



Short & Soft Field Takeoff

Cherokee settings, Archer settings are highlighted

➤ Short Field Takeoff

- Airplane on centerline as close as possible to threshold
- Hold the brakes with both feet
- Smoothly apply full throttle over the course of ~2 seconds
- Verify & Vocalize RPMs at 2300
- Verify & Vocalize Engine Instruments in the green
- Release brakes, use rudders to maintain on centerline
- Rotate at Vr 60mph **55kts**
- Keep trees in sight at the end of the runway as the airplane accelerates
- Trim and Maintain the aircraft to Vx 78mph **65kts**

➤ Soft Field

- Yoke back during taxi and takeoff
- Avoid braking or stopping while taxiing
- Airplane pointed straight down the runway on centerline
- Smoothly apply full throttle over the course of ~2 seconds
- Verify & Vocalize RPMs at 2300
- Verify & Vocalize Engine Instruments in the green
- Keep back pressure on yoke, allow the nose to come off the ground before Vr
- Relax back pressure after the nose comes off and work the airplane off the ground to maintain in ground effect
- Use Rudders and Yoke to maintain aircraft on centerline
- Accelerate the aircraft to Vx 78mph **65kts** and climb
- Transition to Vy 89mph **76kts** after clearing all obstacles