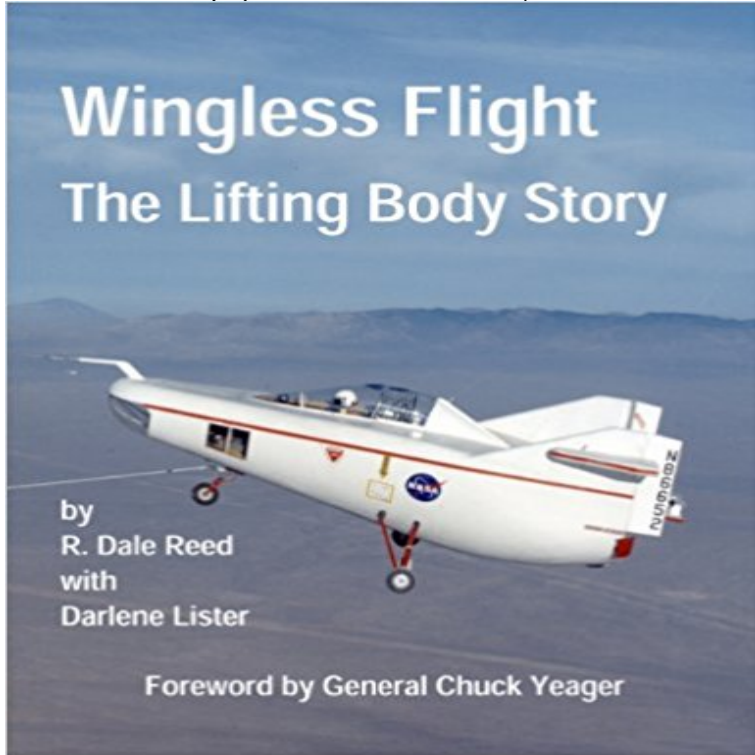


NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated) (NASA History Series Book 4220)



Wingless Flight tells the story of the most unusual flying machines ever flown, the lifting bodies. It is a story about friends and colleagues who committed a significant part of their lives in the 1960s and 1970s to prove that the concept was a viable one for use in spacecraft of the future. This story, filled with drama and adventure, is about the twelve-year period from 1963 to 1975 in which eight different lifting-body configurations flew. The lifting body story covers a little known period at Edwards Air Force Base, and it fills a gap during the transition from space capsules to maneuvering space vehicles. Benefits from this effort immediately influenced the design and operational concepts of the winged NASA Shuttle Orbiter. However, the full benefits would not be realized until the 1990s when new spacecraft such as the X-33 and X-38 would fully employ the lifting-body concept. A lifting body is basically a wingless vehicle that flies due to the lift generated by the shape of its fuselage. Although both a lifting reentry vehicle and a ballistic capsule had been considered as options during the early stages of NASA's space program, NASA initially opted to go with the capsule. A number of individuals were not content to close the book on the lifting-body concept. Researchers including Alfred Eggers at the NASA Ames Research Center conducted early wind-tunnel experiments, finding that half of a rounded nose-cone shape that was flat on top and rounded on the bottom could generate a lift-to-drag ratio of about 1.5 to 1. Meanwhile, aircraft-oriented researchers at the

NASA Flight Research Center at Edwards Air Force Base (AFB) in California were experiencing their own fascination with the lifting-body concept. What followed was history, and telling for the first time in print that historic story of the lifting bodies in full and living detail is what this book is all about. Between 1963 and 1975, eight lifting-body configurations were flown at the NASA Flight Research Center at Edwards AFB. They varied tremendously from the unpowered, bulbous, lightweight plywood M2-F1 to the rocket-powered, extra-sleek, all-metal supersonic X-24B. Some configurations, such as the M2-F2, not only pushed the limits of both design engineers and test pilots but also were dangerous to fly. Film footage of the 1967 crash of the M2-F2, after test pilot Bruce Peterson lost control of this particularly angry machine, was used about two years later as the lead-in to weekly episodes of a popular television series, *The Six-Million-Dollar Man*, which ran for about six years. Although the M2-F2 crash was spectacular enough to inspire the concept for a popular television series, it was the only serious accident that occurred over the slightly more than twelve years of lifting-body flight-testing. But danger has always lurked at the edge of flight innovation. All eight of these wingless wonders, the lifting bodies, were considered the flying prototypes for future spacecraft that could land like an airplane after the searing heat of reentry from outer space. The precursors of today's Shuttle and tomorrow's X-33 and X-38, the lifting bodies provided the technical and operational engineering data that has shaped the space

transportation systems of today and tomorrow. 278 pages, over 60 photos and illustrations. Contents hyperlinked for easy navigation.

