Dumbing It Down in the Cockpit

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Slate:

Long gone are the leather jackets, goggles, and silk scarves flung over the shoulders of aviators who wrestled with flight controls, furiously scanned instruments, and navigated using paper charts. Airplanes have been largely flying themselves since the early 1980s. Today, with a few keystrokes, pilots program the details of a flight route into a computer that calculates, in seconds, the bearings, distances, altitudes, speeds, and fuel needed to get the airplane from city to city. Aircraft navigation? Yes, there is an app for that.

Once airborne, pilots can use an autopilot that automatically calculates and carries out the control inputs needed to guide the airplane along the programmed route. Other systems warn pilots about airplanes that come too close, or a nearby mountaintop or thunderstorm. When aircraft components fail, sensors throughout the aircraft detect the problem and tell pilots which steps are needed to remedy it. And when the tires hit the runway at the destination airport, the autobrakes smoothly bring the airplane to a stop.

All this automation in the cockpit has prompted researchers like me to wonder what might be happening to pilots' ability to fly the airplane "the old-fashioned way" when the automated systems go awry.

Read the whole story: *Slate*