

# Library Additions



November/December 2001

## BOOKS

### General

**The Best-Ever Book of Flight.** I. Graham. Kingfisher Publications, New Penderel House, 283-288 High Holborn, London WC1V 7HZ, UK. 2001. 64pp. Illustrated. £10.99. ISBN 0-7534-0531-8.

*Published in association with the Royal Aeronautical Society, this book for children concisely describes with many illustrations the evolution and development of aviation and aircraft technology.*

**The Miracle of Flight.** S. Dalton. Merrell Publishers Limited, 42 Southwark Street, London SE1 1UN, UK. 2001. 184pp. Illustrated. £22.50. ISBN 1-85894-128-8.

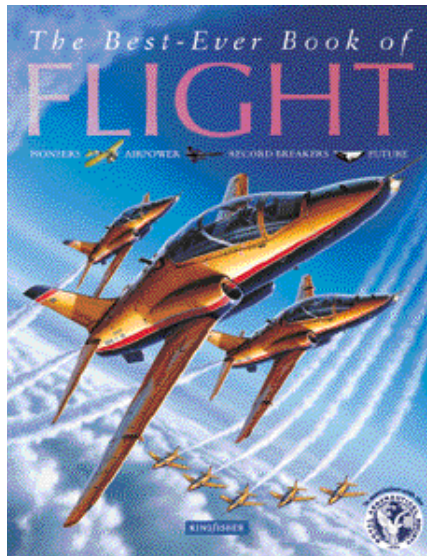
*Numerous colour photographs illustrate this study of the aerodynamics of bird and insect flight and the evolution from prehistory to modern times of man's ability to fly. Originally published in 1999, this revised and expanded edition is published to coincide with an exhibition of the same name at the National Museum and Gallery of Wales, Cardiff, UK.*

**World Defence Systems — July 2001: the International Review of Defence Acquisition Issues.** Edited by Rear Admiral R. Cobbold *et al.* Sovereign Publications, Meredien House, 42 Upper Berkeley Street, London W1H 5QJ, UK. 2001. 166pp. Illustrated. £25. ISBN 09-538719-83. *Recent developments in NATO, UK defence R&D policy and public private partnerships in the MoD are among the subjects discussed in a number of concise articles.*

**Defence Procurement Analysis — Autumn 2001.** Edited by G. Blakey *et al.* Highbury House Communications, The Publishing House, 1-3 Highbury Station Road, Islington, London N1 1SE, UK. 2001. 130pp. Illustrated. £84 (annual subscription). ISSN 1462-0243.

*QinetiQ's Vectored-thrust Aircraft Advanced flight Control (VAAC) research, aero engine technology and support of GPS guided weapon systems are among the subjects reviewed.*

**Engineering Uncertainty and Risk Analysis: a Balanced Approach to Probability, Statistics, Stochastic Modeling and Stochastic Differential**



**Equations.** S.E. Serrano. HydroScience, 1021 Deer Crossing Way, Lexington, KY 40509, USA. 2001. 456pp. Illustrated. \$89. ISBN 0-9655643-8-X.

**Commonwealth Universities Yearbook 2001: a Directory to the Universities of the Commonwealth and the Handbook of their Association Vols 1-2** — 76th edition. Association of Commonwealth Universities, John Foster House, 36 Gordon Square, London WC1H 0PF, UK. 2001. 2464pp. £180. ISBN 0-85143-178-X.

**World Guide to Special Libraries Vols 1-2** — Fifth edition. Edited by W. van der Meer and P. Schmidt. K.G. Saur Verlag, Ortlerstrasse 8, 81373 Munich, Germany. 2001. 1286pp. DM 698. ISBN 3-598-22257-2.

### Aerodynamics

**Understanding Flight** D.F. Anderson and S. Eberhardt. McGraw-Hill Publishing Company, Shoppenhangers Road, Maidenhead, Berkshire SL6 2QL, UK. 2001. 240pp. Illustrated. £25.99. ISBN 0-07-136377-7.

