



Piloting Times and the FAA Form 8710-1

How to fill out the FAA Form 8710-1 for your Mil Comp to Commercial Pilot / Instrument rating application, or for your ATP flying program:

In Section I: For a Mil Comp application, mark the boxes "Commercial", "Instrument", and "Airplane Multiengine" or "Airplane Single-engine" as appropriate. For an ATP application, mark "Airline Transport" and "Airplane Multiengine".

Fill in the rest of Section I, boxes A thru U, with your personal info. Should be self-explanatory, but remember that social security numbers have dashes (-), and pilot certificate numbers do not; all dates should be in MM/DD/YYYY format.

In Section II:

For Mil Comp people: In Section II, you'll mark the block for "Military Competence Obtained In" in Part B. Put the military service in which you serve/served in block 1. In block 2 put the date you were first rated as a military pilot. In block 3 put your rank and service number (use the number on the back of your U.S. military ID card... yes, it's probably your social, but not always). In block 4a, disregard the words "10 hours PIC in last 12 months in the following Military Aircraft" since they don't apply any more under the new FAR 61.73 and just list the aircraft that you have flown. In block 4b, disregard the words "US Military PIC & Instrument check in last 12 months (List Aircraft)" since they don't apply any more either under the new FAR 61.73 and just list the same aircraft that you listed in block 4a.

For ATP people: You will only use line A, boxes 1, 2a, and 2b; but don't try to fill them out ahead of time... fill them in after your practice flights, with the help of your assigned CFI.

In Section III: For Mil Comp and ATP, fill in the boxes across the "Airplanes" line. We're going to cover the categories in a different order than on the form... that's intentional. Note that military "Other" time does not count for anything in the FAR's. We've tried to give you the FAR reference for all this stuff so you can go read the details yourself if you want. And if you have a civil log book with times that you will be adding to your military time, the civil log book probably has all of the different time classifications clearly logged... it's your military times where you are going to have to do all the work.

Before we start, there are no magical multipliers that you can multiply your military time by to get a civil equivalent. The only multipliers are those offered to you by certain airlines that let you multiply your flying time associated with certain military flying operations to increase your hours toward their application form... but it's company specific, and is not offered by the FAR's or the FAA.

Also, "flight time" is defined (14 CFR 1.1) as pilot time that commences when an aircraft moves under its own power for the purpose of flight and ends when the aircraft comes to rest after landing. So if you added 5 minutes to all your military flights, this may not have accounted for all of your aircraft movement on the ground time, but it's what you added, so you probably are stuck with it (in other words, we don't recommend trying to go back and add more). But if all of your military flights in a given airframe were logged from wheels off the ground to full-stop landing roll, then you can probably add 5 or 10 minutes to each of those flights for your ground movement time.

Throughout the following flight time categories, We'll indicate the ATP minimums in blue type. These minimums come from 14 CFR 61.159 if you need to read them yourself. If we don't list a minimum hour requirement for a particular box, then it has no minimum for an ATP applicant. If you're a Mil Comp applicant, there are no minimum hours required in any of the following categories, so disregard the text in blue and just enter the hours you have (FAR 61.73).

Pilot in Command (PIC) 14 CFR 61.51: That flight time during which you were a) the sole manipulator of the controls of an aircraft for which you were rated, b) the sole occupant of the aircraft, c) acting as pilot in command of an aircraft on which more than one pilot is required, d) serving as an instructor pilot. The minimum is: 250 hours of PIC, or as second in command performing the duties of pilot in command while under the supervision of a pilot in command, or any combination thereof. So PIC and SIC have to add up to 250.

Second in Command (SIC) 14 CFR 61.51: That flight time during which you were qualified as second-in-command in an aircraft that required more than one pilot, and you were occupying a pilot crewmember station.

Solo (also 14 CFR 61.51): That flight time when you were the sole occupant of the aircraft.

Instruction Received (also called Training Time, see 14 CFR 61.51): Any flight time when you were receiving training from an instructor.

Notice that some of the areas above can overlap in the civilian community... for example, you could be the sole occupant of an F-16, and that time counts as both Solo time and PIC... or if you're a solo student pilot in UPT, again that's both Solo time and PIC time. A different example of overlap... if you passed your qual check in the F-16 at FTU, you're rated in the aircraft, but you will still fly with instructors before you're done with the course... those hours after the qual check where you have an instructor on board can be logged as both PIC (because you're the sole manipulator of the controls) and as Instruction Received because you're receiving training. Also, since instructors can log all flight time where they are serving as an instructor as PIC time, then my instructor in the F-16 also gets to log PIC for the flight. Recognizing that there is overlap built in to some of these areas is important to recognize as we move to the Total box.

