

## **See History in a New Way**

### **PREFACE**

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### **SCOPE**

The Topical Research Intern Program provides the opportunity for Servicemembers and DoD civilian employees to work on diversity/equal opportunity projects while on a 30-day tour of duty at the Institute. During their tour, the interns use a variety of primary and secondary source materials to compile a review of data or research pertaining to an issue of importance to equal opportunity (EO) and equal employment opportunity (EEO) specialists, supervisors, and other leaders throughout the Services. The resulting publications (such as this one) are intended as resource and educational materials and do not represent official policy statements or endorsements by the DoD or any of its agencies. The publications are distributed to EO/EEO personnel and selected senior officials to aid them in their duties.

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### **INTRODUCTION**

To see history in a new way, we must uncover those "hidden" stories of women's contributions throughout our nation's past dating back to colonial times. Accounts of women's roles in American history and their contributions to the nation have been notably absent or minimized in portrayals that depict them as secondary characters in a supporting role to men. The recording of the westward expansion is a prime example of historical accounting that has suffered from these omissions and incomplete studies. Women's involvement in our nation's wars has also needed retelling, especially during the Revolutionary War and the Civil War.

# COLONIAL DAYS

Since colonial times women have contributed in significant ways and performed work customarily reserved for men. Beginning in 1740, Eliza Lucas Pinckney, a 17-year old, managed her father's 5000-acre plantation in the Carolinas when he was called back to his position as lieutenant governor of Antigua. She experimented with new crops and successfully grew indigo, a seed used to make blue dye. Indigo became the second most important export for the Carolinas. (3:8-9)

Pinckney's work was not considered extremely unusual in the colonies. Widows often continued to farm the land owned by their husbands or manage their shops. Although not numerous, women shopkeepers and innkeepers were not uncommon. Almost 100 women owned printing and publishing companies during the early colonial period. (3:9)

## EIGHT PRINTING WIDOWS OF THE THIRTEEN COLONIES

Women usually inherited their printing presses from their husbands. The following eight illustrate the stories of some of these women printers. (12:89)

***Dinah Nuthead.*** After her husband died in 1695, she became the first woman printer in America, in Annapolis, Maryland. (12:89)

***Anne Smith Franklin.*** Benjamin Franklin's sister-in-law, she continued her husband's printing business after his death. In 1758, her younger son started the first newspaper in Rhode Island, the *Newport Mercury*. After his death in 1762, his mother published the paper. (12:89)

***Cornelia Smith Bradford.*** In 1742, she continued her husband's printing and bookselling business. She published the *American Weekly Mercury* with a male business partner for a while, and later managed it by herself. (12:89)

***Anna Catherina Maul Zenger.*** She continued her husband's business after his death in 1746. (12:89)

***Elizabeth Timothy.*** In 1738, she became the first woman in America to edit a newspaper, the *South Carolina Gazette*. After running the paper for several years, her son Peter took over. His widow managed it after he died. (12:89) ***Ann Catherine Hoof Green.*** After her husband died, she managed the majority of government printing in Annapolis, Maryland and his newspaper, the *Annapolis Gazette*. (12:89) ***Clementina Rind.*** She published the *Virginia Gazette* from 1773 until her death in 1775. (12:89) ***Margaret Draper.*** After her husband died in 1774, she continued publishing the *Boston Newsletter*, the first paper in Massachusetts. She continued the paper until after the British evacuated Boston, giving the paper the distinction of being the last paper in that colony (12: 89)

## **BREADWINNERS OF EARLY AMERICA**

To support their families, women performed many jobs and ran businesses traditionally reserved for men:

***Anna Jones***. After the death of her husband, she continued a distilling business in Massachusetts. (12:90)

***Ann Page***. In Pennsylvania, she made cylindrical items--mortars and pestles, bench screws, and spindles, and she made and mended spinning wheels. (12:90)

***Mary Emerson***. She silvered mirrors, worked as a carpenter, made and sold new and used furniture in Pennsylvania. (12:90)

