

High Flight

By [John Gillespie Magee Jr.](#) (RCAF, 1941)



Oh! I have slipped the surly bonds of Earth
And danced the skies on laughter-silvered wings;
Sunward I've climbed, and joined the tumbling mirth
of sun-split clouds,—and done a hundred things
You have not dreamed of—wheeled and soared and swung
High in the sunlit silence. Hov'ring there,
I've chased the shouting wind along, and flung
My eager craft through footless halls of air

Up, up the long, delirious, burning blue
I've topped the wind-swept heights with easy grace
Where never lark nor ever eagle flew—
And, while with silent lifting mind I've trod
The high untrespassed sanctity of space,
Put out my hand, and touched the face of God.



Giving you a Flying Start!

Hosted by EAA Chapter 179



Flying Start **Mission**



To walk you through the process of
becoming a pilot and learning to fly!



Program Outline

- **Who is EAA?**
- **Why learn to fly?**
- **What to fly?**
- **What does it take to become a pilot?**
 - Flight Training Process
 - Instructors
 - Aircraft Access
 - Costs
- **Next Steps**



Try it out - **Eagle Flights!**



Experimental Aircraft Association (EAA)

We are . . .

a **community** of passionate aviation enthusiasts
who promote and support recreational flying



EAA Chapter 179



What We Do

- Member Gatherings
- Builder Support
- Youth Programs
 - Double Eagle Aviation Academy (DEAA)
 - Young Eagles Flights
 - Scholarships
- Public Events
 - Land of Enchantment Fly In
 - Host B-17 and Tri-Motor

Web Site: eaa179.org



Why Learn to Fly?



Peaceful
CrossCountry
Responsibility Flight
Fun Soar
Freedom Destination
Travel Aerobatics
Serene View Calm
Relaxation Fun
Warbirds Vintage Fun
Peaceful Sunset XC
Freedom

Why Learn to Fly?

Excitement, Curiosity

The Challenge of
Learning New Things



Why Learn to Fly?



To Go
Places



The "\$100 Hamburger"

For Enjoyment



Tour the Countryside



Just Go Flying

The Freedom

George Young

License: T-34, US Air Force Academy - 1965



➤ Favorite Airplanes



Beechcraft T-34



Cessna C-172 Skyhawk



Remos GX)

➤ Favorite Flights

- T-34, First solo - takeoff & landing
First solo - cross country, Colorado Springs to NW Kansas for breakfast with my parents
- C-172, Cross Country - California to Kansas and Florida to visit family
- C-172, Coast-to-Coast - Norfolk Virginia to Oakland California
- Remos GX, Scenic Touring - Flying around New Mexico

Coast to Coast in a Cessna 172

Newport News, VA to Oakland, CA and return



A recent flight RV-12, Tour of the Rio Puerco



RV-12 Flight
Tour of the Rio Puerco
George Young
4/22/2023



Joyce Woods

Private Pilot 1994; Instrument, High Performance, Multi-Engine Ratings

Typical Flights

- Local sight-seeing
- Fly-Ins
- Cross Country transit (CO, MT)
- Young Eagle Flights





Why Do You Want To Fly ?

- Enjoy Flying
 - Develop your flying skills – precision takeoff & landing (short & soft field, spot landing), precision aerial maneuvers
- Share flying with family and friends?
- Explore the Scenery of New Mexico (and beyond)?
- Fly to Grants for Lunch?
- Plan and fly a long-distance Cross Country flight?

What do you want to fly?



Certificated Aircraft



Cessna C-172 Skyhawk

Private Pilot certificate typically required

Amateur Built “Experimental”



Vans RV-12

What do you want to fly?



Light Sport Aircraft

2 place, 180 hp, 1320 lb limits

Sport Pilot or Private Pilot



Remos GX Mirage



Rans S-7LS



Piper Cub

What do you want to fly?



Light Sport: “Trikes” & Gyroplanes

Sport Pilot Certificate required if >254 lbs



Ultralights

Pilot Certificate not required if <254 lbs
Single Seat



What do you want to fly?



Sailplanes, Balloons

Sport Pilot or Private Pilot





What Interests You?

- Going cross country?
- Occasional \$100 hamburger?
- Explore the local area from the air?
- Giving rides to others? Young Eagles?
- Getting a job in aviation?
- Teaching others to fly?
- Become an airline pilot?
- Fly for the military?
- Become a corporate pilot?



