



Decisions, Decisions...

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I have to admit that before I'd started flying, I gave little thought to how critical some decisions I made in my day effected my life down the road. (Boy, lucky for me I started flying, huh?) After a few thousand of hours, it's still amazing to me how flying amplifies how important it is to make the right decision, at the right time, at just the right amount, sometimes because our very lives depend on it!

It turns out that I'm not alone in noticing this simple fact either. Extensive research on human factors, from many notable universities and NASA, have quantifiable reams of data which show how we make decisions as well as why we make the errors we do. The following is just a small condensed example of what they've come up with.

Decision-making requires a blend of two types of factors when faced with the need to make one. The first, and most predominant are from *habit patterns* we've developed in our lives through repetition and training which we then apply to something new. The other factor comes from a structured decision making process which includes data evaluation affecting our decision. In short, it's a data vs. time issue.

Preflight planning a trip in advance allows us the opportunity to fly it in our head and make decisions and corrections without the negative influence of time. It's important to note that the more we're faced with a time constraint, the more we revert back to habit patterns we've learned. This may, or may not, be a good thing based on what's in front of us at the time.

"Error". The result of a bad decision. We, as pilots, are generally a proud bunch, (according to statistics). The ability to fly is very technically demanding, and to master it, very rewarding. So when a decisional *error* is pointed out to us in our flying, it might feel like we've slipped a little among our peers of aviators. However, once we remove the emotional aspect of the errors we make, objective categories start to emerge concerning the decision errors we make as humans. **A. Fear of Loss (Loss Aversion):** In this category, we might tend to make wrong decisions based on a negative

consequence than if we were to do it another way. Example: *Loss of time*, resulting in doing a run-up while taxiing. A greater significance placed on loss (time) vs. equal gain (dedicated run-up). Another example might be taking off in hopes that the weather will clear ahead. This has killed more than its fair share of pilots. **B. The Sunk Cost Fallacy:** The best example used here might be the stock market and a resistance to sell. "It's just got to turn around," you might've said to yourself only to find your stock plunging lower and lower. In aviation it might be continually coming across broken things in/on the aircraft, and finding yourself making compromises and excuses about them. All of this falls under the Sunk Cost Fallacy

C. Over Confidence: Research suggests that 90% of all pilots consider their skills to be above average. Although it takes a lot skill to become pilot, many of us out there consider our skills to be above the norm within our own field of aviation as well, and as a result mistakes can be made influenced by this.

D. Preferential Bias: It's interesting to note that we sometimes distort the information/data coming to us in order to support our own preferences. Have you ever heard only what you'd wanted to hear, or seen only what you'd wanted to see? Constantly asking the same questions, or doing the same thing, thinking it will change the results is what this fallacy category's all about.

E. Conflict Choice: When options and information bombard us, and too much information is coming at us all at once, our brains get saturated and numbed. When we're faced with this type of situation we tend to "*opt out*" and take the path of least resistance and revert to habit pattern.

Concerning the decision making process, I'm constantly reminded of a saying I'd seen on a poster long ago which reads, "Aviation in itself is not inherently dangerous. But, to an even greater degree than the sea, it is terribly unforgiving of any carelessness, incapacity, or neglect." ...May we all make good decisions!

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Thursday, September 5th. 2002 @ 7:00pm - 9:00pm.

Where: Civic & Convention Center, 1440 W Desert Hills Dr. Yuma, AZ.
Subject: Yuma airport and runway safety at Yuma
Presented by: AZ Aviation Safety Program & MCAS Yuma Operations.
Sponsored by: Art Rodriguez, Aviation Safety Counselor - Yuma.
928-246-7379

What's Inside this Issue

"Decisions, Decisions..."

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Aviation Safety Seminar Notices

Wednesday, September 11, 2002 @ 7:00pm - 9:00pm.

Where: TUCSON, AZ.
Best Western Airport Inn, 7060 W. Tucson Blvd.
Subject: Single Pilot IFR.
Presented by: AOPA, Air Safety Foundation.
Sponsored by: AOPA.

Thursday, September 12, 2002 @ 7:00pm – 9:00pm

Where: Mesa, AZ, Mesa Community College, Navajo Room, Kirk Student Center.
Subject: "Single Pilot IFR".
Presented by: AOPA, Air Safety Foundation.
Sponsored by: AOPA.

In October!

EAA's Copperstate Fly-in; 10th. – 13th.