

PPL GROUND SCHOOL

REBOOT BY CHADD GARVY
AND TAYLOR, AND JON

Steps to becoming a private pilot

Ground/Flight Instruction

- Ground training learning all things aviation
- Flight training requires hours in the airplane with an instructor
- Must complete solo flight, XC, landings, maneuvers, emergency ops.

Written Test (Computer)

- Must first receive training from a certified flight/ground instructor
- Score at least 80% or higher on 3 practice tests
- Receive an endorsement from a CFI to take the actual test

Practical Test

- Meet with FAA Inspector or DPE (designated pilot examiner) for final evaluation
- Consists of a ground questionnaire and checkout flight with the examiner
- After passing, the examiner will issue a temp. cert.

First become a STUDENT PILOT

FAR 61.83

- Eligibility: 16 yrs old, and can do English good

FAR 61.85

- Find someone to issue you your student pilot cert.
- (AME) Aviation Medical Examiner
- (FSDO) Flight standards district office

What can you do?

- Privilege: Act like PIC, fly Solo, go on XC, fly through Class B!
- Limitations: (FAR 61.89) CANNOT carry passengers, cargo for money, can't make any money actually, gotta stay in USA, must always be able to see solid ground below you, must see 3sm day and 5sm night, any other limits I want!

The Privileges and limits of a PPL

Privileges (FAR 61.113)

- May act as PIC and carry passengers, given pro-rata share
- May fly for non profit or charity
- +200 hrs of flight time allows you to become a demo pilot for aircraft sales
- Glider tow pilot at 100 hrs

Limitations (FAR61.113)

- Pilot may not carry passengers or cargo for compensation or hire
- Just don't do anything for compensation or hire...get a CPL first!

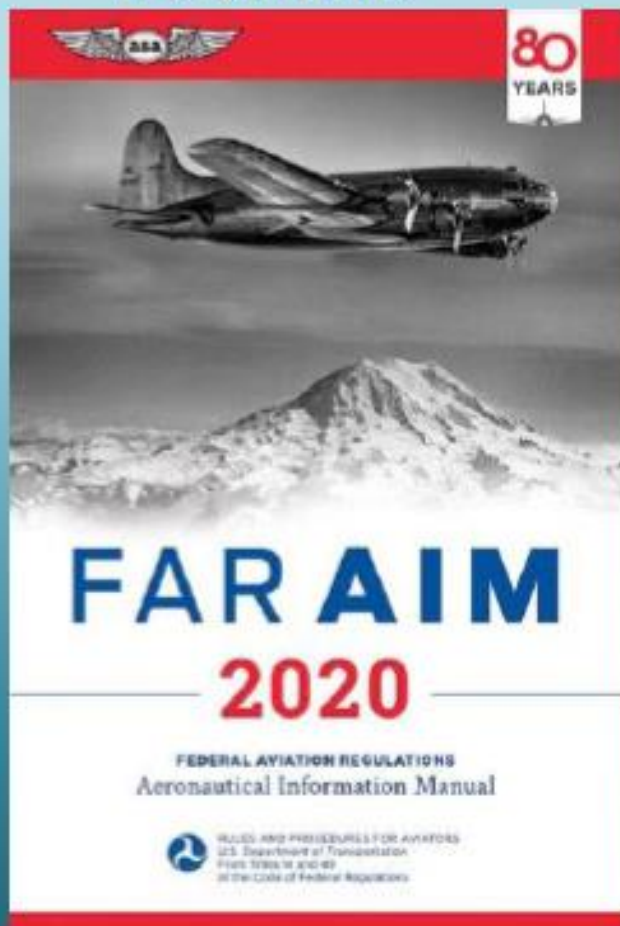
Aeronautical Exp. (FAR61.109)

- 40 hrs flight time
- 20 hrs with CFI covering: 3 hrs XC training, 3 hrs Night training (10 T/O & Lands), 3 hrs basic IR flying, 3 hrs training within 60 days of practical test,
- 10 hrs solo with 5 hrs of solo XC

