Mike Goulian Aviation
Pro Tip of the Month - Benefits of Trim during Landing
By CFII Prassuna Budlong

A few clicks of aft trim before roundout and flare should be helpful to counteract the forward trim applied during traffic pattern configuration changes. 3-4 clicks should keep your landings slick!

Easier said than done, right? We've all struggled our way through rough landings, leaving us frustrated and wanting to do *one more* to end our flight on a good note.

There sure is a lot of value in taking our shiny birds out on a calm wind day and practicing a few landings in the pattern to keep proficient. But how many of us are using incorrect techniques over and over again, then turning them into…. *bad habits?*

Elevator Trim

The trim system on the Cirrus is designed to reduce pilot workload by relieving control pressure on the side stick and setting a new neutral position on the spring cartridges; it's set to hold an AIRSPEED.

Pressing the electric trim hat switch forward commands the electric elevator trim motor to adjust the neutral trim setting of the elevator spring cartridge to a nose DOWN position. Pressing the switch aft, does the opposite.

So if your airspeed changes, the elevator trim must also change to keep control pressures on the side stick lighter. Remember, trim and airspeed go hand-in-hand.

In the traffic pattern, trimming down after extending flaps is done to counteract ballooning from an increase in lift due to a change in angle of attack, but mainly to manage AIRSPEED with the new change in configuration.

Pitch- Power- Trim

If you change pitch and/or power, you have to readjust the trim for that specific airspeed. Avoid making immediate changes to trim as the airplane will need a few seconds to stabilize, reach a state of equilibrium and a constant airspeed.

If you trim right away you're probably going to end up over-trimming and chasing airspeed. That's no fun.

Landing

Once you begin your descent to land in the traffic pattern, and/or extend flaps, notice how much forward trim you require.

As we're trimming for airspeed and desire to hold 100 KTS on downwind, 90 KTS on base and published Vref speed on final, guess what happens when you reduce power to idle before roundout and flare?

Hint: You're going from a nose down attitude to a nose up attitude.

Another hint (because I'm generous like that): You're changing airspeed!

Answer: Your nose will begin to drop to capture the airspeed you set while trimming forward in the pattern.

Just by adding 3-4 clicks of aft trim while bringing your power to idle for landing, you've set yourself up for success. This ensures less control pressure is required for that gentle pitch-up attitude during roundout and flare. And as long as you're on airspeed and have the correct sight picture set, you're on your way to a smooth touch down on the main wheels, soon followed by the nose.

So grab your favorite bird, maybe take your trusty mentor pilot along, and try 3-4 clicks, to keep your landings slick!