

THE PRIVATE PILOT

GUIDEBOOK

Version 1 • 2023

By Jon Kotwicki



**YOUR COMPREHENSIVE GUIDE TO
BECOMING A PRIVATE PILOT**

*Incl. how to start, manage your resources
(time and money), and ultimately succeed*



FLIGHT TRAINING DONE RIGHT



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PRIVATE PILOT GUIDEBOOK *by Jon Kotwicki*

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Thank you to Bailey Hill and the entire FLY8MA Team that made this book possible! We hope this book helps to alleviate much stress and frustration from your flight training experience!

FLY8MA



JON KOTWICKI

Author

Jon Kotwicki is a full-time flight instructor with thousands of hours and a multitude of credentials. His flight experience has been garnered through teaching, flying for the airlines, and flying for fun in all 50 states. He holds CFI, CFII, MEI and ATP certificates.

Today, Jon actively trains students from all over the world at the FLY8MA Pilot Lodge in Big Lake, Alaska. You'll also find him with a GoPro in-hand, filming new content for our courses and social media channels.

In 2018, Jon founded FLY8MA to help others achieve their dream of becoming a pilot. FLY8MA brings flight instruction into the 21st Century, creating new products and courses for pilots of all stages (beginner to advanced). Jon and the FLY8MA Team have helped tens of thousands of people just like you save time and money through their flight training journey.



📍 BIG LAKE, AK



TERMINOLOGY



- PPL** — Private Pilot License; otherwise known as the Private Pilot Certificate stateside, but still use PPL for short.
- CFI** — Certified Flight Instructor; the instructor who will prepare you for your PPL, both on the ground and in-flight.
- FAA** — Federal Aviation Administration; aviation's governing body in the US.
- ACS** — Airmen Certification Standards; book containing the standards to which you must perform during your FAA checkride with a DPE (designated pilot examiner).
- VFR** — Visual Flight Rules; the category of flight you are taught in (and fly in as a PPL); must have visual reference to the outside world while flying (i.e. cannot enter clouds or poor visibility/weather, where you have no outside reference).
- ATC** — Air Traffic Control; a service operated by appropriate authority to promote the safe, orderly and expeditious flow of air traffic.
- PIC** — Pilot In Command. This will be you after you get your license (and during your solo flights). Just like a ship only has one captain, an airplane only has one PIC. In other words...one person fully responsible for the flight.
- A&P** — “A” stands for Airframe, “P” stands for Powerplant. It is essentially an aircraft mechanic certified to work on the external (airframe) and internal (powerplant/engine) components of an airplane.

CONTENTS

| YOUR COMPREHENSIVE GUIDE TO BECOMING A PRIVATE PILOT |

01

CHAPTER ONE

Getting started

11

CHAPTER TWO

What does flight training consist of?



15

CHAPTER THREE

Time is money, money is time

35

CHAPTER FOUR

Beginning flight training right

55

CHAPTER FIVE

Don't let this happen to you

65

CHAPTER SIX

The "written"



69

CHAPTER SEVEN

The checkride

77

PRIVATE PILOT DO'S & DON'TS

81

MISCELLANEOUS Q&A

“

**IF YOU PUSH
THE STICK FORWARD,
THE HOUSES GET BIGGER.**

**IF YOU PULL THE STICK BACK,
THEY GET SMALLER.**

**THAT IS, UNLESS YOU
KEEP PULLING THE STICK
ALL THE WAY BACK...THEN
THEY GET BIGGER AGAIN.**

”

CHAPTER 1

GETTING STARTED

What is a Private Pilot Certificate?

A private pilot certificate (otherwise known as a private pilot license or PPL) is essentially a driver's license, but for airplanes. It is the first step all pilots take in their pursuit of aviation, either as a hobby or career.

Privileges + Limitations (what you can/cannot do with it)

Once you have your private pilot certificate, you can fly with passengers and share flight expenses with them. You can pilot volunteer flights for non-profits. There are a limited number of jobs you can get paid for, such as towing gliders (with an endorsement*) or demoing aircraft as an aircraft salesman.

If you are trying to do this for a job and make money (like fly freight or people in small planes), a private pilot certificate will not allow you to do that. You **MUST** earn a commercial pilot certificate or higher to get paid as any sort of "career" pilot.



EVERYONE get's their PPL before earning a commercial pilot license. There is no way to skip the PPL and jump right to commercial, regardless of what training or school you sign up for.

**See page 3 for "endorsement" definition.*

What types of airplanes can you fly?

Generally speaking, the planes you fly as a student pilot will most likely be the ones you fly as a private pilot. However, as a private pilot you have the ability to obtain additional endorsements to fly more complex aircraft. Take a peek below for details.

Student Pilot Trainer Aircraft:

You will be training in small GA (general aviation) aircraft. Common trainers include the Cessna 172 or 150, Piper Cherokee, Diamond DA40 and [if you're super fancy] the Cirrus SR20. We will discuss what's important when choosing your trainer in Chapter 4.



1. Cessna 172 Skyhawk 2. Diamond DA-20 3. Piper PA-28 Cherokee 4. Cirrus SR20

What you can fly as Private Pilot:

As a private pilot, you are certificated to fly ASEL-category aircraft. ASEL stands for Airplane Single Engine Land. Let's break that down.

"Airplane" — This is defined as engine-driven fixed-wing aircraft (no balloons, helicopters, etc.).

"Single Engine" — You can only fly an aircraft with one (single) engine. To fly an aircraft with more than one engine, you will need a multi-engine rating (meaning just more training in an aircraft with two engines).

"Land" — You may only fly an aircraft classified for land (dirt,

asphalt, grass, etc.) landings, as opposed to “sea.” To pilot a seaplane, you must obtain an additional rating (which requires in-flight training with a CFI appropriately certified). Land airplanes have wheels, seaplanes have floats.

Additional endorsements may be sought to fly aircraft such as tailwheel, complex (retractable gear and controllable pitch prop), seaplane or high performance (+200 hp). These take a few hours of training and approximately \$500-1,500, depending on the endorsement.

endorsement

[n.] “sign-off” from CFI, certifying required training for task has been completed. Located in the back pages of your paper logbook.

Example endorsements include: *high performance, complex, tailwheel, high altitude, glider towing.*

Okay...but what do I do now?

Follow Steps 1-7 for your foolproof plan.

1

Purchase an online ground school

Getting into a ground school right away will either reinforce or squash your love for flying. A headstart developing a solid knowledge base before flying is also advantageous.

By studying a ground school first, you will rapidly build your aviation knowledge and awareness, which will make the rest of the process much easier for you. Aviation is full of helpful (and very opinionated) folks, all who will tell you what THEY think is best for you. However, ultimately only you know what's best for you—timeframe, budget, types of airplanes you want to fly, etc. If you have a solid foundation of knowledge, you will be able to make the best decisions for YOU, rather than rely blindly on other's advice.

Our online ground school gives you two different options for purchase: one time purchase or subscription. We'll talk more about ground schools in Chapter 4!



2

Complete an FAA Medical

As you're trying out a ground school, sign-up for an FAA medical examination with an AME (aviation medical examiner; doctor). The reason you should do this right away is to uncover any disqualifying issues before spending thousands on flight training.

You need at least a third class medical to solo, complete the FAA Checkride and fly as a private pilot.

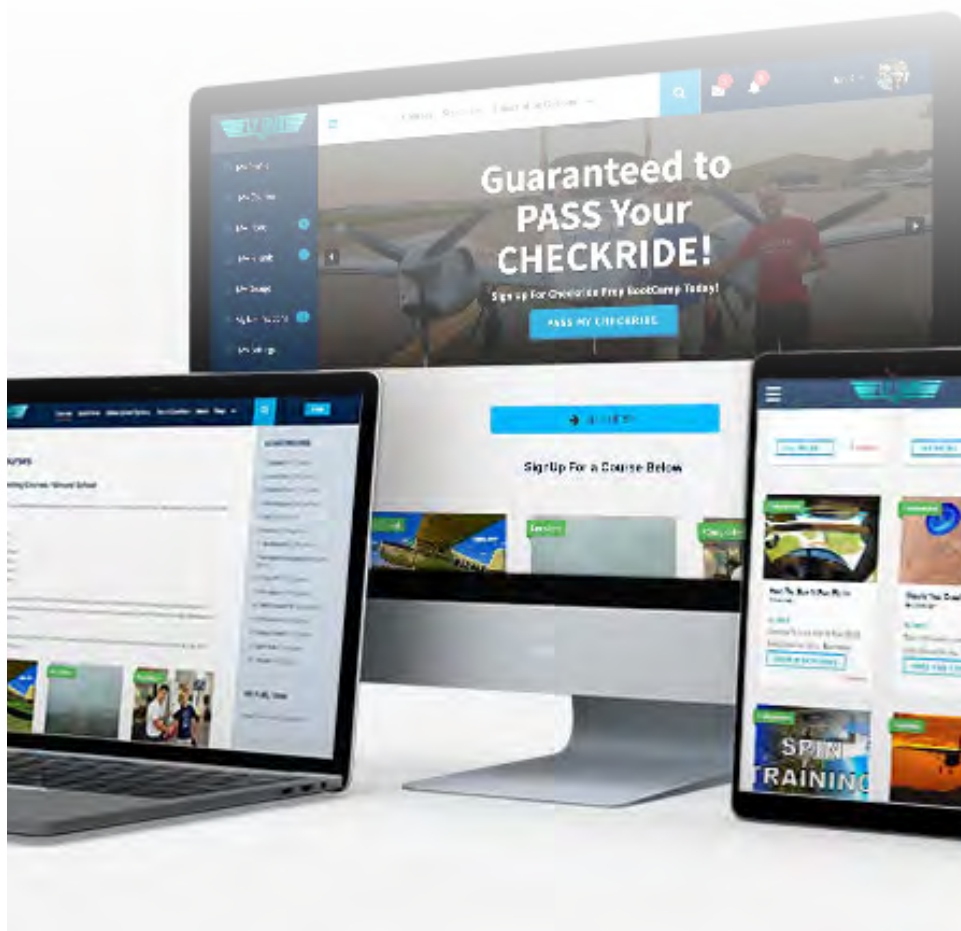
However, if you are thinking about a career in aviation, request a first class medical. These are used by large commercial operators (i.e. airlines), and are more thorough than a third class. Passing this now can save you a lot of anxiety and anguish down the road.

Find an AME near you by using the following link: <https://www.faa.gov/pilots/amelocator/>

Pass the FAA Airman Knowledge Exam

You must obtain a score of +70% on this exam (AKA “the written”) before taking the FAA Private Pilot Checkride. Generally, the best course of action is to knock this out before starting flight training. This ensures you start flying with a solid base of knowledge and no distractions.

