

Lesson 2. Takeoffs and landing demonstrations

Ground 1.0 hr | Dual 1.5 hr | 14 CFR 61.31(i) | Est. \$510 member, \$662.50 non-member

Aircraft: Luscombe 8E, N1302B, Salinas (KSNS) 14 CFR 61.31(i) elements: normal takeoff brought to standard. Normal landing, wheel landing, and go-around introduced by demonstration.

STUDENT

DATE

INSTRUCTOR

AIRCRAFT

N1302B Luscombe

Ground only

FLIGHT TIME

GROUND TIME

ON THE GROUND

Tricycle gear and conventional gear, the full comparison. Centre of gravity relative to the main wheels. Stability on the ground. Why one design straightens itself and the other does not.

The four causes of yaw, separately. Torque. P-factor. Spiraling slipstream. Gyroscopic precession. What each one is, when each one is strongest, and which of them only shows up in a taildragger at the moment the tail rises.

The two tail positions. Tail on the ground and tail raised are two different airplanes. Your sight picture changes, your rudder authority changes, and your centre of gravity is doing something different in each.

Bounce recovery. What a bounce is, why it happens, and the rule.

Ground operations and low visibility. Where you cannot see, and what you do about it.

IN THE AIRPLANE

Review the transfer of control procedure before taxi. Every flight, without exception.

Takeoffs. Advancing the throttle. Lifting the tail, and the torque transition as you do. Rolling with the tail up. Short field. Soft field.

Fly the approach to final and identify the wind conditions aloud.

Correct for any crosswind component on final, as an introduction rather than to standard.

Landing demonstrations by me, with directed performance from you as the lesson progresses: a three-point landing, a wheel landing, and a go-around.

Any bounce is an immediate go-around. Not a judgment call today. A rule.

COMPLETION STANDARDS

1. You maintain the centreline through the takeoff roll, including through the tail-lifting transition, with rudder rather than brakes.
2. You lift the tail smoothly to the correct attitude and hold it there, without over-rotating into a wheelbarrow or letting it settle back.
3. You name the four causes of yaw and say which one changed as the tail came up.
4. You fly a stabilized approach to final and state the wind from the sock, your crab angle, and any drift you can see.
5. You go around, immediately and without prompting, on any bounce, and you say the words as you do it.
6. You describe the difference between a three-point and a wheel landing after seeing both, in terms of attitude and energy rather than in terms of how they looked.
7. You execute the transfer of control procedure correctly, in both directions, every time.

Standard 1 carries the lesson. The takeoff roll is where directional control stops being a taxi exercise and starts happening at speed.

DEBRIEF AND SIGN-OFF

What went well, what to work on next lesson.

Sign once for the whole lesson. Steps left unchecked above were not completed this session.

INSTRUCTOR SIGNATURE / INITIALS

DATE