

# **FLYING LESSONS** for May 28, 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.thomasplurner.net](http://www.thomasplurner.net)

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

**Typically nose-heavy airplanes**, and airplanes with full-flying stabilators, have a high incidence of hard landings on the nose, with subsequent failure of the nose landing gear. This is most common when flying in a training configuration or otherwise with just two aboard. Airspeed and attitude control through touchdown are important in all airplanes but even more so in airplanes with these characteristics.

**Often a well-timed go-around** in lieu of riding out the remainder of the landing after a bounce can save the day.

**If the speed and attitude don't match** on final approach, or if the airplane bounces on first contact, don't try to "salvage" the landing. Go around...or you may end up having to salvage the *aircraft*.

The FAA's [Airplane Flying Handbook](#) reminds us "the assumption that an aborted landing is invariably the consequence of a poor approach, which in turn is due to insufficient experience or skill, is a fallacy. The go-around is not strictly an emergency procedure. It is a *normal* maneuver that may at times be used in an emergency situation. Like any other normal maneuver, the go-around must be practiced and perfected. The flight instructor should emphasize early on, and the student pilot should be made to understand, that the go-around maneuver is an alternative to any approach and/or landing."

See [www.faa.gov/library/manuals/aircraft/airplane\\_handbook/media/faa-h-8083-3a-4of7.pdf](http://www.faa.gov/library/manuals/aircraft/airplane_handbook/media/faa-h-8083-3a-4of7.pdf)

**Instructors, be ready** to extricate the flight from any situation you put it into, always assuming the pilot-receiving-instruction [PRI] will not handle things alone. The CFI's primary job is safety, with instruction and quality control taking a close but secondary role.

Questions? Comments? Email me at [mastery.flight.training@cox.net](mailto:mastery.flight.training@cox.net)

## **QUESTIONS OF THE WEEK**

### **May Question of the Week #4**

- **What *instrument* flying skill have you learned after earning your instrument rating that you wish you had known before the checkride? How did you learn this skill?** Copy and paste the question with your response to [MFTsurvey@cox.net](mailto:MFTsurvey@cox.net). Thanks, and good luck!

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 Response: There wasn't much response to last week's question that asked what visual flying technique your Private Pilot training left you unprepared to perform. One reader objected to my phrase "woefully inadequate to perform," which in retrospect was a bit strong. So get your name in for the hat or DVD drawing another time by answering this rephrased May question #3:

- **What *visual* flying skill did you learn after earning your Private, Recreational or Sport certificate that you wish you'd learned earlier? How did you learn this skill?** Copy and paste the question with your response to [MFTsurvey@cox.net](mailto:MFTsurvey@cox.net). Thanks again!

## **DEBRIEF:** Readers discuss past *FLYING LESSONS* reports

Regarding last week's *FLYING LESSON* about minimum fuel requires for takeoff, Cardinal RG pilot Gus Gillespie reminds us that in some models or aircraft:

Another more practical reason is that during acceleration or climb with too little fuel in a tank, the fuel pick-up port can become uncovered.

Good reminder, Gus. Thanks!

On the Question of the Week subject of dealing with pilots who are "accidents waiting to happen," frequent *FLYING LESSONS* debriefer Lew Gage takes us back to an experience he had at Pan Am:

I had an experience when I was a 747 flight engineer that points out that cronyism has always existed in the airlines. Captain X in this case was a very senior pilot, seniority of course being a function of date of hire and not any measure of skill or knowledge.

This story begins during an early evening departure at Honolulu on a flight to arrive at about 2300L in San Francisco. On disconnect of the ground man's headset X began to taxi forward without the required hand-sent "all clear" signal. A ground man pulling the nose wheel chock fortunately had braced himself with one hand on the nose wheels while just having removed the chock, but was still in front on the wheels. He felt the wheel begin to move and just barely escaped being run over. The head ground man yelled on the company frequency to "STOP, STOP" which was done with a lot of brake application. I was engrossed in getting the engineer's panel set for taxi and cabin air conditioning, etc. In addition to the ground guy almost getting run over there was a vehicle parked in such a way that the number 4 engine would have run into it. The panic stop left about 6 feet clearance from the vehicle. The captain tossed it off with an air of "so what." When I gave the [company dispatch] "off" message (after takeoff) the dispatcher said he wanted to talk to the captain, who refused to talk and said he would be back next week and handle it then.