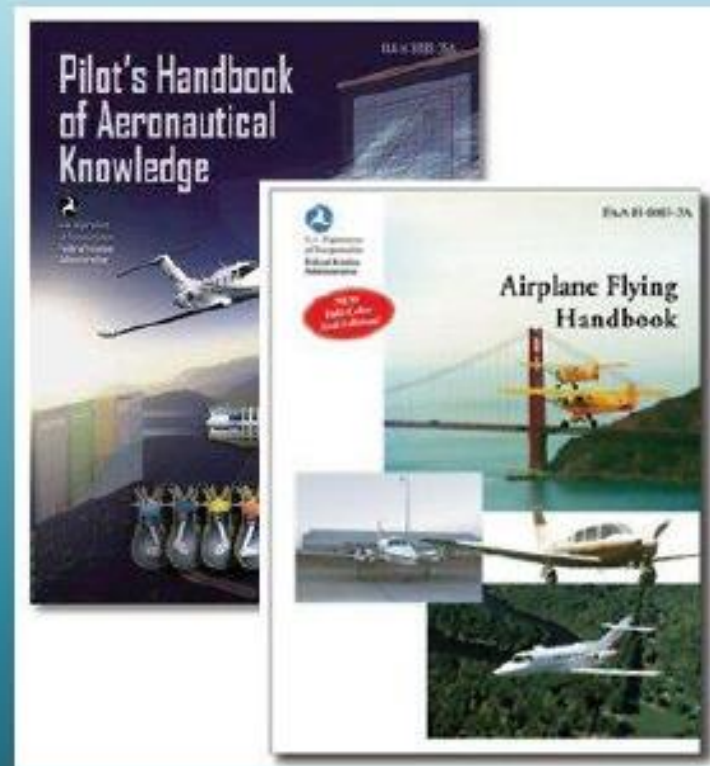
Course Materials

Text Books and iPad

- **FAR/AIM:**



- Pilot Handbook of Aeronautical Knowledge (PHAK)
- Airplane Flying Handbook (AFH)



Course Materials

Text Books and iPad

- Aviation Weather
- Aviation Weather Services



Course Materials

Flight Computer
(E6B)



Sectional
Chart

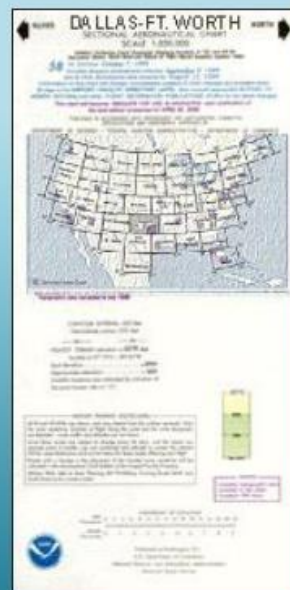
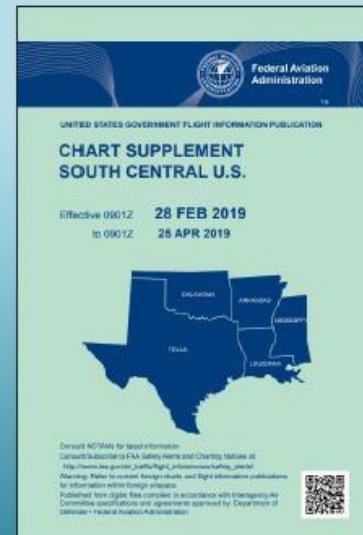
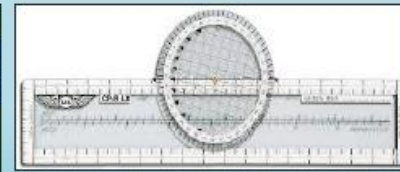


