

When Motion Works

Sometimes the lesson is a VFR one, and for that a little movement can really be a revelation, especially for the experienced aviator. That was certainly true the day I climbed into my first Redbird Flight Simulations FMX with Master CFI Meg Godlewski, who was part of a team of SAFE flight instructors demonstrating the SAFE Pilot Proficiency Project flight simulation training program during a recent aviation conference.

The motion-based simulator uses Microsoft software at its base, and that day was set up to demonstrate the capabilities of a heavily-loaded Cessna 172 at a mountain grass strip in Idaho on a summer morning. It is one of nine scenarios used with the SAFE program,

and yes, the analog panel can be changed out for digital on some of the simulators. With the capacious visuals and accurate analog controls and even realistic seating (including seat belts) the “box” provided a convincing scenario to me, an experienced flatland pilot in need of a little mountain-flying touch-up before a trip I was planning.

I got more than I bargained for. When I stood on the brakes and applied full power I could feel the pull of the airplane’s engine—a simple shift of the “box” on its motion axis provided a little tilt against my fastened seatbelt—and the jolt when I released the brakes, paired accurately with the large screen visuals in front of me effectively pulled me into the realism of the moment. The controls were mushy, the climb was sluggish to nonexistent. And I had to abort the takeoff. I was not convinced the airplane would fly.

Godlewski chuckled and set the simulation up again. Then she told me “how” to get the airplane into the air. A simple short-field technique would not do it. The airplane had to be flown, soft-field style, in ground effect, and then zoomed at V_x up and over the giant firs at the end of the runway, all the while gently weaving around the tallest of the treetops. Within a half-hour lesson we climbed along a canyon, performed confined-area mountain turns, discussed and demonstrated approaching and clearing (and not clearing) ridge lines, and handled a maximum demonstrated crosswind landing back at the same tight mountain strip.

I came out of the “box” in awe of its realism, and ready to recommend it to experienced and other pilots for the kind of “touch-up” training I’d just received. Even at \$100 an hour, the Redbird box saves pilots money in today’s GA flying environment, all the while imparting some effective lessons on real world flying.

