

Air law group reprints

The following is a list of the Air Law Group lectures which have been printed in the *Journal*.
Most of them are available as reprints.

<i>Author</i>	<i>Title</i>	<i>Published</i>
Wilberforce, Sir Richard	Crime in Aircraft (out of print)	March 1963
Beaumont, K. M. and White, C. B.	Legal Liabilities Arising out of Aircraft Design and Manufacture	May 1963
Kean, A. W. G. and Marking, H.	Interchange—The Legal Point of View Interchange—The Airlines' Point of View (out of print)	Aug. 1963
Richards, E. J. and Caplan, H.	The Control of Aircraft Noise Perceived at Ground Level	Jan. 1964
Wheatcroft, S. F.	The Licensing of Air Transport	March 1964
Martin, P.	Everyday Air Law (out of print)	April 1964
Barrowclough, A. R.	The Development of Legislation for Hovercraft (out of print)	July 1964
Fawcett, J. E.	A Draft Code of Behaviour in Outer Space (out of print)	Dec. 1964
Bulin, R.	Eurocontrol—A European Organisation	March 1965
Jack, P.	Bilateral Agreements (out of print)	July 1965
Petts, F. C.	Practical Noise Control at International Airports with Special Reference to Heathrow ...	Dec. 1966
Lowenfeld, A. F.	The Warsaw Convention and the Washington Compromise—A View from America ...	Dec. 1966
A Discussion	Compensation for Airline Passenger Death and Injury. The Future of the Warsaw Convention	July 1967
Gordon-Burge, H. K. and Caplan, H.	Practical and Legal Problems of Disseminating Air Safety Information	Nov. 1967
Hildred, Sir William	The First Beaumont Memorial Lecture	May 1968
Johnson, D. H. N.	The Legality of Modern Forms of Aerial Warfare	Aug. 1968
Harris, J. D.	Airworthiness Regulations—National and International	June 1969
Martin, P.	In Defence of Private, Business and Aerial Work Flying	May 1969
Vallat, Sir Francis	The Outer Space Treaties	Sept. 1969
A Symposium	Facilitation	Oct. 1969
A Discussion	Hijacking—Why Governments Must Act	Feb. 1970
A Discussion	Is There a Future for British Air Transport? A Discussion on the Edwards Report ...	March 1970
Tymms, Sir Frederick	ICAO—Its Origin and Development. A Personal View	April 1970
Wheatcroft, S.	The Influence of Operational and Technical Factors on Air Transport Regulation ...	Aug. 1970
Johnson, W. E. P.	Protection of Work in Patents and Designs	Oct. 1970
A Symposium	Compensation for Death and Injury in International Air Transport. The Second International Symposium Concerning the Warsaw Convention	Feb. 1971
Jenkins, W. B. and White, C. B.	Legal Aspects of International Co-operation on Aircraft Design and Production ...	March 1972
A Symposium	Industrial relations in the aviation industry	July 1972
A Symposium	The Hague Convention on Hijacking of Aircraft, 1970	Sept. 1972
A Symposium	The Air Charter Market and the Restrictive Effects of Current Bilateral Agreements ...	Jan. 1973
Kean, A. Tymms, Sir Frederick and Cheng, Prof. B.	The Latest on Hijacking—Summary of a report	July 1973
A Report	The Latest on Hijacking	July 1973

The Aeronautical Journal of the Royal Aeronautical Society

INCORPORATING THE INSTITUTION OF AERONAUTICAL ENGINEERS AND THE HELICOPTER ASSOCIATION OF GREAT BRITAIN

VOLUME LXXVIII

JANUARY - DECEMBER 1974

The Aeronautical Journal of the Royal Aeronautical Society

INCORPORATING THE INSTITUTION OF AERONAUTICAL ENGINEERS AND THE HELICOPTER ASSOCIATION OF GREAT BRITAIN

JANUARY - DECEMBER 1974

VOLUME LXXVIII

S indicates Supplementary Papers

(This applies to the first six months only, after which the Members Journal ceased publication.)

ABEDIN, M. Z. and MILLS, R. D.

Computing laminar boundary layers with the von Mises equation, pp. 476-479 (Oct.).

AERODYNAMICS

Adventures and ventures in the Italian aircraft industry, Dr. Ing. Alberto Jona, pp. 65-79 (Feb./March).

A method of obtaining sub-critical compressible velocities for two-dimensional aerofoils from an exact inviscid incompressible solution, B. Probert, pp. 380-383 (Aug.).

A note on fully developed turbulent flow down a circular pipe, Rajni P. Patel, pp. 93-97 (Feb./March).

Effect of deflecting flaps on strike/fighter aircraft wing design, D. R. Stanniland, pp. 553-559 (Dec.).

Some experimental results of the effect of a streamwise vortex on a two-dimensional wing, M. H. Patel and G. J. Hancock, pp. 151-155 (April).

The relationship between the base pressure on a bluff body and the velocity at separation, J. E. L. Simmons, pp. 330-331 (July).

AIRCRAFT

Aerospatiale Alouette II (Illus.), p. 252 (June).

Aerospatiale Puma and Gazelle (Illus.), p. 123 (April).

Agusta A.109 helicopter (Illus.), p. 79 (Feb./March).

Airbus Industrie A.300 B.4 (Illus.), Front Cover and p. 443 (Oct.).

Aircraft, civil, the future world demand for, A. P. Ellison and E. M. Stafford, pp. 506-512 (Nov.).

Auster V (Illus.), p. 251 (June).

Auster IX (Illus.), p. 252 (June).

BAC/Aerospatiale Concorde (Illus.), pp. 139 and 145 (April).

BAC/Dassault-Breguet Jaguar (Illus.), p. 139 (April).

BAC TSR-2 (Illus.), p. 139 (April).

Bell 212 (Illus.), p. 123 (April).

BGM-34B strike support weapon system (Illus.), p. 360 (Aug.).

Boeing YQM-94A Compass Cope (B) (Illus.), p. 360 (Aug.).

BQM-34A Firebee (Illus.), pp. 356, 358 and 359 (Aug.).

Breda BZ.308 (Illus.), p. 72 (Feb./March).

Breda 15 (Illus.), p. 72 (Feb./March).

Breda-Pensuti (Illus.), p. 73 (Feb./March).

Bristol Belvedere (Illus.), p. 121 (April).

Bristol Sycamore (Illus.), p. 118 (April); p. 251 (June).

Campini-Caproni (Illus.), p. 74 (Feb./March).

Caproni 7 (Illus.), p. 67 (Feb./March).

Caproni 60 (Illus.), Cover and p. 67 (Feb./March).

