

Lesson 30. Slow flight and the flight characteristics demonstration

Ground 0.8 hr | Dual 1.5 hr | ACS AI.IV.A, AI.X.A, AI.X.B

CFI CANDIDATE

DATE

SUPERVISING INSTRUCTOR

AIRCRAFT

N41459 Warrior

Ground only

FLIGHT TIME

GROUND TIME

OBJECTIVE

The candidate teaches maneuvering during slow flight and the demonstration of flight characteristics at various configurations and airspeeds, from the right seat. At the end they can put a Student at the slow end of the envelope, keep them there safely, and use what the airplane is doing to teach rather than just to demonstrate.

This lesson is the foundation of the stall series and it is not a stall lesson. Nothing here is taken to a stall except by accident, and an accidental stall in this lesson is a finding rather than a bonus.

LESSON STEPS: THE ELEMENTS, IN TEACHING ORDER

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

- Establishing slow flight: configuration, power, and the airspeed the task specifies
AI.X.A
- Control effectiveness and control feel at low airspeed
FAA-H-8083-3C
- Left-turning tendencies at high power and low airspeed
FAA-H-8083-3C
- Coordination as a requirement rather than a refinement
AI.X.A
- Maneuvering in slow flight: turns, climbs, descents, and configuration changes
AI.X.A
- The flight characteristics demonstration: what changes with configuration and airspeed
AI.X.B
- Stall warning recognition, and the difference between the warning and the stall
AI.X.B, AI.X.C
- Emergency thread: a power loss from slow flight, and what a Student's instinct will be
AI.XII.B
- Teaching at the edge of the envelope: how much a Student can absorb while uncomfortable
FAA-H-8083-9B chapter 2
- Angle of attack as a visible margin, taught in the one regime where a Student can feel it
FAA-H-8083-15B Addendum, April 2015 lesson 14

COMPLETION STANDARDS

- The candidate delivers the preflight ground lesson on slow flight and the flight characteristics demonstration, covering all seven items of the brief, and explains why slow flight is taught in terms of what the Student gains rather than what the ACS requires.
- The candidate establishes and maneuvers in slow flight to the tolerances the current AI.X.A task specifies, from the right seat, while narrating continuously, including turns, climbs, descents, and at least one configuration change.
- The candidate conducts the flight characteristics demonstration, naming what changes with configuration and airspeed as it changes, rather than describing it afterward.
- The candidate distinguishes the stall warning from the stall in the taught content and in flight, and does not allow the demonstration to reach a stall.
- The candidate talks the Simulated Student through slow flight using single-idea corrections, and does not deliver a correction longer than two sentences while the Student is at high workload.

6. The candidate teaches the response to a power loss from slow flight before it happens, and directs the nose down within two seconds when it does.
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 the one that is new. Everything before this lesson allowed the candidate to explain at length. Here, length is the error. Falling short does not block lesson 31. 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