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Flying over terrain like this isn't the time to wonder if anybody knows where you are or when to start looking for you. Always ensure someone does know. Photo courtesy of Mike Hangge

NEED TO KNOW

When should you carry survival gear? Always

The beauty of being prepared for anything is that you are always ready

The very nature of an accident is that we never know when it may happen





Why, when and where you should carry aviation survival gear.

By Mike Hangge

Becoming a pilot takes months of training in performance planning, meteorology, airspace, flight maneuvers and emergency procedures. Years are spent perfecting aviation skills and forming rote memorization into the correlation of all things aviation. Yet no matter how much time and energy expended, there still exists the ever-present knowledge that the big fan always is just a bolt away from blowing.

Odds are that most aviators never will experience a true emergency and few will ever fall from the sky for reasons that aren't of their own making.

But there always remains the slim chance that we might, no matter how much we would like to believe that it wouldn't ever happen to us. Aviation is a dangerous occupation filled with myriad hazards just waiting to pluck our delicate ships from the sky. When that happens, we only can hope to survive the accident and be blessed to continue with our lives.

Many aviators put a lot of thought, practice and exercise into avoiding an accident, but may be wholly unprepared for what happens after the sudden stoppage, when the crew and passengers are thrust into an equally dangerous ground-survival situation. There is a common misconception that a pilot's sole responsibility lies in avoiding the crash and that there always will be somebody else to take care of the post-crash. But as Mike Perrin of Randall's Adventure & Training/ESEE Knives pointed out, "Aviators have a responsibility to be knowledgeable on how to guide the crew and passengers through a post-crash survival situation."

No matter how safe you consider aviation, there always exists the chance that you could be only minutes away from fighting for your last breaths. While survival gear won't save you from a crash, it might help to survive the post-crash. "Like any other adventurer, aviators are subject to being stranded in very remote locales," said Jeff Randall, also of Randall's/ESEE. "Their skills, knowledge and gear may be the only chance they have of ever seeing their families again."

Aviation accidents happen regularly and people sometimes are stranded. Put yourself into the situation and ask an honest question, "Am I prepared for the post-crash?" As you're asking that question, also consider whether you've fully prepared your family, friends and passengers.

Seven-year-old Sailor Gutzler survived the crash that killed her father, mother, sister and cousin. Returning from a New Year's Key West vacation, Sailor suffered only a broken wrist when the family's private airplane went down in 38-degree western Kentucky weather. Despite the shock of the crash and her family's deaths, the secondThe more tired and hungry you are, the more you can simulate a real survival situation. Always push yourself. For instance, try to start a fire with wet tools and wood. *Photos courtesy of Randall's Adventure & Training*

Lucky Girl?

On Jan. 2, the Gutzlers were flying home from a winter holiday in Key West, Fla. About 4 p.m., Marty Gutzler flew his Piper PA-34-200T out of Tallahassee (Fla.) Regional Airport on an IFR flight plan to Mount Vernon Airport, 30 miles east of his Nashville, Ill., home. Onboard were his wife, Kimberly; daughters Piper, 9, and Sailor, 7, and a cousin, Sierra Wilder, 14.

About 2 hours, 50 minutes later, the 2,300-hour-plus pilot radioed ATC reporting engine problems and seeking vectors to a nearby airport. Weather was VFR. The controller directed Gutzler to an airport 11 miles west of his position.

Gutzler said he had it in sight, adding his right engine had quit. He acknowledged a visual clearance, then said he'd lost the airport. The aircraft dropped off radar as it descended through 2,700 feet 10 miles west of the airport roughly five minutes after the first radio call.

The aircraft was found inverted, landing gear retracted, at a 480-foot elevation. The site reeked of fuel. NTSB investigators found all major airplane components there, as well as evidence of continuity from the cockpit to all flight and engine controls. The only survivor of the crash

was seven-year-old Sailor.



You do what you must in a survival situation. What you feed today might feed you when you're in need tomorrow. *Photo courtesy of Mike Hangge*

> grader used survival skills her father had taught her and attempted to light branches off the still-burning airplane. Unsuccessful, she then made her way over nearly a mile of rough terrain, woods and thick briar patches—all in the darkness, dressed only in a t-shirt, shorts and one sock. She had no shoes.

