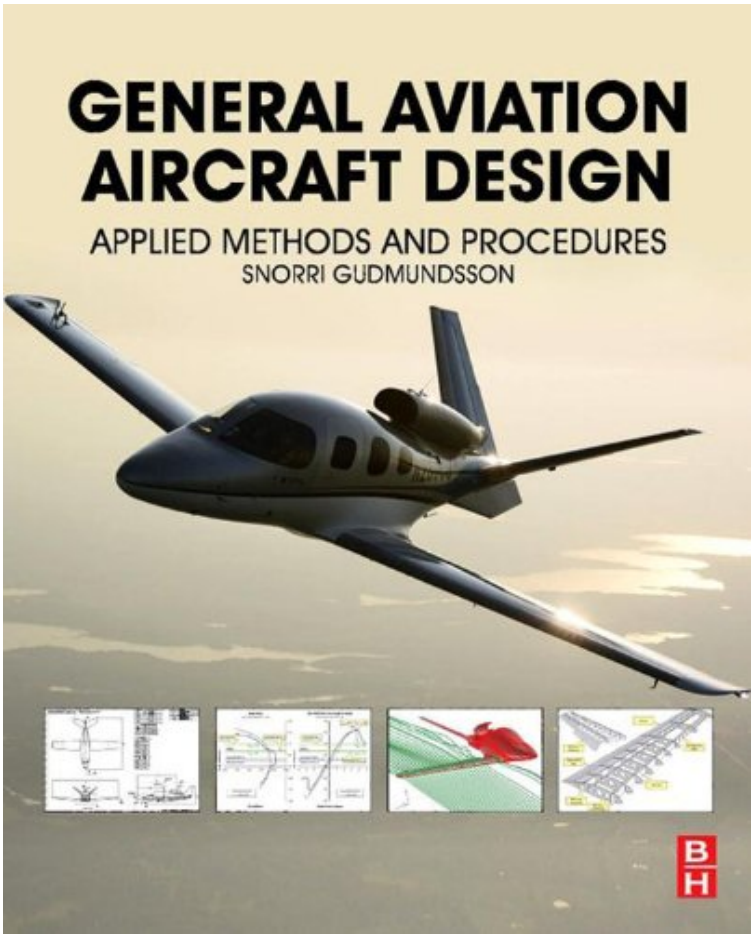
General Aviation Aircraft Design: Applied Methods and Procedures

Snorri Gudmundsson
*audiobook | *ebooks | Download PDF | ePub | DOC*



#1245069 in eBooks 2013-09-03 2013-09-03File Name: B00FFFZ3N4 | File size: 55.Mb

Snorri Gudmundsson : General Aviation Aircraft Design: Applied Methods and Procedures before purchasing it in order to gage whether or not it would be worth my time, and all praised General Aviation Aircraft Design: Applied Methods and Procedures:

2 of 2 people found the following review helpful. An Excellent Text on Aircraft DesignBy Sarah AThis is a very complete book on the subject of Aircraft Design. I find it to be a very good reference with lots of details, better than digging through the various texts I have from my college days. I am currently working through major revisions to an existing aircraft design so the formulas and guidance are put to good use. I have a friend and fellow aircraft builder in Australia who bought the book on my recommendation and he says it is his most valuable resource asd he works through his own unique aircraft design. In his case he does not have the four year degree to back him up but he says the book is easy enough to follow if he makes the effort. This is an excellent text for the serious amateur aircraft designer and would make a suitable text for collage level aircraft design courses.1 of 1 people found the following review helpful. A comprehensive and complete preliminary design textBy KeltonThis book has saved me hundreds of hours in generating a complete light aircraft preliminary design. It can be read cover to cover, and while the concepts

can be quite difficult to grasp, the topics are covered by the author thoroughly and without unneeded complexity. An engineer of any discipline can work through this with enough time invested. The examples are invaluable and can help the dedicated individual create a spreadsheet of design parameters, information, and plots with dependencies before moving on towards detailed design. This book will continue to be a reference for me. If you are at all interested in the preliminary design process or a clean sheet design for an aircraft (specifically homebuilt or 14 CFR Part 23) look no further.Note: There are a few computational, grammatical, and spelling errors. Ask the author for the errata and he will provide it!7 of 7 people found the following review helpful. Nice compilation of current aircraft design dataBy Burton M. KnappThis is a fantastic compilation of current information on pretty much all aspects of light aircraft design - including cost modeling and the Eastlake cost model - both very hard to find in conventional sources for airplane design. I may write another review after more time with the text, but it looks thorough, with numerous examples. review qualification: I am a 15+ year professional aircraft design engineerOne complaint: After some debate, I bought the hard copy because I like physical books, but found out too late that they printed only in black and white! The online version has very nice colour illustrations.

Find the right answer the first time with this useful handbook of preliminary aircraft design. Written by an engineer with close to 20 years of design experience, General Aviation Aircraft Design: Applied Methods and Procedures provides the practicing engineer with a versatile handbook that serves as the first source for finding answers to realistic aircraft design questions. The book is structured in an "equation/derivation/solved example" format for easy access to content. Readers will find it a valuable guide to topics such as sizing of horizontal and vertical tails to minimize drag, sizing of lifting surfaces to ensure proper dynamic stability, numerical performance methods, and common faults and fixes in aircraft design. In most cases, numerical examples involve actual aircraft specs. Concepts are visually depicted by a number of useful black-and-white figures, photos, and graphs (with full-color images included in the eBook only). Broad and deep in coverage, it is intended for practicing engineers, aerospace engineering students, mathematically astute amateur aircraft designers, and anyone interested in aircraft design.Organized by articles and structured in an "equation/derivation/solved example" format for easy access to the content you needNumerical examples involve actual aircraft specsContains high-interest topics not found in other texts, including sizing of horizontal and vertical tails to minimize drag, sizing of lifting surfaces to ensure proper dynamic stability, numerical performance methods, and common faults and fixes in aircraft designProvides a unique safety-oriented design checklist based on industry experienceDiscusses advantages and disadvantages of using computational tools during the design processFeatures detailed summaries of design options detailing the pros and cons of each aerodynamic solutionIncludes three case studies showing applications to business jets, general aviation aircraft, and UAVsNumerous high-quality graphics clearly illustrate the book's conceptsnbsp;(note: images are full-color in eBook only)

"...a splendid bookhellip;For anyone involved in the design of general aviation (GA) aircraft and those deeply interested in the subject, this book is highly recommended." --The Aeronautical Journal, General Aviation Aircraft Design "A truly excellent book on aircraft design. Unlike many modern text books, it really tells the "story" of the subject with lots of current, real-world examples, data, and cautions, along with the mathematical equations that dominate many engineering texts. On that note Irsquo;d put it in with the aeronautical engineering classics like Perkins and Hage, or Bruhn for aircraft structures. The illustrations and graphics are also first-rate. I believe that this book will find wide acceptance among practicing engineers and students." --Brian E. Meyer, Manager, Aircraft Applications Engineering, Hartzell Propeller Inc.About the AuthorSnorri Gudmundsson, Department of Aerospace Engineering, Embry-Riddle Aeronautical University. From 1995-2009, Dr. Gudmundsson served as Manager of Aerodynamics Engineering at Cirrus Design Corporation. He has performed testing, analysis, and performance analysis review on variety of single and twin engine small aircraft. He is also a Consulting Designated Engineering Representative for the FAA as a Structural and Flight Analyst.