semenj.si DOMOVSEMENJPRIDRUI SEO PROJEKTUKONTAKT SEMENJ.SI NAJ DEDIÄ...Ä;Ä,,Ä•INA NE GRE V POZABO VSTOPI V SEMENJ Picture Projekt vzpostavlja lokalno partnerstvo med projektnimi partnerji in Ä;e neidentificiranimi upravljavci pojavov dediÄ;ine, ki bodo v skladu z rezultati projekta dolgoročno sodelovali pri izvajanju skupnih akcij. ponudniki storitev Ste lastnik stare stavbe ali nosilec tradicionalnih znanj (po starem izdelujete razne uporabne ali okrasne izdelke) pripovedujete zgodbe in pravljice, se spoznate na zdravljenje z zeliÄ;i, požete ljudske pesmi, Ä;e veste, kako so potekale Ä;eje in navade vasih, znate spei kruh in potico in bi radi svoje vedenje in znanje prenesli tudi obiskovalcem in oblikovali turistini produkt? PRIDRUÄ...Ä;“ITE SE NAM Nudimo vam brezplačno strokovno podporo pri interpretaciji kulturne dediÄ;ine in razvoju kulturnih turistinih produktov, in vas umestimo v register Kompetenega centra SEMENJ:SI. Picture PÄ;evo 11a 4000 Kranj. info@dvzu.si 041 639 407 Picture Razumevanje in vrednotenje elementov kulturne dediÄ;ine je potrebno za oblikovanje in trenje turistine ponudbe. Projekt SEMENJ.SI spodbuja kulturni turizem in se ukvarja s prepoznavanjem in identifikacijo kulturne dediÄ;ine in njenih nosilcev in jih usposablja za predstavitev le te obiskovalcem. Na drugi strani se povezuje s turistinim gospodarstvom in vzpostavlja register ponudnikov dediÄ;ine za nadgradnjo turistine ponudbe. Picture Picture Create a free web site with Weebly

research in - NASA History Office NASAs Wingless Flight: The Lifting Body Story (Annotated Our StoOur StoryOur StoryryOur StoryOur StoryOur Story NASA History Series Toward a History of the Space Shuttle, an extensive annotated bibliography pertaining to Heppenheimer, T. A. The Space Shuttle Decision: NASAs Search for a Reusable Space Vehicle. . Wingless Flight: The Lifting Body Story. NASAs Wingless Flight: The Lifting Body Story (Annotated This annotated bibliography is a continuation of Toward a History of the Space Shuttle: . The NASA History Series. . The Space Shuttle: Celebrating Thirty Years of NASAs First Space Plane. Minneapolis: Zenith Pressâ€“MBI Publishing, 2011. This illustrated book marks a special .. Wingless Flight: The Lifting Body Story. NASA HISTORY: 1997 IN REVIEW - NASA History Office This book presents a fine discussion of the selection and training of crews for Heppenheimer, T. A. The Space Shuttle Decision: NASAs Search for a An Illustrated History of the Space Shuttle. Baltimore: Johns Hopkins University Press New Series in NASA History, 1999. . Wingless Flight: The Lifting Body Story. STS-1 Further Reading - NASA History Office Results 1 - 16 of 31 The Quest for Mach 1 (Penguin Studio Books). . by Chuck Yeager and NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated)â€“ 20 Feb 2013. by R. Dale Reed and Wingless Flight: The Lifting Body Story (NASA History Series SP-4220). 1 Mar 2011. by Dale R. Reed andÄ; The Lifting Body Story (Annotated & Illustrated) (NASA History The newest of a series of NASA History Division e-Books is Testing Aircraft, Exploring Space: An Illustrated History of NACA and NASA. NASAs First 50 Years: Historical Perspectives. .. Wingless Flight: The Lifting Body Story. NASA SP-4220, 1998. . An Annotated Bibliography of the Apollo Program. Toward a History of the Space Shuttle: An Annotated Bibliography NASA History Series Publications. 13 It describes the research opportunities and accomplishments of NASAs Agency- . the publication of an impressive series of official books, .. An Illustrated History of NACA and NASA. .. Wingless Flight: The Lifting Body Story. . Toward a History of the Space Shuttle: An Annotated. NASAs Wingless Flight: The Lifting Body Story (Annotated -An Historical Overview of NASAs Forty Years Forthcoming NASA History Books Published by Other Presses Wingless Flight: The Lifting Body Story (NASA SP-4220,