Caproni-Stipa (Illus.), p. 73 (Feb./March).

Concorda 02 at Los Angeles (Illus.), Front Cover (Nov.).

Crocchio-Ricaldoni hydrofoil (Illus.), p. 65 (Feb./March).

D'Asciano helicopter (Illus.), p. 69 (Feb./March).

DH Beaver (Illus.), p. 253 (June).

Dornier Wal II (Illus.), p. 68 (Feb./March).

Faccioli N1 and N2 (Illus.), p. 66 (Feb./March).

Fairey Gyrodyne (Illus.), p. 118 (April).

Fairey Rotodyne (Illus.), p. 121 (April).

Fairey Ultra-Light (Illus.), p. 121 (April).

Fiat G.222 (Illus.), p. 75 (Feb./March).

Fiat CR.42 (Illus.), p. 75 (Feb./March).

Fiat G.50 (Illus.), p. 75 (Feb./March).

Forlanni airship (Illus.), p. 65 (Feb./March).

Gazelle, Aerospatiale (Illus.), p. 254 (June).

Harrier, Royal Air Force experience of the, AM Sir Ruthven Wade pp. 1-6 (Jan.).

Hawker Hurricane (Illus.), p. 136 (April).

Hawker Siddeley Harrier (Illus.), Cover (Jan.); p. 142 (April).

Hawker Siddeley HS.146 (Illus.), p. 447 (Oct.).

Hawker Siddeley Trident Three (Illus.), Cover (May).

HS Trident (Illus.), p. 142 (April).

Hiller 12 (Illus.), p. 253 (June).

Jona 6 (Illus.), p. 73 (Feb./March).

Kettering Bug (Illus.), p. 355 (Aug.).

Lockheed Cheyenne (Illus.), p. 122 (April).

Lockheed TriStar (Illus.), Cover, p. 389 (Sept.).

Lockheed TriStar, The, —an operational overview, L. E. Frisbee, pp. 389-402 (Sept.).

Marchetti "La Chimera" (Illus.), p. 71 (Feb./March).

Macchi M.53 (Illus.), p. 77 (Feb./March).

Macchi MC.39 (Illus.), p. 77 (Feb./March).

Macchi MC.72 (Illus.), p. 77 (Feb./March).

Macchi MC.100 (Illus.), p. 78 (Feb./March).

Macchi MC.202 (Illus.), p. 78 (Feb./March).

Mil Mi6 (Illus.), p. 121 (April).

Mil V12 (Illus.), p. 123 (April).

Northrop OQ-2A (Illus.), p. 355 (Aug.).

Partenavia P.66B (Illus.), p. 79 (Feb./March).

Piaggio P.108B (Illus.), p. 70 (Feb./March).

Piaggio P.136L (Illus.), p. 70 (Feb./March).

Piaggio P.166 (Illus.), p. 70 (Feb./March).

Piaggio PD.808 (Illus.), p. 70 (Feb./March).

SIAl Marchetti S.12 (Illus.), p. 71 (Feb./March).

SIAl Marchetti S.16 bis (Illus.), p. 71 (Feb./March).

SIAl Marchetti S.51 (Illus.), p. 71 (Feb./March).

SIAl Marchetti SM.64 (Illus.), p. 72 (Feb./March).

SIAl Marchetti SV.20 (Illus.), p. 72 (Feb./March).

Sikorsky R.4 (Illus.), p. 117 (April).

Sikorsky (Illus.), p. 251 (June).

Skeeter (Illus.), p. 252 (June).

Stefanutti SS.2 (Illus.), p. 73 (Feb./March).

Supermarine Spitfire (Illus.), p. 136 (April).

Teledyne Ryan YQM-98A Compass Cope (R) (Illus.), p. 360 (Aug.).

Umberto Maddalena (Do.X) (Illus.), p. 68 (Feb./March).

Vickers B9/32 prototype (Illus.), p. 135 (April).

Vickers Valiant (Illus.), p. 137 (April).

Vickers Vanguard (Illus.), p. 138 (April).

Vickers Vistra transport (Illus.), p. 135 (April).

Vickers VC10 (Illus.), p. 138 (April).

Vickers Viking (Illus.), p. 136 (April).

Vickers Viscount (Illus.), p. 137 (April).

Westland Dragonfly (Illus.), p. 118 (April).

Westland Lysander (Illus.), p. 250 (June).

Westland Lynx (Illus.), p. 124 (April).

Westland/Aerospatiale Puma (Illus.), p. 255 (June).

Westland Scout fitted with SS11 anti-tank guided missile (Illus.), p. 254 (June).

Westland Sea King (Illus.), p. 124 (April).

Westland Utility Lynx (Illus.), p. 254 (June).

Westland Wasp (Illus.), p. 122 (April).

Westland Wessex Mk. 5 and Mk. 60 (Illus.), p. 122 (April).

WG-13, The concept of the, R. G. Austin, pp. 7-15 (Jan.).

WG-13, The design of the, V. A. B. Rogers, pp. 15-23 (Jan.).

WG-13, The development of the, A. H. Smith, pp. 23-31 (Jan.).

Wright Brothers "Flyer" (Illus.), pp. 134 and 145 (April).

Westland Westminster (Illus.), p. 121 (April).

Westland Whirlwind (Illus.), p. 122 (April); p. 252 (June).

AIRCRAFT DESIGN

The tandem-wing concept applied to modern transports, J. W. Bottomley, pp. 523-524 (Nov.).

Design and development of the Hawker Siddeley 748 prop-jet feeder liner, Alan J. Troughton, pp. 485-505 (Nov.).

AIRCRAFT STRUCTURES

Coefficient of linear thermal expansion as a function of temperature, M. Holland, pp. 424-426 (Sept.).

An experimental investigation of the efficiency of a range of channel section struts, A. Rothwell, pp. 426-430 (Sept.).

Anticlastic curvature in anisotropic beams, P. J. Banks, pp. 525-528 (Nov.).

Finite deflection of sandwich panels resting on elastic supports, S. F. Ng, pp. 147-150 (April).

