

# Flight Dynamics, LCC



## Flight Operations

# Standard Operating Procedures and Flight Standards

Current Revision: Rev: -

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### REVISION HISTORY

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## Table of Contents

Table of Contents .....	3
Introduction to Flight Dynamics Flight Operations .....	4
Standard Courses .....	4
Course Descriptions .....	5
Basic Tailwheel Operations Course .....	5
Advanced Tailwheel Operations Course .....	5
Light Sport Pilot Course .....	6
Light Sport Instructor Course .....	6
Glider Tow Pilot Course .....	6
Solo Tailwheel Requirements .....	6
Introduction and Rationale .....	6
Initial Check Out .....	7
Currency Requirements .....	7
Solo Tailwheel Operations .....	7

## Introduction to Flight Dynamics Flight Operations

It is Flight Dynamics desire to provide qualified persons the ability to rent the Aeronca Champ for pleasure, time building and refinement of tailwheel skills. At present, there are very few commercial operators that allow solo operations in tailwheel airplanes. The reason is simple: losses of rented tailwheel aircraft is much higher than for tri-cycle gear aircraft. This rate of loss of rental tailwheel airplanes is dramatically apparent in the insurance premiums and pilot requirements. The rate of loss is so high that in the recent past, commercial insurance for rental tailwheel airplanes was not possible. Although now possible, the insurance premiums and pilot requirements are substantially higher than that of there tri-cycle gear counter parts. Even though the Aeronca Champ is a very simple aircraft, it is more challenging to operate particularly in takeoff and landing phase of flight.

To that end, it is Flight Dynamics policy to only allow people that have the skills, academics and judgment to fly the aircraft solo. Flight Dynamics requirements for solo flight are above the basic requirements for tailwheel flight by the FAA.

Flight Dynamics offers several standard courses that are taught in the Aeronca Champ. These courses are:

- Basic Tailwheel Operations Course
- Advanced Tailwheel Operations Course
- Light Sport Pilot Course
- Light Sport Pilot Instructor Course
- Glider Tow Pilot Course<sup>[1]</sup>

## Standard Courses

Flight Dynamics offer several standard courses that are taught in the Aeronca Champ. These courses are:

- Basic Tailwheel Operations Course
- Advanced Tailwheel Operations Course
- Light Sport Pilot Course
- Light Sport Pilot Instructor Course
- Glider Tow Pilot Course<sup>1</sup>

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<sup>1</sup> Conducted in conjunction with the Flight Dynamics Piper PA-25 Pawnee

## Course Descriptions

The following section includes the basic descriptions of the standard Flight Dynamics Courses. More detailed information on each course are contained in the course workbook.

Put in here philosophy on course completion ect..

### ***Basic Tailwheel Operations Course***

The Basic Tailwheel Course is structured to introduce the basic of tailwheel operations to tri-cycle gear pilots. This course will include all of the items necessary for an FAA tailwheel endorsement including wheel landings, 3-point landings, cross-wind landings and tailwheel ground school. Successful completion of the course will result in an FAA tailwheel endorsement. The basic course consists of:

- 6 – 1.3 hours flight lessons in the Aeronca Champ
- 6 hours of pre-briefs, post-briefs and ground instruction
- Flight Dynamics Basic Tailwheel Operations Workbook

Prerequisites: An FAA fixed wing pilot's certificate.

Completion Standards: FAA tailwheel endorsement

### ***Advanced Tailwheel Operations Course***

The Advanced Tailwheels Course is structured to refine and further improve the basic skills learned in the basic tailwheel course. This course includes both ground and flight tasks that are specifically designed to reduced common accidents in conventional gear aircraft. The advanced Tailwheel Course consists of:

- 6 – 1.3 hours flight lessons in the Aeronca Champ
- 6 hours of pre-briefs, post-briefs and ground instruction
- Flight Dynamics Advanced Tailwheel Operations Workbook

Prerequisites: An FAA tailwheel endorsements and ground school knowledge of the Basic Tailwheel Operations Course.<sup>2</sup>

