Aeronautical Technologies for the Twenty-First Century—National Research Council 1992-02-01 Prepared at the request of NASA, Aeronautical Technologies for the Twenty-First Century presents steps to help prevent the erosion of U.S. dominance in the global aeronautics market. The book recommends the immediate expansion of research on advanced aircraft that travel at supersonic speeds, advanced aircraft that meet expected future demands for improved takeoff and climb, land and takeoff performance, greater capacity to handle passengers and cargo, lower cost and increased maintenance of air travel, greater aerodynamics and a traffic management system that reduces environmental impacts.

Automatic Flight Control—E. H. J. Pallett 1979 This book provides an introduction to the principles of automatic flight of fixed-wing and rotary wing aircraft. Representative types of aircraft are used to show how these principles are applied to their systems. The revised edition includes new material on automatic flight control systems and helicopters.

Structural Loads Analysis for Commercial Transport Aircraft—Ted L. Lomax 1996 This important text covers all aspects of structural loads analysis and provides some continuity between what was done on earlier airplane designs and what is currently used.

Fundamentals of Airplane Flight Mechanics—David Hull 2007-01-20 Flight mechanics is the application of Newton’s laws to the study of vehicle trajectories, performance, stability, and control. This volume details the derivation of analytical solutions of airplane flight mechanics problems associated with flight in a vertical plane. It covers trajectory analysis, stability, and control. In addition, the volume presents algorithms for calculating lift, drag, pitching moment, and stability derivatives. Throughout, a subsonic business jet is used as an example for the calculations presented in the book.