> Could you be this calm given the situation? Could your children? It is critical "to remain calm so you can figure out how to survive the situation you're in," Lindsey Phelps of Columbia River Knife & Tool said.

> "Make a decision and implement the plan," Randall said. "Indecision kills way more people than making mistakes." Perrin added, "Indecision is the result of not being able to manage stress and it will kill you."

> Take a moment to remember Sailor's story next time you have an opportunity to challenge your family. Make the family build fires, cook meals and navigate across rough terrain. Those lessons could one day save lives.

> When should you carry survival gear? The simple answer is the most obvious—always. Live my Coast Guard brethren's great motto—"Semper Paratus," or "Always Ready." Of course, my thinking might be biased by my experiences, but I believe we should all live by that rule and always be prepared.

> At the risk of sounding a bit insane and redundant, you should always have the tools necessary to survive. At home, in the truck, on the subway, in the woods and in the aircraft. There should not be a moment of your life when you aren't prepared.

> Should everybody carry an 'everyday carry pack' and have a 'bug-out bag' ready at all times? Again, at the risk of being called crazy, my answer remains yes. Why not? The beauty of being prepared for anything

is that you're always ready. But this article is about aviation survival kits and I will cover my crazy long enough to focus on that topic.

While the word "always" seems clear, many still will argue that survival gear can be skipped when you're just doing traffic patterns or remaining over controlled or congested areas. There may be some validity to that argument, but it has three possibly fatal flaws.

First, keep in mind the axiom "Better to have it and not need it, than need it and not have it." A flight doing idiot circles easily can turn into a quick trip down to Lambert's Cafe for some Throwed Rolls. If you weren't prepared, then your gear might be sitting in the back seat of your truck while you're shivering overnight without a fire.

If you make it a habit to be prepared at all times, then your gear will be with you when you need it most. Positive habits promote consistency and reliability.

Second, by the very nature of an accident, we never know when or where it may happen. If you are without even the most basic medical kit, then you have significantly decreased your chances of survival. Even if you crash at the very door to a hospital emergency room, a basic medical kit could prove useful if it is at hand.

Third, as the professional in the aircraft, you are depended upon by your passengers and their families to do the right thing. That begins with training to avoid a crash, flying sensibly and limiting risks. It ends with you doing everything possible to bring everybody home safely.

Where should you carry survival gear? Each



Randall's Adventure & Training's survival gear (top) goes beyond "good enough." A quality knife (bottom) is one of the most valuable tools in your arsenal. *Photos courtesy of Becky and Kelsey Hangge* individual must decide where survival gear should be packed. Some, as we said, will ignore it. Others will pack it under golf clubs and hair care products. Still others will secure it in an appropriate location, while some will wear it on their bodies. It is better to have a survival kit than not, but the closer the kit is after an accident the better.

It also is on each individual to decide what level of preparation is appropriate. This comes down to the level of risk each of us is willing to accept. To help this decision, the locations can be narrowed down to five levels of survival-gear preparation.

Level 1: Flight Plan

This may seem a stretch regarding the where of survival gear, but the simplest, easiest and possibly most important piece of survival gear always has been to ensure somebody knows exactly where you are

going, how you are getting there and when to begin searching for you. Time always is the enemy in a critical survival situation and the extra minute you spend ensuring your flight plan is thorough, accurate and filed could shave hours, days and even weeks off the search to find your crash site.

Level 2: Training

"Training first," Randall said. "Then kits." This includes aviation training to avoid the accident, medical training to provide care, training to signal rescue crews and survival training if there are no rescuers.

A survival kit within your mind far exceeds one in your hand that you don't know how to use. While I can't tell you how to store the training in your headhangar, I can tell you how to build it.