- Initial buckling of lipped channel struts, J. W. Williams, pp. 468-475 (Oct.).
Structural optimisation by an impulse response method, N. W. Bellamy and M. J. West, pp. 258-261 (June).
Pure bending of beams having initial curvature, M. Holland, pp. 570-573 (Dec.).
- AIRPORTS**
Establishing airport cost and revenue functions, Dr. R. S. Doganis and Dr. G. F. Thompson, pp. 285-304 (July).
- AIR TRANSPORT**
The contribution of civil aviation to the economic strength and well-being of the UK, Lord Boyd-Carpenter, pp. 181-184 (May).
Anglo-French collaboration—Concorde and supersonic transport, R. Chevalier (26th Louis Bleriot Lecture), pp. 61-64 (Feb./March).
- ANNUAL REPORT, BALANCE SHEET AND ACCOUNTS, 1973**
Published separately this year, see Notice, p. VI (Feb./March) and p. VI (April).
- AUSTIN, R. G.**
The concept of the WG-13, pp. 7-15 (Jan.).
- BANKS, P. J.**
Anticlastic curvature in anisotropic beams, pp. 525-528 (Nov.).
- BARNWELL MEMORIAL LECTURE, NINETEENTH**
The British Aircraft Corporation: the first twelve years, Sir Reginald Verdon Smith, pp. 45-52 (Jan.) S.
- BEGG, R. D.**
Some compressible jet flow and reattachment effects in fluid control valves, pp. 211-214 (May).
- BELLAMY, N. W. and WEST, M. J.**
Structural optimisation by an impulse response method, pp. 258-261 (June).
- BLERIOT, LOUIS, LECTURE, 26th**
Anglo-French collaboration—Concorde and supersonic transport, R. Chevalier, pp. 61-64 (Feb./March).
- BOTTOMLEY, J. W.**
The tandem-wing concept applied to modern transports, pp. 523-524 (Nov.).
- BOYD-CARPENTER, LORD**
The contribution of civil aviation to the economic strength and well-being of the UK (29th British Commonwealth Lecture), pp. 181-184 (May).
- BOUNDARY LAYERS**
The British Aircraft Corporation: the first twelve years, Sir Reginald Verdon Smith (19th Barnwell Memorial Lecture), pp. 45-52 (Jan.) S.
Computing laminar boundary layers with the von Mises equation, R. D. Mills and M. Z. Abedin, pp. 476-479 (Oct.).
A device for generating an artificial boundary layer in a short axial distance in a supersonic flow, P. Philpot, pp. 320-324 (July).
The effect of stream surface convergence on turbomachine blade boundary layers, J. Dunham, pp. 90-92 (Feb./March).
- BRITISH COMMONWEALTH LECTURE, 29th**
The contribution of civilisation to the economic strength and well-being of the UK, Lord Boyd-Carpenter, pp. 181-184 (May).
- BURROWS, F. M. and WILLIAMS, R. V.**
Movement of a line vortex pair downstream of a circular cylinder in potential flow, pp. 573-578 (Dec.).
- CAMM, SIR SYDNEY, LECTURE, SECOND**
Royal Air Force experience of the Harrier, AM Sir Ruthven Wade, pp. 1-6 (Jan.).
- CATTANACH, J.**
Anti-Tank guided weapons, pp. 112-115 (Feb./March) S.
- CHEESEMAN, I. C.**
Helicopters—people and places (The 14th Cierva Memorial Lecture), pp. 363-374 (Aug.).
- CHEVALIER, R.**
Anglo-French collaboration—Concorde and supersonic transport (26th Louis Bleriot Lecture), pp. 61-64 (Feb./March).
Concorde and Safety: design, testing and certification, pp. 277-283 (June).
- CHICHESTER-MILES, I.**
The economic utilisation of resources through aviation, pp. 439-458 (Oct.).
- CIERVA MEMORIAL LECTURE, THE 14th**
Helicopters—people and places, I. C. Cheeseman, pp. 363-374 (Aug.).
- COMPUTERS**
The computer in management: the current status of the management information system, G. E. Williams, pp. 109-111 (Feb./March) S.
- COOMBS, L. F. E.**
Left and right in cockpit evolution, pp. 513-522 (Nov.).
- CORRESPONDENCE**
Aviation memorials, Brian R. Robinson, p. viii (Jan.).
Hollis Williams, D. L., Thurstan James, p. vi (June).
- DASARATHY, BELUR V.**
An analytical approach to attitude determination of a spinning satellite, pp. 256-257 (June).
- DOGANIS, Dr. R. S. and THOMPSON, Dr. G. F.**
Establishing airport cost and revenue functions, pp. 285-304 (July).
- DONE, G. T. S.**
A simplified approach to helicopter ground resonance, pp. 204-208 (May).
- DRONES**
Drone/RPV systems, Col. Ward W. Hemenway, pp. 355-362 (Aug.).
- DUNHAM, J.**
The effect of stream surface convergence on turbomachine blade boundary layers, pp. 90-92 (Feb./March).
The economic utilisation of resources through aviation, I. Chichester-Miles, pp. 439-458 (Oct.).
- EDWARDS, SIR GEORGE**
Looking ahead with hindsight (Sixty-Second Wilbur and Orville Wright Memorial Lecture), pp. 134-146 (April).
- ELLISON, A. P. and STAFFORD, E. M.**
The future world demand for civil aircraft, pp. 506-512 (Nov.).
- ERRATA**
To paper by V. A. B. Rogers published in January, p. iv (May).
To paper by Prof. I. C. Cheeseman published in August, p. 483 (Oct.).
- FAIREY MEMORIAL LECTURE, FIFTEENTH**
The Lockheed TriStar—an operational overview, L. E. Frisbee, pp. 389-402 (Sept.).
- FATIGUE**
A new analysis of fatigue under combined bending and twisting, D. L. McDiarmid, pp. 325-329 (July).
Fatigue properties of the Alclad Al-Cu-Mg-Si-Mn alloy, J. A. Sova and T. R. G. Williams, pp. 375-379 (Aug.).
- FEDDEN, SIR ROY**
Obituary, p. vi (Jan.).
- FLAX, A. H.**
Aeronautics—A Study in Technological and Economic Growth and Form, Wilbur and Orville Wright Memorial Lecture—63rd, pp. 537-552 (Dec.).
- FLUID MECHANICS**
Application of numerical techniques in fluid mechanics, Prof. Egon Krause, pp. 337-354 (Aug.).
The effects of end plates on the base pressure coefficient of a circular cylinder, P. K. Stansby, pp. 36-37 (Jan.).
Movement of a line vortex pair downstream of a circular cylinder in potential flow, pp. 573-578 (Dec.).
- FRISBEE, L. E.**
The Lockheed TriStar—an operational overview (Fifteenth Fairey Memorial Lecture), pp. 389-402 (Sept.).
The future world demand for civil aircraft, A. P. Ellison and E. M. Stafford, pp. 506-512 (Nov.).
- GAS TURBINES**
Small gas turbines for helicopters, R. M. Lucas (The Halford Memorial Lecture), pp. 305-314 (July).
- GETHING, J. M., GILL, K. P., HOLT, J. A. and SMART, D. R.**
Dynamic analysis of flexible space vehicles having uncoupled control axes, pp. 560-569 (Dec.).
- GIBBS-SMITH, CHARLES H.**
Sir George Cayley, Father of aerial navigation (1773-1857), pp. 125-133 (April).
- GIBSON, IVAN S.**
On the velocity induced by a semi-infinite vortex cylinder: with extension to the short solenoid, pp. 262-268 (June).
- GILL, K. P., GETHING, J. M., HOLT, J. A. and SMART, D. R.**
Dynamic analysis of flexible space vehicles having uncoupled control axes, pp. 560-569 (Dec.).
- GINN, M. C.**
The operation of the Bell 212 under instrument flight rules, pp. 194-197 (May).
- GOLDSMITH, H. A.**
The development of aircraft as influenced by the shortage of material and fuel, pp. 403-410 (Sept.).
- GOODHART, Rear Admiral H. C. N.**
A man-powered aircraft with power to spare, pp. 411-413 (Sept.).
- GUIDED WEAPONS**
Anti-tank guided weapons, J. Cattanach, pp. 112-115 (Feb./March) S.
Surface to Air Guided Weapons (Naval), P. Hampton, pp. 163-166 (April) S.
- HALFORD MEMORIAL LECTURE, THE**
Small gas turbines for helicopters, R. M. Lucas, pp. 305-314 (July).
- HAMPTON, P.**
Surface to Air Guided Weapons (Naval), P. Hampton, pp. 163-166
- HANCOCK, G. J. and PATEL, M. H.**
Some experimental results of the effect of a streamwise vortex on a two-dimensional wing, pp. 151-155 (April).
- HEAT TRANSFER**
The heat pipe: its development, and its aerospace applications, D. A. Reay, pp. 414-423 (Sept.).

