

announcing

TEQC83

the international conference on

**Testing, Evaluation and
Quality Control of Composites**

sponsored by the journal *composites*

13-14 September 1983 Guildford, England

TEQC83 will cover developments in the mechanical and non-destructive testing of composite materials in the laboratory together with the industrial uses of test techniques and quality assurance procedures for composite structures. 32 contributed papers will be presented in formal sessions, together with poster sessions for short contributions.

The main sessions will cover:

- Mechanical testing
- Materials' characterization
- NDT — research and industry
- Environmental testing
- Quality assurance and structural performance

Exhibition

A small commercial exhibition is being planned, for manufacturers of test equipment and for establishments offering testing facilities and services.

Industrial visits

Arrangements have been made for delegates to visit local establishments with an involvement in composite materials technology: British Aerospace, Royal Aircraft Establishment (Farnborough) and AERE Harwell.

Delegate registration

For full details of the programme for **TEQC83** and for delegate registration forms please complete the form below (or a photocopy) and return it to the address shown.

To: **Tim Feest, Conference Organizer TEQC83,
Butterworth Scientific Ltd — Journals Division,
PO Box 63, Guildford, Surrey, England GU2 5BH
Telephone: (0483) 31261 Telex: 859556 SCITEC G**

Please send full details of the **TEQC83** programme and delegate registration forms.

Name..... Position.....
(please use BLOCK CAPITALS)

Address for correspondence

.....

.....

Telephone..... Telex.....



The Royal Aeronautical Society

FOUNDED 1866

INCORPORATED BY ROYAL CHARTER 1949

Patron: HER MAJESTY THE QUEEN

COUNCIL

President: CAPTAIN E. M. BROWN, CBE, DSC, AFC, MA, FRAeS, RN(Ret'd)

President-Elect: PROFESSOR M. G. FARLEY, HonCGIA, CEng, FIMechE, CBIM, FIProdE, FRAeS

Vice-Presidents:

J. W. FOZARD, OBE, DCAe, BSc(Hons), CEng, FIMechE, FAIAA, FRAeS
G. K. C. PARDOE, BSc(Eng), DLC, CEng, FBIS, FRAeS
T. H. KERR, BSc, FRAeS

Past Presidents:

P. A. HEARNE, MSc, DLC, CEng, FRAeS
J. T. STAMPER, MA(Cantab), FEng, FRAeS

Members:

AIR CDRE M. K. ADAMS, AFC, FRAeS
C. ABELL, OBE, CEng, HonFSLAET, HonFRAeS
M. W. ANDERSON, MA(Cantab), CEng, MICE, MSAE, AFAIAA, FRAeS
PROFESSOR R. D. ARCHER, CEng, FRAeS (*President — Australia Division*)
A. F. ATKIN, CBE, BSc(Hons), DipAe(Hull), FEng, FIMechE, FRAeS
R. G. AUSTIN, MSc, CEng, MAIAA, FRAeS (*Chairman, Rotorcraft Section*)
AIR CDRE F. R. BANKS, CB, OBE, HonCGIA, CEng, HonFAIAA, HonFRAeS, RAF (Ret'd)
A. E. M. BARTON, DFC, CEng, MRAeS
A. L. BLACKMAN, OBE, MA, FRAeS
WING CDR A. W. BOWER, OBE, DFC, MRAeS (*President — South Africa Division*)
DR P. H. CALDER, OBE, BSc, ACGI, PhD, CEng, FRAeS
I. B. CRIPPS, MRAeS (*Chairman — Branches Committee*)
J. L. CROWDER, MA, CEng, FBIS, AFAIAA, HonMIED, FRAeS (*Chairman — Astronautics and Guided Flight Section*)
H. M. DOWELL, AMRAeS (*President — Zimbabwe Division*)
N. FALCONER, BSc, MEcon, FStat, MRAeS
DR G. S. HISLOP, CBE, HonDSc, PhD, BSc, ARCST, FEng, FIMechE, FRSA, FRSE, FRAeS
G. C. HOWELL, MA, MSc, CEng, FRAeS
D. J. KNIGHT, BSc(Eng), AMRAeS
B. P. LAIGHT, OBE, MSc, FEng, MIMechE, FRAeS
F. J. LOW, MRAeS
B. NEW, DFC, MRAeS (*President — New Zealand Division*)
AIR MARSHAL SIR CHARLES PRINGLE, KBE, MA, FEng, FRAeS, FBIM, RAF(Ret'd)
D. J. RICHER, MSc, BSc, CEng, MRAeS
M. RYLAND (*Chairman — Graduates' and Students' Section*)
P. R. SAMPSON, TEng(CEI), AMRAeS
PROFESSOR J. L. STOLLERY, DSc(Eng), DIC, ACGI, CEng, AFAIAA, FRAeS

Officers:

Hon. Treasurer: C. F. HUGHESDON, AFC, FRAeS
Secretary: N. A. M. EASTWOOD, MA, CEng, MRAeS

DIVISIONS AND BRANCHES OF

THE ROYAL AERONAUTICAL SOCIETY

Australia Branches at: Canberra, Sydney, Melbourne and Adelaide.

