

Questions and Answers for Pilots - General

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Controlling Patience as a CFI

Dear Rod:

Do other instructors have trouble controlling their patience when students don't seem to show any sign of improvement? I'm a little embarrassed to admit it, but I occasionally get angry with my students.

Thanks,

Mr. Anonymous

Dear Mr. Anonymous:

I'm assuming the problem isn't caused by your having one-too-many espressos. If you can vibrate though solid matter after a cup or two, you might want to cut back a little. Seriously, a loss of patience often damages the student-instructor relationship. In many cases this is caused by unrealistic expectations. Instead of evaluating students for what they can do, instructors sometimes evaluate them for what they should do. But not everyone can solo in 15 or 20 hours.

When a student's progress is abnormally slow, you might wonder if you're at fault. The result is that you might become more demanding of that student, raising your expectations in the process. This only makes matters worse. If you have serious concerns about a student's progress, then place the ball in his court. Let him know. Ask him what you might do to improve his performance. Now he's forced to assume more responsibility for his training. Give him the option to fly with another instructor for an evaluation. This is very effective in managing the guilt instructors sometimes feel regarding a student's slow progress.

Holding Pattern Trouble

Dear Rod:

I'm having a devil of a time with IFR training and I'm just realizing that it's not all my doing. When my instructor first started teaching me about holding patterns I asked him to draw pictures for me. He resisted, saying that I needed to see them in my head. He wouldn't even let me draw them on the enroute chart during flight practice. Any suggestions or feedback would be greatly appreciated.

Sincerely,

Betty

Greetings Betty:

It seems to me that the easiest way to get the picture of a holding pattern into your head is through the eye, not the ear. Your instructor's position seems difficult to support, although I'm sure he has your best interest at heart. I suspect what you want to know is whether visualizing a holding pattern is necessary to fly one. It helps, but it's not absolutely necessary. In fact, I know airline pilots who still draw holding patterns on their enroute charts (of course, the pros use pencil, not pen, and the captain always draws on the copilot's chart). There's no practical reason you shouldn't if you find it useful. So feel free to insist on pictures, not verbs. Suggest to your instructor that you'd like to try it his way but first need the intermediate step of seeing and drawing holding patterns on paper. In this way you teach your instructor how to teach you.

Confidence in Preparing for the CFI Rating

Dear Rod:

I've been flying for the past 27 years and decided about three years ago to become a CFI because I enjoy flying very much. It hasn't been easy since I've had my share of difficulties. However, I've stuck with it, but after all the let downs I have developed a confidence problem and check ride jitters. I've been studying hard but I still have some doubt to all the information that I'm required to know. Can you make any good suggestions as to how I can complete the check ride with confidence?

Thanks,

Mickey. J. Smith

Greetings Mickey:

The best advice I can offer regarding the jitters is to take a "simulated" CFI checkride. Of course a simulated checkride will probably cost the same as the real thing, but it's well worth the money (don't plan on paying in simulated cash, either). Do this with a designated examiner who has experience giving these rides for the FAA. At least this way you'll obtain a more realistic assessment of your skills.

This advice has worked well for quite a few people who've had similar concerns. Call the FAA and get a list of designated examiners in your local area. Even if you have to go out of your area to take this simulated checkride, that's OK. In fact, don't worry about flying. Most CFI applicants have more difficulty with the teaching part, so concentrate on the oral portion for this trial run.

Best,

Rod

A Student Pilot too Big for a Small Airplane

Dear Rod:

I'm a student pilot. In the process of checking out flight schools I rode in a couple different aircraft. I am 6'3", 210 pounds with large shoulders, so the Cessna 150 was a little too cramped. I opted for upgrading into the Cessna 172. While checking out another flight school, the owner suggested I try training in the Piper 140, or even the Warrior. I've heard different stories from multiple people about the pros and cons of training in low wing vs. high wing airplanes. I find that I like to fly the 140. Is this airplane too easy to fly and will it make my check out, flying experience, and transition to a high wing aircraft (For renting etc.) harder? Will I not be learning as much as I need to in the 140.

Jeffrey Marcella

Greetings Jeff:

If you fit in a Cessna 150 then Houdini would be proud of you! I know of no serious evidence indicating that one's flight training success is based on the location (high or low) of the airplane's wings. The only requirement is that the airplane have wings. Find an airplane you feel comfortable with that's within your budget. Also, the plane does not make the man or woman. It's been said that difficult-to-fly airplanes make better pilots. If that were so, then flying an airplane with a serious aft-cg problem (it's harder to fly) should make you a good pilot in no time. Instead, it's more likely to make you a hospitalized pilot in no time. Perhaps you've heard that taildraggers make better pilots. Granted, you'll need to develop good rudder skills to fly a taildragger properly. Does that make you a lesser pilot if you learn to fly in a tricycle-gear airplane? No, it simply makes you a pilot who doesn't know how to fly a taildragger (yet). Airplanes are airplanes. Transitioning from one to the next is a matter of acquiring basic skills, not toughing it out with a recalcitrant old bird.

Best,
Rod

I Don't Like to Fly Alone

Dear Rod:

I'm a newly rated private pilot and I don't like flying alone. I always try to bring a friend along or fly with another pilot. My friends (they're pilots too) tell me that this isn't normal. I just feel comfortable with others around me. Is there anything wrong with wanting to fly with others instead of alone?

*Sincerely,
Barb*

Dear Barb:

I can understand why your friends are concerned but I think their worry is misplaced. Consider this. The purpose of solo isn't to give the flight instructor a rest (even though he or she may need it). Solo helps students build confidence and self reliance. Therefore, if you've met the FAA's minimum solo requirement

for private certification, it's reasonable to assume that you have the necessary mettle to fly alone if you really want to. Some people, however, don't like flying by themselves. They enjoy sharing aviation with others. For these folks, the choice is simple: fly with others or don't fly. Of course, I'd rather have them fly with others than not fly at all. I know several senior aviators who worry about becoming incapacitated while airborne. While this hasn't happened to them, they worry about it, nevertheless. So they take another pilot along with them to ease their worry. In my opinion, your desire to fly with others is perfectly normal behavior. Don't let it keep you from enjoying aviation.

I'm too Small to See Over the Panel

Dear Rod:

I'm 5' 3" tall and have about 36 hours of flying time. I haven't soloed yet because I'm having trouble with landings. I'm flying a 1973 model Cessna 150 and can't see much over the panel during the landing flare. My instructor refuses to let me use cushions. He says that this is an artificial crutch and I may have to fly an airplane without cushions someday. What should I tell him?

Tina

Dear Tina:

If you're 5' 3" tall and flying that model Cessna without cushions, then you must be one heck of an instrument pilot. I can't imagine how you would know when to flare unless you called the tower and asked for a pull-back-now alert. Learning to flare means knowing where the runway is. So please get yourself some cushions now, lots of them. Perch yourself high enough in the cockpit so that your eye level is just a little below the top left window. I've often found that shorter students need a thick seat-back cushion to keep them sufficiently close to the rudder pedals. I've even had a student that needed to wear thick heeled shoes just to reach the pedals. As far as cushions being a crutch, well, they are a crutch. But so are eyeglasses and I've never heard an instructor say, "Hey, let's get those glasses off buddy. You're not practicing landings in my cockpit while wearing those things." As far as having to fly without cushions one day, here's the solution to this problem: don't fly without them (treat them the same way you would eyeglasses).

Using Trim During a Steep Turn?

Dear Rod:

What do you think about letting a student use trim while doing a steep turn? I'm not so sure it's a good idea. There seems to be a lot of disagreement between flight instructors at our school on the issue.

Thanks,

Bill (a CFI)

Greetings Bill:

Interesting question. Here's one way to think about it. First, consider the real purpose behind steep turn practice. It's a maneuver that demonstrates the relationship between four things: bank, airspeed, load

factor and stall. The maneuver ultimately shows students how a quick change in direction occurs at a price: a closer proximity to stall. The increase in apparent weight (load factor) and the heavy elevator force is symptomatic of movement toward the critical angle of attack. You want the student to associate heavy stick forces with a decrease in the margin between flying and stalling. Eliminating the heavy stick force with trim deprives a pilot of this important cue.

Besides, a steep turn is a transient condition that doesn't require long periods of muscle exertion. You don't spend hours in a steep turn (if you do, make sure to wear a neck brace or have heavily starched collars). Trimming during steep turns is important if the student lacks the muscle to keep the airplane at a constant altitude (I've had it happen with a petite female student in a Cessna 182). The reality is that even petite students must hold altitude in a steep turn to pass a checkride. So, trim if necessary; if not, a little bicep action isn't likely to hurt anyone.

My Student Won't Use the Rudder Pedals

Dear Rod:

Do you have any secrets for getting my 16 year-old primary student to use the rudder? I can't get this youngster to work his feet.

*Concerned,
Frank*

Dear Frank:

Isn't it amazing that a 16 year-old can dance up a storm, but will treat a rudder pedal like a Claymore landmine? Try this. As a general rule, if you want to improve an aspect of a behavior, then isolate that aspect for repetition. Have your student work only the rudders (nothing else) while you work the ailerons, elevator and throttle. Start from straight and level, enter slow flight, then return to straight and level. His job is to keep the nose pointed straight ahead at all times. Do the same thing for turns. Roll into and out-of right and left turns, having him apply the appropriate amount of rudder. After a few practice sessions even Michael Jackson will be proud of his footwork.

Help! I Can't Judge My Distance Above the Runway

Hello Rod:

I seem to be having some difficulty judging my distance above the runway. I have talked with my CFI about it and we don't seem to be able to figure it out. My approaches have been very good, I'm just dropping it in.... When I started landing practice, I was flaring too low. Now I don't seem to be able to judge a good time to flare, so I do it high.... Any suggestions or exercises you might have would be greatly appreciated.

