## INDEX

BIANCO, E., CABANNES, H. and KUNTZMANN, J. Curvature of attached shock waves in steady axially symmetric flow, 610

CABANNES, H. See BIANCO, CABANNES and KUNTZMANN

CARRIER, G. F. and GREENSPAN, H. P. The time-dependent magnetohydrodynamic flow past a flat plate, 22

CHANG, C. T. See EMMONS, CHANG and WATSON

CLARKE, J. F. The linearized flow of a dissociating gas, 577

COMINGS, EDWARD W. See MILLER and COMINGS

CUMBERBATCH, E. The impact of a water wedge on a wall, 353

DEAN, R. G. See URSELL, DEAN and YU

Demetriades, Anthony An experiment on the stability of hypersonic laminar boundary layers, 385

Donnelly, R. J. and Simon, N. J. An empirical torque relation for supercritical flow between rotating cylinders, 401

EDWARDS, D. H. See JONES and EDWARDS

EMMONS, H. W., CHANG, C. T. and WATSON, B. C. Taylor instability of finite surface waves, 177

Fraenkel, L. E. A shallow-liquid theory in magnetohydrodynamics, 81

GOTOH, K. See TATSUMI and GOTOH

GREENSPAN, H. P. See CARRIER and GREENSPAN

HERRING, T. K. The boundary layer near the stagnation point in hypersonic flow past a sphere, 257

HOWARTH, L. See STEWARTSON and HOWARTH

Illingworth, C. R. A note on fluctuating heat transfer at small Péclet numbers, 442

Jones, I. R. and Edwards, D. H. An experimental study of the forces generated by the collapse of transient cavities in water, 596

Keller, H. B., Levine, D. A. and Whitham, G. B. Motion of a bore over a sloping beach, 302

KUNTZMANN, J. See BIANCO, CABANNES and KUNTZMANN

LANCE, G. N. See ROGERS and LANCE

Leslie, F. M. Free convection in the tilted open thermosyphon, 115

LEVINE, D. A. See KELLER, LEVINE and WHITHAM

LICK, WILBERT Inviscid flow of a reacting mixture of gases around a blunt body, 128

Long, Robert R. Steady finite motions of a conducting liquid, 108

Long, Robert R. A laminar planetary jet, 632

LUDFORD, G. S. S. and MURRAY, J. D. On the flow of a conducting fluid past a magnetized sphere, 516

McCune, James E. On the motion of thin airfoils in fluids of finite electrical conductivity, 449

MAUDE, A. D. The viscosity of a suspension of spheres, 230

MICKELSEN, WILLIAM R. Measurements of the effect of molecular diffusivity in turbulent diffusion, 397

MILES, JOHN W. On the generation of surface waves by turbulent shear flows, 469

640 Index

MILLER, DAVID R. and COMINGS, EDWARD W. Force-momentum fields in a dual-jet flow,

MURRAY, J. D. See LUDFORD and MURRAY

NEURINGER, JOSEPH L. Optimum power generation from a moving plasma, 287

PAYNE, L. E. and Pell, W. H. The Stokes flow problem for a class of axially symmetric bodies, 529

PEARSON, J. R. A. The instability of uniform viscous flow under rollers and spreaders, 481

PELL, W. H. See PAYNE and PELL

PHILLIPS, O. M. Centrifugal waves, 340

PRIESTLEY, C. H. B. Temperature fluctuations in the atmospheric boundary layer, 375

RHEY, N. Interaction of a shock wave with a mixture region, 321

ROGERS, M. H. and LANCE, G. N. The rotationally symmetric flow of a viscous fluid in the presence of an infinite rotating disk, 617

RUDINGER, GEORGE and SOMERS, LOWELL M. Behaviour of small regions of different gases carried in accelerated gas flows, 161

SAFFMAN, P. G. Dispersion due to molecular diffusion and macroscopic mixing in flow through a network of capillaries, 194

SATO, HIROSHI The stability and transition of a two-dimensional jet, 53

SHAW, R. The influence of hole dimensions on static pressure measurements, 550

SIMON, N. J. See DONNELLY and SIMON

SMITH, A. M. O. Remarks on transition in a round tube, 565

Somers, Lowell M. See Rudinger and Somers

STEWARTSON, K. and HOWARTH, L. On the flow past a quarter infinite plate using Oseen's equations, 1

Tatsum, T. and Goton, K. The stability of free boundary layers between two uniform streams, 433

Toomre, Alar The viscous secondary flow ahead of an infinite cylinder in a uniform parallel shear flow, 145

TURNER, J. S. A comparison between buoyant vortex rings and vortex pairs, 419

URSELL, F., DEAN, R. G. and Yu, Y. S. Forced small-amplitude water waves: a comparison of theory and experiment, 33

WARREN, F. W. G. Wave resistance to vertical motion in a stratified fluid, 209

WATSON, B. C. See EMMONS, CHANG and WATSON

WHITHAM, G. B. See KELLER, LEVINE and WHITHAM

WIEGEL, R. L. A presentation of cnoidal wave theory for practical application, 273

Wooding, R. A. Instability of a viscous liquid of variable density in a vertical Hele-Shaw cell, 501

Yu, Y. S. See Ursell, Dean and Yu

## REVIEWS

Electromagnetic Phenomena in Cosmical Physics, edited by B. Lehnert, 156

Magnetohydrodynamics, edited by R. K. M. LANDSHOFF, 156

The Plasma in a Magnetic Field, edited by R. K. M. LANDSHOFF, 156

The Magnetodynamics of Conducting Fluids, edited by D. Bershader, 156

Applied Hydrodynamics, by H. R. VALENTINE, 317

The Potential Theory of Unsteady Supersonic Flow, by J. W. Miles, 319

Proceedings of the Sixth Midwestern Conference on Fluid Mechanics, 320

Liquid Helium, by K. R. ATKINS, 479