

# AIM HIGH!

Thinking of a career in the Aeronautic field?

Follow through this presentation and find information on careers and related game and activity sites.

# 6 Jobs you can get at the Airport

## 1. Air Traffic Controller

**ROLE** -The role of air traffic control is similar to the way that a police officer directs traffic on a busy street, but more complicated. ATC works around the clock to ensure that airplanes are safe around the world.

**SKILLS** – This job requires serious concentration and skills in Math, Communications, and decision making.

**REQUIREMENTS** – The FAA requires air traffic controllers to have at least 3 years of work experience or they can hold a bachelor's degree, or a trade degree with the required hours. As a federal level job, ATC must be U.S. English-speaking citizens.

**SALARY** – The salary for an ATC averages \$127,000 annually. They also receive benefits such as retirement and health insurance,

## 2. **SECURITY – TSA**

**ROLE** – A TSA has a very serious job. There are many types of jobs at the security level. You could do anything from running the x-ray machines to monitoring traffic and checking tickets and identification.

**SKILLS** – You must be physically fit and have an alert eye and attention to detail.

**REQUIREMENTS** – TSA agents must have at the very least a high school diploma or a GED. In addition, in order to apply you must have at least 1 year of experience as a security officer or X-Ray technician.

**SALARY** – TSA's typically start around \$25,000 a year, however, with experience they can move up and make an average of \$44,000. TSA officers are employed by the Transportation Security Administration and they are federal employees.

### **3. BAGGAGE HANDLER**

**ROLE** – Baggage handlers must take part in physical labor and be able to do some heavy lifting. They also need to work within time constraints and deliver baggage to the correct destinations. It is a fast paced environment.

**SKILLS** – Baggage handlers must be physically fit, have a great attention to detail and be able to work in a fast paced environment in all types of weather, rain or shine.

**REQUIREMENTS** – To become a baggage handler you must be at least 18 years of age and have a high school diploma. They must also have a valid drivers license and pass a physical test.

**SALARY**- Baggage handlers make, on average, \$23,000. Hourly rates vary according to the airline. Some airlines pay \$13 an hour and others up to \$20. Employees can also work up to supervisor positions and receive a higher pay with experience. They may also get benefits such as healthcare, etc. if they are full time. Some even offer flight discounts and waivers.

#### 4. **AIRLINE MECHANIC**

**ROLE** – Are you good at problem solving? You will not only diagnose and fix problems with the airplanes themselves. You will also work to fix problems with the IFEC systems and electricity.

**SKILLS** – Problem Solving, electrical and mechanical skills.

**REQUIREMENTS** – You must be at least 18 years old and have 18 months of practical experience with either power plants or air frames, or 30 months of practical training working on both at the same time. There are many aeronautical schools that offer the required training, typically 24 months.

**SALARY** - \$55,000 on average annually, this can vary based on airlines and positions.

## 5. PILOT

**ROLE** – Pilot's have one of the hardest jobs at the airport. They must be able to make quick decisions and read constant information to get their plane from point A to B safely, with turbulence and bad weather thrown in the mix. They travel constantly and a flexible schedule is a must.

**SKILLS** – A pilot needs to have a strong education and be able to grasp math, physics and spatial coordination. They always need to maintain control and be able to make split decisions at any time. They must have 20/20 vision and excellent hearing.

**REQUIREMENTS** – Commercial pilot's must be trained at a professional flight school. They must be at least 23 year of age and hold a commercial Pilot certificate with an instrument rating. They must have recorded at least 1,500 hours of total time as a pilot. They must have recorded at least 50 hours in a multi-engine airplane. Pilot's are consistently tested and screened for drug/alcohol before every flight and must be in good health at all times.

**SALARY** – Pilots make \$73,500 annually on average, but that salary can easily rise above \$100,000 with experience.

## 6. **FLIGHT ATTENDANT**

**ROLE** – Flight attendant's not only have to keep a smile on their face and attend to passengers, they bridge the gap between the passengers and the pilots. Flight attendant's must keep every passenger comfortable and safe. They must be able to act quickly and follow procedures to do this. They travel constantly and must be able to adapt and have a flexible schedule.

**SKILLS** – Flight attendant's must have a good demeanor and patience. They must be trained in safety procedures and be able to demonstrate leadership and problem solving skills. They also must be able to work under time constraints.