*Thanks for your help in advance,
Rick*

Greetings Rick:

Your problem isn't uncommon at all. Here's something I do when students are having this type of difficulty.

The problem is time. You need to slow down the clock during the roundout, which would help you gauge your height above the runway. Did you know that your airplane has a built in time machine designed just for students having landing difficulties? It does. It's called a throttle. Instead of flaring with power completely off, leave a little power applied during the roundout and subsequent flare.

You'll immediately notice that your runway closure rate decreases, which gives you more time to flare. Upon touchdown, immediately reduce power to idle. Keep in mind that flaring with power applied makes it easier to float or overcontrol during the flare. So only use this technique with your instructor on board. Don't use it on short runways, in strong winds or when obstacles are present. Once you have a feel for the mechanics of the flare, you won't need this application of power anymore.

I've used this technique with great success over the years. Students seldom take more than an hour in the pattern to acclimate themselves to the flare. Perhaps the biggest drawback to this time-distorting technique is that it has no effect on the Hobbs meter. Don't worry, I'm working on that problem.

(Note to CFIs: using power for landing is done as an intermediate step to help students learn how to flare. Just to be clear about this, I'm not advocating power-on landings to touchdown as the norm.)

Best,
Rod

I Can't Hold My Altitude in a Steep Turn

Dear Rod:

I took my checkride on 20 Aug. 99 and I must retest on a few items. My most problematic [item] was steep banked turns.... What keys do you teach to master this maneuver? I am flying a Cessna 172.... I can maintain 45 degrees of bank but I am hard pressed to maintain altitude + /- 100 feet.

*Sincerely,
David*

Greetings David:

There are several solutions to this problem. I met one fellow who claimed the only way he could hold altitude in a steep turn was by continually updating the altimeter setting. This isn't a good solution. I have a better one.

Trying to maintain altitude in a steep turn by referencing the actual horizon is difficult. Haze, mountains, clouds and other conditions can make the horizon difficult to see. Therefore, you need a more reliable source of pitch information. I recommend using the VSI.

Begin by rolling into the turn. You'll notice that once you pass 30 degrees of bank, you'll need to disproportionately increase elevator back pressure to maintain altitude (load factor increases noticeably at

larger bank angles). Once established in the bank, adjust the elevator back pressure by referencing the VSI. If you keep the needle on the zero index, you'll hold altitude. Yes, the VSI does have a slight lag when making large or abrupt pitch adjustments. Therefore, if you're correcting for an altitude deviation, you can assume you're passing through level flight when the VSI's needle stops its movement and reverses direction. Of course, you'll also need to glance at the altimeter and the attitude indicator as well.

I don't want to leave you with the impression that this is a maneuver done entirely on instruments. It's not. Most people spend about 30% of their time looking inside and 70% looking outside (of course, this percentage can vary considerably between pilots).

I hope this helps.

Best,

Rod

My Students Grip the Yoke Too Hard. Suggestions?

Dear Mr. Machado

Some of my students like to grip the control yoke tightly which causes them to overcontrol. I've begun making them hold the yoke with only their pointer finger and their thumb. It seems to work but other CFIs say it's not a good idea. What's your opinion?

Sincerely,

Charles

Greeting Charles:

I've not had much luck with that technique. Yes, it does work in cruise flight where small control pressures are necessary to fly the airplane. It doesn't work well for takeoffs, landings, stalls and other maneuvers where considerable control pressures are often necessary. Nor does it work well on bigger airplanes having larger stick forces. Additionally, your student must readjust the position of his or her hands to activate the push-to-talk switch.

Over the years I found two techniques that work well for this type of problem. First, take some foam rubber (about an inch thick) and wrap it around the left grip of the control yoke. Secure the foam with one or two rubber bands. The reactive pressure of the foam seems to help remind students to relax their grip. Be prepared to use a double wrapping of foam if the student's hand is the size of a car's hubcap. And don't get too creative with this idea. I actually had one fellow tell me that this technique works better when a few thumb tacks are placed inside the foam. Remember, we're here to teach flying, not give acupuncture treatments.

Finally, you can use the old, tried and true method of placing a pencil under the student's middle finger as he grips the yoke. A tense grip means pain. This works well, especially if you need smaller pencils. I knew one CFI that used a carbon-nickel steel Harley spoke instead of a pencil. You can imagine how much that hurt! He claimed that all he had to do was show the spoke to his students and their hands melted on the controls.

Best,
Rod

I'm Female and My Instructor is Overly Helpful

Dear Rod:

As a female, I'm having trouble with my flight instructor. He's overly helpful. He doesn't dote on his male students, but hovers over me constantly. It's disconcerting and uncomfortable. Any suggestions?

*Thanks,
Lucy*

Greetings Lucy:

Yes. Politely ask him to stop being so overly attentive. Unfortunately, some men aren't sure how to behave around women. The result is that you, the student, end up feeling awkward. Have a little chat and tell him what's bothering you. I suggest telling him that you appreciate his gentlemanly manner as well as his attention to instructional detail. But in order to become a confident, competent and independent pilot, you need the freedom to fumble, fall and make your own mistakes, just like everyone else.

Years ago an instructor at our airport was also overly helpful to his female students. He went so far as to preflight the airplane for them, but not for his male students. He did a great disservice to these students. How would they learn to preflight if he didn't give them a chance to learn it on their own? This behavior came to a screeching halt (and I do mean screeching!) when one of the airport's senior instructors heard about it and volunteered to talk to him. That senior instructor, by the way, was named Cindy. She realized how damaging (and even demeaning) this behavior was and put a stop to it pronto.

I'm Frightened at Doing Departure Stalls

Dear Mr. Machado:

Every time my instructor and I do departure stalls, I'm scared to death. The airplane always seems to want to enter a spin after I stall. My instructor has to take over at this point. I find this spinning tendency very uncomfortable. How can I get over these feelings?

*Sincerely,
Ted*

Greetings Ted:

If you want to overcome these feelings about spins, I recommend you take spin training from a qualified instructor in an appropriate airplane. Regarding how to prevent the airplane from spinning, consider this. As you approach the stall, feed in a little right rudder to compensate for the airplane's increasing left turning/yawing tendency. Apply enough rudder to keep the ball centered in the inclinometer. Assuming the airplane's not severely out of rig, stalling with a centered ball should result in both wings stalling at the same time. This means you'll stall straight ahead (or, along a path perpendicular to the airplane's lateral

axis) instead of having one wing stall before the other. An airplane in coordinated flight almost always stalls in this type of predictable manner. This is what pilots are referring to when they say, "Misusing the rudder in a departure stall could cause a wing to drop off." Of course, they don't mean that an airfoil is ejected into space when the pedal is touched. They mean that the airplane is likely to spin if the rudder is used incorrectly.

My Instructor Smokes in the Cockpit. Is This Good?

Dear Rod:

Is it reasonable for an instructor to smoke in the cockpit during a lesson? My instructor occasionally smokes during our flight lessons. It's very annoying and she doesn't seem to be cutting back.

Lane

Greetings Lane:

I think it's unreasonable to obtain a pilot's license only to lose a lung in the process. Years ago I remember seeing a student taxi in a smoke filled cockpit. His instructor was in the right seat smoking a cigar. That poor guy didn't need a hood to simulate IFR flight--he was already IFR. So, have a talk with the Marlboro Lady and ask her not to light up in the cockpit. Besides, smoking isn't good for you. The Surgeon General once said that smoking is four times worse than the scientists originally thought--and they originally thought it would kill you. As you can see, this is bad stuff. Time to say, "No fumar."

A National Forum for Published Aviation Syllabi?

Dear Rod:

What do you think about the idea of establishing a national forum with published syllabi so that we poor old flight instructors could compare them and decide on how best to instruct our students?

Robert B. H.

Greetings Robert:

That's an interesting idea. But I've always been more interested in what people actually learn, rather than what we expect them to learn. Therefore, to better teach your students, I recommend engaging in something I call Logbook Archeology.

By examining the logbooks of pilots who've already obtained their licenses, you can obtain some interesting insights. For instance, when I first began teaching instrument flying, I obtained logbook copies of 14 instrument rated pilots. In particular, I was interested in the logbook entries dating from the beginning of their instrument training up to and including their checkride. I discovered something very important.

The students requiring the most instrument time were those who spent fewer hours developing their instrument scan. But when students had approximately 10+ hours of basic scan training, they did much

better. There were many more insights I culled from my logbook collection. Of course, my sampling wasn't entirely scientific but it sure helped me become a better instructor.

Logbook archeology can also provide interesting insights for the other ratings, too. It helped me determine the most efficient training sequence for my primary students. I also learned many interesting things about the duration, order and repetition of primary flight training lessons. Granted, it's not easy obtaining copies of logbook entries, but the results are worth it. Perhaps a national forum with published logbook entries (all anonymous, of course) from a large number of pilots would be just as valuable?

How Do I Pick a Good CFI?

Dear Flight Training:

How do you pick out a good CFI? I am a new student with about 5 hours logged and, until now, I've had a real interest in wanting to get my private pilot's license and an instrument rating. My joy, however, is fading. Of the four full-time instructors at my school, I've not had much luck with two of them. The first was late for our two initial appointments. He is very quiet and doesn't provide much information (I am also very quiet). The second gets excited easily. He teaches me a lot on the ground but in the air he's easily excited and it makes me nervous. I have only gotten started learning and most of the joy is gone. I'll be trying a third instructor soon.

