



**FLIGHT DESIGN**

***CTLS***

**LSA**

**SERIAL NUMBER: \_\_\_\_\_**

**Flight Training Supplement**

THIS DOCUMENT AND THE TECHNICAL DATA HEREON DISCLOSED ARE PROPRIETARY TO FLIGHT DESIGN AND SHALL NOT BE USED, RELEASED, OR DISCLOSED IN WHOLE OR IN PART WITHOUT EXPRESS WRITTEN PERMISSION FROM FLIGHT DESIGN



## Flight Training Supplement (FTS)

Type: *CT*

Series: *CTLS* LSA

Page: ii

### REVISION STATUS

Rev	Pages	Date	Chapter	completed
1	All	09 Jan 2008	All	TP / OR
2	-	01 Apr 2008	System of pages numbering changed	Vasyl Sys
	-		Formatting (page breaks) partially changed	
	-		Chapters were numbered	
	5-1		Chapter 5 added	



# Flight Training Supplement (FTS)

Type: *CT*

Series: *CTLS LSA*

Page: iii

## LIST OF EFFECTIVE PAGES

CHAPTER			CHAPTER			CHAPTER		
	PAGES			PAGES			PAGES	
		REV			REV			REV
1	1-1	2	5	5-1	2			
	1-2	2		5-2	2			
2	2-1	2		5-3	2			
3	3-1	2		5-4	2			
	3-2	2		5-5	2			
	3-3	2	6	6-1	2			
4	4-1	2	7	7-1	2			
	4-2	2	8	8-1	2			
	4-3	2		8-2	2			
	4-4	2						



## Flight Training Supplement (FTS)

Type: *CT*

Series: *CTLS LSA*

Page: iv

### TABLE OF CONTENTS

1	GENERAL.....	1-1
1.1	Read this before your first training flight.....	1-1
1.2	Manufacturer.....	1-2
1.3	In the USA contact.....	1-2
2	LIGHT SPORT AIRCRAFT PRIMER.....	2-1
3	LSA TRANSITION SYLLABUS.....	3-1
3.1	Overview.....	3-1
3.2	Objective.....	3-1
3.3	Completion Standards.....	3-2
3.4	Areas of Operation and Tasks.....	3-2
3.5	Ground Training.....	3-2
3.6	Flight Training.....	3-3
4	NORMAL FLIGHT PROCEDURES.....	4-1
4.1	Take-off.....	4-1
4.2	Climb.....	4-2
4.3	Limitations (for a complete list of limitations please refer to the AOI).....	4-2
4.4	Cruising Flight.....	4-2
4.5	Banked Turn.....	4-3
4.6	Stalls.....	4-3
4.7	Approach and Landing.....	4-4
4.8	Control of the Emergency Location Transmitter ELT (if equipped).....	4-4
4.9	Engine stop.....	4-4
5	STANDARD EQUIPMENT.....	5-1
5.1	Glass Cockpit Dynon EFIS 100.....	5-1
5.2	Glass Cockpit Dynon EMS D120.....	5-2
5.3	Hobbs Hour Meter.....	5-2
5.4	Backup Instrumentation including:.....	5-3
5.5	Radio Garmin SL40 installed with antenna.....	5-3
5.6	Transponder Garmin GTX 327 Mode A/C installed with antenna.....	5-3
5.7	Altitude Encoder ACK A30 (Classic) or Dynon (Advanced).....	5-4
5.8	GPS Garmin 496 XM with USA database.....	5-4
5.9	ELT Ameriking AK450 (Installation and operation manual).....	5-5
5.10	Intercom PM 3000 A with aux music input and connection to GPS Audio.....	5-5
6	BRS PARACHUTE SYSTEM.....	6-1
7	PERFORMANCE.....	7-1
8	AIRCRAFT ACCEPTANCE CHECKLIST.....	8-1



## 1 GENERAL

### 1.1 *Read this before your first training flight*

This document is provided to supplement the information provided in the Aircraft Operating Instructions (AOI-Flight Manual) but does not replace it. Specific information on operation of the engine and systems are provided in the AOI. Specific information on maintenance is contained in the Flight Design CTLS Maintenance Manual provided with each aircraft.

