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Nota di contenuto	CONTENTS; Introduction; 1. BRIEF REVIEW OF THE BASIC LAWS OF AERODYNAMICS; 2. THE THEORY OF INVISCID TRANSONIC FLOW; 3. NONSTEADY TRANSONIC FLOW; 4. LIFT SLOPE AND DRAG RISE AT SONIC SPEED; 5. ANALYTICAL SOLUTIONS OF THE TRANSONIC CONTINUITY EQUATION; 6. VISCOUS TRANSONIC FLOW; 7. NUMERICAL METHODS OF TRANSONIC FLOW COMPUTATION; 8. STEPS TOWARD THE OPTIMUM TRANSONIC AIRCRAFT; 9. TRANSONIC WIND TUNNEL TESTING; REFERENCES; INDEX
Sommario/riassunto	This new book leads readers step-by-step through the complexities encountered as moving objects approach and cross the sound barrier. The problems of transonic flight were apparent with the very first experimental flights of scale-model rockets when the disastrous impact of shock waves and flow separations caused the aircraft to spin wildly out of control. Today many of these problems have been overcome, and this book offers an introduction to the transonic theory that has made possible many of these advances. The emphasis is on the most important basic approaches to the solution of transonic

