

## **THE MERCURY 13**

**Five decades ago, women were considered too weak, too emotional, too, well, womanly, to participate in America's astronaut program. And, of course, they simply weren't qualified.**

**In June 1957, Geraldyn (Jerrie) Cobb's goal was set to the break the world altitude record for lightweight aircraft of 27,000 feet. She was hoping for 30,000.**



**She knew that at several miles up breathing became difficult, vision was impaired, and a pilot could slip into unconsciousness. She also knew that – as absurd as it seemed – she had to worry about her appearance as well. Unspoken social customs for women pilots dictated that she wear a dress and high heels under her protective clothing. So dressed, she flew to 37,010 feet.**



**Dr. W. Randolph Lovelace II, chairman of NASA's Life Sciences Committee, and Brigadier General Donald Flickinger of the Air Force helped design the medical testing procedures for the astronaut**



**candidates. Lovelace and Flickinger were interested in testing women for potential spaceflight.**

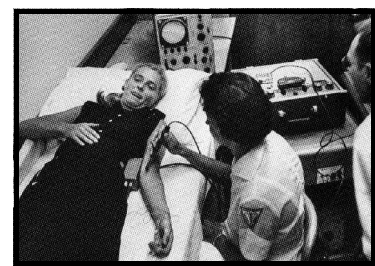
**After a chance meeting with Dr. Lovelace and General Flickinger just months after the press conference introducing the Mercury 7 astronauts, Jerrie Cobb became their test subject. When the press learned about Cobb's tests they dubbed her "America's first woman astronaut."**



**Flickinger approached NASA with the idea of testing women for their viability as astronauts. NASA was not interested. The space agency believed women were physically incapable of handling the demands of space. Flickinger and Lovelace, decided to test a woman as part of their own independent experiment. If their results proved that a woman scored well on the same tests that the Project Mercury astronauts underwent, Flickinger would again approach NASA with the data.**



**In February 1960, Jerrie Cobb began astronaut tests. For six days Cobb battled tilt tables, electrical stimulation to the nerves, three feet of rubber hose slithered down her throat, exhausting**



**physical endurance exercises, frozen ears, frozen hands, frozen feet, brainwave measurements, radiation counts, and the nightly dose of humility – barium enemas. In all, doctors scheduled a total of seventy-five tests to measure the range of her body’s capability.**

**Dr. Lovelace compared her scores with the Project Mercury astronauts, and initial indicators suggested that she had done very well. But he knew that NASA would view Jerrie Cobb’s exceptional test scores as a fluke and not representative of women pilots in general. He began compiling a secret list of women pilots who had racked up more than a 1,000 hours in the air, not an easy task in the 1960s, since women were not allowed to fly for the military and were not being hired by airlines. He eventually selected 12.**

**Jerri Sloan’s flying credentials: 1,200 flying hours, commercial pilot’s license, multi-engine rating, air-race honors, and experience flying B-25s.**



**Jan Dietrich and Marion Dietrich were identical twins. Jan became a flight instructor and corporate pilot, logging a phenomenal 8,000 hours flying time. Marion flew charters and ferried aircraft for various clients, piling up 1,500 hours.**



**Wally Funk got her first job at Fort Sill, Oklahoma, in 1959, at age 20, as a Civilian Flight Instructor of noncommissioned and commissioned officers of the United States Army. Still flying today, she has logged almost 20,000 hours – over 2 years in the air.**



**Gene Nora (pronounced Janora) Stumbough was an air race competitor. In 1962, after NASA refused to consider the “girl astronauts” she captured what at the time was (to her) the best possible job in aviation for a female. She flew as a sales demonstration pilot for the Beechcraft factory in Wichita, Kansas. Initially she flew as one of the Three Musketeers, an introductory formation flight through the contiguous 48 States. Only the Navy’s Blue Angels (1946) and France’s Patrouille de France (1931) are older formation flying units.**



**Janey Hart’s husband Philip Hart had been elected U.S. senator from Michigan. She earned her first pilot’s license during World War II, and later became the first licensed female helicopter pilot in Michigan. Even though she was 40 years old, the oldest woman to be invited for astronaut testing, Hart made the cut. Bea Steadman earned her private**



