

They Forged A Path For Us

Getting to Know Some of the Women Aviation Trailblazers

Theresa Kraus, Ph.D.
FAA History Office,
terry.kraus@faa.gov

www.faa.gov/about/history



•Federal Aviation
•Administration



Can Women Fly?

- When women first took to the skies in the early 1900s, popular opinion maintained that the female constitution was too panic-ridden and flighty to become pilots.
- The attitude that flying was socially inappropriate and even physically impossible for women was common.
- Orville Wright rejected all female applicants for pilot training on the grounds they were notoriety seekers.

“If God had wanted a woman to fly, He would have given her wings.”



Can Women Fly?

Dr. L. H. Bauer, the founder of American aviation medicine, the first federal aviation medical examiner, and editor of the *Journal of Aviation Medicine*, advised aviation examiners to inform female pilots that they should not fly during, immediately before, or immediately after their menstrual periods.

He wrote that this fact of biology was the cause of a number of recent crashes.



Can Women Fly?

Many aircraft manufacturers in the late 1920s hired women as sales representatives and flight demonstrators. The reasoning was that if a woman could fly an airplane it must be safe and easy.



Can Women Fly?

There is the world-old controversy that crops up again whenever women attempt to enter a new field. Is woman fitted for this or that work? It would seem that a woman's success in any particular line would prove her fitness for that work, without regard to theories to the contrary

- Ruth Law, 1918



Blanche Stuart Scott – The Flying Tomboy



“It doesn’t take nerve. It is just a love of excitement that makes a person want to fly. That isn’t bravery.”

On September 2, 1910, Scott made her first solo flight in a Curtiss Pusher at Hammondsport, NY. According to some accounts, however, the flight was an unintentional one caused by wind lifting her taxiing aircraft off the ground.



Bessica Raiche



“... when the plane was ready for flight it did not occur to me that my trip skyward might be my passport to eternity. Adventure was calling me and I readily obeyed.”

On September 16, 1910, Bessica Faith Curtis Medlar Raiche, M.D., having had no training, made a solo flight in an airplane that she and her husband had built at their home in Mineola, NY. The New York Aeronautical Society presented her an award on October 13 to recognize her as “the nation’s first intentional solo by a woman.”



Harriet Quimby



“The men flyers have given out the impression that aeroplaning is very perilous work, something that an ordinary mortal should not dream of attempting. But when I saw how easily the man flyers manipulated their machines I said I could fly.”

The first American woman to earn a pilot's license, license #37, on August 1, 1911, sanctioned by the French Fédération Aéronautique Internationale and administered by the Aero Club of America.



Ruth Law



"Women have qualities which make them good aviators, too. They are courageous, self-possessed, clear-visioned, quick to decide in an emergency, and usually they make wise decisions."

She received her pilot's license in November 1912. After the United States entered World War I in April 1917, she campaigned unsuccessfully for women to be allowed to fly military aircraft.



Katherine Stinson – The Flying Schoolgirl



“I have found that women are not only just as much interested as men are in flying, but apparently have less fear than the men have. At least, more women than men asked to go up with me. And when I took them up, they seemed to enjoy it.”

In 1912, she became the fourth woman in the U.S. to obtain her pilot’s license. With her mother, she opened a flight school in San Antonio, Texas.



Bessie Coleman – Queen Bess



“The air is the only place free from prejudices.”

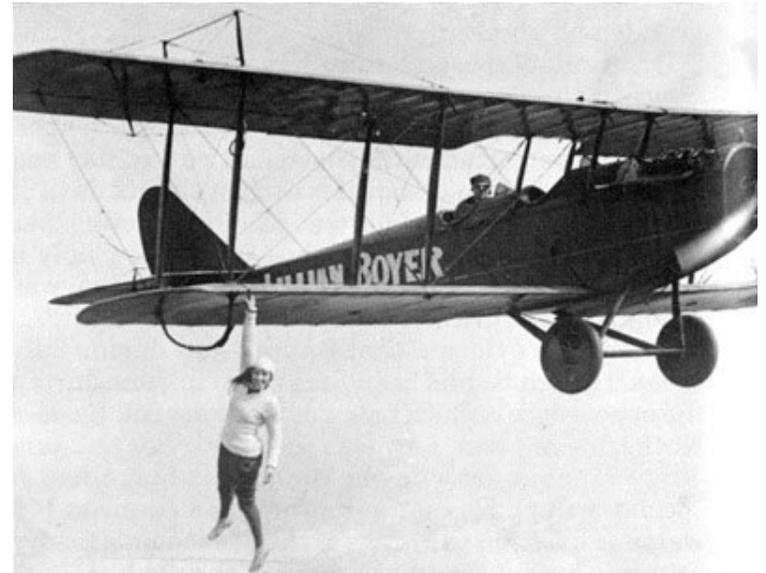
On June 15, 1921, she became the first woman of African-American descent to earn an international aviation license from the Fédération Aéronautique Internationale.