All the ground crew walked off the job for the next 6 hours, causing delay of flights both arriving and departing during that time. The station people had had prior problems with X and this was the last straw.

Upon arrival in the SFO area the captain was going to give the first officer (his first line trip on the 747) a "flying lesson" on descent and landing of a 747. The entire approach (the weather was CAVU) was botched with the airplane going V Prog plus about 50 knots over the threshold. Needless to say the GPWS [Ground Proximity Warning System] was hollering "descent rate, pull up, pull up." At about 400 feet AGL the captain told me to pull the CB's [circuit breakers] for the GPWS, which I responded "no, sir." He then leaned back in his seat trying to find the CB's on the overhead panel. The first officer sat there the entire time doing absolutely nothing, none of the required call outs or anything.

Of course the engines were at idle power from about 2000' AGL to touchdown with everything happening at racetrack speed. We touched down at the intersection of 01 and 28R. With maximum reverse thrust and maximum braking the airplane made the left turn to the parallel taxiway with the cockpit overhanging the end of the pavement. My mistake was not having maintenance pull the flight and voice recorder as evidence. Several of the tires later went flat due to brake overheat and fuse plug meltdown.

I wrote a very detailed flight crew report and turned it in to the Chief Pilot's office. The "real Chief Pilot" was out on a several day line trip and so his stand in was manning the office. My next trip out of SFO I ran into the "real CP" (who was not only a very good pilot but also a good administrator) in the hallway and ask

what the dispensation on my report had been. He asked "What report?" I then gave a brief tale of the event and the date. The report had been buried by the substitute CP as a cover up for his "old friend."

The real CP looked into the matter. The captain and first officer denied everything except the taxi event to which there were witnesses. I was being two timed by both pilots since each was guilty of not following the required procedures. The real CP took captain X off flight for the remaining 6 months of his time to age 60 and he retired, and I heard of him dying within 2 years of a heart attack.

I confronted the first officer sometime later and let him know what a CS bastard he was. Of course I could not do any thing except know that my report may have avoided an accident if X had continued to fly the line. There isn't anyone immune to an accident, but the crew concept is suppose to diminish that probability to near zero and does work that way most of the time. But when an overbearing, under talented captain gets roaring around the cockpit that system falls apart.

I debated running this story because, among other things, this single instances casts doubts on the safety of the entire airline industry. In the end I decided to print it to show there are times when we have to step up to challenging even senior and respected pilots to promote the overall goal. Thanks, Lew, for reminding us that professionalism is not the province of the airline cockpit alone—that we all must act responsibly and professionally to safely enjoy the freedom and utility of flight.

## Two from the AOPA Air Safety Foundation

### Safety outreach raises fuel awareness

What has caused 1,700 accidents in the past decade and is nearly 100 percent preventable? The answer is fuel mismanagement, which causes two pilots to crash every week, on average. In an effort to raise awareness, particularly among student pilots, the foundation mailed its [Fuel Awareness Safety Advisor](#) to the flight schools and made additional copies available free by request. The campaign also directed recipients to the foundation's [online fuel management resources](#), which include courses, publications, videos, and an interactive, Google-based map that plots fuel-related accidents.

See:

[www.aopa.org/asf/publications/sa16.pdf](http://www.aopa.org/asf/publications/sa16.pdf)  
[www.aopa.org/asf/hotspot/fuel.html](http://www.aopa.org/asf/hotspot/fuel.html)

### Electrical system know-how

Although rare, in-flight electrical fires can happen at any time—and they can be disastrous, as was the case in the July 2007 fatal accident involving a Cessna 310. To help raise awareness, the AOPA Air Safety Foundation has produced a new [Safety Brief](#) that helps pilots recognize the symptoms and take action in the event of an electrical fire.

See [www.aopa.org/asf/hotspot/electrical.html](http://www.aopa.org/asf/hotspot/electrical.html)

Questions? Comments? Send your insights to [mastery.flight.training@cox.net](mailto: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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