**REQUIREMENTS** – Flight attendant's must have a high school diploma, be 18 years of age and have the appropriate training and certificate from a certified flight attendant program. Some airlines may hire and train the attendants, this typically takes 8 weeks of training. They must be eligible to work in the United States, have a valid passport and pass a background check and a drug test. Flight attendant's must also pass a physical test and be height/weight proportionate. It is beneficial to be multi-lingual.

**SALARY** – Entry level attendants start around \$20,000 annually, however they quickly move up with experience and can make up to \$80,000 or more.



## FIND YOUR CAREER

To find out more about careers in the Airline Industry or any other career, visit one of the following reputable sites. Take an assessment, search for career descriptions, salaries and more:

[www.educationplanner.org](http://www.educationplanner.org)

[www.careeronestop.org](http://www.careeronestop.org)

[www.onetonline.org](http://www.onetonline.org)

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# THE UNITED STATES AIRFORCE

If working an Airport job isn't exactly what you want, you may want to consider enlisting in the US Air Force. Recruiters are still recruiting during the Coronavirus Crisis. The Air Force provides careers that aren't just flight related. There are many other career opportunities.

**Aircraft and Flight**

**Allied Health**

**Arts & Humanity**

**Dentistry**

**Ground Vehicles**

**Computer Science**

**Electronics**

**Emergency Management**

**Engineering**

**Facilities**

**Future Technologies**

**Health & Medicine**

**Health Administration**

**Intelligence**

**Law Enforcement**

**Logistics**

**Maintenance & Repair**

**Mental Health**

**Missile & Space**

**Natural Science**

**Nursing**

**Operations & Administration**

**Weaponry**

**Physicians and Surgeons**

To Join the AIR FORCE you need to meet the following requirements:

1. **Age** – you cannot be younger than 17 or older than 39 years of Age (48 years of age if you are enlisting as a healthcare professional or in the ministry).
2. **Height and Weight** – the Air Force maintains a strict height and weight requirement. You must be in good health and your weight needs to be proportionate to your height. You can check the requirements at [www.airforce.com/how-to-join/prepare-for-success/meet-requirements?](http://www.airforce.com/how-to-join/prepare-for-success/meet-requirements?)
3. **Sexuality** – Air Force applicants are Neither asked nor required to reveal their sexual orientation.
4. **Health** – You must be in good mental and physical health. If you have a pre-existing health condition a recruiter will work with you on a case-by-case basis to determine eligibility
5. **Vision** – you will be fully evaluated and to be an officer you may have an eye refraction level of no worse than + or – 8.0. Pilots have stricter vision requirements.
6. **Citizenship** – If you wish to enlist as a non-citizen you must be a legal permanent resident with a valid green card. Officers have stricter requirements and MUST be a native-born or naturalized US Citizen.

**7. Education** – You must have a high school diploma or GED

NOTE – if you have a GED, you must meet additional requirements

- 18 years of age

- score a 50 qualifying score on the ASVAB

- Obtain 15 credits of college credit to gain the same eligibility

TO JOIN AS AN OFFICER – you must have a 4 year degree or be within 365 days of graduating

- If you are currently attending college or hope to attend and are looking for financial assistance, the Air Force can help you do that in exchange for a commitment to serve.

**8. Marriage and Dependents** – You can be married, however, you must plan to be away from your spouse during your period of military training and/or technical training. After that, your spouse may live with you on the base that you are assigned to.

**9. Tattoos and body piercings** – Some tattoos are disqualifying. You cannot have a tattoo on your head, neck, face, tongue, lips or scalp. You also cannot have a tattoo that is obscene or advocate sexual, racial, ethnic or religious discrimination.

**10. Drug Use** – In most cases, substance abuse is disqualifying, it is determined on a person-person circumstance

11. **Law violations** have an impact on qualifying for enlistment. If you have concerns about your record, contact your recruiter to discuss your situation.
12. When you apply you will take the **ASVAB**. High school seniors must have a 31 AFQT as the minimum qualifying score. To be an officer you must pass the AFOQT, this test is similar to the SAT.

