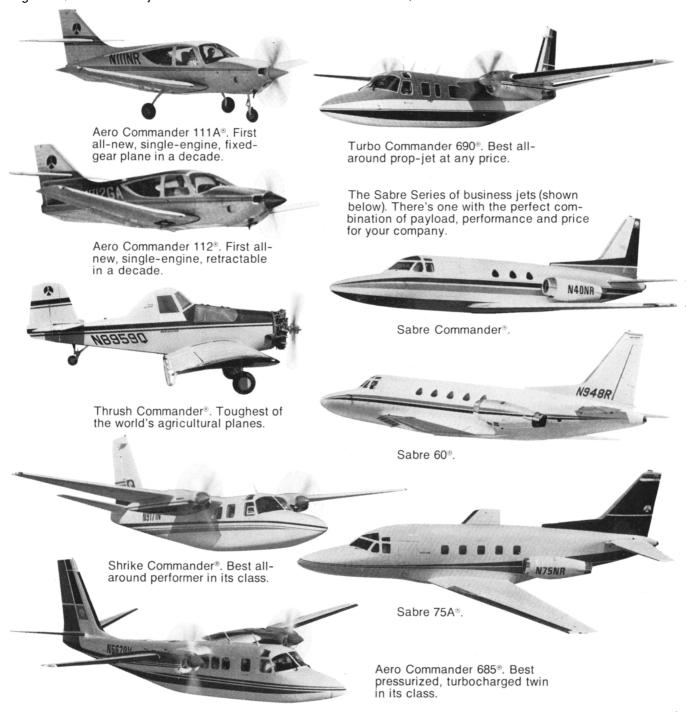
Because each of these business aircraft is built by North American Rockwell. In the past 38 years we've produced thousands of dependable, economical, highperformance aircraft and spacecraft. Everything from military fighters and business jets to

Apollo, the ship that took man to the moon.

If you'd like to know more and the name of the dealer in your area, write:
Doyle E. Bradford, Director, International Sales,
General Aviation Divisions.

North American Rockwell, Dept. E-11, 5001 N. Rockwell Ave., Bethany, Okla. 73008 U.S.A.





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