Lillian Boyer



When asked how she learned to do stunts, she simply replied "Just Practice."



Amelia Earhart



“Please know I am quite aware of the hazards. I want to do it because I want to do it. Women must try to do things as men have tried. When they fail their failure must be but a challenge to others.”

On May 15, 1923, she became the 16th woman in the United States to be issued a pilot's license by the Fédération Aéronautique Internationale. Earhart was the first female aviator to fly solo across the Atlantic Ocean. She set many records, wrote best-selling books about her flying experiences, and was instrumental in the formation of The Ninety-Nines, an organization for female pilots.



Phoebe Fairgrave Omlie



“In the seven years I have been flying, I have found that the woman plays a greater part in aviation than anyone suspects.”

In 1927, she became the first woman to obtain a U.S. federal pilot and mechanic certificates



Louise Thaden



“There is a decided prejudice on the part of the general public against being piloted by a woman . . .”

In 1929, she became the first pilot to hold the women's altitude, endurance and speed records in light planes simultaneously.

In 1936, Thaden and her co-pilot Blanche Noyes won the Bendix Trophy Race in the first year women were allowed to compete against men.



Blanche Noyes



“I went to a dinner party one night. People were talking about Lindy’s accomplishment, but I thought it was a small thing to deserve so much attention. Now I understand how great it was.”

Taught how to fly by her husband, she soloed her first plane in February 15, 1929, and earned license in July. She became the first women to be hired by a federal agency to fly airplanes.



Powder Puff Derby

During the first National Women's Air Derby in 1929, women flying the race faced "threats of sabotage and headlines that read, 'Race Should Be Stopped.'"

Louise Thaden defeated her colleagues in the derby – a transcontinental race from Santa Monica, California, to Cleveland, Ohio. Twenty women were entered in the race.



Ellen Church



“Give me a plane anytime. There are not turns or careless drivers to worry about on the airway.”

In 1930, Church, a pilot and nurse, who was unable to secure work flying proposed to airline executives that women be allowed to act as hostesses on planes. She was hired on a three-month trial basis by Boeing Air Transport and selected the first seven flight attendants for airlines.



Helen Richey



“Flying isn’t physically tiring. You just have know your air and navigation”

The first woman to be hired to fly a commercial airline – Pennsylvania Central Airlines in 1934.



Eleanor Roosevelt



“This is not a time when women should be patient. We are in a war and we need to fight it with all our ability and every weapon possible. Women pilots, in this particular case, are a weapon waiting to be used.”

She lobbied her husband to advocate for both women and minority pilots. She supported the Civilian Pilot Training Program and allowing Black pilots to fly in the military.



Civilian Pilot Training Program

On June 27, 1939, President Franklin D. Roosevelt signed the Civilian Pilot Training Act of 1939 into law.

The law specifically contained a provision that "none of the benefits of training or programs shall be denied on account of race, creed, or color." Training remained mostly segregated. The CPTP graduated approximately 2,000 black pilots.

Four women's colleges initially participated, and women were enrolled at other male-dominated schools at a ratio of one woman for every 10 men. the CPTP trained around 2,500 women by mid-1941, and many of them became Women Airforce Service Pilots.



Willa Brown



“When I whipped my airplane through the designated spins, spirals, figure eights, verticals, and passed the written test last month to get a private pilot’s license, I was overcome with joy . . .”

Her determined efforts on behalf of black aviators and relentless advocacy to allow black pilots into the Army Air Corps led to the organization of the 99th Pursuit Squadron, desegregation of Civil Air Patrol units, and, ultimately desegregation of the military.



First Female Controllers



During World War II, women entered the ranks of air traffic controllers and aircraft communicators in large numbers to replace men who joined the war effort.

By late 1942 women comprised approximately 40 percent of the controller trainees.



Women Airforce Service Pilots

1942 - Nancy Harkness Love and Jackie Cochran organize women flying units and training detachment

1943- Love's and Cochran's units are merged into the Women Airforce Service Pilots and Jackie Cochran becomes the Director of Women Pilots

1944 - WASPs flew more than 60 million miles before the program ended in December 1944, with only 38 lives lost out of 1830 volunteers and 1074 graduates -- these pilots were seen as civilians and were only recognized as military personnel in 1977



Jacqueline Cochran – The Speed Queen



“I have found adventure in flying, in world travel, in business . . . Adventure is a state of mind - and spirit.”

She founded the WASPS. In 1953, she was the first woman to break the sound barrier. At the time of her death in 1980, she held more world aviation records than any other pilot, male or female.



Hazel Ying Lee



“I held a moment in my hand, brilliant as a star, fragile as a flower, a tiny sliver of one hour. I dripped it carelessly, Ah! I didn't know, I held opportunity.”

A dual American-Chinese citizen, she earned her pilot's license in 1932 in the U.S. She volunteered to serve in the Chinese Army after the Japanese invasion of Manchuria, but was rejected due to her sex. Joining the WASPS, in 1943, she delivered planes for the military until she was killed in service in 1944.



