

Lesson 29. Chandelles, lazy eights, and eights on pylons

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

CFI CANDIDATE

DATE

SUPERVISING INSTRUCTOR

AIRCRAFT

N41459 Warrior

Ground only

FLIGHT TIME

GROUND TIME

OBJECTIVE

The candidate teaches the three commercial performance maneuvers from the right seat: chandelles, lazy eights, and eights on pylons. At the end they can name what each maneuver is actually training, fly all three to commercial tolerance while narrating, and diagnose the specific way each one goes wrong.

This is the hardest flying in the program and the lesson most likely to need a second attempt. Say that to the candidate in advance rather than discovering it together. A P3 second-career candidate whose commercial checkride was years ago will have decayed most on exactly these three, and that is a US-5.7 case rather than a problem.

LESSON STEPS: THE ELEMENTS, IN TEACHING ORDER

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

1. Chandelle: the 90 degree point, and why everything is set before it
AI.IX.C
2. Chandelle: coordination through a decaying airspeed with rising torque effects
FAA-H-8083-3C
3. Lazy eight: the four reference points, and the symmetry that reveals the errors
AI.IX.D
4. Lazy eight: teaching a maneuver with no constant to hold onto
AI.IV.A
5. Pivotal altitude: derived from groundspeed, and what it means that it changes in a turn
AI.IX.F, FAA-H-8083-3C
6. Eights on pylons: the line of sight reference, and correcting with pitch rather than with bank
AI.IX.F
7. Wind's effect on all three, since none of them are flown in still air
FAA-H-8083-3C
8. Teaching a maneuver the candidate is still working on themselves
FAA-H-8083-9B chapter 5

COMPLETION STANDARDS

1. The candidate delivers the preflight ground lesson on the three commercial performance maneuvers, covering all seven items of the brief, and states for each maneuver what skill it is training rather than only how it is flown.
2. The candidate derives pivotal altitude from groundspeed in front of the instructor, and explains in one sentence why it changes during the maneuver.
3. The candidate flies chandelles in both directions, lazy eights, and eights on pylons to commercial pilot tolerances from the right seat while narrating continuously, with no silence longer than five seconds.
4. The candidate talks the Simulated Student through a pylon correction, directing a pitch change rather than a bank change, and names altitude as the reason.
5. The candidate narrates their own demonstrations honestly, naming a correction they are making as they make it rather than describing the maneuver as though it were going to plan.
6. The candidate names the symmetry of the lazy eight as the diagnostic, telling the Simulated Student what the second half reveals about the first.
7. 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.

8. The candidate delivers a critique naming the error, its probable cause, and the correction for at least two of the errors flown.
9. The candidate delivers a self-critique before hearing the instructor's.

Standard 5 is unusual and it is deliberate. This is the one lesson in the phase where the candidate is likely to be demonstrating something they are still rebuilding, and the honest handling of that is a teaching skill worth assessing directly. Falling short does not block lesson 30. No proficiency gate (Decision 9). It triggers policy/REMEDIATION-VISIBILITY.md, and this is the single most likely lesson in the program to trigger it. Repeating this lesson is normal and is not a mark against the candidate.

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