



The Best of *Flight Training Magazine*

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Making every minute count

The golden rule of cost-effective flight training

By Budd Davisson

When Benjamin Franklin said, "Remember that time is money," he couldn't have known he was talking about aviation. Whether it is learning to fly, operating aircraft as a flight school or fixed-base operator, or running a major airline, it all comes down to the cost per minute. To the flight school operator, the longer an aircraft is flown, the more revenue is generated for the school. To a student, who is looking at the same minutes from the other side, the longer he flies, the more he has to pay—so it's important to make every minute count.

What does it cost the average student per minute? Let's assume you're paying \$90 an hour for a two-place trainer with instructor, a bargain these days. That's easy enough to figure—it's costing you a buck and a half a minute, or two and a half cents a second. Ka-ching, ka-ching. That's the cash-register-like sound of a Hobbs meter clicking over.

First it must be clearly understood that we don't mind spending money as long as we're learning something. What we hate is wasting time just sitting in the cockpit doing nothing productive. The key to efficiency is to eliminate the bad minutes and accentuate the good ones. If the Hobbs is running, we want to be learning.

Talking about a minute here and a minute there sounds as if we're splitting hairs, but at \$1.50 per minute those are pretty expensive hairs. The biggest time-waster is saddling up without a concrete plan that the flight will follow. On a dual flight, your certificated flight instructor (CFI) is probably working from a syllabus, but even though the hour is theoretically planned, it's still easy to waste minutes.

Here are some examples of unconscious time-wasters on a dual flight:

Bonding rituals. You tell your CFI what you did last night. She matches your story with one of her own. That's good for at least three minutes. Ka-ching! \$4.50 down the tubes. You're there to fly, not socialize. Socializing is necessary to make the entire learning experience flow more smoothly, but while in the cockpit, be very mission-specific. Now, you can chat a bit while you're flying to the practice area and scanning for traffic, but don't let it detract from instructional activity. It's cheaper—not to mention safer—to socialize on the ground.

Say that again? You get in the cockpit and ask your CFI to explain something he could easily answer when sitting in the lounge having coffee. Line up your questions well in advance. Corner him during the preflight briefing and run right down your written list. Once the engine is running, the last thing you want to do is say, "Oh, I forgot—can you tell me how to...." Ka-ching!

Bathroom break. "Oh, darn! I'm sorry, but I have to go to the restroom." You'll shut down the engine for that one, but it still costs, and flight instructors don't like it.

Runup ramble. While the aircraft is stopped in the runup area, either you or the instructor takes time to review what you're going to do during the flight. Part of the preflight briefing should be a very pointed discussion about the goals of this particular flight, how maneuvers are going to be flown, and what each entails. He'll review each of those in the air while the maneuver is in progress, but not while sitting at the end of the runway. (You can and should ask him to review takeoff procedures if you're uncertain about them.)

What's the frequency? "What's the ATIS frequency? Oh, yeah. And ground?" A golden opportunity to save money is staring you in the face the second you strap in. At a tower-controlled airport, don't start the engine until you absolutely have to. You'd see why, if you timed the number of minutes it takes you to set up the radios, listen to recorded airport information on the ATIS broadcast, and then call ground control. That's usually at least two minutes (\$3) and it's not essential for the engine to be running while you accomplish all those tasks. Over 60 hours of training that's \$180 you didn't need to spend.

Where are we? You look over at your instructor and say, "OK, which taxiway do I take and how do I get there?" That question-and-answer exchange can take at least a minute, usually two. You'd save two or three bucks by just looking at the airport diagram ahead of time so you're familiar with the taxiways. You could also ask your CFI for directions before cranking the engine.

On dual hops the biggest waste of time may be caused by nothing more than a student who arrives unprepared for the lesson. It's bad enough that students start to forget what they've learned the moment they climb out of an airplane. Brain drain is a terrible waste of money and can't be completely eliminated. Its effect on your wallet can be minimized, however, but only if you will do a few basic things before coming out to the airport. All of these tricks are easy, and, more important, they are all free.

