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Introduction

It is our pleasure to present these proceedings for “The Aerodynamics of Heavy Vehicles II: Trucks, Buses and Trains” International Conference held in Lake Tahoe, California, August 26-31, 2007 by Engineering Conferences International (ECI). Brought together were the world’s leading scientists and engineers from industry, universities, and research laboratories, including truck and high-speed train manufacturers and operators. All were gathered to discuss computer simulation and experimental techniques to be applied for the design of the more efficient trucks, buses and high-speed trains required in future years.

This was the second conference in the series. The focus of the first conference in 2002 was the interplay between computations and experiment in minimizing aerodynamic drag. The present proceedings, from the 2007 conference, address the development and application of advanced aerodynamic simulation and experimental methods for state-of-the-art analysis and design, as well as the development of new ideas and trends holding promise for the coming 10-year time span. Also included, are studies of heavy vehicle aerodynamic tractor and trailer add-on devices, studies of schemes to delay undesirable flow separation, and studies of underhood thermal management.

We would like to thank the ECI organizers for their efficient organization of the meeting. In addition, we would like to express our appreciation to all session chairs, the scientific advisory committee, authors, and reviewers for their many hours of dedicated effort that contributed to a successful conference, and that are manifest in this proceeding. We also gratefully acknowledge the financial support received from ECI, the United State’s Truck Manufacturers Association, International Truck and Engine Corporation, Lawrence Livermore National Laboratory, and CD Adapco.

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