Comprehensive Kitfox Transition and Tailwheel Endorsement Syllabus

This outline covers the ground and flight tasks performed to complete both a Kitfox transition and tailwheel endorsement. The session and time estimates provided are approximate and assume the client is certificated, has no tailwheel experience, but is proficient and current in single engine airplanes with maximum gross weights of less than 2500 lbs. Proficient tailwheel pilots can expect to complete Kitfox transition training in as few as half the hours estimated below.

Two sessions can be scheduled per day. We recommend completing this training over three to five consecutive days. Please note that a Flight Review or mountain, canyon and backcountry training can be combined with this syllabus.

Initial Ground Training Session
(Estimated 1 session, 2-3 hrs instructor)

- Tailwheel vs tricycle tracking instability
- Tailwheel vs tricycle CG consequences
- Left turning tendencies during takeoff and climb
- Tailwheel braking considerations
- The ground loop explained
- Rudder use and the aerodynamics of turns
- Stall-spin awareness and prevention
- Systems overview
- Rotax considerations
- Pilot's Operating Handbook overview
- Aircraft preflight procedures
- Tailwheel mechanism explained
- Sight picture familiarization
- Airspeeds, power settings and configurations

Initial Flight Training Session(s)
(Estimated 1-2 sessions, 2-3 hrs rental, 3-4 hrs instructor)

- Start-up and pre-taxi procedures
- Taxi and braking exercises
- Crosswind taxi techniques
- Run-up and pre-takeoff checks
- Normal takeoff (CFI demo)
- Normal Vy to cruise climb transition

- Turns - level, climbs and descents
- Coordination awareness exercises
- Dutch rolls (rolls on a point)
- Best glide and configured to land glides
- Simulated go-arounds from landing configuration
- Power-off stall recoveries
- Power-on stalls recoveries
- Cross-controlled stalls
- Rudder stalls and spin prevention
- Maneuvering during slow flight
- Forward slips - straight ahead and in turns
- Emergency procedures
- Normal three-point landing (CFI demo)
- Shutdown procedures

Takeoff and Landing Training Sessions

(Estimated 4-6 sessions, 6-9 hours rental, 8-12 hours instructor)

- Aborted takeoffs from a three point stance
- Aborted takeoffs from a tail-up stance
- Normal takeoffs
- Low approach sight picture and runway alignment exercises
- Low approaches with side slip alignment in crosswinds
- Go-arounds from the landing flare
- Normal three-point landings
- Recoveries from balloons and bounces
- Soft field takeoffs
- Soft field landings
- Short field takeoffs and Vx climbs
- Short field landings
- Crosswind takeoffs and landing (three-point)
- Wheel landings (calm and crosswind conditions)
- Simulated engine failures during takeoff and climb
- Impossible turn exercise - when and how it’s possible
- Power-off 180 approach and landings

Recommended reading:

- The Compleat Taildragger Pilot by H.S. Plourde
- Emergency Maneuver Training by Rich Stowell