



When Results Count

R/Cers frequently incorporate things into their airplane and radio setups that promise to improve their flying, but if they could objectively step back, they would see that they and/or their planes flew better without them. Despite this, they hope to overcome the difficulties and/or lack of advancement with more practice.

The tricky part of airplane setup is knowing what really helps, what sounds good in theory, but isn't, what is not worth the trouble, and what may be applicable to some extreme forms of *stunt* flying, but is actually a detriment to aerobatics.

Seldom can you go wrong by initially setting up your control surface *travels* according to the manufacturer's recommendations for that airplane. Then, at a certain point you will develop a *feel* for the way your airplane responds to your inputs, and whether you feel it is too sluggish, too sensitive, or about right. Or maybe most of the controls are fine, but you'll feel that one is too sensitive. In any of these cases, why not accommodate your comfort level and simply increase or decrease the total travel of the control(s) at issue and move on? Why needlessly force yourself to get used to an overly sensitive or sluggish elevator or aileron, or introduce large amounts of radio *exponential* and sacrifice the correlation between your control inputs and the flight responses, when a simple control surface travel adjustment may be all that is needed to make the airplane more agreeable to you, and therefore a pleasure to fly?

All too often, perfectly good airplanes are faulted or retired simply because the pilots, who upon experiencing a dislike with the way their planes handled, put it upon themselves to learn to deal with it, and then went looking for another airplane when the one they were flying wasn't much fun to fly. On the other hand, changing the travels to your immediate comfort level will boost your confidence and free you to concentrate on aerobatics, instead of trying to get used to the plane.

1st U.S. R/C Flight School has always adjusted travels to suit each student's skill and comfort level to foster faster rates of progress. Interestingly, all the aerobatic students prefer similar rates of response (what might be called "happy medium" responses, plenty for aerobatics, but not too sensitive). Those happy medium control rates have been identified as the following:

For testing purposes, a full up elevator loop will take a person counting as fast as he can at the start, a count of "14" or "15" to complete.

If the airplane reaches the bottom of the loop before reaching "14" or "15," the elevator travel needs reducing. If "14" or "15" is achieved before reaching the bottom, the elevator travel needs increasing.

The roll rate is checked with full aileron, and counting as fast as you can at the start takes a count of "7" or "8" to complete one full roll.

KPTR: Often the best solutions are the simplest ones, and that is why it is so easy for the advancing pilot to overlook them!