

FLYING LESSONS for May 21, 2009

suggested by this week's aircraft mishap reports

FLYING LESSONS uses the past week's mishap reports as the jumping-off point to consider what *might* have contributed to accidents, so you can make better decisions if you face similar circumstances. In almost all cases design characteristics of a specific make and model airplane have little direct bearing on the possible causes of aircraft accidents, so apply these *FLYING LESSONS* to any airplane you fly. Verify all technical information before applying it to your aircraft or operation, with manufacturers' data and recommendations taking precedence.

FLYING LESSONS is an independent product of MASTERY FLIGHT TRAINING, INC. www.thomaspturner.net

This week's lessons:

There's a reason most airplanes carry a legally binding limitation that at least some minimum amount of fuel must be in *each* main tank for takeoff. It's to protect pilots and their passengers in the event the wrong tank is inadvertently selected, and to provide an alternate source if for any reason the selected tank does not deliver combustible fuel.

The pilot who feels him/herself "smarter" than the POH may unexpectedly find him/herself in exactly the rare situation that caused the limitation to be imposed in the first place.

Experience is what happens to you. **Training** is learning from the experiences of others. Much of our training involves identifying and complying with the limitations placed on the airplane by the Pilot's Operating Handbook (POH) or Approved Flight Manual (AFM). Remember that these limitations (which carry the force of law) are almost universally written as a result a mishap—they are not *proactive*, but instead *reactive* to the circumstances of an accident.

Sometimes even good pilots make a bad decision. One frequent example is what I call the "airshow pass," an impromptu low altitude/high speed pass, followed by a steep climbing turn. There is a crash, on average, out of one attempted airshow pass every week in the United States, half of those fatal—clustered, logically, on weekends in the nicer flying months.

Although the amateur airshow pass is usually flown at local fly-ins and pancake breakfasts, it is often an exhibitionist display in front of friends or family—who tragically at times have a front-row view to the pilot's final flight. It's even more tragic, if not homicidal, when the pilot takes unwitting passengers on this often-fatal flight.

It's certainly one valid regulatory interpretation that, since this low-altitude flight is not necessary for takeoff or landing, that the airshow pass is a violation of regulations concerning minimum flight altitudes and potentially the requirements for distance from people and structures. Others contend that the maneuver is legal, pointing to the many FAA employees who attend airshows and witness these displays without comment (and even enjoying them). More so, military and aerobatic pilots warn of the danger of "rolling Gs". Read about the hazards, and considerations for safety, in my article "[The Airshow Pass: Having Fun Without Getting Killed](#)".

See www.ipilot.com/learn/article.aspx?ArticleID=258.

Questions? Comments? Email me at mastery.flight.training@cox.net

Thanks to everyone who attended Mastery Flight Training's seminar "What Really Happens in IMC" last week in Columbus, Ohio, and "The First 60 Seconds: Performance in Transition" at the annual Sporty's Pilot Shop fly-in at Batavia, OH. Thank you Sporty's Pilot Shop and BPPP, Inc. for hosting these events.

QUESTIONS OF THE WEEK

One randomly selected reader in May will win his/her choice of a **Mastery Flight Training hat** or the MFT DVD **Those Who Won't: 10 Tips for Avoiding Landing Gear Mishaps**. Your email address goes in the drawing once every week you respond to a question. All responses will remain confidential, but I will publish a review of the results. Like PIREPs, this works best if *everyone* participates. So take a moment to answer this week's question... then come back to read the rest of *FLYING LESSONS*.

May Question of the Week #3

What visual flying skill do you feel your initial Private Pilot training left you woefully inadequate to perform? How did you overcome this deficiency? Copy and paste the question with your response to MFTsurvey@cox.net. Thanks, and good luck!

May Question of the Week #2 Response: Several readers related situations when they confronted a pilot who was "an accident waiting to happen." Here are some highlights:

When I was going through some advanced pilot training there were a lot of kids wanting to fly for a living and setting out to prove that they were capable. Our class wasn't yet IFR rated but one fellow thought he could brave the elements and try it. Being fresh from the police dept as a NJ street cop, I wasted no words expressing to him that it was not a good idea. He agreed and after about 5 minutes we waited out one of the biggest Texas thunderstorms I've ever encountered.

Yes, I've had that unpleasant experience. We had a skydive operation going at the airport. The sky divers themselves were pretty fast and loose - one or two bounced off the hangars on landing for example. However, what got me to step up was simple: a King Air 90, making a high speed pass in the opposite direction of the pattern. The pass was slightly above the height of the rotating beacon. Never mind the wingover that the King Air pilot did as he tried to beat the skydivers to the ground. The airport in question is frequented by a variety of aircraft, including ultralights. The pilot put himself, his sightseeing passenger, and the other pilots at risk through his maneuver. When I met up with him, I asked him what he thought he was doing. He responded that he "was trying to give his passenger a good ride, and didn't mean any harm. I pointed out the various local traffic, that he had violated the regulations for following the traffic pattern, for traffic pattern speeds, and for general safety, and that by doing so, he had put everyone in jeopardy. Fortunately, the skydive operation has moved elsewhere, but this guy was an award winner. How you can develop that kind of attitude is amazing.