***Elizabeth Franklin***. The wife of Benjamin's brother John, she continued her husband's business of making and selling soap and candles after he died. (12:90)

***Elizabeth Russell***. After her husband died, she continued his coach-making business. (12:90)

***Ann Smith***. In 1773, she began a bookstore but it failed after her new husband began managing it. (12:90)

***Sarah Jewell***. She continued making ropes in Philadelphia after her husband died. (12:90)

***Mary Salmon***. She shod horses in Boston. (12:90)

***Mary Cowley***. She worked as a tanner and leather worker in Philadelphia. (12:90)

***Hannah Beales***. She continued her father's net-making business in Philadelphia. (12:90)

***Mary Jackson***. She made and sold copper and brass pots and kettles in Boston. (12:90)

***Martha Turnstall Smith***. In Long Island, she managed a whaling company, going out in the boats herself. (12:90)

***Cornelia Lubbetse DePeyster***. In New York, she imported the first salt to the colony. (12:90)

## **WESTWARD EXPANSION**

Writers of traditional western history have for the most part ignored women. They typically have written about expeditions, gold rushes, ranching, farming, and railroading

activities and related public events. Women's activities were relegated to a supporting role and were not considered a central part of the events. (5:1)

John Mack Faragher's 1979 book *Women and Men on the Overland Trail* has been credited with the beginning of historical accounting of women's contributions through personal accounts, diaries, and letters. (5:4) Where scholars had ignored these accounts in favor of the more sensational stories provided by men of their wild west experiences, historians then began to study history from a perspective that included women. (5:1) The westward expansion was no longer viewed as just a movement of rugged men who fought Indians and explored and settled the West. (5:4)

The perspective of women and their contributions are important to our understanding of western history. The settling of the West is an important era, as some historians believe it provided a strong foundation for much of our nation's value system, and that the frontier infused democratic ideals into the nation. (5:2)

The "invisible" women probably had more to do with influencing the men's behavior and providing a mutually supportive environment for the "individualism" that emerged in the West than was previously thought. (5:4)

Families were the primary focus of the movement west, with the woman forming the center of this focus. Extended families often moved together with other family members arriving from other counties and states. Single men became part of another family and worked as extra labor rather than moving a wagon alone. (7:31)

Women were necessary for a successful overland trek and for settling the land when they arrived. (7:3-4) Farm wives produced goods for family needs and earned money for the family by selling some of the goods. Robert L. Griswold, author of the article "Anglo Women and Domestic Ideology in the American West in the Nineteenth and Early Twentieth Centuries" writes that miner's wives

cooked, cleaned, hauled water, gardened, cared for livestock, chopped wood, served, canned, slaughtered, cured meat, made candles and soap and if poor, washed, served and cooked for single men. (2: 8)

Even though women did much of the same work as men, they received no special recognition for it. When men left their wives and families to travel the Overland Trail and were gone for two years or longer, a woman not only completed her domestic responsibilities, but tended the farm, and in some cases managed a mill or a store. Out of necessity, women had to be forceful, flexible, and capable. (2:15,19)

When a woman became a widow on the Overland Trail, she continued with her children and filed her claim alone. It was not common for a widow to place her wagon and her family under the protection of another family. It was expected that she would direct the family enterprise independently when necessary. Despite their ability to do the same

work as men when necessary, women hung on to their traditional roles in society. (7:4,15)

Women anguished over leaving their homes and experienced much loneliness in leaving parts of their families behind. In research of 103 diaries of women who traveled West, it was found that 63 percent talked of the difficulties of separation from parents and siblings. They watched many of their children and husbands drown while crossing the rivers or die in one of the many accidents that were so common on the trail., and eleven percent of the diaries described deaths of fathers, husbands, and brothers by drowning. (6:85-86)

Even though reports indicate more men than women died on the trail, infant and maternal mortality was a frequent occurrence along the trail. Very few women who made the trip were unmarried and approximately 20 percent were pregnant or had babies along the way. (7:4-6,86)