The higher you score on this exam, the better. While C’s earn degrees in school, C’s in aviation might make you end up in trees. Completing a solid online prep course will pay dividends (both during flight training and later in your career). Our online course comes with a “100% pass rate on your first try” guarantee!





4

Book an introductory flight (AKA “discovery” flight)

A discovery flight is a 30-60 minute (usually discounted to \$150-\$200) flight that gives you a taste of flying. This will give you a chance to “try out” a certain CFI, airplane and/or flight school. Think of it as a first date!

Note: Flight schools will typically only allow you one “discovery flight” at the discounted rate before charging the regular rate [for airplane rental and instructor]. Keep this in mind if you want to try out other aircraft or instructors.

5

Flight Training

The FAA requires a minimum of 40 flight hours (we will expand on the details later) to qualify for a PPL. However, the FAA cites a national average of 73.1 hours to earn a license.

Your mother is correct—you are “special and above average.” But, so are the other folks who pursue flight training. Your flight school “classmates” are unlikely to be on parole from their 5th DUI while working on their GED at night school. They are likely doctors, lawyers, and other educated professionals who make up the national average of 73.1 hours [required to earn a pilot license]. It’s a safe bet you will fall close to this average. If you use the steps at the end of this book, however, we guarantee it’ll shave at least 5-10 hours off your training (saving you time + money)!



6

FAA Checkride Preparation

While technically this entire journey from now forward is preparing you for the FAA Private Pilot Checkride, it never hurts to have a little specific preparation to ensure you pass on the first try. When you get to this step, check out the Checkride Prep Boot Camp on FLY8MA.com. Over 20,000 other pilots have used that same course to pass their checkride on the first try!

7

FAA Private Pilot Checkride

A designated pilot examiner (DPE) will conduct your PPL checkride. The checkride consists of an oral exam and in-flight exam. After a successful ride, you will be issued a temporary private pilot certificate (before your official one arrives in the mail)!



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“

YOU START WITH A BAG **FULL** OF LUCK
AND AN **EMPTY** BAG OF EXPERIENCE. THE
TRICK IS TO **FILL** THE BAG OF EXPERIENCE
BEFORE YOU **EMPTY** THE BAG OF LUCK.

”

CHAPTER 2

WHAT DOES FLIGHT TRAINING CONSIST OF?

A big part of getting your private pilot license involves spending time in a small airplane. Some of those hours will be solo, but the majority will be with a certified flight instructor (CFI). However, there are minimum hours throughout several categories [set by the FAA] which you must meet before taking the checkride.

40 HOURS TOTAL including:

20 HOURS DUAL

[“Dual” means your CFI was with you in-flight.] These 20 hours of “dual” must cover...

3 HOURS INSTRUMENT TRAINING on the control and maneuvering of an airplane solely by reference to instruments, including straight and level flight, constant airspeed climbs and descents, turns to a heading, recovery from unusual flight attitudes, radio communications, and the use of navigation systems/facilities and radar services appropriate to instrument flight

3 HOURS NIGHT-TIME TRAINING including one cross-country flight of over 100 nautical miles total distance, and 10 takeoffs and 10 landings to a full stop (with each landing involving a flight in the traffic pattern) at an airport

3 HOURS CROSS COUNTRY TRAINING

“Cross country” does not mean LA to NYC, but rather any flight over 50NM in length (straight-line distance)...by FAA standards.

3 HOURS CHECKRIDE PREPARATION TRAINING

which must be performed within the preceding two calendar months from month of test

AND...

10 HOURS SOLO

[“Solo” means flying by yourself; no one sitting beside you other than your checklist.] These 10 hours “solo” include...

THREE TAKEOFFS AND THREE LANDINGS to a full stop (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower

5 HOURS CROSS COUNTRY

ONE SOLO CROSS COUNTRY FLIGHT of 150NM total distance, with full-stop landings at three points, and one segment of the flight consisting of a straight-line distance of more than 50NM between the takeoff and landing locations

1. This pilot wears “foggles” to simulate instrument conditions (i.e. flying through fog/clouds/low visibility). She is only able to see the aircraft panel clearly. You will wear these during the required three hours of instrument training.

2. When you gain enough experience, you’ll be flying the airplane by yourself (AKA “solo”) like this student pilot.

3. When the instructor is with you in the airplane, like Jon is here, it’s called “dual flight training.”





CHAPTER 3

TIME IS MONEY, MONEY IS TIME

HOW MUCH DOES IT COST & HOW LONG DOES IT TAKE?

Just as one shoe doesn't fit each foot, there isn't one set path or fixed cost for private pilot training. There are innumerable variables affecting the cost of a PPL, such as previous experience, diligent study habits (or lack thereof), type of aircraft (rental rate), big school vs. little school... Generally speaking, though, the longer it takes, the more it costs.

Throughout the next few pages, you'll find an estimated cost breakdown (spanning the entirety of your training). *Estimated costs are based on the prices we've encountered across the nation.*



\$200-1,250 TRAINING SUPPLIES

KNEEBOARD — \$17-35

This is an optional, but *highly recommended*, tool. It is a clipboard that straps to your leg to provide a sturdy writing surface while flying. Cockpits are cramped...there isn't a lot of desk space in there. It also ensures papers and checklists remain secure in one spot, versus falling down by your feet in bumpy weather.

HEADSET — \$150-1,100

While you can usually rent one from the flight school—yuck, lice—we recommend buying one (once you're certain flying is for you). You can purchase a cheap one off of Amazon, or an expensive one through an avionics shop. Either way, you'll get what you pay for.

If you're on a budget, the David Clark brand has a variety of price points (probably offering one of the cheapest options). They have been worn by hundreds of thousands of pilots for decades, and they last a long time. Just know that budget headsets will most likely be passive noise reduction, potentially leading to hearing issues later down the line.

If money is no object to you, and you want something comfortable with better audio to understand ATC's garble, go with Bose or Lightspeed. Bonus points: they employ active noise canceling technology. Permanent hearing loss plagues over 30% of aviators...just saying.

PLOTTER — \$7-17

This map-plotting tool is essential. You will use it to plot cross country routes near the halfway point of flight training.

E6B — \$15-40

Another essential—the E6B is a rather ingenious, ancient flight “computer.” The US Navy's Lt. Philip Dalton introduced it to the Army in the 1940s, and it's been in pilots' hands ever since. It is a paper or metal analog calculating device, used in course plotting and in-flight navigation adjustments. There are electronic versions out now, such as Sporty's Electronic E6B or ASA's CX-3. Those will cost upwards of \$100. Check out Jon's Journal for his thoughts on the matter (opposite page).

SECTIONAL — \$9

The sectional is a must-have for student and private pilots alike. It is a paper map used for aerial navigation and flight planning. You can most likely find one for your area by stopping by the local airport.



JON'S JOURNAL

You are in training to learn. You are not there to take a “easy pill” and magically become a pilot. Would you want to sit in the backseat of the plane flown by the pilot who studied hard and learned all of the intricacies of flying, or the one who downloaded an app instead of using the tools all other pilot’s have used for the past 90 years? Stick to the old-school paper E6B in training. It may be more tedious, but we make it easy to learn with videos in our courses. It is best to learn it and forget it (you can use fancy apps after you earn your license) rather than to never know it at all.





\$100-300/hr
AIRCRAFT RENTAL

This aircraft rental fee depends on the type of aircraft (see Chapter 1), its condition, type of avionics/panel, plus the owner's operating costs. A "wet" rate (aircraft rental with fuel included) will vary based on local fuel prices.



\$45 - 150/hr

INSTRUCTOR FEE

A CFI's hourly fee usually depends on their experience level and type of instruction (flight or ground). If they work for a flight school, the school sets an hourly rate for all instructors, regardless of experience.

\$300-800 GROUND SCHOOL

Online ground school is cheaper than individual lessons with a CFI in-person. With our online course you can still ask questions through live support online (from real CFIs), plus rewatch videos as many times as you want. In person, you'll hear the info once and then they move on. Online ground schools give you a chance to review topics with no extra charge.



FLY8MA

Pilot Courses ▾ Ask a Question Pricing Articles ▾ Practice Tests Videos For CFIs Sign In

Pass your Test the 1st Time 100% Guarantee!

Join over 12,000 other pilots who have used FLY8MA Online Ground School to pass their written exams and then check out!

The average written test score from FLY8MA students is a 92% in addition to passing the FAA Written Exam, we guarantee you will pass your checkride when you sign up for our courses.

[LEARN MORE](#)

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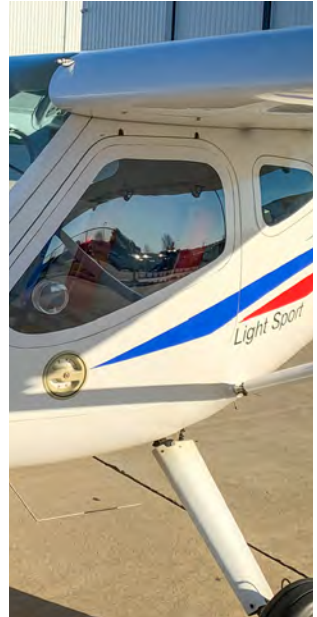
\$100 - 200

MEDICAL

The first class medical generally costs more than a third class, but the pricing is set solely by the AME (aviation medical examiner; doctor). The FAA has nothing to do with it.

See Chapters 1 & 4 for details on the medical requirements, process, etc.

\$165 FAA WRITTEN
EXAM



\$600-1,200 FAA
CHECKRIDE

the TOTAL



*The upper limit can go over \$30k if you choose
a very expensive plane and have poor study habits.
The average total cost in 2022 was \$13,455.*

THE **LONGER** IT TAKES, THE **MORE** IT COSTS.

FLIGHT TIME

Airplanes are expensive classrooms. The average in-flight lesson runs about 1.5 hours. Let's say the aircraft rental fee is \$140/hour. Your CFI charges \$50/hour. That lesson is now costing \$285. Would you want to spend that hour and a half staring blankly at your instructor, wishing you would've studied prior? It sounds like a sure way to repeat a lesson, thereby spending double the money.

This is why we emphasize ground study so much. If you do not study prior to a flight lesson, you can watch your hard-earned money burn right out the exhaust. Trust us—we've been there.

