

Flying To The Extreme



From the NTSB:

“The accident pilot had recently returned from an airshow, and had shared with his pilot associates that he thought he could roll his personal airplane. He had previously attempted to roll the airplane, but a pilot-rated passenger stopped the accident pilot from completing the aerobatic roll. On the accident flight, a ground witness, who is also a pilot, heard the accident airplane, and thought it sounded like the pilot was doing aerobatic maneuvers. He heard the engine noise continue to increase, and saw the airplane descending very fast, in a 45 to 60 degree nose-down attitude. The witness then saw a portion of the airplane break away prior to impact. Postaccident inspection of the airplane by the NTSB investigator-in-charge and the NTSB Materials Laboratory, disclosed evidence of pilot-induced overload failures of the tail and wings. The accident pilot’s airplane was not designed or approved for aerobatic flight.”

The NTSB’s probable cause finding: “The pilot’s exceeding the design stress limits of the airplane while performing aerobatics in a nonaerobatic airplane, which resulted in an in-flight overload failure of the airframe. A factor in the accident was the pilot’s decision to perform aerobatics.”

What this synopsis does not state is that the pilot took four passengers along on this final flight, including children. They all trusted the pilot to keep them safe. The accident pilot apparently had other plans. For him, “utility” seems to have included load-carrying capability, speed, range, engine redundancy...and aerobatics capability.

This crash was obviously an extreme case of asking an airplane to do more than it is capable of doing but, sadly, isn’t all that rare. On February 15, 2010, a Cessna T337G Turbo Skymaster crashed in Farmingdale, N.J., after its pilot conducted a low pass and a wing failed in the high-speed pull up. Another five, including two children, were killed.

I imagine the Baron pilot did not go from flying well within the envelope to rolling the airplane in one ideological leap. Most likely he had incrementally stretched the boundaries of airplane limits a bit at a time, and not been bitten...yet. The positive reinforcement of not being harmed by bad decisions likely escalated his acceptance of risk over time. The lesson for us is to catch ourselves before we violate any of the airplane’s limitations.