



Custom built to fit the person

The flying season is always my busiest. Pilots need to get their parachutes inspected and packed, and of course they need them back yesterday. The problem is all the days before yesterday are your responsibility. How you take care of your expensive life preserver could determine how quickly you get your parachute back. With proper TLC your parachute will only require a 180-day repack and the occasional replacing of rubber bands, worn elastic keepers, and the pack closing loop(s).

What I'd like to review is some of the many steps you should take so your parachute rigger doesn't have to ground your parachute for needless and possibly expensive repairs. Keep in mind many parachute riggers do not have the necessary sewing machines or the material to do extensive repairs and would have to send them back to the factory or a rigger like myself that has way too many sewing machines and specialized tools.

The number one problem I see over and over is your parachute harness so far out of adjustment that you could **easily fall out of it**. "I don't want you to end up the fall guy when all it takes is a few simple adjustments to prevent this." This is something you need to discuss with your parachute rigger or some other knowledgeable person before your next flight. You could also send me a picture of yourself with your parachute on, and I can probably tell by the photo if it's properly adjusted. I guarantee you there are no second chances here.

Many of you have never seen your rigger. You just box your parachute up and send it off, and like magic it reappears with a new inspection date on it. Your rigger needs to know how tall you are and how much you weigh, so he or she can adjust your parachute harness to fit you properly.

Don't assume it's ready to put on and go flying. I've mentioned this before, but it's worth repeating. Most riggers are very familiar with sky-diving parachutes that have very few or no adjustments on them. They're custom built to fit that person when he or she purchased it. Now, in comes your parachute with as many as seven adjustments. Unless it's been properly adjusted beforehand, there's a good chance it'll be returned to you with a current repack and out of adjustment.

A simple trick I do is hand tack the webbing in place when I receive your parachute based on the information you gave me about your height and weight. This

way the webbing can't slip (see photo No. 1). The parachute in this photo happens to be a Mini Softie. By leaving about 3-4 inches below the metal three-bar slide, this parachute will comfortably fit someone from about 5-feet-5-inches to 6-feet tall. This is a simple solution that your rigger can do (on any parachute), and it can be easily removed, if necessary. When properly adjusted the three-bar slide should be located in the small of your shoulder. Also, if your parachute is out of



Photo 1

adjustment, you may not be able to reach the steering system assuming you haven't fallen out.

Believe me, all webbing will slip through its adjusters over time (see photo No. 2). I suggest you go back and reread the February 2012 *Sport Aerobatics* article titled "Mid Air Collision." Then please make doubly sure your parachute harness is adjusted properly.

The second problem I see is the failure to protect your parachute harness/container from wear and tear that can lead to potentially expensive repairs. The problem is the back and/or bottom of your parachute container rubbing on your **hard** seat. In less than one repack cycle, of 180 days, you'll notice the container material has scuff marks on it. Then you'll start to see the outline of your rip cord cable and pins showing through the material. Over time the material will show a lot of wear and tear. If it's bad enough, that

area will need to be repaired. There is a simple solution that I've been preaching for years that you can do for little or no out-of-pocket expense. You need to pad your seat back, bottom, or both with something like a piece of carpet remnant. All you need is a little bit of padding and cushioning material to protect your parachute from excessive wear.

Thinking about it and saying I'll get to it soon is not good enough. You should make sure this has been done before your next flight. Many pilots say they don't have a problem because their seat back or bottom is smooth. That's not the problem. The problem is it's **hard**. If you have an aluminum seat it compounds the problem. It'll start turning your container black after the first flight. If you don't believe me, just rub your hand back and forth a few times on your aluminum seat and it'll soon be black.

While I'm on the subject of seats, some aircraft have fancy cushions on the seat back or bottom. Many pilots need to remove those cushions so they and their parachute can fit in their aircraft, preferably at the same time. This can create a whole new problem. You may still have to pad the area where the cushion has been removed as I mentioned above, but you may have exposed yourself to a new problem. It's that wonderful stuff we all can't live without. I receive several parachutes a year that look like a cat has scratched the container material. It's typically two inches wide and runs the length or width of your container. It's not your cat; it's the Velcro. If you remove a cushion and do not pad the seat, you may have exposed your parachute container to the scratchy part of the Velcro called the hook. If you still don't want to pad your seat, you at least need to put the mating portion of Velcro called the pile on top of the hook.

Your parachute is also not a place for your pet to sleep on. I receive parachutes with animal hair on them from improper storage all too frequently. I've also had them arrive with mouse droppings on them. Most of us fortunately or unfortunately live close to a Kmart or similar store where you can purchase an inexpensive plastic box with a snap-on lid to protect your parachute. With proper care your parachute will last you the twenty years' service life that most manufacturers want on their equipment.

In my July column and at the beginning of this column I mentioned leg and chest straps missing the elastic keepers and the potential problems they can cause. Remember, at a minimum your parachute rigger should have extra replacement elastic keepers, pack closing loops, and rubber bands on hand to replace the ones that have gone missing or wear out. If they don't have these basic items, it may be time to find a new rigger.

Until my next column, I'll leave my computer on to receive your questions. Fly safely and blue skies. **IAC**

