

Lesson 35. Short-field and soft-field takeoffs and landings

Ground 0.8 hr | Dual 1.5 hr | ACS AI.IV.A, AI.VII.C, AI.VII.D, AI.VII.E, AI.VII.F

CFI CANDIDATE _____ DATE _____ SUPERVISING INSTRUCTOR _____

AIRCRAFT N41459 Warrior Ground only FLIGHT TIME _____ GROUND TIME _____

OBJECTIVE

The candidate teaches short-field and soft-field takeoffs and landings from the right seat. At the end they can explain what each technique is protecting against, teach the two as genuinely different problems, and hold a Student to a landing point rather than to a runway.

These four tasks are simulated on a normal runway and that is the teaching trap. A short-field landing onto 5,000 ft of pavement has no consequences, so a Student learns the shape of the technique and none of the discipline. The candidate's job is to supply the consequence, and the way they do it is by holding the standard as though the runway ended where they said it did.

LESSON STEPS: THE ELEMENTS, IN TEACHING ORDER

Check each element as it is taught. Leave anything not done blank. Sign once at the bottom.

- What each technique protects against, and why that determines every step
FAA-H-8083-3C
- The short-field takeoff: configuration, the available distance, and the obstacle
AI.VII.E
- Airspeed discipline on the short-field climb, and the cost of being fast or slow
AI.VII.E
- The short-field landing: the aim point, the touchdown point, and the difference
AI.VII.F
- Braking and directional control after a short-field touchdown
AI.VII.F
- The soft-field takeoff: weight off the wheels early, ground effect, and the acceleration
AI.VII.C
- The soft-field landing: power in the flare, and the nosewheel afterward
AI.VII.D
- Emergency thread: the abort decision, and the point on the runway where it is made
AI.XII.C
- Performance data from the airplane's own approved material, every time
Cross-cutting requirement 5
- Supplying the consequence a simulated short field does not have
AI.IV.A

COMPLETION STANDARDS

- The candidate delivers the preflight ground lesson on short and soft field operations, covering all seven items of the brief, and states what each technique protects against, without notes, before describing how either is flown.
- The candidate presents takeoff and landing distance figures for today's actual conditions, worked from the approved material of the airplane being flown, and can say where in that document each figure came from.
- The candidate flies short-field and soft-field takeoffs and landings to commercial pilot tolerances from the right seat while narrating continuously, touching down at or beyond the agreed point and within the tolerance the current task specifies.
- The candidate distinguishes the aim point from the touchdown point in the taught content and in the corrections they give.

5. The candidate corrects a soft-field landing in which the nosewheel is lowered early, naming the surface as the reason rather than the technique.
6. The candidate keeps power in through the soft-field flare and teaches why it is there.
7. The candidate teaches the abort point as a decision made before the takeoff roll, and calls the abort at that point without reconsidering it.
8. The candidate holds the Simulated Student to the touchdown point standard, naming a landing beyond it as a failure of the approach rather than of the braking.
9. The candidate takes the flight controls using the three-way exchange, out loud, in both directions, including at least once when the airplane was not offered.
10. The candidate delivers a critique naming the error, its probable cause, and the correction for at least two of the errors flown.
11. The candidate delivers a self-critique before hearing the instructor's.

Standard 1 is the one that predicts everything else. A candidate who leads with the procedure rather than the purpose will teach it that way. Falling short does not block lesson 36. No proficiency gate (Decision 9). It triggers policy/REMEDIATION-VISIBILITY.md.

DEBRIEF AND SIGN-OFF

Critique: the error, its probable cause, and the correction. Candidate self-critique first.

Sign once for the whole lesson. Elements left unchecked above were not taught this session.

SUPERVISING INSTRUCTOR SIGNATURE / INITIALS

DATE