Vernon Flying Club

HAPPY HALLOWEEN



HALLOWEEN IN THE DEEP SOUTH

A boy wanted to wear a costume for Halloween but he didn't own any so he went to his Mother to ask her to go shopping in order to get one. But her mother said, "Oh, I think your Father had a ghost costume at home, let me get it!"

She later returned and put the costume on the boy. The boy said, "The costume is great but one thing, why is the hat pointy?".

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(Long, but worth it and pertinent to our geography...)

I SURVIVED AN AIRPLANE CRASH

By Steve Green

In the summer of 1978, I was a flight instructor at Laconia, New Hampshire, flying a set of Grumman AA-1B Trainers. On a very warm, cloudless and nearly windless evening in June, my best friend of many years and I were out gallivanting around Lake Winnepesaukee. My friend had just been commissioned as a second lieutenant in the Air Force and was headed to Williams for primary flight training. He had flown with me throughout college, although he had no formal flight training.

We had just completed a practice approach to Moultonboro Airport, and had turned up into the hills behind the ridge on the north side of the Lake, near Tamworth. I regularly used this route as a form of ground reference maneuver, when I felt the conditions were good, and they certainly were that evening. At about 500 to 700 feet



above the ground, as we approached a shallow ridge, something went very wrong.

It wasn't far from home, but these mountains might as well be 1000 miles away for an injured pilot.

It is pointless to debate what exactly went wrong; it has been 38 years. I didn't know then, and I certainly don't know now. It appeared that we were not going to clear the ridge, although we had been above it to begin with, and maximum power did not seem to yield a result. It has always seemed like a downdraft in my memory, even immediately afterward, but there was no

wind. It was about five in the afternoon, and no clouds at all. I attempted a turn away from the ridge, probably induced an accelerated stall at some point, and we hit the trees. The NTSB, in their ingenious method of coding probable cause, said "Failure to maintain airspeed." No kidding.

We spent about 43 hours in the woods on the side of Johnson Mountain. My friend passed away sometime during that period. I know he was still alive during the first night; after that, I have no idea.

It has been a long time since I talked about this much. I recently rekindled an old presentation discussing survival based on this experience and pitched it at a local FAA safety seminar. Some time after that, one of my airline colleagues, an engaged AOPA general aviation pilot, expressed interest in the story as well. Some of this discussion prompted me to take a look through current literature on the subject of general aviation survival, and I found it to be pretty much the same as it always had been, which is to say primarily focused on a model of survival that could be interpreted by many pilots as not applicable to them. It seemed like it might be useful to talk about this hard lesson again.

We were a local flight. There was no flight plan. The FBO staff locked up that night and assumed I had flown the airplane home to Rochester; to be fair, I did that from time to time, although not without coordination. It was only when my friend did not arrive at home later that night that his parents became alarmed.

About 24 hours after we went down, a Scandinavian Airlines System DC-8, piloted by Captain Haaken Gerdsell, passed overhead en route to Europe and detected the ELT signal. As we were in a shallow ravine, the line-of-

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sight signal was not heard unless one passed directly overhead within a pretty narrow cone. When Captain Gerdsell heard the ELT, he transmitted that to ATC; they replied that someone was missing and requested latitude and longitude coordinates.

Captain Gerdsell then did something right out of the old time brotherhood of aviation that Saint Exupery and Ernie Gann wrote so passionately about: he asked for and was given clearance to fly a single racetrack pattern back over the site. This seems like a simple thing to do, until you do some oceanic flying and realize how precious fuel is and how much it costs to make that circuit with four pretty inefficient engines. The second time he heard the ELT he captured accurate coordinates

The following day, the USAF sent over a UH-1 Huey from Plattsburgh, flown by Major Woody Kinsey and Captain Ron Lanier, and they spent most of the day drifting above the trees, looking. The particular Grumman we were flying sported a pre-war Navy trainer paint scheme, with yellow wings, and a yellow band around a gray fuselage. We had hardly broken a branch when coming down, and the airplane rested on a crushed nose, standing straight up against a large tree. At about two in the afternoon, the rotor downwash parted the foliage, and we were found.

I was in very serious condition, with two shattered ankles, a crushed vertebra, broken collarbone, collapsed lung and multiple lacerations. I was sufficiently dehydrated that it took an Air Force paramedic, a veteran of multiple tours in Vietnam, four attempts to get an IV inserted. While the Huey refueled, they packaged me up in a Stokes



litter, and when the chopper returned, they hoisted me up through the trees and off to a long recovery.

It might be unreliable, but an ELT just might save your life.

I had no survival gear whatsoever. I had no flight plan. No one knew where I was. I did have an ELT, and it saved my life.

A great deal of the survival discussion, requirements and regulation centers on very remote areas and a type of survival that presumes little injury. There is a place for this; the Canadian and Alaskan requirements are rooted in serious understanding of, and experience with, very large, empty and remarkably inhospitable areas. These ideas are applicable in considerable

areas of the western United States as well, and none of them can ever hurt when flying anywhere.

