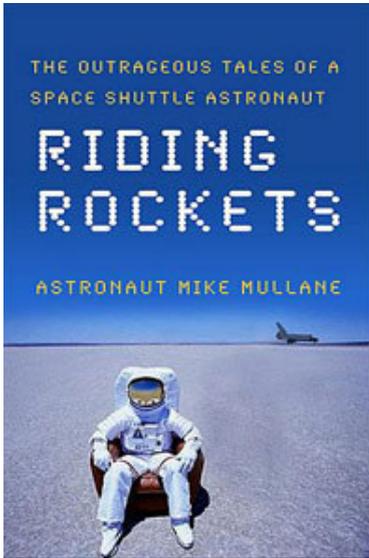


Book Review: Mike Mullane's *Riding Rockets* The Outrageous tales of a Space Shuttle Astronaut

Review by Barry Davidoff



During the last several years there has been an explosion of books about the space program. Mike Mullane's *Riding Rockets* shines above most of the others for providing an earnest and insightful view of the trials and tribulations of being an astronaut.

Mike Mullane was selected in 1978 as part of the first class of 35 astronauts specifically chosen for the space shuttle. This group of shuttlenauts for the first time included women and minorities and a larger number of scientists who were being trained as mission specialists. Mullane had graduated from West Point and after taking his commission in the Air Force flew 134 combat missions in Vietnam as the Weapons System Officer of an RF-4C reconnaissance Phantom jet. He was the first non-pilot to be selected as an astronaut from the Air Force.

After arriving in Houston as an astronaut candidate, Mullane was shocked by the atmosphere surrounding the new shuttlenauts. Having grown up in an Air Force Family, attending the military academy, and flying in combat, his bearing and swagger demonstrated the "Right Stuff". NASA, however, had changed and he now was competing against brilliant post-doctoral scientist astronauts and women. Mullane in many extremely humorous anecdotes describes how he was a prime example of "arrested development".

His attitudes from growing up as an American male in the fifties and then being part of the Air Force clashed greatly with the new breed of astronauts.

The military astronaut's actions were filled with sexual innuendoes and military machismo. For example, aboard the close confines of the shuttle simulator he originally felt awkward being nude in front of crew member Judy Resnick while pulling on the EVA spacesuit. Often the pilot astronauts banter during meetings would create animosity from the feminist astronauts.

NASA was desperate to fly a woman as a mission specialist aboard one of the early shuttle flights. Mullane reveals that Sally Ride was selected for this honour, not because she was the best qualified, but rather, she was the most feminist movement oriented among the six women in his class. This was critical since the first woman in space would be lofted as a major role model by feminist leaders. Ride became instantly famous and was assured of a lucrative career as a lecturer and corporate board member. On the other hand, Shannon Lucid, who was also in the same class, remained as a career astronaut logging 223 days in space including a six month stay aboard Mir while she was a 53 year old grandmother.



The STS-41D crew. Judy Resnick is in the center and Mike Mullane by her right knee.

Mullane also is very frank about the closeness he shared with Judy Resnick, who was rookies together on the STS-41C flight. Despite Mullane's arrested development syndrome he and Resnick became close colleagues and adoring friends. Mullane confides he was deeply attracted to her and their relationship

Mike Mullane aboard STS-27 floating in weightlessness with cameras



remained platonic. Her loss in the *Challenger* disaster was very hard for Mullane to bear.

In the age of political correctness, Mullane relates that even the in-flight photo, shown above, of the crew raised some issues with feminists. They decried that Dr. Resnick was wearing shorts and showing her tanned legs with her hair floating in weightlessness, rather than in a more dignified pose.

In one of the most revealing sections in the book, Mullane reveals how fearful he was during shuttle launches. Although fully confident of the rocket's capabilities, each launch was a very emotional and dramatic experience. The crew would be quarantined for several days prior to a flight and on the night before launch there would be tearful farewells to their wives and children.

On launch day the crew would be strapped on their backs in the Shuttle's cockpit and wait hours for launch which was very uncomfortable. Inevitably there would be delays in the countdown prolonging the process for hours. During the entire 100+ flights of the shuttle, very few launches occurred on their first attempt. The entire process of sorrowful good byes and the physical agony of waiting for a fearful launch would be repeated several times until all conditions were right. In Mullane's career there were 9 launch attempts in which he boarded the shuttle, but only three actual flights.

Following the *Challenger* explosion on Jan. 28, 1986 the drama and discomfort of launches transformed into considerable fear. Mullane and the other astronauts no longer thought NASA was infallible, but rather flying the shuttle was very risky. The strain of launches became difficult for him and his family to bear.

Mullane points out space shuttle always had difficulties due to limits of technology and the culture of NASA. On several flights there had been erosion of the "O" rings in the solid rocket boosters. The Morton Thiokol engineers thought the situation was under control until *Challenger*.

On Mullane's own STS-27 flight the underside of Atlantis was damaged by small pieces of the foam from the external tank during launch. Once in orbit the astronauts were assured by Mission Control that the situation was within accept-



able limits. An after flight analysis showed that over 700 tiles need to be replaced and there had been some damage to the aluminum skin. Fifteen years later a larger piece of foam would hit a critical section of *Columbia's* wing leading to a tragedy.

Many of the problems of NASA in the eighties were due to the capricious and autocratic George Abbey, the Director of the Flight Control Division. Abbey had joined NASA during Apollo and became the virtual ruler of Houston. Abbey was the most important factor in crew assignments and his favorite astronauts benefited from more and higher priority flights. The astronauts had expressed their concern over the Shuttle prior to *Challenger*, but Abbey quashed all dis-sension.

Mullane's views of Abbey are shared by many other astronauts and are detailed in the book *Dragonfly* by Bryan Burrough. Mullane also places much of the diminishment in the role of astronauts on John Young, who was Chief of the Astronaut Office. Although Young was the most experienced astronaut with six flights and landed on the moon as commander of Apollo 16, Young stifled criticism by the astronauts. Young acquiesced totally with Abbey and failed to bring astronaut concerns to higher management. Although Young was replaced by Daniel Brandenstein in April 1987, one year following *Challenger*, he remained with NASA in other supervisory positions until he retired in 2003.

Mullane had a distinguished carrier as an astronaut. He first flew on STS-41D which launched a communications satellite on the first flight of the shuttle *Discovery* in 1984. His other two flights, STS-27 in December 1988 and STS-36

Launch of STS-27 with Mike Mullane on Dec. 2, 1988

in February 1990, were for the Department of Defense. The details of the two missions remain classified in which large reconnaissance satellites were orbited. On both occasions he was the National Intelligence Medal of Achievement. He couldn't wear the medal since due to the highly secret nature of the missions it had to remain in the vault of the National Security Agency in Washington.

Mullane joyfully recounts the exhilaration of being in space. His descriptions of weightlessness are among the best written by a space fairer. The view through the shuttle windows of the earth was ever changing and on many nights Mullane would watch continents speed by from the cockpit windows. The camaraderie and rivalries among the crew members is described by many anecdotes.

Riding Rockets is a powerfully insightful memoir of a modern astronaut. Its honest and humorous appraisal of one of the most inspiring and dangerous occupations provides readers with a highly rewarding and fascinating experience.



STS-36 crew.