

Welcome to Your Young Eagles Flight!



YoungEagles.org

Sponsored by: EAA Chapter 105
Hillsboro, Oregon



About the Young Eagles Program

- Launched in 1992 by EAA, the Experimental Aircraft Association, based in Oshkosh Wisconsin.
- Our mission is to provide a meaningful flight experience – free of charge – in a general aviation aircraft for young people ages of 8 and 17.
- More than 2.3 million Young Eagles have flown under the auspices of the program.
 - More than 50,000 EAA member volunteer pilots.
 - More than 40,000 ground support volunteers.
- Young Eagle flights have been conducted in every state in America; each province in Canada; and in more than 90 other countries.
- The flights have been safely conducted in nearly every type of general aviation aircraft, from light planes to business jets, and everything in between!

Young Eagles Pilots

- The pilots are local members of EAA, who are **volunteering** their time and aircraft to make your child's flight possible.
- Each pilot is licensed by the Federal Aviation Administration (FAA) and all aircraft are likewise certified by the FAA.
- The flights will be conducted according to federal regulations. No aerobatic maneuvers will be performed.
- Each pilot is vetted via EAA's Youth Protection Training and Background Check program.



What will the flight be like?

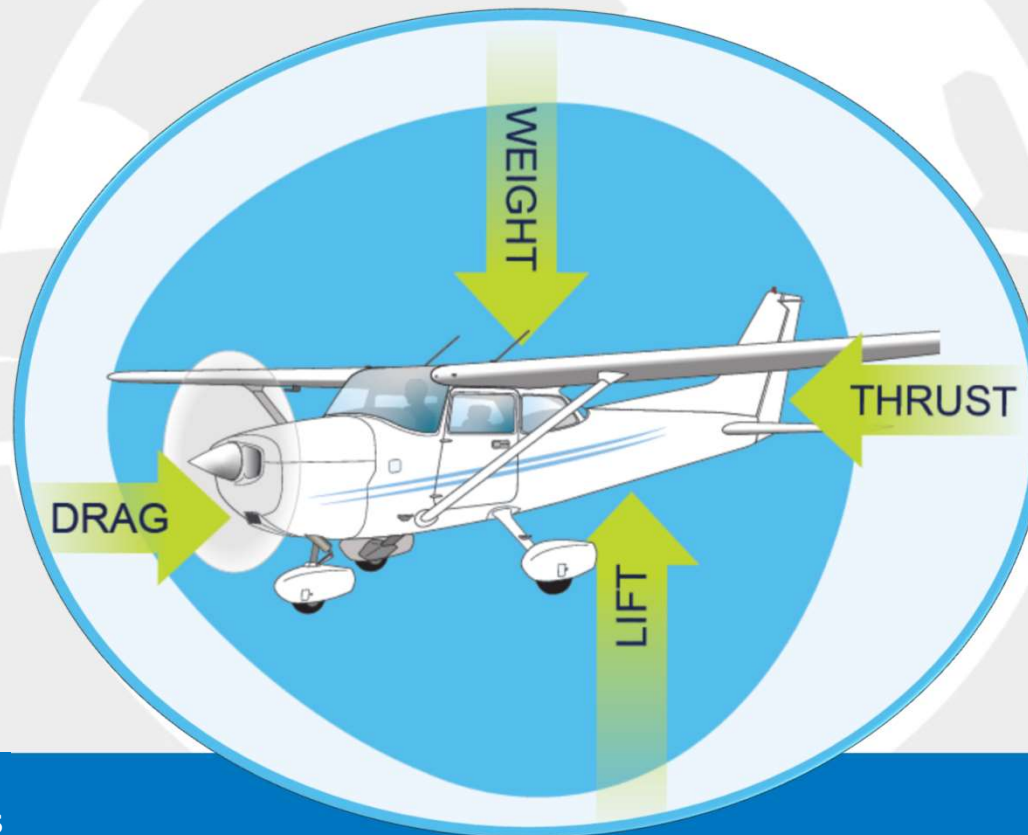
- The pilot complete a "walk around" preflight inspection of the airplane and identify the parts that control the airplane.
- The pilot instruct your child on how to enter the aircraft and buckle their child's seat belt. The pilot may assist with these tasks.
- Once in the air, your child will see the world below in a new and exciting way. They will experience the wonderful freedom of flight that many people only dream about.
- The flight will last about 15 – 20 minutes, depending on a number of factors.
- Following the flight, there will be additional time for photos and Q&A
- **Please listen to all pilot instructions (what not to touch, when to be quiet, etc.)**





