



FLYING LESSONS for October 8, 2020

FLYING LESSONS uses recent 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 airplane have little direct bearing on the possible causes of aircraft accidents—but knowing how your airplane's systems respond can make the difference in your success as a scenario unfolds. Apply these *FLYING LESSONS* to the specific 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.**

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This week's LESSONS:

More LESSONS from Success

It's always better to learn from a success story. Reader Charles (Randy) Myers, Deputy Director of the Second Marine Air Wing (2d MAW) Aviation Training System at MCAS Cherry Point, North Carolina, adds to our **LESSONS from Success:**

Attached please find a summary of a recent trip I took in my Mooney from Beaufort, North Carolina, to Tunkhannock, Pennsylvania. There are some LESSONS learned you might be able to use in your weekly column. Feel free to use anything you think would be useful for your audience. Thanks, and keep up the great work!

Dear Tom:

I always enjoy reading your weekly *FLYING LESSONS*. Let me add context and a recent story of my own. I spent 27 years as a pilot in the Marine Corps. I started out flying the A-4 Skyhawk but spent most of my career as an AV-8B Harrier pilot. I flew combat missions from the USS Nassau in Desert Storm, had two flight instructor tours, spent two years as the commanding officer of the Harrier training squadron, relit and saved an A-4 after two flameouts in the same flight, and ejected from a Harrier after an inlet guide vane controller failure and subsequent massive compressor stall and fire. **I've had enough in-flight emergencies in my flying career to realize that the more I think I know, the less I really know.** I take each and every flight as a single event with the same risk as the previous flight I survived. **There is no "repunching the clock" after an emergency.** I'm most proud and grateful that I've maintained a lot of humility, a sense of humor, and a love for flying.

I retired from the Marines in 2004. I remained in aviation by teaching classes such as CRM [Crew Resource Management] and basic adult learning theory and application. In 2012 I decided to get back into flying and purchased a 1969 Mooney Ranger. I knew nothing about general aviation, and my knowledge base was abysmal. I quickly realized that **the more I learned about GA [general aviation], the less I really knew about it.**

My aircraft was based initially in Summerville, South Carolina, and Mr. Wally Moran taught me to fly it. Wally, who I believe you know, is a great flight instructor and just an all-around nice gentlemen. We still stay in touch since I moved to eastern North Carolina two and a half years ago to take a job as the Deputy Director for Aviation Training Systems at Second Marine Aircraft Wing, Cherry Point, NC. I keep my Mooney in Beaufort, NC, at Michael J. Smith Field (MRH). Sorry, I'm rambling. My story...

I scheduled my Mooney to have new fuel bladders installed by the STC-owner at Tunkhannock, Pennsylvania (Skyhaven, 76N). My plan was to fly to Hagerstown [Maryland] Regional (KHGR) from Beaufort, NC, stop for gas and take a break. Then I would push on to Tunkhannock. My

girlfriend Roni was with me, and we planned to stop briefly in her hometown of Harrisburg, PA (Capital City). She was going to pick up her car and then come get me in Tunkhannock before we drove back to North Carolina.

Takeoff and the first hour of flight from Beaufort were uneventful. The air was smooth and visibility great. I was getting flight following at 6500 feet and flying over a scattered deck [that was] at about 3000. My route of flight was almost direct to Hagerstown except for a jog to the west to clear the Washington, DC, flight restriction zone and Dulles airspace to the west. About 30 minutes south of Richmond [Virginia], the scattered layer was turning into a broken layer and occasionally overcast. I could tell it was more scattered to the east and more overcast to the northwest (my route of flight). While I've flown a lot in IMC in the Marine Corps, I am not instrument current. These days, I have little desire to fly anywhere I can't see the ground, especially in an airplane that can't "power out" of a bad situation.

Thank goodness for Foreflight and its ADS-B in/out antenna. I began checking forecasts along my route of flight for Richmond, Culpepper, Stafford, Charlottesville, Winchester, Martinsburg, and Hagerstown. I didn't have to make a single radio call. **I received current and forecast weather at all the airports along my anticipated flight path, and it wasn't promising.** They all currently were overcast and forecasted to remain that way at least for the next several hours, a far cry from the VMC predictions earlier in the day. The last thing I wanted was to arrive over Hagerstown, MD, with an hour of fuel and have to declare an emergency to shoot an IMC approach for which I was unqualified. **Could I do it? Probably. But the thought of not being able to safely get under the weather, break out, and then declaring a fuel-related emergency kept me from making the wrong decision.**

Most interesting was while flying and checking weather, I kept thinking about all of those AOPA safety videos I'd seen, quizzes I'd taken, all of your FLYING LESSONS I'd read, all the Pilot Workshops' Tips of the Week I'd reviewed, and all the stories I'd heard about pilots pushing weather and fuel limits – all with bad outcomes. That day, I refused to be a statistic and the subject of a bad aviation-related decision. Aviation safety education and outreach work!

