



## What the Examiner Sees – Pilot Logbooks

by Larry Bothe, 9/15/2012

For our next look at what pilot examiners see during checkrides we'll go back to the very start of a checkride, before the actual testing begins. One of the examiner's first duties is to make sure the applicant is qualified to take the test. This is partly accomplished by an examination of the applicant's pilot logbook. Having the required number of hours in various categories ("aeronautical experience") shown on the 8710-1 application form (online, in IACRA) isn't good enough by itself. Examiners have to verify that there are supporting entries in the applicant's logbook. We also need to see the endorsements that are required for the certificate or rating to be tested.

Consider the most common certificate, Private Pilot. I start by looking for the endorsements, usually located in the back of the applicant's logbook in the Private Endorsements section. Private Pilot requires three endorsements - current 90-day solo (FAR 61.87,n,2); 61.39,a,6; and the 61.107,b,1/61.109,a endorsements. When an applicant makes an appointment with me for a checkride I specifically tell him or her that they must have those three endorsements in order to be eligible to take the test. Even so, they still sometimes show up without one or more of them.

It's not hard for 90 days to go by without the student being re-endorsed for solo flight. The 90-day solo endorsement is required for the Private checkride because your student will be flying as PIC. Sometimes when the appointment is set the solo endorsement is current, but then weather or mechanical problems delay the checkride and the solo endorsement goes beyond 90 days. Other times it has been months since the applicant has been legal for solo, simply because the instructor forgot. Never mind that the examiner can't give the checkride; whatever insurance is on the plane was probably invalid for the entire time. The pilot wasn't legally qualified to fly the plane, and because of the FAR violation the insurance contract was null and void. If the student was working on required aeronautical experience during that period, say flying solo cross-country, the FAA could invalidate that time and require that it be flown again (but I have never heard of that actually happening). Note that the 90-solo endorsement must be dated on a day the instructor flew with the student. After all, how could you attest to your student's competence on that day if you didn't fly with him?

Instructors dislike the 61.39 endorsement, which is required for virtually all certificates or ratings. It's long, consists of two parts, and often not found preprinted in the logbook. Nobody wants to write it out. But write it out you must. The short version, "Joe Applicant meets the requirements of FAR 61.39" isn't good enough, according to the FAA. They require the full text. The two parts are "..... 3 hours of instruction in the preceding 2 calendar months .....", and, ".....has demonstrated satisfactory knowledge of the areas shown to be deficient on his airman knowledge test." When you give 61.39 be sure to include both parts.

The FAR 61.107/109 endorsement is short and straightforward, and nearly always found preprinted in the back of the student's logbook. It is the one that attests to the fact that the applicant has received instruction in all of the Areas of Operation and has all of the aeronautical experience for Private Pilot, ASEL, and the applicant is prepared to take the practical test. (The comparable endorsement for the Instrument Rating is FAR 61.65.) Since 61.107/109 sort-of sounds like the first part of 61.39, why are both required? It has to do with the fact that many students have had more than one instructor pursuant to any certificate or rating. The last one, the recommending instructor, didn't give all the training, but he is responsible to determine that the student has received all the required training and has all the required aeronautical experience, hence the need for the 61.107/109 endorsement. Sometimes in haste the 61.105 endorsement gets confused with 61.107/109. 61.105 is the endorsement that allows the student to take the knowledge test. Since the applicant has his knowledge test results in hand (and/or loaded into IACRA) the examiner doesn't need to see the 61.105 endorsement. Don't confuse the two. We need to see 61.107/109 in order to give your Private Pilot student the checkride.

Here are a few final thoughts about required endorsements. Are you unsure about the proper wording for an endorsement? Just grab a FAR/AIM book, look up the FAR, and write "I certify that I have given (student's name)", and then parrot back the FAR. A form of this procedure works for the wording of any endorsement you need to give, provided that you know the FAR number to start with. Examiners don't care how endorsements get into the applicant's logbook. Any form, preprinted, fill-in-the-blanks, printed on crack-and-peel labels, or written out longhand, are all acceptable. Although customarily put in the back of a logbook, endorsements can be anywhere. We just need to see them in order for your student to be eligible to take the test. And while this article is primarily about what we see, or don't see, in pilot logbooks; while you're signing your student off for that first solo cross-country be sure the you have signed his student pilot certificate for solo X-C.