Maggie Gee



"When I was growing up, my heroes were Amelia Earhart and Charles Lindbergh. I loved to watch airplanes fly."

One of two Asian Americans to serve as a Woman's Airforce Service Pilot. After the war, she became a physicist/researcher, working and studying at the UC Berkley and at its National Laboratory in Livermore. Her research covered the fields of cancer, nuclear weapons design, fusion energy, and other related fields.



Janet Bragg



“I’m not afraid of tomorrow because I’ve seen yesterday, and today is beautiful.”

She helped found the Challenger Air Pilots Association in Chicago, for Black flyers. She received her commercial license in 1943 at the Pal-Waukee Airport near Chicago. During World War II, she tried to join the WASPs, but was turned down because of her skin color.



Elinor Williams



“It was a good career and total life change for me.”

First Black woman air traffic controller. She began her FAA career as a contract janitor in the Alaska Region.



Mercury 13



Thirteen American women selected to be part of a privately funded program underwent the same physiological screening tests as the astronauts selected by NASA for Project Mercury.



Wally Funk

“I can do anything a man can do.”



She was one of the Mercury 13, the first female air safety investigator for the National Transportation Safety Board, the first civilian flight instructor at Fort Sill, Oklahoma, and the first female FAA inspector.



Jerrie Mock – The Flying Housewife



“I just wanted to have a little fun in my airplane.”

In 1964, she became the first woman to fly around the world.



Emily Howell Warner



“This is your Captain speaking.”

She began applying to be a pilot for Frontier Airlines in 1968 - Frontier hired her in January 1973. After flying as a first officer on Convair 580s and de Havilland Twin Otters, in 1976, she became the first female captain on a scheduled U.S. airline. She later became captain of a Boeing 737 for United Parcel Service. In 1974, she became the first woman member of the Air Line Pilots Association (ALPA).



Jill Brown-Hiltz



“I used to ask if I could use the plane like other kids asked for the family car.”

In 1978, she became the first black female pilot for a major commercial airline in the U.S. – Texas International Airlines.



Bonnie Tiburzi

“In the early days they said I was trying to make a statement, but I was just trying to make a living.”

At the age of 24, American Airlines hired her as a pilot in March 1973. She was the first woman hired by a major airline as a member of the cockpit crew. At American Airlines, she flew as flight engineer, first officer, and captain on the Boeing 727. At the time of her retirement in 1998, she was flying as captain in the Boeing 757/767 on domestic and international routes.



Olga Custodio



“If you want something to happen, you must make it happen . . . You can't make other people do things for you. You can't wait for people to come and give it to you. You must go out and get it.”

After retiring as an Air Force pilot, American Airlines hired her in June 1988; she subsequently became the first Latina airline captain in the United States. She flew Boeing 727, 757, and 767, and Fokker 100 aircraft.



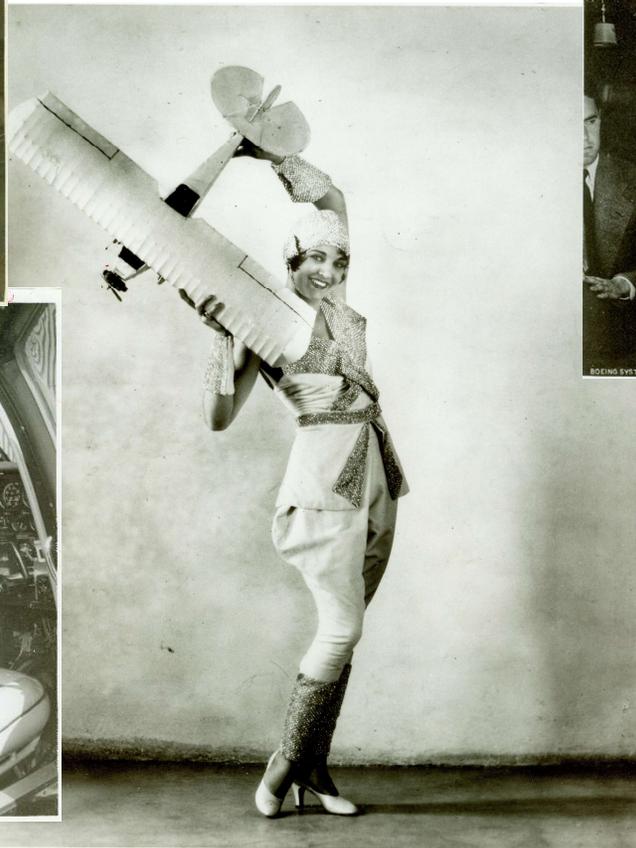
First All-Female All-African American Crew



Atlantic Southeast Airlines flights 5202 and 5106 became the first commercial jet revenue flights to be operated by an all-female all-African-American crew, on February 12, 2009.



Questions?



Thank You!



Federal Aviation
Administration