Wiley 0470058196

Unmanned Aircraft Systems: UAVS Design, Development and Deployment Instruction Manual

A Guide to Understanding and Utilizing the Book's Content

1. Introduction to the Book

This book provides a comprehensive introduction to Unmanned Aircraft System (UAS) technology, adopting an integrated approach to cover various engineering disciplines involved in UAS design, development, and deployment. It is structured into four main sections, with the first three parts detailing the engineering aspects and the fourth section addressing future challenges and opportunities within the UAS field.
The text explores the rapid expansion of UAS technology driven by innovation and diverse applications, including military, agriculture, meteorology, conservation, and border control. Both fixed-wing and rotorcraft UAVs are discussed, along with their roles and underlying technologies.
Authored by Reg Austin, a leading aeronautical consultant with over 40 years of experience in UAS design and development, the book draws upon his extensive background, including co-founding the Bristol International Remotely Piloted Vehicle (RPV) conferences.

2. How to Effectively Use This Book (Setup)

To maximize your learning and understanding from "Unmanned Aircraft Systems," consider the following guidelines:

- **Sequential Reading:** The book is structured to build knowledge progressively. Reading chapters in order is recommended for a foundational understanding of UAS technology.
- **Cross-Referencing:** Utilize the index and table of contents (if available in your edition) to quickly locate specific topics or revisit concepts.
- **Review Illustrations:** Pay close attention to diagrams, charts, and figures, as they often provide visual explanations of complex systems and concepts.
- **Note-Taking:** Engaging with the material through notes can aid in retention and comprehension, especially for technical details and definitions.

3. Core Concepts and Applications (Operating)

This section outlines the primary areas of study within the book, enabling readers to focus on key operational

aspects of UAS:

- **UAS System Technology:** Understand the integrated approach to UAV systems, encompassing various engineering disciplines.
- **Design and Development:** Explore the methodologies and considerations for designing and developing both fixed-wing and rotorcraft UAVs.
- **Deployment and Applications:** Learn about the practical deployment of UAS in diverse fields such as defense, agriculture, meteorology, conservation, and border control.
- **Future Challenges and Opportunities:** Gain insight into the evolving landscape of UAS technology, including market trends and technological advancements.

4. Understanding Difficult Concepts (Troubleshooting)

If you encounter challenging concepts or require further clarification, consider the following approaches:

- **Re-read Sections:** Sometimes, a second reading can clarify complex ideas. Focus on the context and preceding information.
- **Consult External Resources:** For deeper understanding, refer to academic journals, online databases, or other reputable engineering texts on specific topics.
- **Review Appendices/Glossary:** Check if the book includes a glossary of terms or appendices with supplementary information that might aid comprehension.

5. Book Specifications

Publisher:	Wiley
Publication Date:	May 24, 2010
Edition:	1st
Language:	English
Print Length:	368 pages
ISBN-10:	0470058196
ISBN-13:	978-0470058190
Item Weight:	1.66 pounds
Dimensions:	6.93 x 1.01 x 9.86 inches

6. Authors and Editors

- **Reg Austin:** Author, a leading aeronautical consultant with over 40 years of experience in UAS design and development.
- **Ian Moir:** Series Editor
- **Allan Seabridge:** Series Editor
- **Roy Langton:** Series Editor

7. Media Information

No instructional product images or videos are available for this book. The primary image associated with this product is the book cover.

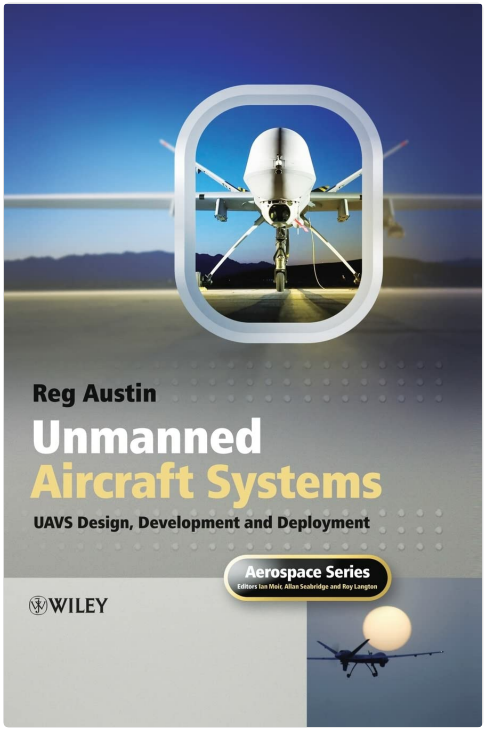

Image: Book cover for "Unmanned Aircraft Systems: UAVS Design, Development and Deployment". This image displays the front cover of the hardcover edition, featuring the title and authors.

8. Warranty and Support

As this product is a book, there is no specific product warranty or technical support provided by the publisher for its content. For inquiries regarding the physical book's condition or delivery, please contact your retailer.