

Wings in Orbit: Scientific and Engineering Legacies of the Space Shuttle, 1971-2010

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From US National Aeronautics and Space Admin : Wings in Orbit: Scientific and Engineering Legacies of the Space Shuttle, 1971-2010 before purchasing it in order to gauge whether or not it would be worth my time, and all praised Wings in Orbit: Scientific and Engineering Legacies of the Space Shuttle, 1971-2010:

9 of 9 people found the following review helpful. An imperfect, detailed look at the Space Shuttle By FalconBravoThe Good: This is a hefty tome, a textbook-style approach to learning about what the shuttle did both as a vehicle and as a technology demonstrator. It's split into sections listing its not only its flights and missions, but also new techniques for (as an example) applying insulating foam to the External Tank, a list of spinoffs of NASA technology now used for other purposes, and a series of essays written about the program and its legacies. A number of details about its onboard systems, techniques, payloads, and operations are provided, and the book is well-supplied with pictures and mini-

interviews with astronauts, engineers and others impacted by the program. As a layman's guide to the space shuttle and its history, it is a varied and technical look at the shuttle. It should appeal to all ages, though younger readers may have more fun looking at the pictures. The Bad: The biggest objection space aficionados will have with it are the relatively high number of mistakes. For example, the first time I opened the book, I landed on a page showing graphically the assembly of the International Space Station, but the first assembly flight to the ISS was STS-88, not STS-96, and that it launched in 1998, not 1999. There are other mistakes, not many of which an average reader would catch (or care about), but that those who work on the program would catch in a second. For a NASA publication about its own program, such errors are inexcusable and a bit confusing, since anyone with a basic knowledge or interest in the ISS would have caught such a mistake. Why would a book talking about the Space Shuttle's great legacy and important contributions to the world contain such crucial and obvious issues? The bottom line: obviously written by (or drawn heavily from) engineers, the book is generally a good reference for most people, but that may leave hardcore enthusiasts a bit disappointed (but only a little). 0 of 0 people found the following review helpful. A little rah-rah, but good details. By DenverPilot A bit of "marketing" feel to this book, but the things you can learn about Shuttle's engineering achievements outweigh having to read past the rah-rah. Better detail than most Shuttle books. 0 of 0 people found the following review helpful. A must read for aerospace enthusiasts! By Customer Excellent reference! A comprehensive profile of one of history's great flying machines. This book is a must for any aerospace enthusiast!

Wings in Orbit is an authoritative documentation of the many accomplishments of the NASA Space Shuttle Program. Starting with a foreword written by astronauts John Young and Robert Crippen, this compelling book provides accurate, authentic and easily understood accounts from NASA's best subject matter experts and external resources. The book captures the passion of those who devoted their energies to the Program's success for more than three decades. It focuses on their science and engineering accomplishments, the rich history of the program and the shuttle as an icon in U.S. history. No other book on the market has accumulated as many experts and resources on this subject nor broken it down in such easy to understand language with compelling imagery. With the Shuttle Program coming to a close, consumers will be inclined to purchase this book as it provides comprehensive information on this historic program as it ends its 30 year run. The promotions for this book will definitely benefit from the publicity of this historic event.

Aviation Week article-- March, 2011 Posted by Mark Carreau www.aviationweek.com/blogs/aw/space As Discoverys astronauts settled onto the Shuttle Landing Facility at NASA's Kennedy Space Center on March 9 it was inescapably clear the long-running U.S. Space Shuttle Program is in de-orbit prep. Endeavour and Atlantis are scheduled to fly for the final time within several weeks. What's less certain is how the three-decade long flight test program will be judged by its investors, the American public. Will the shuttles impressive capabilities be truly missed? Or were the winged orbiters, with their inability to leave low Earth orbit, an expensive detour to missions grander than Apollos? Wings In Orbit: Scientific and Engineering Legacies of the Space Shuttle, is a 553-page, firsthand account of the efforts to develop and sustain a reusable spacecraft with the technologies of the sixties and seventies. The effort is focused on the shuttle programs heritage, operational strategy, engineering innovation and contributions to science, education and as well as its social legacy. The shuttle was to be the first commercially successful space transport, Wings quickly advises with surprising candor. This impossible leap was not realized, an unrealistic goal that appears patently obvious in retrospect, yet it haunts the history of the shuttle to this day. In all, Wings combines contributions from more than 325 men and women whose professional careers were intertwined with the shuttles accomplishments and limitations as well as others who were swept up because of the programs long run and the wide assortment of missions. The orbiters ushered satellites into space for astronomers, climate researchers, national security interests, planetary scientists and commercial satellite operators. They've flown as temporary space stations for biologists, biotechnologists, chemists, medical researchers and physicists. Shuttle crews have salvaged and repaired satellites. The orbiters played a uniquely visible role in the unification of former Cold War adversaries, strengthened global partnerships with the assembly of the International Space Station and helped to shatter gender, racial and cultural barriers to space flight. On occasion, they've introduced the significance of science and math to the classroom. Wings is the brainchild of Dr. Helen W. Lane, chief nutritionist at the Johnson Space Center and Manager of JSC's University Research and Affairs Office. Lane was grocery shopping during Discoverys STS-114 return-to-flight mission in 2005, NASA's first bid to recover from the Columbia tragedy, when she was stopped by an old friend, a chemical engineer. Lane recalls the unexpected exchange: He berated me: NASA never does anything new, just orbits the Earth. Nothing came out of the space shuttle. NASA never does any science, period. Lane embraced the criticism as a challenge to present the shuttle story from the insiders perspective. She found an ally in Wayne Hale, the articulate former NASA shuttle program manager and long-time flight director. With Lane serving as Editor-in-Chief and Hale as Executive Editor, they enlisted the best and brightest of their colleagues in an effort to present the shuttle story to those among NASA's stockholders with an appreciation for science and technology. If the shuttles milestones matter not so much to taxpayers in the current trying economic times, they may to the aspiring engineers and historians who wonder

how they came about. Perhaps, the lessons learned from the shuttle era will help to temper wider expectations as the nation attempts to foster new commercial space transportation capabilities and look beyond the human exploration of the Moon. These will be difficult pursuits. Published by the Johnson Space Center and the Government Printing Office, *Wings In Orbit* is scheduled for an April 8 release through major book stores, including Amazon.com and Barnes Noble, as well as at <http://www.shopNASA.com>.