

AIR FAIR!

AIRPLANE PILOT ACTIVITY



K20CENTER
THE UNIVERSITY OF OKLAHOMA

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Sooner Flight Academy. (n.d.). SFA-Eagles Camp.

AIR FAIR! OVERVIEW

Do you love to travel and see new places? Do you enjoy solving problems and helping others? Then a career in Transportation, Distribution, and Logistics might be just right for you! Workers in the Transportation, Distribution, and Logistics career cluster travel, move people and things from one place to another, and plan out the best ways to get things on the move! One of the many careers that falls into this cluster is an airplane pilot.



Airplane pilots can fly planes for commercial or private companies, the military, or even for farming purposes. They fly people and cargo all over the world. Some work as drone pilots and fly from the ground! The average salary for an airplane pilot is \$85,000 per year.

Airplane pilots go to flight school to learn skills and get a license. Pilots can earn a private pilot license at 17 years old if they have completed the required hours and are in good health. Spending time gaining flight hours and going to special trainings can open up more work options as an airline pilot. It also helps if pilots know

about geography, algebra, geometry, calculus, and statistics. That is why even though college degrees are not required, taking college courses can help you to find the best jobs when applying to companies such as airlines.

[Sooner Flight Academy](#) is a great place to start if you need more information about how to get the training you need to get up in the air. They offer camps and classes for grades K-12 that connect the science of flight to real world experiences. You can start attending camps to get an idea of what a pilot's life is like.



Airplane pilots need to have a wide range of skills and abilities to be successful in their jobs, including:

- **Healthy Lifestyle.** Pilots need to be in good health. They are responsible for the people in their plane and those walking around below. It is important that a pilot be physically prepared for long flights and stressful situations.
- **Focus.** Pilots have to be able to focus on small details to keep their plane on track and also to be sure that the plane is ready to fly.
- **Problem Solving.** Pilots have to understand how to adapt when the skies around them change. Airplane pilots have to be able to analyze a problem to find the best solution for themselves and their passengers.
- **Dependability.** People count on pilots to get themselves and their cargo to where they need to be.
- **Lifelong Learner.** Pilots have to understand how flight works and be able to read and understand cockpit flight instruments. It seems like there is always more to know!

How does someone become an airplane pilot? What kinds of work do they do? How do they keep planes up in the air and headed to where they need to go? This series of activities will help you better understand the skills needed for a career as an airplane pilot. The need for airplane pilots is expected to increase over the next 20 years, so there may be lots of new jobs. These activities will help you better understand the work that airplane pilots do and see if this career is a great fit for you!

Materials

- Computer or tablet
- Internet access
- Pencil or pen
- List-Group-Label activity (found on page 7)
- My Preflight Checklist activity (found on page 9)
- Printable Paper Airplane (found on page 11)
- Airplane Observations Diagram (found on page 12)

Instructions

1. Hear what the life of a private airplane pilot is like from an Oklahoma pilot from Sooner Flight Academy.
2. Learn about the importance of a preflight checklist with Check it Out! Test out your skills at being as detail oriented as a pilot. Make your own "preflight checklist" to start your day and see if following it brings you in for a successful landing.
3. Experiment with a paper airplane in What's Up? Lift! to see what effect the different parts of a plane have on steering, lift, and distance.
4. Visit Sooner Flight Academy when you are ready to learn more to set you on a course for a career as a pilot!



Sooner Flight Academy. (n.d.). SFA-Flight.

ACTIVITY 1: CAREER TALK

Before you take off, let's learn more about what it means to be an airplane pilot from a professional in the field!

Materials

- Computer or tablet
- Internet access
- Pencil or pen
- List-Group-Label activity (found on the next page)

Instructions

1. Before you watch the video, use the List-Group-Label activity on the next page. Under the word "List" jot down any words you can think of that the airplane pilot might say in his video.
2. Visit the link below to watch a video and learn about what life is like for an airplane pilot: <https://tinyurl.com/SFAPilot>
3. After viewing the video, add to your list of words based on what you saw. Were there some words you hadn't thought of?
4. Do you see some words on your list that go together? Use the "Group" column to record these groups of words. You can even draw circles around them if that helps.
5. Time to "Label"! Look at your groups of words, think about how they are alike. Give each group a title, or label, that describes how they are alike.
6. What did you learn about the work pilots do? Did anything surprise you?

LIST-GROUP-LABEL

LIST	GROUP

ACTIVITY 3: WHAT'S UP? LIFT!

It is time to get your airplane up in the air, your paper airplane that is! Using the printable airplane from Sooner Flight Academy on the next page, you will get a chance to experience the effects that different airplane parts have on how an airplane travels through the air. Usually when you make a paper airplane, there are two factors that keep it in the air: lift and propulsion. For this activity, you can modify your plane and test the results. Try cutting flaps on the wings for example. Experiment with these changes to discover the effect they have on flight.

Materials

- Computer or Tablet
- Internet Access
- Printable Paper Airplane [click here](#) or visit this link to print: <https://tinyurl.com/SFAplane>
- Airplane Observations Diagram (found on page 12)

Instructions

1. Print out the airplane template from this link: <https://tinyurl.com/SFAplane>
2. Fold and cut following the directions on the template.
3. Test out your airplane.
4. Next, try modifying your airplane by cutting flaps into the wings, or at other places on the airplane.
5. Record your observations by making a diagram on page 12 to help you remember what each change to the airplane did to your test flights. Remember a diagram is a sketch with lines drawn to the different parts and words describing what each part does.
6. Watch [this video](#) from Sooner Flight Academy to see if your findings match how the parts of a real airplane work.

AIRPLANE OBSERVATIONS DIAGRAM

Draw a sketch of your airplane. Add lines to show which parts you changed and notes for what happened.

EXTEND

Now that you have had some time to experiment with lift, control, and propulsion, let's practice what you know using one of the earliest successful planes ever made! In this simulation you will have a chance to fly the Wright Brothers' first airplane. See if you can keep your plane in the air longer than their first flight. Can you top the distance from their 4th flight? Watch the replay and see how you performed. It may seem easy at first, but all of the variables that keep an airplane in the air can be tricky to manage.

Materials

- Computer or Tablet
- Internet Access

Instructions

1. Visit the website: Smithsonian Fly Like the Wright Brothers: [Engineering the Wright Way: 1903 Flyer Simulation](#) and try to keep their airplane in the air.
2. You can also follow the Wright Brothers step-by-step through their process by starting the game here: [Engineering the Wright Way: Invent like the Wright brothers in this online game.](#)
3. Feel ready to be a pilot? Check out these great Sooner Flight Academy Camps!
 - a. [Falcons Camp for 12-13 Year Olds](#)
 - b. [Eagles Camp for 14-18 Year Olds](#)
4. Sooner Flight Academy has [more resources here](#) if you are interested in other careers in aviation.

[Sooner Flight Academy Summer Camp Partial Scholarships are also available](#)

Want to Learn Even More?

You can also take a look at [My Next Move](#) to discover more about airplane pilots, what they do, and the knowledge, skills, and abilities needed in the field.

There are other careers related to flight that you can find [here](#) at [My Next Move](#). Airplane pilots aren't the only career to explore in the Transportation, Distribution, and Logistics career cluster. Check out the other careers classified as [Transportation, Distribution, and Logistics](#) work to see even more options that let you work with your see the world, help others, and solve problems.

SOURCES

All of the sources that were linked throughout the activity are listed below. Providing a list of sources allows us to give credit for the work someone else made.

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