

We Reach the Moon
Written by John Noble Wilford
Analysis by Alissa Friedman
MIT Class 16.895J, due April 2, 2007

According to the publisher, Bantam Books, *We Reach the Moon* responded to worldwide interest in the American moon missions, and was published fewer than three days after the splashdown of Apollo 11. It is one of the first books to capture the Apollo events and milestones, from the first space satellite to Kennedy's reached goal. It begins with the launch of Sputnik and concludes with the "task accomplished" phrase on the mission control computer screens. The pages in-between are carefully laid out in chronological order of the Apollo program: from a scientific description of the moon, to the key players in assembling the NASA team and Apollo contractors, then highlighting the engineering systems necessary to drive mission success (such as G&N&C and the engineering of the command and lunar modules). It concludes with each mission leading up to and including the Apollo 11 manned landing.

The author, John Noble Wilford, was (and still is) a newspaper reporter, so his book targeted the general public. He found ways to make the public understand the more complex technological or scientific topics that were important parts of the Apollo program. One way he did this was by using analogies to relate scientific topics to something not at all scientific. For example, in chapter two, he described the earth-moon combination and the celestial bodies' relative revolution speeds by comparing the bodies to a pair of dancers, "think of the earth and the moon as a couple of dancers with arms locked, spinning wildly around a dance floor...the plane in which they spin is tipped slightly...and since the earth is 81 times more massive than its partner, it is the anchorman in the dance."¹ In chapter nine, he used this technique to relate the new moon-landing concept to early explorers exploring a new frontier. He also painted pictures of political events that shaped the 1960s to remind the public of what was occurring outside the Apollo project; Wilford prefaced chapter fourteen with the grim events of Vietnam, the assassinations of Martin Luther King and Robert Kennedy, and students rioting around the world, events that he said "rocked the foundations of man's institutions."² Wilford then used the Apollo 8 success as a means to uplift the spirit in the reader. "Not only did Apollo 8's

¹ John Wilford, *We Reach the Moon* (New York: Bantam Books, 1969) 19

² John Wilford, *We Reach the Moon* (New York: Bantam Books, 1969) 184

tremendous success inspire new confidence in the moon-landing project but it brought renewed hope to Americans and mankind in general. It seemed to make a profound spiritual impact on people.”³

Additionally, the author elaborated on many technical and political decisions that were made during the Apollo missions. Rather than providing the reader with only the decisions’ outcomes, he wrote about the many factors that came into play at the time of the decision. One example was the decision program director Samuel Phillips made regarding Apollo 10’s objective. Since Apollo 8 and 9 were great successes, there was thought of making Apollo 10 the manned lunar landing mission, despite the fact that the lunar lander was delayed in its preparedness for the mission. Phillips had to determine if Apollo 10 was technically ready to be the manned landing mission. Phillips had two choices: he could have delayed the next launch until the lander was ready and made Apollo 10 the manned lunar landing, or he could have made Apollo 10 the practice mission for Apollo 11, with the rather significant difference being a non-moon landing. Phillips thought this decision “fell in the class of choices where you can’t be wrong.”⁴ Phillips participated in “daily meetings, countless telephone conversations and visits to space centers and contractors’ plants” as well as “listening to the Apollo 9 crew’s debriefings and sounding out the flight controllers at Houston.”⁵ He chose the latter of his two options based upon the technical considerations of the lunar lander delay, and the lack of experience performing the mission in its ultimate environment (Apollo 8 orbited the moon but did not test a lunar lander, and Apollo 9 tested the lunar lander while in an earth orbit). Of course, his decision was not purely technical: NASA was on a deadline to both land a man on the moon before the decade’s end, and beat the Soviets in doing so. Apollo was under such public scrutiny that another failure (like Apollo 1) would have made the public doubt Apollo’s (and NASA’s) purpose, and NASA could have lost funding for future moon missions. Phillips’ decision portrayed the nature of engineering on a large-scale project like Apollo: because of the large, complex, never-been-done-before engineering systems, delays in commitment dates for these components caused the mission schedule to slip. NASA took great care in holding high engineering standards and even higher mission and human success rates, and this high demand

³ John Wilford, We Reach the Moon (New York: Bantam Books, 1969) 205

⁴ John Wilford, We Reach the Moon (New York: Bantam Books, 1969) 228

⁵ John Wilford, We Reach the Moon (New York: Bantam Books, 1969) 228

also had potential to postpone commitment dates. However, human safety was not to be sacrificed to meet a deadline or political pressures.