HELICOPTERS

- Certification of helicopters for flight in instrument meteorological conditions, H. E. Le Sueur, pp. 185-187 (May).
Helicopters—people and places, I. C. Cheeseman, pp. 363-374 (Aug.).
Requirements for the helicopter instrument rating, W. H. Perry, pp. 200-203 (May).
The Bölkow Bo. 105D, Cdr. L. G. Locke, pp. 197-199 (May).
The concept of the WG-13, R. G. Austin, pp. 7-15 (Jan.).
The design of the WG-13, V. A. B. Rogers, pp. 15-23 (Jan.).
The development of the WG-13, A. H. Smith, pp. 23-31 (Jan.).
The operation of the Bell 212 under instrument flight rules, M. C. Ginn, pp. 194-197 (May).
Westland design philosophy on the Lynx for instrument and all-weather flying, L. R. Moxam, pp. 187-193 (May).

HEMENWAY, Col. WARD W.

- Drone/RPV systems, pp. 355-362 (Aug.).

HISLOP, Dr. G. S.

- Presidential Address 1974, pp. 117-124 (April).

HISTORICAL AVIATION

- Making and flying replicas of Sir George Cayley's gliders, Lt. Cdr. J. Sproule, pp. 315-319 (July).
Sir George Cayley, Father of Aerial Navigation (1773-1857), Charles H. Gibbs-Smith, pp. 125-133 (April).

HOLLAND, M.

- Coefficient of linear thermal expansion as a function of temperature, pp. 424-426 (Sept.).
Pure bending of beams having initial curvature, pp. 570-573 (Dec.).

HOLLIS WILLIAMS, D. L.

- Obituary, p. iv (May).

HOLT, J. A., GETHING, J. M., GILL, K. P. and SMART, D. R.

- Dynamic analysis of flexible space vehicles having uncoupled control axes, pp. 560-569 (Dec.).

HOWARD, H. B.

- Obituary, p. v (June).

JAIN, R. K. and KIRK, C. L.

- Axisymmetric vibrations of ring stiffened shallow spherical shells, pp. 32-36 (Jan.).

JET FLOW

- Some compressible jet flow and reattachment effects in fluid control valves, R. D. Begg, pp. 211-214 (May).

JONA, Dr. Ing. ALBERTO

- Adventures and ventures in the Italian aircraft industry, pp. 65-79 (Feb./March).

KENNEDY, J. B. and ZAGHLOUL, S. A.

- Material constants of filamentary-composite laminates, pp. 464-467 (Oct.).

KIRK, C. L. and JAIN, R. K.

- Axisymmetric vibrations of ring stiffened shallow spherical shells, pp. 32-36 (Jan.).

KRAUSE, Prof. EGON

- Application of numerical techniques in fluid mechanics, pp. 337-354 (Aug.).

KUMAR, K. and MODI, V. J.

- Closed-form analysis of a class of damped systems, pp. 209-211 (May).

LECTURES AND SYMPOSIA

MAIN SOCIETY

- Application of numerical techniques in Fluid Mechanics. Prof. Egon Krause, 7th Reynolds Prandtl Lecture, pp. 337-354.
Aeronautics—a Study in Technological and Economic Growth and Form (Sixty-third Wilbur and Orville Wright Memorial Lecture), Dr. A. H. Flax, pp. 537-552 (Dec.).
Anglo-French collaboration—Concorde and supersonic transport, R. Chevalier (26th Louis Bleriot Lecture), pp. 61-64 (Feb./March).
The British Aircraft Corporation: the first twelve years, Sir Reginald Verdon Smith (19th Barnwell Memorial Lecture), pp. 45-52 (Jan.) S.
Civil aeronautical frequency planning with special reference to operational and equipment performance aspect (Joint RAeS/IEE Meeting summary), p. 38 (Jan.).
The contribution of civil aviation to the economic strength and well-being of the UK, Lord Boyd-Carpenter (29th British Commonwealth Lecture), pp. 181-184 (May).
Helicopters—people and places (the 14th Cierva Memorial Lecture), I. C. Cheeseman, pp. 363-374 (Aug.).
Looking ahead with hindsight, Sir George Edwards (62 Wilbur and Orville Wright Memorial Lecture), pp. 134-146 (April).
Royal Air Force experience of the Harrier, AM Sir Ruthven Wade (Second Sir Sydney Camm Lecture), pp. 1-6 (Jan.).
A review of precious resources and their effect on air transport (Spring Convention)—The development of aircraft as influenced by the shortage of materials and fuel, H. A. Goldsmith, pp. 403-410 (Sept.); The economic utilisation of resources through aviation, I. Chichester-Miles, pp. 439-458 (Oct.); Noise—future targets, Prof. G. M. Lilley, pp. 459-463 (Oct.).

