



## **FLYING LESSONS** for December 27, 2012

suggested by this week's aircraft mishap reports

*FLYING LESSONS* uses the past week's mishap reports 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. You are pilot in command, and are ultimately responsible for the decisions you make.

If you wish to receive the free, expanded *FLYING LESSONS* report each week, email "subscribe" to [mastery.flight.training@cox.net](mailto:mastery.flight.training@cox.net)

*FLYING LESSONS* is an independent product of MASTERY FLIGHT TRAINING, INC. [www.mastery-flight-training.com](http://www.mastery-flight-training.com)

### ***This week's lessons:***

**Several *FLYING LESSONS* readers** sent detailed and well-reasoned comments about the NTSB's statistical analysis that formed the basis of [last week's \*LESSONS\*](#). Having enjoyed some family time over the Christmas holiday, I will defer printing and discussing those comments until I have time to review and respond to them with the attention they deserve. Thanks, readers!

See [www.mastery-flight-training.com/20121220flying\\_lessons.pdf](http://www.mastery-flight-training.com/20121220flying_lessons.pdf)

**Although I will defer discussion** of those excellent comments until next week, I want to dispel any thought that I'm advocating a reduction in flying privileges or freedoms for personal and recreation pilots in my quest to improve the fatal accident rate to mirror that of business aviation flying similar aircraft.

**My goal, instead,** is to see what differences exist between personal and business aviation, and to apply any *LESSONS* we learn from such a comparison to fairly painlessly make personal aviation just as safe as business flying. As aviation safety researcher, aero-ethicist and *FLYING LESSONS* reader Dr. Bill Rhodes writes:

*If safe utility [of general aviation airplanes] is the goal, we have examples of pilots who accomplish that routinely; sadly their expertise is for the most part left uncelebrated. Training, education, and self-mastery make it possible to extract utility from GA airplanes....*

**Bill cautions us,** however, that this safe utility occurs:

*...only within limits. And ethics can be thought of as a science of limit.*

**The limits to which I subscribe** are well-documented in the existing U.S. Federal Air Regulations. They are echoed, albeit at times more conservatively, in the codes of other nations that permit personal and business aviation.

**I'm *not* calling** for increased limits on how we should be permitted to fly. Long-time readers of *FLYING LESSONS* and the many aviation publications to which I contribute should know (if I've written effectively, that is) that **my goal is to prevent further regulation by demonstrably improving the mishap record**, thereby taking away the potential motivation of regulators to impose limits "in the interest of safety."

**The only exception to my goal** of no increased regulation is that I feel there should be more guidance for flight instructors on those items that should be presented in existing Required Flight Reviews. I believe it is AOPA Foundation president (and, of course, *FLYING LESSONS* reader) Bruce Landsberg who recently observed that **all it would take to dramatically reduce the rate of serious and fatal crashes is for pilots to fly to the completion standards** of the (U.S.) Private Pilot and, if instrument rated, Instrument Pilot Practical Test Standards.

**I suggest that,** just as the Instrument Proficiency Check (IPC) specifies those Tasks from the Practical Test Standards (PTS) that must be presented and flown to at least Instrument Rating performance standards for the instructor to endorse the IPC, so should the Flight Review contain a list of specific items from the Sport Pilot or Private Pilot PTS (as applicable) to which the pilot must be trained to attain PTS performance standards in order to earn a Flight Review

endorsement. Currently the Flight Review requires a minimum of one hour each of ground instruction and flight training, but it does not require any specific task areas or standards for completion for the flight instruction. Many pilots get excellent, relevant instruction in a Flight Review today. From my contacts in the industry, however, I hear that many do not.

**The enhanced Flight Review** could still be flown in an hour (although a good Flight Review today probably takes more time than that). The difference is that **the Flight Review should cover items we already acknowledge as being the minimum performance standards for rated pilots**. Pilots holding advanced certificates (Commercial, ATP) could earn endorsement by flying to Private Pilot standards, but the instructor providing the review should point out any discrepancies between the pilot's performance during the Review and the PTS for the certificates the pilot holds.