Sincerely,

Mr. Discouraged Student

Dear Mr. Discouraged Student:

Wow! You only have five hours and you've worn out two CFIs already. If I've done the math correctly, you'll need six to eight more CFIs just to solo. Of course, I jest, but I think I can help you with this problem. If you want the best shot at finding a good CFI, then look for one with a good reputation. To do that, visit the local flight examiner and ask for the names of the CFIs that consistently recommend fully qualified and competent pilot applicants. After all, examiners fly with and evaluate the products of these instructors so they know who the pros are. Be sure to specify the qualities you're looking for in an instructor. Some students prefer laid-back instructors while others prefer more assertive ones. I actually had a student who attended military school for most of his life and insisted that I yell at him on occasion. He said it made him learn better. Of course, I refused to yell but suggested he could salute if he ever felt the need. Second, spend some time at the airport and ask other students or rated pilots who they would recommend for flight instruction. In the flight instruction business, reputation is everything.

Additionally, if you're not sure that an instructor is right for you, then commit to no more than three lessons with this person. If, at the end of the third lesson you and the instructor are compatible, you can make the arrangement permanent. This makes it much easier to slip from the clutches of a poor instructor or try a different one if the "cockpit chemistry" just isn't right..

Should a CFI Charge for All His/Her Time?

Dear Mr. Machado:

My instructor is a good man, very conscientious, thorough and dedicated. No complaints in this department. But there's one thing that concerns me. The FBO schedules a two-hour block of time for each lesson and the instructor charges for the entire two-hour block. Is this reasonable?

*Thanks in advance,
Wayne*

Dear Wayne:

If an instructor spends two hours giving you instruction, then he or she should charge for the entire block of time, regardless of the proportion of time spent in the air or on the ground. Time is time and the instructor has every right to be compensated when he's directly or indirectly involved in teaching you. If, however, he's only spending 1.5 hours with you and 30 minutes chewing the fat with the boys, that's a different story. You shouldn't be expected to pay for time that doesn't in some way involve teaching. In your case, if we're talking 10 minutes or so of lax time, I would advise caution in thinking you're getting a bad deal. If this instructor is as good as you say he is, then he's probably not being paid enough. Good instructors are worth their weight in slow running Hobbs meters. Buy him lunch now and then. You might even think about tipping him on occasion.

Words of Wisdom for a Challenged IFR Student?

Dear Rod:

I have just started on my instrument rating and find it very challenging. Do you have any words of wisdom that you could pass on to me? I only have around 75 hours at this point and try to fly at least 1-2 times a week.

*Thanks,
Darwin*

Greeting Darwin:

Yes. Purchase instrument simulation software for your computer (assuming, of course, that you have a computer. After all, it's very difficult to run this software on a kitchen appliance). You'll benefit enormously from this purchase since you'll be able to increase your instrument proficiency between lessons. You'll also find it useful for maintaining your proficiency after you obtain the rating. What brand of software? Any of the major brands are just fine. But if it allows you to chase Klingons back to their homeworld, this probably isn't the caliber of software you're looking for.

Suggestions to Help My Students Preflight More Thoroughly?

Dear Rod:

Do you have any suggestions to help students preflight the airplane more thoroughly?

*Sincerely,
Danny the CFI*

Greetings Danny:

Yes. Carry a bag of official looking bolts, screws, nuts and washers in your flight case. Before the student begins the preflight, spread a few of these items underneath the airplane. During the preflight, your student should become concerned with the wayward hardware.

Hopefully they'll question you about these items instead of scooping them up and placing them underneath someone else's airplane. One of my CFI/mechanic friends placed a Lycoming piston inside the lower cowling lip of a Cessna 152. When the student nudged the airplane, the piston plopped on the ground. Apparently he kept nudging the plane attempting to see if he could get more pistons or at least a crankcase to fall out. You can also write little notes on Post-its and stick them on the airplane where students typically don't look. For instance, write bolt missing on a Post-it and stick it near the elevator hinge or bald spot and stick it on the bottom side of a tire. When your students finish the preflight, they should have all the Post-its in hand. And be prepared for surprises. One time I wrote, Suction gauge shows inadequate suction on a Post-it and placed it over the suction gauge. I looked away to take care of cockpit business. Later, I saw the student had written, "No it doesn't!" on the Post-it. I love sharp students.

Are Simulators Good For Students?

Dear Mr. Machado:

A Part 141 flight school uses up to half of the IFR training time (20 hours) in a Frasca ground trainer. Do you concur with the extensive use of ground trainers for instrument training?

*Sincerely,
Terry*

Greetings Terry:

Yes, I'm a big, big fan of using ground trainers (let's call them simulators here) for the instrument rating. There's absolutely no reason why they can't and shouldn't be used for the 20 hours of instrument training you mentioned. It's important, however, that students using them learn to behave the same way as they would in the actual airplane. Several years ago I worked with a student who had taken a six-month flight simulator class at a local college. On our first IFR takeoff in the airplane, the tower instructed us to contact departure control. Instead of using the radio, he did exactly what he practiced (incorrectly) in his class. He turned his head slightly to the right as if he were talking to his simulator instructor and yelled out, "So Cal departure, this is 2132 Bravo, over." I chuckled a bit, but not before turning my head to the left and yelling, "Three-two-bravo, we can hear you a little better if you use the radio, over."

It turned out that he never used the mic, the checklist nor other common procedures associated with a real airplane. Yes, this was the fault of the instructor, but it's also why my preference is to fly one hour in the airplane after every 4 to 5 hours in a simulator. I've found this helps students integrate the simulator experience with the airplane they'll fly later. Keep in mind that this is simply my preference. I've known a few instructors that do a great job and spend the first 20 hours entirely in the simulator.

Help, I Can't Land In a Crosswind

Dear Flight Training:

I have been learning to fly in a Katana DA-20. Every aspect of my training has been going well up until now. My instructor cannot find fault with anything other than my landings. I have logged more than 20 hours but cannot seem to handle the plane once I get over the numbers.... I have been working on it for weeks and am not improving. I can land in crosswind conditions but seem to float down the runway in calm weather. My instructor has to take over every time. Any suggestions would be appreciated.

Help !

Michael

Greetings Michael:

Students who have difficulty floating during the flare are typically approaching at too fast an airspeed. Here's why I think this is your problem. You state that you can land well in crosswind condition but not in calm weather. If you're using a sideslip during crosswind landings (as I suspect you are), this increases drag which helps counteract the floating caused by excessive airspeed. Under calm conditions, without the benefit of drag from the sideslip, the airplane floats as a result of your faster approach speed.

Unless the airplane's manual suggests otherwise, try a final approach speed of 1.3Vs (that's 30% above the stall speed for the flap configuration used). Now the airplane's operating close to the bottom of its drag curve. Increasing the angle of attack for the roundout and flare results in an increase in induced drag, which minimizes your chance of floating.

Additionally, if the airplane isn't properly trimmed on final approach, it's very easy to over control during the flare. When I make an approach, the airplane is typically trimmed for a speed of 1.3Vs. I maintain that speed with a light touch until I'm ready to begin the roundout, which normally occurs about 20 feet above the runway. At that point I raise the nose slightly and the descent rate decreases, but the airplane continues to descend because of the increasing drag. If the airplane is trimmed, it usually takes no more than two distinct attitude changes to land the airplane: the roundout and the flare.

Here's something else to try. Have your instructor hold your right wrist with his or her left hand and flare the airplane for you as you hold the controls (don't let go while he's doing this. He'll never speak to you again if you do). This technique imparts a sense of the pressure and timing necessary for a proper flare.

Can I Use Two Hands to Flare?

Dear Rod:

What do you think about letting students use two hands to flare the airplane? The reason I ask is that one of my petite female students can't land the 210 unless she can pull back on the controls with both hands. Any suggestions here?

*Your comment would be appreciated,
Thanks,
Mike*

Dear Mike:

As a practical matter, it's better if the student has one hand on the yoke and the other on the throttle during landing. Of course, certain airplanes like the Cessna 182 and 210 often require lots of elevator back pressure during the flare. I had a petite female student who had a similar problem in her Cessna 210.

First, your student won't be arrested by the yoke police if she uses two hands to flare. The only law that governs how you flare an airplane is the law of gravity. Nevertheless, it's always a good idea to have one hand on the throttle because it provides immediate access to engine power. So, if she has to flare with two hands, then so be it. I can assure you that if she needs to add power quickly, she be able to let go of the yoke with the right hand and slap the throttle forward in no time.

Another solution is to let her use trim during the flare. If the airplane has electric trim, she might be able to simultaneously flare and provide nose-up trim with the left hand while keeping the right hand on the throttle. If the airplane has a manual trim wheel, let her flare with the left hand while applying nose-up trim with the right. This helps reduce the heavy nose-down stick forces experienced during flare. But this method creates a potential problem: if she's forced to go around during the flare, then the full application of power can cause excessive nose-up pitch. I solved this problem by having my Cessna 210 student begin the go-around by applying three-quarter takeoff power, adding sufficient nose down trim, then applying full takeoff power.

There's nothing unsafe with any of these procedures. After all, the alternative is for your student to give up flying. That's not much of an alternative in my book.

My CFI Likes to Touch the Controls too Much

Dear Flight Training:

While flying with several different CFIs I've noticed a common problem. As I fly the plane and make small control inputs, the CFI, thinking that I'm not controlling the plane properly, adds his own inputs. This creates a tug of war on the flight controls. Is this a common problem? What can I do about it?

*Thanks,
Anonymous*

Dear Anonymous (Tugmaster?):

Yes, the problem is indeed common. Sometimes students have difficulty knowing when the CFI is doing some or all of the flying. That's why it's not uncommon for a student to land the airplane, then look over at the CFI and say, "Did I do that?" I've often wondered if new 747 copilots do the same thing after making their first successful landing. Do they look at the captain and say, "Did I do that?" Maybe not. Nevertheless, here's what I recommend. Ask your instructor to make it clear when he or she is doing all or part of the flying. Arrange for your CFI to say something like I've got the controls, when he takes over the airplane. If the instructor is following you through on the controls, then have him say something like: My hands are on

the controls or I'm assisting you with (right rudder). In the early stages of training you can't be expected to know when the controls feel funny, thus signifying that the CFI has his or her hands on them.

