

# **MAKE SURE**

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Just recently, one of the country's leading sailplane pilots was killed when his sailplane broke up in mid-air. The accident itself and the possible causes will be the subject of a later report. Let it suffice to say here that the probable cause, the starting point in the chain of events leading to the mid-air breakup, appears to have been that a part, essential to the normal operation of the controls, was missing from the aircraft. The fact that the part had not been installed in the aircraft was firmly established when it was later found in the pilot's car.

No pilot in his right mind will ever claim that the proper functioning of his sailplane is unaffected by the loss, or the improper installation of any one of the nuts, bolts, pins or structure of which the sailplane is constructed. Yet there are numerous instances on record of apparent carelessness or indifference in making sure that all the parts are in place and functioning as they should.

For instance, a P-R was winched into the air during a contest at Torrey Pines. After release from tow, the pilot and passenger discovered there was no elevator control. The elevator horn bolt had not been properly installed and the controls had not been checked for proper functioning prior to take-off. The sailplane, after a series of increasingly violent stalls which were brought partially under control by the timely application of dive brakes, dived into the ocean at a shallow angle. Both occupants received only bruises but the ship was substantially damaged.

In the Midwest, a pilot took off in a 1-23 during a contest. After becoming airborne, he discovered there was no aileron control. The aileron bolt had been forgotten. On landing, a wingtip dug into the ground and the ship ground looped violently, becoming almost a total loss. The pilot, however, did not.

A 1-19 was assembled by a group of pilots and rolled to the take-off point. On the way, a strange noise was heard inside. An investigation disclosed the fact that the tailplane

struts were rubbing against the wheel in the bottom of the fuselage. Needless to say, the struts were quickly installed in their proper place. Had it not been for the noise, the oversight could have cost the pilot his life.

Sailplanes, to a much greater extent than powered aircraft, are susceptible to missing parts because of the continual assembly and disassembly of the major components. The problem will always be with us until designs are developed to the point where all controls are automatically engaged as the wings and tail are assembled to the fuselage.

The question might very well be asked — Who is responsible for seeing to it that a sailplane is ready to fly after having been assembled? The answer, first, last and always, is — the pilot. After all, it is his neck if something has been forgotten. If he has a passenger, the responsibility is even greater because the passenger trusts him to get the ship back safely on the ground.

The pilot has two procedures or methods which, if used faithfully, will reduce the chance of error to the vanishing point.

First is the assembly check list. Every sailplane should have a convenient list of all assembly connections available for checking off when the ship is put together. A walk around inspection, starting, for instance, at one wing tip and ending in the same place costs very little time but does great things for the pilot's peace of mind. Inspect every nut and bolt on the way. One suggestion that works very well is to leave all fairings and inspection plates off while assembling the ship, then install them as each point is checked during the inspection.

Another method used is to hand the list to a bystander and ask him to make the inspection. This may take more time however, because the person may not be familiar with the ship and will ask questions. The various connections will have to be shown and explained. In any case, the pilot should not trust his own memory and particularly, should

never trust another person's word for the integrity of the assembly job. Don't congratulate the crew for having assembled the ship in record time until a check has been made to see if the ship has been completely assembled. There is one rule that has been distilled from experience and that rule, containing just about everything there is to flight safety is, "Never take anything for granted."

Second in our rules for long life is a habit, widely practiced by the older pilots, of making a "cockpit check" prior to take-off. Again, a list of items to be checked is a very useful prop. Paste it in the cockpit where it can be seen. It should list all controls necessary for the safe operation of the sailplane.

As the list is checked off prior to flight, the controls should be moved from stop to stop to insure free operation. Any sign of binding or failure to respond should be cause to not fly until the trouble is corrected. Look at the control surfaces move or have someone verify their movement. Check the canopy latch. Check to see that the thermos or camera cannot move and jam the controls. Make sure everything is ready before giving the signal to raise the wing tip.

In other words, when the ship leaves the ground, the pilot will have made sure of two things. One is that all the necessary parts are in place and two, the control surfaces respond as designed.

To settle for anything less is to invite disaster.

### **3 NEW SSA CHAPTERS**

In recent months, three more U.S. soaring clubs have applied for and been granted SSA Chapter status, bringing the total number to sixteen. The three new Chapters are the Charlotte (N.C.) Soaring Society, the Hawthorne Soaring Club of Moultrie, Ga., and the Northwest Michigan Soaring Club, Inc., of Frankfort-Elberta, Mich.

The Charlotte Soaring Society has seven members and will soon have a P-R flying. The Hawthorne Soaring Club has seven members and an L-K that Mr. Beverly Howard, owner of the Hawthorne Flying Service, has owned. The Northwest Michigan Soaring Club, Inc., has nine members who fly a Cinema for their soaring.

SSA welcomes these new Chapters and looks forward to long and mutually beneficial relationships with each.