But there is another kind of survival, the kind that you must consider when flying ten miles from your home airport near developed civilization. In many of those cases, if you can walk, you can walk out. In my case, there was a farmhouse three miles down the hill. If I could have walked, I would have been there in less than six hours by simply following a nearby brook downslope. I had spent a lot of time hiking in those same mountains. That would have been easy

But I wasn't able to walk. I did try to fashion a crutch from a Y-shaped stick. I even tried to make a splint for one of my legs with my belt. My plan on the second day was to make my way over to the brook and float downstream, which I thought would be useful in cleaning the dried blood caked over my left eye as well as discouraging the flies buzzing around the stub of bone sticking through my left sock. Since, in actual fact, the brook was about six

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inches deep and two feet wide, this perhaps gives an indication of my state of mind. In any event, I was about halfway to the brook when the helicopter arrived.

Not only was I unable to walk, but I was also very thirsty; by the second day, I had crafted and memorized a list of drinks I would consume immediately upon rescue. Three glasses of milk, big glasses, like those Schlitz steins I had back in my chalet, a can of Pepsi, a can of lemonade, a can of Seven-Up, three glasses of orange juice and a large cherry slush.

I was pretty sure the ELT had not worked because I couldn't hear it. I also, at one point, thought I was lying in the woods beside the path between the town pond and the dirt parking lot. At another point, I vaguely remembered locking up the hangar, checking the tie downs, and then going to lay down in the woods rather than driving home.



Sometimes there's a need for an old fashioned tool

By the middle of the second day, after about three hours of listening to that Huey, I was sure who they were looking for. When they settled into a hover directly over the crash site, I knew I had to get them to see me. This was my chance; I had to get their attention. I was face down in the leaves, and by then I could not even raise myself up slightly. I had no signaling devices at all. So I grabbed a handy sapling and shook it as hard as I could... a noble effort, if adding an entirely new line to the definition of the word "forlorn," given the predominant effect of rotor downwash. Thank goodness they had already seen me.

What I needed to do was pop an orange smoke, and if I'd done

that six hours earlier they would have been on me in a heartbeat. This was not the time for signal mirrors or even portable strobe lights. We were under a very dense forest canopy, and there was a pretty good chance we were going to stay there for several hunting seasons, had it not been for a handful of very intrepid, altruistic and just plain good-at-what-they-do aviators listening to an old fashioned ELT.

Today, with Cospas/Sarsat and 406 Mhz beacons, preferably equipped with GPS, the ELT world has changed. Some manufacturers advertise remarkable accuracy, and, given the ability of my cellphone to identify which room of my house I am standing in, this capability is probably not overstated. But this also raises a point, probably the most important point of any discussion about survival: there won't be any do-overs. There won't be any second chances. It really doesn't matter how any particular system is advertised, marketed, or what the brochure looks like. It has to work. It has to work. It just plain has to work.

After I recovered and returned to general aviation flying, I put together a simple survival kit meant to address the problems I encountered on the mountain. I began with my own personal ELT, because at the time the FAA was waiving the ELT requirement due to persistent battery problems, and a local area trainer (such as the one I was in) was not even required to carry one in the first place. Today, I would have carried a personal locator beacon. I was lucky in that it was summer and very warm. But part of my survival kit was a wool blanket, because wool has superior insulation qualities even when wet. That said, insulation technology has made great strides in the past forty years. There are some even better synthetic materials today, although they are not necessarily available in the form of a blanket. The best information on materials that work well when wet probably comes from the people who make and use drysuits, whether for diving or kayaking. Bear in mind that while synthetics may offer even better wet performance than wool, they are quite flammable, whereas wool is decidedly not.

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Also, consider that when injured, you may not be pulling on a coat or jacket... a blanket is the easiest and most universally usable form of protection against cold. That certainly doesn't preclude you from carrying the appropriate parka. The three-mile hike that I might have made, had I been mobile, would not have gone well in sub-freezing weather without a proper coat. But you must plan for injury.

Many people carry space blankets; you should thoroughly research these before trusting your life to them. One of the things you will find with any engineered system is that the more efficient it is, the more specific the conditions of usage will be. When trading off weight, what may happen is that the system will work very well for a limited number of specific applications; if those conditions are not met, then the system really doesn't do well at all. A broader, more universally effective but less efficient system may be better suited to the wide variety of situations that you may find yourself in. Hence, my wool blanket, because it has to work. That said, space blankets are so ridiculously light that you can't go wrong by tossing a couple in anyway for whatever use might arise.



it was.

The most important thing in your survival kit?

Along with the wool blanket, I carried a Very pistol, meteor flares, orange smoke signals, and perhaps the most important piece of gear you can bring along: a canteen of water. I note today that many survival kits have water purification systems and bags for collecting rainwater, which are useful if you are marooned in various remote parts of the world, but not if your legs are broken. You will become dehydrated in a hurry, as I did. I cannot overemphasize the importance of these words... it has to work. The water has to be accessible and in a container that is highly likely to survive the crash. I used a rubberized canvas canteen. The idea was that it would be able to deform when it impacted aircraft structure, or my head, and be less likely to fracture. It was tough enough to absorb sharp impacts, or at least I hoped

One of the most important questions to consider is that of accessibility. Your survival kit isn't going to be worth much if it is in the baggage compartment and you have been orthopedically compromised... your legs are broken. Or if you are intact but the baggage compartment is locked, or even better, thanks to the now deformed fuselage, the compartment door is jammed.

One approach to this is to consider a distribution of equipment based on priority. For example, you will need the water and the signaling devices in almost every possible survival situation. On the other hand, if you cannot physically reach your ring saw or your water purification equipment, you probably are not going to be able to use it, either. Equipment can be distributed based on priority of need and ease of use.

