

Forget self-driving cars, this plane landed itself

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I don't have a pilot's license. I'm not crazy about heights. I'm not even great at flight simulators on a computer.

None of these obstacles, however, stopped me from landing a small private jet recently at Stewart International Airport in New Windsor, New York. It was easy, really.

OK, full confession: Actually, the [plane](#) landed itself. I merely pressed a single red button on the roof of the main cabin, transforming it into an [autonomous aircraft](#).

I was aboard a \$2.75-million Cirrus Aircraft Vision Jet, newly outfitted with an aptly named [safety system](#) called Safe Return, which is in the final stages of getting approval from the Federal Aviation Administration.

Prior to my, um, act of heroism, we had been flying at an altitude of about 10,000 feet after taking off from Westchester County Airport in White Plains, New York.

All kidding aside, the Safe Return system is designed to address a dead serious problem: What happens if the [pilot](#) becomes incapacitated and is unable to act? In just such an emergency, the system can let any passenger safely land the plane.

There was a pilot during my demo flight, but still the prospect of having me land a self-flying plane was enough to spook some U.S. TODAY video staffers who turned down my invitation to capture the moment from the cockpit.

Safe Return has to be able to solve two main problems, the most obvious of which is to return everyone to the ground safely.

But it must also perform this rescue mission without disrupting the flight patterns or risking the safety of all the other planes in nearby airspace.

"When you automatically turn that plane into an autonomous vehicle, the plane starts acting as if the pilot were still doing things," says Ben Kowalski, [senior vice president](#) for sales and marketing at Cirrus Aircraft.

The plane has databases of the terrain and possible obstacles (like mountains and cell towers). It gets real-time weather and wind information. And it knows the weight, how much fuel remains, and all the nearby airports where an [emergency landing](#) is possible, including the lengths of all runways.

After determining the proper path based on all these considerations, the system uses text-to-speech software to broadcast its whereabouts to [air traffic control](#).

Kowalski says it goes something like this: "Aircraft 149 Victor Bravo, we have an emergency onboard. The pilot is incapacitated. I'm 15 miles north of White Plains, and I'm going to land at JFK on runway 27."

There's no particular challenge to push the button—it's easily reached by an adult in the cabin. (The plane seats five adults and two children.) But you can only assume that panic will set in during a real crisis in which the pilot has a heart attack, seizure or something else goes wrong.

The system tries its best to calm everyone down by mimicking what, well, a pilot might say: "Safe Return activated, landing in 13 minutes." A moment later, "Safe Return activated, landing in 12 minutes." And so on.

Meanwhile, the screens in the cockpit show that Safe Return is activated and warns passengers not to touch anything.

If there is situation where a passenger inadvertently (or intentionally) pushes the button, the pilot can override the self-landing system with a control on the yoke.

The turbine aircraft has other built-in safeguards: For almost three years, Vision Jet has a standard parachute system that promises to safely bring the plane down in case of engine failure. This latest innovation takes

care of the human element, rather the missing human element.

Some of the company's older jets can be retrofitted with the Safe Return system.

The Cirrus planes also recently got an updated flight deck system from Garmin.

Cirrus expects to begin delivery of Vision Jets equipped with Safe Return in early 2020.

It's rather doubtful I'll have a pilot's license by then, never frankly on my bucket list.. But in a pinch—or at the push of a button—you can count on me to land the plane just fine.

More information: cirrusaircraft.com/aircraft/vision-jet/

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