



# **FLYING LESSONS for February 11, 2021**

*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 as a scenario unfolds. So 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:***

**Attempted visual flight** into Instrument Meteorological Conditions (IMC) is consistently one of the most common general aviation accident scenarios. [AOPA tells us](#) nearly half of all weather-related mishaps involve “VFR into IMC”—and 90% of them are fatal. About a third of all VFR into IMC crashes involve an experienced pilot who holds an instrument rating.

**Usually** these tragic crashes make the news, and may receive some attention again when the NTSB preliminary report comes out a few weeks later. When investigation is complete and the final, Probable Cause report is released the accident is already all but forgotten. The details of the crash are all but ignored, and become just another entry in the long VFR into IMC column in the statistical reports. We don’t learn much.

**Occasionally** there’s an exception. Usually it’s not the circumstances of the crash, but instead the names of the people involved that make them stand out. If you’ve been flying long you know the basic facts of [the JFK, Jr. crash](#). Most recently, our attention has been drawn to the fatal [Sikorsky S-76 helicopter crash](#) that killed nine people, among them basketball star Kobe Bryant. Although the final report is not yet published, the NTSB held a public meeting on this crash this week that is being widely reported in the aviation press. Here is [NTSB’s detailed description of its findings](#).

**The scenario** is all too familiar: flying under a cloud deck and funneled along a route between localized high terrain, the pilot continued flying lower and lower until he had no choice but enter the clouds. During his attempted escape the pilot lost control of the aircraft and it spiraled into the ground. “Unfortunately, we continue to see these same issues influence poor decision making among otherwise experienced pilots in aviation crashes,” said NTSB Chairman Robert Sumwalt. “Had this pilot not succumbed to the pressures he placed on himself to continue the flight into adverse weather, it is likely this accident would not have happened.” The NTSB placed blame on the pilot’s employer and its culture of safety as well. “A robust safety management system can help operators like Island Express provide the support their pilots need to help them resist such very real pressures.”

**As is my** self-imposed mission, the week following “the Kobe Bryant crash” *FLYING LESSONS* focused on the general topic of attempted visual flight into IMC. It’s one of the more extensive *LESSONS* I’ve ever written, including several real-world mitigations—in the interest for brevity here I’ll let you [read the January 30, 2020 FLYING LESSONS here](#). Then come back here for a new *LESSON* as a result now.

**The LESSON now:** Compare what I wrote the week of the crash to the NTSB’s official findings now. I’m not saying this in boast; instead, I’m pointing out **the depressing predictability**

**of aviation accidents**, so much so that with only the barest preliminary information it's frequently possible to learn as much from a mishap as we can after the official investigation is complete. NTSB and other Air Safety Investigators (ASI) provide a valuable, expert and quite necessary service. Unfortunately, the conclusion often comes down to this: **“those who fail to learn from [accident] history are doomed to repeat it.”**

**The great news** is that by learning these *LESSONS* and incorporating them into our flight planning and inflight decision-making we can detect the scenarios that often lead to a crash, and take active steps to avoid continuing into the scenario ourselves.

**Instructor and aviation podcaster** Max Trescott today published a blog that contains [five good LESSONS from the NTSB's public meeting](#). AVWeb's Paul Bertorelli added insights as well, including how the crash seems to be the tragic result of [“a split-second wrong decision.”](#)

**This time, at least**, we're talking about what we learn in the final stages of an accident report. Trouble is, The week's overriding *LESSONS*? **Plan and manage your decisions so that you don't find yourself having to make a snap decision about conditions you should have been able to anticipate and mitigate.**

See:

<https://www.aopa.org/training-and-safety/air-safety-institute/safety-centers/vfr-into-imc>  
<https://app.nts.gov/pdfgenerator/ReportGeneratorFile.ashx?EventID=20001212X19354&AKey=1&RTtype=Final&IType=MA>  
<https://data.nts.gov/carol-reppen/api/Aviation/ReportMain/GenerateNewestReport/100863/pdf>  
<https://www.nts.gov/news/press-releases/Pages/NR20210209.aspx>  
<https://www.mastery-flight-training.com/20200130-flying-lessons.pdf>  
[https://www.maxtrescott.com/max\\_trescott\\_on\\_general\\_a/](https://www.maxtrescott.com/max_trescott_on_general_a/)  
<https://www.avweb.com/multimedia/how-a-split-second-wrong-decision-caused-the-kobe-bryant-fatal-crash/>

Questions? Comments? Experiences to relate? Send them to [mastery.flight.training@cox.net](mailto:mastery.flight.training@cox.net).



See <https://pilotworkshop.com>

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

Retired Cessna sales and transportation pilot (and past owner of a fabulously updated Cessna 182) Charles Lloyd writes:

A friend shared a copy of the January 2020 edition of *Aviation Safety*. Your article [“In Close Approach”](#) was especially meaningful to be because of an experience that happened 20 years ago.

I was on a trip to Charlotte [North Carolina], KCLT. The ceiling was not very low but the entire approach was IMC. I requested [runway] 18L to turn off directly to the GA ramp. “Unable,” was the response and [I] was told to expect 18R which is now 18C. Then I got a call with vectors for 18L. I had about a year's experience with my Garmin 430. There was very little information on training in 2000 and I had studied the manual to learn what I could about this new avionics package in my 182.

[I] got the approach selected for 18L and was close to the final approach fix when Approach told me it would not work and changed me back to 18R. The chain of events was building as I changed heading, twisted knobs and pushed buttons plus confirmed I had the correct ILS frequency for the 18R approach. As I turned on the localizer I lost all SA [situational awareness]. Somehow I made it down safely and taxied across the airport to the GA ramp. After reviewing the approach I called the tower and talked to the supervisor about the sequence of events, and told him I appreciated the controller trying to help me but that close-in changes for single pilot operations were not a good idea.

Later I analyzed what is necessary to set up an approach on a Garmin 430. How many knob twists and button pushes to you think are necessary to load or arm an approach? The number is 18! The time [it takes] to execute these actions is probably at least 45 seconds or longer. How far will you travel in this time? At least two miles or farther [at approach speeds]. I analyzed the same action in the Citation XL's Honeywell FMS. [It] turned out to be the same number of finger actions, 18. However, there were two people in the cockpit.

I made a personal rule to *accept one change only and if another change [comes] to announce a go around and start over.*

Wise choice, Charles. I agree. The capability of modern avionics comes with a corresponding complexity in their operation. Under pressure or under-trained, the complexity can create a loss of situational awareness more rapidly than old-school, tune-and-twist VOR and ILS navigation. Put differently, **it takes time and effort to earn an improvement in SA.** Thanks for relating your experience and the *LESSON* you learned.

See <https://www.aviationsafetymagazine.com>

I'll get to much more reader Debrief email next week.

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

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"The great success of *FLYING LESSONS Weekly* is rooted in how often you do the right thing in encouraging all of us to fly safely and showing us ways to do so." – Bruce Dickerson

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Welcome aboard to the very many new subscribers this week, many of whom likely joined after hearing [my presentation](#) on Max Trescott's [Aviation News Talk](#) podcast. To those and all new readers, thanks for subscribing, and I look forward to your participation in the discussion.

See:

<https://aviationnewstalk.com/podcast/176-traffic-pattern-stall-myths-listener-feedback-ga-news/>

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