Astronautics and Guided Flight Section

- Drone-RPV systems, Col. Ward W. Hemenway, pp. 355-362 (Aug.).
European role in satellite systems (Symposium)—Spacelab, Dr. Christian Reinhold (Lecture summary), p. viii (Feb./March).
The evolution of Anti-Aircraft and Anti-Tank Guided Weapons in the UK (Symposium)—Anti-tank guided weapons, J. Cattanach, pp. 112-115 (Feb./March) S; Surface to Air Guided Weapons, P. Hampton, pp. 163-166 (April) S.

Branches

- Research in human engineering at the Royal Aircraft Establishment, R. G. Thorne, pp. 167-180 (April) S.
Small gas turbines for helicopters, R. M. Lucas, (The Halford Memorial Lecture), pp. 305-314 (July).
The evolution of army aviation, Maj. Gen. T. A. Richardson, pp. 250-255 (June).
The Lockheed TriStar—an operational overview, L. E. Frisbee (Fifteenth Fairy Memorial Lecture), pp. 389-402 (Sept.).

Graduates' and Students' Section

- Aerodynamics for formula 1, P. G. Wright, pp. 226-230 (May) S.

Historical Group

- Sir George Cayley, Father of Aerial navigation (1773-1857), Charles H. Gibbs-Smith, pp. 125-133 (April).
Left and right in cockpit evolution, L. F. E. Coombs, pp. 513-522 (Nov.).

Management Studies Group

- Problems and opportunities for aerospace and allied technology in Europe (Report on Symposium), pp. 53-59 (Jan.).
The computer in management: the current status of the management information system, G. E. Williams, pp. 109-111 (Feb./March) S.
Problems and opportunities for aerospace and allied technology in Europe (Report on Symposium), pp. 53-59 (Jan.) S.

Rotorcraft Section

- A new era in helicopter all-weather operations (Symposium): Certification of helicopters for flight in instrument meteorological conditions, H. E. Le Sueur; Westland design philosophy on the Lynx for instrument and all-weather flying, L. R. Moxam; The operation of the Bell 212 under instrument flight rules, M. C. Ginn; The Bölkow Bo 105D, Commander L. G. Locke; Requirements for the helicopter instrument rating, W. H. Perry, pp. 185-203 (May).
The WG-13 (Symposium)—The concept of the WG-13, R. G. Austin; The design of the WG-13, V. A. B. Rogers; The development of the WG-13, A. H. Smith, pp. 7-31 (Jan.).

LE SUEUR, H. E.

- Certification of helicopters for flight instrument meteorological conditions, pp. 185-187 (May).

LILLEY, Professor G. M.

- Noise—future targets, pp. 459-463 (Oct.).

LIPSCOMB, C. P. T.

- Obituary, p. iv (May).

LOCKE, Commander L. G.

- The Bölkow BO.105D, pp. 197-199 (May).

LUCAS, R. M.

- Small gas turbines for helicopters (The Halford Memorial Lecture), pp. 305-314 (July).

MAN POWERED FLIGHT

- A man-powered aircraft with power to spare, Rear Admiral H. C. N. Goodhart, pp. 411-413 (Sept.).

MATERIALS

- Glass windshields for wide bodied aircraft, W. G. Roberts, pp. 221-225 (May) S.
Material constants of filamentary-composite laminates, S. A. Zaghoul and J. B. Kennedy, pp. 464-467 (Oct.).

McDIARMID, D. L.

- A new analysis of fatigue under combined bending and twisting, pp. 325-329 (July).

MILLS, R. D. and ABEDIN, M. Z.

- Computing laminar boundary layers with the von Mises equation, pp. 476-479 (Oct.).

MODI, V. J. and KUMAR, K.

- Closed-form analysis of a class of damped systems, pp. 209-211 (May).

MOXAM, L. R.

- Westland design philosophy on the Lynx for instrument and all-weather flying, pp. 187-193 (May).

NG, S. F.

- Finite deflection of sandwich panels resting on elastic supports, pp. 147-150 (April).

NOISE

- Noise—future targets, Professor G. M. Lilley, pp. 459-463 (Oct.).
Noise in Transportation, Symposium on, Notice, p. V (April).

OBITUARIES

- Fedden, Sir Roy, p. vi (Jan.).
Hollis Williams, D. L., p. iv (May).
Howard, H. B., p. v (June).
Lipscomb, C. P. T., p. iv (May).
Ricardo, Sir Harry, p. vi (June).

PATEL, M. H. and HANCOCK, G. J.

- Some experimental results of the effect of a streamwise vortex on a two-dimensional wing, pp. 151-155 (April).

PATEL, RAJNI P.

- A note on fully developed turbulent flow down a circular pipe, pp. 93-97, (Feb./March).

PERRY, W. H.

- Requirements for the helicopter instrument rating, pp. 200-203 (May).

PHILPOT, P.

- A device for generating an artificial boundary layer in a short axial distance in a supersonic flow, pp. 320-324 (July).

PLANE JET

The plane jet growth rate as influenced by a wall in the plane of the nozzle, P. Arnot Smith, pp. 384-385 (Aug.).

PROBERT, B.

A method of obtaining sub-critical compressible velocities for two-dimensional aerofoils from an exact inviscid incompressible solution, pp. 380-383 (Aug.).

PROPULSION

On the velocity induced by a semi-infinite vortex cylinder: with extension to the short solenoid, Ivan S. Gibson, pp. 262-268 (June).

RACING CARS

Aerodynamics for formula 1, P. G. Wright, pp. 226-230 (May) S.

REAY, D. A.

The heat pipe: its development, and its aerospace applications, pp. 414-423 (Sept.).

REINHOLD, Dr. CHRISTIAN

Spacelab (Lecture Summary), p. viii (Feb./March).

REPRINTS

Air Law Group, p. 107 (Feb./March).
Astronautics and Guided Flight Section, p. 336 (July).
Historical Group, p. 162 (April); p. 275 (June).
Rotorcraft Section, p. 60 (Jan.); p. 108 (Feb./March); p. 284 (June).
Test Pilots' Group, p. 276 (June).