CALENDAR TIME

You're a full-time loan officer at a local bank, pursuing a PPL in your spare time. The bank won't let you skip out of work to go fly (rude, right?), so you only take lessons on the weekends. And you're a busy parent—so lessons are now twice a month. This sounds fine and all, but let's talk "currency." Pilots, students and professionals alike, have to fly semi-often to maintain currency and proficiency within a certain aircraft or skillset. If you take longer breaks between lessons, it's much harder to keep up your skills (and improve them) because you're constantly needing a refresher. This is why stretching PPL training across a long period of time (calendar time) will ultimately cost you more.



HOW TO **SAVE** MONEY

SPEND TIME ON THE GROUND, NOT IN THE AIR

While this may not sound appealing, I promise it's the best way. Let me explain.

You can spend time on the ground studying (which costs little to nothing with our course), or you can spend a lot of time in the air with your instructor...who will be trying to explain things over engine noise and vibration to the tune of \$200-400/hr. By that logic, would you rather spend 1 hour of study on the ground and 5 hours being taught a maneuver in the air, or 5 hours studying on the ground, and 1 hour in the air? Confusion or preparation? I know which one I'd choose.

PRE- and POST-FLIGHT BRIEFS

Let's paint the picture: you show up to the airport starry-eyed and excited for your fourth training flight. Your CFI approaches you and says, "Are

you ready for slow flight?” Hold on...what’s slow flight? “You didn’t study at all? Ugh. Okay. Did you at least work on the radio calls that were weak last flight?” My radio calls were weak last flight? This stuff would have been nice to know before today’s lesson, right? That’s where pre- and post-flight briefings come in.

The upcoming tasks and goals for the day are addressed during the pre-flight brief. Once you’re back on the ground, you and your CFI can assess your performance while reinforcing the main lessons of the flight (AKA the post-flight brief). Your CFI will also discuss what to study for the next lesson.

DO NOT let your CFI take you flying without briefing you first on what to expect on the flight. DO NOT let your CFI end the lesson without thoroughly debriefing you on what you did well, what needs more work, and what you should study to prepare for the next lesson.



Our PPL Lesson Plans provide you and your CFI with guidance for both of these all-important talks. During the pre-flight brief, review with your CFI the lesson’s tasks and common errors to be aware of. When the flight comes to a close, refer to your lesson’s “Debrief Questions” for an effective post-flight brief.

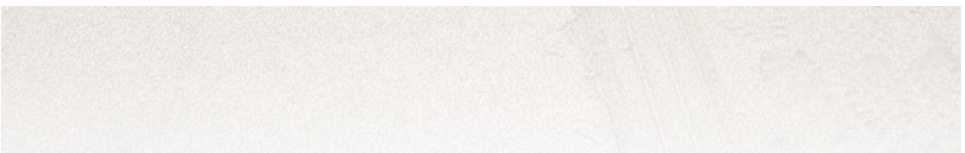


JON'S #1 TIP FOR SUCCESS:

FIND THE RIGHT INSTRUCTOR

The “right instructor” is someone who cares about you and your success. You will have a million questions during your flight training journey. But, if you have that instructor in your corner, you’ve got an invaluable resource who will walk you through the process (and even tailor it towards your goals and learning style).

Before we start getting into the negatives...there are people



out there who love teaching, care about their students and see the hours/pay as a mere bonus. The unfortunate truth, however, is the majority of CFIs out there are only using teaching as a way of survival—both in terms of time building and income.

It's pretty difficult to find a CFI who wants you to be the best pilot you can be (especially in the shortest time and lowest cost possible). This is because the longer it takes you to get through flight training, the more money you hand over to the CFI and school. If you save money, they are likely missing out on revenue. So...how do you find an instructor who is actually invested in you and not the hours?

See Chapter 4 for our CFI “interview guide” (i.e. the questions you should be asking before committing to an instructor).

Guess what? You've found him already. As the guy writing this book, and the guy who teaches the online ground school course, I'm VERY motivated to save you time and money. In fact, I might be the only person along your entire flight training journey that stands to benefit from you saving time and money!

Let me be totally transparent. Our company sells online training courses for Private Pilots, IFR training, Commercial Pilots, Flight Instructors, etc. We offer over 30 courses on our website. If we sell you a private pilot course and you run out of money overpaying for excess hours, then I just lost an opportunity to sell another course to you. If you get through training quickly, easily, and with money leftover, we'll be ready to provide you with training towards your instrument rating, tailwheel endorsement, commercial pilot certificate...you name it!

I can't sell you a second course unless you are successful in the first one, and I can't sell you a 4th or 5th course unless you are successful in the first, second, and third. So, guess what? You have me and an entire team of instructors at FLY8MA.com willing to help you via phone and email 7 days a week, 365 days a year, to ensure your success in aviation. As for finding the perfect instructor, we cover that in a video series in Lesson 2 of the Private Pilot Ground School.



While learning from one CFI is good, following multiple trained professionals is great. Think of it as reading through an entire library rather than one textbook. You want to be a well-rounded pilot, right? Watching our videos on FLY8MA.com and our YouTube channel will get you closer towards that goal.



HOW TO **PAY** FOR FLIGHT TRAINING

SAVE UP

If possible, save up the total cost of training (plus a contingency) prior to starting. Obviously, this will take a bit longer. But, you'll waste far more time and money if you pay as it comes in!

LOANS

In any situation, taking out a loan is a serious thing to consider. However, if you are looking to pursue aviation as a career and get to the airlines fast, loans are a viable option. This will allow you to train full time, which means retaining more knowledge and progressing quicker. Note that private flight schools are not usually tied to universities, which makes it near impossible to pull out a student loan.

Large flight schools will most likely have a company they partner with for flight training loans, such as Sallie Mae or Wells Fargo. If they don't, look into AOPA Finance. These companies see your training as career- or trade-based, which gets you closer to that student loan style.

SCHOLARSHIPS

If you're training in a university setting, scholarships are much easier to come by. Typically, the finance or counselor's office can discuss options with you (and may even have convenient walk-in hours).

For those of you in a private setting (independent CFI or flight school), you do still have scholarship options...albeit a few less. Most will be offered through special aviation clubs or organizations (i.e. Women in Aviation-International, EAA). There are even a few airlines offering scholarships (some with the stipulation of directly working for or entering a career path to them). Although the application processes may take a bit more work than a loan application, they are a great interest-free option.



MILITARY ASSISTANCE

Quick note: The Tuition Assistance Program will not cover flight training fees. However, it can be used in conjunction with the GI Bill to cover fees outside of flight training (especially if pursuing a university program).

The GI Bill offers oodles of benefits for financial compensation. However, you must have a private pilot's license to qualify. The Department of Veterans Affairs sites the following requirements must be met before using GI Bill benefits:

- You qualify for the Post-9/11 GI Bill or Montgomery GI Bill, **and**
- You have a private pilot's license, **and**
- You have a second-class medical certificate valid for second-class privileges—or a first-class medical certificate if you want to pursue the Airline Transport Pilot (ATP) certificate.

The Silver Lining: You know how we just told you the GI Bill can only be used if you're an existing private pilot? Here's the loophole—you can use the GI Bill to cover from Day Dot (zero time) if you attend a university/college aviation program. Why? Because the flight training is lumped into your degree training! This option allows you to get a bachelor's and flight certificates/ratings all in one.

The GI Bill can be used in a vocational or degree program at a private college, university or Pt. 141 private flight school. Consult Military One Source, the VA website or local base education office for more details.

WORK AT A FLIGHT SCHOOL

This is a perfect option if you're also looking for a job! Most flight schools offer employee discounts on flight training fees (aircraft rental, instructor fees, etc.). You can work as a front desk attendant, dispatcher, line technician, airplane detailer, etc. Check your local flight schools to see if they offer this as an option!

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“

AIRSPPEED, ALTITUDE, AND BRAINS.

**TWO ARE ALWAYS NEEDED TO
SUCCESSFULLY COMPLETE THE FLIGHT.**

”

CHAPTER 4

BEGINNING FLIGHT TRAINING RIGHT

Ground School First

\$350 vs. \$3,000...it's up to you...

Why complete a ground school before beginning flight training? I'll explain the details below. But, for those of you looking for the short version, here it is:

TLDR: *Ground school gives you a foundation of knowledge (how the airplane works, flying in different airspace systems, terminology, etc). Without that foundation, you won't have a clue as to what's going on up there. You'll ultimately be paying hundreds of dollars per hour while flying around totally confused; learning and retaining nothing. The best way to waste money in flight training is to simply jump in a plane and start swiping that credit card. The best way to save is to study and learn as much as possible on the ground prior to getting in the plane. The actual "flight" portion of flight training will then go as quickly and smoothly as possible.*

The Full Story:

It is theoretically possible to have an instructor teach you everything in the plane. However, there is A LOT of material you need to know. If you try to learn every single piece of information in the plane (where it's hard to hear, busy, and...you know...you're flying the plane), it will take A LOT longer to learn. With more time [and less independence] comes higher cost. You'd be paying an instructor to teach you the required

ground knowledge for approximately 40-60 hours. With their rate usually around \$50-75/hr, that's a total of \$3,000.

Alternatively, if you complete an online ground school first, you will pay about \$350 for the same 40-60 hours of studying (via videos) on your own. If you're afraid of not having an instructor there to answer your questions, don't worry. With our online ground school course, you'll get unlimited support via phone and email from real flight instructors here in the USA, 7 days/week, at no extra cost to you. So, you pick: \$350 or \$3,000.

Still unsure? Let's talk about you being inadequately prepared for any portion of flight training—the written test, actual training in-cockpit, or the final checkride. If you need to repeat lessons or testing because of insufficiency or complete failure, here's what you can expect:

Fail a written test... Pay an instructor for a few hours of remedial training (usually \$200-\$350) and then pay the testing fee (\$165) again.

