

One Record That Can't Be Broken

Description

Too many have already been there and tried it before anyone today could try it: Going lower than the ground in an aircraft.

The USAF has a plan to keep it from happening: Auto-GCAS.

From [Defense Tech](#):

Helping Pilots Avoid the Ground

Aviators have a saying: "You can only tie the record for low flight."

Well, the U.S. Air Force's Air Combat Command is installing a system in its jets that is designed to keep future pilots from tying the record. Press Zoom reports that the Automatic Ground Collision Avoidance System is a software-based technology that has demonstrated a 98 percent effectiveness rate at eliminating aircraft crashes into the ground. The system is ready for operational integration on F-16 Fighting Falcons, F-22 Raptors and F-35 Joint Strike Fighters.

Auto-GCAS differs from other crash-avoidance systems in that it doesn't create nuisance warnings and activates only at the last instant to take control and recover the aircraft when it determines collision is imminent. The determination is made when the aircraft is within 1.5 seconds of the "point of no return" and no action has been taken by the pilot.

[...]

In the skydiving world, we have the ["AAD" or "Automatic Activating Device"](#) that monitors your rate of descent, and if you reach a certain altitude and are still moving at a fairly high percentage of freefall speed, the system activates a cutter that cuts the loop holding your ripcord pin on your reserve. There are versions designed to pull main parachute ripcords, and are commonly used with military related High Altitude Low Opening (HALO) equipment, but the sport world only uses them for activating a reserve canopy.

I, once, will acting as a jumpmaster for a SEAL just returned from operational deployment, had to get a requal sport jump ([AFF Level 4](#)) to get active sport jumping again. The exit was fine, his stability was great, but the plan to knock off turns once 6000? AGL was reached went out the window. He kept doing turns. At this point, I was falling about 4 feet in front of him, where I had been since turning him loose a few seconds after exiting at 13,000?.

I gave him the hand signal to pull several times, then I began to fly in to position myself next to his main ripcord to back up his thought process. Instead of realizing I was moving, he thought he was turning (using me as a reference point, and not some landmark out in front of him on the ground), so

he kept maneuvering to point at me. Net result: I couldn't get into position to pull either his main or reserve ripcords), about hip position on the right side (main) and heart position on the left for the reserve.

I lost altitude awareness, as had he, so we proceeded, at the speed of the pull of gravity (it's not just a good idea, it's the law!) towards the pine trees on the south side of the airport. I finally got smart and backed off and reached for my pull out for my main, and as I let go of the pilot chute, my AAD opened my reserve. A quick check of my altimeter put me just a little above 1000?. The setting for the [Cyrus AAD](#) I was wearing is fixed at 800?, but apparently it comes on about 1200? to monitor and when it saw the drastic change in the rate of pressure change (indicating rate of fall change) when my main began to open, it activated a little early. I had two clean canopies, so I cut away my main, checked my reserve for controllability, then hung a left turn into the wind and landed.

The student's AAD also performed as designed. He got a talking to, and so did I from the DZ Owner. He made only one remark, but that's all he had to say: "They have an AAD, too. It's not worth losing your life if you've done all you are supposed to."

Then George reminded me that training for students included "If you see your jumpmaster pull, it's probably a good idea to do the same." I had said it for years in class, too, but it's one of those cases you just don't happen into with regularity.

So, moral of the story:

- Jumpmasters: Don't forget to pull on time
- Students: Yeah, what they did!

Oh...and I never tried to break the low pull record either.

Category

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Date Created

August 11, 2007

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