Please pay attention to the pre-flight check and maintenance instructions for the aircraft, the Rotax ® engine and the BRS emergency parachute system and the operation manuals for other installed equipment such as the Dynon EFIS, EMS, Garmin 496 and the Tru Trak CT pilot autopilot systems.

Do not attempt to learn the basics of these systems in the aircraft. Preparing by studying the basic operation of this equipment prior to your first transition training flight will be time well spent.

The Flight Design CTLS is equipped with non-certified engines. Flying the CTLS must always be done with the possibility of a safe landing due to the loss of the engine power.

The Flight Design CTLS is a VFR aircraft only. Because of the high cruising speed and range of the CTLS, flight into vastly different weather patterns and meteorological conditions can occur. The entry into bad weather with IMC conditions by VFR pilots and aircraft is extremely dangerous. As the owner or operator of an aircraft you are responsible for the safety of your passenger and yourself. Do not attempt to operate the CTLS in any manner that would endanger the aircraft, the occupants or persons on the ground.



### **WARNING**

**Use alkali-free cleaning products only to clean  
both the structure and the windows!**



## Flight Training Supplement (FTS)

Type: *CT*

Series: *CTLS LSA*

Page: 1-2

### **1.2 Manufacturer**

Flight Design GmbH  
Siemlinger Str. 65  
D – 70771 L.-Echterdingen Germany

### **1.3 In the USA contact**

Flight Design USA  
P.O. Box 325  
South Woodstock, CT. 06267  
860-963-7272  
[airworthiness@flightdesignUSA.com](mailto:airworthiness@flightdesignUSA.com)



## 2 LIGHT SPORT AIRCRAFT PRIMER

Light Sport Aircraft may seem familiar to us by their appearance, but they are in fact quite different from the traditional aircraft we are used to. First, LSAs weigh significantly less than many aircraft. With a typical empty weight of 700 pounds and a take-off weight of up to 1320 pounds, they are indeed light aircraft. The light weight, coupled with a generous wing surface area, means that they have a low wing loading making them more susceptible to wind currents than larger, more heavily loaded aircraft. A good pilot needs to remain vigilant from the time the aircraft first moves under its own power, until after the landing is complete and the aircraft is brought to a full stop.

Also, the weight constraints of designing and building a safe and practical LSA mean that only a certain amount of the design can be devoted to shock-absorbing, ground maneuvering, equipment (the landing gear). Consequently, LSAs do not take kindly to being driven nose-first into the ground, the favorite landing technique of many pilots. It is a good idea for us to try to raise our game a little by constantly seeking to improve our flying skills (in this case our landing technique) so that we may continue to enjoy many happy accident-free hours of operation.

Next, many LSAs are built to be more ergonomic and have larger windows than older aircraft. Seated inside them, you will find yourself in a more reclined position, with new viewing angles, and able to see more of the outside world. You may find this to be quite an adjustment to make coming from older design aircraft that could often impart the impression of sitting at an office desk with a less than ideal view out the window.

It is important to become familiar with the sight picture (the view) when looking out the windows of your aircraft before your first flight and you will find that your landings are directionally more consistent and you are better able to judge your flare. Remember that it's been said that the main wheels are for landing, the nosewheel is only for steering on the ground.

With different flight characteristics, different control placement and new glass panel avionics, the transition can be more than many expect. Do not rush through your transition training until you are thoroughly comfortable in all aspects of the aircraft.

LSAs are often capable of flying at a relatively wide range of speeds: from surprisingly slow, to rather fast. Make it a goal to become comfortable and safe at both ends of the speed range. At slow speeds, become familiar with aircraft's flight characteristics at different flap settings and learn to recognize the onset of a stall. Learn and practice correct stall recovery technique for your particular aircraft.

At high speeds, watch where you are going! Things can happen fast. You can cover more distance and find yourself in un-favorable weather areas before you know it. Light Sport Aircraft are ushering in a new and exciting era in aviation. From modern construction techniques to sophisticated avionics to new and improved medical certification requirements, everything seems to be changing. To continue this exciting new trend, it is important that we strive for higher level of safety and proficiency in all our flying activities.