Four Forces of Flight

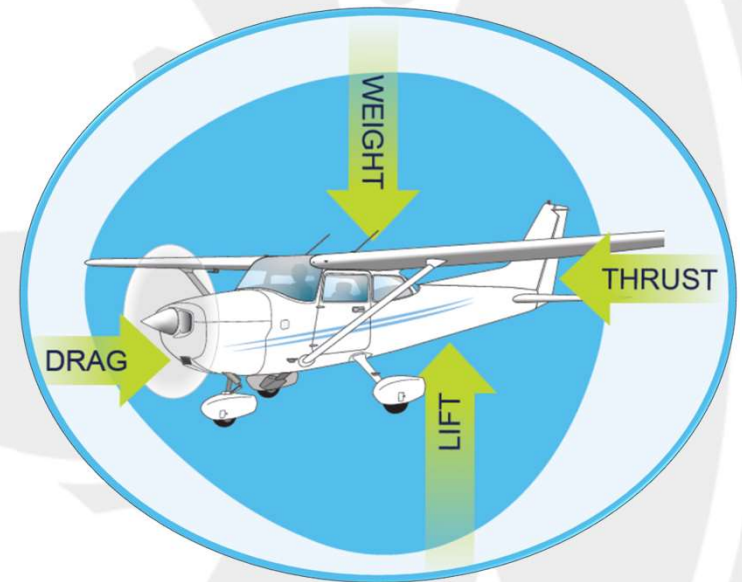
What makes an airplane fly?



Four Forces of Flight

What makes an airplane fly?

- **Thrust** - is a force that moves an aircraft. It is created with a propeller, jet engine, or rocket. Air is pulled in and then pushed out in an opposite direction.
- **Drag** - is the force that acts opposite to the direction of motion. It tends to slow an object. Drag is caused by friction and differences in air pressure. An example is putting your hand out of a moving car window and feeling it pull back.
- **Weight** - is the force caused by gravity.
- **Lift** - is the force that holds an airplane in the air. The wings create most of the lift used by airplanes.

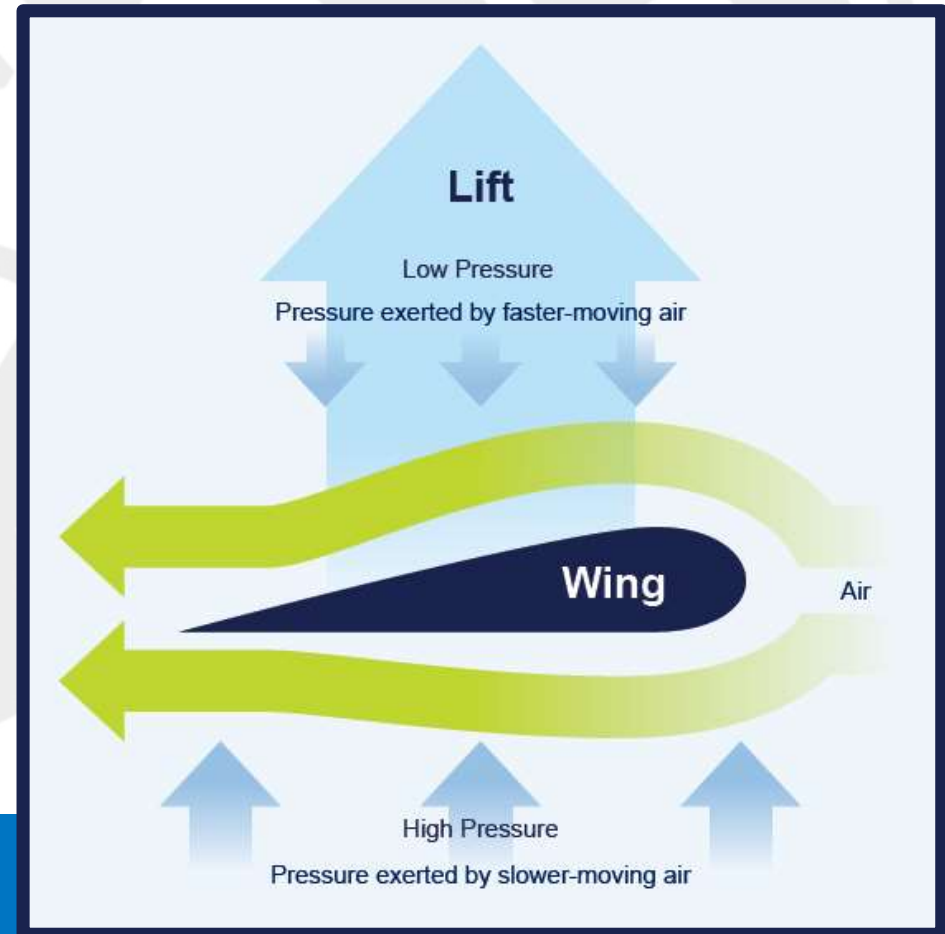


How is lift produced?

