



BY BARRY SCHIFF

The possible turn

When unconventional wisdom goes mainstream

IT WAS APRIL 8, 1957. I was checking out my student, Henry Meyers, in a Stinson 108-2 Voyager, N40156. Shortly after liftoff from Santa Monica, California's Runway 21, the Franklin engine threw a piston rod through the number 3 cylinder and brought our climb to an explosive halt. We had just passed over the departure end of the runway, and a densely populated residential area discouraged me from attempting to land straight ahead. It would have been ugly. I instead and almost instinctively reversed course and landed on the runway downwind and in the opposite direction.

It was this event—and the criticism I received for turning around following an engine failure after takeoff—that triggered the beginning of what has been a decades-long study of this controversial subject. The literature of the day dogmatically insisted that a pilot should always land straight ahead following an engine failure that occurs shortly after liftoff. It became my contention, however, that although landing straight ahead almost always is the safest course of action, there are exceptions to the rule—circumstances when turning around would be the preferred option.

My first article discussing this subject, “Engine Failure after Takeoff,” was published in the November 1974 edition of this magazine. In it I described the results of flight testing that led to what I considered to be the safest manner in which to execute a turnaround maneuver. It also discussed the conditions that would be necessary to consider such a maneuver.

As my thoughts about this subject evolved and solidified over the years, I continued to write about them in subsequent articles as well as in my monthly column, “The Proficient Pilot.” My most recent article about it, “Unconventional Wisdom,” appeared on these pages in April 2011.

These articles continued to attract criticism and derision, although some conceded that turning 30 or so degrees right or left following an engine failure would be acceptable. My detractors even formed an informal counterculture, authors and speakers whose mantra was that a pilot should never turn around following an engine failure, labeling such a maneuver as “the impossible turn.”

These well-intended naysayers cited numerous fatal accidents in which pilots attempted to return to the runway following a low-altitude engine failure after takeoff. I'm willing to bet, however, that the majority of these ill-fated pilots had not had the benefit of the training

needed to do this safely. On the other hand, many pilots have performed the turnaround without incident. The number of such uneventful landings, however, cannot be determined because they obviously never became accident statistics.

After 44 years of having to endure criticism for publicly advocating that pilots need to recognize and be prepared for those times and conditions when turning around is preferable to landing straight ahead, I was ready to concede that I had been fighting a losing battle. I was stunned, therefore, to recently learn that I had been vindicated by an unexpected ally. The FAA now states matter-of-factly in paragraph A.11.4 of Advisory Circular 61-83J dated September 13, 2018, that “flight instructors should demonstrate and teach trainees when and how to make a safe 180-degree turnback to the field after an engine failure.”

Never in a million years did I expect that the FAA would come to my rescue. The impossible turn is now considered possible.

It is important for me to explain that it has never been my goal to encourage anyone to execute a low-altitude return to the runway. But let's face it: An engine failure shortly after takeoff places a pilot in extreme jeopardy. We need to be aware of our options and when they might be available.

My only concern about the FAA's suggestion in Appendix A of AC 61-83J is that it leaves to instructors to determine how best to demonstrate and teach when and how to make a safe turnaround. It is critical, I believe, for the FAA—perhaps with industry cooperation—to develop and provide the necessary guidelines. An improperly executed turnaround can just as easily lead to the type of fatal accidents mentioned earlier.

As a start, the FAA might want to consider publishing the principles involved in turning around safely that will be presented during a live, hour-long broadcast by my son, Brian, a captain for a major airline and an accomplished general aviation flight instructor. His seminar is sponsored by the National Association of Flight Instructors and will be based to a large extent on my decades of study and research involving this subject. The seminar will air May 15, at 8 p.m. Eastern time. All interested pilots are invited to view this broadcast live (or an archived broadcast at a later date) at www.nafinet.org/mentorlive.

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► www.barryschiff.com

BARRY SCHIFF has been a member of the Society of Experimental Test Pilots as well as a Fellow of the Royal Aeronautical Society.