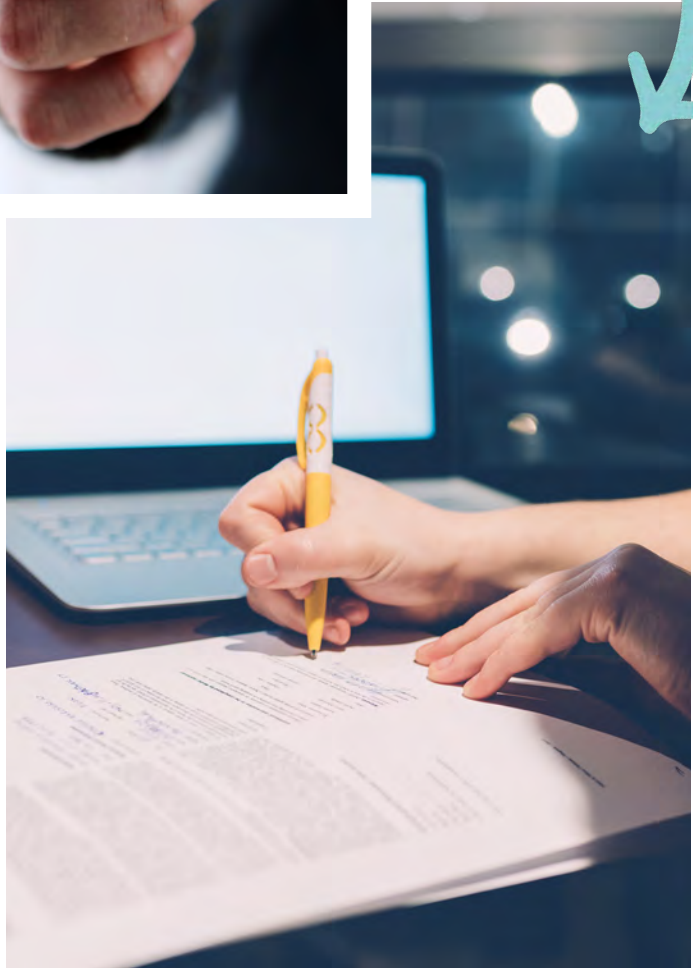
Fail a flight lesson... Repeat the lesson at a cost of \$300-\$500.

Fail a checkride... Plan to pay for remedial training (around \$500-\$1,000), pay to rent the airplane again for a retest (about \$400), and pay the re-examining fee (about \$800).

Bottom line: if you're prepared, you will not incur those extra costs. FLY8MA's online ground school courses prepare you specifically to be successful on all three fronts. Oh, and did we mention they come with a guarantee you'll pass both the written exam and final checkride on the first try? Paying \$350 for an online ground school is looking pretty good right now...



VS



Medical

A medical certificate, granted by an FAA-approved doctor (otherwise known as an AME), is required to solo during flight training. It is also required to act as pilot in any flying you do *after* getting your license.

You have two main options to start out with, depending on your goals (i.e. why you are getting your PPL):

HOBBY— If you are pursuing your PPL for hobby flying, all you need is a Third Class Medical.

CAREER— If there is any part of you thinking of flying for a career, snag a First Class Medical. The airlines—and similar flying jobs—require a first class. Although it seems far away, you'll want to find out now if you even qualify.



JON'S JOURNAL

The Second Class Medical is used by all other pilots who fly commercially (excluding airline transport pilots...with a few exceptions). Whether it's airlines or crop dusting that interest you, we still recommend getting your first class initially.




The cost of your medical may vary depending on location and the class of certificate. However, some AMEs charge the same fee for first, second and third classes. Most range from \$100-200.

Before scheduling an appointment with an AME, fill out a medical application on MedXPress (<https://medxpress.faa.gov/medxpress/>). Print off the completed application to bring with to your appointment.

To find an AME near you, visit this FAA website:
<https://www.faa.gov/pilots/amelocator>

FAA Medical Durations

At this point, you are aware of the medical requirements to fly [solo and post-certificate]. But how long are medicals good for? Take a look.

	 Class 1	 Class 2	 Class 3
Pilot Type	Airline Transport Pilot (ATP)	Commercial Pilot	Private, Student, Recreational Pilots
Duration	≥ 40 y/o = 6 months < 40 y/o = 12 months	12 months	≥ 40 y/o = 24 months < 40 y/o = 60 months

But that isn't the whole story...

The above table is fairly cut and dry, but the overall usable time of a medical is less so. For instance, if you are under 40 and receive a first class medical, it will last for 12 months. Once the first class "times out," you will still be able to use the medical under *third class privileges*, as shown below. It is still a first class medical, but you would be restricted to third class use (i.e. PPL, CFI, etc.).

1st class

1st class privileges		3rd class privileges		< 40	
1st class priv.	2nd class priv.	3rd class priv.	≥ 40		
2nd class privileges		3rd class privileges		< 40	
2nd class privileges		3rd class priv.		≥ 40	
3rd class privileges					< 40
3rd class privileges			≥ 40		
6 months	12 months	24 months	60 months		

FAA Airman Knowledge Exam

The FAA Airman Knowledge Exam (often referred to as “the written” or “written test”) is a computer-based multiple choice test all student pilots must take [and pass] prior to earning their private pilot certificate. To pass, you must score 70% or above.

At the private pilot level, you take the Private Pilot Airplane written test (abbreviated PAR...not all FAA abbreviations make sense). An instrument rating, commercial certificate, CFI certificate, etc. all require their own written tests.

The private pilot written is a 60 question, 2.5 hour test. It may seem easy enough since it is multiple choice (simply A, B, C). However, having less choices often means the potential answers are more similar (and thus more difficult). It is safe to say the average smart person with maybe a little flight experience (but no specific written test preparation) would fail—below 70%. Studying specifically for the test is essential to passing and earning a good score.



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“Why do I need above 70% if that’s the minimum?”

We hear this a lot. While a future employer is unlikely to care what score you earned on the FAA written exam, the FAA examiner administering your checkride at the end of training will be very interested. In fact, they are legally required to re-quizz you [during the oral portion of the checkride] on all questions you got wrong on the written. If you miss lots of answers, there will be lots of questioning. Life becomes much easier if you score in the 90s, as there will be fewer items for the examiner to drill you on.

FUN FACT: Each week, at least one FLY8MA student earns 100% on their written test. The average score of a FLY8MA student is 94%.
Just saying...



"BUT I'M A REALLY GOOD TEST-TAKER, AND DON'T NEED TO STUDY."

Sorry, but you need to study. Trying to save time by not studying for the written will cost you time and money later in your training. And for those of you who are not good test-takers, don't worry. Our online courses are designed to work for ALL learning types and will ensure you pass.

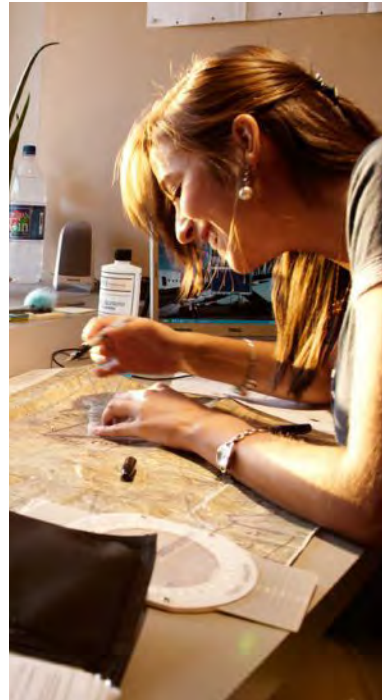


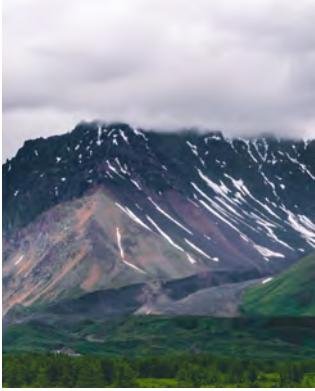
"WHEN SHOULD I TAKE THE WRITTEN?"

You may think you will be best prepared for this test after completing a ground school course and near the end of your flight training. After all, it makes sense the longer you are in aviation the more you will know about it...right?

It's actually not quite so. The FAA written test does not measure your overall aviation knowledge. It measures specific areas of knowledge (many rules and regulations) which, quite frankly, you will not deal with much after taking the written.

Studying for the written test and studying for flight training are two different things, with slightly different information. You DO NOT want to be trying to study two things while going through flight training. Instead focus on one at a time—master it—and move on. This is the best way to save time and money.





Choosing a School

A flight school is the most common route to learn to fly. If you go to a flight school at a local airport, the school may own or lease aircraft and instructors on-staff available. You will have the option of selecting an instructor you relate well to. The school may be a “Part 141 flight school” or a “Part 61 flight school.”

A Part 141 school has specific approval from the Federal Aviation Administration (FAA) to teach a structured and organized program. A 141 program sticks to a rigid schedule and can be completed in the shortest amount of time. If your school is not a 141 flight school, they are a Part 61 flight school. This means they are governed by Part 61 of the Code of Federal Regulations (CFR).

There are several alternatives to attending flight schools. We will explain each option in the next few pages!



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One is not necessarily any better than the other. While Part 141 schools often advertise that you can complete training faster than Part 61, there is no reason you cannot achieve nearly everything you want from a Part 61 school.

It's a rather loaded topic to talk about the differences between 141 and 61, and we cover all this online at fly8ma.com/61-141

At the end of the day, the national average for Private Pilots at part 141 schools is 71.3 hours and the national average for Part 61 schools is 73.1. You are not likely to save time one way or the other. The most likely reason you would choose 141 is if you are on a career track to the airlines or using VA funding from the military to help pay for training.



ALTERNATIVES TO FLIGHT SCHOOLS



WORKING WITH AN INDEPENDENT CFI

An independent CFI is someone who isn't attached to a flight school, and teaches on their own schedule with [usually] their own airplane. This can be extremely convenient if they have good availability. The downside of learning to fly in one aircraft is if the airplane goes down for maintenance, you won't be able to fly.

You can find local independent CFIs by stopping into nearby airports. If no one is lounging in the FBO, "ask" the bulletin board—there are usually hundreds of business cards posted there. An FBO is a Fixed Base Operator... basically a catch-all organization who's been granted the right by the airport to provide services (fueling, aircraft rental, courtesy cars, etc.). An uncontrolled airport's FBO may or may not be attended, but there's sure to be some older pilots meeting for morning chit chat closeby.

JOIN A FLYING CLUB

Flying clubs are member-run groups that allow members access to airplanes. Clubs can be very small (~5 people) and 1 to 2 aircraft. Or, they can be as big as an established flight school with several dozen aircraft at multiple airports. One advantage of learning to fly with a flying club is the availability of multiple aircraft. This means backups are available if one is reserved or down for maintenance.

Flying clubs often have one or two CFIs who teach full-time, and many more who teach part-time with other flying careers (airline, air ambulance, corporate, etc.). If you have a career goal in mind, finding an instructor who can mentor you towards a desired goal can be beneficial. The advantage to a flying "club" over a school is they are generally non-profit groups, which keep aircraft rental costs low by relying on member-volunteer work (maintaining aircraft and facilities).

BUYING AN AIRPLANE

This option is very experience/knowledge-intensive, and has more cons than pros. The biggest “con” is that no one sells amazing quality airplanes at low prices just because they’re wanting to help a new pilot out with a deal. This scenario is more likely: everyone else who knew better passed. They see an opportunity to sell a plane to some naive newbie for \$25k, when it needs \$50-70k worth of work. If you thought boats ate money, try airplanes.