Requirements & Privileges Vary



Sport Pilot

- Minimum 20 hrs Flight Time
- 2-seat Aircraft
- Day flying only
- Altitude restriction – 10,000ft
- Max Speed 138 mph
- Max Weight 1320 lbs
- Valid Drivers License



Private Pilot

- Minimum 40 hrs Flight Time
- No occupancy restriction
- Day & night flight
- Altitude restriction – 18,000ft
- No Max Speed restriction
- Max Weight 12,500 lbs
- 3rd Class FAA Medical / Basic Med



See EAA's [Step by Step Guides for Private, Sport, Ultralight](#)



FAA Pilot Certificates

License	Notes
Student Pilot	Training for a pilot certificate
Private Pilot	The most common certificate
Recreational Pilot	Soon to be obsolete
Sport Pilot	Least restrictive, lowest cost, quickest to obtain
Commercial Pilot	Fly for hire/compensation
Flight Instructor	Teaching others to fly
Airline Transport Pilot	Airline pilots, most advanced certificate

See EAA's [Step by Step Guides for Private, Sport, Ultralight](#)

Initial Pilot Certification



	Private	Recreational	Sport	Ultralight
Pilot Cert?	Yes	Yes	Yes	No
Medical Req?	Yes (3rd class) or Basic Med	Yes (3rd class) or Basic Med	No (only driver's license)	No
Min Training	40 hrs total time 20 hrs dual 10 hrs solo 3 hrs dual night 5 hrs XCTRY	30 hrs total time 15 hrs dual 5 hrs solo	20 hrs total time 15 hrs dual 5 hrs solo	None
Certificate exam requirements	Written, Practical, Oral	Written, Practical, Oral	Written, Practical, Oral	None
Currency requirements	BFR, 3 T/O & landings every 90 days to carry PAX	< 400 hrs = 3 T/O & landings every 90 days, > 180 days = fly with CFI	BFR, 3 T/O & landings every 90 days to carry PAX	None
Fly for business	Yes	No	No	No

FAA Aircraft Designations



Category	Class	Type
Airplane	Single Engine Land Single Engine Sea Multi Engine Land Multi Engine Sea	Any Jet Aircraft Any Aircraft > 12,500# Boeing 737 Airbus A320
Glider	None	
Rotorcraft	Helicopter Gyrocopter	
Lighter-Than-Air	Airship Balloon	
Powered Lift	None	Osprey
Powered Parachute	Land Sea	
Weight-Shift Control	Land Sea	
Rocket	None	

Initial Pilot Certification



	Private	Recreational	Sport	Ultralight
# PAX	No limit	1 Pax	1 Pax	None
# A/C seats	No limit	4 max	2 max	1 max
Max Speed	No limit	120 Kts	120 Kts	55 Kts
Aircraft Size	No Limit	1,320 lbs	1,320 lbs	254 lbs
Retractable?	Yes	No	No	No
Night Flight?	Yes	No	No	No
Instruments?	Yes	No	No	No
Multiengine?	Yes	No	No	No
Fly into Class B, C, or D?	Yes	Only with CFI endorsement	Only with CFI endorsement	No
Altitude limits	None	10K MSL or 2K AGL	10K MSL or 2K AGL	None
XCTRY Limits	None	50 nm from home	None	None
Fly < VFR?	Yes	No	No	Yes
Notes	Most \$\$ to obtain	Only 150 Recreational pilots in US. Soon to be obsolete.	Least \$\$ to obtain	Not a pilot certificate



Flight Training Topics

- Aerodynamics and Mechanics
- Navigation
- Communication
- Weather
- Safety and Procedures
- Regulations
- **AND Flying Skills . . .**





Flight Lessons – 3 Phases

Basic Skills & Solo!

Turns
Climbs and descents
Stalls
Takeoffs & Landings
Ground Reference Maneuvers
Communications

SOLO!!!

Written Exam

Cross Country & Navigation

Navigation
Weather
Flight Planning
Dual Cross Country Flights

SOLO CROSS COUNTRY!!!

Checkride Preparation

Refine & Polish Skills
Practice Checkride

PILOT!!!