REVIEWS—AUTHORS

Allen, Roy (Ed.), Flight International Airports Guide, p. 433 (Sept.).
Baipal, A. C. *et al.*, Engineering Mathematics, p. 529 (Nov.).
Beaty, David, The Human Factor in Aircraft Accidents, p. 433 (Sept.).
Beer, Arthur (Ed.), Vistas in Astronomy, Vol 15, p. 433 (Sept.).
Burkhart, A. J. and Medleck, S., Tourism: Past, Present and Future, p. 580 (Dec.).
Bushby, J., Air Defence of Great Britain, p. 269 (June).
Collacott, Ralph (Ed.), Simulators—an International Guide, p. 480 (Oct.).
Collier, Basil, A History of Air Power, p. 332 (July).
Dym, Clive L., Introduction to the Theory of Shells, p. 579 (Dec.).
Ellison, A. P. and Stafford, E. M., The Dynamics of the Civil Aviation Industry, p. 480 (Oct.).
Flight International, British Aerospace Vendor Profiles—Vol One, p. 480 (Oct.).
Gallagher, R. H. and Zienkiewicz, O. C., Optimum Structural Design Theory and Applications, p. 215 (May).
Goodall, Michael H., The Wight Aircraft, p. 98 (Feb./March).
Harvey, D. L. and Ciccoritti, L. C., US-Soviet Co-operation in Space, p. 579 (Dec.).
Hosny, A. N., Propulsion Systems (Revised and expanded edition), p. 433 (Sept.).
Irving, David, The Rise and Fall of the Luftwaffe—the Life of Luftwaffe Marshal Erhard Milch, p. 156 (April).
Jackson, A. J., British Civil Aircraft since 1919, Vol 2, p. 39 (Jan.).
Krall, A. M., Linear Methods of Applied Analysis, p. 580 (Dec.).
Kershner, William K., The Student Pilot's Flight Manual, p. 332 (July).
Lambert, Bill, Combat Report, p. 386 (Aug.).
Leslie, D. C., Developments in the Theory of Turbulence, p. 580 (Dec.).
Ma, M. T., Theory and Application of Antenna Arrays, p. 579 (Dec.).
Millar, G., The Bruneval Raid: Flashpoint of the Radar War, p. 269 (June).
Norrie, Douglas H. and de Vries, Gerard, Finite Element Method, The, p. 529 (Nov.).
Parker, Earl R. and Colombo, Umberto (eds.), The Science of Materials used in Advanced Technology, p. 39 (Jan.).
Poynter, Dan, The Parachute Manual, p. 386 (Aug.).
Robinson, John, Integrated Theory of Finite Element Methods, p. 529 (Nov.).
Taylor, H. A., Fairey Aircraft since 1915, p. 156 (April).
Vinson, Jack R., Structural Mechanics, p. 480 (Oct.).
Wedlake, G. E. C., SOS. The Story of Radio Communication, p. 39 (Jan.).
Welch, Ann, Pilot's Weather, p. 39 (Jan.).
Wragg, David W., A Dictionary of Aviation, p. 98 (Feb./March).

REVIEWS—TITLES

Air Defence of Great Britain, J. Bushby, p. 269 (June).
British Aerospace Vendor Profiles—Vol. One, Flight International, p. 480 (Oct.).
British Civil Aircraft since 1919, Vol. 2, A. J. Jackson, p. 39 (Jan.).
Bruneval Raid, The: Flashpoint of the Radar War, G. Millar, p. 269 (June).
Combat Report, Bill Lambert, p. 386 (Aug.).
Developments in the Theory of Turbulence, Leslie, D. C., p. 580 (Dec.).
Dictionary of Aviation, A. David W. Wragg, p. 98 (Feb./March).
Dynamics of the Civil Aviation Industry, The, A. P. Ellison and E. M. Stafford, p. 480 (Oct.).
Engineering Mathematics, A. C. Baipal, *et al.*, p. 529 (Nov.).
Fairey Aircraft since 1915, H. A. Taylor, p. 156 (April).
Flight International Airports Guide, Roy Allen (Ed.), p. 433 (Sept.).
Finite Element Method, The, Douglas H. Norrie and Gerrard de Vries, p. 529 (Nov.).
History of Air Power, A. Basil Collier, p. 332 (July).
Human Factor in Aircraft Accidents, The, David Beaty, p. 433 (Sept.).
Integrated Theory of Finite Element Methods, John Robinson, p. 529 (Nov.).
Introduction to the Theory of Shells, Clive L. Dym, p. 579 (Dec.).
Linear Methods of Applied Analysis, A. M. Krall, p. 580 (Dec.).
Optimum Structural Design Theory and Applications, R. H. Gallagher and O. C. Zienkiewicz, p. 215 (May).
Parachute Manual, The, Dan Poynter, p. 386 (Aug.).

Pilot's Weather, Ann Welch, p. 39 (Jan.).
Propulsion Systems (Revised and expanded edition), A. N. Hosny, p. 433 (Sept.).
Rise and Fall of the Luftwaffe, The, —the life of Luftwaffe Marshal Erhard Milch, David Irving, p. 156 (April).
Science of Materials used in Advanced Technology, The, Earl R. Parker and Umberto Colombo (eds.), p. 39 (Jan.).
Simulators—an International Guide, Ralph Collacott (Ed.), p. 480 (Oct.).
SOS. The Story of Radio Communication, G. E. C. Wedlake, p. 39 (Jan.).
Structural Mechanics, Jack R. Vinson, p. 480 (Oct.).
Student Pilot's Flight Manual, The, William K. Kershner, p. 332 (July).
Theory and Application of Antenna Arrays, M. T. Ma, p. 579 (Dec.).
Tourism: Past, Present and Future, A. J. Burkhart and S. Medleck, p. 580 (Dec.).
US—Soviet Co-operation in Space, D. L. Harvey and L. C. Ciccoritti, p. 580 (Dec.).
Vistas in Astronomy, Vol. 15, Arthur Beer (Ed.), p. 433 (Sept.).
Wight Aircraft, The, Michael H. Goodall, p. 98 (Feb./March).

RICARDO, Sir HARRY

Obituary, p. vi (June).

RICHARDSON, Maj. Gen. T. A.

The evolution of army aviation, pp. 250-255 (June).

ROBERTS, W. G.

Glass windshield for wide bodied aircraft, pp. 221-225 (May) S.

ROGERS, V. A. B.

The design of the WG-13, pp. 15-23 (Jan.).

ROTHWELL, A.

An experimental investigation of the efficiency of a range of channel section struts, pp. 426-430 (Sept.).