### 3 LSA TRANSITION SYLLABUS

#### 3.1 Overview

The objective of transition training is for a pilot to develop the knowledge, skill and proficiency to operate a heretofore unfamiliar model of aircraft. The training should not be limited to flight training but should also include ground training. The syllabus used should be effective and tailored to the student's individual experience and needs. Previously learned skills may be useful in the learning process but differences should be emphasized. At the end of the course, the transitioning pilot should be able to demonstrate having reached the objective and meeting the standards by the use of oral, written and flight testing.

The training should include but not be limited to:

- The aircraft systems specific to the model of aircraft.
- The flight characteristics and limitations
- The care and cleaning of aircraft made from modern materials.
- Modern aircraft engines
- Responsibilities of Owners and Operators of Light Sport Aircraft.

Information pertaining to transition training can be obtained from government publications as well as from leading industry organizations.

#### 3.2 Objective

The over all objective of the transition training is to obtain the required knowledge and skill level to safely operate a Flight Design CTLS.





### **3.3 Completion Standards**

At the end of the course, the transitioning pilot should be able to demonstrate having reached the course objectives and meeting the completion standards by the use of oral, written and flight testing. The student will demonstrate knowledge of the Aircraft Operating Instructions manual, the aircraft systems and limitations, and the regulations pertaining to Light Sport aircraft and airmen. The demonstration will include emergency as well normal procedures.

### **3.4 Areas of Operation and Tasks**

In a manner similar to Practical Test Standards put forth by the FAA, the instructor will establish Areas of Operation corresponding to specific areas of knowledge and/or skill needed by the student to complete the transition training.

Within each Area of Operation the instructor will identify specific Tasks that can be completed by the student in order to demonstrate proficiency.

### **3.5 Ground Training**

#### **Systems and Limitations**

The instructor should not only provide an overview of the aircraft, but also an in-depth description of the aircraft systems, their operation and their limitations. The description should include a discussion on how the systems may be different from what the student has previously experienced.

Areas of operation

- I. Aircraft overview
- II. Flight and system controls
- III. Flight Instruments
- IV. Performance and Limitations
- V. Powerplant
- VI. Electrical system
- VII. Fuel System
- VIII. Landing Gear
- IX. Weight and Balance
- X. Specific avionics installed



### 3.6 *Flight Training*

#### **Preflight**

The purpose of a preflight inspection is to determine the airworthiness of an aircraft in preparation for flight. The transitioning student must learn assess the overall condition of the aircraft and establish its maintenance status. Items of note are: documents, placards and inoperative equipment.

#### **Flight Training Standards**

Upon completion of flight training, the student will demonstrate a skill level appropriate to the Light Sport Pilot Practical Test Standards or to the level of pilot certificate held, if higher.

#### **Areas of Operation**

- I Flight planning for Light Sport Aircraft
- II Preflight procedures
- III Surface operations
- IV Takeoff, Landings and Go-arounds
- V Navigation
- VI Slow flight
- VII Emergency procedures
- VIII Post flight procedures



## 4 NORMAL FLIGHT PROCEDURES

The CTLS is a conventional aircraft that has conventional characteristics and procedures. The aircraft is aerodynamically very clean and pilots being transitioned to the CTLS need to be trained to manage their airspeed carefully.

The rapid acceleration to takeoff and the angle of climb is different from conventional aircraft. Attention to the flap limitation speeds is needed during climbing flight.

Landing the CTLS requires attention to controlling and reducing airspeed in the pattern and final approach to landing. After practice, the CTLS can be landed in very small areas safely.

This section is an outline of typical procedures for flying a CTLS. It is represented here as a primer-overview only. More detailed explanations including emergency procedures are listed in the Aircraft Operating Instruction (AOI) manual provided with the CTLS.

### 4.1 Take-off

If the runway and approach to the runway are clear. Roll out to the take-off position.