Chart
Supplement

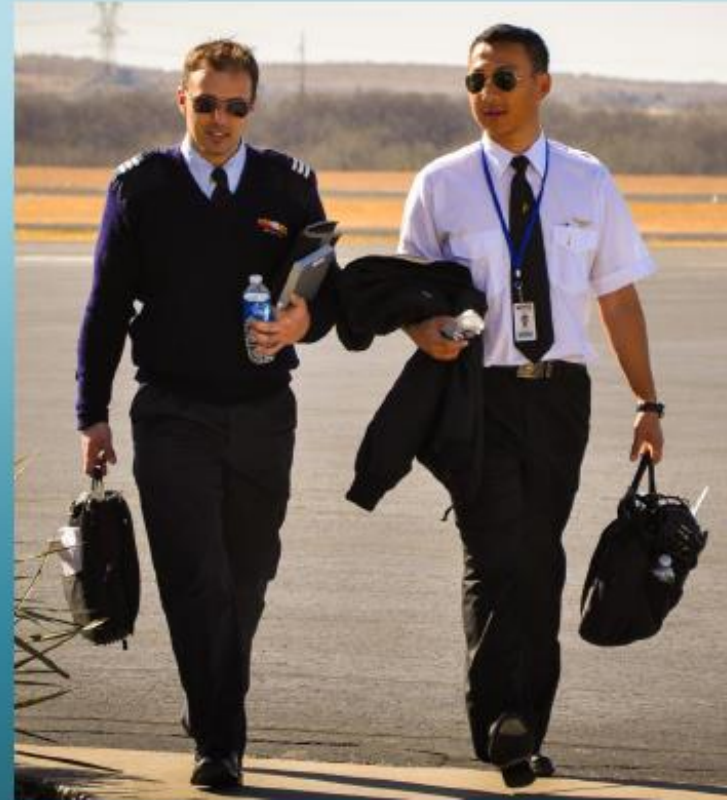


VFR
Plotter



Federal Aviation Regulations

- Part 1: Definitions and Abbreviations
 - Find and Note the Following:
 - Aircraft
 - Airplane
 - Category
 - Class
 - Large Aircraft
 - Night



Federal Aviation Regulations

- Part 61: Certification of Airmen
 - Find and Note the Following:
 - AIRMEN CERTIFICATION
 - 14 CFR 61.3 Required Documents
 - 14 CFR 61.31 Category/Class, Type Rating Requirements and Additional Endorsements
 - 14 CFR 61.23 Medical Certificate Classes and Duration
 - Student Pilot Limitations 14 CFR 61.89(a)(1-8)(b)
 - CURRENCY
 - 14 CFR 61.56 Flight Review
 - 14 CFR 61.57 Recent Flight Experience

The Pilot Certificate (61.3)



The Pilot Certificate Lists:

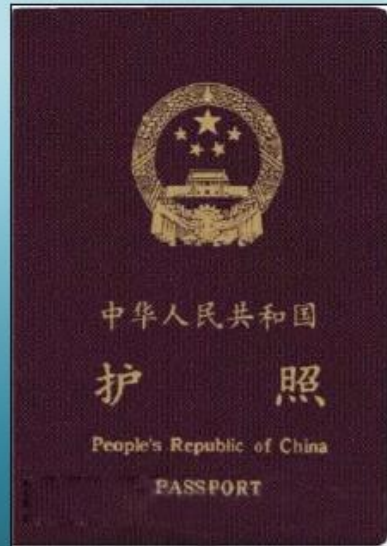
- The Pilot's Personal Information
- The Type of Certificate
- The Categories, Classes and Ratings that the Pilot is Authorized for

The Certificate *Does Not* List:

- The Specific Aircraft That The Pilot is Authorized to Fly (Unless Typed)
- A Certificate Expiration Date
- The Pilot Medical Information

Photo Identification (61.3)

- Official Government Passport:
- Official State Driver's License or Photo ID:



FAA Medical Certificates (61.23)

Under Age 40	Age 40 or Over
1st Class	
12 Months	6 Months
Required for ATP Operations	
2nd Class	
12 Months	12 Months
Required for Commercial Operations	
3rd Class	
60 Months	24 Months
Required for Private Pilot Operations	