**Advances in the Theory of Shock Waves.** Edited by H. Freistuhler and A. Szepessy. Birkhauser Verlag, Viadukstrasse 42, CH-

4051 Basel, Switzerland. 2001. 516pp. sFr. 158. ISBN 0-8176-4187-4.

*Stability of Multidimensional Shocks, Shock Wave Solutions of the Einstein Equations and Basic Aspects of Hyperbolic Relaxation Systems are among the areas reviewed in this compilation of recent research in the mathematical theory of shock waves.*

**Aerodynamics, Engines and Systems for the Professional Pilot.** D. Robson. AirLife Publishing, 101 Longden Road, Shrewsbury SY3 9EB, UK. 2001. 328pp. Illustrated. £30. ISBN 1-84037-330-X.

*Using the Boeing 767-300ER as the reference aircraft, this well-illustrated book concisely outlines the basic principles of aerodynamics, aircraft performance, gas turbine propulsion and aircraft systems (including air conditioning, hydraulics, electrical systems and landing gear).*

### Air Transport

**Deregulation and Liberalisation of the Airline Industry: Asia, Europe, North America and Oceania.** D. Sinha. Ashgate Publishing, Gower House, Croft Road, Aldershot, Hampshire GU11 3HR, UK. 2001. 166pp. £39.95. ISBN 1-84014-835-7.

**Buying the Big Jets: Fleet planning for airlines.** P. Clark. Ashgate Publishing, Gower House, Croft Road, Aldershot, Hampshire GU11 3HR, UK. 2001. 278pp. £45. ISBN 0-7546-1385-2.

**Human Error — by Design?** S. Bennett. Perpetuity Press, PO Box 376, Leicester LE2 1UP, UK. 2001. 43pp. £14.95. ISBN 1-899287-72-8.

*Based around case studies of particular aircraft accidents — including the crash of the Convair B-58 on 14 February 1963, de Havilland Comet 1 (26 October 1952), BEA Airspeed Ambassador at Munich (6 February 1958) and Hawker Siddeley Trident 1C (18 June 1972) — this book proposes a systematic approach to understanding 'human error' looking beyond the immediate causes of an air disaster.*

**Air Disaster Vol 4 — The Propeller Era.** Aerospace Publications, PO Box 1777, Fyshwick, ACT 2609, Australia. 2001. Distributed by AirLife Publishing, 101 Longden Road, Shrewsbury SY3 9EB, UK.

184pp. Illustrated. £14.99. ISBN 1-875671-48-X.

*Twenty major air accidents from 1950-1971 are reviewed.*

**Air Travel — Greener by Design: The Technology Challenge.** Society of British Aerospace Companies, Duxbury House, 60 Petty France, London SW1H 9EU, UK. 2001. 87pp.

**Aircraft Type Designators** — 29th edition. ICAO Doc 8643/29. International Civil Aviation Organization, 999 University Street, Montreal, Quebec, Canada, H3C 5H7. 2001. Irregular pagination.

## Aircraft Design and Construction

**Aircraft Interiors International: the International Review of Aircraft Interior Design and Completion** — July 2001. Edited by A. James. UK & International Press, Abinger House, Church Street, Dorking, Surrey RH4 1DF, UK. 2001. 88pp. Illustrated. £60 (annual subscription). ISSN 1463-8932.

*Passenger cabin health issues, inflight entertainment (IFE) systems, seat design and noise control are among the subjects reviewed in this edition of a compilation of concise articles surveying the latest developments in aircraft interior design and furnishings.*

## Aviation Medicine

**Human Performance and Limitations for the Professional Pilot.** D. Robson. Airlife Publishing, 101 Longden Road, Shrewsbury SY3 9EB, UK. 2001. 270pp. Illustrated. £30. ISBN 1-84037-332-6.

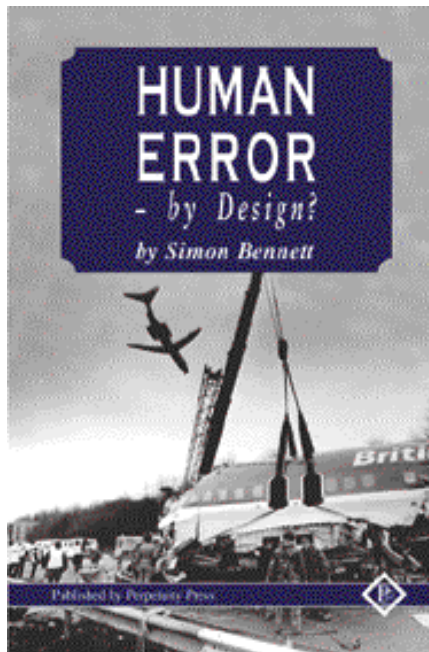
## Avionics and Systems

**Avionics and Flight Management for the Professional Pilot.** D. Robson. Airlife Publishing, 101 Longden Road, Shrewsbury SY3 9EB, UK. 2001. 232pp. Illustrated. £30. ISBN 1-84037-331-8.