Giving birth along the Trail was not easy as wagon trains often only stopped temporarily for the birth before hastening on. Traveling in the wagons was not a pleasant experience under the best of circumstances and could be especially tortuous for women and their newborn babies. (7:39)

Diseases were also common killers along the Trail. The majority of travel on the Overland Trail occurred during the cholera epidemic. (7:15) In their journals, women recorded diligently the number of graves they passed each day along with the number of miles traveled:

July 5, passed 9 graves...made 18 miles. July 6, passed 6 graves...made 9 miles. July 11, passed 15 graves...made 13 miles. July 12, passed 5 graves...made 15 miles. (7:112)

Women's letters have provided a different perspective on the relations with Indians along the trail. Even though the women were always afraid of the Indians, they generally described encounters with them as useful opportunities to acquire information about the trail and for trading clothing for fish and meat when their husbands were not successful in buffalo hunting.

Women organized and civilized the communities. Women settlers in the late nineteenth century established a number of organizations to civilize the new state of Kansas. Some of the organizations they formed were the Women's Relief Corps, the American Association of University Women (AAUW), the Kansas Federation of Women's Clubs, and the Women's Christian Temperance Union. (2:25,155)

## **FOURTEEN WOMEN WHO WERE FIRST ON A "MAN'S JOB"**

**Sadie Orchard.** She was one of the first women to drive a stagecoach on a regular basis in the Wild West. She always dressed stylishly, as an English woman on a hunt. Instead of a gun, she carried a bullwhip. She was apparently effective since she boasted that none of her stages were ever robbed. (12:99)

**Mary Fields.** She was probably the first woman to drive a U.S. mail coach, taking the job in the 1880s when she was in her sixties. She had previously worked as a freight hauler. (12:99)

**Emma Nutt.** In 1878 she became the first woman telephone operator. Women had been considered incapable of handling the sophisticated technology. She retired after 33 years as the chief operator. (12:99)

**Marie Luhring.** With a Master of Engineering degree from New York's Cooper Union in 1922, she was the first woman automotive engineer and the first woman voted an associate member of the Society of Automotive Engineers. (12:100)

**Alice L. Marston.** Working at an airport in Concord, New Hampshire, in the 1930s, she was most likely the first woman dispatcher. She met planes in sub-zero temperatures with snow six-feet deep on the runways. (12:100)

**Katy Margerum.** The first woman to supervise air freight operations, she worked for American Airlines in El Paso, Texas. (12:100)

**Lynne Degillio.** At Kennedy Airport, she was the first woman air traffic controller. (12:100)

**Rachel C. Hall.** In her early fifties, in 1969 she became the first woman to work in the final repair station at Chrysler Corporation's assembly plant in Hamtramck, Michigan. (12:100)

**Joni E. Barnett.** She was the first female athletic director of a major university when she was placed in charge of physical education at Yale University in 1973. (12:100)

**Josephine Figliolia Striano.** In New York City in 1977, she received the first master plumber's license given to a woman. (12:100)

**Candy Dykstra.** The granddaughter of a former Ford Motor executive, she was the first woman to obtain a Ford Motor Company dealership. Profits increased 600 percent over that of the previous owner. (12:100)

**Libby Howie.** In 1974 she became the first female art auctioneer for Sotheby in London. After two years, she took charge of the nineteenth- and twentieth-century prints. (12:100)

**Deirdre Hickey.** In 1979, as a twenty-four-year-old, she became the first woman conductor of yard, freight, and passenger trains while employed by the Long Island Railroad, the nation's largest commuter line. (12:100)

## UNCLE SAM'S FIRST FEMALE EMPLOYEES

The U.S. government hired large numbers of women in the 1860s. Many women worked cutting paper bills in the Treasury Department. The Treasury Secretary General Francis E. Spinner stated that "A woman can use scissors better than a man and she will do it cheaper." The Civil Service Act of 1883 enabled women to compete with men for government jobs. (12:102)

