

**Military Instructor Pilot to FAA Flight Instructor
Transition Guide
Version 03 – 14 September 2009**

This guide is being offered to you free by military IP's who've made the transition from military IP to civil Certified Flight Instructor (CFI). It is a compilation of their ideas and advice, not those of Sheppard Air, Inc. It's full of info to help you get started and to illustrate some of the differences between the two fields of instructing. If you have questions or subjects you'd like touched on here, if you have corrections, or if you've made this transition before and have any ideas for additions to this guide, please feel free to send them to us at SheppardAir@aol.com. We'd love to hear from you, and all are welcome to add inputs. You may find this guide slightly fixed-wing biased, but most of the info is the same for helo. If you have helo specifics you'd like added, please let us know.

Table of Contents:

Definitions	1
Recommended Reading (what should I read to get oriented)	2
Other Resources for CFI's.....	3
Instructing Someone for a New Certificate or Rating	4
Initial Preparation.....	4
Giving ground and flight instruction.....	5
Checkrides	6
Random CFI Knowledge.....	7

Definitions

Here is some discussion on several terms that you will encounter that are often misunderstood by military IP's. If you have additions, let us know:

Applicant – someone who will be filling out an FAA Form 8710-1, “Airman Certificate and/or Rating Application.” They can be filling it in to give to the examiner giving them their checkride, or filling it in to hand to an FAA Inspector at a FSDO for additional ratings. Often today, an applicant and their instructor will apply for a checkride using the Integrated Airman Certification and/or Rating Application (IACRA) system instead of filling in an 8710-1.

Aircraft Category and Aircraft Class – Unfortunately, the word “category” has too many meanings in the FARs. One definition from 14 CFR 1.1 is, “As used with respect to the certification of aircraft, means a grouping of aircraft based upon intended use or operating limitations. Examples include: transport, normal, utility, acrobatic, limited, restricted, and provisional.” But as CFI's, we normally use the word “category” in the other sense which is aircraft categories on pilot certificates, which 14 CFR 1.1 goes on to define as, “As used with respect to the certification, ratings, privileges, and limitations of airmen, means a broad classification of aircraft. Examples include: airplane; rotorcraft; glider; and lighter-than-air.” So in that sense, the front of your pilot certificate lists your highest privilege (private pilot, commercial pilot, or airline transport pilot), and the back of the certificate lists combinations of the aircraft Category and Class that you hold which your privileges apply to. So if the back of your certificate says “Airplane Single Engine Land”, then you have privileges for Airplane category and Single Engine Land class aircraft. If the back of your certificate says “Airplane Single Engine Sea”, then you have privileges for Airplane category and Single Engine Sea class aircraft.

Certificate – The FAA has chosen to use the word certificate instead of license. You have a driver’s license, but you have a pilot certificate or flight instructor certificate or mechanic certificate.

CFI-Certified Flight Instructor. This term causes confusion sometimes. When you find it defined in FAA pubs, it just means Certified Flight Instructor. That’s someone who has a flight instructor certificate, no matter what ratings are on it. But when you talk to a friend who you know is a civil instructor and he says he’s “just a CFI”, he’s probably implying that he’s only got an Airplane Single Engine rating on his flight instructor certificate, and not Instrument or Airplane Multiengine. The good news is that CFII generally only means someone who has a flight instructor certificate with Instrument on it, and MEI generally only means a flight instructor who has Airplane Multiengine.

FAR – Federal Aviation Regulation. This acronym used to be used a lot, but now you’ll find 14 CFR instead (Title 14 of the Code of Federal Regulations).

Integrated Crosscheck – same as what some of our military services call Composite Crosscheck.

Upwind Leg – our military services often use “initial” as the leg of the pattern civil pilots call “upwind.” Be careful, if you report initial in a Cessna 172, the other pilots may not be sure where to look for you.

Part – The term “part” has a specific meaning when you’re reading the FARs. You may be reading FAR 61.63 where it says, “Must have received the required training and possess the aeronautical experience prescribed by this part that applies to the pilot certificate for the aircraft category...” and see that it says “this part.” The “part” it is referring to is the major part of the regulation. In this example (14 CFR 61.63), then you are reading part 61 and section 63. Often, they refer to requirements by just saying they’re found elsewhere in “this part”.

VSI (Vertical Speed Indicator) – The military seems to use VVI (Vertical Velocity Indicator) more often than VSI, but the civil community uses VSI almost exclusively.

“You have the Flight Controls” – Depending on your military service, you may still be using “You have the aircraft” instead of “you have the flight controls” for positive transfer of aircraft control. The correct phrase in the civil community is “you have the flight controls.”