Completion Standard: Ready for the Flight Dynamics Academic and Flight test for solo flight

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<sup>2</sup> Student that have not taken the Basic Tailwheel Course at Flight Dynamics may require additional ground school

### ***Light Sport Pilot Course***

This Light Sport Pilot Course is designed to take a person with no aviation experience through to the FAA Light Sport Pilot Certificate. The following is FAA minimum requirements for a Sport Pilot Certificate:

- 20 hours of flight in a fixed wing LSA (the Champ) aircraft including 15 hours of dual instruction and 5 hours of solo flight.

### ***Light Sport Instructor Course***

### ***Glider Tow Pilot Course***

## **Solo Tailwheel Requirements**

The following are the solo requirements for the Flight Dynamics Champ.

### ***Introduction and Rationale***

It is Flight Dynamics desire to provide qualified persons the ability to rent the Aeronca Champ for pleasure, time building and refinement of tailwheel skills. At present, there are very few commercial operators that allow solo operations in tailwheel airplanes. The reason is simple: losses of rented tailwheel aircraft is much higher than for tri-cycle gear aircraft. This rate of loss of rental tailwheel airplanes is dramatically apparent in the insurance premiums and pilot requirements. The rate of loss is so high that in the recent past, commercial insurance for rental tailwheel airplanes was not possible. Thought now possible, the insurance premiums and pilot requirements are substantially higher than that of there tri-cycle gear counter parts. Although the Aeronca Champ is a very simple aircraft, it is more challenging to operate particularly in takeoff and landing phase of flight.

To that end, it is Flight Dynamics policy to only allow people that have the skills, academics and judgment to flight the aircraft solo. Flight Dynamics requirements for solo flight are above the basic requirements for tailwheel flight by the FAA.

### ***Initial Check Out***

The following are the minimum requirements for an initial solo checkout in the Aeronca Champ:

- Competition of the Flight Dynamics Advanced Tailwheel Course or at the point of solo in the Flight Dynamics Light Sport Pilot Course.
- 10 hours of flight time in Aeronca 7AC and a minimum of 5 hours in the Flight Dynamics Aeronca Champ.
- Pass an oral exam on tailwheel and Aeronca Champ operations
- Pass a flight exam on tailwheel and Aeronca Champ operations
- Pass a written exam on tailwheel and Aeronca Champ operations
- Exhibit unquestionably sound judgment
- A pilot history including but not limited to losses and violations
- Flight Dynamics or its underwriter MAY require a medical in certain circumstances

Additional Requirements for Pilots Under 21 or over years of age:

- Competition of the Flight Dynamics Judgment training course

### ***Currency Requirements***

Solo qualified pilots must have 3 takeoffs and landings in the Flight Dynamics Champ within the previous 6 week to operate the aircraft solo. Those pilots that exceed the 6 week period must fly with a Flight Dynamics instructor to regain solo privileges.

Solo pilot must complete an annual refresher lesson each year to maintain solo privileges. This refresher will include ground work, a flight and written questions.

### **Solo Tailwheel Operations**

- Pilots approved for solo flight must have a credit card on file and agree to pay the deductible in the case of a loss or damage
- Landings are only permitted at FAA approved public airports
- Landings at turf fields must be 3-point landings
- Aircraft time will be billed at 1.1 times (10% above) the indicated tach time of the flight
- The maximum time for a local flight is 2.5 (clock) hours

- Flights greater than 2.5 hours or flights outside of the local area require prior approval
- Solo pilots must fly in the front seat
- Solo pilots must be the sole manipulator of the aircraft controls below 1,000 feet AGL

### Solo Tailwheel Pilot Requirements (Champ)

The following are the minimum requirements for solo flight in the Aeronca Champ 7AC:

1. A tailwheel endorsement or solo endorsement in make and model
2. A minimum of 10 hours of dual instruction in make and model
3. Passing the Flight Dynamics written exam corrected to 100%