President: Professor R. D. ARCHER, FRAeS. *Hon. Secretary:* B. A. J. SCOLES, FRAeS, 191 Royal Parade, Parkville, Victoria 3052.

Zimbabwe Branches at: Bulawayo, Gweru and Harare

President: H. M. DOWELL, AMRAeS. *Hon. Secretary:* Mrs. MARGARET HEAP, Assoc RAeS, 84 Broadlands Rd, Emerald Hill, Harare.

New Zealand Branches at: Auckland, Wellington, Palmerston North, Christchurch, Hamilton and Blenheim.

President: Ben NEW, DFC, MRAeS. *Hon. Secretary:* M. MILSOM, BP New Zealand Ltd, 20 Custom House Quay, Wellington.

Southern Africa *President:* Wg. Cdr. N. F. HARRISON, MRAeS. *Hon. Secretary:* N. A. H. BARRAUD, MRAeS, PO Box 27335, Sunnyside, Republic of South Africa, 0132.

Bedford

President: A. B. HAINES, FRAeS.

Chairman: A. M. McVITIE.

Hon. Secretary: G. I. PAULEY, Aircraft Research Assoc. Ltd., Manton Lane, Bedford MK41 7PF. Tel: 0234 50681.

Belfast

President: Sir PHILIP FOREMAN, CBE, FRAeS.

Chairman: T. E. MORRISON, MRAeS.

Hon. Secretary: W. GORDON, MRAeS, Dept. of Mech. Eng., College of Technology, College Square East, Belfast BT1 6DJ. Tel: Work — 0232 227244. Home — 0232 710370.

Birmingham and Wolverhampton

President: J. LENHAM, MRAeS.

Chairman: E. ALBRECHT, MRAeS.

Hon. Secretary: W. G. MORRIS, 16 Benson Ave, Goldthorn Park, Wolverhampton WV4 5HB. Tel: Work — W'ton 783361. Ex. 328. Home — W'ton 330139.

Boscombe Down

President: Air Cdre. R. G. SPIERS, OBE, FRAeS, RAF.

Chairman: B. RAMSDALE, BSc, CEng, FRAeS.

Hon. Secretary: Wg. Cdr. N. BONNOR, MRAeS, MRIN, RAF, Chief Experimental Navigation Office, A&AEE Boscombe Down, Salisbury SP4 0JF. Tel: 0980 23331. Ex. 2840.

Bristol

President: H. METCALFE, FRAeS.

Chairman: P. J. ALLARD, MRAeS.

Hon. Secretary: D. C. GREENMAN, MRAeS, Aerodynamics Dept, No 7 Drawing Office, British Aerospace Aircraft Group, Filton House, Bristol BS99 7AR. Tel: 0272 693831. Ex. 464.

Brough

President: L. W. MILSOM, CEng, MIMechE, FRAeS.

Chairman: E. J. SOLMAN, AMRAeS.

Hon. Secretary: C. ROE, TEng(CEI), AMRAeS, Future Projects Dept, British Aerospace, Brough, N. Humberside HU15 1EQ. Tel: 0482 667121. Ex. 5116.

Cambridge

President: Professor W. A. MAIR, CBE, FRAeS.

Chairman: N. A. J. HARRY, FRAeS.

Hon. Secretary: J. MOSELEY, AMRAeS, 6 Cooks Drove, Earith, Huntingdon, Cambridge PE17 3QG.

Chester

President: R. GRIFFITHS, FRAeS.

Chairman: V. W. CLARKSON, MRAeS.

Hon. Secretary: J. R. YOUNG, AMRAeS, British Aerospace, Hatfield Chester Division, Broughton, Chester. Tel: 0244 535333.

Christchurch

President: M. COBHAM, FRAeS.

Chairman: R. C. GODWIN, FRAeS.

Hon. Secretary: C. H. GOOM, MRAeS, British Aerospace, Weybridge Bristol Division, Bourne-mouth (Hurn) Airport, Christchurch, Dorset.

Coventry

President: A. H. POPE, FRAeS.

Chairman: A. J. WEBBER, MRAeS.

Hon. Secretary: A. J. EAGLES, 30 Lupton Ave, Coventry CV3 5BQ. Tel: 0203 415412.

