

Pilot or Observer

By Chris Hope, Master CFI

Are you a pilot in your plane, or an observer? Do you “make things happen” or are you fascinated watching things happen?

Last month in this space I discussed the differences in flight planning between now and not too long ago. And this month I want to expand that idea to flying in general, and by extension, perhaps to the way we all lead our lives now. So let me start by talking about why I fly.

I get a lot of satisfaction out of flying. I love spending a Midwest summer afternoon, climbing to about 5,000 feet, and working my way between the cumulous clouds. It is as if I am walking through the canyons in New Mexico (but without the heat.) It gives real meaning to Magee’s statement

*Sunward I’ve climbed, and joined the tumbling mirth
of sun-split clouds, — and done a hundred things
You have not dreamed of . . .*

I also love to fly first thing in the morning, or just before sunset, and to touch down on a grass runway at a rural airport and just watch the long shadows the sun casts, so low on the horizon, and I love to smell the grass with dew not yet rising.

But I also get a lot of satisfaction when I have determined that I will use my mind and my hands and my eyes, and I will put the airplane exactly at a point in space that I desire. Sometimes that point is the top of a perfectly executed chandelle, or sometimes it means that I have hit every waypoint on an instrument approach on altitude, on airspeed, and I have broken out of the clouds and viewed the runway just as I had intended. And sometimes it means that I have put the wheels on the ground at precisely the point I picked, fully stalled, without touching the throttle. Although I will never be in the same league as competitive aerobatic pilots, I feel somewhat as they do when they perform their routine to the best of their ability.

And like competitive pilots, and for that matter, like competitors in every endeavor, when the flight is done and I analyze my performance, I always see something that I could have done better, and I tell myself that, “Next time I will improve on that.”

So, when my friends ask me if I have the latest autopilot, or the latest update for an iPad app, they look at me as if I am nuts when I say, “Why do I need one more navigation app? The whole world is a three-dimensional full-scale map. Look outside and enjoy.”

The first aircraft that I flew for hire as newly-minted Air Force pilot was a four-engine transport. And, even forty years ago, it was capable of fully coupled instrument approaches through touchdown and rollout. But generally, we did not take advantage of all that. We flew the ten hours of cruise with the autopilot, but most pilots flew the approaches by hand. Why? Because there is a certain satisfaction in knowing that you can.

We have become, in the last ten years or so, accustomed to letting others do our work for us, letting others do our thinking for us, even letting others run our social life for us. We no longer care how to navigate to a new part of town. We will tell the GPS our destination and blindly follow its turn-by-turn instructions. Is it taking us there by the most scenic route? By the most direct route? Who knows? We only know that someone else picked this route for us.

Do we decide who our friends are, and how each of them is unique and how our relationship with each of them is unique? No, we allow Facebook to tell all of our "friends" that we think of them all equally.

And for pilots, this attitude of laying decision-making off on the computers affects the way we allow our airplanes to fly us, instead of us flying them.

Generally, we pilots love gadgets. How else would our friends at Sporty's sell us so much stuff? We love virtual runway displays that allow us to "see" the runway while we are still in the clouds. We love moving maps that allow us to move our aircraft down the magenta line. We love a really accurate autopilot that moves our airplane down the magenta line for us, so we do not even need to do that for ourselves. But all of these cool electronic gadgets come with a price that we do not consider. The take away from us the skills that we once depended upon to make us a pilot.

Mark Twain, in "Life on the Mississippi", talks of the awe in which the public held river pilots of the 1800s, because they knew every twist and turn and sandbank in the river. That awe was transferred to the early pilots for the same reason. Early pilots needed to know so much, because so little was written down. The early pilots created their own maps, and became their own weather forecasters and became their own mechanics. Bit by bit, we pilots slowly gave away each of these skills, until now it is necessary (barely) only to know how to taxi the aircraft to the runway and get it pointed in the correct direction for takeoff. And then, at least still for us GA pilots, it is only necessary for us to know how raise the nose a few degrees and make a landing.

Our gadgets are in the process of making us better computer players, but not better pilots. And when we see the news items regarding airliners falling into the south Atlantic Ocean, or running into the seawall short of the runway at San Francisco, we slowly understand that not only are we not the best pilots we can be, we are not necessarily the best computer operators we could be either.

We have come to believe the siren calls of the advertisements, which say “Buy me. I will simplify your tasks.” But in order to justify the costs, (and just because they can) computer programmers love to add features. (And I am speaking now as a former computer programmer.) But we have all come to learn that there is a tradeoff between features and ease of use – more of one means less of the other. And so many of us end up using a few of our computer’s features, and then getting lost in the menus.

So here we are. We have less brain power because we have transferred our skills to a machine. We use less of our memory, because we have moved that to a machine. And we do not even choose the outcomes we want, because we have allowed a computer programmer to do that for us. A rather bleak analysis.

Actually, the future of flying is not nearly as bleak as I paint it. On the contrary, it is full of exciting possibilities. But we as pilots need to seek out and master those possibilities.

If we want to be the best pilot that we can in today’s world, we need to do so in two different directions. First, we still need to master those stick and RUDDER skills that have traditionally set our airplane upon our desired path. And second, when a new piece of equipment is installed in the panel, we need to master that tool. We need to (dare I say it) read the manual and learn not only what the tool’s capabilities are, but how to reach those capabilities. And we need to be able to push the buttons and turn the knobs, not only while sitting in the comfort of the living room, but we need to become so expert at “knob-ology” that we can recite from memory all of the button-pushing and knob-turning steps for any particular task. And then we need to be able to perform that task while flying the airplane.

For additional thoughts on how we are surrendering our skills to the wishes of computer programmers, check out “The Glass Cage: Automation and Us”, by Nicholas Carr.

Don’t just practice until you get it right. Practice until you don’t get it wrong

Chris Hope has taught fledgling and experienced pilots for nearly 40 years, mostly in the Kansas City area. Chris holds flight instructor certificates for single engine land and sea airplanes and multi-engine land planes, as well as for instrument training. He holds ground instructor certificates for advanced and instrument training. Chris is an FAA Gold Seal Instructor and a Master Certified Flight Instructor. Chris serves as a member of the FAAS Team in the Kansas City area. His website is www.ChrisHopeFAAFlightInstructor.com