
Advanced Passenger Train

The team working on the high speed Advanced Passenger Train at British Railways Research Department at Derby is being strengthened, and we need a further 6 Scientists and Engineers. These are unique opportunities to join one of the most exciting projects in modern transport engineering.

The appointments will carry membership of a staff superannuation fund and there are free and reduced rate rail travel facilities. The board has arrangements with many employers for the preservation of pensions.

Applications stating age and giving full information of education, qualifications and experience should be sent to: Headquarters Staff Manager (quoting ref. RB.APT/VE), British Railways Board, 222 Marylebone Road, London, N.W.1

STRUCTURES

Experienced structural project engineers and stressmen are required to lead and control design and development programmes of new types of vehicle body and suspension structures for the APT. Applicants should possess honours degree in aeronautical, mechanical or structural engineering or should have evidence of equivalent ability. (Three Assistant Section Head posts in the salary range £2235-£2675).

STRUCTURAL DYNAMICS AND NOISE TRANSMISSION

An engineer, physicist or mathematician with an interest in structural dynamics in relation to the generation and transmission of noise and vibration, is required to conduct research into the internal and external noise problems of high speed ground vehicles. (One post in the salary range £1720-£2235).

EXPERIMENTAL DYNAMICS

Experienced dynamics engineers with interests in instrumentation and data reduction aspects of dynamics or in environmental testing techniques are required to lead experimental programmes on the APT. These programmes involve work in the laboratory and on the test track. (Two Assistant Section Head posts in the salary range £2235-£2675).

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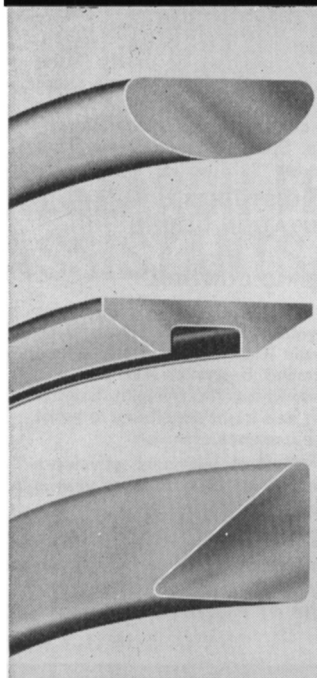
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Aircraft Structures Research



AUSTRALIAN DEPARTMENT OF SUPPLY

SENIOR PRINCIPAL RESEARCH SCIENTIST AND RESEARCH SCIENTIST

The Aeronautical Research Laboratories of the Department of Supply in Melbourne, Australia, have vacancies for a Senior Principal Research Scientist and a Research Scientist in the Structures field.

The work of the Laboratories covers a broad spectrum of research and development in the fields of aeronautics, with particular emphasis on aircraft and missile performance and the study of associated operational problems.

The Structures Division has major facilities for structural and mechanical investigations and for the fatigue testing of components and materials. In addition, computer (PDP-10) and electron microscope facilities are available.

SENIOR PRINCIPAL RESEARCH SCIENTIST —STRUCTURES

The successful applicant for this position will be responsible to the Superintendent of the Structures Division for the co-ordination and scientific direction of the research activities of three Groups concerned with:

- (a) Vibration and aeroelasticity,
- (b) Structures theory, and
- (c) Strain measurement and scientific computing services.

Staff comprises 14 research grades and 17 experimental grades, with supporting technical grades.

Qualifications

Candidates should have post-graduate qualifications in Engineering, Science or Mathematics at the Doctorate level, or alternatively other qualifications and research experience of PhD standard. The successful applicant will have an outstanding record of personal research achievement, preferably in one or more of the above fields, indicating scientific research ability of an exceptionally high order. Ability to initiate, direct and co-ordinate the work of scientists undertaking research and development in the above fields is essential.

Salary

Within the range \$A.9,989 to \$A.10,301 per year. (£1=\$A.2.14).

RESEARCH SCIENTIST—STRUCTURES

The successful applicant for this position will carry out research in one of the following areas, depending on his qualification and field of specialisation:

- (a) Solid mechanics—for example, elasticity, plasticity and creep.
- (b) Theory of structures—for example, shell structures.