Practical Checkride



Flight Training Options

Instructor (\$50- 65/hr)

- Local Flight Schools (Bode, Del Sol)
- Independent CFIs

Aircraft (\$50 – 160/hr)

- Rent from Flight School / instructor
- Join a Flying Club
- Single or joint aircraft ownership



Private Pilot Cost: Rental Example

Item	Rate	Total Cost
Aircraft Rental	60 hours @ \$110–\$160/ hr	\$6,600 - \$9,600
Flight Instruction	45 Hours @ \$50 – \$65/hr	\$2,250 - \$2,925
Miscellaneous	Ground School, exams, supplies	\$1,000
	Total Investment	\$12,000 – \$15,000

Assumptions:

- 60 hours flight time to license (40 required, 60-70 typical)
- Flight Instructor ground time not included
- Borrow a headset



Sport Pilot Cost – Rental Example

Item	Rate	Total Cost
Aircraft rental	30 hours @ \$110 per hr	\$3,300
Flight Instruction	25 Hours @ \$35 – 70 / hr	\$875 - \$1,750
Miscellaneous	Ground School, exams, supplies	\$900
	Total Investment	\$6,000 - \$7,000

Assumptions:

- 30 hours flight time to license (20 required)
- Flight Instructor ground time not included

Ground School

Good Place to Start



- Universities (UND, Embrey Riddle, CNM, etc.)
- On your own (Books from library or bookstore)
- Del Sol (3 nights/week)
- Kirtland Flight Center (If you have base access)
- Multiple online courses (King, Pilot Institute, Sporty's)
 - Sporty's Learn to Fly Course (\$299)
 - Test prep tools
 - Comprehensive document library
 - Free lifetime updates
 - Several Learn to Fly Week Specials www.sportys.com

Medical Certification



- Private – **3rd Class Medical** from an **FAA approved doctor**
- Sport Pilot – **Drivers License**
- Glider/Balloon – **None Required**

Fact: 98% of pilots work through any special circumstances to get a medical

Medical Advice:

- Talk to your mentor or call EAA at **888.322.4636** about any chronic medical conditions or medications to learn if these might impact your ability to get a medical



Flight Training – a Typical 1st Lesson



- Lessons begin with a meeting with your instructor
 - Discuss your experience & goals
 - Outline the plan and schedule for your training
 - Give preflight briefing for the day's lesson
- Then go for your first flight lesson
 - Conduct a preflight inspection of the airplane (with checklist)
 - Under instruction:
 - Taxi to the runup area, complete engine runup, get clearance onto the runway, and ... take off
 - All movements with clearance from controller, via radio
 - Climb to altitude, receive instruction on performing various maneuvers – level flight, turns, maintaining altitude
 - Return to land – traffic pattern, radio communications, maneuvering to landing
 - Wasn't that exciting?

Lee Otto – CFI, Builder





Wrapping it up - You're the BOSS

Take control, do your homework, and \$AVE!!

- Interview instructors
 - Availability (weekdays, weekends)
 - Agree on expectations, most efficient path
- Fly often!
 - At least once a week
 - Most efficient: 2-3 times/week
- Come prepared!
 - The aircraft is an expensive classroom
 - Practice in your mind, sit in the cockpit

Consider this...



The cost of learning to fly is comparable to . . .

- Family ski vacation, Disneyland, cruise
- Used jet ski or razor ATV
- Season tickets for major league sports
- Installing an outdoor patio living area



Questions?

EAA 179 members are here to help you!



NEXT UP: Eagle Flights

Come Fly with Us!

Flights provided FREE by EAA volunteer pilots





Additional RESOURCES

Offered by EAA

Other Considerations

- Time / Competing priorities
- Proof of US Citizenship
- Insurance (aircraft rental)

*Plan and assess issues early,
to save time and money*

EAA Member Benefits: EAA.org/MemberBenefits



- **EAA Virtual Flight Academy** – offers a complete set of virtual flight lessons
- **Sporty's Learn to Fly Video Library** – access more than 80 videos from the Sporty's Learn to Fly Course - FREE
- **Flight Planning Resources** – discounts on flight planning apps
- **EAA Pilot Proficiency Center Tech Talks recordings** – many qualify for FAA Wings credit
- **Pilot Medical Resources** – BasicMed and aeromedical advisory information



Ground School Study Group

Pass the written exam with a little help from your friends

Self-study at home using the Sporty's Learn to Fly Course, then meet up for regular group discussions with your Flying Start classmates

- Provides support and opportunities to get specific questions answered by a CFI or knowledgeable pilot.
- Stay on track and engaged with the chapter as you prepare for the FAA knowledge test
- Encourages accountability
- Organize your group study today