About 30 miles south of Richmond, I told Richmond Approach my plans had changed. To the northeast, New Kent County (W96) was scattered at 2000 feet. I had to "work my way down" through the cloud deck, but was able to do so [in] VMC. **I explained to Roni what we were doing and why. She was in full agreement.**

Fortunately, we had no firm timeline, and "get-there-itis" had not set in. **We landed** at New Kent County, and on the descent Roni learned what sucker holes look like in a descent. We landed uneventfully at New Kent County, got gas, **and hung out for about two hours. I was relieved to be looking at options while on the ground instead of in the air.** According to weather forecasts, ceilings along my route of flight from New Kent County to Hagerstown were between 2000-3000 feet. I could easily get there at 1500-2000 feet except for crossing the Blue Ridge mountain range east of Charlottesville. That would put me closer to terrain than my comfort level allowed. However, if I headed more toward Charlottesville, where the weather was better, got across the range, then I could fly up the valley to Hagerstown. We took off from New Kent County and shortly thereafter came up against what looked like a potential wall of rain. **I wasn't going to test my suspicion.** Thirty minutes into our second leg, **we diverted** to Louisa County/Freeman (LKU). We spent **about an hour and a half** at Louisa County, allowed the rain squall to pass, had lunch, and planned leg three.

Weather was slowly improving, and cloud layers were turning mostly scattered at 3000 feet. The afternoon was forecast to improve so that terrain clearance over the mountains was **within my comfort level.** We took off from Louisa County, received flight following, and cleared the mountains just east of Front Royal before heading direct to Hagerstown, but jogging slightly west to stay clear of Dulles airspace. **Flight following was very helpful** as they alerted us to numerous potential traffic hazards along our flight path. As we got closer to Hagerstown, the weather had improved to scattered clouds and light winds. After **a brief stop** there, we took off for

Capital City in Harrisburg (KCXY). Our two-leg trip had turned into four, so **we decided to stay in Harrisburg for the night.**

The next morning, I took off for Tunkhannock while Roni drove there to pick me up. If you've never been into Tunkhannock (Skyhaven), make sure winds favor the runway, and don't be fast on final! **I waived off my first approach after the round out and initial flare** because I was floating down the 2007 foot x 50 foot runway and had concerns that I might not get stopped before reaching the end. I didn't want to end up in the Susquehanna River! My second approach was better, but still a challenge. I kept the aircraft at about 1.1 [V_{so}] instead of 1.3 x stall on final, and touched down about 500 feet down the runway. I was both relieved and proud to have made the landing in spite of the first waive off.

I asked the office manager at the repair facility if anyone ever mentions how challenging it is to land here. She said "everyone says that." I'm glad it wasn't just me. I told her that **I had 300 sea-based landings in a Harrier onto an Amphibious Assault ship at sea, and landing the Mooney at Tunkhannock was every bit as challenging.**

My confidence had been boosted, and my aeronautical decision-making ability remained intact during the trip. The *LESSON* learned, however, is that **no aviator is beyond the temptation to press weather or continue a poor approach.** The sting of swallowing one's pride only lasts for a little while, but the sting of wrecking an airplane or injuring oneself can last forever.

Thank you very much for letting us learn from you, Randy. To have an aviator of your experience and stature remind us of the challenges and responsibilities of personal aviation, and to model the professionalism my readers and I strive to emulate, is a valuable *FLYING LESSON*.

An aside: I spent the summer of 1978, before my senior year in high school, with my grandparents who lived on a small acreage about halfway between Newport and Havelock, North Carolina. The highlight of that summer was watching the Marine Harriers in and out of nearby Cherry Point, often arcing low over my grandparents' garden where I worked. That would have been before Randy's time there, but it's gratifying to know I'm teaching and learning from someone who flew those airplanes in that pattern.

Questions? Comments? Experiences of your own to relate? Send them to mastery.flight.training@cox.net.

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Debrief: Readers write about recent *FLYING LESSONS*:

Reader Mark Dulude writes about last week's *LESSONS*:

A number of the comments in this issue reminded me of an earlier time in my flying progression. I had **access to many higher time pilots whose experience I valued** and I believe that having these kinds of connections **is imperative for any pilot** moving their way up your "[bars](#)" system. I was totally undaunted in asking them for help regarding weather briefings in particular although I did ask considerably more beyond that.