My initial approach to this was to carry a couple of pencil meteor flares and orange smoke signals in a pouch that I wore on my belt, so that I would have them even if I couldn't get back into the airplane. This same approach could be achieved with a cotton vest with suitable pouches... cotton because synthetic material is distinctly unpleasant when it catches fire.

In any event, you need to seriously consider accessibility for your particular aircraft type. Look at it from the perspective of priority of equipment, limited movement and strength, but also consider unintended consequences, such as the whole thing arriving rather suddenly in the forward cockpit during the impact sequence, and generating as much injury as the accident itself.

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Speaking of unintended consequences, note <u>FAA Advisory Circular 91-58a</u> and the discussion of pyrotechnic signaling devices contained within. From my perspective, smoke and meteor flares are absolutely essential. They work, they are simple, they don't need batteries, and they are universally recognized. You also don't need one spontaneously igniting itself while clipped to your belt. Note the FAA's emphasis on Coast Guard approval for these types of devices, and proper maintenance of them.



Personal Locator Beacons have never been less expensive or more powerful.

Finally, there is the endlessly discussed question of the flight plan. Someone needs to know where you are going. That someone, be it the FAA, your FBO, or your father, which was my approach for years afterward... that someone needs to know what to do if you don't show up. They cannot hesitate. They cannot fall asleep and then realize the next morning that you are not there. It has to work.

In his popular western novels, Louis L'Amour would occasionally write about the rancher or farmer who mounts his horse, waves to his family and begins the 20-mile ride to civilization, never to be heard from again. His horse stumbles; he gets thrown, and breaks his neck or worse, his leg. Because of the vastness of the country, no one ever finds him, or even passes nearby for a hundred years. It is a very big world out there. The disappearance of an entire Boeing 777 into the Indian Ocean, without a trace being found for years, is a further reminder of how big a space we fly over regularly. Even the space contained within locales that we think we are familiar with is much bigger than we comprehend. In December 1996, a Lear

35 went missing following a missed approach at Lebanon, New Hampshire. Although their general location was known, the wreckage was not found for three years. They did not have an ELT, nor were they required to carry one.

You need a GPS-capable 406 Mhz ELT that is properly maintained. You need someone to know that you have not arrived, on the chance that the ELT fails. You need a properly maintained, <u>high caliber PLB</u>, on the chance that the ELT fails, or in case you believe it best to leave the crash site. You need pyrotechnic signaling methods that will immediately locate you when the rescue is nearby. Finally, you need to stay warm and hydrated while all of the above works.

And it has to work. Fix it so it does.

NEVER AT A LOSS FOR WORDS

The one L lama, he's a priest The two L llama, he's a beast And I will bet my silk pajama There isn't any three L llama.

-- O. Nash,

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LOSS OF N114DE

By Dave Prizio

With a few weeks having passed since my ditching on the way to Catalina (KAVX), I finally had time to calm down and reflect on what happened. It all began with our typical debate about where to fly for Saturday lunch. Someone suggested Big Bear Lake, a nearby resort nestled in the San Bernardino Mountains. It is a pretty spot with a good restaurant and low fuel prices, but at 6700 feet it can be a bit chilly in the winter and sometimes windy in the surrounding mountains. I suggested Catalina as an alternative. It is closer and warmer and scenic in its own way, although the landing fee usually keeps us from flying there more than once or twice a year. It had been a long time since we had dined on buffalo burgers, a Catalina specialty, so we decided to go there.



We grabbed the life vests, at least those of us who had them, made the usual jokes about going swimming, preflighted our planes, and off we went, never suspecting how prophetic our little jokes would turn out to be. It was a beautiful Southern California day with perfect temperature and only high scattered clouds. We climbed around the east side of John Wayne's Class C airspace and turned towards Catalina when we reached the shoreline. There were four planes that day. Some of us decided that 6500 feet was high enough for the crossing, others went up to 8500 feet. Neither altitude will guarantee a safe glide back to land for the entire trip, but obviously, 2000 extra feet of altitude makes the wet zone smaller, the wet zone being that portion of the trip where a water landing is inevitable if the engine were to quit. In the Cub, the kit version of the Legend Cub that a good friend and I had built some four years ago, we decided on 6500 feet. The total crossing distance is about 30 nm, with a wet zone of about seven miles skewed towards Catalina because the airport there is at 1600 feet, and the terrain between there and the ocean is unusable as a landing spot.

Somewhere near the midpoint of the crossing the engine simply quit, for what reason we will never know. What an odd and uncomfortable feeling. This is something you read about, talk about, and practice every now and then, but you never really believe that your engine is going to quit. Initially there is that period of shock. How the hell could this be happening to me, and here of all places? I am pretty good at math, but it didn't take too much fancy calculating to figure that we were not going to make it to anyplace that included dry land. We were in exactly the wrong place to glide anywhere but the Pacific Ocean.

At this point that old admonition, "Fly the plane!" came to mind. I set up a glide at 50 knots and started going through the drill. Check fuel valve, apply carburetor heat, check ignition, check circuit breakers, attempt restart, try it again. Darn! (Or something like that.) This thing isn't going to run. Get on the radio and squawk 7700. We were already on Catalina CTAF, so I called them first. "Mayday, mayday, mayday. Cub 114DE is 15 northeast on a heading of 240 degrees towards you. We have had a complete engine failure and will not make it to the airport."