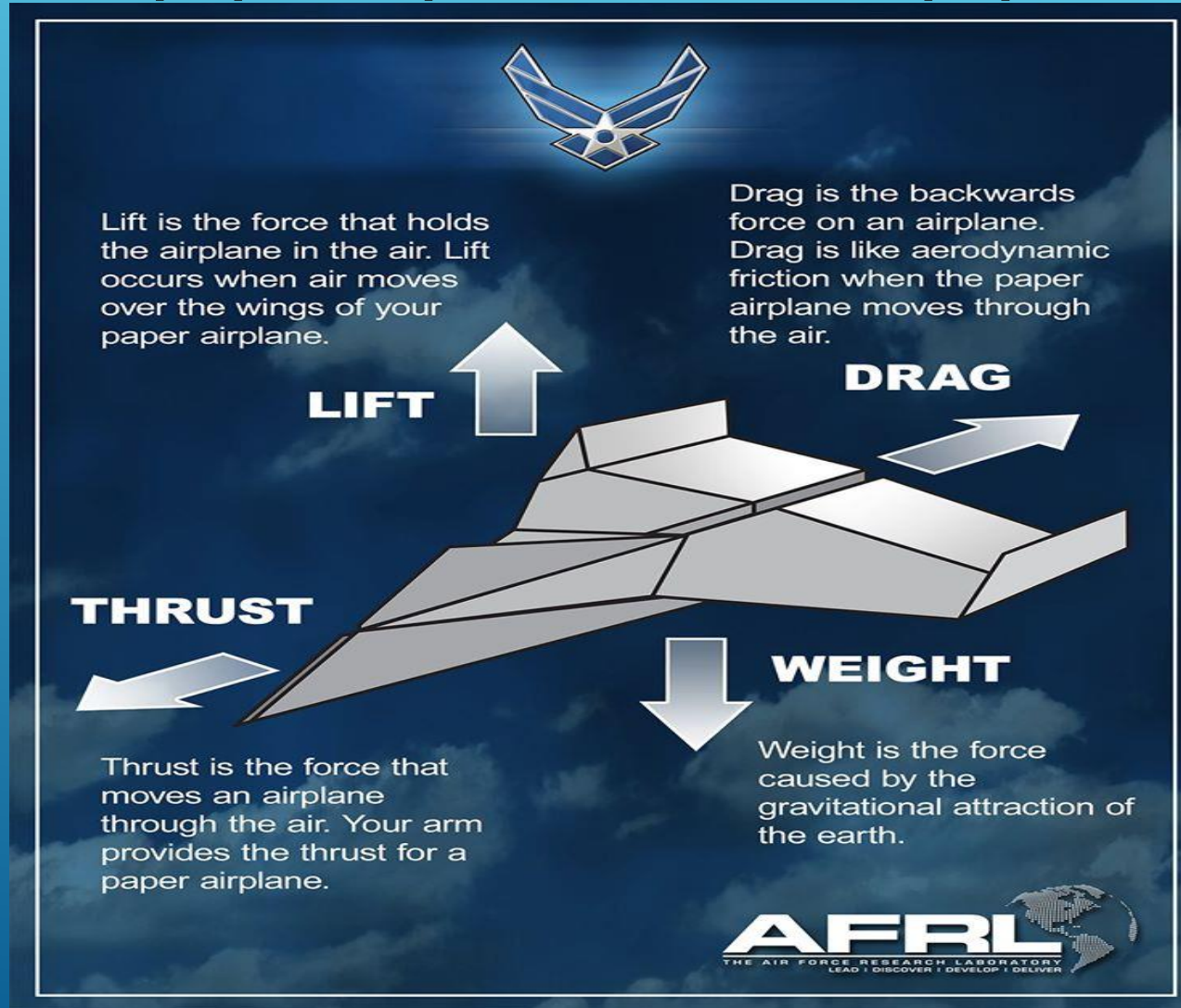
For more information please contact your local recruiter or go to:

[www.airforce.com](http://www.airforce.com)

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# ACTIVITIES

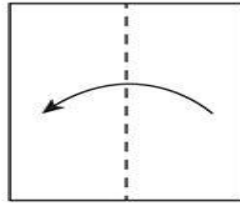
## 1. Make your own paper Airplane – learn the physics behind it



# Now try it yourself!

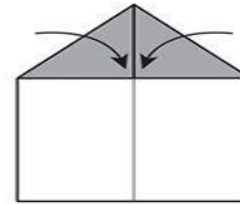
## Assembly Instructions Basic Dart

Step 1



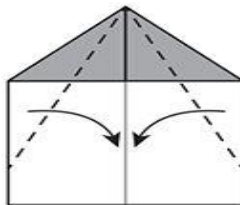
Printed side down.  
Fold paper in half  
lengthwise and crease it.  
Now, unfold the paper.

