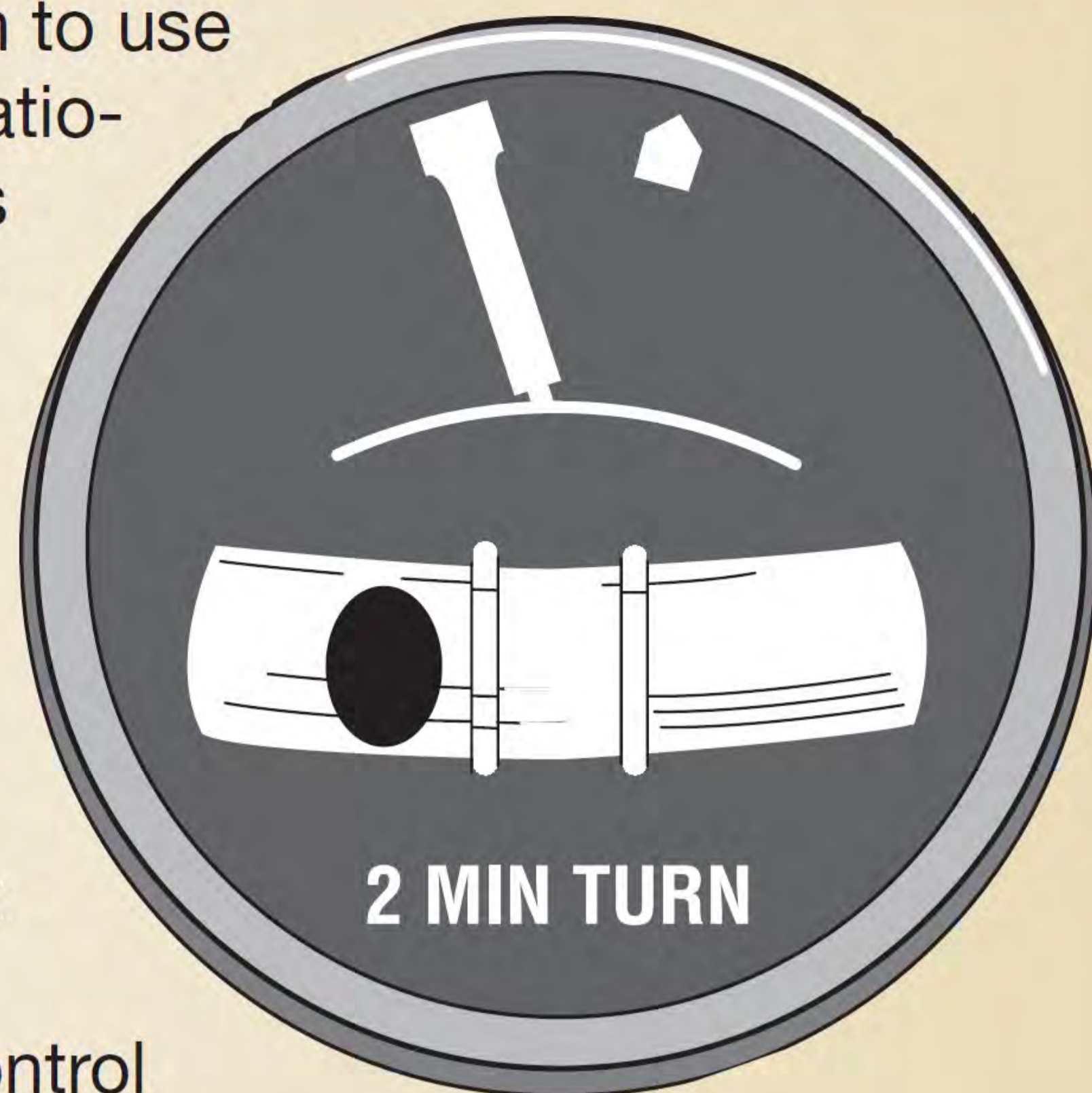


## STEP ON THE BALL (WELL, MOST OF THE TIME)

We're admonished from the very first lesson to use rudder to maintain coordinated flight. The rationale is avoiding the violent stall we're told is almost certain to occur if we don't "step on the ball" to keep it centered.

This reminds me of elementary mathematics, when we're taught for the first few years that you can't subtract a larger number from a smaller one. Then somewhere around fifth grade we're introduced to the world of negative numbers—and that hard-and-fast rule suddenly goes away.

Similarly, we need to learn good rudder control skills as we are taught in our early flying, but eventually we learn there are times when we may need to have the ball all the way out to one side of the instrument. As long as we have good attitude, airspeed and angle of attack awareness and control, we need not fear the uncoordinated flight regime...and it may actually be useful to us.



## ANOTHER USE FOR SLIPS

In my earliest flying days, in an U.S. Air Force flight screening program, we were taught a couple of things about slips. First, my initial instructor told me, "It's not a slip unless the rudder is at the stops." In other words, if you're going to do a slip, do it like you mean it.

Second, a slip is a technique to increase rate of descent when you've exhausted other means. In other words, slipping with anything other than idle power is an oxymoron—increase descent rate by retarding the throttle(s) until you can reduce power no more. Then if you need to make the descent even steeper, do so with a slip.

Third (and my favorite memory of slipping in the flight screening program), we were taught to use a slip in the event of an engine fire that would not go out. The slip had two functions: to get us on the ground faster, and to blow the engine's flames away from the cabin.

I suppose that in a very steep slip the fire might be blown completely to one side of the airplane. Figuring that flames wouldn't completely miss the fuselage, however, we were taught to "always slip so the flames go to the instructor's side of the airplane." As a CFI now, that doesn't have the appeal it did as when I was a student pilot. But it reminds me to this day that there is another use for slips, that being part of a response to an engine failure.