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What a strange feeling it is to make such a call. I had this odd sense of detachment from the situation, calmly going through the steps I knew I had to perform, yet somehow not really ready to embrace the concept that I was going to land in the ocean soon. Catalina gave me the frequency for SoCal ATC, so I switched over to them and gave them the same call. I suppose they were glad to talk to that guy who had just lit up their radar screens with the emergency squawk. They calmly asked that most appropriate but somehow never welcomed question, "What are your intentions?"

The answer you would love to blurt out is, "I don't know. Just make it go away!" But, of course, that is not one of the available choices. "We will continue our glide on this heading and look for a boat. We will not make it to the airport. Please notify the Coast Guard and let us know where they are," I said, not realizing that the Coast Guard really doesn't handle such emergencies in the Catalina Channel. Los Angeles County Baywatch does. (Yes, just like the cheesy television show.) In any case they weren't close enough to meet us upon our "arrival." We spotted two private pleasure boats.

One was closer and perhaps bigger, so we headed towards it. The plan was to circle them once and land right in front of them, so they would be sure to see us, which is exactly what we did.

As we approached I did a quick briefing with my back seat passenger, himself a pilot. One last attempt to restart. Nothing. We gave SoCal one last call, opened the doors on both sides to give us the best egress possibilities, tightened out belts and turned into the wind. Mercifully the sea was pretty calm, so swells were not a big concern.

All I could think about was slow it down and keep the nose up. I just didn't want to flip over. The rest I wasn't all that worried about. Airspeed was down to about 30 knots after the final turn. Slow enough, even in the Cub. Hold that attitude and just wait for it.

The things that struck me about the touchdown were the pitch down of the nose, which I expected, and the sudden rush of water that somehow I didn't really expect, at least not with that intensity. The Good Lord being with us, we stayed right-side-up, but the cabin was completely full of water in an instant. My back seat passenger Bill was out the door in a flash, as we had briefed, a feat he could never have performed on dry land with such speed and grace. I was a bit disoriented by the sudden onrush of water but regained my composure after only a few seconds. Bill said it took me about ten seconds to come up after he had surfaced, but time is hard to judge in such tense situations. I never had the thought that I wouldn't make it, but I was sure glad to take a breath of air again.

We could see the boat heading towards us, a most welcome sight, because the water was cold. I think we were on board within five minutes of ditching, but Bill estimated it to be more like ten. I think it just felt like ten to him because the cold water was really getting to him very quickly. He was otherwise in good shape with no apparent injuries, but the onset of hypothermia so quickly had me very concerned. Luckily we were out of the water and wrapped in blankets in short order. The Baywatch boat arrived within minutes to take us to Avalon, where we could get some dry clothes and get checked out at the local clinic. Everything worked about as smoothly as it possibly could. Well, except for the plane being at the bottom of the ocean.

As this drama unfolded, our friends were circling above us to make sure we got help. Once we had been picked up they flew to the airport and took the shuttle bus to town. We were sure glad to see them in Avalon. Unfortunately, they all missed out on lunch that day, but they now have a pretty good story to tell as compensation.

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The professionalism and thoughtful consideration of everyone we encountered that day was heartwarming and impressive. I can't say enough good things about the L.A. County Baywatch crew, the firefighters, and deputy sheriff in Avalon. What a great bunch of people. It is nice to know that when you really get in trouble, there are some great people around to help you out.

So, what's the takeaway from all of this drama? One, never get complacent about a water crossing, or any other flight over potentially hostile terrain, for that matter. No matter how many times you have made a trip, the next one could be the one where your engine quits. It doesn't happen very



often, but it does happen. Two, wear a life jacket when you fly over water. I had one on, but Bill had to make do with a cushion. I felt bad about that and will not let it happen again. Three, when you do have to cross a place where landing is not a good option, take the shortest route and fly high. We could have done better in both respects on this trip. There is no way to know if it would have made a difference to us, but it might have. Four, make sure someone knows where you are going and/or use flight following. We were flying with three other planes, but didn't use flight following until we were in trouble. In this case it worked out well enough, but if we had been alone and somewhere else, it might not have. And five, be sure to do a careful preflight. I did that, but I will never know if there was some little thing that I missed that made all the difference. I don't think so, but I think there will always be that little bit of nagging doubt. (This article originally appeared in the October 2014 issue of Kirplanes magazine).

A ROUTINE DAY IN HEAVEN

Saint Peter is seeing all of the new arrivals trying to go through the pearly gates into Heaven. The first applicant of the day explains that his last day was not a good one.

"I came home early and found my wife lying naked in bed. She claimed she had just got out of the shower. Well, her hair was dry and I checked the shower and it was completely dry too. I knew she was into some hankypanky so I began to look for her lover. I went onto the balcony of our 9th-floor apartment and found the guy clinging to the rail by his fingertips. I was so angry that I began bashing his fingers with a flower pot. He let go and fell, but his fall was broken by some awnings and bushes. On seeing he was still alive I found super human strength to drag our antique cedar chest to the balcony and throw it over. It hit the man and killed him. At this point the stress got to me and I suffered a massive heart attack and died.

