



Allen Silver

By Allen Silver, IAC 431160

Ask Allen

A master rigger answers your questions about parachutes.

Q: Will heat affect the rubber bands that hold my parachute suspension lines in place?

A: The rubber bands are a critical part of the proper deployment of your parachute. If a picture is worth a thousand words, then look at this photo carefully. The rubber bands in this photo didn't become stuck to the lines of this parachute overnight. Several things can cause this to happen to your parachute. Long intervals, usually several years, between having your parachute packed can cause this to happen. Storing your parachute in a hot, damp, climate is a contributing factor. It's almost always a combination of several things. Even if you could remove most or what would appear to be all of the rubber bands stuck to this parachute (see photo), you still have a problem. Particles of rubber bands have impregnated themselves into the parachute line and only need a little heat to make everything a sticky mess again. You can't remove the rubber bands without damaging the lines.

The number one cause of this problem, in my opinion, is exposure to excessive heat. Usually this is caused by such things as leaving your parachute in your cockpit exposed to the hot sun (and UV damage). This will be compounded by leaving the oven door (your canopy) closed, creating an even hotter environment. I often see parachutes left in cars that have been sitting in the hot sun for hours. A car or the cockpit of your aircraft can become very hot, speeding up the deterioration of the rubber bands. In addition to heat, UV damage will also speed up the whole process. Severe UV damage is almost always irreparable. At today's prices of replacing your parachute this can be a very expensive lesson.

Over the years I've attempted several methods of trying to remove, from parachutes, rubber bands that have

turned to a sticky mess, with no satisfactory results. I've had come into my shop parachutes that could not even be pulled out of the container because the rubber bands had glued the canopy and lines to the inside of the container. This would have caused a total malfunction of the parachute. The best you can hope for is that the rubber bands have only dried up and become crumbly. Usually they can be successfully removed. This is still dangerous, because they are not holding the suspension lines in their proper order. This could easily result in an out-of-sequence opening of your parachute and could result in a malfunction if you needed your parachute in an emergency.

This is such an easy situation to prevent. Having your parachute serviced on a regular basis will usually solve this problem. Your parachute rigger should always have a supply of rubber bands on hand. The ultimate solution is to properly store your parachute when you're not wearing it. This includes opening the parachute container and removing the rubber bands if you anticipate a long storage period (anything more than six months).

Q: How do I store my parachute for the winter?

A: Winter is fast approaching in many parts of the world, and storing your parachute can be an issue. I covered this last year in the December 2007 issue of *Sport Aerobatics*. You can refer to that issue, if you have it still lying around, or go to my website, www.SilverParachutes.com, and click on "Ask Allen Dec 07." However, I do have a couple of photos of a parachute sent to me in a plastic box. These boxes are very inexpensive and a great way to store your parachute for the winter. They also prevent critters from getting into your parachute (see photos). Stores like K-Mart or Wal-Mart carry them. If you store your parachute in a container, you might consider tossing in a few desiccants to help absorb any moisture.

Q: Is my parachute steerable and where will I land?

A: Many pilots don't have a clue if their parachute is steerable or how to maneuver it. Most modern parachutes have some means of steering them. You need to ask the manufacturer or the dealer who sold you your particular parachute how to do this. It can vary slightly from manufacturer to manufacturer. The next time you have it repacked ask your rigger to show you the steering handles and how to properly use them. If you ship your parachute to your rigger, open it up and check for yourself before you box it up.



I receive at least one call or e-mail every month from someone who didn't even realize their parachute was steerable. I often refer them to my website, www.SilverParachutes.com, and tell them to click on "Articles" and read "Practice! Practice! Practice!" Once they find out that they can steer their parachute, they often ask how maneuverable it is and where they will land. This article has one section devoted entirely to steering your parachute and where you'll land based on the average forward speed of most round parachutes of about 5 mph.

I need to remind you that more than 99 percent of you will be wearing round parachutes and you must not confuse them with rectangular parachutes used by sky divers. One is an apple and the other an orange. On round parachutes, you pull down *one* steering handle at a time depending on which way you want to turn. Sky diving parachutes are flying wings and need to be flared on landing to reduce their forward speed just prior to landing. This is accomplished by pulling down both steering handles at the same time. Remember, *never* flare or pull down both steering handles on a round parachute at the same time. If you do this, the result can be a very hard landing and possible injury.

This year is almost over. I don't know where it went so fast, but I wish all of you a happy holiday season and a happy new year. Of course, keep your questions coming. 🇺🇸



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