**Why Some Pilots Are Bad Risk Managers**
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*December 2015 cover date*

## Why Some Pilots Are Bad Risk Managers

"You can't teach judgment." "…I'm afraid no amount of 'risk management' training is going to change your attitude." These comments were in response to John's May column "Double Trouble at Denver." John had revealed our incredible series of risk management failures on a trip in the early 70's—getting caught in a snowstorm in two separate airplanes with mechanical problems. John then expressed our fond hope that other pilots could learn from our mistakes and practice the habit of risk management.

Then here in the pages of Flying, another columnist opined, "I am rather skeptical about whether risk management (judgment) is something that can be taught and tested…" The readers and the columnist are to be excused. A lot of people confuse risk management with judgment and attitude.

Actually, the practice of risk management, as John and I see it, has two main components. The first is a habit of maintaining situational awareness by systematically thinking about risks. The second is coming up with mitigation strategies for the risks you have thought of. On our trip to Denver John and I clearly failed at both.

Regarding situational awareness, we were in the category of "fat, dumb, and happy." As we were approaching Denver from the east, the weather was forecast to be good. We didn't have any concerns.

Suddenly the weather got worse, with abundant snow and ice. We had been caught by the fickle system known as an "upslope condition." We had never heard of an upslope condition. We were very surprised.

We had, of course, been taught about counterclockwise circulation around lows (in the Northern Hemisphere) and orographic lift. What we had not been taught was where the topside of a low might combine with rising terrain to create orographic lift with copious snow and ice. That "where" is in eastern Colorado.

Many pilots who get into trouble in their flying are, like us, the most surprised people on earth. The problem is that we don't know what we don't know. In many cases regarding risk management, we are sent out the door as we leave flight training with, "Y'all be careful, hear?", but no systematic training on how to identify and mitigate risks.

An ideal way for a learning pilot to develop the habit of maintaining situational awareness is with scenario-based training during which they develop the habit of active risk identification. Much of our aviation knowledge, like counterclockwise flow around a low (in the Northern Hemisphere) and orographic lift, is an abstraction until we apply it in a practical scenario.

A lot of flight instruction is about learning to develop habits like meticulously inspecting our aircraft before taking it into the air, using checklists, fastening seat belts, and many, many more. Risk management is just another one of those habits that, once learned, will serve us well for the rest of our flying.

These habits are often supported with memory aids and sayings like "GUMP," "CIGAR TIPS," and "Black square--you're there." Pilots find them helpful.

Risk management comes with its own memory aids. There's PAVE for putting risks into the categories of Pilot, Aircraft, enVironment, and External/internal pressures. Plus, there's C-CARE for Changes, Consequences, Alternatives, Reality, and External/internal pressures.

The cure to the "fat, dumb and happy" status, like John and I were in on the way to Denver, is relatively simple—learn to use habit patterns and tools to help maintain situational awareness and identify risks.

The cure to the risk mitigation component is more complicated. Many pilots are, like John and I previously were, resistant to mitigating the risks.

We've all seen pilots who came to grief after continuing in the face of one mounting risk after another. You had to ask, "What were they thinking?" What made them accept risks that, in retrospect at least, were unacceptable to everyone else?

When other pilots see this they tend to call the offending pilot names like "idiot," "stupid," "arrogant." But that response is not an adequate explanation, or helpful in understanding their behavior. The answer, I believe, lies in the last "E" in both PAVE and C-CARE. It stands for the external and internal pressures that impinge on pilots. Those pressures and how they affect pilots vary with the individual, but they fall into at least two identifiable groups.

The first group is, fortunately, relatively small. It is the Big-Shot/Show-Off/Thrill-Seeker group. They step into risk. Taking risk is a part of the fun of flying for them. This group knows they are taking risks, but are sure they can get away with it.

They think risk-taking makes them look like superior pilots. There is a tendency for these pilots to keep on enjoying risk-taking until they, and their passengers, pay the ultimate price.

A pilot who lost his pilot's license twice, first for buzzing the Santa Monica Pier and later for illegally selling rides to the public, was eventually killed along with his very unfortunate passenger while attempting to touch his aircraft's tires on the water to produce a water-skiing effect for a video.

A Baron pilot killed himself and four passengers attempting the aerobatics he saw performed in a Twin-Beech at Sun 'n Fun. He had attempted to do the same maneuvers on an earlier flight, but a pilot-passenger in the front seat had prevented him.

These show-off pilots see professionals do things and think they can do them too. They fail to understand that the professionals have worked up to a high level after years of very careful training and practice. Plus, professional show pilots are keenly aware of the risks, and see risk mitigation as integral to what they do for a living. The best hope for the show-off/thrill-seeker is for them to realize that to be anything less than equally focused on risk management is a sign of a rank amateur.

The second group potentially includes most pilots including, I believe, John and me in the 70s. We all became pilots because we were willing to take on a very tough challenge over an extended period of time. We studied a body of knowledge and then submitted to a test on it. We learned difficult skills that we weren't certain, in the beginning, we could master. Nearly every learning pilot says at one time

or another, "You know, I'm not sure I am going to be able to do this." Then we soloed and took our lives into our own hands thousands of feet above the ground. We persisted, presented ourselves for evaluation, and became certificated pilots.

Flying self-selects people who are willing to do all this. They are good at almost everything they do. They are the movers and shakers of every community they belong to. They are hard-wired to complete what they set out to do. This goal-orientation is a wonderful characteristic in almost all of life, but as a pilot it can be a risk factor. It tends to make us want to keep on going when good risk mitigation says we should change our plan.

An Episcopalian priest who took one of our classes in the 70s was also a physician. He died on a solo cross country after being begged by the FBO to come in to talk before he turned around and flew the second leg in worsening weather. He had to get back in time to give a speech to a large crowd.

A friend of ours who owned a ski resort was leaving the resort in the evening in his Cardinal when he became disoriented and flew back into the ground. He was late for a meeting back in town.

And of course John and I continued into worsening weather to maintain our schedule into Denver. We weren't courting risk or showing off. We were simply hard-wired to complete what we set out to do, and resistant to anything that reduced the utility of our flying.

Like the show-offs, the goal-oriented pilots know they are taking some risk, but they think they can get away with it and they hate to give up on goals.

After we had our subsequent accident, John and I spent considerable time reflecting on what it was that made us in particular resistant to mitigating risk. As a result, we came to terms with the concept that while in GA we don't want or need to be as rigid as the airlines, we have to accept reasonable limitations on our utility. We consider our introspection on the subject time well spent. We highly recommend it to anyone who flies.