- If it is possible, take-off directly into the wind.
- The maximum direct crosswind component at take-off is 30 km/h (16 kts / 18 mph) (See Item 2 of Performance Limitations).
- Confirm the nose wheel is centered.
- Controls in proper position for takeoff.
- Apply the throttle smoothly to fully open (forward).
- Engine speed: approx. 4800 RPM
- Flaps: 15° (0° is fine on longer runways)
- As soon as the airplane accelerates, gently pull back on control stick – keep the nose wheel slightly elevated until the airplane takes off.
- After take-off, release the back pressure on the stick slowly as airspeed builds to 110 km/h (61 kts / 70 mph). At initial climb speed up to 120 km/h (67 kts / 71 mph). Climb to a minimum height of 650 ft. in straight ahead flight before attempting to turn the aircraft.
- Do not reduce the flaps to below 0° with less than 110 km/h (61 kts / 70 mph) airspeed.



## Flight Training Supplement (FTS)

Type: *CT*

Series: *CTLS LSA*

Page: 4-2

### 4.2 Climb

- Slowly decrease the flaps to  $-6^{\circ}$  - increase the climb speed to 160 km/h (87 kts / 100 mph). Make certain to not exceed the flap speed limitations during climbs.

### 4.3 Limitations (for a complete list of limitations please refer to the AOI)

The CTLS is not certified for aerobatics.

Flights are only to be made under VFR conditions.

Night flights require special optional equipment.

Flights in icing conditions not allowed.

Steep turns beyond 60 Degrees are prohibited.

In gusty wind or wind speed more than 46 km/h (24 kts / 30 mph) flight operations should be stopped.

### 4.4 Cruising Flight

During cruising flight, an RPM of 4200 – 5500 RPM should be used (redline is 5800 RPM). The maximum permissible speed of 269 km/h (145 kts / 168 mph) should not be exceeded.

During cruising flight, monitor your fuel consumption and total fuel on board for flight planning. Fuel consumption at typical cruising flight is about 4.7 gallons (18L) per hour. In case of possible carburetor icing, pull on the carburetor heat (immediately after icing clears, push it back in again – as significant power is lost).

For normal cruising flight, bring the airplane to the desired cruising speed in level flight by observing the VSI or the altimeter. Adjust the throttle and trim to hold altitude.



### 4.5 Banked Turn

Each of turn should be made with the coordinated use of the aileron and rudder. Steep turns in excess of 60 degrees are not recommended. At lower speeds in tight turns, the airplane loses altitude quickly. Banked turns with more than 30° of banking should not be carried out less than 54 kts. (62 mph) If the airplane enters an inadvertent spin, push the rudder opposite the spin direction. Position the control stick in neutral position for recovery. After the spin rotation stops, recover to level flight carefully to not exceed  $V_{ne}$ , or the load limits of the aircraft.

### 4.6 Stalls

The CTLS is very docile in stalls. The loss in altitude during stalls is approx. 165ft, with a maximum pitch down of 25°. The aircraft is resistant to stalling in clean-cruise configuration. During stalls with flaps a tendency for the aircraft to roll can occur and is easily countered by use of the rudder.

The stall speed at 600 kg (1320 lbs) gross weight is

65 km/h (39 kts / 45 mph) at 35° flaps,  
75 km/h (42 kts / 48 mph) at 0° flaps,  
81 km/h (44 kts / 51 mph) at -6° flaps.

The stall is noted through light buffeting. At 2 kts.(3 mph) above the stall speed, the rudder becomes "soft". When flying close to stall speed, only the rudder and elevator are fully controllable. The ailerons have less effectiveness in very slow flight. The airplane loses about 165 ft. in altitude during a stall. Close to the ground, do not fly slower than a minimum speed of about 115 km/h (62 kts / 71 mph).

In the case of a stall-spin entered through crossed controls oppose a spin with opposite rudder input. Center the ailerons and elevator until the rotation stops, then level out the airplane gently.

If the attempt to level out the airplane fail or leveling out is doubtful because of too low altitude the emergency parachute system should be actuated.



### 4.7 Approach and Landing

Land into the wind, or the runway with the least crosswind if possible. The final approach to landing is to be carried out in level attitude. In case of carburetor icing hazard pull the carburetor heating.

