## TAILWHEEL ENDORSEMENT TRAINING SYLLABUS

## As used by Chester Charter in the Piper J3 Cub

This syllabus provides for the introduction, practice, and demonstration of basic skills and procedures required to properly learn how to fly a tail wheel aircraft and receive the required logbook endorsement. Instructors will tailor each lesson to individual students as needed.

**Note:** Students are required to purchase "The Compleat Taildragger Pilot" by Harvey S. Plourde This book is available from Amazon.com for roughly \$23. It is the best book written on the subject.

FAR 61.31(I). Additional training required for operating tailwheel airplanes.

- (1) Except as provided in paragraph (I)(2) of this section, no person may act as pilot in command of a tailwheel airplane unless that person has received and logged flight training from an authorized instructor in a tailwheel airplane and received an endorsement in the person's logbook from an authorized instructor who found the person proficient in the operation of a tailwheel airplane. The flight training must include at least the following maneuvers and procedures:
  - (i) Normal and crosswind takeoffs and landings;
  - (ii) Wheel landings (unless the manufacturer has recommended against such landings); and
  - (iii) Go-around procedures.
- (2) The training and endorsement required by paragraph (I)
- (1) of this section is not required if the person logged pilot-in-command time in a tailwheel airplane before April 15, 1991. (FAR/AIM 2014)

**IMORTANT:** On rare occasions some candidates may complete a tailwheel endorsement in as little at 3-5 hours. This however, is extremely rare and should not be expected. The national average is roughly 10 hours, with some students taking up to 15 hours or more. Most students will require additional instruction and/or practice in order to develop the proficiency necessary to be both safe and proficient and meet the instructor's standards. The flight durations listed below are only a general guide. Actual times will vary depending on the pilots learning abilities, total experience, recent experience, consistency of lessons and overall dedication.

Flight/Oral	Time	Tasks
	(hours)	
Oral Ground Instruction	0.5 - 1 Hrs	<ul> <li>General review of training syllabus and flight scheduling.</li> <li>Differences between nosewheel and tailwheel center of gravity positions and the various handling impacts.</li> <li>Tailwheel ground handling and what to expect.</li> <li>Crosswind taxiing procedures.</li> <li>Normal take-off procedures.</li> <li>Adverse yaw and control coordination.</li> <li>Understanding the four left turn tendencies and when they occur.</li> <li>Review upcoming three point, wheel, and cross-wind landings.</li> </ul>
Phase 1 Flight Training	1 – 2 hrs	<ul> <li>Taxi operations using S-turns.</li> <li>Run-up procedures</li> <li>Normal tail-raised take offs.</li> <li>Anticipating and correcting for left turn tendencies.</li> <li>Coordination exercises: shallow and steep turns, dutch rolls, s-turns</li> <li>MCA introduction and practice.</li> </ul>

		<ul><li>Introduction to approach stalls.</li><li>Gradual introduction to three point landings.</li></ul>
Phase 2 Flight Training	1 – 3 hrs	<ul> <li>Taxi operations using S-turns</li> <li>MCA practice (as needed)</li> <li>Departure stalls and approach to landing stalls (power on &amp; off)</li> <li>Normal tail raised takeoffs.</li> <li>Three point landings.</li> <li>Instruction to bounce/swerve recovery.</li> <li>Go-arounds and their proper use.</li> </ul>
Phase 3 Flight Training	1 – 3 hrs	<ul> <li>Introduction to proper and safe hand propping of engine (if desired)</li> <li>Introduction to short field take-offs.</li> <li>Performing and understanding when to use either a three point or tail raised take off position.</li> <li>Introduce forward slips to landing.</li> <li>Three point landings and pattern flying</li> <li>Introduction and practice of soft field takeoffs and landings</li> <li>Bounce/swerve recovery practice.</li> </ul>
Phase 4 Flight Training	1 – 3 hrs	<ul> <li>Proper and safe hand propping of engine (if desired).</li> <li>Introduction to short field landings.</li> <li>Practice of short field and soft field take offs and landings.</li> <li>Introduction to Wheel Landings (may be introduced prior)</li> <li>Introduction to side slips</li> <li>Cross-wind takeoffs and landings (3 point and wheel)</li> <li>Bounce/swerve recovery practice.</li> </ul>
Phase 5 Flight Training	1 – 2 hrs	<ul> <li>Preparation for final checkout</li> <li>Proper and safe hand propping of engine (if desired).</li> <li>Normal take offs</li> <li>Normal three point landings.</li> <li>Normal wheel landings.</li> <li>Short &amp; soft field takeoffs and landings.</li> <li>Forward slips and side slips to landing.</li> <li>Crosswind takeoffs and landings.</li> </ul>
Phase 6 Final Checkout	1 – 1.5 hrs	<ul> <li>Final check-out flight (all maneuvers performed unassisted):</li> <li>Proper and safe hand propping of engine (if desired)</li> <li>Unassisted normal take offs.</li> <li>Unassisted three point landings.</li> <li>Unassisted wheel landings.</li> <li>Unassisted cross-wind landings.</li> <li>Unassisted forward slips to landing.</li> <li>Unassisted side slips to landing.</li> <li>Unassisted short &amp; soft field takeoffs and landings.</li> </ul>

Oral Ground Instruction and debrief	0.5 –1 hrs	Debrief -         Review procedures.         Answer final questions.         Provide tailwheel endorsement (if appropriate).
Oral Ground Instruction	1.0 hr	<ul> <li>Biennial Flight Review Candidates Require 1hr Additional Ground Instruction</li> <li>Review rules and regulations contained in FAR Part 91</li> <li>Review cross-country planning procedures.</li> <li>Review how to do weight and balance calculations.</li> <li>Review proper radio procedures and etiquette.</li> <li>Review weather forecast sources and understanding its effects</li> <li>Provide biennial flight review endorsement (if appropriate).</li> </ul>

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

Information provided by Advisory Circular 61-65E

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. 12-31-17

Please be aware that though we give dual training in the Piper J3 Cub, it is **not** available for solo rental. The tailwheel endorsement does not require solo flight; and for both insurance and liability reasons Chester Charter does not allow for it.