Mountain / Canyon Flying LLC
TAILWHEEL ENDORSEMENT SYLLABUS

Lesson Schedule:
Stage1: Introduction to Tailwheel Airplanes [Ground: 1.0 hours. Flight: 1.5 hours]*
Stage2: Advanced Tailwheel Operations [Ground: 1.0 hours. Flight: 1.5 hours]*
Stage3: Tailwheel Proficiency - Crosswind Operations [Ground: 1.0 hours. Flight: 2.0 hours]*

*(Note that a minimum of 5 hours training should be given prior to endorsement and that such training should consist primarily of takeoff and full stop landing practice, augmented by air-work as needed to increase the student attitude control and rudder coordination skills.

Excerpt from AC-61-98A, Chapter 4, Section 16, TAILWHEEL AIRCRAFT
The general flight experience requirements specified in FAR Section 61.57 state that pilots who act as PIC of a tailwheel aircraft carrying passengers or certificated for more than one required pilot flight crewmember must have made three landings to a full stop within the preceding 90 days to maintain currency.

Under FAR Section 61.31, no person may act as PIC of a tailwheel airplane unless that pilot has received flight instruction from an authorized flight instructor who has found the pilot competent to operate a tailwheel airplane and has made a one-time endorsement so stating in the pilot's logbook. The endorsement must certify that the pilot is competent in normal and crosswind takeoffs and landings, wheel landings (unless the manufacturer has recommended against wheel landings), and go- around procedures. The endorsement is not required if a pilot has logged flight time as PIC of tailwheel airplanes before March 15, 1991.

In addition to the requirements specified in FAR Section 61.31, the FAA recommends that pilots obtain a thorough checkout and transition training for each make and model of tailwheel airplane to be flown due to significant differences in operating characteristics of individual tailwheel airplanes. For example, many older types of tailwheel airplanes have pronounced or unusual stall and spin characteristics which differ greatly from those of more recently certificated tailwheel airplanes. In addition, many older airplanes may lack the comprehensive operating data and information typically found in pilot operating handbooks for comparable newer airplanes. Also, systems taken for granted in newer model airplanes may not exist in older aircraft, requiring a pilot to be familiar with unusual or seldom-used procedures. For example, the absence of electrical systems on many older aircraft compels the pilot to be familiar with hand propping procedures. The absence of attitude and heading gyroscopic instruments requires the pilot to depend more heavily on visual and other cues for basic aircraft control. Finally, the lack of radio equipment in many tailwheel airplanes obligates the pilot to be current in navigation by pilotage and no-radio traffic pattern procedures.

Additional factors may affect the instructional environment in tailwheel airplanes equipped with tandem seating. These factors may include reduced visibility from the rear seat, difficulty in communicating with the student due to seating position and higher noise levels, and lack of complete instrumentation or aircraft controls for the pilot in the rear seat.

Tailwheel Training Task
Lesson Stage 1: Introduction to Tailwheel Airplanes

Flight Instructor: _____ Pilot Applicant: _____

Lesson Objective:
Introduce the student to the regulatory requirements, systems, performance characteristics, handling characteristics and operating procedures associated with tailwheel (conventional gear) airplanes. Emphasis on air-work.

Study Assignment:
FAA-H-8083-B "Airplane Flying Handbook", Chapter 15 - Transition to tailwheel airplanes.
FAR 61.31 and 61.57
Flight Manual of the airplane used for the training.

• Preflight Ground Instruction •

Item	Notes	Item	Notes
FAR 61.31, 61.57	O	Flight controls usage	O
Tailwheel benefits and drawbacks	O	Ground visibility and maneuvering	O
Airplane similarities and differences	O	Taxi, normal and crosswind	O
Main gear, tailwheel and CG	O	Takeoff, normal and crosswind	O
Tailwheel steering system	O	Landing, normal and crosswind	O
Left turning tendencies	O	Three point landings	O
Weather-vaning tendencies	O	Bounce recovery techniques	O
Nose-over tendencies	O	Ground loop avoidance techniques	O
Ground looping tendencies (inertia)	O	Go-arounds	O
Porposing tendencies	O	Grass versus paved runways	O
Landing challenges	O	Exchange of flight controls	O

• At the Airplane •

Item	Notes	Item	Notes
Preflight inspection	O	Main gear	O
Prop clearance	O	Tailwheel	O

• Flight Instruction •

Item	Notes	Item	Notes
Taxi procedures	O	Stall series	O
Run up procedure	O	Coordination maneuver	O
Normal takeoffs	O	Bounce recovery	O
Normal landings	O	Go-around	O
Slow flight	O	Emergencies	O
Flight at MCA	O		O