Recommended Reading

Here are some things to read just to get oriented with your new privileges and ROE as a civil flight instructor. We’ve given you the reference, where to find it, and about how many minutes it’ll take to read it.

All of the 14 CFR stuff can be found at: http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=97e020b72cbba6d061a89ffc1898aa69&tpl=/ecfrbrowse/Title14/14cfr61_main_02.tpl

ROE:

14 CFR 61.189	Flight Instructor Records	2 minutes
14 CFR 61.193	Flight Instructor Privileges	2 minutes
14 CFR 61.195	Flight Instructor Limitations & Qualifications	10 minutes
14 CFR 61.197	Renewal of Flight Instructor Certificates	3 minutes
14 CFR 61.199	Expired Flight Instructor Certificates & Ratings	2 minutes

Endorsements People will ask you for:

14 CFR 61.31(e)	Complex Aircraft Endorsement	2 minutes
14 CFR 61.31(f)	High Performance Aircraft Endorsement	2 minutes
14 CFR 61.31(i)	Tailwheel Aircraft Endorsement	2 minutes
14 CFR 61.56	Flight Review (A.K.A. Biennial Flight Review – BFR)	4 minutes
14 CFR 61.57(d)	Instrument Proficiency Check	4 minutes

Other Resources for CFI's

Here are some resources that you don't need to read just to get oriented, but they're things that you need to know exist, because if you do teach in the civil community, you will need them eventually.

14 CFR 61.63 Additional Aircraft Ratings

- This is the most under-read section of the FARs for instructors. Often someone will ask an instructor what the requirements are to add a new rating to their existing certificate. For example, they might ask to add single engine privileges to the multiengine commercial certificate they already have from graduating military flight training and doing Military Competency to Commercial/Instrument (per 14 CFR 61.73). Instructors will sometimes refer to the "part" of 14 CFR 61 that talks about initially qualifying for a commercial pilot certificate (61.121 thru 61.133) instead of referring to 14 CFR 61.63 first.

Advisory Circular (AC) 61-65e Certification and Endorsements

http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/2E1337FC395E0A33862570D0005EA8A2?OpenDocument&Highlight=61-65e

- You might as well memorize this advisory circular number and where to find it because if you do instruct, this thing is the bible on how to word the different endorsements (all the private pilot required endorsements, tailwheel endorsement, BFR, etc.).

FAR/AIM – If you're going to do a lot of instructing, buying a FAR/AIM reprint book (like the ASA one for example) is not a bad idea. It's got a good index, isn't too big, and contains Part 1, Part 61, and Part 91 (as well as some other good parts... it just doesn't contain part 121). Sometimes having the book when you're working with your student is easier than finding a computer with an internet connection, and then trying to remember in the FARs where the section is that you need.

14 CFR 91.167, 91.171, and 91.175

- If you're going to do some actual IFR flying as you shift over to civil instructing, you'll want to read these three FAR sections to get up to speed on the fuel, equipment check, and landing requirements for part 91 operation of a civil aircraft under IFR that will likely be different than your particular military service rules.

Handy FAA web pages:

http://www.faa.gov/licenses_certificates/airmen_certification/

- This page has links to tons of useful stuff: how to get a replacement medical or pilot certificate, how to get a replacement test score report, how to get a copy of all of your personal airman certification records, and a link to search the airman certification database.

http://www.faa.gov/education_research/testing/airmen/test_standards/pilot/

- This page contains all of the FAA Practical Test Standards for all checkrides. This page will be essential to you if you instruct people in preparation for checkrides. These standards can all be

ordered in a nice printed handbook form from several book publishers (ASA, etc.), but the online ones on the FAA site are free (and current).

<http://www.faa.gov/library/manuals/>

- This page is the entry point for FAA Handbooks and Manuals (all those references that the many of the FAA test questions came from) like FAA-H-8083-3a, the Airplane Flying Handbook, as well as the AIM.

http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/MainFrame?OpenFrameSet

- This page will allow you to find an Advisory Circular that you find a reference to, everything from logbook endorsements to setting up a flying club.

http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/MainFrame?OpenFrameSet

- This page will help you to find the new Airworthiness Directive you heard rumor about that just came out on the airplane that you are about to rent this afternoon. That way you can read it and make sure the aircraft you'll fly this afternoon is in compliance.

Instructing Someone for a New Certificate or Rating

Initial Preparation:

If you are going to instruct someone to prepare them for a checkride for a certificate or rating, and you earned your flight instructor certificate thru military competency, go get the training you need first!! The things you'll be teaching you need to be proficient at first. A civil Lazy 8 and Chandelle don't look like military ones except in the most general sense, and the military doesn't do eights-on-pylons or a dozen other things you'll teach as a CFI. So get with an experienced CFI to learn the stuff yourself before you try teaching it to someone else.