Engine power at:	about 10-20 %	slightly above idle to confirm that the engine still has power.
Approach speed	about 100 km/h (54 kts / 62 mph)	with experience, a slightly slower approach speed can be used.
Flaps	from 0° to 35°	

At the distance of 3 ft. over the ground close the throttle and land the airplane gently. If engine cools too much in descent with the engine at idle and won't increase RPM, pull the choke and then increase throttle. Close the choke again.

When landing with crosswind, perform a crabbing approach or slip carefully.

The flights over obstacles during approach to landing should be avoided.

### 4.8 Control of the Emergency Location Transmitter ELT (if equipped)

Before switching off the radio equipment, adjust frequency to the international emergency frequency 121.5 and check if the ELT is activated.

### 4.9 Engine stop

Under normal conditions, the engine is sufficiently cooled during the landing approach and rollout, therefore it can be stopped through ignition switching off. The radios and instruments should be switched off before stopping the engine.



## 5 STANDARD EQUIPMENT

This chapter provides brief information about standard equipment installed on the aircraft.

**Warning:** this is supplemental information for convenience only, the binding information is given by the instrument manuals.

### 5.1 Glass Cockpit Dynon EFIS 100

The primary flight instruments on your EFIS display are generated using a group of calibrated sensors. All of them are solid state – that is, there are no moving parts. These sensors include accelerometers, which measure forces in all three directions; rotational rate sensors, which sense rotation about all three axes; pressure transducers for measuring air data; and magnetometers on all three axes for measuring magnetic heading.

All normal operation of the EFIS-D100 happens via the front panel. The front panel contains buttons and a display.

- Buttons – There are six buttons on the front panel of the EFIS-D100. Throughout this guide, these buttons are referred to as one through six, with button one being the leftmost and button six being the rightmost. EFIS-D100 buttons are used to turn the instrument on and off, cycle between screens, scroll through menus, and adjust instrument parameters.
- Display – The display shows EFIS information, menus, and data obtained from other connected products.



### 5.2 Glass Cockpit Dynon EMS D120

The EMS-D120's versatile design accommodates a wide range of engines and sensors. You may configure the system to meet your monitoring requirements covering both air- and water-cooled engines with up to six cylinders. Its warning capabilities provide early notification of problems that might otherwise go unnoticed.

All normal operation of the EMS-D120 happens via the front panel. The front panel contains buttons and a display.

- Buttons – There are six buttons on the front panel of the EMS-D120. Throughout this guide, these buttons are referred to as one through six, with button one being the leftmost and button six being the rightmost. EMS-D120 buttons are used to turn the instrument on and off, cycle between screens, scroll through menus, and adjust instrument parameters.
- Display – The display shows engine parameters, menus, and data obtained from other connected products.

### 5.3 Hobbs Hour Meter

Record and track the total elapsed time that aircraft is in use. These escapement - controlled DC hour meters are electrically powered with jewelled movement, shockproof odometer and permanently lubricated parts. Total digital quartz readout is 9999.9 hours. Easy-to-read white numerals on black face dials. Sealed against dirt and moisture.





### **5.4 Backup Instrumentation including:**

Analog airspeed indicator small (diameter 57 mm)  
Analog one pointer altimeter small (diameter 57 mm)  
Magnetic compass with deviation table

### **5.5 Radio Garmin SL40 installed with antenna**

The all-purpose, high-performance SL40 is packed with innovative features: active and standby flip-flop frequency tuning, direct sunlight-readable alphanumeric display, easy access to National Weather Service broadcasts, a two-place intercom and more.

With 8 watts of transmit power and only 35-watt DC input, the SL40 is cool and efficient. No external fans or cooling equipment are required. It also operates on 10 to 32-volt inputs without the need or expense of a separate voltage converter.

The SL40's frequency-monitoring function gives you the ability to monitor ATIS or the 121.5 emergency frequency without leaving your assigned ATC channel. This allows you to listen to standby frequencies while giving priority to the active channel, meaning you'll never miss a transmission.

### **5.6 Transponder Garmin GTX 327 Mode A/C installed with antenna**

The Garmin GTX 327 is a panel-mounted transponder with the addition of altitude reporting and timing functions. The transponder is a radio transmitter and receiver that operates on radar frequencies, receiving ground radar or TCAS interrogations at 1030 MHz and transmitting a coded response of pulses to ground-based radar on a frequency of 1090 MHz.