What happens when an applicant shows up with an endorsement missing? Do we just send him home? Not necessarily. If we can locate the instructor and have him drive or fly over to provide the endorsement we can give the test. How about a faxed or e-mailed

endorsement? Since endorsements require an original signature the acceptability of an electronically transmitted one would be up to the policy of your local FSDO. When in doubt we examiners check with our FAA boss, called our Principal Operating Inspector (POI), for guidance. But if the instructor cannot be located then we have no choice; we have to send the applicant home.

While I'm in the back of the applicant's logbook checking for required endorsements I also look for a record of ground instruction. Most logbooks have a Ground Instruction section right before the preprinted endorsements. The same FAR that requires a record of flight instruction also requires that ground instruction be received and recorded. In fact, FAR 61.107,a, states that: *A person who applies for a private pilot certificate must receive and log ground and flight instruction from an authorized instructor.....*; note that the ground instruction is even mentioned before the flight part. A student and his instructor will take great pains to record every minute of flight time, but ground sessions often go undocumented. In recent years our FSDO has told all the DPE's that if an applicant shows up without a record of ground instruction, send him home; don't give the test. A 61.107/109 endorsement by itself is not sufficient. We have to see individual entries with dates and times, covering the subjects taught, just like for flight instruction and aeronautical experience. Be sure that you make a separate logbook entry for any ground session that goes beyond a few minutes of briefing or debriefing.

After verifying that the applicant has the required endorsements and record of ground instruction I then make sure that he or she has the hours logged to meet aeronautical experience requirements for the certificate or rating sought. In the case of Private Pilot that means 40 hours total time, 20 of which are dual and 10 solo, with 3 hours of instrument training, 3 hours cross-country training, 3 hours of night training (including a 100 NM X-C and 10 night takeoffs/landings), 5 hours of solo cross-country (one "long" 150 NM one with one leg at least 50 NM), and 3 full-stop landings at an airport with an operating control tower. That's pretty straightforward so how could it possibly get screwed up? Oh Lord, let me count the ways!

- The "long" cross country wasn't long enough. Examiners don't measure each leg of each cross country flight, but we are generally familiar with the area in which we examine. We know the approximate distances between airports. If a flight looks like perhaps it doesn't qualify, then we check.
- Insufficient control tower landings. The instructor told his student that while he was over at Big Airport to make 3 landings and takeoffs, but he made only one, and he logged it that way.
- Control tower landings were touch and go; not full stop, taxi-back. How would we know? Because they were logged as touch & go, that's how. Pay attention to how your students log things, especially required aeronautical experience.

- Part of the 3 hours of instrument *flight* training was accomplished in a ground-based flight training device. Since the FAR calls out *flight* training, with no qualifying exceptions, all the IFR training for Private has to be in the airplane. The 2.5 hours of FTD time allowed toward Private Pilot by FAR 61.109,k,1 has to be used some other way, like cockpit procedures training.
- Insufficient solo time. Dual instruction somehow got stuck in the PIC column in the logbook, and the instructor didn't catch it.
- Insufficient X-C PIC (50 hours required) for the Instrument Rating. This usually happens when the applicant thinks he has just barely enough PIC X-C, but has inadvertently included the 3+ hours of dual X-C training he received toward his Private certificate. The solo X-C for Private counts, but the dual doesn't.

I could go on and on, but I think you get the idea. It is necessary that you, the instructor, make sure your student meets all aeronautical experience requirements. Those requirements must be logged in such a way that the examiner can understand them and readily see that the requirements are fulfilled.

This brings up a sore subject among pilot examiners; sloppy logbooks. We just hate it when we open a logbook and it is all but indecipherable. Columns are not added up, page totals are not carried forward, time entries in various columns are missing, there are multiple errors and scratch-outs; the logbook is a mess. That immediately tells the examiner that neither the applicant nor his instructor give a hoot about what they are doing. Is that how you and your student want to be viewed by the examiner at the outset of a checkride? Probably not!

