

Awareness, Accidents and Airmanship (Part three of a three part series)

By John Matylonek, USHGA certified Instructor

This last article on accidents continues into the realm of personality and culture and how they affect our flying. Personalities are coping behaviors and dispositions that we have used successfully in dealing with life challenges. Some of these work to our flying advantage, some do not. Some of these quirks interact with our culture in negative ways. Our culture can be defined as the organizational support structure that provides the privileges of free-flight. The collective responsibility for our flying privileges trumps self-interest. Thus, the FAA has made us all responsible for keeping the public and our membership safe through our own certification, proficiency and regulation programs. Our clubs, composed of members of USHGA, have the right to refuse access to regulated sites. Yes, you are USHGA. This forms the basis of accidents that arise from our collective actions or inactions.

Attitude Management and Blocks to Awareness

Our attitudes and behaviors are often a complex mix of conscious and unconscious motivations. Waking up with the "wrong" person makes this obvious. We easily fool ourselves into all sorts of unsafe behaviors. Sitting still for some moments to determine to what degree the following attitudes apply can be helpful.

HAZARDOUS ATTITUDES	ANTIDOTES
1. Anti-Authority: Joe is an expert pilot that takes his friend's tandem every chance he gets despite not having the rating, or following the specific FAA and USHGA rules for tandem flight. He takes his girlfriend's friend and a major accident occurs. Her family complains to a lawyer that calls the FAA. USHGA loses the tandem exemption.	Follow USHGA and site rules. They are usually right. Listen to your trusted instructor's or sponsor's judgment. Resolve parental issues.
2. Impulsivity/Excess Enthusiasm: Tom wants to fly now because everyone else is and he has had enough of the training hill work.	Not so fast. Think first. GATHER! Wait for appropriate conditions. Take your Ritalin.
3. Invulnerability: Steve is not worried about an accident since he has top landed here in all conditions many times before and he has not had any problems. This time he does have a problem.	It could happen to me. Observe a large fly-in with various skilled pilots. Have a small accident! Increase your margin of error.
4. Macho or Ego: John often brags to his friends about his skills as a pilot and how close to the trees he flies. During a particular flight he buzzes the launch slot and clips a tree.	Taking chances is foolish. Don't attach self-worth to flight. Find smooth air and an unregulated dune to practice on. Try Yoga.
5. Resignation:	I'm not helpless. DECIDE! I

<p>Jim finds the a problem in the stability of his canopy. It keeps collapsing and self correcting. He ignores the dynamic and just wants to get down rather search for the cause and solve it. It collapses 20 feet above the landing zone.</p>	<p>can make a difference during every phase of flight. Don't resign, get fired (up).</p>
<p>6. Laziness: Martha hasn't flown for over two years. She dreads the idea of going to the training hill and walking up the hill multiple times to get the needed review. She tries launching at the local mountain site and blows the launch.</p>	<p>My body and mind can be honed to the levels of skill needed through a little work. Live with the Amish for awhile.</p>
<p>7. Lack of Empathy: Sam likes to gossip about and judge other pilots because it bolsters his self-concept. A new pilot in the group senses all this group talk and tries to prove himself by performing something radical. It doesn't work.</p>	<p>Our behavior affects other pilots' performances whether we like to admit to it or not. Study the Golden Rule.</p>
<p>8. Complacency: Brad has flown these same sites over and over again with no incidents. His casualness peaks when he stops doing his preflight and forgets to hook-in properly.</p>	<p>Keep a beginner's alertness throughout your career by staying in the moment. Provide yourself more safe challenges. See No. 3</p>
<p>9. Excessive Frugality: Bob wants to get into the sport as inexpensively as possible. He values this over instruction and purchasing the appropriate equipment. Rather than working for a time to save the money for complete instruction and a beginner glider he succumbs to purchasing a cheap advanced glider and tutors himself. He crashes, loses his investment and has medical bills.</p>	<p>You get exactly what you pay for in foot-launched flight. Of all the activities to be cheap on, free-flight is not it!</p>
<p>10. Timidity and Lack of Commitment: Harry sporadically trains or practices because of irrational fears, conflicts, or focus. His progression is spotty. This keeps him on perpetual skill plateau that restricts his versatility. He is known as "Hairy"</p>	<p>Whatever you do or dream you can, begin it. Boldness has genius, power and magic in it. Begin it now - Goethe</p>

Adapted from: The Handbook of Aeronautical Knowledge, FAA

We are often susceptible to these behaviors in certain situations or moods. Oftentimes, they surprise us when we least expect them. If you ever wondered where this "surprise" arises from, you are one step closer to realizing that "you" are bigger than these habits of mind and have a choice in participating in them. The more you recognize them, the more practiced you become in catching them before they actually arise. This is the essence of any kind of personal transformation. These traits may also create some group dynamics that lead to accidents.

Supervisory Errors

Local sponsoring pilots can only have a rough idea of a new or visiting pilot's ability to handle any specific challenges. They can only act as

a check in the most obvious mismatches. On the other hand, local pilots often like the enthusiasm of new-comers and want to see them have a great flight. They want to provide some benefit of the doubt. It is only polite and the new guy may be a great flying buddy. This interaction between skill-level, the site challenges and the relationship with local pilots can lead to unintended supervisory errors.

An accident is supervisory error when a pilot had been encouraged or ignored by the pilot community despite the pilot's specific or general disqualifications to fly.