Step 2



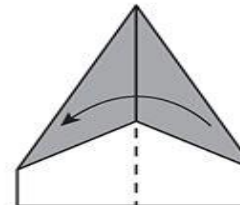
Fold down top corners  
inward to the center line.

Step 3



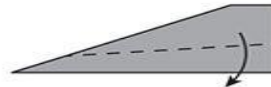
Fold the two edges  
toward the center line,  
as shown.

Step 4



Fold the plane in half.  
Turn the plane 90 degrees  
as shown in step 5.

Step 5



Fold wings down along  
white line.

Step 6



The Basic Dart is now  
complete. Bend up the  
tailing edge of the wings  
for lift if it has a tendency  
to nose-dive.



Do you want to design your own paper airplane and print it, design and launch rockets into space, learn about controlled flight and try to fly different airplanes?

If so, go to this site and click on activities

[www.howthingsfly.si.edu](http://www.howthingsfly.si.edu)

Or try one of the experiments on the following slides at home!!

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# Lighter Than Air

Helium and hot-air balloons float in air, but how?  
Is floating a type of flying?

## Bag-O-Water

### Try This:

Place a bucket of water on a bathroom scale; be sure you can still see the readings on the scale. Dunk a large zip-closing plastic bag under water and fill it half full. Carefully squeeze out the air before you close the bag. Now lift the bag completely out of the water. How heavy does it feel? Lower the bag back into the water, but don't let go of it. How heavy does it feel now? What is holding up the bag? Watch the scale. How does the reading change as you raise and lower the bag?

### Materials

- Bathroom scale (optional)
- Large zip-closing plastic bag
- Bucket of water



### WHAT'S GOING ON?

The bag of water felt lighter in the bucket, because the water was holding up the bag for you. (If you used a scale, you should have seen the weight of the bucket increase as you lowered the bag and decrease as you raised it.) Water can hold up water. Do you think water can hold up other things? Can air hold up anything?

# Free Fall

What do falling down an elevator shaft and orbiting Earth have in common?  
Try these experiments to find out.

## Watch Your Weight

### Try This:

Stand on a bathroom scale and notice where the needle stops. Watch the needle as you quickly squat down. It will wobble, but which way does it go first? Try this a few times to be sure of your observations.

*Hint: A digital scale won't work for this experiment.*

### Materials

- Bathroom scale
- You!



## WHAT'S GOING ON?

Gravity is constantly pulling you against whatever you're standing or sitting on. A chair supports you and keeps you from falling. If the chair suddenly disappears, you fall to Earth. For that split second as you fall, you are in a state known as free fall.

When you stood on the bathroom scale, it supported your weight. When you squatted quickly, for a brief instant you approached free fall and seemed to have no weight. That's why the reading quickly dropped.

If you tried to stand on a scale while falling in an elevator or orbiting Earth, the scale would give you a reading of zero. You might think it's broken, but if you squeezed the scale with your hands, the needle would move. So why wouldn't the scale measure your weight? You and the scale would be in free fall with no support.

# Bernoulli Brain-Teasers

In the early 1700s, a Swiss mathematician named Daniel Bernoulli made a discovery. He noticed that when flowing air or water changed its speed, its pressure also changed.

As you do these activities, can you figure out how the pressure changes?

How does this help airplanes stay in the air?

## Use Your Lips to Levitate

### Try This:

Hold a piece of paper between your thumb and forefinger, as shown. Now take a deep breath and blow over the paper. What happens?

### Materials

- Strip of paper or dollar bill



### WHAT'S GOING ON?

So why did the paper lift up when you blew over it? How did that change the air pressure? Air never pulls or sucks; it only pushes. It pushes on you every second, from every direction. This constant push is called air pressure.

Did you change the push of air on the top or bottom of the paper? When you blew over the top, the moving air had to squeeze between the paper and the air above it. As the air squeezed through, it sped up, lost pressure, and stopped pushing as hard. The still air below the paper had greater pressure and pushed the paper up.

# **ARE YOU INTERESTED IN VIDEO GAMES?**

***Go to the following website and  
Download NASA's Space Walk Game***

[https://www.nasa.gov/multimedia/3d\\_resources/station\\_spacewalk\\_game.html](https://www.nasa.gov/multimedia/3d_resources/station_spacewalk_game.html)

It's never too late  
AIM HIGH!

We hope you enjoyed this presentation

Stay tuned for more online programming from ETS

If you have any questions, please contact  
ETS at:

814-393-2071

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