



**ALLEN SILVER**  
COLUMNS / ASK ALLEN

## Sun 'N Fun...nel



I RECENTLY RETURNED FROM the Sun 'N Fun International Fly-In & Expo in Lakeland, Florida, and had a very nice turnout for my IAC-sponsored bailout seminar. No more dusty hot tents. The brand new Florida Aeronautical Academy building is fantastic. A special thanks to Jim and Jean Taylor for helping set up my presentation.

I managed to survive the tornado. It passed over and all around the exhibit building I was in, wreaking destruction to so many aircraft and displays. Fortunately no one was seriously injured or killed. I thought the exhibit building I was in was going to end up in Kansas with Toto. Being from California, I'm used to the earth going up and down, sideways, and rolling like a wave, but not going around in circles. For those old enough to remember, it was definitely an "E" ticket ride. No matter what Mother Earth throws at us, I find pilots are very resilient.

However, you manage to make the same costly errors over and over. What I'm referring to is purchasing used pilot emergency parachutes from many different sources without having them inspected as to their airworthiness. I've said this many times before, but it apparently is worth repeating: *Do not buy a used parachute without having a parachute rigger look at it.* Most parachute riggers are

more than happy to inspect it for free. Remember 20 years' service life is all that each manufacturer wants to see their equipment in service. That's a maximum, if you take good care of your expensive cushion. It could be a lot less if you mishandle or abuse your parachute.

It is important that you understand the following. I'm talking about the entire assembly, not just the parachute inside. Everything should be removed from service in 20 years. That means the harness and container also. I hear the following all the time: "I hardly ever use it, and it looks just like new." I don't care where you've stored your parachute or how new it looks, it needs to come out of service in 20 years. Even though there are no laws or rules in the United States saying this is mandatory. Many countries around the world have laws that require you to remove the entire parachute assembly from service in as little as 15 years. If you still decide to get your old parachute packed and have to use it, I can only hope I'm not standing underneath you, if you have to make an emergency bailout. So, if you can find a rigger, in the United States, who doesn't care what the manufacturer wants, then go for it. Personally, I would be looking for a new rigger. Even though your parachute will probably never be used, it's a chemical product and will weaken over time (20 years) no matter how well you take care of it. Many years ago when I was chairman of the rigging committee for the parachute industry, I asked the manufacturer for guidelines. The 20 years we came up with (at first) was kind of a stab in the dark, but it turned out to be a good and accurate number. Most parachutes that seem to have problems are at least 25 years old. This gives you a safety factor of approximately five years. This is just like the safety factors built into your aircraft to keep you and your passengers safe. No one wants to fly his aircraft until it starts to fall apart in the air, so a safety cushion has been built in to keep you safe. The same is true for your parachute.

A couple of other factors that help weaken your parachute are excessive UV damage, and excessive heat from leaving your expensive cushion in a hot place like your aircraft or car trunk during the hot and sunny summer months. Remember, your parachute doesn't need direct sunlight to cause UV damage. An overcast day will work just fine.

I've seen many older parachutes usually around 25 years and older pull apart like a wet tissue. The damage is almost always invisible to the naked eye. Non-destructive pull tests randomly done on your parachute fabric may

help detect weak areas, but these tests can very easily miss them. Your parachute is a giant piece of nylon, and doing occasional pull tests in random areas and having that area pass is useful, but it only tells you the area that you tested passed. I've done tests where the fabric failed. What I did next was test several areas surrounding the area that failed, and they passed. This led me to wonder how many other parachutes that I tested and passed were bad just a few inches away. Unless there were other problems, the common denominator these parachutes had was they were always old parachutes, in excess of 25 years of age. This is why the manufacturer's recommendation of a 20-year service life on your parachute is a good one. *One that you can live with.*

Remember, I have a lot of articles and past "Ask Allen" columns on my website that will help make sure your life preserver lasts the full 20 years. Go to them and refresh your memory. You probably will find something you've overlooked or forgotten. If you have questions, don't hesitate to contact your rigger. You can also always call or e-mail me.

**Q:** *What do I teach/tell someone who rents or borrows a parachute from me?*

**A:** If you run an FBO that rents parachutes to aerobatic pilots, you need to explain to that person how to properly use it. You wouldn't rent them your aircraft without a proper checkout. That goes for the parachute you offer them. But the problem is

you don't know much more about that thing than the people you're renting it to. Merely having it packed twice a year is not good enough. An occasional safety seminar for you, your instructors, and renters is ideal, but not always practical. Here's a suggestion. On my website under articles is my three-part series titled "Practice, Practice, Practice.. Have everyone read it and sign a training form that they have done so. It's called CYA. This additional training along with your briefing may help protect you from a lawsuit, if something happens. That person or their relatives, in a court of law, may sue you for lack of proper training. Continuing education is a valuable training tool. Remember, safety is not an accident."

See you next time. Please keep the questions coming. **IAC**

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