**pilot's license at 17 and her commercial rating at 21, and eventually earned the highest FAA license, the Airline Transport Pilot license.**

**Rhea Hurrle was a competitive air racer and charter pilot with more than 2,000 flying hours.**



**Sarah Gorelick had B.S. in Mathematics, with minors in Physics and Chemistry. She held a Commercial Pilots license, with Airplane Single and Multi Engine Land ratings, Single Engine Sea, Instrument, Rotor and Glider ratings.**



**Myrtle Cagle, known as “K” had 4,300 hours of flying time – more than some of the Mercury 7. She held a Commercial Pilots license, with Airplane Single and Multi Engine Land ratings, an Instrument rating and was a Certified Flight Instructor, Certified Flight Instrument Instructor and Certified Ground Instructor.**



**Irene Leverton tried to join the WASPs (Women's Air Force Service Pilots) at age 17 using fake id. When**





she was tested, she had built up 9,000 hours, more than any of the Mercury 7.

Jean Hixson, carefully listed all her qualifications, including her WASP experience, 4,000-plus flying hours, high-altitude flying, explosive decompression experience, low-pressure chamber indoctrination, graduate degree in education, specialization in science and mathematics from the University of Akron, and her study of Russian as a foreign language. Hixson emphasized the value of a teacher in space in capturing the imagination of the nation's schoolchildren – 25 years before Christa McAuliffe died in the Challenger explosion.



By the end of August, 1961, Randy Lovelace could confirm that 13 American women – the Mercury 13 – had passed the same tests as the Project Mercury astronauts.

Jerrie Cobb next took part in an experiment more psychologically challenging than any test the Mercury 7 encountered. The men's isolation test confined the astronauts to a silent, dark room for two or three hours. John Glenn's experience was typical. By



**feeling his way around the darkened chamber, Glenn located a desk and then discovered a writing tablet left in the desk drawer. With a pencil that he had tucked into his shirt pocket, Glenn scribbled eighteen pages, tracing one line to the next by sliding his finger along the paper. By contrast, Cobb faced the sensory isolation tank.**

**Jerrie Cobb's run in the tank shattered every previous record. Six hours in the water was thought to be the absolute limit of tolerance. Cobb remained in sensory isolation for nine hours and forty minutes, her run finally terminated by an observer.**

**Rhea Hurrle spent 10 hours in the tank before her run was stopped by a testing observer. Wally Funk remained in the tank until observers asked her to come out. In the report to Dr. Lovelace, Shurley wrote that Funk "gave no evidence of any approach to limits to her tolerance. Funk's total time in sensory isolation was ten hours and thirty minutes.**



**Jerrie Cobb passed all the tests the Project Mercury astronauts had taken, scoring as well as they had.**

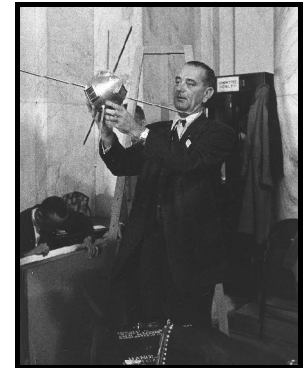


**Lovelace wrote to each of the Mercury 13 announcing that they would undergo the same tests on September 18.**

**On September 12, telegrams arrived at their houses. Randy Lovelace had received word from the Navy that NASA had no interest in the tests going forward. NASA determined that sending an American woman into space was not a priority. The official statement was, “NASA does not at this time have a requirement for such a program.”**



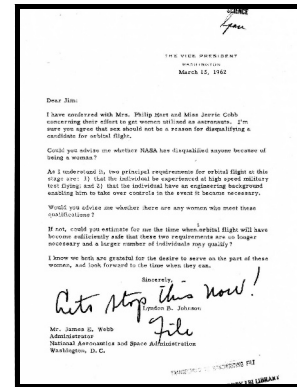
**Janey Hart dialed Liz Carpenter in Vice President Lyndon Johnson’s office. They had operated in the same national Democratic circles for years and shared a respect and fondness for Lady Bird Johnson. Carpenter arranged an interview for Hart and Jerrie Cobb. She urged the Vice President to give the women some encouragement and drafted a letter to NASA’s James Webb for Johnson’s signature. Her recommendations to Johnson were clear: hear the women’s petition, show them the letter to James Webb, and offer them some support.**





