



# The Seat Cushion

Saving your tail and preventing injury since aviation's inception!

## Defensive Flying

By Brent Crow

During my driver's training to operate a car, they showed us a video on defensive driving. Basically this involved trying to keep an "escape zone" around the vehicle while driving, having a large following distance, and being aware of blind spots on your vehicle as well as those around you. Being an aviator, I then tried to apply these in an aviation setting. Perhaps you may find the following defensive flying techniques useful in preventing risk:

→ Keep scanning. We rely on see-and-avoid as our primary method to avoid a collision with other aircraft. Try to learn how to do tasks in the cockpit more by feel than having to focus attention in the cockpit to accomplish tasks. Of course – don't allow aircraft to hide in your blind spots.

→ Coordinate on CTAF. The scariest time on a cross country to an uncontrolled field is when

you announce on CTAF you are "entering downwind mid-field," after having announced intentions since 10nm out. Then you immediately hear another traffic state for their first call that they are "entering downwind mid-field." Now you are in danger of a mid-air collision with an aircraft you don't have in sight. It would be best to exit the pattern and circle until you have the traffic in sight. Once you do, coordinate with them – "Aircraft on left downwind, I have you in sight, will enter left downwind Runway 12 to follow." Feel free to ask other traffic if they have you in sight. If they don't have you in sight – perhaps think of putting them in front of you instead of allowing them to sit in your blind spot behind you.

→ Don't let your guard down just because the airport has an air traffic control tower. Listen to what's happening around

you and don't accept a clearance from ATC if you don't understand it. For instance, if you are on right downwind coming abeam the departure end of the runway, and tower tells a student solo who just departed to make an early right crosswind, it may be prudent to widen your pattern and query ATC until you get the student in sight. This also is important when holding short of the runway and you are cleared for takeoff. A defensive pilot does not take ATC at their word, but instead checks his clearance against previous clearances to land, and clears the approach visually before departing.

→ Always be ready to go around. I always have the mentality on approach that I am more focused on going around than on making the landing. My hand sits ready to push the throttle lever in, and I'm constantly thinking, "I'm going around." This way, when my approach

suddenly becomes unstable, my mind will automatically initiate the plan that has been at the forefront all along – "I'm going around."

→ Don't let the student take it too far (instructors this one's for you!). How far is too far? That is dependent on how close you are to loss of control in any situation. When allowing my student to practice landings, I'll let the student make mistakes so they can learn to correct them. But if the mistake is allowing the operation of the aircraft to escape my control, I immediately take controls and shout

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**KEEP  
CALM  
AND  
FLY DEFENSIVELY**

### Dates to remember:

- 30 May—Memorial Day  
**School is Closed**
- 5 June—Ramadan begins
- 4 July—Independence Day  
**School is Closed**
- 15 July—Invention Challenge  
**Submissions Due!**
- 1 Aug—Invention Challenge  
**Voting Ends**
- 28-29 October—Copperstate

Aviation is not in itself inherently dangerous. But to an even greater degree than even the sea, it is terribly unforgiving of any carelessness, incapacity or neglect.

(Alfred Gilmer Lamplugh)

## Risk Factor: Stress

By Theresa Farley



Stress, what do you think of when you see that word? Do you think exam? Checkride? What to have for dinner? All these are stressors but obviously some cause more 'stress'.

But what is stress? For our purposes stress as defined by Merriam-Webster is "one of bodily or

mental tension resulting from factors that tend to alter an existent equilibrium". Skybrary defines stress as "a bodily response to a stimulus that disturbs or interferes with the "normal" physiological equilibrium of a person and, in the context of aviation, refers to a state of physical, mental or emotional strain due to some external or internal stimulus."

Stress is both physical and mental. While you may be preparing for a checkride and feel mental stress there is a physical component as well. You may be tired or irritable from lack of sleep from staying up late studying. You may not eat correctly which can lead to lack of mental clarity. If this pattern goes on too long the stress can affect you on

a molecular level.

Common sources of stress are grief, sadness, anger, shame, guilt, and company or family pressures. It is important to recognize where the stress is coming from and take action to deal with the stress in a healthy way.

As pilots it is vitally important that we recognize our stressors and find ways or people to help mitigate this risk. As pilots we face daily challenges through our training, testing, and everyday work life. Add into that home and family and it begins to take a toll on our mental and physical well-being. The aircraft accident files are filled with investigations where stress was a contributing factor. Some well-known examples are American Airlines Flight 965, JetBlue Flight 991, and

John Kennedy Jr.

