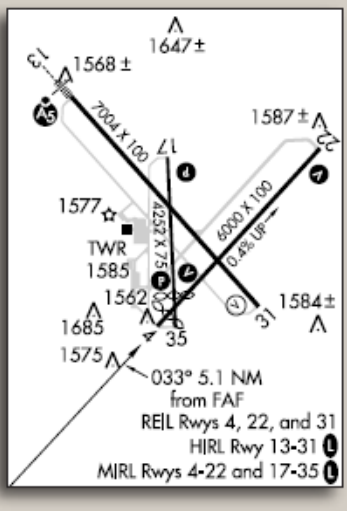
My Closest Call



I was in the right seat of a Beech Baron; my student was flying the VFR traffic pattern to Runway 31 at Hutchinson, Kan. As we turned onto a left downwind, the tower told us, "Traffic is a Citation jet on the VOR Runway 4 approach. He'll be on a low approach and will pass beneath you on your downwind leg." As my student continued on the downwind, I began scanning for the Citation, which would be approaching from my side of the airplane. As I saw the aircraft in its descent inside the VOR, I told my student I had the traffic in sight and advised the tower.

From flying that same VOR approach, I knew the Citation should descend to 2040 feet msl, or about 500 feet below our pattern altitude. The Citation should continue at that altitude until the missed approach point (MAP) at the runway threshold, and begin a climb straight ahead to 4000 feet msl. As the tower had indicated, this meant the jet should pass beneath us on our downwind leg and not be a factor.

The Cessna crew, however, made a mistake common when flying non-precision approaches with a minimum descent altitude (MDA) level-off. As soon as they reached MDA, instead of driving on to the MAP at that altitude, they immediately began a missed approach climbout. The moving image of the Citation suddenly became stationary in the right cockpit window: We were on a collision course.

"I have the flight controls," I said as I took command and pulled the Baron into a steep, climbing right turn, away from the jet but so that I could keep it in sight for as long as possible. I figured at least the Citation crew would get the "climb straight ahead" part of the missed approach procedure correct. The jet passed through our altitude about where we would have been if we'd continued on downwind.

Being at a towered airport had no bearing on collision avoidance. Traffic alerting systems like SkyWatch or ADS-B would not have made a difference either—the purpose of in-cockpit traffic displays is to help the pilot know where to look to visually acquire nearby airplanes. With the tower's help, I'd already bypassed that step and had the traffic in sight. If I'd had a "fishfinder" view of the Citation jet on a panel display I still would have expected its crew to fly the procedure as published.

The moral of the story? Fly patterns and procedures completely and correctly, so pilots of other airplanes know where to look for you and what you're likely to do. And never trust the pilot of another airplane to fly patterns and procedures completely and correctly, but be watchful for when they deviate and become a collision threat.