



Airfreddy's Flying Stories

Stories That *All Pilots* Can Learn From

Story #13: I Didn't Need the Airspeed Indicator

FRED I DIDN'T NEED THEAIRSPEED INDICATOR :One morning I was in the office when one of my students came in to rent an airplane for the morning. He got the keys and went on his way. About three hours later he came back in and said he had a great flight. As he walked out the door he said” by the way the airspeed indicator went out just after I left Sedona . I then asked him” ok what did you do”? He said” I just flew the plane as you taught me to and no problem a tall”. That was it!!

I was pretty happy since this little instrument failure didn't even bother him. This is the reason why I teach students attitude flying instead of focusing on the instruments inside. Once again I will state, ” if you are trained with nothing, when you lose everything you are right at home”. This was a perfect example. This happens in all aircraft. The little critters like to build homes in the pitot tube so they become blocked sometimes.

I have had this happen to me probably about 20 times. If I am up with a student, this is a perfect time for some real world training. Most instructors would put the plane on the ground; I will keep the student in the traffic pattern and do a series of landings. Usually they are looking outside, so there is no panic.

Every time I get into an airplane that I have never flown I use this system and once the light bulb goes on it is a piece of cake to fly any plane. That is why I teach flying this way.

We will use the Cessna 152 for an example. No matter what plane you are in, ask your instructor to go over this with you and you will get my drift. Just do it when you are coming into the traffic pattern the next time you are up. Remember the following in your head:

ATTITUDES

Climb Attitude– nose just above the horizon. If you can't see outside you have the nose too high.

Level attitude- Nose level with the horizon. In some planes you will have to use the wing to find the nose level attitude

Descent Attitude- Nose just below the Horizon ,The Same amount as climb but nose down instead of nose up.

POWER SETTINGS

Cruise Power- Normally 2400 – 2500 Rpm- It can vary depending on the plane.

Descent Power– Normally 1900 – 2100 Rpm – This is also your traffic pattern power.

Descent to land power– 1500 – 1700 rpm.

Remember if you have a higher density altitude these will be a little higher, but don't worry about that for now. Start at normal cruise flight coming into the airport. Note your cruise speed. In the 152 you will be about 90 -95 Knots. Most training aircraft are going to be close to this +/- 10 knots or so.

Ok, we are cruising at 95 knots; when you are ready to start your descent bring the power back to your descent power setting, (Better yet do it without looking at the tachometer listen to the engine), you will notice that the plane will pitch to descent attitude. You can do this the opposite way and bring the power back until the nose gets to descent attitude.

You will notice your airspeed will not change if you had the plane properly trimmed in level flight. You are now in what is called a cruise descent. Now pick the point to which you want to enter the traffic pattern. If you are going to get to traffic pattern altitude a little quick, you are descending a little too quickly, so just add 100 Rpm or so. You don't even need to look at the Tach to do this- just inch the power in or out slightly.

When you reach the traffic pattern bring the nose of the airplane to nose level attitude and don't touch the power. Now, after you trim the plane for level attitude, check your airspeed. You should be at the downwind airspeed you desire. In the case of the 152 you will be at about 80 knots.

When you are abeam the numbers ready for your final descent, once again bring the power back until the nose of the plane goes to descent attitude. Now you will be at descend to land power. Your airspeed shouldn't change. Now add 10 degrees flaps (don't let the nose come up maintain descent attitude). You will notice you will lose about 5 knots with each 10 degrees of flaps, therefore at this point in time you will be around 75 knots. Turn base and add the next 10 degrees flaps (Maintain descent attitude). Now your airspeed will be about 70 knots. Turn final and now change your focus to the numbers as I mentioned in the landing section. Adjust power slightly if needed. When the runway is made bring in the last 10 degrees of flaps. You will note your airspeed is about 65 knots right, which is where you should be.

So let's go over this again: you are cruising along and notice your airspeed indicator goes to zero and you are at nose level attitude and cruise power setting. We know we are at about 95 Knots. You start getting close to your home airport. You bring the power back until the nose of the airplane goes to descent attitude. You know the aircraft is in a cruise descent so we are still going about 95 knots.

Upon reaching traffic pattern altitude you bring the nose level and leave the power set. You know that in this configuration the airplane is at about 80 knots since you

will lose that extra airspeed when you level off. Abeam the numbers you bring the power back to “descent to land power setting” and set the nose of the plane at descent attitude. (Bring the power back until the nose goes to descent attitude). Since we know the 152 will pitch for airspeed, our airspeed is still about 80 knots.

We now add the first 10 degrees flaps and maintain descent attitude. The airplane loses about 5 knots for each ten degrees flaps we add, so the airspeed is now 75 knots. The base turn is made and you add the next 10 degrees flaps. You maintain descent attitude and power setting so the airspeed will drop another 5 knots where your airspeed now is 70 knots.

You turn final, maintain pitch and power setting. Your airspeed is still 70 knots. When the runway is made you add the last 10 degrees flaps. Maintaining power and descent attitude the airspeed will decrease another 5 knots dropping the airspeed to 65 knots.

You now focus on the runway and land. Pretty simple? You can get into any small piston powered airplane and fly it this way. It will take you a little while to do this especially if you are used to staring at the airspeed indicator.

This is the way I fly. When I get into an airplane I have never flown, I use this attitude system to fly all the time. It makes flying very simple. Yes, you want to verify your airspeed but you don't want to stare at it. Flying outside the plane makes flying a lot easier than flying inside the plane.



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