ROYAL AERONAUTICAL SOCIETY

Aerospace, Notice calling for papers, p. iv (April).
AGM—9th May 1974, Notice, p. vi (Feb./March), p. vi (April).
Minutes, pp. iii-iv (June).
Agricultural Aviation Group AGM, Notice, p. v (April).
Council, p. 106 (Feb./March); p. iv (Aug.).
Council Ballot 1974, Erratum, p. iv (May).
Divisions and Branches, p. 161 (April); p. 219 (May).
Eadon, Letitia, Memorial Award, p. vi (Feb./March).
Focus on Airline Safety: Hazard Alert (Air League Forums), Notice, p. v (Feb./March).
Graduates' and Students' Section AGM, Notice, p. v (Feb./March).
Handley Page Memorial Lecture, Eleventh, Notice, p. vi (April); p. iv (May).
Honorary Fellowship for Donald W. Douglas, Sr, p. v (April).
International Aerospace Instrumentation Symposium, 8th. Call for papers, p. v (Jan.).
Medals and Awards 1973, p. 111 (Jan.).
New Year Honours List 1974, p. v (Jan.).
New Year Message from the President, p. iii (Jan.).
New Zealand Division's Award, Notice, p. v (Jan.).
Nomination of Candidates for Council, p. vi (Feb./March); p. vi (April).
President, 1974-1975, p. iii (May).
Presidential Address 1974, Dr. G. S. Hislop, pp. 117-124 (April).
Review of precious resources and their effect on air transport 1974 Spring Convention, Notice, p. v (Feb./March); p. vi (April).
Special General Meeting—General Meeting, p. v (Feb./March).
Supper Club AGM, 9th May 1974, p. vi (Feb./March); p. vi (April).
Young People's Lecture—Building replica aeroplanes for films, Air Cdre A. H. Wheeler, Notice, p. v (Jan.).

RUSSELL, J. B.

A note on the entropy change across a normal shock wave, pp. 431-432 (Sept.).

SAFETY

Concorde and Safety: design, testing and certification, R. Chevalier, pp. 277-283 (June) S.

SATELLITES

An analytical approach to altitude determination of a spinning satellite, Belur V. Dasarathy, pp. 256-257 (June).
European role in satellite systems (Symposium)—Spacelab, Dr. Christian Reinhold (Lecture Summary), p. viii (Feb./March).

SEARS, Prof. W. R.

Self correcting wind tunnels, pp. 80-89 (Feb./March).

SIMMONS, J. E. L.

The relationship between the base pressure on a bluff body and the velocity at separation, pp. 330-331 (July).

SMART, D. R., GETHING, J. M., GILL, K. P. and HOLT, J. A.

Dynamic analysis of flexible space vehicles having uncoupled control axes, pp. 560-569 (Dec.).

SMITH, A. H.

The development of the WG-13, pp. 23-31 (Jan.).

SMITH, P. ARNOT

The plane jet growth rate as influenced by a wall in the plane of the nozzle, pp. 384-385 (Aug.).

SOVA, J. A. and WILLIAMS, T. R. G.

Fatigue properties of the Alclad Al-Cu-Mg-Si-Mn alloy, pp. 375-379 (Aug.).

SPACE VEHICLES

Dynamic analysis of flexible space vehicles having uncoupled control axes, D. R. Smart, K. F. Gill, J. M. Gething and J. A. Holt, pp. 560-569 (Dec.).

SPECIALIST LECTURES

- Left and right in cockpit evolution, L. F. E. Coombs, pp. 513-522 (Nov.).
- SPROULE, Lt. Cdr. J.**
Making and flying replicas of Sir George Cayley's gliders, pp. 315-319 (July).
- STAFFORD, E. M. and ELLISON, A. P.**
The future world demand for civil aircraft, pp. 506-512 (Nov.).
- STANNILAND, D. R.**
The effect of deflecting flaps on strike/fighter aircraft wing design, pp. 553-559 (Dec.).
- STANSBY, P. K.**
The effects of end plates on the base pressure coefficient of a circular cylinder, pp. 36-37 (Jan.).
- STEPNIEWSKI, W. Z.**
Civilian vertical lift systems and aircraft in North America, pp. 231-249 (June).
- THOMPSON, Dr. G. F. and DOGANIS, Dr. R. S.**
Establishing airport cost and revenue functions, pp. 285-304 (July).
- THORNE, R. G.**
Research in human engineering at the Royal Aircraft Establishment, pp. 167-180 (April) S.
- TROUGHTON, ALAN J.**
Design and development of the Hawker Siddeley 748 prop-jet feeder line, pp. 485-505 (Nov.).
- VERDON SMITH, Sir REGINALD**
The British Aircraft Corporation: the first twelve years (19th Barnwell Memorial Lecture), pp. 45-52 (Jan.) S.
- VIBRATION**
A simplified approach to helicopter ground resonance, G. T. S. Done, pp. 204-208 (May).
Axisymmetric vibrations of ring stiffened shallow spherical shells, R. K. Jain and C. L. Kirk, pp. 32-36 (Jan.).
- VTOL**
Civilian vertical lift systems and aircraft in North America, W. Z. Stepniewski, pp. 231-249 (June).
- WADE, Air Marshal Sir RUTHVEN**
Royal Air Force experience of the Harrier, pp. 1-6 (Jan.).
- WEST, M. J. and BELLAMY, N. W.**
Structural optimisation by an impulse response method, pp. 258-261 (June).
- WILBUR and ORVILLE WRIGHT MEMORIAL LECTURE, SIXTY-SECOND**
Looking ahead with hindsight, Sir George Edwards, pp. 134-146 (April).
- WILBUR and ORVILLE WRIGHT MEMORIAL LECTURE, SIXTY-THIRD**
Aeronautics—A study in technological and economic growth and form, Dr. A. H. Flax, pp. 537-552 (Dec.).
- WILLIAMS, F. W.**
Initial buckling of lipped channel struts, pp. 468-475 (Oct.).
- WILLIAMS, G. E.**
The computer in management: the current status of the management information system, pp. 109-111 (Feb./March) S.
- WILLIAMS, R. V. and BURROWS, F. M.**
Movement of a line vortex pair downstream of a circular cylinder in potential flow, pp. 573-578 (Dec.).
- WILLIAMS, T. R. G. and SOVA, J. A.**
Fatigue properties of the Alclad Al-Cu-Mg-Si-Mn alloy, pp. 375-379 (Aug.).
- WIND TUNNELS**
Self correcting wind tunnels, Prof. W. R. Sears, pp. 80-89 (Feb./March).
- WRIGHT, P. G.**
Aerodynamics for formula 1, pp. 226-230 (May) S.
- ZAGHLOUL, S. A. and KENNEDY, J. B.**
Material constants of filamentary-composite laminates, pp. 464-467 (Oct.).

KINGSTON POLYTECHNIC

School of Mechanical, Aeronautical and Production Engineering.
Applications are invited for the following posts:

PRINCIPAL LECTURER

to co-ordinate teaching of design at degree and diploma level. Must be prepared to also teach in another specialised subject, preferably Production Engineering.