I'm Nervous About Flying Cross Country

Dear Rod:

I'm getting ready for my first solo cross country. I've completed five hours of dual cross country flights with my CFI and now it's time for me to do it on my own. I'm a little nervous at the thought of taking an airplane out of the pattern all by myself. Any suggestions you have that can help me feel more at ease would be appreciated.

Thanks,

Lucy

Greetings Lucy:

Now why would anyone be nervous about taking a quarter-million dollar airplane that you don't own to someplace you haven't been all by yourself for the very first time? Young lady, you have a right to be a little nervous. Therefore, take baby steps. Make your first cross country to a nearby airport that's easy to find. For instance, I send students with similar concerns to an airport located along the coast of the Pacific ocean. All they need do is keep the ocean on their right and the land on their left. Although they do a complete and thorough flight plan for this trip, they really only need to write the words "ocean" on their right hand and "land" on their left. Of course, they'd have to switch hands when they flew back but you get the point (just kidding on the switching hands part).

If necessary, find an airport within 20 to 25 miles that's along an interstate or major road. Make this your first cross country flight. Just follow the road. You can't go wrong. If it makes you feel more comfortable, drive the route first in your car. Sure, this flight isn't long enough to count toward the required cross country time, but this isn't the point. The point is to get you comfortable with cross country flying. Take small steps first and then expand the distance you fly. You'll eventually find that there's no real difference between traveling 25 miles or 2,500 miles.

When Should I Slow Down On an IFR Approach?

Dear Rod:

I'm an instrument student looking for some advice. When shooting an approach, when should I slow down? I've had two instructors with two different opinions. One taught me to slow down, and get in the first notch of flaps, just prior to reaching the fix (a VOR in this case) before the procedure turn. The other had me slow down during the outbound leg of the PT. I found that this second option caused me to get behind the airplane. Which is better? Any advice is welcomed!

Thanks!

Tom

Greetings Tom:

There are many ways to fly instruments. To be fair, I'd say that most techniques are satisfactory as long as they don't require you to use the word deductible. Of course, some techniques are more efficient than others. That's why my preference is to slow the airplane down to an acceptable speed prior to reaching the point where the procedure turn begins.

I prefer this technique because it leaves you with fewer things to do on the outbound leg. After all, you're working hard on the outbound leg to complete your setup for the instrument approach. Additionally, it's more comfortable to approach a fix at 100 knots vs. 140 knots. A slower speed often means longer intervals between necessary tasks. This makes it easier to handle these events. A friend, who was a copilot on a 747, once told me that his captain looked over and said, "John, tell the controller we want to decrease our approach speed by 20 knots." John replied, "OK sir, but just in case he wants to know why, what should I tell him?" The captain replied, "You tell him that your captain needs time to think."

Finally, most pilots like slowing down to their final speed prior to reaching the fix because it allows them to better predict descent rates. For instance, let's assume that your airplane descends at 500 FPM at 120 knots indicated airspeed with its power set to 1,900 RPM. Now, suppose you're six miles from a fix and 1,500 feet above its minimum crossing altitude. You know that it will take approximately three minutes to cross that fix at 120 knots (that's 2 miles of travel per minute). Therefore, if you reduce power to 1,900 RPM, you'll obtain a 500 FPM descent rate and, after three minutes, you'll be at the minimum crossing altitude for that fix.

There are many ways to fly instruments. Sometimes the variation between techniques is more a matter of style than it is a matter of being right or wrong.

Do You Let Your Students Fly Solo at Night?

Dear Mr. Machado:

Do you let your students fly solo at night prior to getting their private pilot certificate?

Tracy, CFI

Dear Tracy:

No.

Am I Responsible for the Endorsements?

Dear Rod,

I'm a student pilot endorsed to take my first solo cross country flight and my CFI asked me to look through my logbook to make sure I have all the required solo endorsements logged properly. I thought it strange that this would be my responsibility as a student; nevertheless, I did as he requested. To my surprise I found

that seven items were never logged and there are even two items required for solo flight that are missing (I have eight hours of solo time already).

When my CFI couldn't be reached, I asked one of the flight school owners about these missing entries. She shrugged them off as being unnecessary items to log and said that even an examiner wouldn't question why they were missing. I am confused. Can you help me by clarifying this?

*Sincerely,
Bonnie*

Greetings Bonnie:

Without knowing anything about the items to which you're referring, I can't say whether or not they're necessary. Nevertheless, the unfortunate fact is that not every instructor takes the time to ensure that your logbook is endorsed properly. You are therefore put in the unfortunate position of having to check his/her work. I wish this weren't so but the FAA has seen fit to place part of this responsibility on you. My opinion has changed on this over the years and I'm not happy about it, but that is simply the way it is. So make it a point to ensure you have the proper endorsements. There's a wonderful article written on this by Linda Pendleton that can be read at: <http://www.avweb.com/news/columns/187476-1.html>.

How Do I Know When He's Ready for Solo?

Dear Rod:

How do you know when a student is ready for a checkride or ready to solo? I've squeaked by until now doing flight reviews and instrument proficiency checks, but I have four students (two IFR and two Primary) and the time is getting close for them to take their checkrides. I'm hesitant to recommend them without knowing if they're ready. I'm being really conservative. Any help would be appreciated.

*Thanks
Tom*

Greetings Tom:

Knowing when a student is ready to solo or ready for a checkride implies that you understand the difference between acceptable and unacceptable flying behaviors. That's why, when teaching CFI applicants, I show them several variations of passable vs. failing flight performances. For instance, I'll demonstrate an acceptable ground reference maneuver, then turn around and show the applicant an unacceptable version of that same maneuver. Then I explain the difference. I do this with most of the maneuvers on the Practical Test Standards. It should even be done with oral questions. After all, a CFI student needs to know how to evaluate his student's verbal performance, too. Therefore, I recommend that you find an experienced CFI and have him or her show you the difference between passable and failing flight performances. You might also hire a designated examiner for an hour or two and have him or her show you these differences.

In regards to solo, I find that consistency is the most important factor in determining whether or not a student is ready. If students are consistent in their performance, then I can rule out luck as a factor in their flying ability. Even if students make safe but firm landings, all that matters is that these landings are

consistent. Of course, these landings shouldn't be so firm that we end up looking like graduates of the Quasimodo posture school. Nevertheless, I'll solo a student who makes 10 firm—but safe—landings in a row, while refusing to solo someone who makes nine greasers followed by a landing where I have to grab the controls to prevent damaging the airplane.

Finally, one of the most helpful things you can do to identify when students are ready to solo is to ask them. Yep, this works--most of the time. Based on my experience, you'll find that 15% of your students will say they're not ready when they are, 10% will say they're ready when they're not and 75% will tell you when they're actually ready. I remember hearing an instructor call the tower and say, "Tower, I've got a student who's ready to solo here." While the mic was still keyed, I could hear the student in the background saying, "Nooooooooo! I'm not ready yet." How do you weed out the 10% that are not ready but think they are? I'll bet money that the majority of these students aren't consistent in their flying performance.

Landings? When Do I Start?

Dear Rod:

What is the normal amount of flying hours a student pilot should have before starting landing practice?

Thank You,

Roberta

Greetings Roberta:

Most instructors teach students to think about landings on their very first lesson. After all, landings are the reason we teach ground reference maneuvers, slow flight, stall recovery, and most of the other skills learned in basic training. Therefore, from day one, a student is learning to land. But here I think you're looking for the specific number of hours or number of lessons where students stop airwork and begin drilling exclusively in the traffic pattern. This value depends on the student, the location of training, the type of airplane being flown and several other variables. Nevertheless, instructors often require that their students become proficient in general airwork (ground reference maneuvers, slow flight, basic stalls, etc.) before making landings the primary focus of training. Under ideal conditions, it's not unusual for students to begin working exclusively in the traffic pattern anywhere between the fifth and seventh flight lessons. Remember, I said ideal conditions. There are many variables that can and will affect this value.

Best,

Rod

Should I Start Flying a Twin as a Student?

Dear Rod

Hi Rod, this is Marcel. I am a 15 year old "Student" Pilot with 38 hours of flight time in Cessna 152's and 172's and I want to know if it would be possible to start flying a twin-engine Cessna 310 and have the time count toward my multi-engine PPL when I am 17? Also, can I solo the 310 when I am 16?

*Thanks in advance,
Marcel*

Greetings Marcel:

Well, no one can accuse you of lacking ambition. Have you been watching Sky King reruns? The answer is "Yes." You can start taking lessons in a 310 right now and have them count toward the private pilot certificate. You can also solo a 310 on your 16th birthday. Of course, this assumes you can find an instructor willing to do the training and the signoffs. I know one person who learned to fly in a multi-engine airplane. He did quite well (yes, he watched Sky King, too). Personally, I think it's better to concentrate on flying a single-engine airplane first, then transition to a twin at a later time. Why? There are important subtleties to a flying education that are difficult to teach if you're learning in bigger, faster airplanes.

Rudder Usage in a Stall?

Hi Rod:

While practicing stall recoveries in a C150, my instructor (as well as several aviation books) cautioned me against trying to pick up a dropping wing with the use of the ailerons, to avoid stalling even further on the lowered aileron side. Only use rudder input. Don't flirt with spin country. That's fine with me. Why then, in the C150 POH, do they state otherwise? In the stall section it reads: In case of roll, use ailerons to return wing level, then neutralize aileron control. No mention of rudder. Who's right?