I encountered one of these, a few years ago. Really a nice guy, but had been flying too long without any instruction or feedback from others on his abilities and techniques. He was borderline "safe", but if something out of the ordinary would happen, he'd be in trouble. His biggest issue was that he didn't have situational control. He altitudes and airspeed control was horrible. He'd come into the airport area 5000 feet high and descent way into the yellow to get down. And then he wasn't sure where the airport was... didn't navigate well. A really good review and perhaps a few simple lessons would have done him a world of difference, which I carefully suggested (at the right time). Well, he agreed, and we had plenty of well-qualified instructors in the area. Unfortunately, he died before he got the instruction.... not that it would have made a difference, as he died of natural causes.

This happened 20+ years ago now, but this culture can still exist in any size operation, airline, flight school or office. We had been purchased, merged with, or taken over (you pick) by the predominant carrier in the East. The airline that I had been with had a very strong training environment that stressed CRM and a company culture that expected that each crew member was responsible to maintain the safety of the flight and to work together to ensure the optimum conclusion of the flight. In a few months our routes and domiciles changed, our seniority merged and many new faces began to occupy the seat next to you. It was quickly evident that this carrier's culture was very different from our old.

There was no CRM or joint operation here; it was the simply whatever the Captain wanted. Since I was a senior F/O on the MD80 I had picked up an excellent four day trip that pored me with one of the most senior pilots at the airline. He showed up in a surly mood and as the day wore on it got progressively worse; and his procedures were very non-standard for the '80.

The next day things were no better. By the third day, after watching him attempt to do short field landings with the '80 and giving me close to heart failure I was able to talk to him in a quiet area. I asked what was troubling him, was there something amiss with me or ? First he rebuffed me rudely and then went into a rant about 767 training and how they'd busted him out and now he's flying this glorified DC-9 and he'll do it his way, etc. I listed quietly as it was apparent that there was something seriously wrong with this gentleman. That night I thought about calling our

professional standards people but decided to hold off, after all it could just be me. The last day was a short one with only two legs. The Captain came into the cockpit and announced he wanted to fly both of them to work on his landings. I agreed and off we went. He was still non-standard on a couple of small items, but he threw the book out the window as we approached our first stop. We had good weather and he reached over to de-activate the Ground Prox and other warning CB's as he aimed to land well below the VASI just before the numbers on the runway! I had challenged him when he pulled the breakers and attempted to reset them but he pulled them again and proceeded to land so short our tail surfaces were still over the grass when the wheels touched. At the gate, I read him the riot act requesting that he not do that again. I was told to stuff it. The Senior F/A (a private pilot) came up into the cockpit to inquire if something was wrong. She left quickly when the Captain turned his temper against her.

I cannot properly relate the angst I felt as we headed back to our domicile. Indeed as we approached the airport, he was pulling CB's again and I was resetting them. Twice I demanded that he allow me to fly the approach. He would not. Our landing was just what he wanted, with the main gear touching down probably 500 feet before the numbers. Over the tower frequency a gasp was heard from one of our company flights holding short of the runway. When we got to the gate I tried to pull the Captain aside and talk but he was in a hurry to leave. The Senior F/A came out to ask again what the '@#\$ was going on and I related what had transpired. She then said under her breath, "old such and such is going off his rocker again". Again? That day I spoke with a professional standards member of our union, and was advised to go direct to the chief pilot. The meeting with the chief pilot was not cordial, to the point I was told that since I was from the "other" carrier I should show more respect for this airlines senior pilots, especially if I wanted to upgrade some day. Further, if he (chief pilot) heard of any problems with me and their Captains I could be removed from the line. Weeks later, one of the professional standards committee members spoke with me. He related that I was not the only person to have problems with Captain X but was the only one to complain in the last year. Captain X had been taken off the line before. From what he heard the company had decided to retire him a year early because a check airman riding jump seat had gotten scared. When I asked why the Chief Pilot would cover for Captain X like he did and why he considered me the rascal here, his reply was, he just wanted to help out his friend; "anyway, you're the new guy here and you need to know your place." Such a culture.

Uncomfortable situations handled with aplomb. Thanks to all who answered last week's question!

DEBRIEF: Readers discuss past *FLYING LESSONS* reports

Commenting on the recent *FLYING LESSON* on the high number of gear-up landings reader Dan Secord writes:

Question: what would be the objection to adding those three words to the landing clearance?
Probably would save some grief.

To which I replied: I don't know why anyone should object. I believe for some reason the phrase was recently eliminated from landing clearances in Canada. Maybe some of my Canadian readers can enlighten us. Secord responds:

There lots of stuff that could be done: "idiot lights" like virtually every automobile in captivity when your alternator goes belly up, or you're down to 4 gallons of fuel. I remember one trip years ago, when the controller announced that my alternator was down and to land immediately just because the radio power was fading (and I hadn't looked at the ammeter).

Thanks, Dan. Cockpit technology is trending toward "hazard monitoring," i.e., indications that display only when there are abnormalities, sometimes called "idiot lights." Knowledgeable pilots monitoring informative cockpit displays is still preferred, for everything from landing gear deployment to electrical monitoring and beyond.

Questions? Comments? Send your insights to mastery.flight.training@cox.net

Fly safe, and have fun!

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2008 FAA Central Region CFI of the Year



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