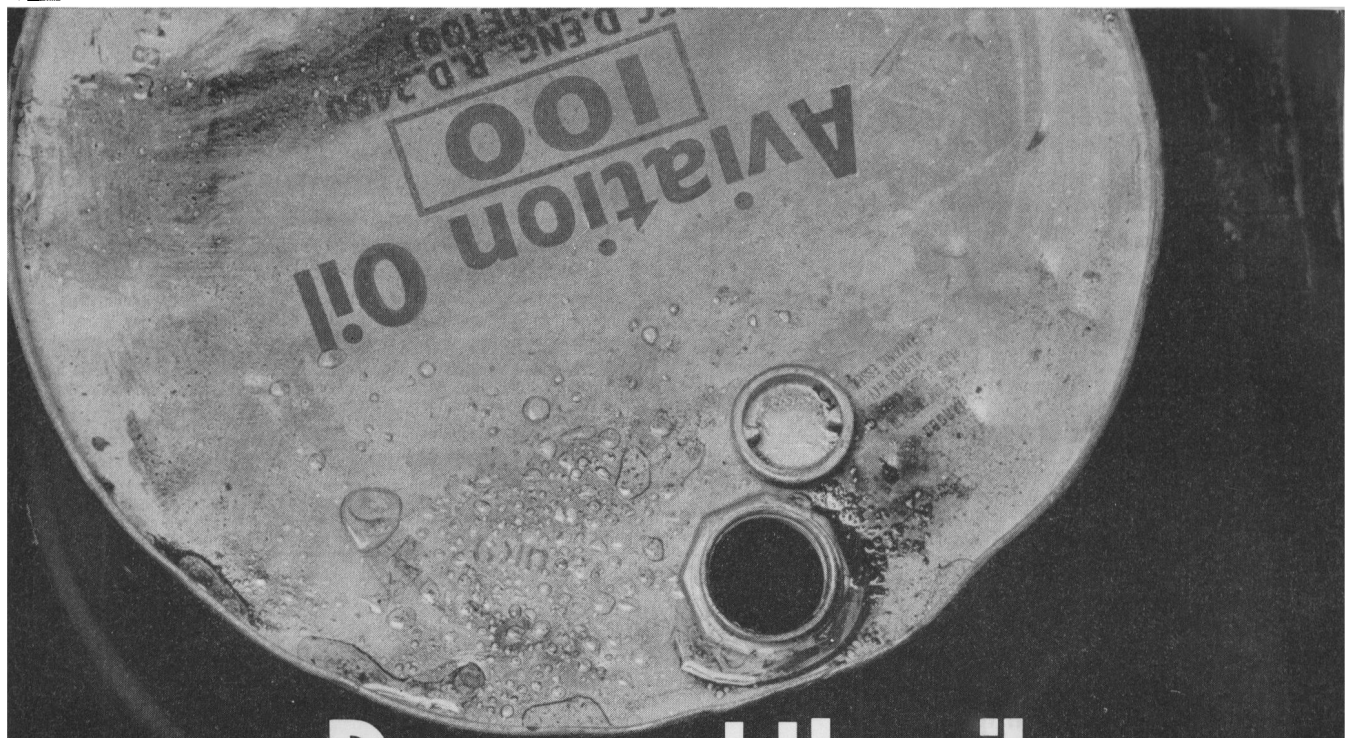


ASTRONAUTICS AND GUIDED FLIGHT SECTION REPRINTS

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.

<i>Author</i>	<i>Title</i>	<i>Published</i>
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. C. W. H. and Harrison, J. E. A.	The UK Polaris Project	September 1966
Dorling, E. B. and Hickman, P. L. V.	Symposium—Trials Data and their Handling	November 1966
Symposium	Symposium on Management	March 1967
Tokaty, G. A.	Aerospace Research and Its Relation to Universities, Industry and the Establish- ments	October 1967
Pardoe, G. K. C.	Some Technical and Management Considerations in European Space Programmes	December 1967
Hume, C. R. and Ducamus, P. M.	Symposium—A Progress Report of the ESRO II Programme	January 1968
Flemming, N. C.	Functional Requirements for Research/Work Submersibles	February 1968
Symposium	Simulation and Control of Guided Weapons	April 1968
Symposium	ELDO	July 1968
Symposium	Commercial Applications of Satellites for Europe	April 1969
Cadoux, J. E.	The Air-to-Air Missile Matra 530	May 1969
Jacob, J. E. B.	Vigilant: A Portable Anti-Tank Weapon for Infantry Use	May 1969
Pout, H. W.	The Evolution of Guided Weapons	June 1969
Symposium	Management Techniques of Guided Weapon Development	January 1970
Augustine, N. and Yates, R. M.	The Evolution of the US Tactical Missile Programme	December 1970
Symposium	Space Satellite and Launch Vehicle Technology	November & December 1970
Symposium	Operational Research in the Guided Weapons Field	January & February 1971