**Clara Barton.** She is credited as the first female to have a white-collar government position. She began as a clerk-copyist at the Patent Office in 1854 and later founded the American Red Cross. (12:102)

**Mrs. Stephen Brown.** She was considered the "greatest living expert" at identifying damaged currency. An Iowa farmer sent the Treasury Department a brown mass of material claiming it was the remains of six \$5 bills eaten by his goat. In two hours Brown determined that he was telling the truth and mailed the farmer six new bills. (12:102)

**Sophia Holmes.** She was the first Black woman ever to receive an official appointment in the federal government. As a reward for finding and securing \$200,000 in currency in the trash while cleaning in the Treasury Building, she was upgraded from charwoman to "janitress." Her annual salary of \$660 was still much less than the lowest ungraded man. (12:102)

**Mary Francis Hoyt.** She made the highest score of any person on the first civil service examination in 1883. She became a clerk that same year with a salary of \$900. (12:102)

**Alice B. Sanger.** In 1890, as a stenographer, she was the first woman to work at the White House. (12:102)

**Margaret W. Young.** Her unusual job required her to sign the names of President William Taft and President Theodore Roosevelt to official documents. She signed approximately 200,000 documents by 1911. Her name was always added below their name. (12:102)

## FEMALE INVENTORS

Ethlie Ann Vare and Gregg Ptacek in their book *Mothers of Invention* detail the inventions of a number of women, some whose inventions were credited to men. Following are some of these women and their inventions:

**Hypatia.** Born in Alexandria in A.D. 370, she invented the plane astrolabe, an instrument that measures positions of the sun and stars. Her other inventions include a device for calculating the level of water, another which distills water and the hydrometer which calculates a substance's specific gravity. (11:24-25)

**Maria Gaetana Agnesi.** Born in Milan in 1718, she developed a mathematical formula to calculate the volume of a cube. She also wrote the text which led to the beginning of integral calculus. (11:29)

**Mrs. Samuel Slater.** Although Mrs. Mary Kies of Connecticut is incorrectly given credit as the first American woman to receive a patent, Mrs. Samuel Slater received the first patent in 1793 for cotton sewing thread. Mrs. Kies received a patent on May 5, 1809 for "a method to weave straw with silk and thread." (11:30) Mrs. Slater's achievements are overshadowed by those of her famous husband but she is believed to be responsible for his successful mill. (11:31)

**Bette Nesmith Graham.** To hide her typing mistakes, she developed a substance out of tempera waterbase paint and an artist's brush to create what became a multi-million dollar business, Liquid Paper. She was worth \$50 million when she died. Before she marketed the product, she used this substance secretly for five years because it was considered deceptive of a typist's abilities. (11:38-39)

**Melitta Bentz.** She created the drip coffee maker in 1908 in Germany. (11:42)

**Marion Donovan.** She developed the disposable diaper in 1950 in New York from a shower curtain and absorbent padding. She also invented a skirt hanger and an elastic zipper pull. (11:43-44)

**Margaret Knight.** She patented the brown paper bag machine in 1870 that has been updated over time but remains in use today. She also patented 26 other inventions such as window sashes, shoe-cutting devices, automotive valves, rotors and engines. (11:49-50)

**Gladys Hobby.** Although Sir Alexander Fleming discovered penicillin, he never pursued its capabilities. Hobby read a 1940 study of Florey, an Australian physiologist and Chain, a German biochemist who created the first version of penicillin 10 years after Fleming's discovery. With Dr. Martin Henry and biochemist Karl Meyer, Hobby began to elaborate on the work of Florey and Chain. Hobby, Henry and Meyer were the first to cure a patient with a penicillin injection and went on to begin developing the first source of penicillin in the United States. (11:118-119)

**Anna Wessel Williams.** She created a stronger diphtheria antitoxin than one available at the time and made it possible to be mass produced. This antitoxin stopped the diphtheria epidemic and virtually eliminated the disease. (11:123)