I feel I used a technique in asking for their help briefing the weather that allowed them to truly help me without getting concerned that I was then going to launch in weather for which I was unprepared; a natural concern for any experienced pilot providing advice. My technique was to brief the weather myself and then, if I felt it was outside my comfort zone, I'd call one or more of these experienced pilots and say, "I want to

go from XXX to YYY at time ZZZZ but I can't get myself comfortable with it. I have made the unequivocal decision that I am not going. I want to hear you take a look and brief the weather as you see it with me on the phone knowing that nothing you say is going to convince me to change my mind and go - you can rest assured."

Perhaps that can be helpful to others? I know that on more than one occasion, those **more experienced pilots really helped me understand how to use the available information and they were willing to share it without any fear I might somehow be harmed.**

All the best and I still love reading each week.

Mentorship is invaluable in any discipline that combines equal parts of science and artistry—flying very much among them. Outside of a military environment it's difficult to find that relationship. Even in many commercial flight departments there is frequently more of a culture of professional competition than one of cooperation.

Flying organizations help, sometimes. Look for pilot mentorship opportunities in associations and flying clubs, and in the local FBO. If you're an experienced pilot—and we are all more experienced than we used to be—offer to be a nonjudgmental, positive influence on those behind you on the experience curve. Thank you, Mark.

See <https://www.mastery-flight-training.com/four-stripes-airmanship.pdf>

A reader who asks to remain anonymous delves deeper into the idea of culture:

In response to [the Grumman AA-5 crash](#) by a pilot with a history of poor decisions, [*FLYING LESSONS*] readers were quick to round up the usual suspects: *A poor GA safety culture.... Until pilots... step up and apply peer pressure.... Why did... someone not talk with him?* etc. All of which begs two questions: **First**, how do [we] know that no one talked to him? And **second**, what makes you think that talk would have made any difference? *The problem with relying on peer pressure is that peers can't apply much pressure.* As you say, the stock response, heard all the time is: "mind your own business."

What is missing in GA [general aviation] that makes the airline and military "cultures" work is not just accountability but **the authority to enforce that accountability.** When that authority can't or won't be used the result is just as tragically predictable in the military as in GA. The pilot in the infamous [B-52 crash at Fairchild \[AFB\]](#) had been flagged for unsafe behavior on multiple occasions for years before the crash. He received verbal reprimands with no consequences to his flight status or career, effectively the same "talk" the commentators above are decrying as missing in GA. Those talks changed nothing.

In the aftermath of the recent [Atlas Air 767 crash](#), several professional pilots came forward with their own stories of flying with pilots with inadequate skills or judgement. In each case the story was the same: multiple talks from peers accomplished nothing, it was only the involvement of the chief pilot, or someone else with authority over their careers and paychecks, that effected change.

Most local GA aviation communities don't have a chief pilot who can ground people flying their own planes, their own way. The only option open to concerned peers is ratting them out to the FAA. That's a pretty extreme escalation, really a nuclear option. That option isn't available in the military, of course, but it was for all those pro pilots who shared their stories, mentioned above, and it's notable that **not one** chose to take it, even when the risks were to their own lives and potentially hundreds of passengers.

When you've been repeating the same message over and over for years, with no apparent affect, maybe more repetition isn't the answer. We hector GA pilots to be "professional" in dealing with miscreant peers, but the only tool that professionals use that actually fixes the problem is not available to GA. And the only tool GA pilots do have is one that even pros won't use.

Readers, I have a response...it's not the solution, because if I had that I've had ample opportunity to share it in my 30 years in somewhat influential aviation circles. But it is a response. Before I taint the conversation with my own views, I'd like you to [send me yours](#). I'll keep your responses anonymous.

See:

<https://www.mastery-flight-training.com/20200820-flying-lessons.pdf>
https://en.wikipedia.org/wiki/1994_Fairchild_Air_Force_Base_B-52_crash
https://en.wikipedia.org/wiki/Atlas_Air_Flight_3591

Reader Doug Abramowitz is equally thoughtful, in a different way:

A thought I was having again recently that I've heard echoed before from a former colleague named Chuck Gensler, and some of my professors at Purdue are as follows;

Accident reports and NTSB investigation write-ups are fairly easy to get our hands on and for that reason make good fodder for us pilots to focus in on what may have gone wrong and what we can learn.