Saint Peter thanked him and sent him on to the waiting room. The second applicant said that his last day was his worst ..."I was on the roof of an apartment building working on the AC equipment and I stumbled over my tools and toppled off the building. I managed to grab onto the balcony rail of a 9th-floor apartment but some idiot came rushing out on the balcony and bashed my hands with a flower pot. I fell but hit some awnings and bushes and survived, but as I looked up I saw a huge chest falling toward me. I tried to crawl out of the way but failed and was hit and killed by the chest."

Saint Peter couldn't help but chuckle as he directs the man to the waiting room. Saint Peter is still giggling when his third customer of the day enters. He apologizes and says "I doubt that your last day was as interesting as the two fellows who arrived here just before you."

"I don't know" says the man. "Picture this, I'm naked, hiding in this cedar chest...

Shock Cooling: Time To Kill The Myth

Rick Durden

Some years ago, I had one of those "what in the world are they thinking?" conversations with a pilot who was towing gliders as a volunteer for the Civil Air Patrol. While he thought it was important to volunteer for a good group, he was ready to quit because of a screwy power reduction procedure imposed on the pilots by someone high up in the organization. The procedure was ostensibly to prevent cylinder cracking due to shock cooling during descent after the glider released. However, the procedure he described took so long that, even if the glider did several minutes of soaring during its flight, it was on the ground well before the tow plane. As a longtime tow pilot, this struck me as ludicrous.

The anti-shock-cooling exercise required a series of small reductions in manifold pressure, each followed by flying around for a period of time before making the next, while the airplane descended slowly, burning lots of fuel. If shock cooling actually existed and caused cylinder cracking, it would probably be cheaper for the operation to have bought a bevy of cylinders and kept them on hand for replacement than pay for the fuel they were going through to avoid a phantasm.

I used to be astonished at how aviation myths, particularly when it came to engine operation, have such incredible staying power. Now, when I hear one spouted, I just shake my head in admiration of the influence of ignorance and belief over data. With some folks, the laws of physics, aerodynamics, metallurgy and thermodynamics are trumped by unwavering faith in their particular superstitions.

Nevertheless, when aviation superstitions get in the way of safe, efficient engine operation and addressing real risks of damage to engines, they need to be exposed for the nonsense they are, particularly when they are adversely affecting others—such as the glider operation that could only get off a few flights an hour. Such practices, especially when they are taught as fact to new pilots, only perpetuate the foolishness.

The widely respected Daniel Patrick Moynihan put it eloquently: "Everyone is entitled to his own opinion, but not his own facts."

There is absolutely no hard evidence that making a large power reduction will cause cracking of the cylinders of a horizontally opposed piston aircraft engine. Because people like examples, we'll start with a few: Bob Hoover regularly shut down and feathered the engines on his Aero Commander Shrike during airshows—going from max power to none—and never cracked a cylinder. That's consistent with what skydiving and glider tow operators have known for decades—their engines hit TBO without much in the way of cylinder problems, even though they descend rapidly at low power settings. Flight schools, with their repeated touch and goes, don't go through cylinders at a disproportionate rate.

Let's look at the numbers involved in engine cooling, starting with the small role that the cylinder fins play. Only about 12 percent of the heat generated by combustion departs from the engine via the cooling fins. The biggest proportion, 44 percent, goes out the tailpipe. Eight percent, almost as much as is handled by the cooling fins, is dissipated through the oil. Most of the rest is dissipated via the big, metal prop bolted to the crankshaft.

The engine manufacturer that has published data on the potential for shock-cooling damage—Lycoming—said to avoid the risk of damage, pilots should limit CHT reduction in flight to 50 degrees F per minute. The good news is that, even assuming such a rate of cooling will damage an engine—Lycoming said that damage potential existed only if done "consistently"—it's nearly impossible to cool an engine that fast in flight even by shutting it down. In an article written by Kas Thomas more than 20 years ago and reprinted in AVweb, he went through the

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published test data—which showed that cutting engine power by half only reduces CHT by 10 percent or so. That kind of CHT drop isn't capable of trashing cylinders—and isn't anywhere close to the CHT change that occurs in the opposite direction on takeoff—shock heating, so to speak. And there's never been any data to indicate that the massive shock heating during takeoff harms the cylinders.

Thomas also pointed out that flying through rain reduces CHTs by nearly as much as a 50 percent power reduction. There's no history of airplanes regularly flown through rain having to constantly replace cylinders. In fact, the real shock cooling comes at the end of the flight when you pull the mixture to idle cutoff and the CHTs drop at more than 100 degrees per minute right away—yet every engine goes through that sort of shock cooling and manages to survive it.

In the last 20 years, graphic engine monitors have become common in general aviation—and the data they provide further support conclusions reached before they were around regarding the minor effect of big power changes. Many monitors are set to alarm if the CHTs show a drop at a rate of more than 60 degrees per minute. Pilots are discovering that it's nearly impossible to hit that rate without slamming the throttle shut and diving—which isn't comfortable for anyone in the airplane. Mike Busch, A&P and principal of Savvy Aircraft Maintenance Management, told me during a conversation at an AOPA Fly-In that he's tracked how fast CHTs will drop with various power reductions in his Cessna T310R. His observations were that it unusual to have CHTs drop at a rate of even 30 degrees per minute even with aggressive power reductions when ATC gives a slam-dunk approach.