I strongly recommend owning an airplane...AFTER you earn your PPL (perhaps even a year or more after earning it). An airplane purchase is not something to rush into. It’s best if you have experienced A&P and pilot friends as backup references. That being said, I do recommend buying into a club or partial ownership of a plane to learn to fly (say 1/5 ownership), if it’s available at your local airport. This may actually save money, and any potential maintenance issues will only hurt 20% as bad.



JON'S JOURNAL

If you really MUST buy an airplane to train in because you want one really really bad, then check out our YouTube channel [FLY8MA.com](https://www.youtube.com/channel/UC8MA.com) **Flight Training**... There is A LOT you will want to learn before writing the check.

Choosing a CFI

These are the kind of questions you should be asking a potential CFI before fully committing:

How many hours dual given?

You'd like to have a CFI with at least 200 hours dual given, and at least 200 hours per year.

How many students have you signed off for PPL checkrides [and how many have passed their first try] in the last six months?

You're looking for an instructor that has sent at least 5 students for checkrides for the same license or rating you are seeking, and for them to have passed on the first try.

Where do you see yourself in a year or two?

The answer you're looking for is "teaching here". Most CFIs only teach at a school for 12-18 months, and then will quit with 2 weeks notice and go take the next higher paying aviation job (either airlines or some other commercial job). You may find a CFI that has a year of teaching experience and meets your criteria. Here's the catch: they are leaving in a few months for a new job. Not a good fit. What if they say they'll still instruct in their time off? Be wary—it rarely works that way.

Are you a full-time CFI at that school?

The goal is to find someone who is available to fly with you when the weather is good and your schedules align. If they have other jobs (aviation-related or not) or are a stay-at-home parent they may not be as available as you will need to avoid delays in your training.





*What syllabus do you use?
Can I see it?*

Of course, the best syllabus available is the **FLY8MA Private Pilot syllabus**. But, you at least want them to have some sort of syllabus to follow. This ensures they train you on everything PPL-required. Too many flight instructors try to “wing it,” and while you feel like you learn a lot, you end up going for your checkride to find several things they did not teach you. This’ll likely end with a failed checkride and expensive day.

*How much time do you
spend briefing and
debriefing versus flying
with me?*

You would like to have a CFI who spends at least 30 mins briefing and debriefing before and after each flight lesson. Many CFIs don’t do this. They’re more focused on getting flight hours rather than teaching you on the ground. Remember most CFIs are not instructing because they love teaching... They simply became an instructor because it was the fastest and easiest way for them to build flight time to get to the next level in their careers.

Are you a Gold Seal or NAFI Master CFI?

This designation is for a CFI who has been instructing for a few years and has a good pass rate with their students. If they say “yes,” then their CFI plastic card will have a gold DOT logo instead of black. Or they will have a certificate from

NAFI (National Association of Flight Instructors) that says Master CFI. It is not possible for a CFI to have these credentials unless they have signed off at least 10 students.

Do they work with the FAA Wings Program [FAAST]?

This is a volunteer program instructors can give their time to. If they participate, it typically means they are giving presentations and lectures on some weekends to pilot groups. It really just means they take teaching seriously and care about promoting safety. Most CFIs do not participate—it's okay if they don't. A small fraction of those who do participate are just full of themselves (doing it for the attention). Take it with a grain of salt.

What are your hobbies?

If they just say “flying,” that's fine. But, the purpose here is to see if you share any common experience that will help them relate the material to you. I.e. if you both have sailed boats, then they can use metaphors about sailing to help correlate aviation topics. If there is no common experience, it may be difficult to communicate. I.e. if you are a 60-year-old retired accountant and your instructor is a 20-year-old video gamer, they may not be the best suited to teach you.

What did they do before flying?

Again, is there any common experience here that may help the two of you bond and communicate?





What is the average number of hours your students have when they go for a checkride?

There is no right or wrong answer here. Ultimately you'll talk to 2-3 of their past students and get the truth from them. The national average for a Private Pilot is 73.1 hours, minimum 40 hours.

What is the average cost your students spend?

Again, get the truth from the students. The only wrong answer here is "I don't know". That means they likely do not care enough to respect their student's money that they are spending on training.

Can I talk to two or three of your students who have done their training with you and finished?

Ask if they would use the same CFI; how much did it cost them; how long; what would they have done differently in training? If they cannot provide contact info for at least 2 students, then run away.

What is your favorite part about teaching?

No wrong answer, aside from "I like getting other people to pay for my hours to get to the airlines so I can

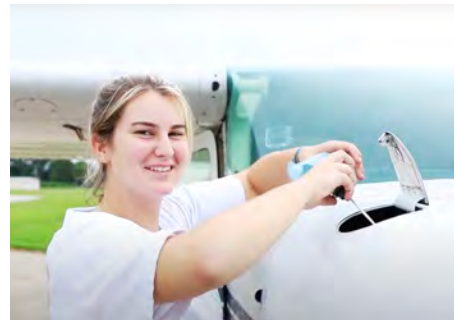
be a Captain making lots of money and not have to deal with student pilots ever again."

How many times a week are you available to fly with me?

You want to aim to fly 3-4 times per week. With weather, and other delays, you'll realistically get 2-3 flight per week.

How long have you been teaching?

Time in calendar months matters, but so does hours of dual given. You'd like to find someone with at least 6 months of instruction and at least 200 hours dual given.



How do you bill for your instruction time?

There is no right or wrong answer, but the typical instructor will bill from the start of the lesson to the end (and for the aircraft only when the engine is running). I.e. you book from 1pm-3pm and fly the plane from 1:30pm-2:30pm. You will pay for 1 hour of aircraft rental and two hours of instructor fees. If you book 1-3pm and show up at 1:30pm, it is more than fair they charge you from 1-3pm. You must respect their time as they must respect yours.

Choosing a Plane

So, which plane do you want to train in? Well...first let me tell you what you “need.” Then we’ll talk about what you “want.”



I NEED...

...A PLANE THAT FITS ME.

Training aircraft are built for small, skinny people. If you’re not one of those, then you’ll need a slightly larger aircraft.

...AN AFFORDABLE PLANE.

A new 2000’s model is nice, but if you have a tight budget, plan to train in a 1960s/70s trainer.

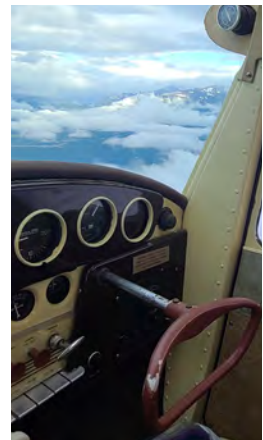
...A PLANE THAT’S SAFE.

While most flight schools maintain their aircraft well, don’t be fooled by a fresh paint job and new interior thrown into an old airplane. While there isn’t anything wrong with old airplanes, a school dumping money into the airplane’s looks [rather than its engine, airframe, etc.] does nothing to ensure safety. We’ll talk about what questions to ask the school on Page 61 to see where their priorities lie.

...A PLANE THAT’S APPROPRIATE TO LEARN IN.

Sure, you might want to fly a fast 6-seater once you get your license. But, learning to fly in a fast plane [burning tons of gas] is pointless. It’s more difficult than trying to learn in a slower, more traditional trainer that’s cheaper to rent and easier to learn in [everything happens slower].

Now, let’s talk about what you might “want” [but certainly don’t need].





I DON'T NEED...

...A LEATHER INTERIOR.

...AIR CONDITIONING

...FANCY RADIOS OR AVIONICS.


This mostly applies to "glass panels." A glass panel is basically a dashboard of computer screens rather than old "round gauges" and instruments [analog]. These round gauges and instruments are often referred to as "steam gauges" or a 6-pack.

...GIANT TIRES.

Yes, they look cool. But, they cost a lot more and you'll pay for them in the cost of aircraft rental.

...A FANCY PAINT JOB.



A scenic landscape featuring a wide river in the foreground, a small white airplane on a sandy bank, and snow-capped mountains in the background under a blue sky with light clouds.

Bottom line, whatever aircraft you get your license in will have VERY LITTLE impact on what airplanes you can fly down the road (despite what the salesperson at the flight school may tell you). At the end of the day, you want to get through training as inexpensively as possible. Why? Once you have your license, you'll actually have money leftover to be able to fly for fun in a perhaps more advanced plane!

See Scenario A (page 55) for more details on the right vs wrong airplane.

Almost always, the most affordable airplane available to you will suffice. At the end of the day, your pilot certificate will give you privileges for AIRPLANE SINGLE ENGINE LAND. Meaning you can fly just about any single engine airplane on wheels. [Flying a seaplane on floats is an additional rating to add to your certificate later on.]

QUESTIONS TO ASK ABOUT A **POTENTIAL** **TRAINER AIRPLANE:**

How many hours are on the airframe? [expressed at TTAF or Total Time Airframe]

Flight school airplanes get a lot of use. 5,000 hours is still pretty new for most aircraft, however 10,000 is when many schools will sell their planes and buy new or “newer” models. Start to be wary when airframe times exceed 15,000 hrs. While a 15k hour airplane can be perfectly safe, that little bird has had to endure a whole lot of [hard] student landings. Planes with this many hours often become maintenance hogs and you don’t want your trainer to be “down” for maintenance too often.