## **DISCOVERIES CREDITED TO MEN**

SMALLPOX INOCULATION. Edward Jenner is credited with the smallpox vaccination and originated the term "vaccination" in his 1798 research paper but **Lady Mary Montagu** is the first one to use a forerunner of the vaccination that dramatically reduced the number of deaths from smallpox. In 1717 she observed old women in Turkey insert a small amount of smallpox matter into the veins of people with a large needle to protect against smallpox. Upon her return to England, she had her daughter inoculated. Many others were inoculated and the death rate dropped from 30 percent to 2 percent. (11:206-208)

**Mrs. Catherine Littlefield Green.** Vare and Ptacek write that Eli Whitney developed the cotton gin that was actually "conceived, perfected and marketed by Mrs. Catherine Littlefield Greene." (11:15)

Accounts differ on how much Mrs. Greene contributed to the invention. Some report that Whitney built the device after she suggested it would be helpful on the plantation and some report that Mrs. Greene gave Whitney a full set of drawings that depicted her idea. Vare and Ptacek report that records do exist to show Mrs. Greene told Whitney that his defective prototype could be improved by replacing the wooden teeth with wire ones. This improvement exists today. (11:204-206)

MARITIME SIGNAL FLARES. Lieutenant E.W. Very is credited with this invention although he only improved slightly the delivery system of the signal after the device had been marketed in America and Europe by **Martha J. Coston**. She had improved and patented the signal flare created by her husband. Coston unsuccessfully spent her life trying to have the name changed to the Coston pistol from the "Very pistol," the name used today. Vare and Ptacek report this signal was central in helping the North win the Civil War. It allowed battleships to send important messages over long distances and prevented and identified shipwrecks. (11:209- 212)

X and Y CHROMOSOMES. Edmund D. Wilson is credited with the discovery of the X and Y chromosomes but it was really **Dr. Nettie M. Stevens** who identified them in 1905. Wilson was conducting his research at the same time as Stevens but he wasn't as detailed as Stevens in defining the chromosomes. Stevens' findings were not accepted but Wilson duplicated her research and confirmed her findings after her death in 1912. Vare and Ptacek report that "Nettie Stevens isn't even mentioned in the multivolume *Dictionary of Scientific Biography*." (11:213-214)

DNA. **Rosalind Franklin**, a microchemist, was the first person to discover the structure of the DNA molecule but as a female Jew in an all-male scientific organization, her colleagues, Maurice Wilkins, James Watson and Francis Crick, refused to give her credit. Wilkins gave Franklin's data to Watson and Crick without her permission and would not allow her to attend their meetings to discuss her results. Wilkins would not accept females in the doctoral program he supervised as late as the 1970s. Franklin was unable to share in the 1962 Nobel Prize with them because she died of cancer in 1958, and only living people can receive a Nobel Prize. Not only did she discover the helical structure of

DNA, she showed Watson the mistakes in his original double-helix model which led to his award-winning conclusions. (11:214-216)

"JUMPING GENES." In 1951, **Barbara McClintock**, a geneticist, found that genes can randomly move, even from cell to cell, and are not situated on chromosomes in a straight line as was believed at the time. Prior to this discovery, she had received numerous honors for her work in genetics but her conclusions about "jumping genes" were rejected for almost thirty years. Her work began to be recognized in 1981 and she won the Nobel Prize in Medicine and Physiology in 1983 at the age of 81. Commenting on the rejection of her findings, the Nobel Prize award committee stated that only about five geneticists in the world could understand them because of their complexity. (11:216-218)

PULSAR. Antony Hewish, a Cambridge University astronomy professor accepted the Nobel Prize in physics in 1974 for discovering the pulsating star or pulsar, but his graduate student **Jocelyn Bell** actually discovered it in 1967 at the age of 24. Hewish supervised Bell and furthered her research. Despite substantial documentation that proved Bell discovered the pulsar, the Nobel Foundation ignored her. Her findings were published in 1968 but no one could explain how it occurred. Even though no one has seen a pulsar, over 300 have been recorded since Bell's first report. When scientists can determine the direction of pulsars, they will be closer to assessing how old the universe is and its origin. (11:219-220)

