

MINISTRY OF AVIATION

AERONAUTICAL RESEARCH COUNCIL

CURRENT PAPERS

List of Current Papers Numbers 701-750

LIBRARY ROYAL AIRCRAFT ESTABLICION ON BEDFORD.

LONDON: HER MAJESTY'S STATIONERY OFFICE

1965

Price 1s. 6d. net

-

•

List of Current Papers

published for

THE AERONAUTICAL RESEARCH COUNCIL (Numbers 701-750)

and placed on sale by H.M. Stationery Office

C.P. No.	Council No.	Title	Author(s)
701	24 689	Excitation temperature measurements of gases in an arc-heated wind tunnel at 1.3 × 10 ⁻² atmosphere, using relative intensities of spectral liners. (April, 1963).	Adcock, B. D. Plumtree, W. E. G., Imperial College
702	24 946	Experiments at hypersonic speeds on circular cones at incidence. (January, 1963).	Peckham, D. H.
703	24 952	The calculation of pressure distribution in steady supersonic flow, with arbitary downwash distribution. (April, 1963).	Klanfer, Laura
704	24 953	A problem of wing-body interference. (April, 1963).	Randall, D. G.
705	23 2 9 3	Limit analysis of circular frames. (January, 1961).	Imegwu, E. O., Bristol Aircraft Ltd.
706	22 618	Free-flight measurements of pressure and heat transfer in regions of separated and réattached flow at Mach numbers up to 4. (September, 1960).	Picken, J.
707	24 732	A note on the estimation of the effect of wind tunnel walls on the forces on slowly oscillating slender wings. (April, 1963).	Acum, W. E. A.
708	24 817	The measured response of an aircraft to the vertical velocity component of atmospheric turbulence. (February, 1963).	Ridland, D. M.

C.P. No.	Council No.	Title	Author(s)
709	24 854	A correlation of the forebody drag of cylinders with plane and hemispherical noses at Mach numbers from zero to 2.5. (February, 1963).	Stanbrock, A.
710	24 502	Low-speed wind-tunnel tests on a delta-wing aircraft model (S.R.177), with blowing over the trailing-edge flaps and ailerons. (August, 1962).	Butler, S. F. J. Guyett, M. B.
711	, 24 715	Measurements of skin-friction using surface-pitot tubes in free flight at supersonic speeds. (April, 1963).	Edwards, J. B. W.
712	24 772	Discrepancies between theoretical and experimental values of temperature behind a shock wave. (March, 1963).	Wilson, J.
713	25 141	Atmospheric turbulence encountered by Comet 2 aircraft carrying cloud collision warning radar. (June, 1963).	Aplin, Judy E.
714	25 228	Flutter tests and calculations on an all-moving model fin. (July, 1963).	Curran, J. K.
715	25 229	A comparison of the measured and predicted flutter characteristics of a wing-aileror-tab model. (August, 1963).	Hall, H.
716	22 254	Some tests with trapped vortices in supersonic flow. (September, 1960).	Stratford, B. S. Neale, M. C.
717	24 669	Measurements of "Aquaplaning Height" on a meteor aircraft and photos of flow pattern under a model tyre. (November, 1962).	Gray, W. E.
718	24 898	Wind-tunnel experiments on a simple lifting-jet body with and without wings. (March, 1963).	Trebble, W. J. G.

- 2 -

—

2

C.P. No.	Council No.	Title	Author(s)
719	24 926	Measurements of the free stream turbulence in the R.A.E. Bedford 13 ft x 9 ft wind tunnel. (July, 1963).	Ferriss, D. H.
720	24 933	Calculations of the structure of unsteady rarefaction waves on oxygen/argon mixtures, allowing for vibrational relaxation. (February, 1963).	Appleton, J. P.
721	25 062	Calculation of the turbulent boundary layer in the nozzle of an intermittent axisymmetric hypersonic wind tunnel. (September, 1963).	Wood, N. B.
722	24 942	A study on the running times in shock tubes. (July, 1963).	Ackroyd, J. A. D.
723	25 346	Some studies of pressure distributions on the windward surfaces of conical bodies at high supersonic speeds. (September, 1963).	Akers, A.
724	24 522	Prandtl-Meyer flow in a relaxing gas. (February, 1963).	Blythe, P. A.
725	24 617	On the theory of vibrational relaxation in gases. (March, 1963).	Wild, E.
726	24 159	Pressure, heat-transfer and temperature measurements in the two-dimensional nozzle of a reflected-shock tunnel. (September, 1962).	Stollery, J. L. Townsend, J. E. G.
727	23 516	Simple theoretical and experimental studies of the flow through a three-shock system in a corner. (September, 1961).	Eminton, E.
728	24 645	Wind tunnel measurements of the unsteady pressure in and behind a bomb bay (Canberra). (October, 1962).	Rossiter, J. E. Kurn, A. G.

5, J. B. W. begion, L. P. K.
egion, Lo P.
,
, K. J.
у, Е.
Α.
G. F. , D.
ey, А.L.
n, Doris E. Gillian.
, M. C. P.
D. G.
() ()

~

-

,

C.P. No.	Council No.	Title	Author(s)
739	25 204	Flight measurements at subsonic speeds of the alleron rolling power and lateral stability derivatives ℓ_v and y_v on a 60 degree delta wing aircraft (Fairey Delta 2). (June, 1963).	Dee, F. W.
740	25 211	Some notes on turbulent boundary layers with fluid injection at high supersonic speeds. (July, 1963).	Squire, L. C.
741	24 838	Measurements of zero-lift drag at supersonic speeds for a symmetrical slender-wing model with different roughness bands. (May, 1963).	Carter, E. C.
742	24 818	Use of a wind tunnel to determine the performance of slender wings suitable for a supersonic transport aircraft. (March, 1963).	Evans, J. Y. G.
743	25 085 25 267	The influence of gas streams and magnetic fields on electric discharges - Part 1 Arcs at atmospheric pressure in annular gaps. (June, 1963). Part 2 The shape of an arc rotating round an annular gap. (September, 1963).	Adams, V. W.
•744	23 723	A theoretical survey of the potentialities of insulation and internal cooling for alleviation of steady kinetic heating. (April, 1962).	McCue, D. J.
7 45	24 810	Wind tunnel force and moment investigation at $M = 4.3$ into the application of various devices for the control of a cone-cylinder-flare configuration. (January, 1963).	Pecover, B. E.

C.P. No.	Council No.	Title	Author(s)
746	24, 950	Some simple calculations relating to the generation of an R.F. plasma. (April, 1963).	Broadbent, E. G.
747	25 819	A microsecond response pressure transducer for blast wave measurements. (December, 1963)	Pierce, D.
748	24 545	Simulation of ground controlled approaches with reference to certain accidents. (February, 1963).	Holden, K. J. The Queen's University of Belfast.
749	24 099	Static tests of ground effect on planforms fitted with a centrally-located round lifting jet. (June, 1962).	Wyatt, L. A.
750	-	List of Current Papers published for the Aeronautical Research Council. (Nos. 701-750).	_

,

/ -

C.P. No. 750

() Crown copyright 1965 Printed and published by
HER MAJESTY'S STATIONERY OFFICE To be purchased from
York House, Kingsway, London w c 2
423 Oxford Street, London w 1
13A Castle Street, Edinburgh 2
109 St Mary Street, Cardiff
39 King Street, Manchester 2
50 Fairfax Street, Bristol 1
35 Smallbrook, Ringway, Birmingham 5
80 Chichester Street, Belfast 1
or through any bookseller

- - -- -----

Printed in England

•

