

Flight Discipline

Whether one's professional endeavors mold us into "cooks, bakers or candlestick makers", we each face individual and collective challenges from time to time.

While overtly admitting that after 40 years of flying I am still chasing that "perfect flight", I do reflect on some salient points (that by either having a vested interest or simply being in the wrong place at the wrong time and unfortunately morphing into a witness) I have learned much over those 16,000 plus flight hours. While some of those lessons have been easily learned, others have been a product of that great learning institution - the school of hard knocks, where the tuition is often the bent metal of an airplane, or worse, a funeral.

In the early 1980's Dr. Clay Fouschee, an internationally recognized expert on human factors, found that failures of airmanship mostly occur not because a lack of proficiency or skill, but because of an inability to coordinate skills into effective courses of action. These failures may indicate that one or more of the pieces of the airmanship puzzle may be missing, at least in some of us.

I know to this date, I still find myself asking some very familiar questions "what else do I need to know?" and "where do I go to get it"?

From the beginning of our existence, mankind has dreamed of flying, forever gazing skyward at the majestic flight of birds, wondering what it must look like and feel like to have control of that endless blue. Before mankind ever left the ground the idea of flight became intoxicating and remains so today. From the childlike awe of the uninitiated spectator watching a military aerial demonstration for the first time to the seasoned operational pilot making a crosswind landing at weather minimums, flying looks and feels good when it's done right.

In their recently published bestseller book Real Life MBA former GE CEO Jack Welch and his wife Jackie speak of "doing it right". One of their (once again cornerstones) emphases is on continuing education, and that mental toughness to seek personal improvement on a consistent basis. How then can we as aviators abide by this wise council? The alternative for us is to conveniently fall prey to "the expert's curse", which is flavored with apathy and complacency - ripe ingredients in the accident recipe. So what is it that allows us to "do it right"? Historically great aviators tend to possess certain common qualities and characteristics.

As we glimpse into the crystal ball, these common qualities take on very little change despite enhancements of technologies and complexities. Extended, time-proven analysis of these cornerstone traits reveals three foundational principles of expert airmanship (regardless of time frame analyzed) - *skill, proficiency and the discipline* to apply them in a safe and efficient manner.

Skill, being that hand eye coordination, that ability to perform whatever mechanical/mental tasks are required. This to a large extent comes through repetitive exposures over more often than not, long periods of time, and in a myriad of scenarios. Proficiency is simply how current you are at performing those skills. Discipline in this case is *"the strength of will required to systematically develop all areas of airmanship and execute sound judgment in the presence of temptations to do otherwise; and to safely plan and employ an aircraft within all operational, regulatory, organizational and commonsense guidelines"*.

For a few moments, let's accept this definition "hook-line and sinker". How do we handle distractions and temptations that may cause a failure of flight discipline? And as we ponder these, let's remember that rules are in the books for a reason. There are usually a lot more reasons to follow the rules than to break them.

Let's think through the following questions:

- What tempts us to stray outside the lines?
- What weaknesses do we overlook?
- What technology do we take for granted that lets our fundamental flying skills grow soft?
- What factors would it take to push us over the line into a region of poor judgment?

In contrast, in a focused study of expertise in aviation in 1986, Dr. Bob Helmrich and Dr. Clay Foushee found the following characteristics present in their definition of an *expert* pilot.

- Recognizes his/her personal limitations.
- Recognizes diminished decision-making capacity in emergencies.
- Discusses personal limitations.
- Openly encourages others to question decisions.
- Knows what rules apply to their flight environments.
- Keep themselves out of tight boxes that make require emergency deviations for standard operating policies and procedures.
- Has the ability to master the temptation to deviate unnecessarily.

Each of these characteristics highlights the importance of an individual's ability to self-regulate and practice sound discipline. In the end as we examine one last issue by comparing risk vs. reward we come to realize that there is in fact a cost-benefit to flight discipline.

- Flight discipline violations have obvious and unseen costs to the individuals and organizations in which the aviator flies.
- The potential costs eventually outweigh the potential gains from an event of poor discipline.
- Elementary conclusion of this equation is that it's not worth it to tempt fate with an act of poor discipline, either in preparation or execution phases of flight.
- Violations of flight discipline have an insidious creeping effect on an aviator's good judgment, often negatively influencing future courses of action.
- A single step down the slippery slope of ethical compromise can deflect future judgment and willpower – often leading to decisions to accept current risks based upon past violations that did not end badly.
- Aviators who get away with bending the rule in one situation are far more likely to try it again in a tighter box of conditions.
- In-group settings, violations of flight discipline are contagious, and require quarantine at the first symptom.

In the 1980's Malcolm Gladwell published his bestseller, titled The Outliers in which he describes high levels of success in many different fields. – The common dominator

is the "10,000 hour rule", yep after that many hours practicing a specific task – we would be really good at it. And while I am not proposing that you spend that amount of time on flight discipline, do give it some serious thought. The challenge to all of us is to make it a big part of our "repertoire". If it's a bit dull and has not been polished in a while, let's do so prior to the next flight – let's make sure we add it to our bag of tricks.

One last challenge – when was the last time you actually practiced a "rope break"?

Fly Safe.

Mario Jimenez
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My thanks to Dr. Tony Kern for providing most of the material for this article, referenced in his book [Redefining Airmanship](#).