Let's say a friend has approached you to become a private pilot (or to get an instrument rating, or to get a commercial pilot certificate, etc). Here are questions you should answer:

1) What maneuvers will my friend have to perform on the checkride, what subjects will the ground eval cover, and to what level or standard will they have to perform? The answers to all those questions are in the Practical Test Standard (PTS). There is a link to the PTS page on the FAA web site in a previous section.

2) Get a syllabus and stick to it! Given: young CFI's will forget to cover some important subjects or maneuvers because of inexperience... a syllabus helps prevent this. Given: old, experienced CFI's forget or skip over important subjects because they've gone over them so many times in their lives that they may think the student sitting there today has already heard it... adhering to a syllabus fixes this too. And if you're brand new to civil flight instruction, there are things to teach that wouldn't occur to you at all if not for the help of a good syllabus. There are many syllabi offered out there for sale, but the Jeppesen series is great. They make the books and syllabi. Give your student a copy of the syllabus and a textbook. You get them too so you know what your student is reading and so you can prepare lessons that compliment the book reading. Here's a link:

http://jeppdirect.jeppesen.com/main/store/product_listing_template.jsp?pageSize=14&catId=cat4&start=1&kwpg=pilot%2bstudy%2bcourse

If you go there and look, part number JS314500 is the text book, and part number JS344515 is the syllabus. Also, part number JS436501 is a great training folder that tracks progression, frequency of maneuvers, tests, etc.... really handy (beats just relying on the few comments you can cram in the log

book line when you fly). They produce a similar line for instrument instruction, CFI instruction, commercial instruction, etc.

- Give your student practice ground evals before the checkride... for many students, a ground oral test is a new experience. They'll be nervous, so they need practice before hand.
- Get your student "stage checks" with another flight instructor periodically throughout their training to back you up.
- Don't let your student try to take the "knowledge test", that's the written test they take on a computer at a testing center, without studying with a test prep book or software first, otherwise they will fail.
- To find a Designated Examiner to give your student the checkride, you could go to the FAA web site. The FAA maintains a list of them. However, getting a first-hand recommendation from another flight instructor is even better.

Giving ground and flight instruction:

Do them like you do in the military.

- Give the student a study assignment in preparation for the ground lesson or flight lesson (new maneuvers, new concepts to be introduced, whatever... reference your syllabus... with Jeppesen, the reading assignments and flight lessons are all laid out).
- Before the flight, give a thorough pre-brief (thorough does not mean a 4-ship pre-brief). Keep it fun and interesting.
- During the flight, give good instruction, but remember that the student's motivations for learning to fly are different than in the military. There is no minimum required learning rate like in the military, so you don't have to push hard or be super-efficient at the expense of the student's learning or comfort.
- After the flight, give a thorough (not painful) debrief and study assignment for next time... do an Emergency Procedure (EP) with them every other flight or so, and do General Knowledge (GK) with them on every other flight. Common EP's include: alternator failure, complete electrical failure, radio failure, headset failure, engine failure, engine fire, cabin fire, wing fire, carbon monoxide poisoning, trapped fuel on one side, use of Avionics Emergency Switch if equipped, and pitot-static failure (no airspeed, questionable altimeter, use of GPS backup and known-pitch-and-power).

You can get paid for the prebrief time, aircraft pre-flight time (if you are still following your student around because you haven't gotten comfortable with their ability to preflight by themselves yet), flight time, and debrief time. But don't be surprised if you run into some strictly civil instructors who are used to only getting paid for flight time... that's an old, bad policy that some flight schools had/have that's really had a negative impact on civil training for years. It's led to instructors starting each lesson at the aircraft (get in and start it up), and then leaving for the day when they step out of the airplane (when the engine stops rotating).

- When you're done getting a student thru their private pilot checkride for their license (or done getting a military pilot single-engine privileges so they can rent a plane), really teach them how to fly with passengers; here's a guide to help:

New Private Pilot Brief for flying with passengers:

Planning Phase:

- Do a full Weight & Balance calculation for passengers (because you probably don't have one from training to reference.)
- Have Airsick Bags ready in every aircraft interior pocket for easy access, and then plan a nice smooth profile... even the heartiest passengers get airsick in small planes.
- Bank Angles... remember, for many passengers, 15 degrees of bank feels like 90 degrees of bank. So start with 5 degree turns and only increase as you get a sense of their comfort level.
- Most passenger flights are **not** Pilot Proficiency Practice... don't try to do stalls, slow flight, steep turns, ground reference maneuvers... just fly around and sight-see etc.
- Strong Winds, Hot Temps, & Turbulence are bad for passengers, so plan the flight for a calm, cool, relatively still morning.
- Plan the Altitudes & Airspace you're going to be sight-seeing near... you don't want to have an airspace violation just because you were distracted by carrying passengers around.