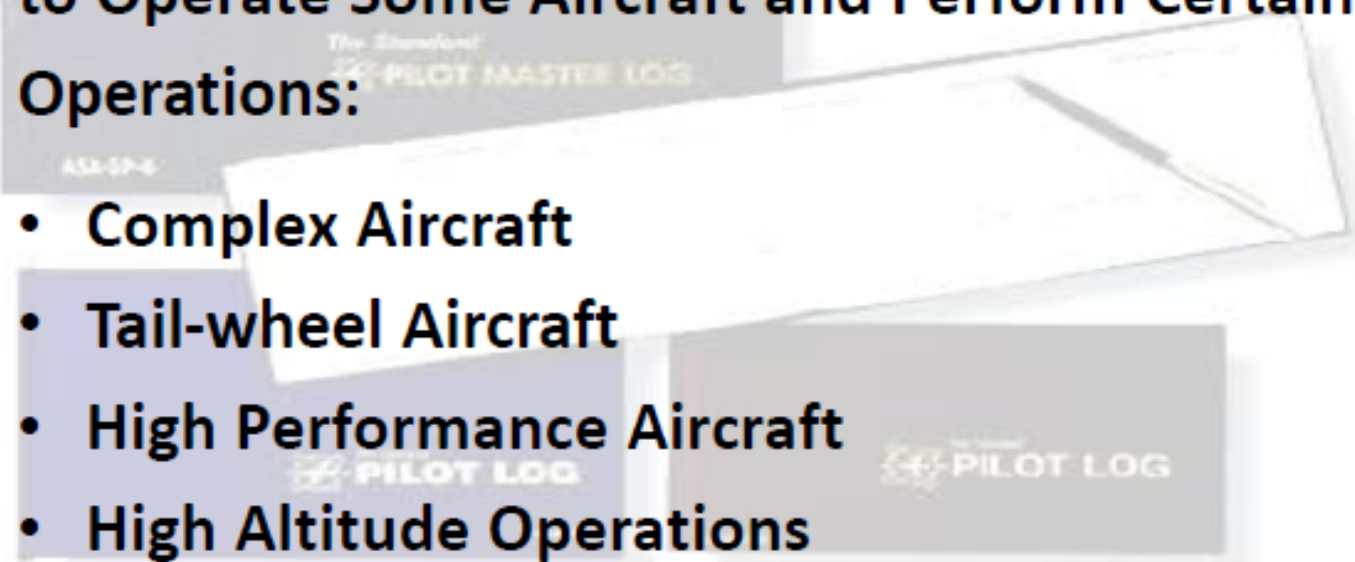
Copy of FAA Form 8500-9 (Medical Certificate) or FAA Form 8420-2 (Medical Student Pilot Certificate) issued.		FF-
MEDICAL CERTIFICATE THIRD CLASS AND STUDENT PILOT CERTIFICATE		
This certifies that (Full name and address):		
JOHN DOE 123 ANYSTREET DR. ANYTOWN, TN 37130		
12-17-73	70	182 BR GR M
Date of Birth	Height	Weight Hair Eyes Sex
has met the medical standards prescribed in 14 CFR part 67, for this class of Medical Certificate.		
Limitations	MUST WEAR CORRECTIVE LENSES	
Examiner	Date of Examination 10/17/89	Examiner's Designation No. 1013-2
	Signature <i>Joe Doctor</i>	
	Typed Name JOE DOCTOR, D.O.	
Airman's Signature		

Additional Endorsements (61.31)

Additional Logbook Endorsements are Required to Operate Some Aircraft and Perform Certain Operations:

- Complex Aircraft
- Tail-wheel Aircraft
- High Performance Aircraft
- High Altitude Operations
- Type Rating

See FAR §61.31 for More Information



Additional Ratings and Certificates



Instrument Rating



Multi-Engine Class Rating



Commercial Pilot Certificate



Certified Flight Instructor



Airline Transport Pilot Certificate

Federal Aviation Regulations

Student Pilot Limitation 61.89

- ▶ A student pilot may not act as pilot in command of an aircraft:
 - That is carrying a passenger
 - That is carrying property for compensation or hire
 - For compensation or hire
 - In furtherance of a business
 - On a international flight
 - Flight or surface visibility of less than 3sm during daylight hours or 5sm at night
 - When the flight cannot be make with visual reference to the surface
 - In a manner contrary to any limitations placed in the pilot's logbook
- ▶ A student pilot may not act as a required pilot flight crewmember on any aircraft for which more than one pilot is required.

Federal Aviation Regulations (61.113)

61.113 Private Pilot Privileges and Limitations =

- A. May share the operating expenses with the passengers
- B. May fly for a charitable organization to which donations are made
- C. May tow gliders with proper experience
- D. May fly in connection with their own business
- E. May fly to any place in the world (if permitted by the specific countries)
- F. May demonstrate an aircraft for sale
 - G. May not fly for hire
 - H. May not give flight or ground instruction without an instructor certificate
 - I. May not carry a medical patient who is not under proper medical care



Federal Aviation Regulations

- **Part 91: General Operating and Flight Rules**
 - Find and Note the following:
 - Aircraft Certification and Airworthiness Requirements
 - 14 CFR 91.7 Aircraft Airworthiness
 - 14 CFR 91.9 Aircraft Flight Manual, Markings and Placard Requirements
 - 14 CFR 91.103 Preflight Actions
 - 14 CFR 91.107 Use of Safety Belts and Shoulder Harnesses
 - 14 CFR 91.203 Required Documents
 - 14 CFR 91.205 Required Equipment
 - 14 CFR 91.207 Emergency Locator Transmitters
 - 14 CFR 91.209 Aircraft Lights
 - 14 CFR 91.213 Inoperative Equipment

Airworthiness Certificate:

