

Frontiers in Aeroacoustics

Ganesh Raman and K. Srinivasan, Editors
Multi-Science Publishing Co. Ltd., Essex, UK, (2014),
Softbound, viii+510 pp., 125 USD,
ISBN 978-1-907132-44-5

This book is composed of twelve (12) review articles on various aspects of experimental, theoretical and computational aeroacoustics. All twelve of these articles (chapters) were originally published in the “International Journal of Aeroacoustics” between 2009 and 2013. Each article is unaltered from the original published paper. The twelve review articles are the following:

1. “Advances in experimental aeroacoustics”, Ganesh Raman, Rakesh Ramachandran, K. Srinivasan, and Robert Daugherty
2. “Recent developments in the application of the Generalized Acoustic Analogy for jet noise prediction”, M.E. Goldstein
3. “The instability of high speed jets”, Philip J. Morris
4. “Jet noise measurements: past and present”, Marcus Harper-Bourne
5. “On Prandtl's formulas for supersonic jets cell length”, Alan Powell
6. “Aeroacoustics of twin supersonic jets: a review”, Ganesh Raman, Praveen Panickar and Kanthasamy Chelliah
7. “Evolution from ‘tabs’ to ‘Chevron’ technology — a review”, K.B.M.Q. Zaman, J.E. Bridges and D.L. Huff

8. “Vortex sound with special reference to vortex rings: theory, computer simulations, and experiments”, Tsutomu Kambe
9. “Green's functions in computational aeroacoustics”, C.L. Morfey, C.J. Powles and M.C.M. Wright
10. “Multidimensional generalized functions in aeroacoustics and fluid mechanics: basic concepts and operations”, F. Farassat and M.K. Myers
11. “Aeroacoustics of pipe systems with closed branches”, Devis Tonon, Avraham Hirschberg, Joachim Golliard and Samir Ziada
12. “Flame dynamics and combustion noise: progress and challenges”, S. Candell, D. Durox, S. Ducruix, A.L. Birbaud, N. Noiray and T. Schuller

All of the papers reprinted in this book are quality papers written by respected experts in the field of aeroacoustics. All, of course, were peer reviewed prior to their publication. The editors included the names of the presumed reviewers in an Acknowledgements section. The book lacks an index which would be very useful if one were searching for a particular topic. The cost of this book is quite high given the fact that one can go to the “International Journal of Aeroacoustics” website <http://multi-science.atypon.com/loi/ija> and download a pdf file of ten (10) of the twelve papers for free. The other two cost \$35 each.

Gerald C. Lauchle
Professor Emeritus of Acoustics
Penn State University
gcl1@engr.psu.edu