Flight Design USA
Syllabus for Transition to a

Flight Design CTLS Light Sport Airplane

FLIGHT DESIGN
USA

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Signature:

Introduction

This syllabus will be used as the guide to become a competent Flight Design CTLS pilot.

The CTLS is a high performance Light Sport Aircraft designed to be used for travel, training and local flying under VFR conditions. The following document and the supervision from a Flight Design trained Flight Instructor will allow you to understand how to use the plane as intended by the Manufacturer.

Before you begin the transition training process please take time to consider what you are about to undertake. The CTLS is made for fun but learning to fly a new type of aircraft is serious business. The hull value of your plane the safety of yourself and others can be affected by the success of the transition training program.

Most pilots should plan to take two or three days to complete the following syllabus. As a light sport aircraft the CTLS has different characteristics than other aircraft and will required a different skill set and individual training time will vary based upon the pilot skill level. The transition will require that you take adequate time to acquaint yourself with things like the transition to an all glass panel, an advanced autopilot, a Garmin GPS or the numerous Rotax powered engine differences. These all will be experienced while flying a low mass, more complex aircraft if you are used to an older part 23 GA aircraft or if you are transitioning from a lighter less capable aircraft the avionics, systems and speed will be the biggest challenge to a speedy transition.

Before the flight a briefing will be done by your instructor and after each lesson you will discuss what you have done, and he will answer any questions. The complete transition training program should be expected to take two full days under most conditions. You should plan on more days to complete this transition training if there are special circumstances or you desire more intensive training.

Each lesson has an objective and completion standards. In general maneuvers will be done to a safe standard using the FAA Sport Pilot PTS (FAA-S-8081-29) or latest revision as a guide.

An open book written exam must be completed 100% correctly and will be graded by your instructor prior to lesson 1.

Day 1: *These times are for guidance only*.
Exam completed

Lesson 1	Ground time 2-3 hours	flight - 2 hours
Day 2:		
Lesson 2	Ground one hour	flight - 2 hours
Lesson 3	Ground one hour	flight-one hour

Outcome of each Skill will be noted as: Meets Criteria or Needs Practice

Lesson 1
(2 – 2.5 hrs)

Objectives:

Transitioning pilot will become familiar with pre flight, ground handling, engine and cooling systems and to understand required inspections and determine the fitness for the proposed flight. He will understand how to care for the airplane.

Pilot will understand aircraft avionics and general aircraft performance, including fuel consumption, appropriate V speeds for flight operations, and will have received instruction on the use of the Flight Training supplement and Aircraft Operation Instructions.

Will be able to do normal and cross wind taxi and takeoff along with normal traffic patterns. Will conduct normal climbs, descends, turns and exhibit positive control of the aircraft within a wide range of flaps and speeds. Will be able to conduct stalls, steep turns, slow flight in all flap configurations at proper flap speeds.

Pilot will be proficient performing power off, power on stalls and stall recoveries with and without flaps both in turns and straight and level flight. Pilot will become familiar with the landing attitude and ground handling characteristics of the CTLS.

Preflight Discussion -

___AOI and Flight Training Supplement
___Maintenance, Service requirements
___Engine
___Propeller
___Fuel and Fuel System
___Oil system
___Coolant
___Landing gear, control surfaces, Flaps, Seat adjustments
___Weight and Balance,
___Loading and performance
___ Preflight Inspection
___ Avionics Briefing - EFIS, EMS, GPS, Radio,Transponder, Autopilot
___Engine Starting
___Taxiing
___Before Takeoff Check
___Normal Takeoff (0. 15 Flaps)
___Climbs, Straight and Level, Descents, Turns
___Slow Flight at all flap settings
___Establishing proper speeds
___Power Off Stall (Approach to Landing stall and recoveries)
___Normal Approaches and Landings
___Parking and Securing,
___Post Flight,
___Cleaning and Cleaners

Post-flight Discussion

Completion Standards

You will have satisfactorily completed this lesson when you can, preflight, start, taxi, takeoff, perform the basic maneuvers and control the aircraft in slow flight with all ranges of flaps and in normal and slight cross wind conditions.

You will be able to find information regarding the aircraft from the documents on board.
You will be able to fly the aircraft and operate installed avionics equipment.
Maneuvers will be done to PTS standards for LSA sport pilot rating as a guide

Lesson 2
(1.5- 2 hrs)

Objective:

For the transitioning pilot to become comfortable with aircraft handling and higher performance conditions including enroute decision making.

This lesson will focus on understanding emergency procedures, extreme slow flight, full stall and recoveries, incipient stalls, understand limitations and spin awareness.

Understand how to operate safely to and from short field, soft field and high density altitude airports in normal and crosswind conditions. To be able to consistently make safe take-offs, landings and go-arounds from different airports.

