No small Step for Women: Nine years before 40 years ago when man first stepped on the moon in 1969, women tested to qualify for America's astronaut training program. As their stats and stories avow, thirteen wise women pilots were as well, if not better qualified than the seven wise men pilots, who would be America's first astronauts known as the Mercury 7. In general, women weighed less, ate less, used less oxygen, and would need less booster power to propel them into space than men.

The physical fitness testing regimen to select U.S. astronauts was in part developed by Dr. William Randolph Lovelace. He and renown pilot Jacqueline Cochran, the first American woman to break the sound barrier, founder of the WASP, and friend of Amelia Earhart, wanted to prove that women were equally qualified to be astronauts. Thus, in 1960, he privately invited pilot Geraldyn "Jerrie" Cobb to undergo the tests.

Cobb got her private pilot's license at 17, her commercial license at 18, and her flight instructor's rating shortly thereafter. She decided upon a career in aviation as a pilot, all but an impossible female dream in the 1950's. Still, Cobb went on to fly all types of aircraft worldwide including military aircraft and four-engine bombers to France. She was perhaps the most experienced high-performance propeller aircraft pilot of her day, male or female. She earned world records for speed, altitude, and distance and in 1960 had 10,000 flying hours compared to John Glenn's 5,000.

After Cobb passed the testing and became the first American woman to qualify for astronaut training, she and Dr. Lovelace publicly announced her test results at a news conference in Stockholm. Reporters from all over the world called. Cobb said they asked, "What were my measurements, my favorite color and why I wasn't married?" It has been written that Dr. Lovelace may have been ahead of his time in 1960 in regard to woman's place in space and in society. Perhaps. Albeit his tests would determine the pilots best qualified sans any gender bias.

Cobb, Lovelace and Cochran, began recruiting women pilots to test. Many were recruited through the Ninety Nines women pilot's organization. Twenty-five of America's top women pilots were selected. Secretly and independent of each other, they underwent four days of physical and psychological testing identical to the male pilots.

Lovelace tested their reflexes using electric shock. He shot ice water in their ears to freeze the inner ear and induce vertigo. He put them in an isolation tank filled with water to see how long they could endure before hallucinating. Some outperformed their male counterparts. Most men lasted 2-3 hours before they started hallucinating. Cobb lasted 9 hours 40 minutes. Thirteen female experienced pilots, several with more flight hours than the Mercury 7 passed the tests but did not, and could not, pass the male criterion.

In the early days of space program planning, President Dwight David Eisenhower wanted only jet test pilots considered. This eliminated all women and minorities. All jet test pilots were white males and NASA maintained this gender bias requirement.

Lyndon Baines Johnson forwarded the legislation that created NASA and was now head of the President's Space Council. His press representative Liz Carpenter drafted a letter for Johnson's signature to NASA's James Webb simply inquiring about spaceflight gender qualifications, thinking it would be good press for LBJ to "show"

support for the women. But instead of affixing his signature Johnson scrawled, "Let's Stop This Now!"

That summer of 1961, just before leaving for the next phase of training at the Naval Aviation Center in Pensacola, Fla., thirteen pilots (Geraldyn "Jerrie" Cobb, Myrtle "K" Thompson Cagle, Jan Dietrich, Marion Dietrich, Mary Wallace "Wally" Funk, Jane "Janey" Briggs Hart, Jean Hixson, Gene Nora Stumbough Jessen, Irene Leverton, Sarah Lee Gorelick Ratley, Bernice "B" Steadman, Geraldine "Jerri" Sloan Truhill, Rhea Allison Hurrle Woltman), who came to be known as the Mercury 13, who had given up their jobs and careers, left their parents, husbands and children all for the chance to go to space, received telegrams telling them not to come, their project was canceled. NASA unabashedly decided against including women in the program.

Cobb met with Vice President Johnson who told her, 'Jerrie if we let you or other women into the space program, we have to let blacks in, we'd have to let Mexican-Americans in, we have to let every minority in and we just can't do it'." Two years later in 1963, the Soviet Union sent the first woman into space.

Twenty years later in 1983, Sally Ride became the first female U.S. astronaut in space. Dr. Mae Jemison became the first black female (fifth black) U.S. astronaut four years later in 1988. At the space shuttle launch, February 1995, the seven living Mercury 13 were guests of astronaut Lt. Col. Eileen Collins. These women pilots watched as Collins stepped into the *Columbia* and soared into space as the first female pilot of a space shuttle: A giant leap for mankind and no small step for women.

Sources:

The Mercury 13, Martha Ackmann http://space.about.com/od/spaceexplorationhistory/a/mercury13.htm