• Postflight •

Item	Notes	Item	Notes
Evaluation, review and critique	O	Schedule additional practice sessions	O
Pilot logbook	O		O

• Logbook Entry •

Item	Notes	Item	Notes
Review FAR 61.31 and 61.57	O	Rudder coordination maneuvers	O
Introduction to tailwheel procedures	O	Rudder proficiency maneuvers	O
Ground handling procedures	O	Bounce recoveries	O
Normal takeoffs and landings	O	Go-arounds	O

Tailwheel Training Task
Lesson Stage 2: Advanced Tailwheel Operations

Flight Instructor: _____ Pilot Applicant: _____

Lesson Objective:
Introduce the student to wheel landings, short and soft field procedures for tailwheel airplanes.
Emphasis on take off and landings operations.

Study Assignment:
Review FAA-H-8083-B "Airplane Flying Handbook", Chapter 15 - Transition to tailwheel airplanes.
Review Flight Manual of the airplane used for the training. Fill
Airplane airspeeds/pattern procedures form.
Fill Weight and Balance form.

• Preflight Ground Instruction •

Item	Notes	Item	Notes
Review previous lesson	O	Wheel landings	O
Taxi, soft field	O	Bounce recovery techniques	O
Takeoff, short and soft fields	O	Ground loop avoidance techniques	O
Landing, short and soft fields	O	Grass versus paved runway	O

• At the Airplane •

Item	Notes	Item	Notes
Preflight inspection	O	Considerations on airplane W&B	O

• Flight Instruction •

Item	Notes	Item	Notes
Taxi procedures	O	Go-around	O
Run up procedure	O	Short field takeoffs	O
Normal takeoffs	O	Short field landings	O
Wheel landings	O	Soft field takeoffs	O
Bounce recovery	O	Soft field landings	O

• Postflight •

Item	Notes	Item	Notes
Evaluation, review and critique	O	Schedule additional practice sessions	O
Pilot logbook	O		O

• Logbook Entry •

Item	Notes	Item	Notes
Ground handling procedures	O	Wheel landings	O
Short and soft field takeoffs	O	Bounce recoveries	O
Short and soft field landings	O	Go-arounds	O

Notes:

Tailwheel Training Task
Lesson Stage 3: Tailwheel Proficiency - Crosswind Operations

Flight Instructor: _____ Pilot Applicant: _____

Lesson Objective:
Increase student's proficiency in performance of the procedures and maneuvers introduced in the previous lessons to the skill level necessary for endorsement. Proficiency in crosswind operations (at least 15 knots direct crosswind component) should be achieved to complete this stage of training.

Study Assignment:
Reflection and review as warranted.
Fill out the airplane checkout form.

• Preflight Ground Instruction •

Item	Notes	Item	Notes
Review previous lesson	O	Wheel landings	O
Taxi, normal, soft field, crosswind	O	Three point landings	O
Takeoff, normal, short and soft fields	O	Crosswind procedures	O
Landing, normal, short and soft fields	O	Tailwinds and gust effects	O

• At the Airplane •

Item	Notes	Item	Notes
Preflight inspection	O	Considerations on airplane W&B	O

• Flight Instruction •

Item	Notes	Item	Notes
Crosswind taxi procedures	O	Go-around	O
Run up procedure	O	Short field takeoffs	O
Normal takeoffs and landings	O	Short field landings	O
Three point landings	O	Soft field takeoffs	O
Wheel landings	O	Soft field landings	O
Bounce recovery	O	Crosswind takeoffs and landings	O

• Postflight •

Item	Notes	Item	Notes
Evaluation, review and critique	O	Schedule additional practice if needed	O
Pilot logbook	O		O

• Logbook Entry

Item	Notes	Item	Notes
Flight instruction elements as practiced	O	Tailwheel endorsement as applicable	O

Endorsement required to act as PIC in a tailwheel airplane (61.31(i)):

I certify that (First name, MI, Last name), (pilot certificate), (certificate number), has received the required training of 61.31(i) in a (make and model of tailwheel airplane). I have determined that he/she is proficient in the operation of a tailwheel airplane.
S/S [date] J.J. Jones 987654321CFI Exp. 12-31-20

Items to add:

Ground training:

Taxi on the ramp, turn taxi with and without brakes, S" Turns on the a line while slow taxing.

Getting the students use to taxing without brakes and knowing how much brakes to use IF necessary to turn A/C.

Taxi on the taxi way, high speed taxi, Lift tail look at and feel what a wheel landing would look like.

Advanced maneuvers:

Use runway to lift tail keeping mail wheels on the ground with proper seed and lift on wheel then the other.

Ideas: