

TAILWHEEL ENDORSEMENT CURRICULUM

North Aero, Inc. · 1948 Luscombe 8E, N1302B · Part 61 flight training · Salinas (KSNS)
Version 2.0, 2026-08-17

This course covers the differences in handling and flying characteristics between tricycle-gear and conventional-gear airplanes. The objective is a thorough understanding of ground handling and flight characteristics, training each pilot to fly a tailwheel airplane accurately and with judgment, leading to the tailwheel endorsement under 14 CFR 61.31(i).

It is a logbook endorsement, not a rating. There is no knowledge test and no practical test. Your instructor signs it when you demonstrate proficiency.

RATES

	MEMBER	NON-MEMBER
Aircraft, wet	\$100 / hour	\$175 / hour
Instruction, ground and flight	\$160 / hour	\$160 / hour
Club membership	\$200 / month	not applicable
Instruction discount	10%	none

PROGRAM COST ESTIMATE

Five lessons. 5.0 hours of ground, 9.5 hours of dual.

LESSON	GROUND	DUAL	MEMBER	NON-MEMBER
L1 Familiarization and basic flight	1.5	1.5	\$582.00	\$742.50
L2 Takeoffs and landing demonstrations	1.0	1.5	\$510.00	\$662.50
L3 Three-point and wheel landings	0.5	2.0	\$560.00	\$750.00
L4 Crosswind operations	1.0	1.5	\$510.00	\$662.50
L5 Crosswind review and power failures	1.0	3.0	\$876.00	\$1,165.00
Flying and instruction	5.0	9.5	\$3,038.00	\$3,982.50
Club dues, 2 months			\$400.00	none
Program total			\$3,438.00	\$3,982.50

Membership is \$544.50 cheaper across the endorsement alone, before you fly an hour of your own afterwards, and it is what makes solo rental of the Luscombe available at all.

This is an estimate to complete the endorsement. Some lessons run longer, some shorter, and some pilots need additional lessons to show proficiency. We train to a standard rather than to a schedule, and the endorsement is issued on demonstrated proficiency rather than on hours.

We bill by the hour as we go. No packages, no prepaid blocks, no financing.

PHASE 1. AIRCRAFT FAMILIARIZATION AND BASIC FLIGHT

Lessons 1 and 2. Learn to operate the tailwheel airplane on the ground and in the air, and understand the aerodynamics of takeoff and landing, including how propeller effects and torque cause the airplane to yaw.

Ground topics: preflight procedures; landing gear and tailwheel inspection; fuel system; V-speeds; weight and balance; limitations and performance; fuel consumption; engine limitations; emergency procedures; operating restrictions; tricycle and conventional gear differences; gyroscopic precession, P-factor, torque, and spiraling slipstream; the two tail positions; bounce recovery; low visibility ground operations.

Flight topics: transfer of control; slow and higher-speed taxi with minimal braking and proper control positioning; S-turns for visibility; takeoff including lifting the tail; short and soft field takeoffs; climbs, turns, descents; steep turns; approach and departure stalls; slow flight and normal glides; slips and skids; ground reference maneuvers; three-point, wheel landing, and go-around demonstrations.

PHASE 2. LANDING TECHNIQUES

Lesson 3. Take control of the airplane during landing in calm winds or winds straight down the runway. Agree clearly with your instructor on who has control and when. The airplane wants to swap ends even in calm conditions.

Ground topics: three-point technique, short and soft field; the importance of stick back; wheel landings, their advantages and technique; common errors, high descent rate, failure to get the stick back, high airspeed, diving at the runway, too slow, and not noticing lateral drift.

Flight topics: three-point landings; wheel landings; bounce recognition and recovery; forward stick timing at touchdown; go-arounds.

PHASE 3. CROSSWIND OPERATIONS

Lessons 4 and 5. Take the skills from Phase 2 into crosswind conditions. Review the transfer of control procedure before every flight. By the end of Phase 3 you should be reasonably confident taking the airplane up in normal conditions for solo flight.

Any amount of crosswind, ignored and not compensated for, can put this airplane on its wingtip.

Lesson 4, crosswind operations: reading wind direction and velocity from the windsock, crab angle, drift, smoke and dust; windward wing down; longer takeoff roll and reduced lift; avoiding drift and aft centre of gravity awareness; cross-control familiarity; ground loop review with video.

Lesson 5, crosswind review and power failures: short field operations with crosswind; crosswind takeoffs and landings at the safe limits in higher winds; simulated power failures to a spot landing in crosswind conditions. The tailwheel endorsement is issued upon demonstrated proficiency.

WHAT THIS COURSE DOES NOT COVER

- **Night.** Not part of the endorsement. Available afterwards behind a separate night checkout.
- **Backcountry and off-airport operations.** We train on paved and turf runways at licensed airports.
- **Instruction in your own airplane.** Not currently offered. Ask and we will tell you where things stand.

WHO CAN TRAIN

Hold at least a student pilot certificate. There are no FAA hour requirements for this endorsement. Club membership is open to student pilots, who fly with a North Aero CFI aboard until they hold a solo endorsement specific to this aircraft.

Maximum student weight for dual instruction is 220 lb with a standard instructor. N1302B carries 463 lb of useful load, and full fuel is 180 lb of that. Most lessons launch on partial fuel for that reason. If you are above 220 lb, tell us early and we will talk about the options.

If you logged tailwheel pilot-in-command time before April 15, 1991, you need neither the training nor the endorsement under 61.31(i)(2).

BUILDING TIME IN THE LUSCOMBE AFTER YOUR ENDORSEMENT

Club membership at \$200 per month keeps the Luscombe available to you at \$100 per hour wet so you can build PIC tailwheel and total time. Membership requires a satisfactory North Aero checkout before solo rental, and current flight review and recent-experience currency as applicable.

Members in good standing also receive a 10% instruction discount, one flight review every 24 months with no instruction charge, and one annual currency flight with no instruction charge, with aircraft time at the standard rate.

See COMMERCIAL-TIME.md for what the Luscombe can and cannot do toward a commercial certificate.