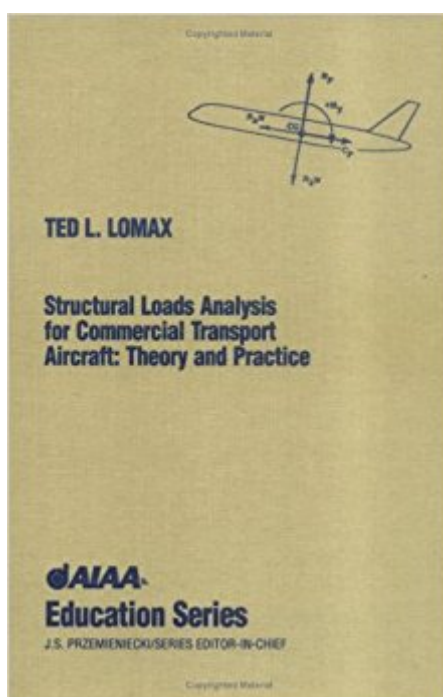


The book was found

# Structural Loads Analysis For Commercial Aircraft: Theory And Practice (American History Through Literature)



## Synopsis

This important text covers all aspects of structural loads analysis and provides some continuity between what was done on earlier airplane designs and what the current applications of the present regulations require.

## Book Information

Series: American History Through Literature

Hardcover: 296 pages

Publisher: AIAA (American Institute of Aeronautics & Astronautics) (September 15, 1996)

Language: English

ISBN-10: 1563471140

ISBN-13: 978-1563471148

Product Dimensions: 6.5 x 0.9 x 9.3 inches

Shipping Weight: 1.3 pounds (View shipping rates and policies)

Average Customer Review: 4.8 out of 5 stars [See all reviews](#) (4 customer reviews)

Best Sellers Rank: #2,025,152 in Books (See Top 100 in Books) #89 in [Books > Engineering & Transportation > Engineering > Civil & Environmental > Structural Dynamics](#) #309 in [Books > Computers & Technology > Programming > Software Design, Testing & Engineering > Structured Design](#) #338 in [Books > Engineering & Transportation > Engineering > Aerospace > Aircraft Design & Construction](#)

## Customer Reviews

The book reflects author personal experience rather than a focus on all aspects of actual aircraft structural loading, which makes the author focuses on wing, landing gear, and empennage loads and gives minor attention to the semi-monocoque fuselage loading; and fully ignores the gyroscopic loads due to yawing and pitching which imposes loads on the engine attachments and supporting structure, and provides constraints to yawing and pitching rates. Also, the author ignores providing a chapter on experimental stress analysis from the pragmatic sense. The Author neither provided some guidance in aeroelasticity design, nor adequate explanation for the computerized fuel management system to control c.g. Equally important, there is no indication of CFD role to aircraft structural loading; that the aerodynamicists provide; while they are deriving the aerodynamics influence coefficients AICAt several articles there is no matching between the text/abbreviations and graphs/charts, for example in the structural design considerations chapter, chart for structural load envelope vs center of gravity; which is well explained by the author; the constant nose gear load not

indicted on the graph ..Reading this reference book needs a background in Mechanics of Flight, Landing Gear Design and aircraft structural components. Nevertheless, the author addresses in an excellent way the actual feeling of the commercial aircraft structural loading within FAR regulatory framework, and he gives hands on overview which makes it unique of its kind available. It is good for young aerospace Engineers, Engineering student's and university professors/Instructors (to address the same while teaching aircraft structure courses). As such, I give it five 5 stars.

Structural Loads Analysis ... by Mr. Ted Lomax provides an excellent step by step guide for developing or reviewing the structural loads needed for the certification of a transport category aircraft. Mr. Lomax states that the premises for the book is; now that computers are used to perform the majority of the design and analysis work for the creation of an aircraft "Is it right?". Mr. Lomax worked for Boeing for many years. During that time he developed not only the technical capability to turn complex ideas into simple methods but also the historical perspective to how the rules and methods developed. And this book represents the synopsis of those years. My one complaint has to do equally with Boeing as with Mr. Lomax. Boeing has a history of leaving out one or more key pieces of information from their reports so that the report results cannot be duplicated perfectly. Mr. Lomax has followed in that line, in the many examples that are provided there is not enough supporting data to duplicate each example. If you want to know the steps and understand the reasons why then this book is great.

Aircraft loads is a peculiar subject, and there is not much material (at least that I'm aware) that is specifically addressed to loads engineers. Therefore, such a textbook as that from Lomax is very valuable, already for its own existence! :) Sometimes it can provide also a sort of safety backup when a loads engineer is stuck without ideas on how to progress further in the analysis, especially if the answer sought is "asked today to be delivered yesterday" (i.e. you want a quick and dirty/rule of thumb thing). This said, I must point out that the book is not really an easy reading. Nor it is a textbook in the classical sense, thought to be read cover to cover. You can think of it more as a reference, if you prefer as an annotated version of the FAR25 (or EASA CS25), commented a bit more extensively and presented in a more "human-thinking form" (i.e. the material is grouped by subject and if a FAR rule is applicable to more than one subject it will be repeated, which is a great help for a loads engineer, especially at the beginning!). Summarising, the book is a good resource if you are already familiar with the subject of loads, know a bit of the regulations and have a sufficient clear idea of what you are looking for. Definitely do not buy this textbook as a learning book,

because you could be easily frustrated from page 2 onwards!

Must read academic/practical reference for load analysis which is required for the stress analysis as pre-processor.

[Download to continue reading...](#)

Structural Loads Analysis for Commercial Aircraft: Theory and Practice (American History Through Literature) Introduction to Aircraft Structural Analysis, Second Edition Fundamentals of Aircraft Structural Analysis Introduction to Aircraft Structural Analysis (Elsevier Aerospace Engineering) Introduction to Aircraft Structural Analysis American History: The People & Events that Changed American History (People's History, American, United States of America, American Revolution, Patriot, United States History Book 1) Structural Analysis and Synthesis: A Laboratory Course in Structural Geology Structural Analysis and Synthesis: A Laboratory Course in Structural Geology 3rd (third) edition by Rowland, Stehen M., Duebendorfer, Ernest M., Schiefelbein, I published by Wiley-Blackwell (2007) [Spiral-bound] Commercial Pilot Test Prep 2012: Study and Prepare for the Commercial Airplane, Helicopter, Gyroplane, Glider, Balloon, Airship and Military Competency FAA Knowledge Exams (Test Prep series) Commercial Transactions Under the Uniform Commercial Code and Other Laws, 6th Edition Aircraft Dispatcher Oral Exam Guide: Prepare for the FAA Oral and Practical Exam to Earn Your Aircraft Dispatcher Certificate (Oral Exam Guide series) Code Check Commercial: An Illustrated Guide to Commercial Building Codes Jane's All the World's Aircraft (IHS Jane's All the World's Aircraft) Guide to Law and Literature for Teachers, Students, and Researchers: Companion Text to Literature and Legal Problem Solving : Law and Literature As Ethical Discourse Theory of Nonlinear Structural Analysis: The Force Analogy Method for Earthquake Engineering AIDS Literature and Gay Identity: The Literature of Loss (Routledge Studies in Twentieth-Century Literature) Sixgun Cartridges and Loads: A Manual Covering the Selection, Use and Loading of the Most Suitable and Popular Revolver Cartridges The Heath Anthology of American Literature: Volume A (Heath Anthology of American Literature Series) Contemporary American Literature: (1945-Present) (Backgrounds to American Literature) Aesthetic Theory (Theory and History of Literature)

[Dmca](#)