*Sincerely,
Arthur*

Greetings Arthur:

First, thanks for using the term dropping instead of dropping off. When instructors tell their students not to use ailerons to pick up a wing that is dropping off, this causes some students to wonder why they're not flying airplanes with stronger wing bolts (and we wonder why stalls make some people nervous). Your instructor is right in terms of not using an aileron to pick up a dropping (stalled) wing. As you know, a lowered aileron increases the angle of attack on that wing. Attempting to lift an already stalled (or nearly stalled) wing will surely exacerbate the stall.

I believe the answer to your question lies in the section of the POH from which you're quoting. Although I'm not sure which make and model your POH refers to, most POHs have separate sections for stall and spin recoveries. Since you're reading from the stall section, the advice found there probably applies to wings that are no longer stalled. In which case, it's expected that you'll return the wings to level flight with the ailerons.

In the spin section of your POH, I'm sure you won't find any mention of using ailerons to raise a stalled wing. In fact, you can easily accelerate spin entry by attempting to raise a stalled wing with the ailerons. It's more likely that your POH contains advice similar to what stall/spin guru Rich Stowell recommends in his book: P.A.R.E. The Emergency Spin Recovery Procedure. Without going into detail, .P.A.R.E. represents the flight control sequence for spin recovery: Power (off), Ailerons (neutral + flaps up), Rudder (full opposite - heavy) and Elevator (to reduce the angle of attack).

Best,
Rod

Is a Complex AC Good to Learn In?

Dear Mr. Machado:

I currently have 80 hours, and am ready to begin my instrument training in a couple of weeks. The FBO where I will be doing my training has four C-172's, a C-182 and two Mooneys (M20F and M20J). I would like to get away from the 172's because they're always rented. I have no idea as to the condition of the 182. Putting the obvious differences in cost aside, is the Mooney a good choice for an instrument trainer?

Thanks,
Beale

Greetings Mr. Beale:

First, let me say this, if time and money weren't an issue, you could purchase a used Boeing 747 and do your instrument training in it. The major benefit there is you'd never have to worry about being home for dinner because you could bring the family with you. The downside is that it would take a lot longer to get the rating.

The same goes for complex general aviation airplanes. With all else being equal, it will probably take between five and fifteen hours longer to get your instrument rating in a complex airplane—any complex airplane, whether Cessna, Piper, Mooney or Boeing. This is especially true if you have 80 hours in non-complex airplanes.

I find it a little more difficult to teach the basics of attitude instrument flying in complex airplanes. Problems like thermal engine shock, the airplane's complexity, its heavy-handedness, etc., make introductory instrument training difficult. Learning to handle a complex airplane properly is a different skill set that I feel should be learned separately from introductory instrument instruction.

If you do decide to use one of these airplanes, please consider using a flight simulator (flight training device) for the initial part of your flight training. It's especially helpful if this simulator closely replicates the complex airplane in which you'll do the flying part of your training. Simulators allow your instructor to teach attitude flying skills with great efficiency.

If you elect to train in a Mooney, rest assured it's as good a trainer as any other complex airplane.

When Do I Use Rudders?

Dear Rod:

I am a new pilot who is still sloppy in turn initiation, especially in the pattern. The symptom of this problem lies in the number of times the turn coordinator tells me I need some right rudder when I am in a left hand

turn. I hesitate adding right rudder because it will flatten me out (or so I think) when I really want to remain in the turn. I wonder if you could suggest a sequence for initiating a turn: rudder and then aileron, or vice versa, or both at the same time?

*Thanks so much,
Mike*

Greetings Mike:

If the ball says you need right rudder to coordinate the turn, add right rudder and counteract any change in bank with aileron. Trust the ball, it doesn't lie (although I did read a report about an airplane with a turn coordinator that was twisted 16 degrees on the panel causing the inclinometer's ball to fall to one side. I just hope the pilot didn't try to keep the ball centered on that flight).

When entering a turn, apply aileron and the appropriate amount of rudder simultaneously. I use the words appropriate amount because it's possible that you may not even need to apply left rudder when entering a climbing left-hand turn thanks to our good friends P-factor, torque, the propeller slipstream and gyroscopic precession.

Remember, the main purpose of rudder is to compensate for a lowered aileron's adverse yaw, which tends to move the nose opposite the direction you desire to turn. So, simultaneously apply aileron and rudder in the direction you want to turn. Once the turn is established, manipulate the ailerons as necessary to maintain the desired angle of bank and apply whatever rudder pressure is necessary to keep the airplane flying coordinated.

As you gain more experience, you'll find that you don't even need to refer to the ball in the inclinometer to tell you if you're flying coordinated. The feeling on your derriere as well as a visual reference to the nose will tell give you all the information you need.

Personal Minimums? Examples Please

Hello Rod:

I hear a lot of talk about setting "personal minimums." Can you give me a few examples of what I as a student pilot should be setting for personal minimums?

Thanks in advance.

Brian in Wichita

Greetings Brian:

Personal minimums are just that: personal. Given your present level of experience, it's best to work with your flight instructor to define these minimums. Without much aviation experience, it is difficult to properly define these limits for yourself. Thus the need to consult with your instructor in establishing these potentially lifesaving limits.

Personal minimums help you in two ways. First, they can keep you from stumbling into situations that exceed your skill level. Second, they can minimize the chance that you'll give in to temptations like get-home-itis, impress-the-passenger-itis, etc.

Many people think of personal minimums as weather minimums, but personal minimums can and should be far more. For instance, I had one student who decided he shouldn't fly for at least two hours after consuming a big meal. The type of food he liked to eat made him tired, causing him to act like he'd eaten a Thanksgiving turkey stuffed with Thorazine. Other students choose to avoid flying when the direct crosswind component is greater than 5 knots, while some stay ground-bound when winds are gusting above 15 knots. I've known a few who always fill their tanks to the maximum amount of allowable fuel before every flight. The list goes on and on. The important thing is that personal minimums are your minimums, tailored to your personality, strengths, and weaknesses as well as your level of experience. Some requirements may remain on your list forever, while others may change or be eliminated as your skill level grows. Personal minimums aren't just for beginners. Every pilot should have personal minimums, and enforce them.

How Do I Learn to Look Outside?

Dear Flight Training:

Can you offer any suggestions that may help me learn to keep my eyes outside the airplane? My instructor is always bugging me to look outside more. I don't do it enough to please him. Any help you can offer would be appreciated.

*Sincerely,
Sue*

Greetings Sue:

Instead of rehashing all the standard techniques, here's one that's a little different but works very well. It requires a small cassette tape recorder and a 10 to 20 minute endless-loop cassette tape (this is a tape that continues to play without having to be flipped over in the cassette recorder).

Do a test to determine the amount the tape counter moves for each minute of tape playback. Let's say that the counter moved a value of 30 for each minute of tape play. Have your instructor record the words "Look for traffic" (and variations of that statement) for every minute of tape play. Do this by advancing the tape by a value of 30 on the counter, then record another statement from your instructor. Repeat this process until the tape has made a complete cycle.

During solo flight, put the recorder in the seat next to you and set it to play with the volume appropriately adjusted. I've even had a student who rigged the playback into the airplane's intercom, while another wore a small earpiece under his headset.

Here's the payoff. Minute after minute you'll hear your instructor's voice reminding you to check for traffic, keep your eyes outside of the cockpit, look right, left, up and down. After a few hours of playing this tape, you'll find that your traffic scan will greatly improve. At five minute tape intervals, the instructor can even

say: more right rudder! After all, you can never hear this phrase enough, right? Finally, even though this recommendation is for VFR flight, make sure that the use of a tape recorder doesn't interfere with any of the airplane's equipment or with any radio transmission.

I Reset the DG On an Approach. Good? Bad?

Dear Mr. Machado:

I'm an instrument student who recently flew with a different instructor (my original CFII was out of town for a week). On one approach, just after intercepting the localizer, I reached over to reset the DG since it was off by about 10 degrees. The instructor reached over and rotated the DG to a value many degrees different from that of the inbound localizer direction. She said that once I'm established inbound on the localizer, I should be able to fly it by bracketing, regardless of the heading shown on the DG. Is this technique common among instructors?

Dan

Greetings Dan:

Actually, it's a great technique and I only wish more instructors would use it. Once you're established inbound on the localizer, it shouldn't matter if the DG is off a few degrees. In fact, it shouldn't matter if the DG is off 90 degrees, from a training perspective. Why? Because if you use a technique called bracketing, you could fly the localizer even if the DG had only lines and no numbers.

For instance, when you were inbound on the localizer and the instructor rotated the DG to a different heading, all you had to do was hold that heading and watch the needle's movement. If the needle moved to the right, you knew that you won't be turning to the left of the heading you were flying. After turning toward the needle for an intercept, the needle will eventually center. When it does, you would apply a wind correction angle by flying a few degrees to the right of your original heading. The point here is that once you're established inbound on the localizer, your CFII can rotate the DG to any value and you should be able to fly the approach.

One of my early instructors used the same technique on me many years ago. Unfortunately, when he twisted the DG's knob, I thought he was resetting it to the correct heading, so I promptly turned 60 degrees toward the heading I had been flying instead of bracketing using the existing heading. Suddenly, I felt the ailerons turn by themselves and thought, "Oh no, the autopilot has taken over," which came as quite a surprise because we didn't have an autopilot. What I felt was my instructor turning us back to the localizer before our airplane disappeared off the controller's scope. Yes, it's a good training technique for instructors to use.

My Student Won't Study

Hi, Rod:

I'm a fairly new CFI and would like to get another opinion about one of my students. I can't get him to open

a book. He's already soloed, but just doesn't want to do ground instruction (he says he can't afford it. I tell him he can't afford NOT to do it). I'm getting ready to drop him because I see that it's going to be like this all down the line and it's wearing me out!! It's like he gets angry when I ask him to come into the classroom to give him an idea of what to expect for our flight. I'm getting ready to can him. I'm tired of spoon feeding him. My other students are extremely motivated and are a joy to work with, so I know it can't entirely be me. What do you suggest?