## **DISCOVERIES MADE BY WOMEN WHO DID NOT RECEIVE CREDIT**

FERTILIZER. By the 1920s the process of converting nitrogen gas into fertilizer was widely used in the United States, but **Madame Lefebvre**, patented the process as early as 1859 in England. It was overlooked at the time and this French woman was never given credit for this discovery. (11:212-213)

ORE EXTRACTION. **Carrie J. Everson** invented the process of extracting precious metal from waste. She patented the oil flotation process in 1886. These same separation fundamentals are used in mining today. This landmark discovery is largely overlooked in the history of mining in favor of more sensational stories and characters. (11:221-222)

## **FATHERS OF FEMINISM**

Advocates of women's rights were not all women. Sylvia Strauss's book "*Traitors to the Masculine Cause:*" *The Men's Campaign for Women's Rights* is filled with accounts of men who supported women's fight for equality. The following excerpts are only a few of those accounts.

**Jonathan Swift** (1667-1745)

Jonathan Swift, a satirist of eighteenth-century life, sympathized with women. He believed women's low status was a result of their failure to be educated. He stated that men were contemptuous of women because of their inadequacies caused by this lack of education. Swift also disapproved of the double standards of morality imposed on women. (9:8-9)

***Tom Paine*** (1737-1809)

Even before Tom Paine published *Common Sense* or *The Rights of Man*, he spoke out against the restrictions on women and believed that women should enjoy the political rights being fought for in America and in Europe. He believed women should work toward equality. He wrote *An Occasional Letter on the Female Sex* (1775) in which he sympathized with the inferior status of women, argued against husbands taking advantage of wives and wrote of the unique difficulties experienced by single women. (9:9-10)

Paine wrote the *Letter* soon after his marriage to Elizabeth Olive ended. Even though he was legally entitled to his wife's property and whatever she might acquire after the separation, he refused to invoke his rights. The separation agreement stated that she should be treated as a single woman with the right to retain her property and any future earnings. (9:10)

***John Stuart Mill*** (1806-1873)

Sylvia Strauss wrote that John Stuart Mill "was without doubt the most influential of all the male feminists." (9:28) She says that his most significant work, *The Subjection of Women* began with the concept that "married women were the last legal slaves." He attributed many of his thoughts to conversations with his wife, who died in 1858, although the book was written in 1861 and published in 1869. Mill stated his feminism did not begin with his wife, but believed his interest in feminism is what attracted her to him. (9:28-29)

One of his letters to her after they met in 1830 included the following statement on the subject of marriage:

And the truth is that this question of marriage cannot properly be considered by itself alone. The question is not what marriage ought to be, but a far wider question, what woman ought to be. Settle that first, and the other will settle itself. Determine whether marriage is to be a relation between two equal beings, or between a superior and an inferior, between a protector and a dependent and the other doubts will easily be resolved. (9:30)

***George Jacob Holyoake*** (1817-1906)

In his biography, *Sixty Years of an Agitator's Life*, published in 1893, Strauss says George Jacob Holyoake claimed to be the father of the women's movement, and that none

of the women feminists of the twentieth century challenged that claim. Holyoake wrote that as of 1840 no evidence existed of a women's movement. (9:3)

In 1840, married women in England and the United States did not have legal status. Strauss writes,

They could not sue nor be sued; could not sign a contract nor make a will; could not own property in their own right. The woman was obliged to live wherever her husband chose. Her wages were not her own; her husband had the right to collect his wife's wages from her employer, and anything she purchased with her earnings belonged to him.... The husband had a legal right to imprison his wife and to chastise her "with a stick no thicker than his thumb." (9:3-5)