Total: Here's the tough one... which is why we looked at the others first... this should be the total of your PIC, SIC, Solo, and Instruction Received times, **but without any duplication...** so, for instance, you should have included all of your Solo time in your PIC time; so if we add both Solo and PIC time into your Total, then we will have duplicated some hours which would be wrong. So let's just add together your PIC, SIC, and Instruction Received time... well, that could cause duplication too if you had any occasions (like the F-16 example in italics above) where you logged flight time as both PIC and Instruction Received. So add up your total carefully, and avoid double-counting any of your flight time in your Total. **Minimum of 1500 hours in this box. Up to 100 hours of this 1500 may have been obtained in a flight simulator or flight training device provided that time was obtained in an approved course conducted by a training center certified under FAR part 142 (our military training programs like UPT are generally not part 142 certified, though the military may have sent you to a part 142 program to get qualified in certain aircraft, or you may have gotten training at a part 142 program at some point in your pilot career).**

Cross Country Instruction Received, Cross Country Solo, and Cross Country PIC/SIC: Until now, your military records were probably helpful in filling out the boxes on this "Airplanes" line. However, our military doesn't track Cross Country (CC) time for us. So how are we gonna come up with it. First, we're gonna define what CC flight time is: If you are filling out this form for a Commercial Pilot certificate (so that's all you people who just graduated from pilot training and took the military competency test and are doing the 8710-1 to turn in with your test results), then CC time is flight time accrued during a flight with a point of landing that was at least a straight-line distance of more than 50 nautical miles from the original point of departure (14 CFR 61.1(b)(3)(ii)). If you are filling out this form for an ATP checkride, then CC time is flight time accrued that is at least a straight-line distance of more than 50 nautical miles from the original point of departure; notice, for ATP there's no need to actually land or put the wheels on the ground... so going 50NM to the air refueling track or MOA or range and back meets the definition for you ATP guys (14 CFR 61.1(b)(3)(vi)).

So, now we know the definition of CC time... but we still have no record of how much of it we did... so guess... yes, guess. Every flight you ever did in an operational aircraft probably went more than 50NM, so just take all of them... or if you did some pattern-only rides, then subtract a bit. It's ok to make a reasonable guess, but if in doubt, guess to the low side, don't exaggerate. **Minimums: When you add CC Instruction Received and CC PIC and CC SIC together (CC PIC includes CC Solo again), the total has to be at least 500. The CC PIC and CC SIC added together must be at least 100.**

Instrument: (14 CFR 61.51) Your flight time counted as Instrument time if: a) you were operating the aircraft solely by reference to instruments under actual or simulated instrument flight conditions, or b) you were an instructor and conducting instrument flight instruction in actual instrument flight conditions. **Minimum hours for this box is 75 hours of instrument flight time in actual or simulated instrument flight conditions. But if you don't have 75, you can take up to 25 hours of time credit obtained in a flight simulator or flight training device (see the definitions of simulators and training devices on the next page before you take this credit), or you can take up to 50 hours of time credit obtained in a flight simulator or flight training device if the flight simulator or flight training device time was in an approved course at a part 142 certified training center.**

Night Instruction Received and Night PIC/SIC: Night can be confusing if you fly in the civil world much... here's why: 14 CFR 1.1 defines night as the time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac, converted to local time (good news here for military guys because the USAF defines it the same way in the Glossary to 11-202 Vol 3). But in 14 CFR 61.57 (b), to update one's night takeoff and landing currency for carrying passengers, the takeoffs and landings have to be accomplished between 1 hour after sunset and 1 hour before sunrise. And if that wasn't bad enough, you have to have your position lights on from sunrise to sunset. To bad all these things don't coincide. (It gets worse... civil twilight starts when the center of the Sun is 6° below the horizon, and ends when the center of the Sun is again 6° below the horizon... sunrise by comparison is defined as the time when the upper edge of the disk of the Sun is on the horizon, and sunset is when the upper edge of the disk of the Sun is again on the horizon... so they're not the same time exactly. Civil twilight begins before sunrise, and civil twilight ends after sunset. How different are they really... on June 1st of this year, 2006, civil twilight began at 0452 and sunrise was at 0520, about 30 minutes later... on the same day, sunset was at 1930 and civil twilight ended at 1959, again about 30 minutes apart.) Bottom line... whatever you already logged in your military and civil records as Night flight time is probably good enough. **Night PIC and SIC added together must be at least 25. Instruction Received and Night PIC and Night SIC must add up to at least 100. If they don't add up to 100 (say they're only 85), then you can use a special rule in 14 CFR 61.159 that says: A person who has performed at least 20 night takeoffs and landings to a full stop (there's that full stop thing again... see the next paragraph) may substitute each additional night takeoff and landing to a full stop above 20 for 1 hour of the 100 total needed... but you can't get credit for more than 25 hours of night time this way. So let's say you had fifty night takeoffs and landings to a full stop; that's 30 more than 20, so you can add up to 25 hours to your total night time if necessary (but you can't add the full 30)... if your total night time was 85 as previously mentioned, then you would take 15 hours of credit this way, so that your total night time came up to 100 hours.**

