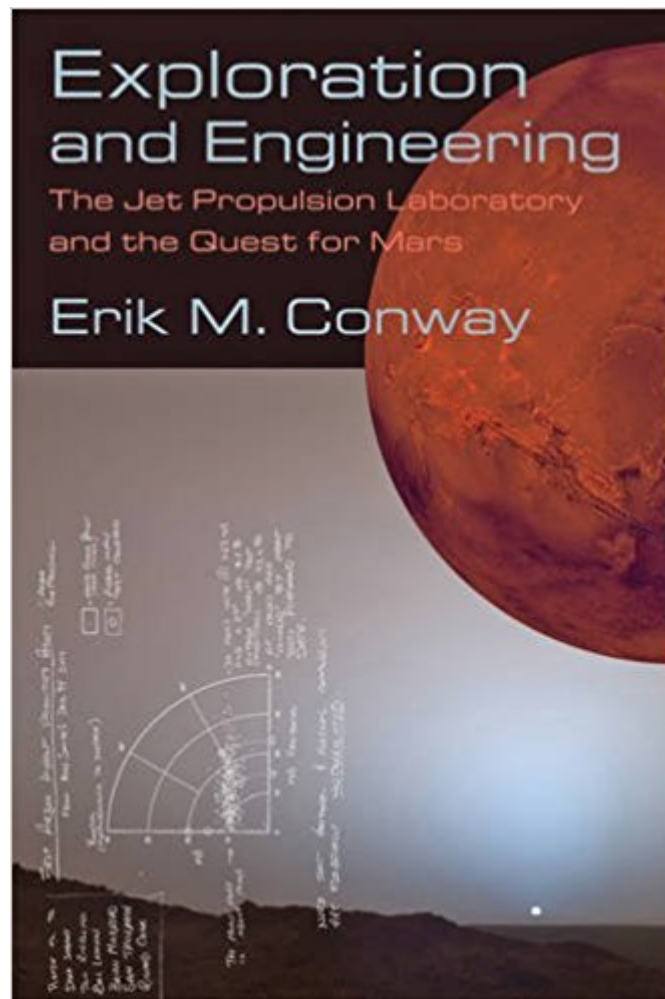


The book was found

Exploration And Engineering: The Jet Propulsion Laboratory And The Quest For Mars (New Series In NASA History)



Synopsis

Although the Jet Propulsion Laboratory in Pasadena, California, has become synonymous with the United States' planetary exploration during the past half century, its most recent focus has been on Mars. Beginning in the 1990s and continuing through the Mars Phoenix mission of 2007, JPL led the way in engineering an impressive, rapidly evolving succession of Mars orbiters and landers, including roving robotic vehicles whose successful deployment onto the Martian surface posed some of the most complicated technical problems in space flight history. In *Exploration and Engineering*, Erik M. Conway reveals how JPL engineers' creative technological feats led to major breakthroughs in Mars exploration. He takes readers into the heart of the lab's problem-solving approach and management structure, where talented scientists grappled with technical challenges while also coping, not always successfully, with funding shortfalls, unrealistic schedules, and managerial turmoil. Conway, JPL's historian, offers an insider's perspective into the changing goals of Mars exploration, the ways in which sophisticated computer simulations drove the design process, and the remarkable evolution of landing technologies over a thirty-year period.

Book Information

Series: New Series in NASA History

Paperback: 416 pages

Publisher: Johns Hopkins University Press; Reprint edition (July 29, 2016)

Language: English

ISBN-10: 1421421224

ISBN-13: 978-1421421223

Product Dimensions: 6 x 1 x 9 inches

Shipping Weight: 1.6 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars See all reviews (4 customer reviews)

Best Sellers Rank: #2,009,374 in Books (See Top 100 in Books) #167 in Books > Science & Math > Astronomy & Space Science > Mars #2394 in Books > Science & Math > Astronomy & Space Science > Astrophysics & Space Science #4175 in Books > Science & Math > Astronomy & Space Science > Astronomy

Customer Reviews

Full disclosure: I am a JPLer, but not technical, and Erik and I are in the same directorate. The NASA History Office has frequently identified topic areas where historical treatment is necessary

and appropriate and, as a consequence, their list of publications and those that they have commissioned (like this one) are all but priceless. Exploration and Engineering is one such book and covers a unique span of time where the desire to explore Mars was realized through a string of missions leading through to today. But most people won't recall the failures and very few understand how dramatically the whole enterprise swung back and forth as far as mission complexity, technical approach, management philosophy, and response to science questions and discovery. If you've heard and wondered about "faster, better, cheaper" then this is a must-read; FBC played out in the Mars program. This book probably isn't quite right for someone who wants a soaring tale of adventure and discovery in the Apollo tradition. But it is not a dry academic book either. It fits very well for anyone really interested in the missions themselves and the thought processes involved in engineering decisions, testing and operations. I found it to be very readable and to flow very well. The book is pretty chronological but makes ample references forwards and back and explains the consequences of decisions in subsequent missions. For me it was a bit of a stroll down Memory Lane having been associated with almost all of the missions. But there was a lot that I learned or that now makes more sense. Dr.

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

Exploration and Engineering: The Jet Propulsion Laboratory and the Quest for Mars (New Series in NASA History) Inside NASA: High Technology and Organizational Change in the U.S. Space Program (New Series in NASA History) Exploration and Engineering (New Series in NASA History) Start Your Own Zine: Jet Lambert's Gumption Guides: Everything You Need to Know to Put it Into Print (Jet Lambert Gumption Guide) Mars: What Isn't NASA Telling Us?: Facts and Questions about the Red Planet, Panspermia, and Humans (Unexplained Mysteries) Life and Death on Mars: The New Mars Synthesis Colony Two Mars: A SciFi Thriller (Colony Mars Book 2) Colony One Mars: A SciFi Thriller (Colony Mars Book 1) Mars One: Humanity's Next Great Adventure: Inside the First Human Settlement on Mars Mechanics And Thermodynamics Of Propulsion Submarine Propulsion: Muscle Power to Nuclear Mars Direct: Space Exploration, the Red Planet, and the Human Future: A Special from Tarcher/ Penguin Roving Mars: Spirit, Opportunity, and the Exploration of the Red Planet After the Martian Apocalypse: Extraterrestrial Artifacts and the Case for Mars Exploration Red Rover: Inside the Story of Robotic Space Exploration, from Genesis to the Mars Rover Curiosity Mission to Mars: My Vision for Space Exploration Seismic Stratigraphy, Basin Analysis and Reservoir Characterisation (Handbook of Geophysical Exploration: Seismic Exploration) Jet-Set Billionaire: The Complete Series Quest on the Thorny Path: A True Caribbean Sailing Adventure (Quest and Crew Book 2) The Archer's Tale (The Grail Quest, Book 1): Book One of the Grail Quest

[Dmca](#)