Qualifications

Applicants should possess a PhD Degree in Engineering, Mathematics or Science or alternatively, other qualifications and research experience of PhD standard.

Additionally, applications should be supported by evidence of scientific research ability.

Salary

Within the range \$A.5,321 to \$A.6,693 per year. (£1=\$2.14).

Travel

First class air or sea passages will be paid for successful applicants and their families. (For further information contact the Department's Representative in London at the address shown below, or telephone 01 836 2435 extension 505.)

Applications

Applications should be forwarded as soon as possible to:

SENIOR REPRESENTATIVE,
Department of Supply,
Australia House,
Strand,
LONDON, WC2,

quoting reference 3131/AJ.

THE CITY UNIVERSITY

DEPARTMENT OF MECHANICAL
ENGINEERING

M.Sc. course in Applied Thermodynamics and Fluid Mechanics

(A two year course of part-time study)

This course is designed for professional technologists who wish to enhance their knowledge of fundamental thermodynamics and fluid mechanics and who may be concerned with new devices and developments in power engineering.

It is a two year course of part-time study together with two short periods of full-time attendance in the University.

Application forms and further details are available from the Secretary, Department of Mechanical Engineering, The City University, St. John Street, London, E.C.1.

CRANFIELD (Proposed Cranfield Institute of Technology)

Postgraduate Courses for 1969/70

in Engineering Control Systems

ONE YEAR COURSES IN ENGINEERING CONTROL SYSTEMS

With specialization becoming increasingly necessary in the study of modern control engineering, Cranfield offers a range of specialist courses, all of which have a central theme embodying modern feedback control theory, electronic engineering, and computer usage. Specialist studies stemming from the basic course structure are

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Applicants should be suitably qualified engineers, physicists and mathematicians of graduate level. A preliminary year is available for applicants without this qualification.

All courses are residential and advice will be given on financial aid.

Enquiries to:

**The Registrar, The College of Aeronautics,
Cranfield, Bedford.**

Aircraft Research Association Limited

Pension Scheme. Assistance with housing and removal expenses. Applications in writing to

Chief Executive,
Aircraft Research Association Ltd.,
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Continued expansion in research on contracts for home and abroad has created vacancies for

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Excellent opportunity of obtaining wide experience. A degree, H.N.C. or equivalent an essential qualification.

Loughborough University of Technology

Compressible Flow Aerodynamics

Applications are invited for a Mature Research Studentship in Compressible Flow Aerodynamics. Applicants, who should have two or more years post-graduate experience, will be concerned with problems of high Mach number internal flows.

This is a two year appointment, possibly extending to three, and registration for a higher degree will be possible. Bursary on scale £1,060-£1,300.

Further details from Professor Keith Legg, Head of Department of Transport Technology.
Loughborough

Leicestershire



**LOUGHBOROUGH
UNIVERSITY OF
TECHNOLOGY**

RESEARCH FELLOWS/ ASSISTANTS/STUDENTS

Applications are invited from suitably qualified graduates for research posts in the Department of Transport Technology. Topics are:

1. Runway Dynamics of Aircraft.
2. Aerodynamics of Trains.
3. Aerodynamics of Tube Transport Systems.
4. Automobile Handling.
5. Active Suspension Systems.
6. Turbulent Internal Airflows.

Depending on qualifications and experience, the salary ranges envisaged are from £550 (Student) to £1,700 (Fellow).

Further details from Professor David Johns, Department of Transport Technology.

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FLINTSHIRE COLLEGE OF TECHNOLOGY

Department of Engineering

Applications are invited from suitably qualified persons for the post of SENIOR LECTURER IN AERONAUTICAL PRODUCTION in respect of a new Higher National Diploma Course.

Salary £2,280 - £2,595 - subject to review.

Further particulars and application forms, which must be returned as soon as possible may be obtained from the Registrar, Flintshire College of Technology, Connah's Quay, Deeside, Flintshire.

*M. J. Jones,
Director of Education*

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