In one of AVweb columnist John Deakin's excellent articles on engine operation, he noted that when he waited 18 seconds to restart the engine of his Bonanza after running a tank dry, the CHTs only dropped 10 degrees. In my opinion, It's time to put the shock cooling myth to bed, so that pilots can worry about things that really are a risk to their safety and wallets—such as runway loss of control accidents. After all, with more than 25 percent of accidents that cause damage to the airplane and engine arising from loss of control on landing rollout it seems to me that rather than designing complex power reduction strategies to avoid a mythical risk of damaging an engine, we should be practicing crosswind landings to protect a real risk that actually does damage engines—and the airframes wrapped around them.

Rick Durden holds a CFII and ATP with type ratings in the Douglas DC-3 and Cessna Citation and is the author of The Thinking Pilot's Flight Manual or, How to Survive Flying Little Airplanes and Have a Ball Doing it, Vols. 1 & 2.

BURIAL PLANS...

An old curmudgeon and his wife were married for many years. Whenever there was a confrontation, yelling could be heard deep into the night. The old man would shout, "When I die, I will dig my way up and out of the grave and come back and haunt you for the rest of your life!"

Neighbours feared him. The old man liked the fact that he was feared. Then one evening, he died when he was 98. After the burial, her neighbours, concerned for her safety, asked, "Aren't you afraid that he may indeed be able to dig his way out of the grave and haunt you for the rest of your life?"

The wife said, "Let him dig. I had him buried upside down... And I know he won't ask for directions."



Years ago, one of our members received a bill for landing at Sault Ste Marie. His response follows...

FIGHTING BUREAUCRACY

17-Jan-15

Sault St. Marie Airport Development Corporation 1-475 Airport Rd Sault Ste. Marie, ON P6A 5K6

Dear Accounts Receivable Department:



RE: The Two Statements Received For User Fees at Your Airport 07-Oct-14

- Invoice # 4101 <u>\$10.85</u>
- Invoice # 4115 \$10.85 + \$.22 = \$11.07 + \$.44 interest
- Balance Due on Statement Date: 01/01/2015: <u>\$22.36</u>

I am puzzled why Airport Corporations continue to institute user fees which penalize itinerant pilots/planes. Charging a \$9.60 fee when it costs at least twice that amount to count, register, invoice, postage etc. to collect is absurd. I tend to avoid airports with user fees.

I'm also a little puzzled at how \$10.85 at 2% interest became \$22.23 so quickly.

It really doesn't matter much anyway because I have no intention of paying you for the simple reason that <u>my</u> aircraft (RV4 C-GEAU) was not parked at Sault Ste. Marie in October 2014 or at any other time. It has never been to Ontario.

In support of my claim, I can photo copy the appropriate page from the aircraft journey log, which is a legal document and each entry is signed. Be advised that there is a \$30.00 fee for this service (payable in advance).

Sincerely,

Charles Ross Owner RV4 CG-EAU

MILITARY RANKS: RESPONSIBILITIES AND CAPABILITIES

THE GENERAL: Faster than a speeding bullet, More powerful than a locomotive, Leaps over tall buildings with a single bound, Walks on water, and Talks with God

THE COLONEL: Just as fast as a speeding bullet, More powerful than a switch engine, Leaps over small buildings with a single bound, Walks on water when it's calm, and Talks with God on special occasions

THE LIEUTENANT COLONEL:

Faster than a speeding BB, Loses a tug-of-war with a switch engine, Leaps over small buildings with a running start, Swims well, and Listens at a distance to the voice of God.

THE MAJOR:

Can load a gun properly, Plays with train sets, Leaps over Quonset huts with a running start, Can do the Dog Paddle, and Sometimes pays attention to what the Lt. Col. says,

THE CAPTAIN:

Is not issued ammunition for fear of self-inflicted injury, Recognizes a locomotive two out of three times, Runs into buildings, Can wade through water less than four feet deep, and Pays no attention to what the Major says.

THE LIEUTENANT: Wets himself with a water pistol, Says "Look at the Choo Choo," Trips over steps when entering buildings,and

Doesn't even notice when the Captain says something.

THE NCO:

Catches bullets in his teeth and spits them out, Kicks trains off the tracks, Picks up buildings and walks underneath, and Freezes water with a single glance, He is GOD!

Hangar News **OCTOBER 2022**

Vernon Flying Club

AERODYNAMICS, EXPERT ADVICE, AND OTHER IMPONDERABLES

In the Flying Club, there are frequent gentlemanly discussions on various subjects such as aerodynamics, flying techniques, Pavarotti's place in history, and world current events. I thought it only fitting that with decades of experience and thousands of hours in the air, I should weigh in with a procedure from days gone by and explain how we did it in the good old days flying fighter jets.

PROPER SHORT FIELD PROCEDURE.



Back in the early sixties, our Sabre squadron was deployed from Zweibrucken Germany to Gros Tenguin France while the runways were being lengthened at the former in preparation for the arrival of the CF-104. Ground access to our dispersal area was around the end of one of the runways where a light system was in place to stop vehicular traffic to allow aircraft to arrive. Our squadron flight safety officer (SFSO) had just arrived at the end of the runway heading for the squadron area when the light went red before he could cross to the other side. The cause of the red light? Me, coming back for a landing after spending an hour or so attacking down anything that moved in Western Germany. Quite successfully, I might add.