### **5.7 Altitude Encoder ACK A30 (Classic) or Dynon (Advanced)**

The operation of the A-30 Digitizer is controlled by the aircraft transponder. Place the transponder in the altitude reporting mode to transmit altitude data. Model A-30 digitizers which transmit RS 232 data (mod 8 and above) provide continuous data to RS 232 devices.

### **5.8 GPS Garmin 496 XM with USA database**

The GPSMAP 496 is an all-in-one versatile color aviation, automotive, and marine navigator—perfect for air, land, or water. This portable GPS navigator features a 256-color TFT screen that is easy to read in bright sun. a built-in City Navigator basemap, AOPA Airport Directory, SafeTaxi Airport Diagrams, Jeppesen aviation database, and auto routing to provide you with automatically generated turn-by-turn directions. With the included GXM 30A antenna and a subscription to XM \VX Satellite Weather, pilots have constant access to NEXRAD radar, lightning, METARs, TAFs, TFRs, and more. In addition, the GPSMAP 496 offers XM Satellite Radio capabilities, featuring more than 150 digital channels of commercial free music: more than 30 channels of news, sports, talk and entertainment; and more than 20 dedicated channels of XM Instant Traffic & Weather.



### **5.9 ELT Ameriking AK450 (Installation and operation manual)**

The AK-450 ELT, Emergency Locator Transmitter, is a state of the art CMOS technology, long lasting, solid state based equipment. It is an extremely reliable, highest standards of quality, designed to meet TSO-C91a requirements for critical application.

The entire ELT system is self powered by its own internal Batteries. Interface with Aircraft Electrical Power System is not required.

The AK-450 ELT is automatically activated upon sensing a change of velocity of 3.5 +/- 0.5 Feet/Second, along its longitudinal axis (Automatic Fixed - ELT (AF) Configuration). It is designed to be removed from the Aircraft and used as a personal locating device when it is necessary to leave the scene of the accident (Automatic Portable - ELT (AP) Configuration).

### **5.10 Intercom PM 3000 A with aux music input and connection to GPS Audio**

The PM3000 is a 4-place, panel-mounted intercom with multiple volume and VOX (voice activated squelch) circuits using unified volume and squelch controls for the pilot, copilot and passengers.

With few controls for the pilot to use, the operation of the PM 3000 is very straightforward. Yet the unit outperforms its much more complicated competition. Although there is only one volume control knob, when an adjustment is made to the volume control, all output amplifiers are being changed simultaneously. Likewise, when the squelch control knob is adjusted, several VOX circuits are being changed at the same time. Since the system is designed to use modern stereo headsets, it is not necessary to balance the volume and squelch controls at the intercom.



## 6 BRS PARACHUTE SYSTEM

The specific operating instructions and limitations for the *BRS* 1350 HS parachute are located in the *BRS* owner's manual supplied in the aircraft documents. More specific information is also located in the Aircraft Operating Instructions.

The *BRS* parachute system included in the *CTLS* is a very high performance system. The *Vne* of the parachute system is above the *Vne* of the aircraft. In an emergency, the parachute system should be activated even if at a very low altitude.

Before activating, if it is possible, stop the engine and tighten the pilot and passenger seat belts harnesses. The parachute system handle is located in the central console between the seats. To activate the system, the handle has to be pulled to the stop.

The history of emergency parachute use in light aircraft has shown that pilots have to be mentally prepared to use of the system before the need arises. The process of looking reaching and pulling is a way to practice mentally, the physical action of activation.

Briefing your passenger on the use of the system is important in the unlikely event of the pilot being incapacitated. Make certain to always replace the safety pin in the activation handle on the ground.



## 7 PERFORMANCE

Performance data is based on an aircraft in good condition and correct settings. Even the smallest adjustments to the controls or the omission of a small piece of fairing can adversely affect aircraft performance. Sufficient reserve should be added to the data given in this handbook to cover all such possibilities.