Note that this situation is often a subtle unspoken collusion between the pilot and community. Unconscious incompetence on part of the pilot and unfamiliarity with what the pilot can handle allows pilot access to launch. There are other situations that arise from our interaction with pilots. They include:

- Those who have prematurely left a certified instructor's program and are now trying to learn through the varying attention of experienced pilots.
- Newly graduated pilots who have not found competent mentors and organizational support.
- Those who are seeking their first altitude flights or soaring flights and dealing with the intensity of desire to fly.
- Those without special skills ratings attempting them for the first time without instruction.
- Those who have recently "taught" themselves and are now on launch.
- Casual communities of pilots who question no one, don't "card" newcomer skill levels and don't encourage formal instruction or preparation.
- Pilots who attempt to instruct despite their lack of current certification.

Everyone and no one is at fault here. The values of self reliance reinforce the collective value of personal responsibility and casual fun for flight, even at the expense of safety. This dynamic is often switched at regulated sites because of the potential of bad publicity or endangering launch site privileges in case of an accident. Qualified new pilots may be given a hard time because of lack of first-hand knowledge about the new pilot's skill level. Also, many experienced pilots project their own fears unto new pilots. They remember how challenging those first flights were and don't want to feel 'responsible' for the new guy's mistakes.

Ideally, all visiting and new pilots provide honest information regarding their experiences and freely offer their USHGA member cards. Site members honor this by providing advice, corrective feedback and respect for newcomers. Instructors should never provide H2 or P2 ratings till high altitude strategic skills are taught (which is a fault of the current rating system). The best situation is a newly rated pilot with good mentors at their side. Being a mentor can be the satisfying contribution to the sport. In all situations, local pilots can smooth introductions by requesting the USHGA member ratings card, friendly interviews asking for specific skill-based experiences,

agreeing on "no surprise" flight plans, refraining from gossip and providing easy first challenges at the site. Experienced locals must expect some mistakes from new pilots and should always be impressed with corrective actions and attitudes displayed.

Violation Errors

The decision to break the rules of flying - physical or regulatory - often has serious consequences. For instance, Joe Oblivious is used to flying at unpopulated sites. His response to an imminent head-on collision at a fly-in is to swerve left instead of right. Unfortunately, the other pilot follows the right-hand rule and a midair collision results. Sometimes violation error and strategic or procedural error are closely related. As in the case of Jane Hotdog who continually likes to buzz launch to wow the spectators despite the no buzz site rule. Or, the guy that likes to exceed VNE or G-Loading every chance he can get. Flying rules, regulations, site protocol, placarded equipment limits exist for a reason. They serve to solve problems that exist from the collective actions of people or multiple uses of things. Since violations don't always have consequences and the reasons for the rules don't always apply in specific circumstances, pilots are continually tempted to break them. So why should we follow the rules if we can't let our spirit's soar and earn the bragging rights to our grandchildren? That is why we got into FREE-flight in the first place.

Here is the reason. Breaking a rule serves as a bad example to pilots less enlightened or lucky than you. The consequences for other pilots, the site, and the sport could be dire if they duplicate your actions. Some instructors use wheels, fly easy gliders and wear full face helmets just to provide a good example. In a similar vein, since the law of averages is at play here, performing the same violation will eventually get you too, either through enforcement, an equipment failure, an accident, or loss of flying privileges for everyone. It always takes special preparation or circumstances to break a rule. Make sure they exist. Waivers, permission, special training or modifications should always be pursued. Always act responsibly when you do.

Summary of Errors Leading to Accidents

Control technique errors are those motor skills and muscle memories resulting in the inability to maneuver, maintain attitude or direction of the glider. They result from violating personal limits and lack of training. These mostly happen in the beginner stage.

Strategic errors are those of planning, placement and follow-through. They are caused by ignoring margins of safety, in-effective flight plans and ignorance of the flight environment. These mostly happen at the novice stage.

Procedural errors are those of "assembly" - putting your aircraft together properly - and of "actual use or operation", using the aircraft properly in flight. They are caused by inattention. These mostly happen in the intermediate stage.

Supervisory errors are those due to interactions of students, instructors, mentors, and the HG community. They are caused by the lack

of effective cooperation of all concerned. These mostly happen at the beginner and novice stage.

Violational errors those caused by disregard for free flight laws, ratings, site regulations or placarded equipment limits. They are caused by lack of respect for agreements or standards made for the good of all concerned. These are likely to happen in all stages.

We could add one more to this. But the implications and solutions are way beyond the scope of this series of articles. **Airworthiness Design errors** are those of invention or manufacturing or obsolescence.

Airmanship in Free Flight

We would like to promote free flight as simple, easy, forgiving and casual. However, we know better. Free flight takes discipline to perform in a consistently safe manner. Managing the variables that lead to safe flying should be the first goal of every pilot. Once this is achieved, we can set our sights on amazing feats and records. Anytime this preparation isn't performed "accidents" are more likely to happen. Pilots can avoid the most common mistakes with incremental training based on fundamentals, review and preparation for new experiences. But accidents can occur to the most advanced, meticulous and experienced of us. These latter accidents especially rattle everyone. Are we crazy doing this? The answer is no. The risks in free flight can be managed during every phase of our flying careers. But, we are dependent on almost perfect preparation and decision-making during every flight. At the very least, we must make more good decisions than bad and resolve the latter quickly. **Technique, procedural, strategic, supervisory and violation errors** can all result from blocks to awareness. This fact emphasizes how much on the edge of human skill and technology free-flight is. Our clubs and culture should foster the attitudes and behaviors that increase awareness. Management of risks requires refining our sense of ourselves and how our aircraft fly, what their limits are, and the safe choices we make on the flying site regarding the possible. This set of perspectives and habits form the definition of airmanship.

Biography: John Matylonek operates the Oregon Hang Gliding School with centers of operation in the Willamette Valley and on the Northern Oregon Coast. You may contact him at john@oregonhanggliding.com or 541 913 1339.