*Yours,
Anne*

Greetings Anne:

You're right. He can't afford to avoid ground instruction. It will cost him in the long run. First, let's assume that his unwillingness to study isn't based on a personal limitation that prevents him from reading, like dyslexia. If so, he may avoid the classroom for fear of embarrassing himself if this disability became known. I suggest being direct and asking him (nicely) "I notice you are having more trouble than most people enjoying the non-flying part of learning aviation. Is that because of any specific learning problems you've experienced?" This should give you a clue as to how to proceed. He might be better off studying videos instead of books. I suspect, however, that this isn't the problem.

It's more likely that he's just plain lazy. Yes, people can be lazy, like those who get up at the crack of noon. If so, try this.

First, let him know that all future flights will be conditional, based on his having completed the assigned homework assignment (be specific about what you want him to study). Inform him that you'll review the homework before each flight. If it's apparent that he hasn't done this work, then the flight is canceled. Second, make sure he understands that he's obligated to pay you for the time blocked on the canceled lesson. Third, always make sure he keeps sufficient funds on account. If this doesn't turn him around, then furlough him. The last thing you want is your name in the logbook of someone who doesn't take flight training seriously.

When Should I Schedule My Checkride?

Dear Rod:

I have a few questions regarding the scheduling of checkrides. Earlier this week, I flew with a student the day before her checkride and she just wasn't ready. During the previous two flights she was fine, but it was obvious that she needed a little more time with me, despite my best efforts. I called the examiner and rescheduled, and he was completely understanding. But it got me to thinking. In your experience, what is the proper thing to do? Should I wait until the student is completely ready and then schedule the ride, knowing that in most cases the ride is then going to be 3-4 weeks away? Or, is it okay to assume that the student is just about ready, maybe a flight or three away from being perfect, and then schedule the ride, knowing that I may have to cancel again?

*Sincerely,
John*

Greetings John:

My personal preference is that students not wait more than 7 to 10 days before taking their checkride after a recommendation. If it takes three to four weeks to schedule a ride with an examiner, then schedule it in advance, even if there is a remote possibility that you may have to cancel again. But let's not forget that examiners have to eat, too. We don't want to cancel if it's not absolutely necessary.

In your case, you certainly don't want to delay your student's checkride for an entire month. Ask the examiner to put you on his or her wait list for the time when you suspect your student will be ready. That way, if another instructor cancels, you get dibs on the slot.

Let's suppose that your student isn't ready and you cancel the ride, rescheduling it in four weeks time. If you suspect the student will be ready sooner, then find instructors with students having checkrides scheduled at about the time you expect your student to be ready (the examiners I know will gladly share this information with you). Offer to switch checkrides if their students need to cancel. This gives your student an earlier date and gives the other student a ride at a more convenient time.

I Was In a Graveyard Spiral. Help!

Dear Rod,

Last year I did something very stupid. I'll skip the details. I'll just say I entered IFR conditions shortly after takeoff (500ft AGL) and was unprepared for it. I was mad at myself for making such a dumb mistake but figured it was something I could learn from. I'm instrument rated with 1,500 hours. As I entered the clouds I went on the gauges. No problem, right? Wrong. I perceived the turn coordinator to show a left turn and the AH showing a right turn. In seconds I was in a developing graveyard spiral. I survived but only by a few hundred feet. I did everything wrong. Had it been night, I wouldn't be here today. It's nine months later and I'm still scared of VFR flying and flying instruments. Any suggestions on how I can regain my confidence!

Sincerely,

Bill

Greetings Bill:

I once had a student who managed to spin an airplane while performing basic maneuvers in the practice area. He returned to the flight school scared to death. I knew that if he left the airport in that condition, he'd never return. So I dragged him back out to the airplane where we discussed the problem, then flew to the practice area for some stall and spin practice. Getting him back in the air liberated him from his fears. You need to do something similar. Unfortunately, you've waited nine months, which gave your fears time to multiply.

Find an instructor you trust and get back in the air. Do it on your terms: VFR, IFR, day or night, it doesn't matter. Just fly. When you're feeling more comfortable, have the instructor put you through a strenuous partial panel exercise. I suspect your unusual attitude was caused by misreading the attitude indicator's sky pointer or horizon line (not an uncommon problem, either). I caught one of my students doing something similar once. He interpreted the AI properly only when I asked him, "Which wing was pointing toward the ground?" A question you might ask yourself if you ever has a similar problem.

Don't let fear rob you of a very important part of your life. Fly now.

Will Wind Invert Me?

Hi, Rod:

I have always been curious about one thing in particular. Do you think it is possible for, let's say a C-172 to be rolled inverted by a strong gust of wind? I'm not talking the kind of winds you would get with a tornado or a strong thunderstorm, just like a 20-25 knot crosswind.

Thanks for any ideas,

Jack

Greetings Jack:

Yes, I think it's possible but not probable. Here's why. During my in-flight emergency programs I usually ask if anyone has ever had their airplane thrown inverted by some phenomenon other than wake turbulence. On a very rare occasion I'll encounter one or two pilots out of a few hundred who have had this happen. (Though, I had a WW2 pilot tell me that he had this happen when the enemy blew off part of his fighter's right wing, which adds a whole new meaning to the concept of "circle to land.") I'm seldom surprised to discover that these few pilots were usually flying near tall mountains in strong, gusty winds (often at a velocity greater than 30, 40 or even 50 knots).

While gusting winds of 20 to 25 knots can certainly make an airplane harder to handle, the evidence doesn't suggest that you need to worry about being flipped inverted under these conditions. Nevertheless, this is a good reason to consider taking an aerobatic lesson and learning how to roll an airplane upright from an inverted position. While you'll probably never have to use this knowledge, the peace-of-mind it provides is well worth the investment.

I Haven't Flown In 20 Years

Rod,

I received my Private Pilot certificate about 20 years ago and haven't flown in the last 16 years. What is the best course of action to become an active pilot again? Can I be signed off for solo flight? Do I have to repeat ground school? I've been trying to find information on the internet regarding this, but have had no success.

Thanks,

Barry

Greetings Barry:

Even though you haven't flown for 16 years, your pilot certificate is still valid. Before you can act as pilot in command of an airplane you'll need a flight review and a current medical certificate. You aren't, however, required to take the FAA knowledge exam again.

Here's how to get started. Find yourself a good flight instructor. Use Flight Training Magazine's instructor database at: <http://www.aopaflighttraining.org/about.cfm>. Since you've been away from flying for 16 years, you'll probably need anywhere from 10 to 20 hours of dual instruction to regain basic proficiency (that's only a guess since I don't know anything about your previous flight time and experience).

Unfortunately, you can't be signed off for solo flight in a single-engine airplane if you're already rated in this category and class of aircraft (that's the way the regulations are written, sorry). Before you can fly alone or with a passenger, you must become proficient enough for a flight instructor to sign you off for the flight review (that usually means proficient to the private pilot skill level).

As far as ground preparation, I recommend that you study as if you're trying to pass the Private Pilot knowledge exam. Many things have changed in the past 16 years (when you study airspace, you'll know exactly what I mean). While it's not necessary to enter a ground school, you might consider a home study course (video, CD, etc.) and a couple of good books. Your flight instructor can help you choose the products that are appropriate for you. It's also a good time to consider renewing your AOPA membership, too.

More Ratings? All I Want to Do is Fly for Fun

Hi Rod:

I have a very important question for you. How far should I go with ratings if I only want to fly for fun and recreation? I am asking because one day I would like to get my hands on an old jet or a prop airplane from WW2. Right now I feel I should go as far as getting a commercial license. Please help me out with my decision!

*Thanks,
Larry*

Greetings Larry:

As I see it, if all you want to do is fly for fun, then get your recreational or private pilot certificate and have a ball. You don't need an instrument rating to have fun in aviation. If you're really serious about getting those little pinkies on a vintage jet fighter or warbird, then consider obtaining more ratings, experience and flight time. After all, the more ratings and experience you have, the more likely you are to find an insurance company that will insure you to fly these types of aircraft.

How Should I Enter the Traffic Pattern?

Dear Rod:

I know there are different ways to enter the traffic pattern at uncontrolled fields but what do you think about the overhead and break entry? The military taught me to do them and they offer a "bird's eye" view of the pattern for entry. Provided one self announces the intention to perform the maneuver (to alert other pilots), I believe it may be the ideal manner to enter the pattern, in terms of seeing and avoiding existing pattern traffic.

*Sincerely,
Lee*

Greetings Lee:

The 45-degree entry to the downwind leg as described in the AIM is only a recommended entry. It's not a required entry. Nevertheless, I strongly recommend that you use this method when entering the pattern at all uncontrolled fields. In regards to uncontrolled civilian fields, the method you described might be better called "The overhead and break (someone's airplane) entry." I can assure you that entering the pattern this way won't make it any easier for other pilots to see you.

This maneuver basically involves flying over the runway above traffic pattern altitude followed by a descending 180 turn to the downwind leg. No doubt, it's a fun maneuver. It's also a great way for you to descend on downwind traffic without being seen. And that's very dangerous in my book. Take a little extra time and enter the downwind at a 45-degree angle at traffic pattern altitude. The increase in safety is well worth it.

My Student Dumped Me

Dear Rod:

I'm a CFI and just got dumped by my student. I was with him on a cross country trip and we got lost! We landed at the wrong airport and he got very nervous. When we returned home he left without saying a word. I don't think he feels safe flying with me any more. I lost his trust. What can I say to this guy? Should I just apologize and tell him that it can happen to anyone? I broke the rules, and did not follow the procedures I teach to others. What do you think?