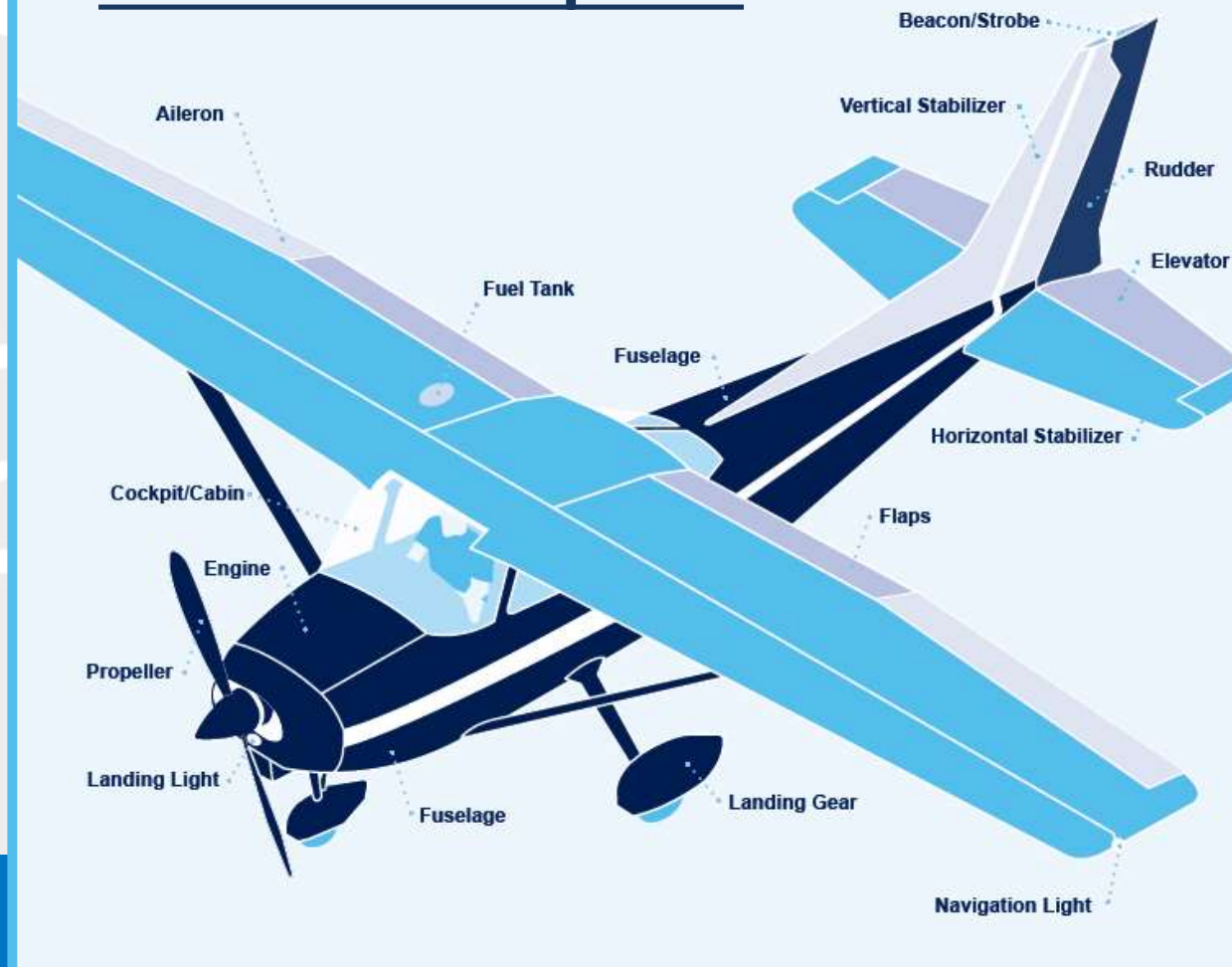
Newton's Explanation – For every action there is an equal, and opposite reaction (Newton's Third Law)

Bernoulli's Principle - This principle uses the fact that the top surface of a wing is more curved than the bottom surface.

High Pressure moves Low Pressure – Lift is created!