Cranwell

President: Air Vice Marshal B. BROWNLOW, FRAeS.

Chairman: Wg. Cdr. P. N. HILLER.

Hon. Secretary: Fit. Lt. M. S. MASON, RAF College, Cranwell, Sleaford, Lincs NG34 8HB. Tel: 0400 61201.

Derby

President: J. O. KEIR, FRAeS.

Chairman: J. BUSH, FRAeS.

Hon. Secretary: D. P. HARPLEY, AMRAeS, Rolls-Royce Ltd, East Midlands Airport, Derby DE7 2SA. Tel: 0332 811216

Dublin

President: R. W. O'SULLIVAN, FRAeS.

Chairman: Capt S. J. P. LYTTLE.

Hon. Secretary: J. CONNERNEY, Eng. Wing, Air Corps, Baldonnel, Co. Dublin. Tel: 592493. Ex. 28.

Gatwick

President: A. T. PUGH, FRAeS.

Chairman: T. J. PATRICK, MRAeS.

Hon. Secretary: G. BOYLING, BCal, Caledonian House, Crawley, West Sussex RH10 2XA.

Glasgow

President: Dr. A. W. BABISTER, MRAeS.

Chairman: T. J. GOODWIN, AMRAeS.

Hon. Secretary: F. FRENCH, MRAeS, 27 Bourtree Road, Hamilton ML3 8QA. Tel: 03552 20200. Ex. 163.

Gloucester and Cheltenham

President: Sir ROBERT HUNT, HonFRAeS.

Chairman: K. BEST, FRAeS.

Hon. Secretary: M. CHANCE, MRAeS, Dowty Rotol Ltd, Cheltenham Rd, Gloucester. Tel: 0452 712424.

Halton

President: Gp. Capt. M. J. EVANS, ADC, CEng, MRAeS, RAF.

Chairman: Wg. Cdr. J. A. CHARLETT-GREEN, RAF.

Secretary: Sqn. Ldr. P. G. HISCOCK, RAF, Electrical Training Squadron, RAF Halton, Bucks HP22 5PG. Tel: 0296 623535. Ex. 234.

Hatfield

President: M. J. GOLDSMITH, FRAeS.

Chairman: F. W. VANN, FRAeS.

Hon. Secretary: K. GREEN, MRAeS, Repair Drawing Office, British Aerospace, Hatfield — Chester Division, Hatfield, Herts. Tel: 07072 62345. Ex. 89.

Isle of Wight

President: M. J. BRENNAN, FRAeS.

Chairman: R. L. WHEELER, MRAeS.

Hon. Secretary: N. MAY, Technical Office, British Hovercraft Corporation Ltd, East Cowes, Isle of Wight. Tel: 098-29 4121.

London Airport

President: Sir JOHN KING, Assoc. RAeS.

Chairman: P. J. CRAWFORD, MIMechE, FSLAET.

Hon. Secretary: J. D. BROWN, MRAeS, British Airways, Room A123, Technical Block A(5356), London (Heathrow) Airport, Hounslow, Middx TW6 2JA. Tel: 01-750 5603.

Loughborough

President: Professor D. J. JOHNS, FRAeS.

Chairman: S. JAMIESON.

Hon. Secretary: L. E. WOODFIELD, AMRAeS, Transport Technology Dept, Loughborough University of Technology, Loughborough, Leics. LE11 3TU. Tel: Loughborough 63171. Ex. 470.

Manchester

President: C. E. FIELDING, OBE, FRAeS.

Chairman: D. L. RAFFLE, CEng, MRAeS.

Hon. Secretary: J. H. MANGAN, MRAeS, Assist. Sec., W. JAMES, Aerodynamics Dept., British Aerospace, Manchester Division, Woodford, Stockport, Cheshire. Tel: 061-439 5050. Ex. 278.

Medway

President: P. A. HEARNE, FRAeS.

Vice President: M. MOULTON, CEng, MRAeS.

Acting Chairman: I. F. COOPER, CEng, MRAeS.

Hon. Secretary: F. H. WOOD, MRAeS, c/o Marconi Avionics Ltd, Airport Works, Rochester, Kent. Tel: 0634 44400.

Preston

President: F. E. ROE, FRAeS.

Chairman: A. G. BARNES, MRAeS.

Hon. Secretary: J. R. HUNTINGTON, MRAeS, British Aerospace, Warton Division, Warton Aerodrome, Preston. Tel: (0772) 633333. Ex. 60.

Prestwick

President: R. McINTYRE, FRAeS.

Chairman: I. McDONNELL, FRGS, AMRAeS.

Hon. Secretary: V. B. M. McLEONARD, MBE, AMRAeS, 21 Hillhouse Gdns, Troon, Ayrshire KA10 6SZ. Tel: 0292 311351.