LECTURERS

- (1) Production Engineering
- (2) Instrumentation, Dynamics and Control Engineering.

All candidates should have a degree or equivalent, together with research and/or industrial experience.

Salary: Principal Lecturer: £4104-£4536(bar)-£5091.

Lecturer II: £2967-£3741.

Salary under review.

Further details and application forms from Appointments Officer, Kingston Polytechnic, Penrhyn Road, Kingston upon Thames KT1 2EE. 01-549 1366.

CARPETS

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

All leading makes of Branded Carpets
WILTONS · AXMINISTERS · 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, EC4M 7JD. Tel: 01-248 7971
BIRMINGHAM: 164, Edmund St., B3 2HB. Tel: (021) 236 5862
BOURNEMOUTH: 268, Old Christchurch Rd., BH1 1PH. Tel: 21248
BRIGHTON: 2-5, North Road, BN1 1YA. Tel: 66402
BRISTOL: 2-3 Royal London Hse, Queen Charlotte St. BS1 4EX. Tel: 28857
EXETER: 157, Fore St., EX4 3AT. Tel: 32019
GLASGOW: 166, Howard St., G1 4HA. Tel: (041) 221 3278
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: 20321/21428
WESTCLIFF-on-SEA: 495, London Rd., SS0 9LG. Tel: Southend 46569

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



Ready for a Change?

At the **CENTRAL ELECTRICITY RESEARCH LABORATORIES** Leatherhead, Surrey, we are looking for energetic and able honours graduates to join our research effort on **STRUCTURAL DYNAMICS**. A wide range of backgrounds will fit well into our team. Do any of the following describe you?

1. You have had some experience of vibration research and would like the chance to tackle a new range of problems.
2. Since graduating you have been working successfully in another field but you would now like to face some new and different challenges.
3. You have mathematical ability and you would like the chance to exercise it on such problems as the analysis of random non-stationary processes or the non-linear optimisation of dynamic responses.

If you fit into one of these categories, we can offer excellent computing facilities, spacious well equipped laboratories in green belt surroundings, salaries in the range **£3179-£5129** with good prospects of advancement to **£5729** and some assistance with house purchase and removal expenses.

For further details of the research areas and for an application form please write now to the Personnel Officer (Research), Central Electricity Generating Board, Sudbury House, 15 Newgate Street, London EC1A 7AU. Quote Ref. A1/3312.

C.E.G.B. - HEADQUARTERS

Heat balance,
solar heating
see Data Items No

69009
69012
69015

Atmospheric data,
gust frequencies
see Data Items No

69023
72018
72026

Buckling of plates,
panels and sandwich
panels
see Data Items No

67024 to 26
72012
72019

Measurement of engine
thrust and performance
of aircraft
see Data Items No

69006 to 8
70019 to 23

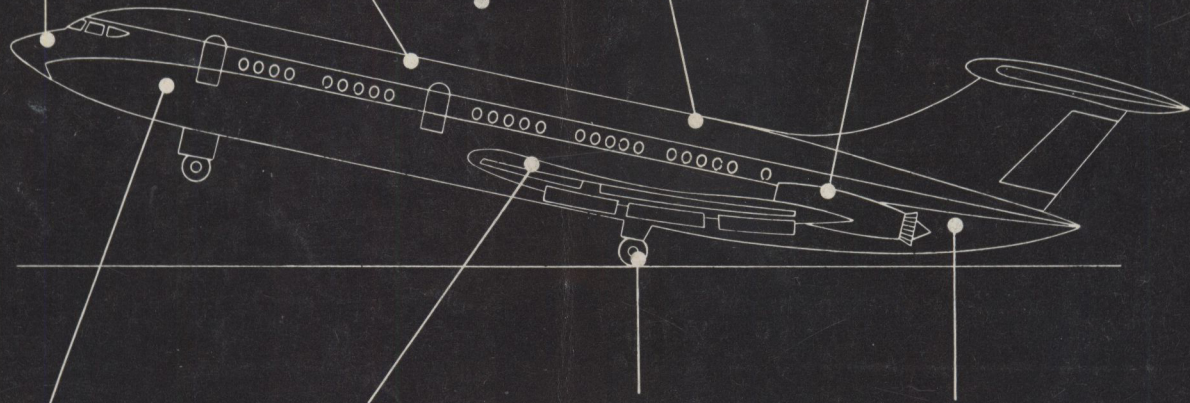
Coming this year
Turbulence near
the ground

Coming this year
Buckling of composite
panels

Coming this year
Estimation of range
and endurance

Dynamics of aircraft
see Data Items No

67001 to 7
67036 to 38



Skin friction drag
see Data Items No

68019
68020

Aerodynamics of wings,
aerofoils and ground
effect

see Data Items No
70011
72023
72024

Tyre-runway friction
see Data Items No

71025
71026
72008

Fatigue and
acoustic fatigue
see Data Items No

72001 to 5
72015 to 17
72020
73001

Coming soon —
Rolling friction

Coming this year
Roughness drag

Get it right-first time!

Design engineers need accurate, reliable information on which to base their designs and specifications. But much of the information available in essential areas is conflicting. Values for vital parameters such as pressure drops or stress concentrations in one source often differ widely from those in another.

Unless you choose the *best* values, you risk over-specifying materials and dimensions, with consequent cost penalties. Or you may under-specify, which could lead to unscheduled stoppages and breakdowns.

Engineering Sciences Data Unit can help you to get things right, first time.

ESDU produces thoroughly evaluated and authoritative engineering design data in chemical, mechanical, structural and

aeronautical engineering.

Committees of practising engineers and scientists monitor and guide qualified ESDU staff who sift and evaluate all the available data on each topic. Sometimes hundreds of separate references are involved.

ESDU issues the results of this work as Data Items in which information is presented in a way best suited to the engineer. Graphs, tables, flow charts, equations and presentation in both British and SI units are all combined to help you to get your design and specifications drawn up precisely and accurately.

ESDU's work is sponsored by the Institutions of Chemical, Mechanical and Structural Engineers and by the Royal Aeronautical Society.

Users of ESDU Data Items may become Associates of ESDU. As an Associate, you would be entitled to a range of valuable services.

All the Data Items currently available are listed in our 1973 Index. If you would like to know more about ESDU, and which Data Items might suit your particular applications, we shall be happy to send you with our compliments a copy of the Index and details of ESDU's services.



Engineering Sciences Data Unit
251-259 Regent Street
London W1R 7AD
01-437 4894