

Goldie at Home: Innovative Iowans



Activity Overview: Prepare for takeoff as you dive into Iowa's high-flying history. You'll learn about famous aviators with Iowa connections and a brief history of Iowans taking to the sky. You also will create your own paper airplane to test and challenge your family and friends on how far it can fly.

Connection to Iowa History

Iowans have always been fascinated by the idea of flying high in the sky. The first airplane flight in Iowa occurred May 10, 1910, on the fairway of the Burlington Country Club. Unfortunately, the plane only rose 10 feet into the air before crashing down to ground. Iowa also has been home to many [famous pilots](#) throughout history, including:

Amelia Earhart (1897-1937): Amelia Earhart lived in Des Moines as a young girl from 1908-1914. She reportedly saw her first airplane at the Iowa State Fair at age 10. Some of her accomplishments include being the first woman to fly across the Atlantic Ocean in June 1928. She also made the first solo flight from the Atlantic to the Pacific Coast in September 1928, and began her attempt to become the first woman to fly around the world on June 1, 1937.

Clarence Duncan Chamberlin (1893-1976): Clarence Duncan Chamberlain was born in Denison, Iowa, and was the first person to fly a paying passenger across the Atlantic Ocean. In 1927, he broke the world endurance record: he stayed in the air 51 hours and 11 minutes.

Neta Snook Southern (1896-1991): Neta Snook Southern was born in Illinois but eventually moved to Ames, Iowa as a teenager. She attended Iowa State College and she was the first woman enrolled in the Davenport School of Aviation in 1917. In 1921, she began giving Amelia Earhart flying lessons.

Eugene Ely (1886-1911): Eugene Ely was born in Williamsburg, Iowa, but grew up in Davenport. In 1910, Ely became the first pilot to make a successful unassisted airplane take off from a deck of a ship. He also was the first pilot to land on a plane directly on a ship in 1911.

J. Herman Banning (1900-1933): J. Herman Banning would not be admitted to aviation school in Chicago because he was African American. He then moved to Iowa, attended Iowa State College and took flight lessons in Des Moines. Banning became the first African-American citizen to receive a pilot's license from the government: #1324. In 1932, Banning, accompanied by Thomas C. Allen, became America's first African-American aviator to fly coast-to-coast.

Instructions ([Video Instructions Available](#))

- 1 **Prepare.** This activity can be altered and changed based on time and available space. Use the [paper airplane instructions](#) to fold and create your own paper airplane.
- 2 **Research.** If you would like to find different airplane style ideas, use the Internet to find new and creative paper plane possibilities. The provided directions are for the basic paper airplane model.
- 3 **Decorate.** Make sure to decorate your plane to make it unique.

Materials

- Paper (rectangular shape)
- [Worksheet](#)
- **Optional materials:** tape, paper clip, marker or pen, ruler

Instructions continued on the next page

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Instructions continued

- 4 **Measure.** Once you have created and decorated your plane, you will want to establish a starting line for all planes to be thrown from and create a runway to measure the distance of the planes' flights. The starting line can be marked by tape on the floor or by laying a broom down, so everyone throws from the same place.
- 5 **Create.** To create the runway, make sure there is a large, clear area in front of your starting line. It is recommended to use a ruler or yard stick to measure the distance of your runway and make distance markers. To do this, you can use a sheet of paper, write a distance (like 1 foot, 3 feet) with a marker or pen and tape the distance marker at that distance from the starting line. For example, you could have a 12-foot runway and have a distance marker at every three feet to help determine the distance of your plane's flight.
- 6 **Throw.** Everyone will take a turn throwing their paper planes from the same location. Make sure to mark the landing locations after they have been thrown. You can do this with tape, a paper clip or whatever materials you have available to you.
- 7 **Test.** Each person will have three flight attempts with their airplane. You can record the distance of the flight on the [worksheet](#) if you would like to keep track.
- 8 **Test again.** After the third attempt, the person's plane that flew the farthest wins the contest.
- 9 **Change location.** If you would like to compete in multiple rounds, consider changing flight locations throughout the house. You can also try different plane styles to see if changing styles makes any difference in how far the planes will fly.
- 10 **Share!** If you would like to share your creation with the State Historical Museum of Iowa, please email photos to museum.education@iowa.gov. We want to share your creation with other young historians!
- 11 **Questions to Spark Learning**

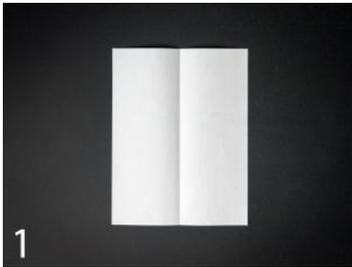
Watch this [State Historical Society of Iowa video](#) to learn more about the historical airplanes in the State Historical Museum's collection - the Bleriot XI Monoplane, Curtiss Pusher Biplane and Benoist Tractor Biplane.

 - Compare these planes to current airplanes. What is the same? And what is different?
 - Why do you think people wanted to fly planes?
 - Would you like to be one of Iowa's early famous pilots? Why or why not?

Steps to Create a Paper Airplane

Step 1

Fold your paper in half vertically.



Step 2

Unfold the paper and fold each of the top corners into the center line.



Step 3

Fold the top edges in the center line.



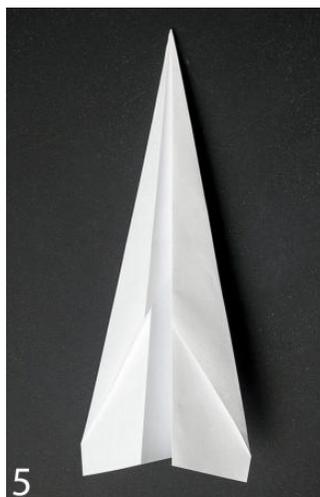
Step 4

Fold the plane in half toward you.



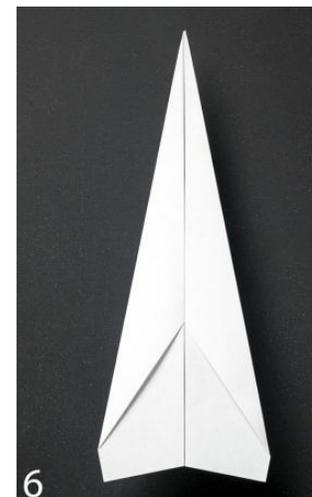
Step 5

Fold the wings down, matching the top edges up with the bottom edge of the body.



Step 6

Optional: Add tape to the inside of the body to help hold both sides together, or add a paper clip to the lower body to add weight.



Goldie at Home: Iowans at Flight Worksheet



Prepare for takeoff as you dive into Iowa's high-flying history. After you've learned about famous aviators with Iowa connections and created your own paper airplane, you will record your distances flown below.

Plane 1

Test Flight #1

Test Flight #2

Test Flight #3

Plane 2

Test Flight #1

Test Flight #2

Test Flight #3

Plane 3

Test Flight #1

Test Flight #2

Test Flight #3