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION STANDARD AIRWORTHINESS CERTIFICATE			
1. NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4. CATEGORY
N2631A	PIPER PA-22-135	22-903	NORMAL
5. AUTHORITY AND BASIS FOR ISSUANCE This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex B to the Convention on International Civil Aviation, except as noted herein. Exceptions: NONE			
6. TERMS AND CONDITIONS Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.			
DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER	
08-10-95	MARION W. WILLIAMS	SW-FSDO-OKC	
Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.			
FAA Form 8100-2 (8-82)		GPO 892-804	

No
Expiration
Date

Registration Certificate:

REGISTRATION NOT TRANSFERABLE	
UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION CERTIFICATE OF AIRCRAFT REGISTRATION	
NATIONALITY AND REGISTRATION MARKS	AIRCRAFT SERIAL NO.
N 12345	6969
MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT CESSNA C-150L ICAO Aircraft Address Code:	
ISSUED TO	THIS CERTIFICATE IS ISSUED FOR REGISTRATION PURPOSES ONLY AND IS NOT A CERTIFICATE OF TITLE. THE FEDERAL AVIATION ADMINISTRATION DOES NOT DETERMINE RIGHTS OF OWNERSHIP AS BETWEEN PRIVATE PERSONS.
ROBERT E. BARO 300 MOERKLE ST ANYTOWN, OHIO 12345	U.S. Department of Transportation Federal Aviation Administration
It is certified that the above described aircraft has been entered on the register of the Federal Aviation Administration, United States of America, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with the Federal Aviation Act of 1958, and regulations issued thereunder.	
DATE OF ISSUE February 15, 1996	David Hinson ADMINISTRATOR
AC Form 8050-3(11/93) Supersedes previous editions	

36
Calendar
Month
Expiration

Airworthiness Requirements

The Aircraft Must Have:

- A** - Airworthiness Certificate
- R** - Registration Certificate
- R** - Radio License
- O** - Operating Limitations (Aircraft Manual, Instrument Markings, and Placards)
- W** - Weight and Balance Documents
- P** - Placards
- C** - Compass Card

Airworthiness Requirements

Required Inspections Which Keep the Airworthiness Certificate Current and Valid!

- A** – Airworthiness Directives (AD Notes)
- V** – VOR Receiver Checks - FAR 91.171 (VOT, Ground, Airborne, Dual) **IFR**
- I** – Inspections - FAR 91.409 (100 hours for hire, annual every 12 calendar months)
- A** – Altimeter - 91.411, 24 calendar months **IFR**
- T** – Transponder - FAR 91.413, 24 calendar months
- E** – ELT - FAR 91.207, 12 calendar month inspection (battery replaced when 1 hour cumulative use or 50% battery life used)
- S** – Static System - 91.411, 24 calendar months **IFR**

Registration Certificate

- The Registration Certificate is Valid Unless One of the Following Occurs:

T – Transfer of Ownership

U – U.S. Citizenship is Lost

F – A/C is Registered in a Foreign Country

C – Cancelled by Owner

D – Destruction of Aircraft

30 – Days After Death of Owner

Other Useful Acronyms

- **91.205 Required Equipment for Day VFR:**

A – Airspeed Indicator

T – Tachometer (One for Each Engine)

O – Oil Pressure Gauge (One for Each Engine)

M – Manifold Pressure Gauge (One for Each Altitude Engine)

A – Altimeter

T – Temperature Gauge (One for Each Liquid Cooled Engine)

O – Oil Temperature Gauge (One for Each Engine)

E – ELT

F – Fuel Gauges (One for Each Tank)

L – Landing Gear Position Indicator

A – Anti-Collision Lights (Aviation Red or White)

M – Magnetic Compass

E – Emergency Equipment (For Hire Over Water – Flotation Gear and Pyrotechnic Device)

S – Seat Belts and Shoulder Harness (After July 18, 1978)

• A
• T
• O
• M
• A
• T
• O
• E
• F
• L
• A
• M
• E
• S

Other Useful Acronyms

- 91.205 Required Equipment for Night VFR
- *Everything for Day VFR Plus:*

F – Fuses (1 Spare Set or 3 of Each Kind, Accessible to the Pilot in Flight)

L – Landing Light (For Hire Only)

A – Anti-Collision Lights (Strobes)

P – Position Lights (Red, Green, and White)

S – Source of Electrical Power (Battery, Alternator, or Generator)

91.213 How a pilot must work through inoperable equipment for legal flight or Special flight Permit.

- ▶ Aircraft MEL
- ▶ manufacturer required equipment for flight
- ▶ 91.205 FAA min. required equipment
- ▶ Placard the inoperative
- ▶ ** Special flight Permit**