If you are experiencing stress know that some is normal and helpful, but if you start feeling overwhelmed speak up. Speak with a family member, friend, colleague, instructor, or seek professional advice.

Knowing that stress is a risk factor is the first step. The next step is to take action to mitigate this risk. Realize one size does not fit all, but some common coping strategies are exercise, ensuring adequate sleep, or communicating with a trusted confidant. Above all do not keep it in, like Mt. Vesuvius, if you keep all that pressure trapped inside you it will come out and could end in death and destruction. →

### Defensive Flying Cont. from pg 1

"my controls." Tip: make sure your student doesn't become discouraged by you taking controls – brief them, and give them positive reinforcement!

→ Continually formulate an emergency plan. Of course you should pre-plan emergency landing fields along your route before you get in the cockpit, but you also need to be scanning for emergency landing sites during your flight.

→ Stay away from airspace you don't want to go into. All of us know this, but when it comes to actually flying your route, will you

know how to avoid the airspace? A great example is R2310, SE of KIWA. Most know it's there, but then accidentally fly into it because they don't know how to use pilotage and dead reckoning skills to help them stay aware of its location. First, plan your navigation legs to stay well clear. Secondly, what visual checkpoints can you use to make sure you stay clear? R2310 has a road which runs down the west side, giving you a perfect reference to remain clear – but only if you can identify the road from the air and pay attention to its relation to you in flight. Lastly, you can use radio aids like GPS,

VOR's and DME to help you remain clear of it. Don't forget about those altitude bugs too!

→ Practice maneuvers in a small area. I once was with a pilot who wandered all over the practice area conducting maneuvers. This doesn't help people on the practice area frequency know where to expect you. Instead, fly a race-track pattern and conduct your maneuvers within it as best you can.

→ Don't turn base on parallel runways until you clear the pattern opposite you. No pilot

likes to fly base head-on with

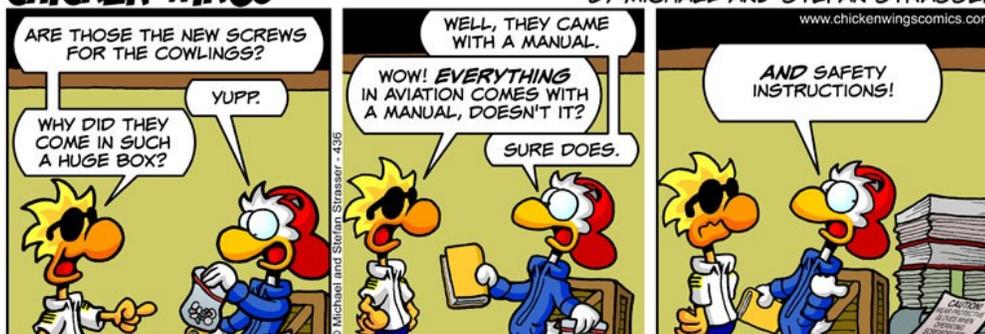
another aircraft. To combat this, simply look on the opposite downwind and extended final and be sure there is a slot for you. If you see traffic, you can extend your downwind to allow for better sequencing, or vary your speed.

→ Know your limitations and obey them. Write down your limitations so that you can reference them on your kneeboard. If you don't – you'll be more tempted to push your limits. Instructors can be great mentors in helping you to identify limitations, as well as help you achieve higher ones. Don't go test your boundaries without consulting your instructor first. VFR flight into IMC, crosswind landing mishaps, flying new aircraft or new limitations, or tangling with thunderstorms will all be very inviting to a person with flexible limitations. →

**"Don't ever let an airplane take you someplace where your brain hasn't arrived at five minutes earlier."**

## CHICKEN WINGS

BY MICHAEL AND STEFAN STRASSER



# Flight Safety Invention Challenge!

Got a great idea to improve aviation safety? Submit it to the Invention Challenge and you may win a prize or even see your invention put to use!

Challenge Rules:

You must submit two pages:

- 1 page describing your invention or innovation – who will use it, what it does, how it works, etc.
- 1 page picture or drawing of your invention or innovation.

Entries must be received by July 15<sup>th</sup>, 2016 to be considered for a prize. Turn in your 2 pages to the Safety Office, and we will remove your name and post on the wall in the student flight planning room with a number. After July 15<sup>th</sup>, voting ballots will be provided for everyone in the planning room to allow everyone to vote for their top three. Voting will end August 1<sup>st</sup> at 1700 local. Only 1 entry and one ballot per person.

“I have no special talents. I am only passionately curious.” – Albert Einstein