Holyoake questioned women's failure to organize against their lack of status. He encouraged women to take charge, to document their legal restrictions, and to organize to work toward righting these wrongs. He continually encouraged women to organize in his journal, *The Free Press*. (9:5)

**Richard M. Pankhurst** (1838-1898)

After Richard M. Pankhurst became a lawyer in 1867, he immediately started working for women's suffrage. Strauss credits him as the "architect of militant feminism." (9:196) He wrote the bill to give women the right to vote in 1870 in England and also was largely responsible for the Married Women's Property Act of 1870, a weak version, and a stronger one which passed in 1882 that enabled married women to keep their personal earnings. Even though he had pledged to remain single to work for reform issues, he married Emmeline Goulden in 1879. After they were married, she immediately became a member of the Married Women's Property Act committee. He also structured a series of reading materials for her. (9:199-200)

## WOMEN IN SPACE

In 1961, the "Mercury 13" were women aviators selected to test their physical and psychological endurance to the unknown requirements of spaceflight. Jim Cross, a Los Angeles filmmaker who coproduced a *Dateline NBC* report on the group says he believes NASA never planned to put the women into space. Kevin Spear in his article "Bizarre Tests Marked Training for 'Mercury 13' Women" writes that Mary Funk, one of the 13, believes the space agency dropped them because the women were performing as well as the men. (8:A-12)

The women were put through numerous tests. **Mary 'Wally' Funk** floated in an isolation tank for 10 1/2 hours to the dismay of doctors who expected her to hallucinate. She says this experiment was not difficult. She just fell asleep. To check her balance, 28-year old **Jerrie Cobb**, a pilot with 7,000 flight hours, had ice water shot into her ears. (8:A-12)

Dr. W. Randolph Lovelace II, who tested the "Mercury" women and the Mercury men, learned that Russia was going to send a woman into space and wanted to determine whether women could endure the physical demands of space. The 26 women were trained in secret with thirteen passing the numerous physical exams required of astronauts. The study was cancelled suddenly and the all-male "Mercury Seven" went on to achieve fame as the first Americans in space. In 1963, the Russians were the first to orbit a woman, **Valentina Tereshkova**, a factory worker and parachutist. She was in orbit alone for three days. (10:6A)

**Jerri Truhill**, one of the tested women pilots says one top NASA official said he'd "just as soon orbit a bunch of monkeys than a bunch of women." She says "That's one of the nicer things that was said." (10:6A)

The women appealed to Congress but were unsuccessful and turned to other careers. Truhill formed a company that tests sophisticated aircraft systems such as infrared technology and radar that tracks terrain. **Gene Nora Jessen** became a Beech Aircraft demonstration pilot in 1962. Later, she became president of the Ninety-Nines Inc., International Women Pilots, an organization begun by Amelia Earhart. **Jerrie Cobb** was the only one of the original group to complete all of the training in the 1960's. She became a pilot in the Amazon jungle. For the last several years she has flown medical and food supplies to people in the South American rain forest. (4:A-1)

Physicist **Sally Ride** was the first American woman to go into space in 1983. Twenty-two other women followed her. Air Force **LtCol Eileen M. Collins** became the first female shuttle pilot when Discovery lifted off on February 3, 1995. Collins was second in command. (1:4)

Collins, and not NASA, invited the 11 living Fellow Lady Astronaut Trainees (FLATs) to watch the launch of her space flight. Seven attended. Sarah Ratley, 62, an accountant said, "She's carrying out our dreams and our wishes." (10:6A)

## CONCLUSION

These stories of women reflect only a small sample of the many contributions women have made throughout our nation's history that have largely gone unnoticed. They illustrate women's strength and tenacity against the obstacles they have encountered, the divergent perspective they bring to issues, and their unique abilities. These are qualities that have added to the richness of our nation and cannot continue to be overlooked or undervalued. We must always strive to "see history in a new way" to ensure that future generations are inspired by women's accomplishments.

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