**Radar Techniques Using Array Antennas.** W-D. Wirth. The Institution of Electrical Engineers, Michael Faraday House, Six Hills Way, Stevenage, Herts SG1 2AY, UK. 470pp. Illustrated. £55. ISBN 0-85296-798-5.

**Flight Deck International — September 2001.** Edited by A. Pickering. UK & International Press, Abinger House, Church Street, Dorking, Surrey RH4 1DF, UK. 2001. 64pp. Illustrated. £60 (annual subscription). ISSN 1463-9033.

*Reducing runway incursions, BAE Systems' Visual Guidance System (VGS), ADS-B and the Galileo satellite navigation system are among the areas reviewed in this edition of a compilation of articles surveying technological trends in avionic systems.*



## Flight Operations

**Operational Flying: a Professional Pilot's Manual based on the Joint Airworthiness Requirements.** P. Croucher. Airlife Publishing, 101 Longden Road, Shrewsbury SY3 9EB, UK. 2001. 392pp. £30. ISBN 1-84037-332-6.

## Guided Flight

**Tactical Missile Design.** E.L. Fleeman. American Institute of Aeronautics and Astronautics, 1801 Alexander Bell Drive, Reston, VA 20191, USA. 2001. 267pp. + diskette. Illustrated. \$69.95 (AIAA members), \$94.95 (non-members). ISBN 1-56347-494-8.

## Historical

**The Genesis of Flight: The Aeronautical History Collection of Colonel Richard Gimbel.** The Friends of The United States Air Force Academy Library. University of Washington Press, PO Box 50096, Seattle, WA 98145-5096, USA. 2001. 372pp. + diskette. Illustrated. \$65. ISBN 0-295-97811-2. *Over 300 selected items (including books, lithographs, manuscripts, photographs and medals) from one of the world's major collections of early aeronautical material — housed at the Air Force Academy Library in Colorado — are described and reproduced in this large-format volume.*

**Aviation Year by Year.** Edited by Bill Gunston et al. Dorling Kindersley, 80 Strand, London WC2R 0RL, UK. 2001. 984pp. Illustrated. £30. ISBN 0-7513-3367-0. *Originally published in 1992 as Chronicle of Aviation, this updated volume continues*

*the well-illustrated survey of the world's major aviation events through to the end of the 20th century.*

**Broughton: From Wellington to Airbus.** N. Barfield. Tempus Publishing, The Mill, Brimscombe Port, Stroud, Gloucestershire GL5 2QG, UK. 2001. 128pp. Illustrated. £12. ISBN 0-7524-2130-1.

*From its origins as a shadow factory for large-scale production of the Wellington bomber (later expanded to Blackpool) to the manufacture of wings for the Airbus programme, over 200 captioned photographs illustrate this history of aircraft production in Chester at the Broughton/Hawarden complex.*

**Uplifted Spirits, Earthbound Machines: Studies on Artists and the Dream of Flight 1900-1935.** J. Siukonen. Suomalaisen Kirjallisuuden Seura, Hallituskatu 1, PO Box 259, FIN-00171 Helsinki, Finland. 2001. 192pp. Illustrated. 140 mk. ISBN 951-746-280-8.

**Boulton Paul Aircraft.** A. Brew. Tempus Publishing, The Mill, Brimscombe Port, Stroud, Gloucestershire GL5 2QG, UK. 2001. 159pp. Illustrated. £15.99. ISBN 0-7524-2116-6.

*The author has added to his earlier book Boulton Paul Aircraft since 1915 (Putnam, 1993). This well-illustrated history of the numerous civil and military aircraft designs of this famous aircraft company concludes with a selection of unbuilt projects.*

**Transatlantic Flight: a Picture History, 1873-1939.** J. Stoff. Dover Publications, 31 East 2nd Street, Mineola, NY 11501, USA. 2000. 120pp. Illustrated. \$12.95. ISBN 0-486-40727-6.