Performance data for MTOW @ 600 kg (1320 lbs)

Take-off roll	flaps 15°	250 m	(820 ft)
Take-off distance to clear 50ft obstacle	flaps 15°	450 m	(1500 ft)
		Mowed, level, dry grass runway or pavement (It does not make a noticeable difference on this aircraft)	
Take-off speed	flaps 15°	85 km/h	(47 kts CAS)
	flaps 0°	100 km/h	(54 kts CAS)
Best rate-of-climb	flaps 15°	120 km/h	(62 kts CAS)
		3.7 m/s	(740 ft/min)
	flaps 0°	132 km/h	(73 kts CAS)
		4.0 m/s	(800 ft/min)
Best angle-of-climb	flaps -6°	140 km/h	(78 kts CAS)
		3.8 m/s	(770 ft/min)
	flaps 15°	110 km/h	(61 kts CAS)
		approx. 8:1	
Maximum level speed $v_H$	flaps 0°	120 km/h	(66 kts CAS)
		approx. 8:1	
Maximum level speed $v_H$	flaps -6°	222 km/h	(120 kts CAS) @ 5500 rpm
Maximum range		1540 km	(830 NM)
		180 km/h IAS	(97 kts CAS)
		flaps -6°; @ 4300 rpm	

All performance data are based on standard atmosphere at sea-level and the Neuform CR3-65-47-101. 6 propeller. They are also based on the procedures described in the AOI. Higher runway elevations, higher temperatures and other propellers can lead to considerable differences in the data!



## Flight Training Supplement (FTS)

Type: *CT*

Series: *CTLS LSA*

Page: 8-1

### 8 AIRCRAFT ACCEPTANCE CHECKLIST

Flight Design USA Aircraft Acceptance Checklist		
Owner Name:	Phone:	
Address:	City:	State: Zip:
Serial & N-Number:		
Delivery date:		
	Owner	Comments
Aircraft Documents		
Airframe Logbook		
Engine Logbook		
Aircraft Manuals		
Equipment Manuals		
Door & door lock operation		
Ballistic chute operation		
Electrical switches		
Circuit breakers		
Master switch		
Basic instrument and their operation		
Fuel shutoff and ignition switch		
Flap Operation		
Wing attach points		
Baggage door operation and security check		
Baggage limitations		
Ballistic chute visual inspection		
Flight control visual inspection		
ELT and remote operation		
Main Landing Gear		
Ballistic chute blowout panel		
Upper and lower antenna		
Airframe construction, inspection and care		
Vertical stabilizer and lower fin		
Airframe Identification Plate		
Stabilator Design		
Trim tab operation		
Flight control push-pulls, cables and balance weight		
Rudder and ground steering operation		
Flap characteristics		
Aileron Characteristics (with and without flaps)		
Wing tip and Navigation light		
Pitot tube		
Fueling aircraft & Fuel cap/vent characteristics		
Wing-root seal		

Aircraft Acceptance Checklist - Page 1of 2 Vs.1.0

AU 010 11100

Revision No. 2

Date: 01 Apr 2008



## Flight Training Supplement (FTS)

Type: *CT*

Series: *CTLS LSA*

Page: 8-2

	Owner	Comments
Engine cowling, Fasteners, and heater flaps		
Nose gear		
Exhaust		
Spinner		
Propeller		
Engine inlet and cooling intakes		
Engine compartment		
Oil & checking the oil		
Coolant		
Gascolator		
Seat & rear strap operation		
Under-seat storage		
Seat belts		
Fuel system		
Engine controls		
Flight controls		
Trim controls		
Brake system		
Interior/Exterior lights		
Climate controls		
Filling tire tubes		
No step areas		
Cleaning and Care (no alkaline cleaners)		
Landing characteristics w/ different flap settings		
<b>ITEM CHECKLIST</b>		
Pitot Cover		
Tail tie down strap		
Rear storage cloth bulkhead		
ELT temporary antenna		
Prop covers		
Flap switches		
Fuel gauge key		
Extra door and ign. Keys		
Composite Clean Proper care kit		
Two David Clark headsets		
<b>Garmin GPS equipped aircraft</b>		
Storage bag		
Portable antenna		
Extra mounts and chargers		
Manuals, update-warranty card, and accessories		

Customer signature

Date