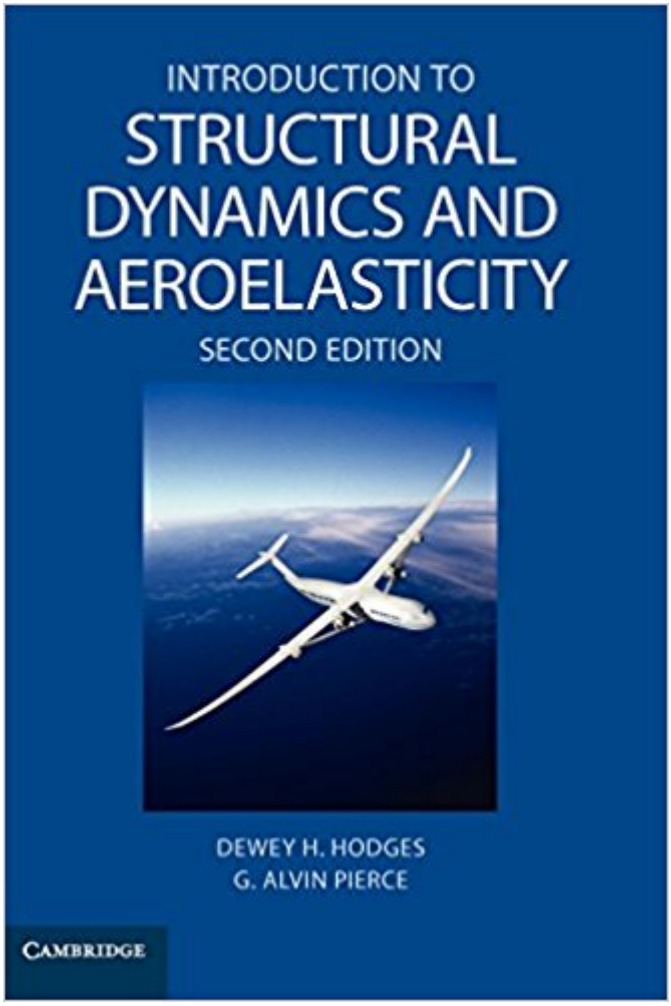
Introduction To Structural Dynamics And Aeroelasticity (Cambridge Aerospace Series, Vol. 15)



Synopsis

This text provides an introduction to structural dynamics and aeroelasticity, with an emphasis on conventional aircraft. The primary areas considered are structural dynamics, static aeroelasticity, and dynamic aeroelasticity. The structural dynamics material emphasizes vibration, the modal representation, and dynamic response. Aeroelastic phenomena discussed include divergence, aileron reversal, airload redistribution, unsteady aerodynamics, flutter, and elastic tailoring. More than one hundred illustrations and tables help clarify the text, and more than fifty problems enhance student learning. This text meets the need for an up-to-date treatment of structural dynamics and aeroelasticity for advanced undergraduate or beginning graduate aerospace engineering students. Praise from the First Edition "Wonderfully written and full of vital information by two unequalled experts on the subject, this text meets the need for an up-to-date treatment of structural dynamics and aeroelasticity for advanced undergraduate or beginning graduate aerospace engineering students." - Current Engineering Practice "Hodges and Pierce have written this significant publication to fill an important gap in aeronautical engineering education. Highly recommended." - Choice ". . . a welcome addition to the textbooks available to those with interest in aeroelasticity. . . . As a textbook, it serves as an excellent resource for advanced undergraduate and entry-level graduate courses in aeroelasticity. . . . Furthermore, practicing engineers interested in a background in aeroelasticity will find the text to be a friendly primer." - AIAA Bulletin

Book Information

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Customer Reviews

"... aimed at final year undergraduates and postgraduates ... This book will certainly appeal to mathematically inclined students." The Aeronautical Journal

This text introduces structural dynamics and aeroelasticity, emphasizing conventional aircraft. It considers structural dynamics, static aeroelasticity, and dynamic aeroelasticity. The structural dynamics material emphasizes vibration, the modal representation, and dynamic response. Aeroelastic phenomena discussed include divergence, aileron reversal, airload redistribution, unsteady aerodynamics, flutter, and elastic tailoring. More than fifty problems enhance student learning.

great seller. AAAA+++

One of the best textbooks I've had in AE. Probably the easiest/least frustrating to read. Also, it doesn't go off on tangents you don't care about.

I got some of my queries answered using this book which I could not do so with 2-3 previous books. So I feel it is a value for money book and worth reading

It was a good buy. The book arrived on time and in good shape as well. Book used for school class.

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