Photo 1

Photo 2

Photo 3

Falling Out of Your Parachute Harness Is Not an Option

And survival is not an accident

BY ALLEN SILVER, IAC 431160

YOUR SURVIVAL IS NOT AN ACCIDENT. It begins with you.

Over the years, as an FAA master parachute rigger, I've written numerous articles on topics such as how to store your parachute, keeping it out of the sun's UV rays, and how to properly ship your expensive cushion for needed maintenance. But there is one topic that keeps rearing its ugly head over and over again. It's survival! Being well informed on how to adjust your harness begins with you. It is critical to your survival. You need to know how to recognize your harness is out of adjustment and how to properly adjust it. You cannot afford to say I'll get to it later or the next time my parachute rigger sees it. There may be no next time. Having to make an emergency bailout is stressful enough. Falling out of your harness is another sign of a bad day. Remember, don't leave home (I mean your aircraft) without it.

Accidents happen at the worst time, and there are no excuses for not being proactive and taking charge of your survival. There have been several accidents over the years where people have fallen out of their improperly adjusted harnesses. This issue also includes harnesses that were adjusted properly, but people forgot to fasten the leg or chest straps. I can recall one accident when the pilot forgot to fasten his leg straps. I was told this individual flew this way because the leg straps were uncomfortable when fastened, and he would fasten them in case of an emergency. If you are not sure how to adjust your parachute

Photo 4

PHOTOGRAPHY BY **ALLEN SILVER**

harness or it's uncomfortable, don't wait until its next repack is due to ask your rigger. I guarantee you there are no second chances here. To emphasize my point many years ago, there was an article in the February 2012 *Sport Aerobatics* titled "Mid-Air Collision." The pilot safely made it out of his aircraft but was seriously injured by a harness that was out of adjustment. Improperly adjusted harnesses can cause serious injury or death. Don't wait to find out.

Many pilots have never visited their parachute rigger. They just box their parachute up and send it off, and like magic, it reappears with a new inspection date on it. Your rigger needs to know at minimum how tall you are and how much you weigh so they can adjust your parachute harness to fit you properly. Don't assume it's ready to put on and go flying when it's returned. I've mentioned this before, but it's worth repeating. Most parachute riggers are familiar with skydiving parachutes that have few or no adjustments on them. They are custom built to fit that person like a new suit, with the measurements provided to the manufacturer. Now, here you come with your generic (one size fits all) parachute with as many as seven adjustments. They certainly may be qualified to pack your expensive cushion; however, they need some information. I address the need for this information further on. Unless it has been properly adjusted beforehand, there's a good chance it will be returned to you with a current repack out of adjustment.

If you are the only one wearing your parachute and it's properly adjusted, I recommend telling your rigger to hand tack your risers in place, just above the three-bar adjuster (if you have them) to help prevent slippage during normal usage. (See Photo 1). Just putting on and taking off your parachute during normal handling can cause the webbing to slip. (See Photo 2 where I'm pointing.) Note how far the webbing is out of adjustment from the three-bar adjuster to the chest strap. Now, look at the other side above the rip cord pocket. (See Photo 3.) If you have the three-bar adjusters on your parachute and your parachute is adjusted correctly, that will place the adjusters in the small of your shoulder below your collarbone. (See Photo 4.) The part of the harness webbing that runs from your waist vertically through the three-bar adjuster, if you have them, and over your shoulder where they enter your parachute container is called the main lift webbing/risers. The suspension lines on your parachute are attached to the end of them. Most parachutes have four. It also is where your steering handles are located. Not all parachutes have steering handles, so ask your parachute rigger, "Do I have steering handles? If I do, what color are they?" You can still steer your parachute without steering handles by using the rear risers only. Your rigger will be able to show you how to do it. Remember, over time and through handling, your parachute webbing may slip through the adjusters.

Do not forget your chest and leg straps. To help prevent them from loosening while wearing your parachute, make sure you have elastic keepers on them. If they are missing or have lost their elasticity, your parachute rigger should be able to replace them.

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This issue leads to another situation should you have to bail out. While you may have managed to stay in your improperly adjusted harness, now you have another problem. Your parachute probably has steering handles, but they are out of reach and you're heading straight toward the power lines and a shocking experience. Why did it end up this way? Was your parachute harness out of adjustment as described above, or maybe it was adjusted properly. Did you forget to tighten your leg straps after you donned your parachute? What I consider the proper way to do this is to bend at the waist about 30-45 degrees and cinch them down. When you straighten up, they should feel pretty snug, but when you sit down in your aircraft, you'll feel comfortable. If you have a chest strap, make sure it's also snug enough to keep the parachute harness from falling off your shoulders. Now, you are ready to fly.

If you do not personally take your parachute to your rigger, call them to make sure they know, at minimum, your height and weight and any other measurements they may ask for. Sending them a photo with your parachute can be a huge help. They may be able to talk you through how to adjust it over the phone, even if you do not need a repack. A Zoom or WhatsApp call works, too. Your fellow pilots may also be a source of help. Be observant, and if you see other pilots' parachutes out of adjustment, you have a duty to speak up. Don't wait! The life you save may be your own or another pilot's.

Photo 5

Properly adjusted parachutes and good friends save lives.

Consider inviting a parachute rigger to your next club or group meeting. Make sure you bring your parachute(s) and any club parachutes so they can be adjusted (if needed) while you have your parachute rigger there. Many flying groups have safety officers. This person should be trained on how to spot a parachute harness that is out of adjustment and how to properly adjust it. I'm often invited to make my PowerPoint presentation titled "Emergency Bailout Procedures & Survival Equipment for Pilots." My presentations are free except for travel expenses.

If you have multiple users of the same parachute, there is a way to size it down for smaller pilots. I call this method (Photo 5) a camel's hump. It works best when the risers are hand tacked in place as I described above but is not necessary.

Many of you collect past issues of *Sport Aerobatics*. I have several articles in them on adjusting your parachute. My articles that have information on this subject are in the September 2013, March 2014, August 2015, and December 2015 issues. You can also go to IAC.org/magazines and follow the prompts to rediscover past issues.

Many years ago, I wrote an article about the "Normalization of Deviance." A quick explanation is "I've always done it this way, and it's worked before for me." Why change? People can generally easily spot complacency in others but find it hard to spot it in themselves.

My whole point of this article is to emphasize the importance of working as a team to help deviated practices from becoming the new norm. And you are part of that team. Putting on your parachute without making sure it's properly adjusted is not normal. Of course, you wouldn't go flying without checking to make sure you have enough fuel, right? Deviating from what is accepted practices has and will continue to cost lives until we take another look at how we conduct our preflight inspections, maintenance, and yes, parachute procedures. Safety begins with you.

You can always contact me if you have questions or would like to schedule a seminar. Fly safe; have fun.

Blue skies. IAC

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