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4.3.5.1.2 Viscous Effects - Laminar and Turbulent Flow

Sommario/riassunto

Focusing on basic aspects of future reusable space transportation systems and covering overall design, aerodynamics, thermodynamics, flight dynamics, propulsion, materials, and structures, this report presents some of the most recent results obtained in these disciplines. The authors are members of three Collaborative Research Centers in Aachen, Munich and Stuttgart concerned with hypersonic vehicles.A major part of the research presented here deals with experimental and numerical aerodynamic topics ranging from low speed to hypersonic flow past the external configuration and through inlet