*Over 250 photographs illustrate this pictorial history of transatlantic flight from the early attempts of the 19th century American balloonist John Wise through to the operations of Pan American Airways.*

**The Bristol Aeroplane Company.** D.N. James. Tempus Publishing, The Mill, Brimscombe Port, Stroud, Gloucestershire GL5 2QG, UK. 2001. 223pp. Illustrated. £15.99. ISBN 0-7524-1754-1.

**Gateway to the Ice: Christchurch International Airport — Antarctic Air Links from 1955.** T. Phillips. Distributed by Hugh McCarroll, Christchurch International Airport, PO Box 14-001, Christchurch, New Zealand. 2001. 120pp. Illustrated. \$39.95 (NZ). *Since 1955 the Antarctic air logistic operations of the United States, Italy and New Zealand have been staged through Christchurch International Airport on the South Island. This well-illustrated volume chronicles the development of these operations and the numerous aircraft types used, including a useful bibliography on Antarctic aviation.*

**National Aviation Heritage Register: Airframes held in Museums and Collections in the UK** — Second edition. British Aviation Preservation Council, c/o K. Ellis, Myddle Cottage, Welland Terrace, off Mill Lane, Barrowden, Oakham LE15 8EH, UK. 2001. 58pp.

**Diaries 1857-1917.** Bishop Milton Wright. Wright State University, University Libraries, 3640 Colonel Glenn Hwy, Dayton, OH 45435-0001, USA. 1999. 852pp. Illustrated. \$39.95. ISBN 0-9676359-0-X.

*The day-by-day family background (four brothers and a sister) in which Wilbur and Orville Wright grew up and the events that preceded and followed their historic flight experiments are recorded in the revealing diaries of their father.*

## Light Aviation

**Q + A — Questions and Answers for the Private Pilot's Licence** — Third edition. P. Godwin and D. Hockings. Airline Publishing, 101 Longden Road, Shrewsbury SY3 9EB, UK. 2001. 377pp. Illustrated. £20. ISBN 1-84037-306-7.

*Revised and updated to reflect the requirements of JAR-FCL and UK ANO 2000, this book comprises of numerous multiple-choice questions based on the style and content of CAA examination papers.*

**Sailplanes and Powered Gliders. JAR-22 — Amendment 6.** Joint Aviation Authorities, PO Box 3000, 2130 KA Hoofddorp, The Netherlands. 2001. Distributed by Rapidoc, Willoughby Road, Bracknell, Berkshire RG12 8DW, UK. Irregular pagination.

## Lighter Than Air

**When Giants Roamed the Sky: Karl Arnstein and the Rise of Airships from Zeppelin to Goodyear.** D. Topping. The University of Akron Press, Akron, OH 44325-1703, USA. 2001. 276pp. Illustrated. \$27.95. ISBN 1-884836-70-4.

## Rotorcraft

**Chinook Doubts: a plain person's guide.** J.M. Ramsden. Published by the author, 20 Townsend Drive, St Albans, Herts AL3 5RQ, UK. 2001. 24pp. £10.

*The fatal accident on 2 June 1994 to RAF Boeing Chinook HC.2 battlefield helicopter ZD576 and the findings of the subsequent RAF Board of Inquiry are re-examined by the author.*

## Service Aviation

**Bomber Harris — His Life and Times: The Biography of Marshal of the Royal Air Force Sir Arthur Harris, Wartime Chief of Bomber Command.** Air Cdre H. Probert. Greenhill Books, Lionel Leventhal Limited, Park House, 1 Russell Gardens, London NW11 9NN, UK. 2001. 432pp. Illustrated. £25. ISBN 1-85367-473-7.

**The Royal Air Force: a Personal Experience.** Sir P. Le Cheminant. Ian Allan

Publishing, Riverdene Business Park, Molesey Road, Hersham, Surrey KT12 4RG, UK. 2001. 160pp. Illustrated. £19.99. ISBN 0-7110-2786-2.

**I Always Wanted to Fly: America's Cold War Airmen.** W.W.E. Samuel. University Press of Mississippi, 3825 Ridgewood Road, Jackson, MS 39211-6492, USA. 2001. 363pp. Illustrated. \$30. ISBN 1-57806-399-X.

*America's role in the Berlin Airlift, strategic reconnaissance flights and in the air wars over Korea and Vietnam is recalled in this informative compilation of reminiscences of those who were involved.*

## Structures and Materials

**Nonlinear Fracture and Damage Mechanisms.** Edited by M.H. Aliabadi. WIT Press, Ashurst Lodge, Ashurst, Southampton, SO40 7AA. 2001. 248pp. Illustrated. £99. ISBN 1-85312-508-3.