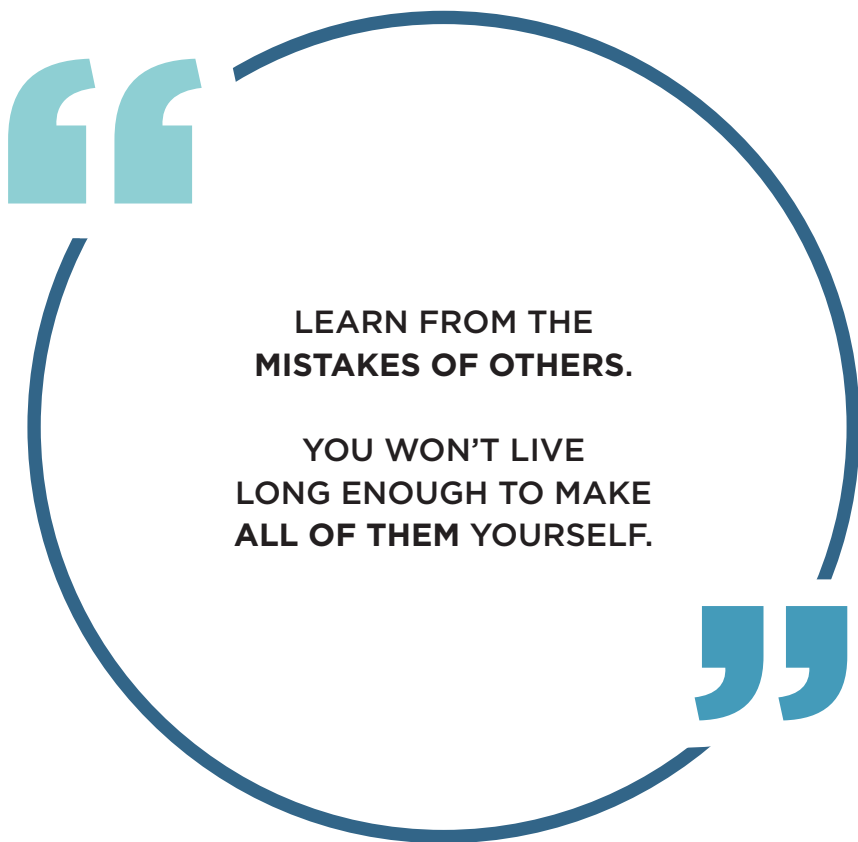
How many hours are on the engine? [Expressed as SMOH or Since Major Overhaul]

Engine manufacturers require engines to be replaced or overhauled at specific times and calendar intervals (typically every 12 years or 1,800-2,400 hours of flight time, whichever comes first). Now, while the manufacturer requires it, there is no law or rule requiring

flight schools or private aircraft owners to abide by this. [Airlines and charter operators do have to abide by these rules.] Engines can run for 3,000 hours sometimes, but prudence dictates when an engine reaches around 2,000 it is time for overhaul or replacement. If a school pushes past that mark it should not be a deal-breaker for you. However, proceed with caution and look out for other potential MX red flags.

Do you own or lease the airplane?

If they own the planes, they are likely to maintain them well. If the school leases them, they aren’t as likely to care about maintenance. And, there is always potential the owner of the aircraft may take the airplane back if the school doesn’t make payments, mistreats the aircraft, or the lease simply expires. Not that this is super important to you, but you don’t want the airplane you train in to disappear one day (especially if you have pre-purchased “block time” in that aircraft).



**LEARN FROM THE
MISTAKES OF OTHERS.**

**YOU WON'T LIVE
LONG ENOUGH TO MAKE
ALL OF THEM YOURSELF.**

CHAPTER 5

DON'T LET THIS HAPPEN TO YOU

Wrong Instructor

From Kira (CFII and commercial multi-engine pilot): When I first started training at a local flight school, I took the first instructor they offered. In hindsight, a quick coffee “date” or introductory flight with that CFI (before training) would have saved me a lot of headaches, time and money.

But, as I didn’t know any better, I hopped into the cockpit with this instructor and all of her red flags. She had been teaching for over 1,200 hours, and was essentially checked out. Texting while I’m flying (even under the foggles), showing up late to each lesson, no pre- or post-flight briefings, no ground lessons... You’d think I would’ve changed instructors after a few flights, right? Nope. I was too intimidated (or maybe resigned) to switch because I thought all CFIs would be like that; it was up to me to make it work. So, what was the straw that broke the camel’s back?

One week before my checkride, my instructor went MIA. Texts, calls, emails...no answer. It’s not like she was unaware...she had helped me schedule my checkride.

So, where was she? My CFI had decided to take an impromptu vacation with her new boyfriend without giving a heads up to anyone. I was completely unprepared. No endorsements, oral exam training, checkride flight training—nothing.

A former student from my flight school, now fresh CFI, had just returned for a job. Boy, did he have a surprise waiting for him. In a last ditch effort to get me ready for a checkride, he became my new instructor.



 **BIG LAKE, AK**

We flew during the day and studied at night. He prepared me better for that checkride in one week than she did in two months. Fortunately, I passed the checkride with flying colors and continued with him for advanced ratings.

This just goes to show you an amazing CFI (one you absolutely deserve and should seek out relentlessly), is one who cares about your progress rather than the clock. Although I was nervous of a brand new CFI (versus an experienced one), he's still one of the best I've ever flown with. He cared so deeply, studied hard and loved his job. Always, always, always meet with a potential CFI before training to make sure you vibe well. Your wallet and sanity will thank you.

Wrong School

A personal story from Jon: Jon initially joined a local flying club to complete his private pilot and instrument training. The flying club was great, but did not have the type of airplane required to complete the necessary 10 hours of complex time to earn a commercial pilot certificate. So, Jon went to a flight school an hour away that offered him a discount [for paying up-front] for 10 hours of rental time. They also call it a “block rate.” Jon paid them in cash, then called the next week to book the first of several lessons in order to complete his training.

Unfortunately, the flight school said the plane was down for maintenance and to call back in a week. Jon did, and was told the same thing the next week. This kept on for about 2 months until they finally said, “Sorry, it is too expensive to repair the plane. We don’t own it anyways. It’s just a leased aircraft.” Jon asked for his money back so he could train at another school. Although it was a bit more expensive in the next town over, clearly this school was no longer an option. The school owner replied she was in the slow season of flying, and did not have his original deposit. But, a Cessna 172 was available to rent if he



wanted. Well, that wouldn't help. Jon didn't need flight time in a 172, but rather a Piper Arrow.

At the end of the day, Jon was out \$2,000. There was nothing he could do about it. He had lost 2 months in delays, and it took another 3 months to save up more money to finish training elsewhere.

While "block time" may sound like a good deal, you should be wary if the flight school is small or hasn't been around long. Also, if there is a specific airplane you're purchasing time in, and they only have one, you'll be out of luck if it goes down for maintenance. This is especially true if they lease it.





SCENARIO A

Another “Wrong School” Situation

Bob walked into a flight school office with the intent of learning how to fly. The nice lady at the front desk, Sally, told Bob they have four planes to choose from:

- **1978 Cessna 152** — \$105/hr
- **1972 Cessna 172 (steam gauge)** — \$145/hr
- **1972 Cessna 172 (glass cockpit, TAA)** — \$175/hr
“TAA” means Technically Advanced Aircraft. It must have a technically advanced avionics system to be classified as such. That system typically includes a PFD (Primary Flight Display), MFD (Multifunction Display), and an integrated two-axis autopilot. You need to have 10 hours of training in a TAA, complex or turbine-powered airplane for your commercial certificate, but isn’t applicable to your PPL.
- **2012 Cirrus SR22** — \$350/hr



1. Cessna 152 2. Steam gauge cockpit of Cessna 172 3. Glass cockpit of Cessna 172 (TAA)
4. Cirrus SR22

Let's get a good look at Bob, first. He is 55 years old, drives a new BMW, and is 5'10" / 170lbs.

Sally tells Bob he would be "most comfortable" in the 172 (also known as a "Cessna Skyhawk") or the Cirrus. She says, "The 152 is an old airplane with a tiny cockpit. The Cirrus has a very nice setup with advanced avionics, otherwise called a glass cockpit. It would be great for you to learn with new avionics instead of the old steam gauge instruments. If the Cirrus is a little too expensive, you can choose the \$175/hr 172. It has an updated instrument panel, just like the Cirrus!" Sounds like a bargain, huh?

What Sally doesn't tell Bob is people his size often fly in the 152 to save about \$5,110 on their training ($\$70 \times 73 \text{ hrs} = \$5,110$...average person completes PPL training in 73 hours).

She also makes it sound better to learn in a glass cockpit. What's the logic? Sally leads Bob to believe he'll save money in the end by not needing additional instruction [on using glass panels] after earning his license.

The real story, though, is this: it will only take 2-4 hours to learn those avionics AFTER Bob obtains his PPL. AND, the more complex systems take away a student pilot's attention from what they're actually there to do, which is learn to fly the plane—not a computer screen. In fact, much of the avionics instruction Bob will need can be studied for on the ground. Assuming the flight school is a friendly one, he can sit in an airplane, turn on electrical power, and play with the radios/avionics. Because he's by himself, and the engine isn't running, he won't pay a dime for aircraft rental or instructor fees.

Bottom line: train in the cheapest airplane that's safe and which you can fit into. DON'T let someone convince you to train in a more expensive airplane because it's one you'll want to fly AFTER training. The additional training needed to learn any new airplane after you get your license is minimal, compared to the added cost you'll bear throughout.

Wrong Study Plan

A personal story from Jon: I once had a young student—let's call him Steve. He was very fortunate that his father bought an aircraft for him to learn to in. And, being young (18-years-old), his motor skills were sharp. He was a quick learner. Before each lesson, I would always assign him homework. This ensured he would be prepared and lesson time would not be wasted.

However, being a newer CFI at the time, I wasn't as pushy and thorough as I should've been... I wasn't checking if he'd actually done the studying I assigned.

After a month of training, he had soloed and was ready to do his solo cross country (moving through quickly). It was at this crucial stage in training it became VERY apparent that what I had suspected earlier was true. He had done about half of what I'd assigned at best, and was only a few lessons into ground school (rather than having it completed). Steve could not progress through training any further. I couldn't let him fly by himself to far-away airports with so little "ground knowledge."

Steve's father pushed for him to study to little avail. Steve wanted to continue regular lessons, but there was little purpose to us flying together unless we could move forward. I couldn't bring myself to charge Steve's father \$65/hr to fly with his son if that time was going to be wasted (thanks to Steve's poor study skills). At that point, I simply refused to fly



with Steve until he studied the ground school more. The online course was already paid for... It was nonsense for his father to pay me to teach what Steve could learn from a computer [for a fraction of the cost].

Steve was ultimately lazy and did not study. I offered to introduce him to another instructor, but luckily his father saw the writing on the wall. After a few months of Steve failing to study, his father sold the plane. Steve never became a pilot.

Having the experience now as a flight instructor, I will never actually begin training with a student until they have

already completed a ground school and passed the FAA written exam. There is no sense in wasting my time and their money.

It's interesting to note Steve started his flight training journey with two other friends—Mark and Zach.

Mark's father had a friend who'd trained at another local flight school, so he sent his son there. Mark had the same study skills as Steve, but his father was paying to rent both the plane and instructor for over \$200/hr. After over 50 hours of flying and more than \$12,000 spent, Mark's father pulled the plug. It was obvious his son wasn't going to spend the time studying, and the flight school was all too happy to continue scheduling lessons (despite them being a waste of time/money). Mark never became a pilot either.

