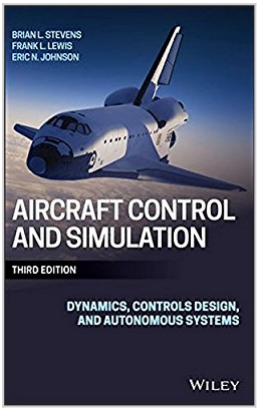

Aircraft Control and Simulation: Dynamics, Controls Design, and Autonomous Systems

By Brian L. Stevens, Frank L. Lewis, Eric N. Johnson

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Aircraft control, as a subject area, combines an understanding of aerodynamics with knowledge of the physical systems of an aircraft. The ability to analyze the performance of an aircraft both in the real world and in computer-simulated flight is essential to maintaining proper control and function of the aircraft. Keeping up with the skills necessary to perform this analysis is critical for you to thrive in the aircraft control field.

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Editorial Review

Review
The book retains its original chapter subject skeleton with the titles slightly changed and as mentioned has two new chapters added, in total it is some 150 pages longer than the original. This is not however a simple graft of new material onto the original book. Many of the chapters have been rewritten so that even where much the same material is covered, it is more detailed and augmented, whilst at the same time maintaining a consistent uniform style across the whole book....In conclusion this new edition is a significant update of a popular text...**(The Aeronautical Journal- January 2017)**

From the Back Cover

THE ESSENTIAL AIRCRAFT ANALYSIS REFERENCE, UPDATED WITH THE FIELD'S LATEST TECHNOLOGY

Aircraft Control and Simulation provides comprehensive, expert-led guidance to the topic, accessible to both students and professionals involved in the design and modeling of aerospace vehicles. Updated to include new coverage of Unmanned Aerial Vehicles, this new third edition has been expanded throughout to cover the latest advances in the field.

The material progresses steadily from motion and aerodynamics equations through advanced control methods, using detailed real-world examples with model software details provided. Fundamental principles give way to dynamic analysis, stability evaluation, multivariable control, and more, including geodesy and the gravitational theory behind suborbital aircraft.

Special features in this updated edition include:

- Up-to-date coverage of flight control systems, flight dynamics, aircraft modeling, and flight simulation, based on both classical design and modern techniques
- Two new chapters that explore the modeling, simulation, and adaptive control of Unmanned Aerial Vehicles
- Comprehensive control design and simulation examples, including relevant MATLAB calculations and FORTRAN code

Supplementary instructor materials ease this book into any aerospace curriculum, and the comprehensive coverage provides an excellent resource for students and professionals alike. *Aircraft Control and Simulation* is the essential reference for anyone involved in aerospace modeling and design.

About the Author

BRIAN L. STEVENS is a retired Senior Research Engineer from the Georgia Institute of Technology Research Institute, where he continues to teach classes in Guidance, Navigation, and Control.

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