## SYMPOSIA

**Complex Electronic Hardware:** Proceedings of one-day conference, 6 September 2001. Royal Aeronautical Society. 2001. Distributed by Eurospan, 3 Henrietta Street, Covent Garden, London WC2E 8LU, UK. 68pp. Illustrated. £60 (members), £85 (non-members). ISBN 1-85768-152-5.

## REPORTS

### Aerodynamics

*Dynamics of aircraft and elements*  
Reconfigurable control design for the full X-33 flight envelope. M.C. Cotting and J.J. Burken. NASA TM-2001-210396. August 2001.

2001 Flight Mechanics Symposium: held at Goddard Space Flight Center, June 19-21, 2001. Held only on CD-ROM. NASA CP-2001-209986. 2001.

Die Anwendbarkeit von Verfahren der Systemidentifizierung zur Verbesserung der Gute von nichtlinearen Hubschrauber-simulationen. M. Rohlf. DLR-FB 2001-04. March 2001.

### Aerospace engineering

Integrated orbit, attitude, and structural control systems design for space solar power satellites. B. Wie and C.M. Roithmayr. NASA TM-2001-210854. June 2001.

### Astronomy and geodesy

Sheffield Space Plasma Meeting: Multipoint Measurements versus Theory: Proceedings of Les Woolliscroft Memorial Conference, Sheffield, 24-26 April 2001. Edited by B. Warmbein. ESA SP-492. July 2001.

### Combustion

Effects of gas-phase radiation and detailed kinetics on the burning and extinction of a solid fuel. J.L. Rhatigan. NASA TP-2001-210770. June 2001.

### Communications

DASIA 2001: DATA Systems In Aerospace: held at Hotel Plaza Concorde, Nice, France, 28 May - 1 June 2001. Held only on CD-ROM. Edited by B. Schürmann. ESA SP-483. 2001.

A new coded digital modulation scheme for nonlinear satellite channels, with high power- and spectral-efficiency. R. De Gaudenzi *et al.* ESA STR-242. July 2001.

### Fatigue

A stress intensity factor equation for cracks at an open hole in a sheet of finite dimensions subjected to a uniform, uniaxial stress. B. Palmberg. FOI-R-0061-SE. June 2001.

Stress intensity factor formulae for a through-the-thickness centre crack in a sheet of finite dimensions. B. Palmberg. FOI-R-0091-SE. June 2001.

# 'Adopt'

## a Library Book or Journal

Since its formation in 1866, the Royal Aeronautical Society has been acquiring aeronautical books, journals and other material which are now housed in its extensive library.

Owing to a combination of age and use, a number of the older volumes in the library are in a worn condition and require rebinding.

These books and journals date primarily from pre-1945 and form a major collection of the world's aeronautical heritage which should be preserved for current and future generations of researchers.

The average cost of rebinding a worn volume is about £30, depending on its size and condition. Anyone who would like to contribute to rebinding costs will have their donation recorded on the bookplate inside the particular rebound volume. If you would like to 'adopt' a book or journal (possibly in memory of someone else) please contact Brian Riddle, RAeS Library, 4 Hamilton Place, London W1J 7BQ, UK. Tel: +44 (0)20 7670 4300. Fax: +44 (0)20 7670 4359. e-mail: library@raes.org.uk

# 'Adopt-a-Picture' appeal

## — the Schneider Trophy contests

The international contests for 'La Coupe d'Aviation Maritime Jacques Schneider' — commonly referred to as the Schneider Trophy — which were held from 1913-1931 led to major advances in the development of seaplanes, high-speed aerodynamics, aircraft engines and aviation fuels. Among the extensive holdings of material (books, programmes, journal articles and photographs) held in the Society's Library relating to the Schneider Trophy contests there are various prints and lithographs of some of the competing aircraft which are now in need of conservation, the details of which are as follows:

1. Geoffrey Watson — Gloster IVB, Venice 1927 and Gloster VI, Calshot 1929.

Two striking black-and-white limited edition lithographs (31cm × 25cm) from pen-and-ink originals.

Cost of conservation/restoration per lithograph £130.

