A Notch in Time…

There is an old saying that "a stitch in time saves nine", implying that if you think ahead and put the right stitch in something being made, you will save nine "repair" stitches later. I would propose that an aviation corollary might be "a notch in time saves a lot of trouble in the pattern later".

Many of those with whom I fly as part of the Wings program, and in flight reviews, are hesitant to use flaps, and yet flaps can do so much for you. And, as more and more Sport Pilots and Sport Aircraft start flying in our patterns, this will become even more of an issue. It is an issue now, when faster aircraft, like light twins and singles (such as Mooney's, Bonanza's, and the faster composite airplanes) exist, or try to, in the same pattern as slower 172's and Cherokees, and even 172's living with 152's. Here is a solution that makes pattern living much easier.

Prior to pattern entry, put on "a notch" of flaps. Get to the flap speed and put on either one notch (for those with that type of flaps) or 10^{O} of flaps (in some really "clean" airplanes you may need to lower the gear to slow down). This does several things. First, it gets your faster aircraft to a speed that blends better with slower aircraft. Second, once you are trimmed for level flight it results in a lower nose attitude at those lower speeds, providing better forward visibility in the pattern and pattern entry. Third, it makes a really stable platform that handles much better in the pattern at the slower speeds.

This is true for instrument flying as well. Don't wait until the final approach fix (FAF) to get it slowed down. Get it slowed down while in the vectored transition, or outbound on a full approach, so that when you get to the FAF you don't have to change so much "stuff" all at once. And, virtually all aircraft are much more stable on the final approach with a notch of flaps, and a stable "stabilized" approach IS what we (and the FAA) want…..isn't it? Then only a minor power reduction, or lowering the gear, at the FAF will result in a smooth transition to a nice descent rate, which is easier to control and observe.

The aerodynamics of it explains the "why". Most, though not all, of the faster aircraft have a somewhat cleaner wing (along with more power) than many of the slower airplanes – and yet they are expected to fly in the same patterns with the slower airplanes. The "first notch" of flaps is, in fact, mostly LIFT, which is accomplished by slightly changing the airfoil shape toward the slow speed/high lift configuration as the flaps move out. Airliners do it all the time, with both leading and trailing edge devices. It is certainly not beneath our dignity to do the same with our flaps.

And, there is the courtesy issue. While a common method of "flying wide" may help the faster/slower issue, it does nothing to "merge" the traffic and make it easier to see and follow in the pattern. How many times have you been told you were number "X", and you could find all but one of those targets – and that one wound up being wide and low – or wide and high?

From a safety perspective, getting your airplane into a configuration that will allow for good flow and orderly progression to the airport also helps the controllers at controlled airports, as well as pilots at non-controlled airports. So why, then, do so many pilots not use, or shy from using, flaps on their approaches? I chalk it up to either lack of recent training or fear of flaps – and we can do something about both of those. It is an easy one to do, and it will make you look like a hero when the pilots with whom you fly find how much easier they can deal with patterns and approaches.

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Have a SAFE day!