Now, after a three-mile run-in from initial and a 60-degree, 2-G turn to downwind, most Sabre pilots drop the gear and delay flap selection until the button is 30-45 degrees aft and then commence the descending turn, rolling out three quarters to a mile final using a powered approach.

Not so real tigers like me. No sir. Real tigers pitch out by bringing the throttle to idle and pulling 3-g to kill the speed, selecting gear and flaps down at the 180 degree point and continuing the turn to roll out short final on profile and on speed. That's what REAL tigers do. (Don't get ahead of me here)

The tiger calls 'initial' three miles back, hits the pitch, thumbs the speed brakes out as the throttle is smartly snapped to 'idle', and racks the aircraft into a speed-bleeding 3 G turn. As the aircraft passes the 180 degree point, the gear is selected down with the flaps following at a suitable interval. Altitude is traded for airspeed as the aircraft continues to short final where the squadron flight safety officer sits waiting for the 'OK' to cross. The tiger is less than a thousand feet back now and as the incredulous safety officer watches, touches down short of the road, rumbles along for a bit, and then leapfrogs the road for a perfect landing on the runway. The SFSO notes the squadron marking and the aircraft number. The tiger is busy signing in when the SFSO accosts him a question: "WTH was that?"

The tiger replies: "Anybody can do a short field landing, but it takes a real tiger to get part of the landing roll done PRIOR to the end of the runway!"

OUTCOME: Tiger bought SFSO beer that night.

PS Not only would I not try this at home, I wouldn't try it anywhere else either!

PPS Did I mention that some German beer and a lack of sleep may have contributed to the success of the approach?

CASARA - by Kathy Jorimann

Vernon's CASARA members have been very busy in the past 6 weeks and have been involved in 6 searches. In all 6 they assisted GSAR (ground search and rescue) to help locate the individuals and/or vehicles. The areas they were required to search ranged from south of Penticton, the Lillooet area, Valemount to Jasper, Logan Lake and a massive search area from Williams Lake to Bella Bella. In all but one, the subjects were located.

The interesting thing that is occurring with CASARA is the increased ability to integrate more technology in searching to achieve faster, positive results. They



John and Kathy Jorimann

currently have the ability to use the ARTEMUS system which is basically a flying cell tower that is able to locate cell phones that would normally be out of cell range. Another tool at their disposal is the attachment of a GO-PRO camera to the wing of a plane that videos the search area. This information is then passed on to ground personnel who can go through video footage frame by frame looking for anomalies or even specific colours. Finally, although not used in these searches, CASARA is taking a leading role of using drones for searching. The RPAS (Remotely Piloted Aircraft System) is in the "start up mode" but has the potential to drastically improve our ability to locate people and objects in a timely and efficient manner. Currently this



organization.

system has been limited to searching using line of sight but with more practice and research it is hoped that future drones will be able to search beyond visual line of sight; thus taking searching in a whole new direction.

Spartan accommodations

Finally, we continue to work in conjunction with the 442 Squadron in Comox as they train and participate in searches. In the upcoming weeks some of our bases in the Central Zone will assist military personnel in training and searching from the Hercules aircraft. Unfortunately, our airstrip in Vernon is not ideal to accommodate the "Herc" due to challenges turning around, but we have accepted an invitation to help train military personnel flying the Cormorant. On November 1st, some of our CASARA volunteers will set up a crash site scenario complete with "victims". Once the Cormorant personnel have completed their training, our members will be provided with a Cormorant flight and will be dropped off at CYVK shortly thereafter. Flying in military aircraft is always a special treat and definitely one of the perks of belonging to our



Best seat in house

Adam & Eve were the first ones to ignore the Apple terms and conditions.

If I got 50 cents for every failed math exam, I'd have \$6.30 now.



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FUN TIMES ----- at the annual fall clean-up



At left, Art Ratte, Tom Glover and Chuck Ross put the flagpole back up using the base made and installed by Luc Mailloux.

At right, Del Desrosiers and Marion Ross display what 'sassing' the hairdresser will get you...



MISSING PERSON REPORT

A husband went to police station to report his missing wife: Husband: I've lost my wife, she went shopping yesterday and has still not come home. Sergeant: What is her height ? Husband: Oh, five something . . . Sergeant: Build? Husband: Not slim, not really fat. Sergeant: Color of eyes? Husband: Never noticed. Sergeant: Color of hair? Husband: Changes according to season. Sergeant: What was she wearing? Husband: Dress/suit/blue jeans -- I don't remember exactly. Sergeant: Did she go in a car? Husband: yes. Sergeant: What kind of car was it?

Husband: 2015 Corvette Stingray LT3 with the Z51 Performance Package, shark gray metallic paint, with the 6.2 liter V8 engine with Direct Injection generating 460 HP. 8-speed paddle-shift automatic transmission, and GT bucket seats, and has a very thin scratch on the front left door (at this point the husband started crying...)

Sergeant: Don't worry sir. We'll find your car.

OCTOBER PANCAKE BREAKFAST – random photos...



STIFFED

One night, a police officer was stalking out a particularly rowdy bar for possible violations of the driving under the influence laws.

At closing time, he saw a fellow stumble out of the bar, trip on the curb, and try his keys on five different cars before he found his.

Then, sat in the front seat fumbling around with his keys for several minutes. Everyone left the bar and drove off. Finally, he started his engine and began to pull away.