**I want us to avoid crashes** to reduce the unfortunate toll of lives and its impact on the survivors. I also want to improve the public image of flyers as responsible citizens, and reduce the public fear of "daredevil pilots" in "little airplanes" crashing down on their homes and their children's schools, thus removing much of the Government's perceived impetus to further regulate and restrict flying. A tertiary but still major advantage is that by reducing the crash rate we'll reduce the rate of attrition in the general aviation fleet (estimated to be as much as 3% per year by some sources). Reduced fleet size means less economy of scale to keep flying expenses down; reduced revenue for FBOs and other aviation support services, forcing service providers out of business; and fewer pilots to serve as influential voting blocks in AOPA, EAA and other groups representing our industry and avocation in regulatory circles.

**The greatest improvement in flying safety** comes from giving yourself time to exercise options. The next greatest improvement occurs when you realize airplanes have great utility, but you have to choose the type of utility you wish to enjoy on any specific flight, because no airplane can do it all—speed, range, payload—at the same time. (For more on benefiting from the compromises see my article "[The Utility Myth](#)," from the May 2012 issue of [Aviation Safety](#)). The third component to realizing "safety" is to practice and train enough to retain the skills needed as you exercise those options and realize those utilities.

See:

[www.mastery-flight-training.com/utility\\_myth.pdf](http://www.mastery-flight-training.com/utility_myth.pdf)  
[www.aviationsafetymagazine.com](http://www.aviationsafetymagazine.com)

**Nowhere in the greatest improvements** is there a need to increase regulation, or reduce the pilot's freedoms to fly within the existing bounds of airplane design and good decision-making. To reduce the fatal and serious crash rate, we simply need to **be as good as we already assume ourselves to be**.

Questions? Comments? Let us know, at [mastery.flight.training@cox.net](mailto:mastery.flight.training@cox.net)

---



Thanks to AVEMCO Insurance for helping bring you *FLYING LESSONS Weekly*.

See [www.avemco.com/default.aspx?partner=WMFT](http://www.avemco.com/default.aspx?partner=WMFT).

Contact [mastery.flight.training@cox.net](mailto:mastery.flight.training@cox.net) for sponsorship information.

---

## **Debrief:** Readers write about recent *FLYING LESSONS*:

Responding to a recent *FLYING LESSONS* concerning night landings in areas of ground fog, a reader Debriefed with this question:

I was always told that ground fog acts just like a convex mirror, “things in the mirror are closer than they appear”. Thus a normal approach leads to a nasty surprise when the runway is actually closer than it appeared. Is this not true?

Mark Peterson answered my call for an answer from readers. Mark writes:

It comes from research into automobile driving in fog. They put drivers in a simulator and had them drive in clear weather and then with fog. The fog disrupted the sense of speed more than anything. People tended to drive much faster in the fog because the visual clues for speed were missing due to the reduced sight distance. Speed is distance, so there you go.

Thanks, Mark. Readers wanting more information might [download this article](#) on the effects of fog on driving speed, from the Journal of Vision.

See [www.journalofvision.org/content/7/9/248.abstract](http://www.journalofvision.org/content/7/9/248.abstract)

Reader Bill Cox relates an experience with nighttime ground fog from his early experience:

Way back when I first got my private ticket in 1979 I took a short flight from Kelso, WA[shington] to Salem, OR[egon] at night before I was instrument rated. Salem had an operating control tower and was telling me that there was ground fog. I asked [the controller] if I was able to land and he cleared me to land. I could see the runway just fine and could not see any ground fog, so I did not really understand what he was telling me. I had my landing light on and I hit the ground, the fog and the power all about the same time. Totally blinded, [I] bounced back into the air and went back home vowing to never do that again.

Good decision-making, Bill. Thank you.