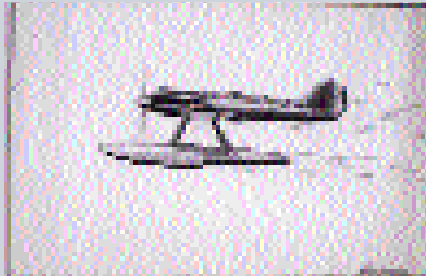
2. T.G.A. Henstridge — Gloster VI N249. Black-and-white print (42cm × 29cm) showing a side-view of the aircraft.

Cost of conservation/restoration £150.

3. Coombe Richards — Supermarine S.5 N220, 1927.

Colour print (26cm × 37.5cm) of water-colour of the aircraft.

Cost of conservation/restoration £130.



1. T.G.A. Henstridge — **Gloster VI** N249. Cost of conservation/restoration (42cm × 29cm) £150.

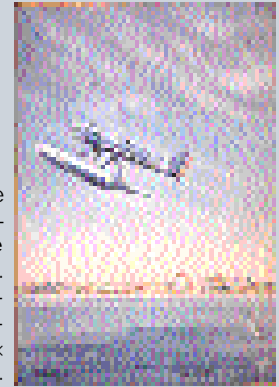
4. Coombe Richards — British Schneider Trophy Team 1929.

Colour print (60cm × 45cm) of a group picture of the various aircraft in the team.

Cost of conservation/restoration £160.

The Schneider Trophy itself is now displayed in the Science Museum in South Kensington, London, alongside the Supermarine S.6B aircraft that won the trophy outright for Great Britain in 1931.

Piloted by Flt Lt J.N. Boothman, a colour print of this aircraft by Ashby has been restored under the Library's 'Adopt-a-Picture' appeal, sponsored by Dr H. Metcalfe, FEng, FRAeS, and is on display at Hamilton Place alongside other 'sponsored' pictures.



2. Coombe Richards — **Supermarine S.5** N220, 1927. Cost of conservation/restoration (26cm × 37.5cm) £130.

For further reading, there have been a number of books on the Schneider Trophy contests, some of which are as follows:

1. JAMES, D.N. *Schneider Trophy Aircraft 1913-1931* (London: Putnam, 1981).
2. MONDEY, D. *The Schneider Trophy* (London: Robert Hale, 1975).
3. BARKER, R. *The Schneider Trophy Races* (Shrewsbury: Airlife Publishing, 1981).
4. HIRSCH, R.S. *Schneider Trophy Racers* (Osceola, WI: Motorbooks International, 1993).
5. DENHAM, T.S. *Speed!* (London: Pilot Press, 1929).
6. ORLEBAR, A.H. *Schneider Trophy* (London: Seeley Service, 1933).

If any individual member, company or organisation would like to 'adopt' one of these works of art — the conservation of which would be undertaken by qualified conservators with the arrangement of The London School of Picture and Frame Restoration and others — please contact: Brian Riddle, Librarian, Royal Aeronautical Society, 4 Hamilton Place, London W1J 7BQ, UK. Tel: +44 (0)20 7670 4362. e-mail: [brian.riddle@raes.org.uk](mailto:brian.riddle@raes.org.uk). A plaque on the frame of the picture, which would be displayed at the Society's headquarters at Hamilton Place, would record the name of its 'sponsor'.

**Library Additions** is designed to keep members of the Royal Aeronautical Society informed of the latest acquisitions of the library at its headquarters: 4 Hamilton Place, London. The contents include those books, symposia, pamphlets, papers, videos, reports and UK patent applications added to the library in the two months prior to publication. **Library Additions** is published bi-monthly in **The Aerospace Professional**. A pdf version is available on the Society's website: <http://www.aerosociety.com>.

Access to the library is free to individual members, members of Engineering Council institutions as well as employees of member companies of the Royal Aeronautical Society's Associated Company Scheme, while others pay a small daily access fee.

The Library's extensive catalogue of books, proceedings, technical reports since 1980, photographs and slides is now available to members via the Society's website, <http://www.aerosociety.com>.

For further information about the library or **Library Additions** please contact: Brian Riddle, RAeS Library, 4 Hamilton Place, London W1J 7BQ, UK. Tel: +44 (0)20 7670 4300. Fax: +44 (0)20 7670 4359. e-mail: [library@raes.org.uk](mailto:library@raes.org.uk).