Night Take-off/Landings, Night Take-off/Landing PIC/SIC: Again, our military flight records don't help us much here, and neither do the FAR's. Where do the FAR's define a night takeoff or landing... they don't. But in 14 CFR 61.57 (b) again, when a pilot is trying to update their night takeoff and landing currency for carrying passengers, it says that you need at least three takeoffs and three landings to a full stop (see the minimums above for more about full stops). This implies that you can't take credit for night touch-and-go's on this 8710-1 form, although it never explicitly says either way. So what are we going to do... first, for the purposes of filling in these boxes, count one initial takeoff and one full stop landing as "1", not "2". Next, here's what I always recommend... decide on how many full stop landings you did per hour at night, and then multiply that by your night hours to get your night landings (yes, it's another guess). So, for example, if you flew KC-135's with an average mission duration of 2 hours, and you only got one initial takeoff and one full stop in that 2 hours, then that's 0.5 "Night Take-off/Landings" per hour... so if you have 200 total night hours, then I put 100 (0.5 x 200) in the Night Take-off/Landings box on the form... and if you then have 100 hours as Night PIC, then you put 50 in the Night Take-off/Landing PIC box. If you flew F-16's with say an average mission duration of 1.0, and you got one initial takeoff and one full stop per mission, then you add 1 for each hour of night time.

The only blocks left that you might need to fill out are the Simulator Instruction Received box, the Simulator Instrument box, the Training Device Instruction Received box, and the Training Device Instrument box at the bottom of Section III. For you ATP people, FAR 61.159(a)(5) allows you to credit up to 100 hours of simulator/training device pilot time toward the hours requirements for your ATP checkride. ***If*** you need the simulator or training device credit to meet the experience requirements, what you should know follows; otherwise, leave those boxes blank.

A "simulator" or "training device" has no definition in 14 CFR 1.1, so we have to look in the definitions section of Part 61 (14 CFR 61.1):

Flight simulator means a device that—

- (i) Is a full-size aircraft cockpit replica of a specific type of aircraft, or make, model, and series of aircraft;
- (ii) Includes the hardware and software necessary to represent the aircraft in ground operations and flight operations;
- (iii) Uses a force cueing system that provides cues at least equivalent to those cues provided by a 3 degree freedom of motion system;
- (iv) Uses a visual system that provides at least a 45 degree horizontal field of view and a 30 degree vertical field of view simultaneously for each pilot; and
- (v) Has been evaluated, qualified, and approved by the Administrator.**

Flight training device means a device that—

- (i) Is a full-size replica of the instruments, equipment, panels, and controls of an aircraft, or set of aircraft, in an open flight deck area or in an enclosed cockpit, including the hardware and software for the systems installed, that is necessary to simulate the aircraft in ground and flight operations;
- (ii) Need not have a force (motion) cueing or visual system; and
- (iii) Has been evaluated, qualified, and approved by the Administrator.**

So if you have time in these devices, and if you need the added credit to meet the ATP pilot hours minimums, put the hours in the appropriate boxes.

At the bottom of the FAA Form 8710-1 is a place for applicant signature and date. For you ATP people, ask your CFI if you should sign and date in advance, or if the examiner wants you to sign it in front of him/her. For you Mil Comp people, sign it when you turn it in. But in either case, don't let the 8710-1 go unsigned, or your paperwork will be severely delayed as they send it back to you for signature.

When you print the form, be sure to print both the front and the back, and print it foot-to-foot. Don't fill out any of the blocks on the back of the form.

That's it... what a nightmare, huh?

Good luck, and we hope that helped you out.