Discussing my summation of reader responses to our Question of the Month on **what makes a good instructor**, reader/instructor Bennett Sorensen has a good point:

It is ok to be “chummy,” as long as it is clear that safety and learning are what you are trying to accomplish. One item that is very important is to never be aggressive or insulting to a student. Learning in a nice environment is essential. The student is spending a lot of money to learn to fly.

Maybe “chummy” was the wrong word. I was trying to describe the relationship where friends endorse friends for something less than a quality learning experience. As you and other responders to our question agree, pilot education should be conducted in a respectful, enjoyable and—yes—“nice” environment. I wholeheartedly agree. Thanks, Ben.

Reader Thomas White of [The Responsibility Project](#) writes about last week’s citation of the general aviation crash record:

Enjoyed this piece. [I] noted that the quotes you chose were quite revealing of the victim mentality and external locus of control: “There are always going to be pilots who crash. Flying is as safe as it’s ever going to get, and there’s not much we can do to make it safer.”

The Responsibility Project seeks to educate pilots (and others) on their personal responsibility in avoiding unnecessary risk, and their sole responsibility in ensuring a mishap- and injury-free outcome to every flight. It does so by identifying, exposing and discrediting the “victim mentality” and advocating “its clear opposite—a higher standard and calling.”

See [www.TRPnet.com](http://www.TRPnet.com)

Something to add? [Mastery.flight.training@cox.net](mailto:Mastery.flight.training@cox.net)

---

It costs a great deal to host *FLYING LESSONS Weekly*. Reader donations help cover the expense of keeping *FLYING LESSONS* online. **Please support *FLYING LESSONS* through the secure [PayPal donations button at www.mastery-flight-training.com](#).**

Thank you, generous supporters.

---

The safest plane for a pilot is the one he feels the most comfortable in. He may feel comfortable in a pressurized piston twin the day he gets out of...training, but if he only flies it 20 hours in the next six months, is he still going to be comfortable flying it in low IFR down to minimums, and maybe on one engine?

- Mark Hegg, flight instructor, aircraft salesman

---

*FLYING LESSONS* readers Rod Machado and Mark Robidoux of [PilotWorkshop.com](http://PilotWorkshop.com) have teamed up in a new podcast program. "PilotWorkshops Audio with Rod Machado" delivers a powerful way to improve your flying skills while listening to America's favorite Flight Instructor. Rod shares tips, tactics and techniques in this unique program suitable for any pilot.

You may listen to Rod's hour-long audios online or easily download them as MP3 files compatible with iPad/iPhone/Android. Details and a free sample are here:

<http://PilotWorkshop.com/t/RodAudio.php>

---

## Question of the Month

Readers are still chiming in on "What makes a good instructor":

A good CFI will stick to the FAR's and a good training curriculum that closely follows the Practical Test Standards. In addition to this he'll throw in his own life experiences, both positive and negative, to add to the student's knowledge base, gaining valuable experience in the training environment as an example to fly the aircraft safely. **The end result will be the student mastering the aircraft.** You may cite my name if so desired. Mike Long, CFI.

Thanks, Mike.

What's *your* experience? Let us know, at [mftsurvey@cox.net](mailto:mftsurvey@cox.net).

**Share safer skies. Forward *FLYING LESSONS* to a friend.**

***Personal Aviation: Freedom. Choices. Responsibility.***

Thomas P. Turner, M.S. Aviation Safety, MCFI  
2010 National FAA Safety Team Representative of the Year  
2008 FAA Central Region CFI of the Year

---

*FLYING LESSONS* is ©2012 Mastery Flight Training, Inc. Copyright holder provides permission for *FLYING LESSONS* to be posted on FAASafety.gov. For more information see [www.mastery-flight-training.com](http://www.mastery-flight-training.com), or contact [mastery.flight.training@cox.net](mailto:mastery.flight.training@cox.net) or your FAASafety representative.