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ISBN	3-319-75617-6
Edizione	[2nd edition 2018.]
Descrizione fisica	1 online resource (xxi, 425 pages) : illustrations
Disciplina	363.12462
Soggetti	Aerospace engineering Fluid mechanics Reliability (Engineering) Commercial law Airplanes - Airworthiness Aerospace Technology and Astronautics Fluid- and Aerodynamics Quality Control, Reliability, Safety and Risk Commercial Law
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	What is Airworthiness?.-The Atmosphere.-The Pitot-Static System -- The Flight Envelope First Principles of Structural Approval -- Approving an Aircraft's Main Flight Structure -- Undercarriage Structural Approvals -- Control Surfaces and Circuits -- Powerplant Airworthiness -- An Introduction to Crashworthiness -- An Introduction to Flying Qualities Evaluation -- Longitudinal Stability and Control -- Lateral and Directional Stability and Control -- Aeroplane Asymmetry -- Departures from Controlled Flight -- Aeroplane Performance Evaluation -- The Conduct of Assessment Programmes -- Systems Assessment -- Environmental Impact -- Facilitating Continued Airworthiness.
Sommario/riassunto	Designed as an introduction for both advanced students in aerospace engineering and existing aerospace engineers, this book covers both engineering theory and professional practice in establishing the airworthiness of new and modified aircraft. Initial Airworthiness

includes information on: · how structural, handling, and systems evaluations are carried out; · the processes by which safety and fitness for purpose are determined; and · the use of both US and European unit systems

Covering both civil and military practice and the current regulations and standards across Europe and North America, *Initial Airworthiness* will give the reader an understanding of how all the major aspects of an aircraft are certified, as well as providing a valuable source of reference for existing practitioners. This second edition has been updated for changes in regulation worldwide, including UK "E-conditions" and Single Seat De-Regulation, the new part 23 regulations in the USA and Europe, and developments to Extended Range Twin-Engine Operations worldwide. Entirely new sections have been added to explain the management of certification programmes, professional ethics within airworthiness practice, environmental impact of aircraft, and aeroplane departures from controlled flight. This edition also includes many new figures, case studies and references to sources of further information.