Southampton

President: Professor G. M. LILLEY, FRAeS.

Chairman: G. DAVIES, CEng, FRAeS.

Hon. Secretary: S. W. D. WOLF, BSc, AMRAeS, Dept. of Aeronautics and Astronautics, The University, Southampton, Hants. SO9 5NH. Tel: 0703 559122. Ex. 2303.

Southend

President: A. J. BROOKE-WALDER, MRAeS.

Chairman: P. R. GROUT, AMRAeS.

Hon. Secretary: D. M. GLADSTONE, MRAeS, 36 Brooke House, Town Square, Basildon, Essex SS14 1HX. Tel: Basildon 284621; Work: 22861. Ex. 290.

Stevenage

President: T. G. KENT, CBE, CEng, MRAeS.

Chairman: C. H. MARTIN, CEng, FRAeS.

Hon. Secretary: M. F. RICKETT, AMRAeS, British Aerospace, Dynamics Group, Gunnels Wood Rd, Stevenage, Herts. SG1 2AS. Tel: 0438 3456. Ex. 325.

Swindon

President: W. GILLESPIE, MRAeS.

Chairman: G. N. M. GINGELL, MRAeS.

Hon. Secretary: Sqn. Ldr. J. J. D. RICHARDSON, CEng, MRAeS, RAF, Support Engineering Squadron, RAF Brize Norton, Oxon. Tel: 0993 842551. Ex. 562.

Thames Valley

President: E. N. MOBBS.

Chairman: J. L. FAREHAM, MRAeS.

Hon. Secretary: A. G. FOSKETT, MRAeS, M.L. Aviation Co Ltd, White Waltham Aerodrome, Berks. Tel: 062-882 3361.

Weybridge

President: J. T. STAMPER, FRAeS.

Chairman: M. W. SALISBURY, MRAeS.

Hon. Secretary: A. M. DOBSON, MRAeS, British Aerospace, Weybridge Bristol Division, Weybridge, Surrey. Tel: 97 45522. Ex. 6945.

Yeovil

President: B. D. BLACKWELL, FRAeS.

Chairman: V. A. B. ROGERS, FRAeS.

Hon. Secretary: P. J. BAKER, MRAeS, Programme Directorate Lynx, Westland Helicopters Ltd, Yeovil, Somerset. Tel: 0935 75222. Ex. 2624.

OVERSEAS BRANCHES

Hong Kong

Chairman: Dr. K. L. LEGG, FRAeS.

Act. Hon. Secretary: J. R. ADDERSLEY, c/o Civil Aviation Dept, 10/F, United Centre, 95 Queensway, Hong Kong.

Malaysia

Chairman: General Datuk ARIFF bin Datuk Awang, MRAeS.

Hon. Secretary: R. H. STEVENS, 3 Jalan, 22-55 Petaling Jaya, Selangor.

This publication is available in microform.



University Microfilms International

Please send additional information for _____
(name of publication)

Name _____

Institution _____

Street _____

City _____

State _____ Zip _____

300 North Zeeb Road
Dept. P.R.
Ann Arbor, Mi. 48106
U.S.A.

30-32 Mortimer Street
Dept. P.R.
London W1N 7RA
England

CALL FOR PAPERS

STRUCTURAL IMPACT AND CRASHWORTHINESS

An International Conference and Exposition to be held at Imperial College, London, UK.
July 16-20, 1984.

The aim of the conference is to provide a forum for the discussion of problems of impact on or by moving structures. This includes impacts at high or low velocity, accidents, explosions and crash-cases of aircraft, marine vessels, automobiles and trains, as well as problems of protecting sensitive nuclear or military installations. Four special areas of current activity are:

- (i) *Computer Simulation* to model dynamic response or collapse of vehicles under impact loads, and fixed plant subjected to explosions, accidents or earthquakes.
- (ii) *Crashworthiness* evaluated by tests. Is this a feasible design tool?
- (iii) *Material and Element Behaviour* under conditions of moderate to high loading rates must be understood if the impact behaviour of structures is to be modelled.
- (iv) *Loading* as a result of impact, accident or blast may be difficult to specify. Experience gained in the fields of transport vehicles, armaments and nuclear plant protection should be exchanged.

Authors are invited to submit abstracts of not more than 500 words to the joint organisers:

Dr G. A. O. Davies, Aeronautics Department, Imperial College, London SW7 2BY, UK.
or in the USA

Professor J. S. Przemieniecki, USAF Institute of Technology, Wright-Patterson AFB, Dayton, Ohio 45433,
USA.

from whom further particulars might be obtained. Abstracts must be received by August 31st 1983, and authors will be notified of acceptance by October 31st 1983.