



May 3rd, 2023

RTAG General Meeting Wings Program

Part One: The Go/No-Go Decision and Rejected Takeoffs

The go/no-go decision starts with evaluations of the weather, the pilot, and the aircraft, but one of the most crucial moments is the takeoff - specifically, the rejected takeoff. This was the focus Joe Rajacic's third AQP Presentation.

A headwind of 10kts can reduce takeoff roll, but a tailwind of only 2kts can significantly increase takeoff roll. Don't be lulled into complacency when taking off on familiar runways.

Joe shared a video of a large passenger jet rejecting takeoff. Rejected takeoffs must be practiced and planned for. The group discussed reasons to abort, including nosewheel shimmy, prop over-speed, partial engine power, wrong configuration (such as lowered flaps), something on the runway, smoke, and simulated aborts with an instructor.

The mindset of the pilot is important. What will you do if you notice something's wrong? Will you try to fix it and continue, or will you abort? The chances of an abort are remote – unlikely but possible. Even if you are alone, it's important to brief aloud before the takeoff roll what you will do in an abnormal situation. Consistency is key. The briefing is important for overcoming continuation bias, which is the pilots' tendency to continue despite warning signs. The briefing should include your abort point and your abort plan. The abort point is a point on the runway, or a set amount of time, after which you will reject the takeoff if you haven't reached rotation speed. The abort plan is what you will do in case of an abort. Will you use aerodynamic braking to slow down? Will you shut off the engine to save the prop and reduce thrust? Also, have a plan to get off the runway.

How to abort: Power to idle, maintain directional control, and brake. If you slam on the brakes, you may lose directional control. Rejecting the takeoff is different than slowing down after landing. You are going faster on takeoff and the wings may be producing lift.

Joe shared a cockpit voice recording of a Citation that went off the runway recently in Oroville. The example demonstrated the captain's continuation bias and the copilot's lack of assertiveness and lack of professionalism when noticing something was wrong. Larry pointed out that a takeoff briefing was not conducted prior to this event. Contributing factors were tunnel vision, brain freeze, workload, and confusion. And these are experienced pilots who fly every day.

Another example Joe shared was a partial-power situation in a Cessna. The pilot had several indications that something was wrong, but it wasn't until attempting to get off the ground that he rejected the takeoff. Accidents happen by making a series of mistakes. The pilot's first mistake was ignoring the first indication. The second mistake was ignoring the lack of power on the takeoff roll. Ultimately the situation had a good outcome, but it could've gone the other way. If



something looks or feels wrong, listen to it. Joe shared a couple other examples, including a pilot whose Piper Lance was making partial power. The pilot ignored indications that power wasn't as expected. He took off and luckily was not hurt, but the airplane was destroyed. The pilot ignored prior issues and comments from passengers who had been in the plane often regarding its performance.

It's also important to be decisive when an incident occurs. Joe shared a video of a pilot who had forgotten to close the oil door and saw it flapping on takeoff. The pressure of being on video and around other pilots caused him to be indecisive. That indecisiveness led to the loss of the pilot and the airplane after the pilot decided not to put the plane back on the ground. He continued to try to fly and landed in the trees.

Part Two: What is a Stabilized Approach?

Joe's next topic was the stabilized approach. A stabilized approach leads to a good landing. A stabilized approach means airspeed, rate of descent, engine power and attitude are all in a specific range. A stabilized approach prevents loss of control and enables a smooth flare. Tips for flying a stabilized approach include using correct engine power, tuning in the ILS even if you're flying VFR, and multiplying your ground speed by five to get a rate of descent for a 3° glideslope. Consistency is important here as well. Whether you are flying a straight in approach or flying the pattern, have a system for when you configure the airplane. What will you do at 1000 feet AGL? What will you do at 500 feet AGL? Which combinations of power setting, pitch, and flaps give you different rates of descent? Prior to your approach, you should brief what you're going to do. How many degrees of flaps are you going to use and when are you going to use them? Are you going to land long, or do you need all of the available runway? Things that could destabilize your approach include traffic, other airplanes on the runway, or requests from ATC to either keep your speed up or to do 360s for spacing. Remember to back up any flows with your checklist. One of the most dangerous places on approach is the base-to-final turn. Because of this, you should consider going around when you've overflowed the runway while turning base-to-final, especially if you need to bank greater than 25° to get back to the final approach path. Once again, consistency is the key and the briefing is important.

Conclusion

Joe wants recommendations for future seminar topics. Larry is looking for ideas on how to significantly increase the audience size for these presentations. To realistically do that, we need a venue that can hold more people. Should we also move the meeting day and/or time? Truckee Airport is giving discounts on hangar rent and/or fuel for those who obtain a certain amount of WINGS Credit. Larry suggested that Karen meet with Stellar Aviation to discuss having a larger meeting room and offering discounts at KRNO for those who attend these safety seminars. If you have any thoughts on this, please contact Joe, Larry, or Karen.