

# KIRKUS

---

# REVIEWS

## TITLE INFORMATION

### **BEYOND THE SAGA OF ROCKET SCIENCE**

Walter Sierra

Xlibris (667 pp.)

\$3.99 e-book

December 19, 2016

## BOOK REVIEW

A debut book traces the development of rocket technology.

Most people assume that rocket technology is esoterically impenetrable to the layperson, so much so that “rocket scientist” has become, in ordinary discourse, synonymous with genius. Sierra, a rocket scientist, attempts to provide an accessible and comprehensive introduction to the subject that largely proceeds chronologically. The author begins with an account of the rocket’s embryonic development in ancient China, originally fueled by gunpowder and driven by military uses. By the 14th century, European powers had taken an interest in the development of rockets, and by the 19th, the reality of war inspired a continued preoccupation with their military implications. They were used in the War of 1812, the Mexican-American War, and the Civil War. Significant leaps in aeronautical research set the stage for the technological revolution that arrived in the 1930s, and Sierra supplies a concise history of the achievements of the Wright brothers as well as lesser-known luminaries like the astronomer and aviation pioneer Samuel Pierpont Langley. Finally, the author tracks the extraordinary impact World War II and the Cold War had on the pace and success of scientific research, and the push provided by the breakneck competition of the latter conflict. While Sierra explains the science behind each shuffle forward for rocket technology—the reader is treated to brief explanations of things like drag coefficients—he also deftly analyzes the political and cultural context within which experimentation necessarily occurs. For example, there is an extended discussion of the impact Stalin’s limitlessly repressive rule had on the Soviet Union’s technological progress. The first installment of a series, this is a dizzyingly thorough work. Sierra consistently writes in lucid prose—even when discussing maddeningly technical subject matter—and the text is mercifully strewn with plenty of helpfully illustrative photographs and diagrams. But the uninitiated will still likely be overwhelmed by the deluge of minutiae, which partially undermines the book’s accessibility. Still, it’s hard to imagine a single volume that delves so deeply into rocket science with such clarity.

An engrossing—if sometimes exhausting—work that examines the scientific and political history of rockets.