I think **the first barrier** to using these, as you have clearly acknowledged, is *bias that comes from (for most of us) being someone who has never been involved in an accident or major incident*. It's clear to me that it's **quite difficult to overcome the lack of empathy with someone who made a poor set of decisions in a tricky environment** that led to loss of life or airplane. The reality as you and I both know is that **those people made perfectly logical decisions (to them) based on their life experiences up to that point** and the set of circumstances they had to deal with. It is all too easy to forget this, both in analyzing accidents and in life on a regular basis.

My point here is that, despite some of your very valid efforts to overcome this by asking questions like "How would you have justified this?", there is still that piece in the back of your mind that says "No, I wouldn't have been in that situation because of x,y,z...". I think this on some level reduces the effectiveness of these scenarios and how significant a memory they hold in our brains. **If we write them off to any extent, how likely is it that we will learn from them truly and/or remember those scenarios?**

The second barrier here as a professor from Purdue once said to myself and my classmates is (paraphrased)

No matter how many accidents you study when the day comes, you will not be in the same exact situation as any of those you learned from.

Which does in fact make it important that we **try and learn over-arching lessons from fatalities**. The reality of looking at these instances however, in my mind is that they come with a limit on how much we can learn. Because unfortunately many times the pilot is killed, we cannot have access afterwards to hear what they were thinking/doing so we are always speculating on these accidents. It seems that we can do this within reason and walk away with fairly accurate ideas of how things went, but **we never have certainty** and I think the lessons are limited.

The reason I say all of this is because I feel that **what we can learn from scenarios where no one was killed and someone escaped a tricky situation is more valuable**. The analysis on the engine failure done with commentary from the president of SimCom was fantastic. It addresses the first point I made because unfortunately, I often look at those non-fatal scenarios and feel more *respect or empathy for someone who is still alive and had the aeronautical skill to walk away from their incident*. To the second point, we often have the opportunity to get commentary and thoughts from the involved pilot on what they were thinking/doing so **we are not speculating in the same way**. We can learn the skills and techniques they used to survive and I think those lessons are more valuable in our toolkit than trying to learn each and every (speculated) mistake that a dead pilot made and adopt the opposing mentality.

Sorry for the long email here, I wanted your **thoughts on how we can overcome the accessibility barrier** here and possibly learn from more scenarios that had positive outcomes. Our goal at the end of the day is always to get down with no injuries to ourselves or the airplane, right? Could we possibly use more scenarios from NASA's ASRS reporting? Is there something that we can do to create a form where people on your email list can anonymously fill out a form about something that happened to them in the near or distant past?

Happy to discuss this more if you would like. By the way, thank you so much for what you're doing with your emails and caring about our community and for the difference you have made already.

Interesting, Doug. For what it's worth, I use ASRS (NASA's Aviation Safety Reporting System) reports when they are relevant to personal and business aviation. The vast majority of published ASRS reports, however, involve air carrier pilots. I also publish all the **LESSONS from Success** that I get, such as the A36TC engine failure return and the Mooney **LESSONS** published this week.

Overall, however, I strive to highlight what you call **the over-arching LESSONS** from accident reports. As I write at the top of my weekly reports, **FLYING LESSONS uses recent mishap reports to consider what might have contributed to accidents, so you can make better decisions if you face similar circumstances**.

That is not, however, what we used to call a cop-out. As news events demonstrated this week, no one is impervious to hazard, and we all need to actively manage risks even when the mitigations aren't popular or convenient. As Doug wrote, we're all better off if we share empathy for those

who have fallen even as we study the circumstances of their fall. I welcome reader ideas to help us all learn more from their experiences, and the experiences of others. Thank you, Doug.

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

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I'm doing another webinar

This one is for [my real job](#). It's oriented toward operation of Beech airplanes, but covers many things that are applicable to all pilots, VFR and IFR, single and twin, reciprocating and turbine. If you can't watch it live the recording will be available at the same link afterward.

Flying Stabilized Approaches In Beech Airplanes

Topic: Thomas P. Turner Presents Flying Stabilized Instrument And Visual Approaches, including Tom's "Rule Of 10s" for increased accuracy

Tuesday, October 13, 2020 at 19:00 Central Daylight Time (17:00 PDT, 18:00 MDT, 20:00 EDT, 14:00 HST, 16:00 AKDT, 17:00 Arizona, **00:00 GMT 14 OCT**)

Select Number: CE03102074

Description: A successful landing is the result of a good approach. Whether a visual landing or an instrument approach, a stabilized glide path makes it easier to fly a more accurate and safe touchdown.

In this program we'll cover:

- What it means to fly a "stabilized approach"
- "By the numbers" flying for instrument and visual approaches
- Whether, when and how to use flaps in an approach
- The "Rule of 10s" for increased accuracy on an approach
- Answers to your questions.

To view further details and to view this webinar [click here](#).

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