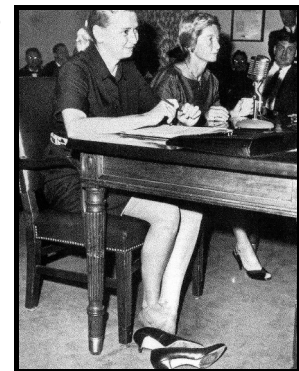
Johnson listened and said as much as he would like to help the cause of women astronauts, but the question just was not up to him to address.

Cobb and Hart never saw the letter to James Webb that Liz Carpenter had drafted. Johnson decided not to show it to them because he had no intention of signing it. After the women left, Johnson scribbled forcefully across the bottom of the page: “Lets Stop This Now!”



The House Committee on Science and Astronautics agreed to three days of hearings investigate alleged government discrimination against women in the nation’s space program.

Only Cobb and Janey Hart would speak for the Mercury 13. For NASA, the witnesses were George Low, director of spacecraft and flight missions in the Office of Manned Space Flight, and astronaut John Glenn.



On July 17, 1962, Jerrie Cobb told the committee, “We seek only a place in our Nation’s space future without discrimination. We ask as citizens of this Nation to be allowed to participate with seriousness and sincerity in

**the making of history now ... We offer you thirteen women pilot volunteers.”**

**John Glenn was asked, Would you support a program to train women astronauts? “I wouldn’t oppose it,” Glenn replied, but then he added, “I see no requirement for it.”**



**In October, 1962, the House Committee on Science and Astronautics concluded that “some time in the future consideration should be given to inaugurating a program of research to determine the advantages to be gained by utilizing women as astronauts.”**

**As far as NASA was concerned, the case of women in space was closed.**

**NASA had more questions to answer on June 16, 1963, when Soviet cosmonaut Valentina Tereshkova.**

**Tereshkova was a textile worker and an amateur parachutist. She was not a pilot. “I’ve fought the battle so**

**long, I can’t help feeling a little regret,” Jerrie Cobb said. “I know ... we could have done it. I’m glad a woman made it. But I’m sorry she’s not an American.”**



**Hoping that James Webb at least might be chagrined to see another space record go to the Russians, Cobb formally applied to the NASA astronaut training program a few weeks later. NASA rejected her application outright, stating that it had come in after the deadline and would not be considered.**

**In 1978, NASA selected thirty-five new astronauts from a pool of 8,079 applicants. They included NASA's first African-American, Asian-American, and six women astronauts. The women, all mission specialists, were selected for their scientific expertise and were not pilots or commanders who would actually fly the shuttle. Selected as NASA's first women astronauts were Anna Fisher, Shannon Lucid, Judith Resnik, Sally Ride, Margaret Seddon, and Kathryn Sullivan. But Sally Ride was the one who would make space history. When she lifted off the launch pad on June 18, 1983, and became the first American woman in space.**



**In 1998, President Bill Clinton announced that NASA had selected Eileen Collins to become the first woman to command the shuttle. A 42-year-old Air Force lieutenant**



**colonel, Collins slid into the left seat for her history-making flight in July 1999.**

**On the ground at Cape Canaveral, watching the liftoff of the space shuttle Columbia, were Jerrie Cobb, Janey Hart, Wally Funk, Jerri Sloan Truhill, Sarah Gorelick Ratley, Irene Leverton, B Steadman, and Rhea Hurrle Woltman. Collins had invited the surviving Mercury 13 women to be her personal guests at blastoff. She wanted them to share in the celebration because she genuinely believed the day also belonged to them. Without the Mercury 13, she declared, the country would not be celebrating women astronauts and the first female shuttle commander.**