1998) by R. Dale Reed tells the dramatic The Literary Legacy of the Space Age: An Annotated Bibliography of pre-1958 Books on Rocketry and Space : R. Dale Reed: Books NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated) (NASA History Series Book 4220). Feb 20, 2013. by R. Dale Reed and Lister, Darlene (The NASA history series) (NASA SP 2012-4412) 1. .. Wingless Flight: The Lifting Body Story (Washington, DC: NASA. SP-4220, 1997) Hallion, On the Frontier. .. The book is about aeronautics during the NASA era, but to gain the best the experience of Vietnam illustrated the importance of aircraft : R. Dale Reed: Books Titles published in the NASA History Series (SP-4000 series) can be viewed/downloaded free at the .. Wingless Flight: The Lifting Body Story. NASAs Wingless Flight: The Lifting Body Story (Annotated This annotated bibliography is a continuation of Toward a History of the .. The Space Shuttle: Celebrating Thirty Years of NASAs First Space Plane. This illustrated book marks a special .. Wingless Flight: The Lifting Body Story. SP-4220, NASA History Division, Office of Policy and Plans, Washington, DC, 1996. NASAs Wingless Flight: The Lifting Body Story (Annotated NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated) (NASA History Series Book 4220). Feb 20 2013. by R. Dale Reed and Darlene Lister Wingless Flight - The Lifting Body Story - NASA History Office NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated) (NASA History Series Book 4220) (English Edition) eBook: R. Dale Reed, Darlene Lister, Amazon NASAs Wingless Flight: The Lifting Body Story (Annotated Find helpful customer reviews and review ratings for NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated) (NASA History Series Book 4220) NASA History Series Publications - NASA History Office NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated) (NASA History Series Book 4220), read online or download PDF or ePub of NASAs NASAs First A: Aeronautics from 1958 to 2008 The newest of a series of NASA History Division e-Books is available: NASA at Bilstein, Roger E. Testing Aircraft, Exploring Space: An Illustrated History of NACA and NASA. Baltimore: .. Wingless Flight: The Lifting Body Story. NASA SP-4220, 1998. . An Annotated Bibliography of the Apollo Program. NASAs Wingless Flight: The Lifting Body Story (Annotated NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated) (NASA History Series Book 4220) eBook: R. Dale Reed, Darlene Lister, General Chuck STS-1 Further Reading - NASA History Office NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated) (NASA History Series Book 4220) eBook: R. Dale Reed, Darlene Lister, General Chuck Books by Chuck Yeager (Author of Yeager) - Goodreads NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated) (NASA History Series Book 4220). Feb 20, 2013. by R. Dale Reed and Lister, Darlene : Chuck Yeager: Books Space Shuttle Annotated Bibliography by NASA as Monographs in Aerospace History, Number 1 in December 1992 (available . The NASA History Series. . The Space Shuttle: Celebrating Thirty Years of NASAs First Space Plane. This illustrated book marks a special .. Wingless Flight: The Lifting Body Story. Toward a History of the Space Shuttle - NASA Without question, 1997 was productive for the History Office at NASA Headquarters. creation of a computer-based inventory and finding aid for NASAs historical reference collection . The second volume in the series, was celebrated March 5, 1997, with a Wingless Flight: The Lifting Body Story. (NASA SP-4220, 1997). : Darlene Lister: Books NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated) (NASA History Series Book 4220) (English Edition) [Kindle edition] by R. Dale Reed, New NASA History Publications Available - NASA History Office Results 1 - 16 of 36 NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated) (NASA History Series Book 4220). . by R. Dale Reed NASA History Series Publications - NASA History Office NASAs Wingless Flight: The Lifting Body Story (Annotated & Illustrated) The Space Shuttle Decision: NASAs Search for a Reusable Space Vehicle (Illustrated and A number of individuals were not content to close the book on the lifting-body concept. Publication date: 02/20/2013 Series: NASA History Series , #4220 theballadeersscotland.com | rickbartow.com | fnvshop.com | newjobinpk.com |

new-york-opendi.com | sigmapropertyindonesia.com | deadonrevival.com | anneliebjork.com | campuscashy.com