- Start a notebook. After each flight write notes to yourself about what you learned. Don't wait until you get home. Do it right away, while your impressions are clearest. The simple act of writing the notes further imprints the lesson in your memory. In a perfect world, you'd sit in the coffee shop or pilots' lounge for 15 minutes after each flight with a laptop noting facts and impressions.
- *This one is really important:* At least once between flights reread what you wrote about the last flight. If your lessons are a week apart, do the review twice. This will slow the brain drain, and in the process you'll come up with new thoughts and, better yet, questions that need to be clarified the next time you see your CFI.
- Review your notes again just before each flight. This is very important. It's just good teaching practice that every lesson will entail a certain amount of review. However, the more time you spend reviewing the last lesson, the less time you spend moving ahead by learning new material. All learning is five steps ahead and three steps back; what we're shooting for is five steps ahead and only one or two back. Every time you have to review something unnecessarily because you were too lazy to come prepared means you've paid for the same minutes at least twice-at, say, \$3 per minute. Not good.
- Before you start the engine, sit for a minute or two and focus on the airplane. Let the outside world drift away as you shift into flying mode. You'll be more efficient, and those first few minutes won't be quite as hectic.
- When you're flying solo, you are master of your time; any minutes wasted are your responsibility alone. We preach "plan ahead" when we're flying, and we should be doing the same thing when we're getting ready to fly. Part of the planning should be analyzing everything we are going to do in terms of efficiency.

Here are some tips for making your solo flights more cost-effective:

- Listen to ATIS or AWOS for the weather, call for your departure clearance if necessary, and do your housekeeping chores around the cockpit without the engine running. A handheld radio is ideal here; if you use the airplane radios, be sure to turn them off before you crank the starter-or those expensive radios could be damaged. Allow sufficient warm-up time when you start up, rather than racing toward the runway with a cold engine. Avoid sitting there with the Hobbs ticking over while you're doing something nonessential like folding sectionals, for instance.
- Housekeeping chores shouldn't be done during your runup. When you get to the end of the taxiway, the only things you should have to do are the pretakeoff items on your checklist; i.e., mag check, carb heat, cycle the prop, etc. Comm and nav radio frequencies should have been tuned, sectionals arranged, and water bottle stowed long before you cranked the engine.
- If the entire practice area is open, don't fly to the far side of it before you begin your air work. Two miles of flying will cost you \$1.50 while you sit there watching real estate roll by.
- Keep a written plan for your practice maneuvers either lying on the seat next to you or clipped to a lap board. Don't go out with a vague notion of what you're going to do. Your instructor told you to practice certain maneuvers. Nail him down for specifics. If you are doing rectangular courses, how many are enough? Which maneuvers should you be concentrating on?
- Do altitude planning so that you only have to climb once. If your instructor has you practicing rectangular courses at one altitude and stalls and slow flight at another altitude, do all the higher-altitude maneuvers together. Don't split them up and waste time climbing.

- When working in the airport traffic pattern realize that wide patterns cost more than close-in ones. If traffic isn't an issue and you're flying a pattern that's a mile longer than necessary, you're actually flying two miles farther—a mile out and a mile back—at a slower speed than cruise. That'll add at least a minute and a half, maybe two minutes, to each approach for an additional \$2-\$3 per landing. Besides costing more, long approaches are bad technique and put you in a position where you can't reach the runway should the engine quit. On top of that, you'll make fewer landings in an hour so you won't learn as much.

OK, let's add all of this up:

During startup and taxi, let's say that talking, inefficient cockpit housekeeping, taxi delays, and other factors caused us to waste two minutes: Ka-ching! \$3.

On climbout, you flew a mile farther than necessary before turning to the practice area: Ka-ching! \$1.

You flew to the far side of the practice area: Ka-ching! \$1.50.

You came back into the pattern and shot three landings, each of which used a larger-than-necessary pattern: Ka-ching, ka-ching, ka-ching! \$6.

So, without getting too exotic about our bookkeeping we spent \$11.50 on flight time that didn't provide any training value. That's more than 12 percent of our \$90, one-hour lesson. The real tragedy in our example, however, is that we haven't even come close to accounting for many of the inefficiencies that we encounter on every flight.

The reality is that flying is expensive. In fact, if you sit down and really analyze the costs, you may get depressed. Still, we can keep the wallet damage to a minimum by doing our best to eliminate the more obvious time-wasters.

The golden rule of cost-effective flight training is this: As long as noise is coming from under the cowling, it costs you money—so make your time work for you.

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