It is necessary that all the times in the various categories be added up for the purpose of entering them into IACRA, so why not do it page-by-page and fix the logbook up at the same time? Virtually all logbooks have some (corrected) errors in them, and that's fine. Strike-through or correction tape is OK with me; I just need to be able to read it. Once it's all added up, and before entering the totals into IACRA, please do one final cross-check. For the first pilot certificate, be it Private or Sport, the total of the PIC/Solo column, plus the Dual Instruction column, must equal the Total Duration of Flight column. If Dual + Solo does not equal Total then there is an entry error somewhere. You need to go find it (it's on the first page where Dual + Solo does not equal Total), fix it, and then fix each subsequent page at the bottom. When Dual + Solo = Total on the last page, then you can move on to IACRA.

What happens if, in spite of your best efforts, it does not appear to the examiner that an applicant has all the required aeronautical experience? Does the examiner just send him home to do some additional flying? Hopefully not. If certain flight times appear to be missing we look for an entry error. Maybe the problem is as simple as the time for a cross-country flight was not entered in the X-C column. If the rest of the entry shows

that the applicant went to airports that qualified as a cross-country, and the time is consistent with the distance, then we just enter the hours in the X-C column, count it as valid X-C time, and move on. But if it is not a simple logging error and the flight was not made, then the examiner has no choice but to refuse to give the test. There are no exceptions to aeronautical experience requirements for Part 61 applicants; either the applicant has all that is required, or he doesn't.

When an examiner sends an applicant home because he is not qualified to take the test, who pays? If a lack of qualification problem comes up the examiner usually spends quite a lot of time, an hour or more, trying to find a solution so he can give the test. If in the end it can't be resolved because the instructor can't be located, or the applicant really doesn't meet aeronautical experience requirements, then the applicant will likely be told to bring an additional fee, perhaps \$100, with him when he returns after the deficiency is corrected. That compensates the examiner for the extra work he had to do, and for making his day otherwise nonproductive. How about the plane? The applicant probably rented it from the flight school and put 1 to 2 hours on it to fly over to the examiner's airport and then back home again, while accomplishing nothing. There's another \$100 to \$200 down the drain. Should your student have to pay for the airplane rental? While students should know the requirements for a certificate or rating it's just not reasonable to hold these beginners ultimately responsible. It's you, the flight instructor, who is signing them off. If you send an unqualified student for a checkride then you should personally pay the examiner's additional fee. The flight school should eat the airplane rental. It wasn't the student's fault.

What if disaster strikes and your student loses his logbook? It doesn't happen very often, but through a fire, theft of a flight case, divorce, automobile or airplane accident, or just plain stupidity, a pilot can lose his logbook. The good news is that the FAA allows a missing logbook to be reconstructed. However, there has to be some basis for the reconstruction (aircraft rental records, instructor's records of dual given, maintenance log for the student's owned airplane, previous 8710-1 form, etc.). You can't just make it up. The new logbook should contain a statement that it is a reconstruction, and cite the sources of information upon which the reconstruction was based.

In my experience the least expensive commercially available logbook, the ASA SP-30, has the most complete pre-printed endorsements in the back, and also has the largest space for comments in each flight entry. A DPE friend says the Gleim logbook is very good as well. That means you'll do less work if you start your student with one of these logbooks. Impress upon him the importance of neat and accurate record keeping. Have him immediately put his name and address, along with a phone number and e-mail address, in the front of the logbook. When the time comes that's where the IACRA logon information will go as well. If you do a neat job of logbook entries chances are that

after your student solos, he will too. If he doesn't, you need to point out the error of his ways.

A pilot logbook that is neat and kept up-to-date will go a long way towards preventing the kinds of problems I have presented in this article. The examiner will be positively impressed with your student's preparation. Pilot examiners find no pleasure in sending an applicant home because he is not legally qualified to take the test. We would much prefer to get the job done and issue the sought-after certificate or rating. We like to create pilots, not prevent them.

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