

## PHOTOGRAPHY

Some tests on the intermittency effect. A. Hnatek. RAE Lib Trans 1595. August 1972.

Properties of the photographic emulsion during discontinuous exposure. A. L. Kartuzhanskii and P. V. Meiklyar. RAE Lib Trans 1598. June 1972.

## PHYSICS

A study of the diffusion of cathodic hydrogen in iron using the electrochemical detection technique. J. L. Dillard. RAE Lib Trans 1667. July 1972.

Measurement of relative cross sections for simultaneous ionization and excitation of the helium 4s and 4p states. J. F. Sutton. NASA TR R-378. June 1972.

Review of Monte Carlo methods in kinetic theory. N. A. Derzko. UTIAS Review 35. April 1972.

An interferometric determination of the specific refractivities of the nitrogen and oxygen atoms. D. E. Wettlaufer. UTIAS Tech Note 175. February 1972.

## PLASMA PHYSICS

Experiments on the application of laser selective excitation spectroscopy to the diagnostics of a potassium plasma. A. B. Rodrigo. UTIAS Report 180. April 1972.

## SAFETY

The dynamic behaviour of crash helmets. J. M. Rayne. CP 1202. 1972.

Spontaneous ignition of AVTUR vapour in various oxygen-nitrogen mixtures. J. T. Cansdale. CP 1209. 1972.

## STRUCTURES

Optimum mass-strength analysis for orthotropic ring-stiffened cylinders under axial compression. J. L. Shideler *et al.* NASA TN D-6772. June 1972.

Effects of eccentricities and lateral pressure on the design of stiffened compression panels. G. L. Giles and M. S. Anderson. NASA TN D-6784. June 1972.

Theoretical study of corrugated plates: shearing of a corrugated plate with curvilinear corrugations. L.-H. Wu and C. Libove. NASA CR-2080. June 1972.

## TESTING FACILITIES AND TECHNIQUES

Magnetic dipole moment determination by near-field analysis. W. L. Eichhorn. NASA TN D-6685. July 1972.

Development of an air flow thermal balance calorimeter. J. M. Sherfey. NASA TN D-6750. June 1972.

Apollo experience report—certification test program. J. H. Levine and B. J. McCarty. NASA TN D-6857. June 1972.

Trace gas analysis by mobility separation. G. P. Laszlo. UTIAS Tech Note 166. December 1971.

The three dimensional quadrupole mass spectrometer. S. Mastoris. UTIAS Tech Note 172. January 1972.

## THERMODYNAMICS

Zur Berechnung der Arbeitsweise von heisswasserspeichern. H. Hardegen. DLR-FB 72-24. 1972.

## TRANSPORT

Adsym: A Fortran model of an automobile defog/defrost system. E. R. Welbourne. NRC LR-558. April 1972.

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The following is a list of the Test Pilots' Group lectures that have been printed in the *Journal*. Most of them are available as Reprints.

Bedford, A. W.	<b>The Role of the Test Pilot</b> ... ..	June 1964
Henderson, Sqn. Ldr. J. M.	<b>Low-Speed Handling of a Slender Delta (HP115)</b> ... ..	May 1965
White, Lt. Col. R. M.	<b>Flying the X-15</b> ... ..	September 1965
Merewether, H. C. H.	<b>Erect and Inverted Spinning with Particular Reference to the Hunter (<i>Out of Print</i>)</b>	December 1965
Watts, Gp. Capt. R. A.	<b>The Training of Test Pilots</b> ... ..	June 1966
Trubshaw, E. B.	<b>Low Speed Handling with Special Reference to the Super Stall</b> ... ..	July 1966
Symposium	<b>Flight Testing for the Certification of Civil Transport Aircraft</b> ... ..	November 1967
Prahl, V. E.	<b>A Résumé of the F-111 Flight Test Programme</b> ... ..	January 1968
Gill, Sqn. Ldr. T. E.	<b>Thoughts on Flight Instrument Presentations</b> ... ..	June 1968
Knight, Maj. W. J.	<b>Increased Piloting Tasks and Performance of X-15A-2 in Hypersonic Flight</b> ...	September 1968
Farley, J. F.	<b>Piloting Aspects of Poor Weather Jet V/STOL</b> ... ..	October 1968
Pinsker, W. J. G.	<b>The Theory and Practice of Inertia Cross-Coupling</b> ... ..	August 1969
Stinton, D.	<b>The Developing Scene in British Light Aviation</b> ... ..	May 1970
Roberts, L. J.	<b>The Development of the BAC One-Eleven Autopilot</b> ... ..	July 1971
Wygle, Brien S.	<b>The Boeing 747—The Pilot's View</b> ... ..	December 1971
Gentry, Major J. R.	<b>Lifting Body Flight Test</b> ... ..	April 1972
Rutan, Burt	<b>Fighter Testing—Spin Test or Spin Prevention Test?</b> ... ..	April 1972

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BUNTIN, W. D.

**Concept and conduct of proof test of F-111 production aircraft**

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The Aeronautical Journal RAeS October 1972

LLOYD, P.

**The aeroplane as a threat to the environment**

*Aeroplanes are often noisy, sometimes smelly and some of them also produce smoke. The purpose of this paper is to attempt an assessment of these and other forms of environmental pollution, also to consider the engineering and administrative measures which are being taken to control them. However, one must try to put the matter in perspective. The threat to the environment does not just come from aeroplanes, transport systems, factories or advancing technology—it comes from man.*

The Aeronautical Journal RAeS October 1972

SIMPSON, E. C.

**Scar tissue and aircraft propulsion development**

*Involvement with the development of an aircraft engine can create deep mental scars. This paper provides, on the basis of one man's scar tissue, some guidance in creating an environment to encourage success. The introduction defines the general size and importance of the problem and the resources applied to the paper. The problems of organisation are outlined followed by a definition of the game rules. The problems line people must overcome are discussed, and the paper ends with a suggested approach to the technical portion of the problem.*

The Aeronautical Journal RAeS October 1972

WHITE, E. A. and WILDE, G. L.

**Engines for civil V/STOL**

*It is over ten years since practical VTOL by direct jet lift was first demonstrated. Since then many experimental V/STOL aircraft for both military and civil roles have been built or studied around the world, but it seems that a further decade must pass before a sophisticated V/STOL public transport system can be in use. The first priorities of such a system must be the reduction in noise and the relief of congestion around present-day airports and the indications are that these requirements will initially be met by STOL aircraft. The reduction in take-off and landing distances is synonymous with reduced take-off and landing speeds, and the engine designer can play a major role either by providing direct lift or by assisting in the achievement of high wing lift. This paper identifies the major project engine proposals for both VTOL and STOL applications that have resulted from work in the UK.*

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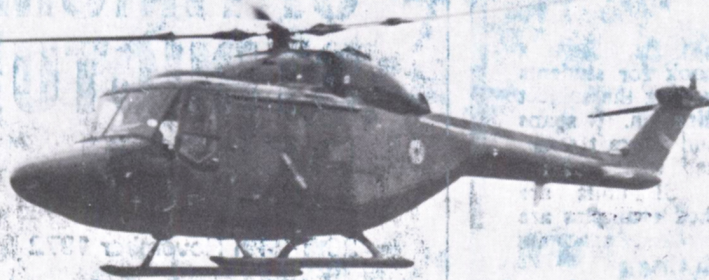
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