

Spins - Ask the Experts

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As an aerobatic instructor and safety presenter for the EAA/IAC and the FAA I tend to repeatedly get the following questions on spins. I will outline them here for you, with input from Rich Stowell, Gene Beggs, Erich Meuller, and Bill Kirshner.

1. Where should I look to figure out which way I am spinning so that I use the right (correct/anti-spin) rudder?

Both Rich Stowell and Gene Beggs (among others) state that *you must look directly over the top of the cowling and no where else* to determine spin direction. In his book *Spins in the Pitts Special*, Gene Beggs shows a diagram that illustrates how looking anywhere else can cause the pilot to mis-diagnose the direction of the spin.

2. If I have a turn and slip indicator or a turn coordinator in my airplane will the 'ball' tell me which way I am spinning?

No, No, No, and No!!! Rich Stowell has done extensive tests on this, and has access to the data others have collected when testing this indicator. The ball does not show the pilot which way he or she is spinning. Bill Kirshner, who has had a ball installed on each side of the cockpit in his Aerobat, has seen both indicators point at each other in a spin. Clearly one of them was wrong!

3. If I have a turn and slip indicator or a turn coordinator in my airplane will the 'needle' or the 'little airplane' tell me which way I am spinning?

Yes, sometimes! According to Rich Stowell and industry research, the needle on the older turn and slip indicators will tell you which way you are spinning whether in an upright or inverted spin. The newer and more complex Turn Coordinators will tell you which way you are spinning if in an upright spin.

4. How can I tell if I am in a spin or a spiral? In both I could have the nose down and see the airplane performing a twisting action.

Use the airspeed gauge, Luke Skywalker! It is the only reliable gauge for determining if the aircraft is in a spin or a spiral, and it is the only one required to be installed even in the simplest of airplanes. If the airplane is in a spiral the airspeed will be increasing. If in a spin the airspeed will be low and steady, somewhere close to stall, even if you do 20 turns in your spin.

Fly Safe!!