The Internet is filled with more survival-training schools than Wikipedia entries. Many of them are legitimate schools that will help you fill your mental toolbox. Though I can't speak for many of them, I can say that I truly have been impressed with Randall's Adventure & Training in Gallant, Ala. Its honest approach to survival training and equipment sets it apart. "We are always honest about what we sell and what we tell," Perrin said. Just remember that you needn't limit your search to an aviation-survival training company, as many survival-training basics apply to all emergency situations.

Level 3: Medical/Firefighting

This is the most basic level of actual aviation survival gear. A medical/fire kit and the knowledge to use it are essential in many situations, not just survival. Consider being on the taxiway waiting for an aircraft to land when it belly-ups in front of you. Its occupants' very lives could depend on your ability to stop the fire and administer first aid until professional responders arrive.

Beyond this level, there are plausible arguments that the gear will never be used, but that approach simply ignores possibilities and plays against dangerous odds.

Level 4: Aviation Survival

This is the level that separates the amateur from the professional aviation survivalist. If you are trained and your aircraft is equipped with the proper survival gear, there are few situations that you can't find your way through. Make your own or search through the hundreds of pre-made kits like ESEE's Advanced Survival Kit. No matter what kit you build or buy, ensure it is in a logical location and easy to reach and that all crew and passengers know how to use it.

Level 5: Survival Vest/Belt

If you fly at this level, congratulations. You have reached the graduate-level, "I want to live" stage of preparation. There is no doubt that you are truly committed to surviving any situation.

Early on, I was taught that if it isn't physically attached to your body, then you won't have it when you egress a burning aircraft. While this doesn't negate the necessity for the other levels, it ensures that you have the bare basics with you at all times. What each individual deems the bare basics varies, but most experts agree that they include a good-quality knife or multi-tool, flashlight, signaling device, first aid kit, and personal locator beacon as well as food, money and the means to start a fire and purify water. All together, my "bat belt" weighs far less than five pounds and also acts as additional lumbar support.

Most Expensive Thing

It isn't the training or gear you carry that will cost you everything. It's the survival class you didn't take, the lessons you didn't apply and the gear you failed to buy. What you lack may cost you and others your lives. Being prepared for the post-crash is a small and simple step that can cost very little energy or money. Think of it as crash insurance—you pay for it, hope you'll never use it, but can't imagine being without it when you use it.

The value of survival training and gear far outreaches their price as they provide a sense of preparedness, peace of mind, contingencies and the ability to survive in disastrous situations.

As a society, we have lost some of our selfpreservation and self-reliance because we've been lured into the false belief that we are invincible and that somebody always will be there to pick us up when we fall.

The truth, however, is that we can rely only upon ourselves in dangerous situations.

Get the training you need. It will not be time, money or energy wasted. Invest in yourself by building everyday carry packs, bug-out bags and aviation survival kits. More than anything, you should share your knowledge of survival and your love of aviation. Think of your children in Sailor Gutzler's position and give them the skills to save themselves if you can't.

Take a moment to honestly evaluate your levels of preparation and think of how you can better prepare for the post-crash.

There are so many great options available for survival gear and training, but I would suggest taking a look at some of my favorites: ESEE, Randall's Adventure & Training, Columbia River Knife & Tool and Flying Circle Bags. For the ultimate in survival lifestyle training, I will always recommend a trip to your local military recruiter to put your right hand in the air. I've received a lifetime of valuable training and earned a decent paycheck along the way.

If you're still wondering about the value of a survival kit, take a moment to read Jack London's excellent short story "To Build a Fire" and imagine yourself as the protagonist, caught unprepared for the weather and unable to build a simple fire to save your life.

By the end of the story, you might agree with the man's last words. "You were right, old hoss; you were right."

Number 2 in the Pattern

In upcoming installments of this series, we will discuss what should be in your aviation survival kits, how it should be arranged and where to get some of the best-quality gear at the best prices.

We also will discuss suggestions about where to go for survival training, how to survive after the crash and what you can do to prepare for any situation.

Care to share your stories of survival, discuss the importance of quality gear, or comment on this article? Want to see something specific in future articles or read about a specific survival school or gear?

Send your thoughts to rotornwing@accessintel.com and follow the author on Twitter, @mjhangge. (#

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