Wilford called the Apollo missions “mankind’s greatest adventure.” As the leading aerospace reporter for *The New York Times* during the 1960s, he prefaced this book as a reporter’s book, as he did not call himself an engineer, scientist, or historian. He showed his fascination in the subject in his acknowledgements, “who could cover the story of man’s first footsteps on another world, and cover it as more than a science story of another nuts-and-bolts technology story, without feeling in himself a flutter of all the romantic urges that have sent man across oceans, up mountains and out into the air and then the space beyond the air? I could not.”⁶ His thoughts echoed in his writing, such as the chapter on Apollo 8 as mentioned above. Wilford also informed the public about the political, scientific, technical, and social aspects of the project, and he delivered.

Because Wilford was a reporter for the *Times*, most of the evidence used was from *Times* articles, as well as countless personal interviews with the key program players. As he found it impossible to list all his resources,⁷ Wilford’s bibliography is short, encompassing less than twenty resources; some were written by either astronauts or NASA administrators, but the rest focused on general information. There were books on the Mercury and Gemini missions, a space encyclopedia and history, and Soviet reports. But because Wilford’s book was an all-encompassing story of Apollo, his bibliography tied in nicely, and related to the events discussed in his writing. No bibliographical source presented Apollo counter-evidence, as the book’s purpose was to provide factual Apollo information to the uninformed public.

Although the book relates to the current Apollo class taught at MIT, the significant difference revolves around depth of individual mission aspects. The author covered everything taught in the semester-long class. The book’s themes are central to the course themes, but the book itself is peripheral: it provides the reader with a general understanding of the Apollo missions but does not go into much detail about any one topic. The book contributes to the class’ larger understanding of Apollo – it just does so in a much shorter amount of writing and time. It is important to remember here that the book was published immediately after Apollo 11’s completion to satiate the public’s curiosity. Instead of focusing on one particular aspect of

⁶ John Wilford, *We Reach the Moon* (New York: Bantam Books, 1969) ix

⁷ John Wilford, *We Reach the Moon* (New York: Bantam Books, 1969) 319

the missions, the book provides information on all things Apollo, from the program's birth to its most defining moment.

That said, this book does not classify itself in one of Roger Launius's five areas of Apollo historiography. Wilford did spend a few chapters skimming foreign policy and public policy antecedents, such as Kennedy's decision to go to the moon (chapter one), and the public's dwindling interest in the moon missions in the wake of the Apollo 1 fire (chapters seven and nine), but his focus was not on policies. Wilford also wrote chapters of space hardware information, but he provided a basic level of understanding of the many engineered components and included key facts, as if out of a school textbook (such as listing Saturn thrust requirements and weight in chapter ten), and didn't delve into great detail of the rockets or other space flight technologies. Wilford touched upon all Apollo mission objectives and program events, but there are not enough memoirs in the respective chapters to classify the book as a narrative of each mission. Wilford also touched upon the importance of scientific findings, such as the lunar rock samples brought home from Apollo 11 and their help in determining the origin of the solar system, but this book was written before any of those findings were released (or even begun). Finally, this book does not focus on social and cultural investigations of Apollo's meaning in modern America, as that information has sprouted within the past couple of decades – well beyond 1969.

Wilford wrote a compelling story of all things Apollo in response to public interest. Although it is not Apollo historiography, it should be respected in its own right as one of the first all-encompassing, complete, and informative references of the Apollo program.

Essay Word Count: 1492