



IACRA, the FAA Form 8710-1, and Piloting Times

You are going to fill out the FAA Form 8710-1 for your Military Competency (Mil Comp) to Flight Instructor certificate application by using the IACRA online system found at <https://iacra.faa.gov/IACRA/>. At the end of the online process, it will allow you to print a draft copy of the real form. The following sections summarize what you should find in the different sections of the 8710-1 form:

In Section I: Ok, the checkboxes at the top of the form can be confusing. Let's break it down into 3 steps:

- 1) If you don't have an FAA Flight Instructor Certificate already (and are therefore taking the MCI test to apply for your initial instructor certificate), then "Instructor: Flight" and also "Initial" should be marked. If you do already have an FAA Flight Instructor Certificate and you are just adding ratings to it from your military career (so you are NOT taking the MCI test), then "Instructor: Flight", "Renewal", and "Added Rating" should be marked.
- 2) Also, the appropriate Instrument Rating block, like "Instrument: Airplane" or "Instrument: Helicopter" should be marked.
- 3) Now you should find marked ALL of the flying machines you instructed in for the military like Airplane Single Engine (ASE), Airplane Multiengine (AME), Helicopter, Glider, or Powered-Lift (MV-22 Ospreys and Harriers).
- 4) The rest of Section I, blocks 'A' thru 'O', should contain your personal info. All dates should be in MM/DD/YYYY format.

In Section II: In Section II, block 'B' for "U.S. Military Competence or Experience" should be marked. The military service in which you serve/served should be in block 1. Block 2 should be the date you were first rated as a military pilot. Block 3 should contain your rank. In block 4a should be listed the aircraft that you have flown while in a military status. In block 4b, just list the same aircraft that you listed in block 4a.

In Section III: Some FAA Designated Examiners/FSDO Inspectors will want you to fill in your aircraft times in Section III of the form, some will not. The federal law (14 CFR 61.73) governing Mil Comp to Commercial/Instrument does not require any minimum hours, and therefore section III of the form is not required to be filled out. However, you may submit the electronic form to a Designated Examiner or FSDO Inspector who "doesn't like to submit paperwork with empty boxes", so you should probably calculate your times just in case you are asked to fill them later at turn-in time. (Calculate ALL your civil/military piloting time, not just military.) You will fill in the lines for Airplane, Rotorcraft, Powered lift, and/or Gliders as appropriate to your military flying. We're going to cover the different categories of piloting time in a different order than they are listed 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. If you have a civil logbook with times that you will be adding to your military time, the civil logbook 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 specific 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. You may have already logged all of your military flights in this way, or you may have added a couple minutes to each flight to account for taxi time before submitting the official military form, or you may have only logged takeoff to landing... it would depend on your military service and the governing regulation in effect at the time. But what was officially recorded is what was recorded, so you are probably are stuck with it. (In other words, we don't recommend trying to go back and add more time if you feel you were shorted originally.)

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.

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, in which case that time counts as both Solo time and PIC... or if you're a solo student pilot in Undergraduate Pilot Training, again that's both Solo time and PIC time. A different example of overlap... if you passed your initial qualification checkride in the F-16 at FTU, you're then rated in the aircraft, but you will still fly with instructors before you're done with the course... those hours after the qualification checkride 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 the instructor

in the F-16 also gets to log PIC for the flight. Recognizing that there is overlap built into 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, but 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.

Cross Country Instruction Received, Cross Country Solo, and Cross Country PIC/SIC: Until now, your military records were probably helpful in filling out the piloting times above. However, our military services generally don't track Cross Country (CC) time for us. So how are we going to come up with it? First, we're going to define what CC flight time is: although there are exceptions for ATP applications, 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)).

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 if they landed... 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.

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.

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 is that most of our military services define it the same way). 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. Too 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 2006, civil twilight began at 0452 and sunrise was at 0520, about 30 minutes later... 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 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. This may imply 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? Here's one technique... first, for the purposes of filling in these boxes, count one initial takeoff and one full stop landing as "1", not "2". Next, 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" or "estimation").

So to use this technique, 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 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. For another example, if you flew F-16's with perhaps 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.

FFS, FTD, and ATD: There is no need to try to calculate these times (Full Flight Simulator, Flight Training Device, and Aviation Training Device). If you do need to convert military "simulator" times to civil equivalents someday, you will have to look at the types, definitions, and rules.

At the bottom of the FAA Form 8710-1 is a place for applicant signature and date. This will get electronically signed and dated when you submit the IACRA electronic online application to the Designated Examiner or FSDO Inspector.

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

Good luck, and we hope that helped you out.