The police officer was waiting for him. He stopped the driver, read him his rights and administered the Breathalyzer test.

The results showed a reading of 0.0. The puzzled officer demanded to know how that could be.

The driver replied, "Tonight, I'm the Designated Decoy."

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Blast from the past: taken by a spectator cell phone, the Vernon Snowflakes "strut their stuff" to open the Vernon Winter Carnival Parade back in February, 2019...

Snowflakes Fly Again

... overtop the Vernon Winter Carnival Parade 2019



It is a scientific fact that all snowflakes are different, but does not apply to aircraft.

The "Snowflakes RV Formation Flying Team" from the Vernon Flying Club entertained the crowd just prior and during the Winter Carnival Parade on Saturday, February 2, 2019 with several passes of the parade route. The seven homebuilt aircraft are all versions of RV - so named because the designer of the kits is Richard VanGrunsven of Oregon, USA, and not because they are a Recreational Vehicle.

Pilots (and in most cases, the aircraft builder) are (name/aircraft type/aircraft ident):

| Lead | - Stephen Swallow | RV 9A | C-GLGG | (with show smoke) |
|------|----------------------|-----------|----------|-------------------|
| #2 | - Chuck Ross | RV 4 C-F | EAU | |
| #3 | - Ron Townson | RV 8 C-FI | FF (Summ | nerland) |
| #4 | - Hamilton McClymont | RV 4 | C-GYWR | (Salmon Arm) |
| #5 | - John Swallow | RV 7A | C-FBJV | |
| #6 | - Franz Fux | RV 7A | C-FUXI | |
| #7 | - Rob Kennett | RV 6A | C-GRBK | |

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Normally, the "Snowflakes" have mounted three- and four-plane flypasts; however, the day of the Winter Carnival saw seven aircraft available for the operation. It was decided that the formation would take off in pairs (except for the last one, of course) and the first four would form up in "box" or "diamond" formation while the last three would form up in "vic" formation. (No 'box' or 'slot' aircraft). Three or four minutes after departure, the three plane joined the foursome to create a "heptathing" or seven plane formation.

As the only aircraft with "smoke", Steve Swallow was the obvious choice for leading the foursome and ultimately, the heptathing. Brother John volunteered to lead the vic formation promising to present a stable platform on which Snowflakes 6 and 7 could fly. (The further from the lead aircraft, the more difficult it becomes to fly formation... Think "Crack the whip")

Formation flying is not without risk; however, as with driving a car, risks can be identified and mitigated. In the case of the Vernon "Snowflakes", demonstrations of this type are limited to straight and level flight with gentle turns to reposition the formation. Nothing is demanded of the pilots that has not been practised or is beyond their capabilities. For their part, the pilots have a contract to remain within the confines of their position unless directed by the lead or permission has been requested and granted.



In an interview with John Swallow, he commented that it is important for

formation flying that the aircraft be of similar characteristics and capabilities, both for safety and precision. In this instance, the aircraft are all of the low wing variety.

The inset shows the positions of each pilot once in the air and joined together. The "Golf" and "Victor" call signs were for ease of identification until join-up was affected.

HEAVENLY GAMES....

Jesus and Moses were playing golf one day when they arrived at a tough, 215-yard par three, all over water. With the honour, Jesus stepped up to the tee with a 4 iron. "That's not enough club; you need at least a 4 wood," Moses said.

Jesus responded, "No, I saw Arnold Palmer play this hole the other day and he put a 4-iron five feet from the pin and sank the putt for a birdie." Moses said, "I'm telling you, that's not enough club!"

Striking his shot, Jesus put his ball into the water. He parted the water, walked out and got the ball and teed up again. Moses said, "I told you that was not enough club; you need at least a 4 wood."

"This will be fine — remember what I said about Arnold Palmer." Jesus said. As he struck his ball, it yet again went into the water. As Moses looked on in disgust, Jesus got his ball and teed it up for yet another try.

As he was about to hit shot for the third time, a foursome was approaching the tee with one of the golfers shouting, "What's he doing hitting a 4 iron on this hole? He needs at least a 4 wood. Who does he think he is, the Lord himself?

"No," replied Moses, "He thinks he's Arnold Palmer!"

LAWS OF THE NATURAL UNIVERSE

Law of Mechanical Repair:

After your hands become coated with grease, your nose will begin to itch.

Law of the Workshop:

Any tool, when dropped, will roll to the least accessible corner.

Law of the Telephone:

When you dial a wrong number, you never get a busy signal.

Law of the Alibi:

If you tell the boss you were late for work because you had a flat tire, the very next morning you will have a flat tire.

Bath Theorem:

When the body is fully immersed in water, the telephone rings.

| VERNON FLYING CLUB / COPA Flight 65 2022 / 2023 | | | | | |
|--|--|--|--|--|--|
| PRESIDENT: VICE PRESIDENT: TREASURER: SECRETARY: DIRECTOR: DIRECTOR: DIRECTOR: | Betty Lee Longstaff John Swallow Bill More Marion Ross Alison Crerar Tom Glover Derek Riphagen | | | | |
| COPA CAPTAIN: COPA Co-CAPTAIN: COPA Navigator: | Stuart McLean Stan Owen Michael Crutchley | COPA | | | |
| Newsletter Editor: | John Swallow etings are held the th | ird Tuesday of each month at 7:00 p.m. | | | |