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CAD

Instruction and Appreciation Course in Computer-Aided Design and On-Line Computing at St. Enoch Hotel, Glasgow, 29 March - 2 April 1971, as outlined in the February issue of this Journal, has, due to the postal strike, been postponed until **10-14 May 1971**. Further particulars can be obtained from:

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MECHANICAL ENGINEERING GROUP
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GLASGOW C1

The Aeronautical Journal RAeS March 1971

NORBERG, J. W.

Aircraft Maintenance

This paper deals with the role and challenges of the aircraft maintenance function in present day airline operations, and the impact of changes being brought about by industry and technological progress.

The task of aircraft maintenance is directly influenced by airline requirements and factors forming part of its operating environment. Safety in air transport is an all inclusive term which embraces an aircraft and its total operating environment. The maintenance function in an airline is a significant element of this environment. The achievement and sustaining of airworthiness throughout the life of an aircraft is the prime responsibility of the airline maintenance branch.

The Aeronautical Journal RAeS March 1971

Compensation for Death and Injury in International Air Transport

The first part of this symposium which consisted of "Proposals for Amendment of the Warsaw Convention" by Mr. A. W. G. Kean; "A European View" by Mr. F. E. Mostyn and Mr. Peter Martin; "A United States View" by Mr. J. Kennelly and Mr. G. Lapham, and a discussion, was published in the February Aeronautical Journal. The discussion on the American papers together with a written contribution and a Civil Aeronautics Board report on "Levels of Recoveries on Account of Passenger Deaths and Serious Injuries in Airplane Accidents" is published in this issue.

The Aeronautical Journal RAeS March 1971

MOWFORTH, E.

A Design Study for a Freight-Carrying Airship

This analysis investigates briefly the applicability of the large airship in selected categories of freight transport, and suggests that the most immediately profitable field of operation would be in the movement of large indivisible loads over moderate distances.

Details are then given of the airship proposed for this type of duty by Airfloat Transport Limited, who envisage a vessel with a gas capacity of 30 million ft³ (849 504 m³) capable of carrying up to 280 tons (284 493 kg) over 1000 miles (1609 km) at 5000 ft (1524 m), or up to 400 tons (406 419 kg) over shorter distances at 2000 ft (610 m).

Modes of propulsion, operation and construction are described for the project, and a design attitude is explained which is intended to lead to a relatively cheap and rapidly available airship at the expense of some sophistication.

The Aeronautical Journal RAeS March 1971

BRITTEN, F. R. J.

The Islander

A survey of the Islander programme to date, covering the design, production, selling and funding, and a look ahead to the future and to the production of the Islander Mark III which first flew in September 1970.

The Aeronautical Journal RAeS March 1971

HILTON, DR. W. F.

Local Avoidance of Sonic Boom from an Aircraft

A flight path is proposed for an aircraft flying at 60 000 ft (18 288 m) and Mach 2, permitting it to fly over a city 10 miles (16 km) in diameter without generating a sonic boom in that city. It involves the passengers in a manoeuvre of less than $\pm 1g$. Only one case has been analysed, and it is not claimed that this is optimum, but merely that the technique is both possible and of interest.

The Aeronautical Journal RAeS March 1971

LEWENDON, J.

A Flight Test Establishment—Its Function and a Suggested Composition

This note (a) Outlines briefly the evolution of present day Flight Test Establishments.

(b) Details the main reasons for flight testing an aircraft.

(c) Describes the order and composition of a typical flight test programme applicable to a military aircraft.

