

## Bookreviews

K. Oswatitsch, *Spezialgebiete der Gasdynamik*, Springer Verlag, Wien/New York, 1977. IX + 377 pp., price DM 193,—.

In 1976 the author published his textbook „Grundlagen der Gasdynamik“ which dealt with the basic principles of gasdynamics and has been reviewed in this journal (October 1978). The present work is a companion volume devoted to a number of special branches in the field of gasdynamics: transonic flow (Ch.I), hypersonic flow (Ch.II), steady flows past wings of finite span (Ch.III), and wave propagation (Ch.IV).

The emphasis in the presentation of the material is on giving the reader a thorough analysis of the flow phenomena, but not on providing a complete survey of all current methods. The book is essentially self-contained apart from some well-known formulae from the earlier textbook quoted in an appendix. The reading of the book does not require many mathematical prerequisites. The style is pleasant and clear, the binding and printing (and the price) are on a very high level.

H. W. Hoogstraten.

*Annual Review of Fluid Mechanics, Volume 11, 1979.* Edited by M. Van Dyke, J. V. Wehausen and J. L. Lumley. Annual Reviews Inc., Palo Alto, California, USA, 556 pp., price \$ 17.50.

The eleventh volume of this outstanding series contains the following contributions:

The Kármán years at GALCIT, by W. R. Sears and M. R. Sears,  
Model equations of nonlinear acoustics, by D. G. Crighton,  
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Self-sustained oscillations of impinging free shear layers, by D. Rockwell and E. Naudasher,  
Vortex interactions, by P. G. Saffman and G. R. Baker,  
Air flow and sound generation in musical wind instruments, by N. H. Fletcher,  
Finite amplitude baroclinic instability, by J. E. Hart,  
Ship boundary layers, by L. Landweber and V. C. Patel,  
Drop formation in a circular liquid jet, by D. B. Bogoy,  
Rotating, self-gravitating masses, by N. R. Lebovitz,  
Mechanics of animal joints, by V. C. Mow and W. M. Lai,  
Numerical solution of compressible viscous flows, by R. W. MacCormack and H. Lomax,  
Wakes in stratified fluids, by J. -T. Lin and Y. -H. Pao,  
Internal waves in the ocean, by C. Garrett and W. Munk,  
On the spreading of liquids on solid surfaces: static and dynamic contact lines, by E. B. Dusan V.

Geostrophic turbulence, by P. B. Rhines,

The measurement of turbulence with the laser-Doppler anemometer, by P. Buchhave,  
W. K. George Jr. and J. L. Lumley,

Similarity laws for constant-pressure and pressure-gradient turbulent wall flows, by A. M.  
Yaglom.