

Dan Gillespie
ESD.30
Due: 2 April 2007

Book Review: The Reluctant Space-Farers: A Study in the Politics of

Discovery

This book, written in 1965 by Frank Gibney and George J. Feldman, examines the implications of America's space effort, "in particular as they affect areas of life not normally regarded as 'scientific'" ([1]p. 5). Written during the Apollo program, over four years before the successful moon landing, it gives insights into the expectations held by the authors for what space exploration would mean to the nation, and the world. Although much of their analysis is well thought out and supported by facts, their conclusions are quite opinionated, and their self declared "capstone thesis", that the space exploration effort would eventually replace war (p. 156), is extremely optimistic and has proven over time to be too idealistic.

In this commentary on the space program several themes become clear: strong support for the space effort; anger at Eisenhower's slow start in space and his decision to separate military space efforts from civilian efforts; high regard for the Soviets' ability to blend the military, political, and scientific aspects of space into a single effort which the authors regard as highly successful; and a strong belief that space exploration is the key to America's future success. Their conclusion is the possibility that space exploration can unite the world and make war obsolete.

Gibney and Feldman possess an almost fanatical support for the space effort, referred to consistently as the "Space Discovery" (always capitalized), meaning "the total process of innovation, experiment, and application directed to the exploration and use of outer space" (p. 2). They believe it will have a beneficial effect on "every aspect of our lives" (p. 8), from national survival to our "seek-and-strive" mechanism which is currently fulfilled in some by religion (p.7). Followed to its logical conclusion, the Space Discovery would focus the nation away from wasteful distractions, allowing it to solve problems and ultimately replace war.

Although this book addresses some decisions, it is not about decision-making. Instead it deals with vision; with a view of where the decisions made in the US space program would lead America and the world. The vision is based on the technological gains made, but also on many "non-scientific" factors.

The authors' involvement in the space program was in the political realm. Frank Gibney, a journalist, served as a consultant to the newly formed House Select Committee on Astronautics and Space Exploration, established by John W. McCormack, Speaker of the House. George J. Feldman served as the committee's director. The committee's immediate goal was to produce a bill that would set up a national space authority, realized with NASA. They claim no background in space, or even science, but had to learn from the testimony and consultations of the committee.

Despite the heavy involvement of the authors in the space program, the book is not well documented. Other than the occasional footnote, usually referring the reader to a magazine article of the period, this book cites no references, and there is no bibliography. The authors claim as their sources "the fruits of [their] conversations and consultations with members of the Congress and the professional staffs of the relevant congressional committees, over the years, as well as numerous talks with officials of NASA, the Defense Department and other Executive agencies involved" (p. xiii). At times it is difficult to know what the authors are asserting as substantiated fact, and what they are giving as their opinions.

At the time this book was written the Cold War was in full swing. The authors were extremely impressed with the engineering effort which produced nuclear weapons and ICBMs, and felt secure that their deterrent capabilities would succeed. By the mid 1960s they had seen the Cuban missile crisis, which convinced them the Soviets didn't want war either. They saw the Cuban standoff as one more in a long line of Soviet "tests", from which they could always retreat if it didn't work since their leaders were unencumbered by the constraints of public opinion and the need for re-election. They felt technology had already reduced war to a political game of chess which was being fought with tools other than weapons, national prestige being chief among them. This rational world was at a turning point, and the promise of the Space Discovery was capable of uniting the world in an international space exploration effort that would take the place of war.

The authors base this vision on some big assumptions, which in retrospect were extremely optimistic. The first assumption is that space travel would become very affordable. Gibney and Feldman claim the technology of nuclear propulsion, specifically gaseous-fission-powered rockets, would drastically decrease the cost and enroute times of space travel, making it analogous to air transport. This would unlock the resources of the solar system to alleviate

Earth's shortages. Second, protected by nuclear missiles the U.S. could convert its defense spending into spending on the Space Discovery. This would fuel the economy as well as technological development much as defense spending had done. Third, the Soviets could be convinced of the advantages of doing the same and joining the Space Discovery. After all, their citizens were already extremely enthusiastic about space exploration, and the thawing of US-Soviet relations during the mid 1960s was encouraging. Fourth, most other developed nations were struggling to develop nuclear weapons and a space capability. Following the example of the US and USSR these other countries would see the benefits of channeling their resources into the space effort. And finally, the education level of the world would increase as countries participated in the Space Discovery, and in their view, educated people are naturally drawn to democracy. The US, being the world leader in the Space Discovery and democracy would be the logical example to follow. The result would be a content and democratic world where everyone's needs were met, and everyone's efforts were constructively channeled into the Space Discovery.

Although Gibney and Feldman were able to convince themselves, and maybe some other visionaries of their time, that these assumptions were valid, with the passing of years all of their assumptions have proven to be far too optimistic. Besides the obvious failure of nuclear powered rockets to materialize, the realities of the Cold War would soon become apparent. Specifically, nuclear weapons had not replaced conventional warfare. Vietnam showed that besides maintaining a nuclear arsenal, conventional weapons had to be developed for actual use. Furthermore, 25 more years of Cold War showed that the Soviets were more interested in maintaining and even gaining power than they were in establishing peace. Even if they had made peace that wouldn't have made the world secure. The simplistic model that assumed if there was a war it would be fought between the US and the USSR was not valid. In fact, the world's reaction to the semi power vacuum created by the break-up of the Soviet Union suggests that had the superpowers disarmed in order to pursue the Space Discovery, someone like Saddam Hussein would have been there to assert himself as the new military power. Finally, the authors' assumptions are based on the premise that everyone in the world wants peace and prosperity for all. Most dictators, for example, would not be enticed to give up power and wealth to participate in space exploration.

Despite the over simplistic view of the world and the hyper optimistic assumptions derived from it, the value of this book is that it gives interesting insights into the hope and vision the early space efforts gave to some Americans during the Apollo program. To their credit, Gibney and Feldman took a step back from the rocket systems and looked at the nation's space efforts from a truly systems view, in the MIT Engineering Systems Division sense of the term. Although they were extremely taken with the new space technology, this was not a technical overview of the space program. They were very cognizant of the political implications of the Soviet and American space efforts, but this was not simply a political assessment. They considered the social dimension of space exploration, but their analysis went beyond public reactions. This book was a multifaceted evaluation of how the Space Discovery would shape the future of the nation and the world. Transcending the usual frameworks proposed by Launius as the typical methods of considering the space effort[2], this book attempts to envisage the post Apollo future accounting for all aspects. Unfortunately, despite the broad vision of the authors, as described above, it is far too idealistic to provide any lasting insights into the actual impacts on society. With the passage of time it is obvious that the world's difficult problems will have to be dealt with directly, and won't easily disappear through space exploration. The relevance of the book rests with its ability to help the reader understand the state of mind of those whose vision and efforts achieved success in space during the 1960s.

Word Count: 1497

1. Gibney, F. and G.J. Feldman, *The Reluctant Space-Farers: A Study in the Politics of Discovery*. 1965, New York: The New American Library. 174.
2. Launius, R.D., *Interpreting the Moon Landings: Project Apollo and the Historians*. History and Technology, 2006. **22**(3): p. 225-255.