(d) Proposes an organisation for a Flight Test Establishment, and its relationship within the parent Company.

The Aeronautical Journal RAeS March 1971

GREGORY-SMITH, D. G. and MARSH, H.

The Manufacture of Glass Fibre Rotor Blades with Pressure Tappings

A method for the manufacture at low cost of research rotor blades using epoxy resin reinforced with glass fibre is described. A design for the root fixing has been developed and strength, creep and vibration tests have shown that there is a large safety margin. A simple technique has also been developed for producing a blade with many pressure tappings, which may be arbitrarily spaced over the surface of the blade.

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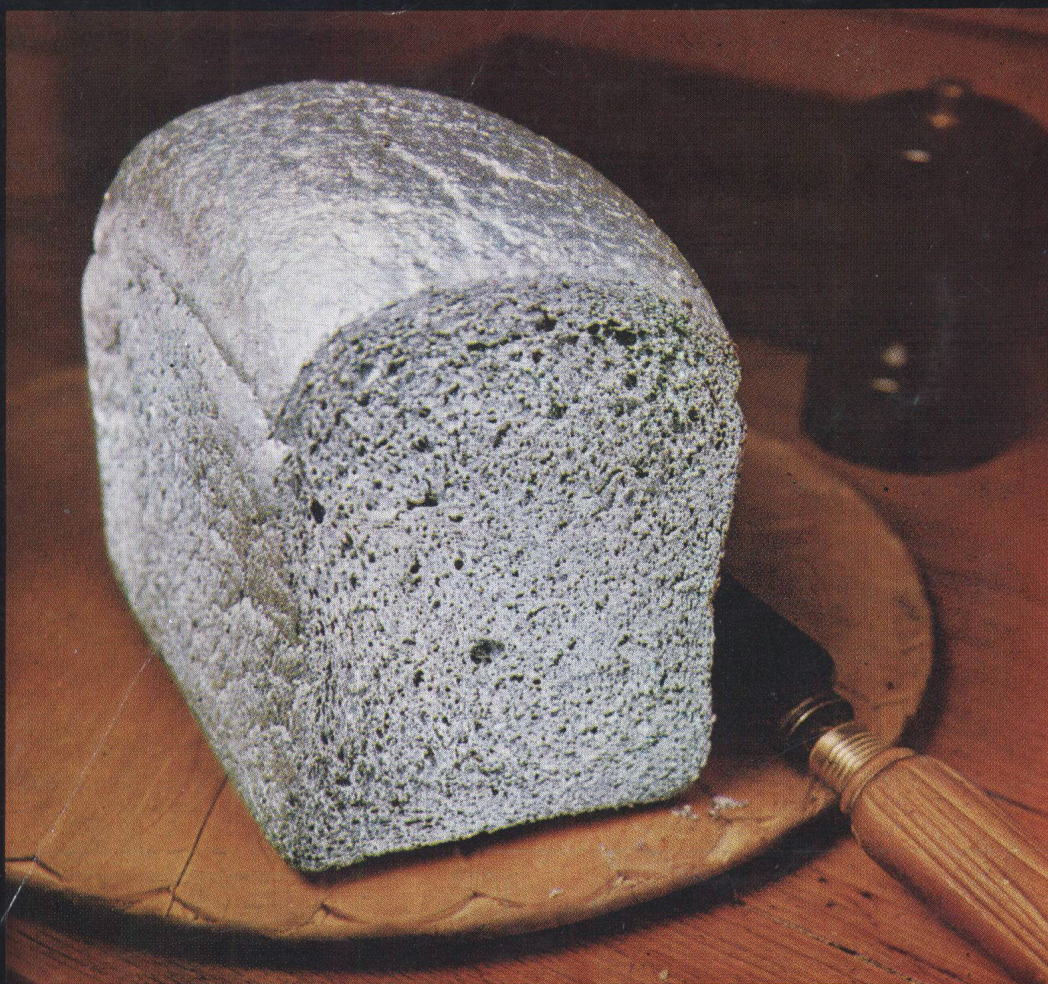
Further information, and forms of application, which must be returned by 18 May 1971, may be obtained from the Registrar, Imperial College, London, S.W.7.

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