Before you take the passengers out to the plane:

- Ask passengers to limit discussions/conversation during the takeoff and during the landing pattern

When you and your passengers reach the plane, brief them on:

- Ingress/Egress
- Fresh air vent locations and use
- Headsets, and how to adjust the volume
- Seatbelt location and use

Checkrides:

Many instructors prefer not to send their students to the local FSDO for their checkrides, even though the checkride at a FSDO is free of charge (they are paid for by tax dollars). Many instructors prefer to send their students to a designated examiner instead. Yes, designated examiners get paid in cash by the applicant for the checkride because they are not FAA employees, but they have more flexible schedules and are often easy to work with. Ask other local CFI's to learn more on this.

To find a designated examiner, get a recommendation from another local flight instructor and try not to send your young student to a checkride with an examiner who's an unknown quantity. Many examiners will help you guide your students final preparation with some of the most often missed ground eval knowledge questions, they're pet peeves, and the flight profiles they like to use (sequence of maneuvers and airports of choice). Get that stuff. If you can't get that info from another instructor for some reason, and you have chosen the examiner you're going to use (recommendation or he/she is the only examiner around), then call the examiner and spend some time on the phone asking them about ground eval emphasis areas, pet-peeves, and profile stuff.

Preparing an applicant for an Initial CFI checkride is a **huge** job... you have lots and lots to do... get help! (You'll have a while before you can do this... you can't prep someone for an initial CFI checkride until you've been a CFI for a least 2 years per 61.195(h).)

Tell your students not to over-answer ground eval questions on the checkride... give the shortest possible answer. If the examiner asks for the total useable fuel capacity of the aircraft, just say it's 48 gallons, don't explain the whole fuel system.

Tell your students that, if during the checkride the examiner says "I'm going to have to refuse your checkride because that maneuver didn't meet standards, would you like to continue," the student should answer "yes, I'd like to continue". Otherwise, on the repeat checkride they must repeat what they did wrong as well as everything else they haven't done to that point. If they choose to continue, then they'll only have to repeat on the next flight the things that they previously failed for (so maybe just that one item).

Random CFI Knowledge

- Your flight instructor certificate is a new piece of plastic... your instructor ratings don't go on your pilot certificate. Your instructor certificate has an expiration date (every 24 months)... your pilot certificate (unlike a European certificate) does not have an expiration date... it's good for life unless suspended or revoked.

- Per 14 CFR 61.197(b)(2)(i), if you complete the renewal requirements for your flight instructor certificate and turn in the evidence of that completion within 3 months of the expiration date on the certificate, then they'll use that same date 2 years later for the next expiration date (they won't back it up the 3 months). So don't wait until the 24th month to try to renew. Apply for your renewal in the 22nd month. Here's a good way to renew yearly, especially if you're not flying much any more... go to the following link, give them the one-time fee, then you can renew using their online Internet CBT for free every 2 years from then on (they'll even file your renewal paperwork with the FAA for you for a small fee each year so you don't have to... very helpful if you're outside the U.S. and therefore can't get to a FSDO to file the paperwork):

http://www.americanflyers.net/flightinstructor/cfi_renewal_online.htm

- Learn about the aircraft airworthiness requirements that you didn't need to know about as a military instructor... Flight Manual requirements (not to be confused with a POH), maintenance records, required aircraft inspections (100 hour when needed, annuals, pitot-static, transponder, ELT, VORs, Advisory Circulars, Airworthiness Directives, and Service Bulletins).

- You're going to have to take money from your students... and that can get in the way of the instructor-student relationship you are used to... so work it out early.

- A student's medical certificate is actually a Student Pilot Certificate... it's yellow in color, not white. So make sure your private pilot students know to get the yellow one. They have to have it to solo... a white medical certificate is a medical only and isn't enough.

- There are insurance policies out there for renters (Renter's Insurance) and for CFI's (CFI Insurance). They are offered by AOPA and others... not everyone gets them, but you can read about them online if you're interested.

- When you don't know the answer to a question, especially if it's at all complicated, ask 3 other instructors, not just one. As complicated as the FARs are, it's not surprising that you have to ask around to find an informed, correct, referenced answer.

**Note: The opinions, products, and manufacturers discussed here represent the individual opinions of the contributing authors only. These opinions are not necessarily those of Sheppard Air, Inc., and they do not constitute endorsement of any manufacturer or product by Sheppard Air, Inc.*