*Sincerely,
Sam*

Greetings Sam:

I can understand why you feel bad, but that's the price we pay for having a conscience. Here's my take on the problem.

First, everyone makes mistakes -- you, me and all the other folks on this planet. You made an embarrassing mistake and there's not a darn thing you can do to make it go away. It's important, however, to put this in perspective. Pilots with a much more experience than you have gotten lost. Some have even landed at the wrong airport with an airliner full of people. Imagine making a mistake like that and bringing along a few hundred eyewitnesses to help you remember it. While you shouldn't feel proud of your mistakes, you can certainly feel proud of the way you handle them.

My advice is to feel bad about this for as long as you need to, then move on. Find comfort in knowing that you can learn from this experience. Mistakes like these become focal points in your personal development. You can draw strength from them. The smartest airline captain I know once landed an airplane gear up when he was a general aviation flight instructor. He told me that this mistake made him realize how vulnerable he was to distraction. It made him a more thoughtful pilot as a result.

The next time you're inclined to toss aside the basics of navigation, you'll think twice, especially when you recall how embarrassing the results can be. We all make mistakes. The secret is to learn to avoid repeating them. That's how I recommend you look at this problem.

In regard to your student, if you mess up then fess up. Apologize to him. Tell him that you made a mistake because you didn't follow the same procedures you tell others to follow. Tell him that both of you can clearly see the consequence of not doing it right, even when an experienced pilot is involved. While the apology is important, the opportunity for your student to learn from the experience is of greater significance. Let him know that if he wants to fly with someone else, you'll understand. Make it easy for him to decide what he wants to do. Don't make him feel uncomfortable in the process. If you're worried that others at the FBO are likely to hear about your faux pas and give you the business, then make a preemptive strike. Apologize publicly. Tell the folks at the FBO that you made a mistake and will use the experience to make you a better pilot. A public apology is the best kept secret on this planet. Human beings are often quick to forgive those who admit and atone for their mistakes.

Other than that, welcome to the club of those who make mistakes and hopefully learn from them.

My CFI Says Yank on the Yoke

Dear Rod:

I recently had an annual checkride through my aero club, and the only area that I was counseled on was my flare upon landing. The CFI performing the checkride insisted that I need to yank back on the yoke to bring the nose high into the air while landing on the main gear. I always land main gear first, but I do not yank back on the yoke. I ease the yoke back enough to get the mains touching first, then the nose follows. The plane that I fly is a Piper Warrior. I must have landed with the CFI seven times, each time not getting the nose up enough. My question is, as long as I land nose up, main gear down first, is there a problem? How high is right?

*My best,
Kenneth*

Greetings Kenneth:

There are two times when the word "yank" is useful: when you're lifting a ship's anchor from the sea floor and when you've got Hulk Hogan in a headlock. This is a word that's seldom used in an airplane. And it's not appropriate in your situation. You don't need to yank anything in an airplane. The nose only needs to be high enough so that the main gear touches the runway first. Normally, you wouldn't land with the nose as high as you experienced unless you're making a soft field landing. And soft field landings don't require yanking of any shape or form.

My Students Won't Land at Our Home Field

Howdy Rod:

I am a CFI and am having problems getting my students to land at our home field. Our airport is

approximately 2,150 feet long with one end of the runway pointing toward a hill and the other toward power lines. These obstacles are scaring my students to the point where they do not want to fly on certain days, especially if it's hot and humid. They are even more hesitant when crosswinds and turbulence are present in the summer months. I have tried many techniques and offered reassurance, but nothing seems to work. I've told them that they won't solo until I'm sure they can handle all the challenges. I am at a loss as to what else to do to alleviate their fears. Any advice that you might have if you have the time would be greatly appreciated.

*Buck,
CFI*

Greetings Buck:

I think I'd be scared to land at that airport under those conditions, too! I suspect that hangar stories from other more experienced pilots around the airport are the possible genesis for your students' concerns. Unfortunately, it's unlikely that you'll be able to obtain a restraining order to prevent others from blabbing these stories in the presence of your students.

I think that I'd handle all future students like salespeople handle a client's most common objections: up front. Specifically, address this difficulty with your students during the first few hours of flight training. Address it in a way that educates but doesn't scare them. This should provide some degree of inoculation against the effects of exaggerated hangar tales.

Regarding the difficulty with the students you now have, try this. Solo them at another airport with a longer runway, under calm conditions (in the morning, for example). After they've landed a few times on a 3,000 foot (or longer) strip with no obstacles, they should be better equipped to handle your home airport runway.

I think it's important to emphasize that a pilot never needs to land if things don't look right. He or she can always go around. Perhaps you should place more emphasis on the go-around as a vital option when things don't look right. Make it the rule, not the exception. Do at least two or three go-arounds on every lesson in the pattern. Let the student see them as being a vital option instead of the failure to fly properly. And emphasize that a go-around doesn't represent a personal failure or a lack of airmanship. It's simply another maneuver.

You might also give your students the option of landing at another nearby airport if they don't feel that the conditions are comfortable at the home airport. In other words, solo them at a nearby, easy-to-land-at airport, one within 25 miles of the home airport. Give them instructions on how to fly over the route from the home airport to this nearby airport in accordance with 61.93. Then, solo them at this airport. This way, if they return from a solo to the home airport and don't feel they can land safely, there is always the option of landing at the nearby airport. Yes, someone would have to come over and pick them up, but this would last only a short time before they gained enough confidence to handle the home airport.

I believe it's important to give your students options. Give them a few alternatives for handling their discomfort.

Make sure you're not conveying your personal landing fears to your students. If they see you tensing up or getting edgy during the landing, they can't help but interpret this as a sign of danger and risk. It's very easy for instructors to convey this message without realizing how it affects their students.

My CFI Yells at Me

Dear Rod:

I am a commercial pilot working on my instrument rating. I have been working with a young instructor, using my own plane. It seems that this kid got some training from his dad and, by the way he sounds, it was a nightmare. I believe his dad yelled at him about every single mistake. He is doing the same thing to me, and I have gotten to the point of quitting flying. I have tried to discuss this with him, but he tells me that he has to be extra tough with me to make me a better pilot.

Is there any truth in this?

Thank You,

Tammy

Greetings Tammy:

Like father, like son? That's what this sounds like to me.

Sorry, but his rationale for yelling is pure nonsense. You don't have to yell at anyone to make them a better pilot. If that were the case, we could improve the skills of every new airline pilot by encouraging the passengers to yell at him when they walk past the cockpit. Yelling is more likely to confuse a pilot and give him or her a case of bad hearing.

As I see it, we teach others how to react to us. Therefore, in situations of verbal abuse, there are no victims, only poor teachers. You need to teach "old yeller" how to show you some respect. I've taught classes on dealing with difficult people. A fundamental premise of this class was that people who yell expect their victims to cower or respond submissively. This results in the yeller finding it easier to abuse the power of his position with each outburst, often resulting in more frequent outbursts. The next time sparky yells at you, inform him that you will no longer tolerate this behavior. Be firm and assertive, but not aggressive. Be specific about the behavior you won't tolerate. Say it like you've just instituted a zero-tolerance policy on yelling. People like this only respect strength, not courtesy. Soon the cockpit will be quieter than a Buddhist monastery.

If, for some reason he continues to insist on exercising his vocal cords, oust him from the cockpit. Even though you may feel like doing it while downwind, please wait until you land. There are too many other wonderful, exciting, kind, caring and mature instructors out there. You just need to look for one.

Best,

Rod

Will a Tattoo Hurt My Piloting Career?

Dear Rod:

I am a junior at a major aviation university, and plan on pursuing flying as a career. My question is, will a tattoo hurt you in any way in trying to get a job with the airlines? If one does not have a tattoo but is looking to get one in a hidden location would you advise against that?

Thanks a lot for the help.

Mr. Simpson

Greetings Mr. Simpson:

When I was 15 years old I remember asking my dad if I could get a tattoo. He said, "Sure you can have a tattoo. Just give me one good reason why you need one." Well, that put the parking brake on the ink tip. Every reason I could come up with sounded absolutely ridiculous. The best I could do was say that our neighbor, who had a ship tattooed on his chest when he was a young sailor, looked cool. Unfortunately, after decades of consuming cheeseburgers, the ship's keel looked a lot longer that it once did.

No, don't even think about doing something so foolish if you're considering an airline job. A tattoo never gives you the chance to change your mind. Airlines are operated by conservative people. If they hear about a tattoo from the company physician, they'll probably ask why you got one. Will you say Because Fred's got one? That will go over like a safecracker at a banker's convention.

In aviation, a tattoo gives you absolutely no advantage over someone without a tattoo. It only gives you a chance to regret a choice you made in your youth. If you're the type of person who insists on getting tattooed, at least wait until you're hired by the airline of your choice and you're off probation. Then, go all out. Have every emergency checklist permanently inked onto the various parts of your body. One day, be prepared for a captain to say, "Simpson, we've got an emergency. Quick, get into your Speedo."

A Student Has a Landing Go Bad

Mr. Machado,

My student pilot wife had a landing go awry during one of her solo flights. From what we could put together, she was a bit hot on landing and bounced the Cessna 152. The plane got into a series of bounces that she described as getting more and more violent. The last bounce caused the nose gear to collapse and the prop to strike the runway.

Now she is very unsure what to do. All the confidence that she built up has totally evaporated. She has no trouble flying with me or going out with an instructor. While she won't admit it, I think she is scared to death to be alone in the plane. How can she regain her confidence in this situation?

Thanks,

Tom

Greetings Tom:

I know a lady who was attacked by a mindless thug. She wasn't badly hurt but was traumatized by the experience, nevertheless. She enrolled in a self-defense class where she learned kung fu (and several other Chinese words). Soon she gained confidence and her fears diminished. I think a similar parallel exists here.

