

# GSEOK

## Aerospace Adventure Patch Program

*Cadettes, Seniors, and Ambassadors*

Developed in partnership with the Tulsa Airports Improvement Trust



# WELCOME TO THE WORLD OF AEROSPACE!

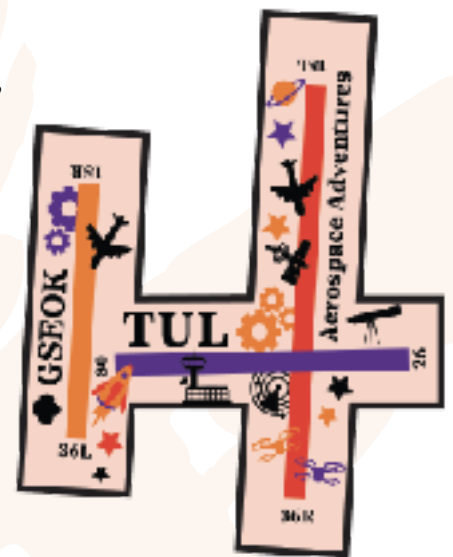
**Objective:** This patch is designed to help girls learn more about career opportunities in aerospace. Today, Oklahoma continues to serve as a hub of aerospace innovation, as some of the world's most successful aerospace companies choose to run major operations in the state.

**Directions:** To earn this patch, girls should complete 5 activities: 1 activity from each category - Discover, Connect, and Take Action, as well as 2 additional from any category.



*Watch a short, introductory message from Alexis Higgins, CEO of the Tulsa Airports Improvement Trust, and SueAnn Alexander, professional pilot and member of Girl Scouts of Eastern Oklahoma's Board of Directors.*

<https://vimeo.com/738678584>



## *Pioneering Women in Aerospace:*

**1915**

**Tiny Broadwick**

began her career parachuting from balloons. She was the first woman to parachute from an airplane. In 1915, she became the first person to demonstrate parachutes to the US Army.

**1932**

**Olive Ann Beach**

along with her husband Walter, co-founded Beech Aircraft Company in 1932. She served as secretary-treasurer and director until 1950 when her husband died. She then took over as President and CEO of the company and transformed Beech Aircraft into a multimillion dollar, International Corporation.

**1954**


**June Maule**

was the CEO and exclusive owner of Maule Air, Inc., the world-renowned manufacturer of Maule STOL airplanes. She was the wife and business partner of the late B. D. Maule, aircraft designer, and manufacturer. For 55 years, she operated the administrative aspect of Maule aircraft and aircraft parts manufacturing facilities.



# Discover

- ★ Learn about the four forces of flight and how they affect things that fly. How are the different stages of flight (takeoff, level flight, and landing) impacted by these forces?
- ★ Pilots and Flight Attendants are well-known careers. Find 3 nonflying aerospace careers and learn about the education and experience required in these professions.
- ★ There are numerous careers that support aerospace. Brainstorm at least 5 careers that support aerospace but don't directly work with aircrafts.
- ★ Visit an airport website:
  - ★ Find out what jobs they are hiring for.
  - ★ Fun historical fact about the airport.
  - ★ How many companies you can find at the airport?
  - ★ What social media platforms does the airport use?
    - ★ What is the most recent post about?
- ★ Visit an airport:
  - ★ How many runways does the airport have?
  - ★ Find and identify as many different types of companies as you can at the airport.
  - ★ Does the airport have an air traffic control tower?



*Home to the largest Department of Defense air depot and commercial airline Maintenance, Repair, and Overhaul (MRO) facility in the world*

***Oklahoma & Aerospace***  
Soar to success in the land of opportunity!

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**1968**

**Jacqueline Smith Burdette**

joined the Navy after high school to become an Air Controlman. In 1968, she co-founded Professional Women Controllers, Inc. Her firsts included the first woman manager of an Air Route Traffic Control Centers (ARTCC) to the first woman Division Manager responsible for Air Traffic Control (ATC) operation in four states and 3400 controllers. She retired as FAA Administrator for the Alaska Region.

**1968**

**Colleen Barrett**

Southwest Airlines President and COO Colleen Barrett is the U.S. airline industry's highest-ranking female and is credited with nurturing the 32-year-old company's unique corporate culture. She began her journey as a legal secretary to Herb Kelleher, the airline's co-founder.



# Connect

- ★ Research education/degree options in Oklahoma for aerospace careers
- ★ Visit a college campus (or talk to an admissions advisor or professor) that has a degree in an aerospace career
- ★ Interview a woman in an aerospace job
  - ✦ Find out about her educational background.
  - ✦ What are the best and hardest parts of her job?
  - ✦ Why did she choose that profession?
- ★ Go to a museum with an aerospace exhibit (for example Tulsa Air and Space Museum, Charles B. Hall Air Park – Tinker Air Force Base, Science Museum Oklahoma)
- ★ Put yourself in the pilot seat and practice your skills in a flight simulator. Check with your local museums, colleges, and libraries to look for options.

More than 120,000 Oklahomans are employed in Oklahoma's aerospace and defense industries.

Oklahoma is home to more than 1,100 aerospace entities including manufacturers, MRO, research and development, military, and others.

**1971**

**Wally Funk**

was one of 25 women chosen to undergo preliminary astronaut testing. In 1971, she became the first female FAA inspector. Wally moved on to the National Transportation Safety Board (NTSB) in 1974, where she became one of the Board's first female air safety investigators.

**1987**

**Nancy Fitzroy**

is an internationally recognized and honored expert in heat transfer and fluid flow. She was with the General Electric Company until her retirement in 1987, serving in a number of engineering and engineering manager capacities. In 1986, she became the first woman to head a major national engineering society, the American Society of Mechanical Engineers.

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# Take Action

- ★ Help a Brownie troop earn their Fling Flyer badges.
- ★ Develop a poster or display highlighting aerospace career paths.
- ★ Create a skit, movie, or song about aerospace careers to share with your troop, service unit, or class.
- ★ Plan an event or activity during Women of Aviation World Wide Week, normally observed during the week of March 8th. Celebrate women's past and present contributions to the betterment of the air and space industry by teaching younger girls about flight and introducing them to female mentor.
- ★ Create a biographical display or website highlighting a prominent woman in aerospace. Include biographical facts and how they shaped the industry.

Oklahoma is ranked #3 in the nation for drone industry preparedness by George Mason University.

9 of Oklahoma's colleges and universities offer aerospace degrees and certifications.

Oklahoma boasts five military installations, two air national guard operations, and numerous aerospace assets, including the Oklahoma Air & Space Port.

1991

**Rhonda Cornum**

is a U.S. Army flight surgeon, who became a prisoner of war of the Iraqis during Operation Desert Storm, when her helicopter was shot down in 1991.

1996

**Shannon Lucid**

has logged more continuous time in space than any other U.S. astronaut, male or female, having spent seven months on board the MIR space station in 1996.

1997

**Jane Garvey**

became the first woman Administrator of the Federal Aviation Administration (FAA) in August 1997. She was the first administrator to be confirmed by the Senate for a five-year term.

