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""Chapter 5 Wind Tunnel Tests of Wings and Rings at Low Reynolds Numbers""""I. Introduction""; ""II. Effect of Aspect Ratio and Planform on the Aerodynamic Lift and Drag""; ""III. Effect of Low Reynolds Numbers on the Lift and Drag of Ring Airfoils""; ""References""; ""Chapter 6 Effects of Acoustic Disturbances on Low Re Aerofoil Flows""; ""I. Introduction""; ""II. Experimental Arrangements""; ""III. Results""; ""IV. Discussion""; ""V. Potential Use of Sound to Improve Performance""; ""VI. Conclusions""; ""Acknowledgments""; ""References""
""Chapter 7 Aerodynamic Characteristics of Low Aspect Ratio Wings at Low Reynolds Numbers""""I. Introduction""; ""II. Apparatus""; ""III. Procedures""; ""IV. Uncertainty""; ""V. Flow Visualization""; ""VI. Discussion of Results""; ""VII. Vortex-Lattice Method""; ""VIII. Conclusions""; ""Acknowledgments""; ""References""; ""Chapter 8 Systematic Airfoil Design Studies at Low Reynolds Numbers""; ""I. Introduction""; ""II. Design Process""; ""III. Parametric Studies in Airfoil Design""; ""IV. Summary and Conclusions""; ""Acknowledgments""; ""References""
""Chapter 9 Numerical Optimization and Wind-Tunnel Testing of Low Reynolds Number Airfoils""

Sommario/riassunto

Recently, there has been a serious effort to design aircraft that are as small as possible for special, limited-duration missions. These vehicles may carry visual, acoustic, chemical, or biological sensors for such missions as traffic management, hostage situation surveillance, rescue operations, etc. The goal is to develop aircraft systems that weigh less than 90 grams, with a 15-centimetre wingspan. Since it is not possible to meet all of the design requirements of a micro air vehicle with current technology, research is proceeding. This new book reports on the latest research in the area of aerodynamic efficiency of various fixed-wing, flapping wing, and rotary wing concepts. It presents the progress made by over 50 active researchers in the field from Canada, Europe, Japan, and the United States. It is the only book of its kind.