Parts of an Airplane



Instrument Panels



Glass cockpit



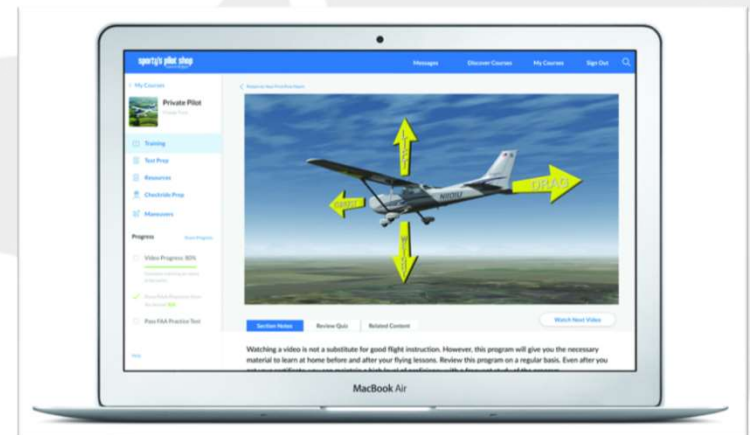
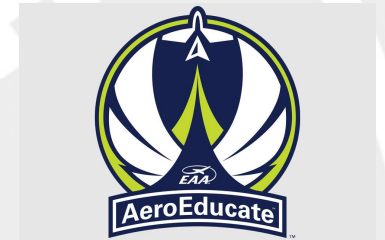
Steam gauge cockpit

Starting Flight Training

- You can begin your training to become a private pilot, recreational pilot or sport pilot.
 - The FAA requires that you are 16 years old to solo a powered aircraft, and 14 years old for gliders.
 - The FAA requires that you are 17 years old to obtain your powered aircraft pilots certificate, and 16 years old for gliders.
- Cost – This is hard to put a dollar figure on. It depends on many factors such as cost of the airplane, instructor time and pace of learning.
 - Locally, the average cost for a private pilot certificate is \$#,###

Young Eagles Flight Plan

- ☒ Step 1 – Become a Young Eagle
- ☐ Step 2 – EAA Student Membership
- ☐ Step 3 – EAA AeroEducate
- ☐ Step 4 – Sporty's Learn to Fly Course (\$279 value)
- ☐ Step 5 – First Flight Lesson (\$130 value)
 - Written Exam Reimbursement (\$175 Value)



Young Eagles Flight Plan

Activating your benefits

- Pre-registration – Checkbox on the form when you registered for today's event.
- Young Eagles Logbook – Code on the back. If in doubt, re-register using the instructions on the back of the logbook



Ramp Safety

- Stay with your pilot/ramp escort.
- No horseplay
- Parent(s) may accompany the Young Eagle to the plane, only with pilot/ramp escort. Photos are allowed and encouraged!
- Once the Young Eagle has boarded, return to a safe area with the ramp escort.
- Do not enter the ramp without an escort.
- Keep your head on a swivel – Watch for blinking/flashing lights, spinning propellers, and moving aircraft
- Listen to all volunteer instructions



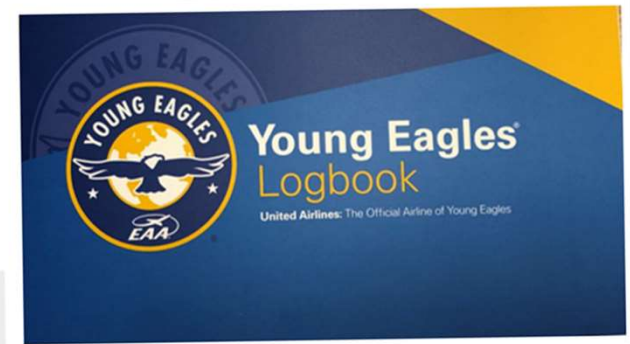
Safety in the Aircraft

- Listen to your pilot.
- Be careful not to pull on controls, push buttons, or flip switches.
- Keep your seatbelt on.
- Try not to ask questions until the pilot says it is ok to do so.
- **Have fun!!**



After the Flight

- Stay with your pilot until you are back in a safe area/off the ramp.
- Be sure to get your Young Eagles Logbook and Certificate
- Ask questions!
- Activate your student membership



About EAA Chapter 105

- **Regular Monthly Gatherings**

- Second Thursday of each month at 6:30 pm
- Chapter Hangar – see EAA105.org for details

- **Other youth activities**

- Young Eagles Build and Fly
- Young Eagles Workshops

- **Adult activities**

- Flying Start – Adult Eagle Flights

Contact Information

Web: EAA105.org

Email: info@EAA105.org

Thank you for attending!!