Record Nr. UNINA9910299667103321 Autore **Gratton Guy** Titolo Initial Airworthiness: Determining the Acceptability of New Airborne Systems / / by Guy Gratton Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2015 **ISBN** 3-319-11409-3 Edizione [1st ed. 2015.] 1 online resource (323 p.) Descrizione fisica 532 Disciplina 533.62 620 629.1 Soggetti Aerospace engineering Astronautics Fluids Aerospace Technology and Astronautics Fluid- and Aerodynamics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and 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 approval -- Control surfaces and circuits -- Powerplant airworthiness -- Crashworthiness -- Introduction to flying qualities evaluation.-Longitudinal stability and control -- Lateral and directional stability and control -- Aeroplane Asymmetry -- Stalling characteristics -- Systems assessment -- Facilitating continued airworthiness. Designed as an introduction for both advanced students in aerospace Sommario/riassunto 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.