1. Record Nr. UNINA9910698557103321 Autore Administration Federal Aviation Titolo Aircraft Weight and Balance Handbook: FAA-H-8083-1A Pubbl/distr/stampa New York, : Skyhorse Publishing, 2011 [Washington, D.C.]: .: U.S. Dept. of Transportation, Federal Aviation Administration, Flight Standards Service, , 2007 1-62636-681-0 **ISBN** Descrizione fisica 1 online resource (208 p.) Disciplina 629.134/52 629.13452 Soggetti Airplanes -- Weight -- Handbooks, manuals, etc Airplanes Stability of airplanes -- Handbooks, manuals, etc Stability of airplanes Stability of airplanes - Weight Mechanical Engineering **Engineering & Applied Sciences** Aeronautics Engineering & Astronautics Handbooks and manuals. Inglese Lingua di pubblicazione **Formato** Materiale a stampa Monografia Livello bibliografico Description based upon print version of record. Note generali Title Page; Copyright Page; Preface; Introduction; Table of Contents; Nota di contenuto Chapter 1 - Weight and Balance Control; Weight Control; Effects of Weight; Weight Changes; Stability and Balance Control; Weight Control for Aircraft other than Fixed and Rotorwing; Chapter 2 - Weight and Balance Theory and Documentation; Weight and Balance Theory; Aircraft Arms, Weight, and Moments: The Law of the Lever: Determining the CG; Shifting the CG; Basic Weight and Balance Equation; Shifting the

Airplane CG: Weight and Balance Documentation; Manufacturer-**Furnished Information** Chapter 3 - Weighing the Aircraft and Determining the Empty Weight-Center of GravityRequirements: Equipment for Weighing: Preparation for Weighing: Safety Considerations: Determining the Center of Gravity: Empty-Weight Center of Gravity Formulas: Chapter 4 - Small Fixed Wing Aircraft Operational Weight and Balance Computations: Determining the Loaded Weight and CG: Multiengine Airplane Weight and Balance Computations; Chapter 5 - Center of Gravity Change after Repair or Alterations; Equipment List; Weight and Balance Revision Record; Weight Changes Caused by a Repair or Alteration Empty-Weight CG RangeAdverse-Loaded CG Checks; Chapter 6 -Weight and Balance Control - Helicopter; Determining the Loaded CG of a Helicopter; Chapter 7 - Large Aircraft Weight and Balance; Weighing Procedures; Determining the Empty Weight and EWCG; Determining the Correct Stabilizer Trim Setting; Determining CG Changes Caused by Modifying the Cargo: Effects of Onloading Cargo: Determining Cargo Pallet Loads with Regard to Floor Loading Limits: Determining the Maximum Amount of Payload That Can Be Carried; Determining the Landing Weight: Determining the Minutes of Fuel Dump Time Weight and Balance of Commuter Category AirplanesChapter 8 - Use of Computer for Weight and Balance Computations; Using an Electronic Calculator to Solve Weight and Balance Problems; Using an E6-B Flight Computer to Solve Weight and Balance Problems; Using a Dedicated Electronic Flight Computer to Solve Weight and Balance Problems: Determining CG in Inches From the Datum; Determining CG, Given Weights and Arms; Appendix - Supplemental Study Materials for Aircraft Weight and Balance; Glossary; Index

Sommario/riassunto

The Aircraft Weight and Balance Handbook is the official U.S. government guidebook for pilots, flight crews, and airplane mechanics. Beginning with the basic principles of aircraft weight and balance control, this manual goes on to cover in exacting detail the procedures for weighing aircraft. It also offers a thorough discussion of the methods used to determine the location of an aircraft's empty weight and center of gravity (CG), including information for an A&P mechanic to determine weight changes caused by repairs or alterations. With instructions for conducting adverse-loaded CG checks a