In your wife's eyes, she was attacked by a problem that scared her. So, the first thing to do is understand the threat, then learn a little aviation kung fu to defend against it. It sounds like your wife experienced something known as a porpoise (the tuna-free kind). Porpoising can occur if a pilot attempts to force the airplane onto the runway at a higher than normal speed. This allows the nose-gear to contact the runway slightly before the main gear does. It can also occur if a pilot lands hard on the main gear, resulting in the airplane pitching forward onto the nose gear. Either way, the airplane responds by pitching up and becoming airborne. The pilot typically reacts by applying too much forward elevator pressure, resulting in the nose gear, once again, making hard contact with the runway. The cycle repeats itself, often with more devastating oscillations, sometimes resulting in a damaged nose gear.

Of course it doesn't have to end this way. Pilots can learn to handle this problem by having their instructor simulate porpoising on landing, then practicing the appropriate defense. Given a slightly higher approach speed, the instructor can simulate the initial bounce of a porpoise by letting the main-gear wheels touch the runway (not the nose-gear wheel!), then pulling back on the yoke gently enough to raise the airplane two feet into the air. At this point, the student, who has followed through on the controls, should take over and practice the recovery. He or she does so by continuing to flare the airplane instead of shoving the yoke forward, which caused the porpoise in the first place. This means that elevator pressure must be applied so as to prevent a further climb as well as a rapid descent. Of course, the instructor should demonstrate how and when to use power to maintain sufficient speed during this maneuver. As a final maneuver, the student should be shown how to go around from the top of the porpoise when landing is no longer an option.

This is how a little aviation kung fu can prevent chop suey gear. The success of this solution, however, lies in how the problem is packaged. Make sure you identify the problem (the porpoise) as a specific event with a specific defense. This eliminates the mystery and provides your wife with a means of controlling her destiny in an airplane. While there are several other ways to increase her confidence, I believe this approach will be the most beneficial and have an immediate effect.

I Can't Get the Confidence to Fly Solo

Rod:

I am a student pilot with 50 hours of time logged, but only 2.5 hours solo. I cannot seem to get the confidence to finish my solo requirements and complete my training. I have been through many flight instructors and they have all signed me off for local solo flights as well as cross country. I like the flight school I am flying out of now, but they rotate me between five different instructors, with a chief instructor overseeing my progress. They think I am ready for more solo flights but I don't think so. Do you have any suggestions for overcoming my fears and lack of confidence?

*Regards,
John*

Greetings John:

There may be a good reason to shuttle a primary student between five different instructors, but I'm at a loss to think of what it might be. I can see why you have little or no confidence.

Confidence is something you gain progressively through feedback about your performance. For instance, when you can do a touch-and-go without pulling the tires off their rims, you begin to feel more confident about your landings. This is just one form of feedback. Another important source of feedback occurs when you observe your instructor's appraisal of your behavior over time.

As a student pilot, your confidence is dependent on the verbal and nonverbal cues provided by your instructor. Whether or not you realize it, you're always assessing the way your instructor's praise and criticisms evolve over time. For instance, if your instructor stops offering suggestions after several hours of landing practice, you can reasonably interpret this to mean that you're doing better (assuming your landings don't hyperventilate him into unconsciousness). This subtle evaluation requires that you spend a sufficient amount of time with one person in order to read these signals. If you're always switching instructors, how can you possibly expect to evaluate the tone, tempo, content and other subtleties of an individual instructor's praise and criticisms? You can't. You have no history of an instructor's evolving confidence in your ability. As a consequence, you are less likely to become confident in your own behavior.

The solution? Pick the best instructor for you from the lot and stick with him or her. No more switching. Finally, as a boost to your confidence, consider that five different instructors have told you that you're ready to fly along. Perhaps they know something that you don't.

How Much Ground Training for CFI Applicants?

Dear Mr. Machado:

My instructor suggests that I may have to spend as much as 40 hours of ground training in preparation for my CFI certificate. Doesn't this seem like a lot of ground time in preparation for this rating?

Sincerely,

Tom

Greetings Tom:

No, it doesn't. In fact, it doesn't sound like enough to me. Would you be surprised if I told you that some of the very best flight instructors spend 80 or more hours on ground training alone for their CFI applicants. It's true. The majority of this time is spent creating lesson plans, understanding the material they contain as well as learning how to teach this material. It's not surprising that students with this amount of preparation have a near perfect pass rate with the FAA. On the average, preparation for the CFI certificate takes a lot of time if it's done well. If you spend a lot of time learning how to teach, it's a sure bet that this will pay off later on.

Logging Safety Pilot Time

Dear Flight Training:

A friend of mine wants me to act as a safety pilot for him in his Mooney while he obtains the instrument experience necessary to be instrument current. I am private pilot single-engine land rated. Most of my

experience is in a Cessna 172. I don't have any high performance or complex airplane time. Am I wrong in thinking that I need a high performance and complex airplane endorsement in my logbook to act as a safety pilot? If I don't, would you consider this to be a safe thing to do?

*Thank you for your time,
(No name provided)*

Dear Man With Good Question:

No, you're not wrong in thinking that you can act as a safety pilot in a Mooney without a high performance and complex endorsement. It's perfectly legal to do so. In this instance, you'll be acting as a safety pilot (or second in command) and won't be acting as pilot in command. You only need the high performance and complex endorsements to act as PIC. The regulations say that the safety pilot must possess at least a private pilot certificate with category and class ratings appropriate to the aircraft being flown. Since the Mooney is a single-engine-land airplane, you meet those requirements.

Not having a high performance or complex endorsement doesn't mean you can't perform the duties of a safety pilot in a Mooney. There's nothing necessarily unsafe about being a safety pilot in this airplane. Obviously the same couldn't be said if you elected to act as a safety pilot in a helicopter (since you're not rated in a helicopter). In this instance, you wouldn't know which chopper stick to move to maneuver that machine. This is the reason the FAA requires a safety pilot to be rated in the same category and class of airplane being used.

PIC & Safety Pilot Time

Dear Mr. Machado:

Could you help clear up the confusion regarding the logging of PIC by a pilot acting as a safety pilot? Several of our local flight instructors are having a difficult time making heads or tails out of the regulations about logging time.

*Thanks,
Jim*

Greetings Jim:

There are only three conditions in which a private or commercial pilot can log PIC time. You may log pilot-in-command flight time when:

1. You are the sole manipulator of the controls of an aircraft for which you are rated (if you are flying a Cessna 172 and you have an airplane, single engine land rating, then you can log this time as PIC. Of course, some folks want to know if this still applies when the airplane is being flown by the autopilot. The answer to this question is: Don't ask that question and don't brag about using the autopilot, either. Just log the time as PIC and be happy.);

2. **You are the sole occupant of the aircraft** (if you are the only one in the airplane then there's a very good chance that you're the only one flying it, so log the time as PIC. How do you log this if you have a split personality? I suppose you'll need to get a twin rating);

3. **You are acting as pilot in command on an aircraft on which more than one pilot is required** under the type certification or the regulations under which the flight is conducted (this one needs a bit of explanation)

To understand item #3 you must understand the difference between *logging* PIC and *acting* as the PIC. Keep in mind that FAR 91.109(b)1 wisely requires that a safety pilot be on board if the person flying is operating under simulated instrument conditions. Yes, I think this is a good rule, too. The regulations also require that one person on board the aircraft always **act** as PIC. This will be the person who is legally responsible for the operation of that aircraft. The person acting as the pilot in command can obviously log this time as PIC. On the other hand, the regulations also allow an additional person to log PIC if that person does something that generates experience of sufficient value. Here's an example.

Suppose you and a friend both have private pilot certificates with airplane, single-engine-land ratings. Let's also say that each of you is legally qualified to act as the legal PIC (meaning that you are both current, have current medicals, etc., etc.). Both of you hop into a Cessna 172 for a flight. Your friend wears a view-limiting device and is the sole manipulator of the flight controls while you act as the safety pilot.

In this instance, if your friend elects to act as the *legal* PIC as well as be the sole manipulator of the flight controls, then he alone logs the flight time as PIC while you log the time as second in command (SIC).

On the other hand, you may elect to act as the safety pilot as well as the legal PIC while your friend is the sole manipulator of the controls. If so, then you can log the time as PIC and your friend can also log the time as PIC. Do you see why this is? Being the safety pilot doesn't mean you can *automatically* log the time as PIC. You must be willing to act as the legal PIC (as well as the safety pilot) to log this time as PIC. Since your friend is the sole manipulator of the controls, he gets to log PIC time as well. If anything goes wrong in this scenario, you're the one whose ticket will be on the line.

Here's another commonly asked question regarding the information above. Suppose you and the same friend go flying in that same Cessna 172 and no one wears a view-limiting device. Is there any situation where both of you log the time as PIC?

Sorry, but there's absolutely no way this can happen.

Yes, I realize that some folks suggest it's possible for both pilots to simultaneously log all the flight time as PIC here but the FAA doesn't seem to think so (and they are the folks who count in this instance). The only condition where these two pilots can log PIC is when one pilot is operating under simulated conditions as stated above. Under this condition the regulations require that two pilots be on board the airplane. There's no type certificate (or any condition, for that matter) that requires that two private or commercial pilots be on board a Cessna 172. When two private or commercial pilots are on board an aircraft and neither wears a

view limiting device, only one pilot can log PIC at a time. This will be the pilot who is the sole manipulator of the flight controls.

If you have additional questions on this matter, then please check all this out for yourself at: <http://afs600.faa.gov>. Once there, look under the column of Designee Standardization (640). Then look at the subcategory of Other Designee Information. Click FAQ 14 CFR, Part 61 & 141. Finally, click on the URL titled FAQ 14 CFR Part 61 [in Microsoft (.doc) format]. If you download this document, then begin reading on page 51 and 56.