Then there was Zach. Zach was one of my students who luckily had better study habits than his friends. He was actually regarded as a bit of a nerd. Zach, being the nerd he was, had spent his teenage years renting books from the library about flying. Yes, this was about 10 years ago when libraries still had paper things on shelves called "books." Zach had completed about 80% of an online ground school when he showed up for lessons to fly with me. By about 10 hours into flight training, he had completed both the course and the written exam. The flying part of his training went smooth, as it does for most kids his age. He was a bit more enjoyable to fly with from an instructor standpoint, as well. He actually understood the directions I gave him with his existing knowledge.

He ended up earning his license for a total cost of about \$8,900 (2013 pricing). Today, Zach flies for a major US airline bringing home over \$200,000/yr. He was lucky that, like his friends, his family was able to help him cover the cost of training without having to take out loans. But, he was even more lucky he studied.

It does not appear that Steve or Mark will be pulling in six figures any time soon (unless inflation drives the minimum wage to \$50/hr).

“

LET'S GET ONE THING STRAIGHT.

**THERE'S A BIG DIFFERENCE BETWEEN A
PILOT AND AN AVIATOR.**

**ONE IS A TECHNICIAN; THE OTHER IS
AN ARTIST IN LOVE WITH FLIGHT.**

”

CHAPTER 6

THE “WRITTEN”

What is it?

The FAA Airman Knowledge Test, better known as “The Written,” consists of 60 questions covering all topics you should know as a private pilot. You must complete it in 2.5 hours with a score of at least 70% to pass. This test must be checked off your list before the FAA Checkride (end of training; gateway to your private pilot certificate).

Prepping for the Exam

The Written is a beast. With randomized questions covering several large topics, you don’t want to go in blind! To prep for the test (and your training in general), enroll in an online ground school. We obviously recommend ours... With updated videos and engaging content, it will be your best first step. After completing the ground school, enroll in our Written Prep Boot Camp. This will ensure you pass the test with flying colors.



JON'S JOURNAL

Pro tip: It is important to do as well as you possibly can on the test. Anything you get wrong will have to be “retested” during the oral exam portion of your FAA Checkride. I don’t know about you, but I’d rather leave as little topics as possible for the DPE to grill me on.



WHAT TO BRING...



You cannot test without:

— **U.S. Citizens and Resident Aliens:**

U.S. driver's license, U.S. government ID, U.S. military ID, passport, or alien residency card.

— **Non-U.S. Citizens:**

Passport and U.S. driver's license, or ID by any government entity.

— *Proper test authorization (endorsements or graduation certificate from an online course). See Page 75 for more info regarding endorsements.*

Tools you're allowed to bring (and should):

— *E6B or CX-3 flight computer, manual or electronic (E6B apps are not legal to use during tests)*

— *Plotter*

— *Small electronic calculator (which only performs basic arithmetic functions and is not capable of storing data in memory)*

The testing center will provide you with:

— *Appropriate FAA computer knowledge test supplement book*

— *Blank paper*

— *Pencil*

— *Transparent sheet*

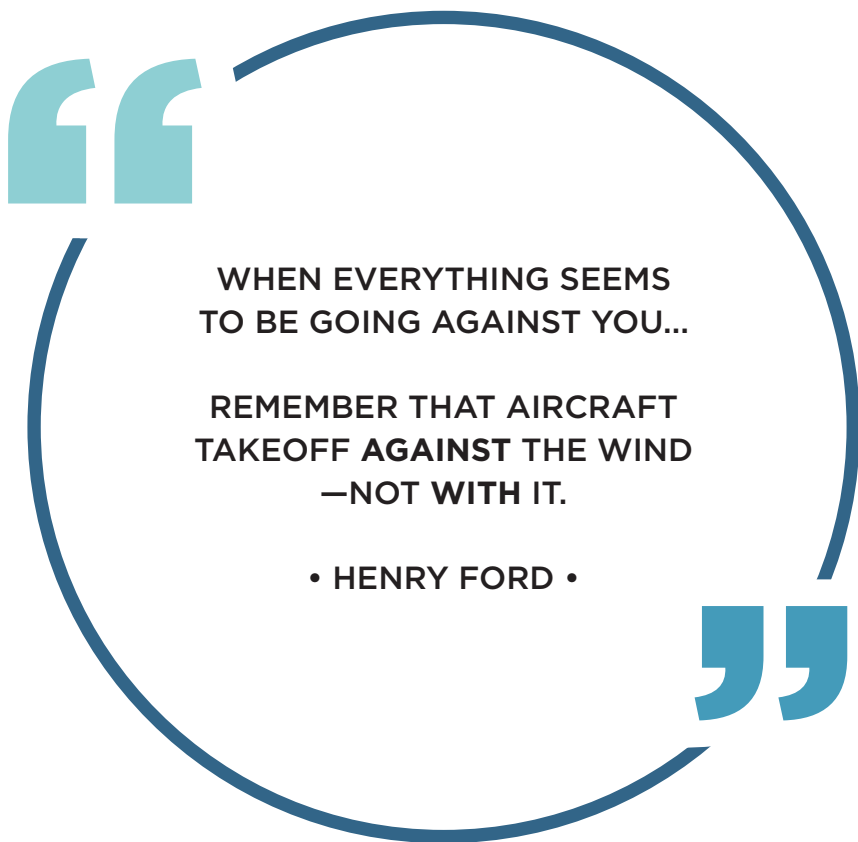
— *Dry erase marker*

AGE REQUIREMENT: *You must be at least 15 years old to test. Before taking the knowledge test, you may have to show proof of age (such as a birth certificate).*

REQUIRED TEST AUTHORIZATION: *If you complete an online ground school (preferably ours), you will receive a certificate of graduation. When visiting the testing center for your written, you will present this document to the proctor. If you are enrolled in an in-person ground school (i.e. with your CFI and/or self-study), you will receive an endorsement in the back of your logbook. In this case, you will present the endorsement to the proctor instead of a graduation certificate.*

TIME LIMIT: *A satisfactorily completed knowledge test expires 24 calendar months after the month it was taken. If a practical test (i.e. FAA Checkride) is not satisfactorily completed during that period, another knowledge test must be taken.*

****You will not be allowed to bring your own scratch paper, notes, or references into the testing room. Nor can you bring a cell phone or communicative device to use as a calculator.**



WHEN EVERYTHING SEEMS
TO BE GOING AGAINST YOU...

REMEMBER THAT AIRCRAFT
TAKEOFF **AGAINST** THE WIND
—NOT WITH IT.

• HENRY FORD •

CHAPTER 7

THE CHECKRIDE

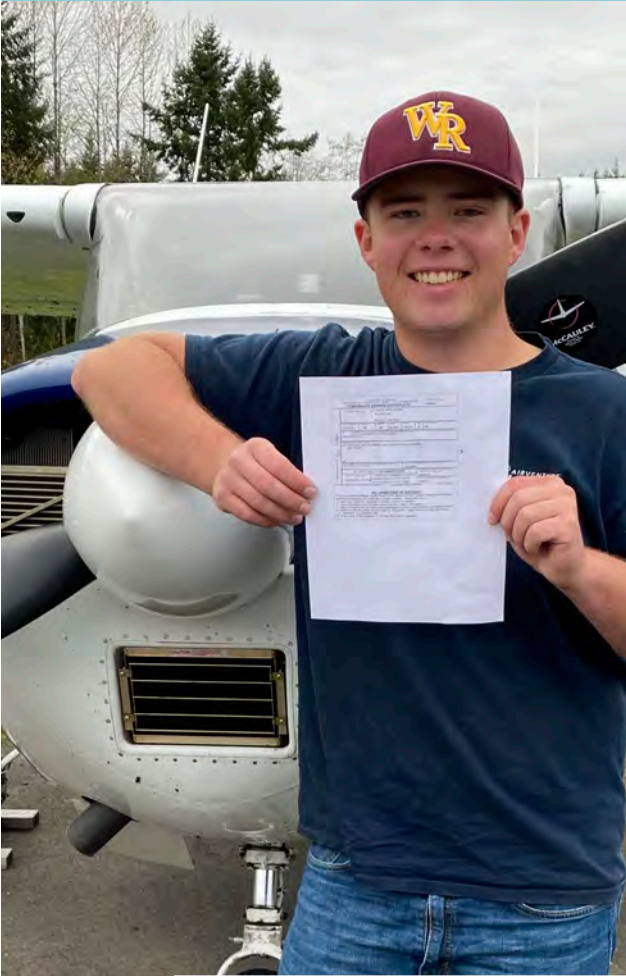
What is it?

Once you have completed all FAA minimum requirements for the Private Pilot Certificate and your CFI feels you're ready, you will tie it all up in a bow with the Private Pilot Checkride. A designated pilot examiner (DPE) appointed by the FAA will [most likely] be your evaluator.

The checkride starts off with an oral exam, lasting approximately 1-2 hours. The DPE will cover topics listed in the Airman Certification Standards (ACS) publication.

Following a successful oral exam, the DPE tests your flying ability. This is called the “practical” portion. Expect them to request several maneuvers and tasks throughout the flight. Don't fret—anything he/she asks of you will be something you've practiced with your CFI, and is also published in the ACS. If all goes well, you'll be back on the ground in about 1-2 hours.

If you've used all the resources and routines discussed up to this point, you'll pass with flying colors. The DPE will then issue you a temporary certificate (until the new card comes in the mail), certifying you as a newly minted private pilot!



Preparing for the checkride

1 FLIGHT PLANNING (for checkride & proposed XC flight)

- Weather // Stay organized with our WX Brief form: www.tinyurl.com/_____
- Weight & Balance + Performance calculations
- Flight plan(s)
- VFR Navigation Log(s) // Use our kneeboard-friendly one: www.tinyurl.com/_____

**If using an EFB (electronic flight bag...i.e. phone or tablet), ensure fully charged prior to checkride*

2 RESOURCE CHECK (ensure publications are current; update if necessary)

Airport diagram, A/FD, sectional, FAR/AIM app or book, EFB (i.e. ForeFlight or Garmin, if using), etc.

3 REVIEW ACS (Airman Certification Standards)

You can find an updated ACS on the following FAA webpage: https://www.faa.gov/training_testing/testing/acs

4 MOCK CHECKRIDE (practice round with CFI)

Plan a mock checkride (preferably with an unfamiliar CFI for the full experience). This CFI will run you through the whole checkride process, making sure you're fully prepared.

If you cannot find a local instructor to do this with you, schedule with one of our instructors remotely here at FLY8MA. This is included free with the purchase of a Platinum Lifetime Membership on the site or available separately for an extra fee.

5 RELAX

(Seriously...stress makes it worse!)

