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Nota di contenuto	Introduction -- Related Works -- Computational Fluid Dynamic Method -- Turbulence Modeling Method -- Validation of Transition Models -- Applications to Helicopter Rotors -- Recommendations.
Sommario/riassunto	This book provides a comprehensive description of numerical methods and validation processes for predicting transitional flows based on the Langtry–Menter local correlation-based transition model, integrated with both one-equation Spalart–Allmaras (S–A) and two-equation Shear Stress Transport (SST) turbulence models. A comparative study is presented to combine the respective merits of the two coupling methods in the context of predicting the boundary-layer transition phenomenon from fundamental benchmark flows to realistic helicopter rotors. The book will of interest to industrial practitioners working in aerodynamic design and the analysis of fixed-wing or rotary wing aircraft, while also offering advanced reading material for graduate students in the research areas of Computational Fluid Dynamics (CFD), turbulence modeling and related fields.