The pilot will understand aircraft limitations and be able to safely operate in VFR conditions and understand proper decision making processes regarding unusual conditions such as distractions and MVFR weather conditions. Understand off airport emergency procedures best glide speeds and use of BRS system. Will understand aircraft visual alarms and aural warnings Will show ability to handle aircraft in changeable conditions.

Preflight Discussion

New This Flight

___Power On Stall Departure stall)
___Strong Crosswind Takeoff and Landings (0 degrees)
___Slips
___Go Around, Balked Landing (Full Flaps)
___Emergency procedures
___Best Glide range and Speeds
___Aborted Takeoff
___Short/Soft Field Landing (Full Flaps Demonstration)
___Aborted Landing (35 Flaps)
___BRS Parachute Simulation

Improving Your Skills

___Understanding VFR Limitations
___Scenario – failure of systems
___Deciding when to abort and turn around

Post-flight Discussion-

Completion Standards

You will have completed this lesson satisfactorily by accurately conducting the preflight of the airplane, having shown control in all basic maneuvers demonstrated entry and

exit from slow flight and shown all stall entry and recoveries and understand spin awareness. The pilot will have shown ability to handle aircraft in crosswinds, understand crosswind performance and demonstrated an approach to an unfamiliar airport.

Lesson 3
Final Review and Check
(1-1.5 hrs)

Objective :

To be ready to take the plane in local pattern and on a cross country flight, showing competence in handling adverse conditions unique to light aircraft. Be able to decide when and how to operate the airplane and be comfortable in those operations. Be able to Brief Passengers regarding aircraft systems, including seat belts and BRS system. Passengers should understand basic aircraft safety and flight expectations.

The pilot must have demonstrated the ability to handle crosswind landings.

The pilot will understand weight and balance affects and aircraft loading restrictions. Pilot will demonstrate proper fuel management. Should have all questions answered regarding the aircraft and systems prior to taking possession of the aircraft.

Preflight discussion

Improving Your Skills

___ Preflight Engine Starting and warm up
___ Proper Loading and securing of Baggage
___ Cold or abnormal weather operations (brief)
___ Passenger Briefings
___Taxiing
___Before Takeoff Check
___Aborted Landing
___Transition to Cruise
___En-route procedures
___Fuel Management
___Normal and Crosswind Takeoff and Landings demonstrated

Post-flight Discussion

Completion Standards

You have completed this lesson satisfactorily when you have shown your flight Instructor that you can safely control the airplane in all phases of flight by yourself and can transition to and from the en-route flight phase. You also can demonstrate adequate

understanding of the Emergency Procedures and safe decision making and conduct passenger briefings.

During landings you will be able to touch down at or within 400 feet of the point specified by your instructor.

Note:

Lesson 3, will be repeated as necessary to become competent in operating the CTLS

FINAL RECORD

Pilots Name:_____

Address:_____

Aircraft Used:_____

Lesson 1

Flight Time : _____ T/L : _____

Ground Time : _____ Dual : _____

PIC : _____

Date Completed :_____ **Pilots signature:** _____
Instructor signature: _____

Lesson 2

Flight Time : _____ T/L : _____

Ground Time : _____ Dual : _____

PIC : _____

Date Completed :_____ **Pilots signature:** _____
Instructor signature: _____

Lesson 3

Flight Time : _____ T/L : _____

Ground Time : _____ Dual : _____

PIC : _____

Date Completed :_____ **Pilots signature:** _____
Instructor signature: _____

Pilot Registration Record

Date : _____

Student : _____

Address : _____

_____

Phone (H) : _____

Phone (W) : _____

Phone (C) : _____

Email : _____

Fax : _____

Certificate # : _____

Medical : _____

BFR : _____

Drivers License # : _____

Drivers Lic. Exp. : _____

Comments : _____

_____

_____

WRITTEN EXAM CTLS

Student Name _____

1) The 912 ULS engine has Max. _____ HP at _____ RPM Max.for up to ___ Minutes.

2) Where can I find the recommended oil for the Rotax 912 ULS ?

_____

3) What is the Min. oil Temperature before Take-off ?

_____

4) What kind of Fuel can be used?

_____

6) What type of oil system is in the CTLS?

_____

7) The procedure to use to check the oil level is

_____

_____

8) The Max X-Wind component with 0 degrees flaps is _____ Knots.

9) The Max X-Wind component up to 35 degrees of Flaps is _____ Knots.

10) What inspections are required to keep the aircraft legal and under Warranty ?

_____

11) The usable fuel is _____ Gallons ?

12) When selecting flaps to 30 or 40 degrees, the ailerons are _____ and in a strong x-wind are _____ effective.

11) What are the following Speeds in Knots ? Va ___ Vl/d ___ Max Glide ____ Vso ___ Vs1 ___ Vfe with 30-35 flaps ___ Max with 0 degrees ___

Transition Trainer Signature:

_____

Date:_____