Did you know that our career, as CFIs, depends solely on your checkride success? Just kidding, it's not that drastic. But, we do love our pass rate. Your CFI won't send you on a checkride if they don't think you're ready. Have faith in your ability!

6 GOOD NIGHT'S REST

(Remember using your IMSAFE checklist before flights? This isn't any different.)

It's better to get a good night's rest than to stay up to the wee hours of the morning, cramming. If you don't know it by now, your brain won't absorb it in the next eight hours. All the more reason to make sure your prepared well beforehand!

7 DON'T DIG YOURSELF A HOLE

(If the DPE wants more info, they will ask for more.)

Your DPE will ask a variety of questions...some will even seem too simple. Don't overthink it, and don't dig yourself a hole. See below for example.

DPE: "What is a METAR?"

Answer 1: "METAR stands for meteorological terminal...ah... It's a weather report that gives you temperature, dew point, winds, lightning and...ah..."

Answer 2: "A METAR is a routine weather report of actual airport conditions."

As you can see, the student pilot fumbling through tiny details in Answer 1 is having a mental lapse (i.e. brain fart). Acronyms can slip your mind in a tense moment. Listing out all the possible details of a METAR also leaves room for the DPE to quiz you on those tangents. I.e. "Oh, does a METAR always report lightning? What else does it report?"

Answer 2 is a much better route to go, and here's why: it leaves little for you to forget or dig a hole into. If the DPE wants more, they'll ask. Such as, "How often is this routine weather report released? Are there different kinds?"

8 TALK OUT LOUD

(Nobody can see what's going on inside your noggin.)

No matter how loud you're thinking, "Oh no, I'm dripping sweat all over my yoke. This is the worst," the DPE can't read your mind.

In the air, say out loud everything you're thinking and doing (but maybe refrain from the sweat talk). The DPE isn't expecting a perfect pilot. He/she is looking for you to recognize and correct your missteps. For instance, when you cut into your turns-around-a-point radius too much, say it! "It looks like I banked too much while turning into the wind. I will reduce my bank angle to recapture the radius." The DPE now knows you are actively thinking through situations at-hand. If you say nothing, they'll assume you think it's going swimmingly.





WHAT TO BRING...



REQUIRED ITEMS:

- *Medical*
- *Student Pilot Certificate*
- **U.S. Citizens and Resident Aliens:** *U.S. driver's license, U.S. government ID, U.S. military ID, passport, or alien residency card.*
- **Non-U.S. Citizens:** *Passport and U.S. driver's license, or ID by any government entity.*
- *Logbook w/necessary endorsements (from CFI)*
- *Foggles (view-limiting device)*
- *Knowledge test results (original document, not copy)*
- *Aircraft documents/logbooks or maintenance records (for the aircraft you'll be using in the checkride)*
- *Form 8710-1—Completed IACRA application (print a copy out, just in case)*
- *IACRA login info and FTN*
- *Exam fee (examiners always want to be paid up front)*



JON'S JOURNAL

The oral portion of your checkride is technically open-book/notes. If a question stumps you, you're allowed to reference any material you've brought with. *However*, avoid doing this for each question! Most of the material you've studied up to this point should be memorized. A pilot doesn't flip through the FAR/AIM to find Class D entry requirements while in-air. See my point?

The DPE will issue you a cross country to prepare for prior to the checkride. You will plan this like any other cross country, and they will review/quizz you on it during the oral. See below for applicable references to bring.

REFERENCES & MANUALS (current)

- *Tools (E6B/CX-3, plotter, sectional chart, A/FD, etc.)*
- *Applicable cross country planning documents, nav logs, etc.*

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REMEMBER, YOU FLY
AN AIRPLANE WITH
YOUR HEAD...

NOT YOUR HANDS AND FEET.

”

MISCELLANEOUS

Q & A

Random questions you may be wondering about too:

I want to fly seaplanes. Can I train in a seaplane or floatplane?

Seaplanes and floatplanes are the same thing—the term is interchangeable. If you care about cost, you should begin your training in a wheeled airplane (a land airplane, or ASEL for Airplane Single Engine Land).

Once you complete your certificate in a land airplane you can complete an additional 5-10 hours of training to earn your ASES add-on (airplane single-engine sea, AKA Seaplane Rating). This is cheaper as the cost to rent a trainer on wheels is generally \$100-\$200/hr, whereas a seaplane will average \$250-\$350/hr.

What is an endorsement?

An endorsement is a written entry from a Flight Instructor in your logbook that will grant you some sort of specific privilege. You will receive an endorsement to take the FAA written exam, to fly solo during training, and even after you earn your certificate (i.e. a High Performance or Tailwheel endorsement).

While your ASEL Private Pilot Certificate technically is valid for any single-engine land airplane, the FAA does require additional training before you can fly an airplane with more than 200hp. The high performance endorsement is your way of showing you received training from an authorized instructor and demonstrated proficiency in such an airplane. You may also learn to fly in a tricycle gear airplane, but wish to fly a tailwheel airplane (AKA “conventional gear” airplane). This is where you would get additional training in a conventional gear airplane and earn the tailwheel endorsement, thus giving you privileges to then fly a tailwheel airplane as PIC.

If you become a sport pilot, then decide to become a private pilot afterwards, do your sport pilot hours count towards the PPL minimum [40 hrs]?

Yes, the hours count. However, you may need to fulfill other requirements within those hours for private pilot specifically (such as cross country).

Is there a permit license for flying like there is for driving a car?

The short answer is “sort of.” When you’re training for your car driver’s license, you get a driver’s permit beforehand to practice driving without an instructor (but with a certified adult). This helps you practice skills and build confidence outside of the “classroom” environment. We have something similar in aviation.

While in flight training, you apply for a student pilot certificate. This is your “ticket” to solo (besides the other requirements of training, CFI approval and medical certificate). Once you’ve met the other requirements and have gained your instructor’s nod of approval, you can fly the airplane by yourself (with certain restrictions, of course) to build confidence and practice skills. We call this “solo flight.”

Should I jump into flight training first, or should I get my Bachelor's and then start?

It depends! We recommend taking an introductory (“discovery”) flight first, regardless if you’re thinking about a university program or small flight school. This will ensure you want to pursue aviation in the first place.

Let’s say you love flying and want to pursue it as a career. It may be in your best interest to pursue a bachelor’s degree (joint aviation program... classes and flight training). The reason we say this is most airlines require a bachelor’s degree of some sort (the majority of them don’t care what the degree is in). Again, this varies depending on your goals. Give us a call to chat more about your options!

Once I complete my PPL, are there opportunities for me to fly as service for others [such as Civil Air Patrol]? I'm 53, and not planning on making a career out of flying. But, I'd love to find a way to fly in some form that provides community service.

Absolutely. Pilots across the US have joined programs such as Civil Air Patrol and Pilots N Paws to volunteer their services. You can also volunteer for search and rescue or disaster relief opportunities with your local police department or natural disaster relief funds. Some organizations allow you to claim portions of your flight expenses as a charitable deduction for tax purposes.

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THERE ARE **OLD** PILOTS, AND
THERE ARE **BOLD** PILOTS.

BUT THERE ARE NO **OLD, BOLD** PILOTS.

”

PRIVATE PILOT DO'S & DON'Ts

Private Pilot Do's:

- **STUDY FOR (AND TAKE) THE WRITTEN EXAM PRIOR** to beginning flight training.
- **STUDY PRIOR TO EACH FLIGHT LESSON** on the ground before meeting with your instructor; about 1-3 hours of ground study for each hour of flight time you fly, or are scheduled to fly.
- **WATCH YOUTUBE** aviation videos, participate in Facebook and chat forums for aviation. The more you are around aviation, the more you'll learn. BUT, take everyone on the internet with a grain of salt—just because it's on Google doesn't make it true. Always consult with your CFI.
- **INTERVIEW SEVERAL FLIGHT SCHOOLS** before choosing one.
- **INTERVIEW AT LEAST THREE CFIs** at your chosen school before committing to a specific person.
- **SAVE** and be at or nearly fully-funded prior to beginning the flight portion of your training.
- **BUDGET** an extra 10-20% as a cushion to ensure you can get through

flight training if unforeseen circumstances arise (car repair bills, increase in fuel costs, etc).

- **SET DEADLINES AND GOALS** to keep your ground school studying on-track. This also works well for notable milestones (i.e. the written exam and your first flight).
- **STUDY AND LEARN AS MUCH AS YOU CAN ON YOUR OWN TIME.** Why? 1) It is cheaper to learn on your own (not paying CFI hourly rate). 2) The more thorough your knowledge base, the better chance of avoiding costly pitfalls during your flying career. Knowledge is a pilot's greatest weapon. However, as a beginner you don't know what you don't know. That is why we build our online courses to be simple. Simply start with Lesson 1 and work your way through the course. Of course, just because you complete the PPL Ground School doesn't mean you know everything there is to know. Because a great pilot is always learning, we have additional courses that are optional (but encouraged and included with your membership on the site). Those courses are listed under "PPL Courses."

Private Pilot Don'ts:

- **BUY AN AIRPLANE FOR FLIGHT TRAINING** unless you have serious cash reserves and a few trustworthy mentors (mechanics, instructors, etc.) to ensure you're buying a good plane. Used planes are like used cars—no one is selling you a used car just because you're 16 and want to learn to drive, nor do they care if you want to learn to fly. They're selling it to make a quick buck, because it has mechanical problems, or simply costs more to own/operate than the plane is worth. Uneducated, new, trusting pilots with a checkbook are easy prey for someone looking to dump a bad plane with a good paint job (we call those “shiny turds”).
- **SET FOOT IN AN AIRPLANE** for a flight lesson unless... 1) You AND the instructor have a clear lesson plan, 2) you're thoroughly prepared to execute tasks and 3) BOTH of you know exactly how this flight will further your goals or count towards required hours.
- **DO ANYTHING IN AVIATION JUST BECAUSE SOMEONE ELSE TOLD YOU SO.** YOU are in charge of your training, your goals, your career, and your life. Outside advice is always valuable... Just do some independent research to fact check.
- **PUT MORE THAN \$1,000-\$2,000 ON ACCOUNT AT ANY GIVEN TIME.** During less busy times where CFIs are hungry for flight hours, students with lots of money on-account are favorites for them to fly with (although that flight may not be benefiting you as much as they lead you to believe, especially if they are not your regular CFI). Do you think someone will work harder to earn your money before or after you give it to them? Also, although rare, it's not unheard of for flight schools to have maintenance or staff problems preventing or slowing a member from using money on-account. It's not always super easy to get your money back if it goes unused.