



**Certification of Pilots, Aircraft, and Repairmen  
for the Operation of  
Light-Sport Aircraft  
Final Rule**



**EAA Airventure  
July 2004**



# OVERVIEW

The new “Sport Pilot and Light-Sport Aircraft” rules address the certification of –

- Light-Sport aircraft
- Sport pilot and flight instructor with a sport rating
- Repairmen
- Inspection and maintenance of the new experimental and special light-sport aircraft

# What are the Anticipated Public Benefits?

Impacts a large population – Airmen and Aircraft

- Operate an FAA registered and certificated aircraft
  - ◆ Aircraft inspected and maintained by certificated airman
  - ◆ Purchase “Ready to Fly Aircraft”
- Comp or hire:
  - ◆ Flight Training/Rental
- Hold an FAA Pilot Certificate
  - ◆ Carry a passenger
  - ◆ Flight instruct

Provides for better access to: Insurance, financing, airports, and increased acceptance by general aviation community

# What is a Light-Sport Aircraft?



Weight-shift-control aircraft



Powered Parachute

# What is a Light-Sport Aircraft?

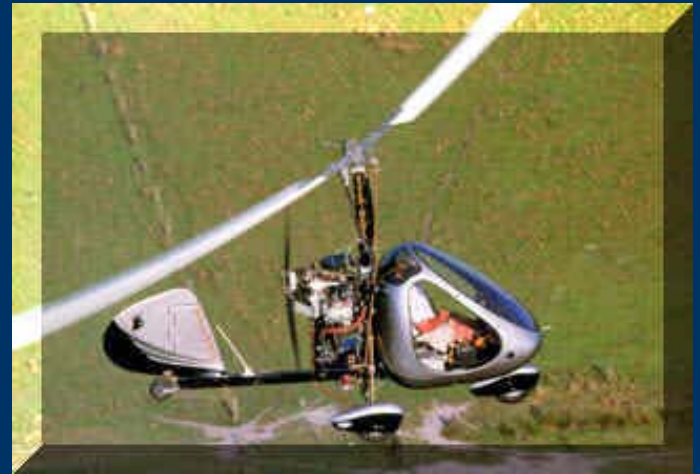


Airplane Single-engine Land

# What is a Light-Sport Aircraft?



Airplane-Single-engine sea



Gyroplane

# What Is a Light-Sport Aircraft (LSA)?

The definition limits LSA to small, simple-to-operate, & low-performance.

May include several aircraft types –

- ◆ Fixed-wing
- ◆ Gliders
- ◆ Powered parachutes
- ◆ Lighter-than-air
- ◆ Weight-shift-control (trikes)
- ◆ Gyroplanes



# Definition of a Light-Sport Aircraft (LSA)

Light-Sport aircraft are small, simple, low-performance, low energy, aircraft limited to:

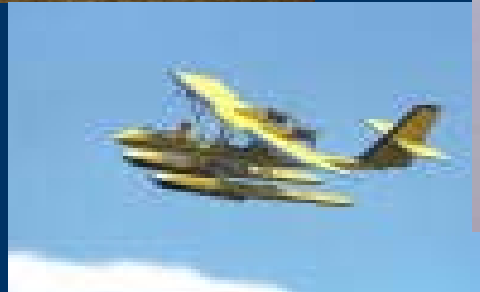
- Maximum weight – 1320 lb (600kg) or 1,430 lb (600kg) (aircraft intended for water operations),
- 1 or 2 occupants,
- Single engine (reciprocating),
- Maximum stall speeds – 45 knots (no-lift enhancing devices),
- Maximum airspeed - 120 knots (max power level flight),
- Fixed landing gear (repositionable), and
- Fixed pitch propeller (ground adjustable).

# What is Not a Light-Sport Aircraft?

- Part 103 Ultralights  
(powered/unpowered)

- Hanglider
- Paraglider
- All single seat categories of LSA

- Multiengine aircraft
- Powered lift
- Helicopters
- Complex aircraft
  - ◆ Retractable gear
  - ◆ Controllable pitch propeller



# **Part 103 Exemptions-- Two-place Training Vehicles, Towing, and Tandem Operations**

Training exemptions for two-place training vehicles.

- Expires 36 months after final rule.

Towing and tandem ultralight training and operations in hanggliders and paragliders (powered/unpowered) will continue under revised part 103 exemptions.

# Operating LSA ... Exercising Sport Pilot Privileges and Limits (Basic Level)

- Day
- 3 Miles visibility or greater
- Class G and E airspace
- No comp or hire operations
- LSA < 87 knots
- Below 10,000' MSL
- May not tow any object.
- Operate in U.S. only
  - ◆ Except with agreement from foreign country.

# Operating LSA ... Exercising Sport Pilot Privileges and Limits (Add-On)

Additional Training and Endorsements required-

- Operate in Class B, C, and D airspace\*
- Additional category and class privilege
- Additional make and model aircraft\*
- LSA > 87KT Vh\*

# Certification of Light-Sport Aircraft (LSA)



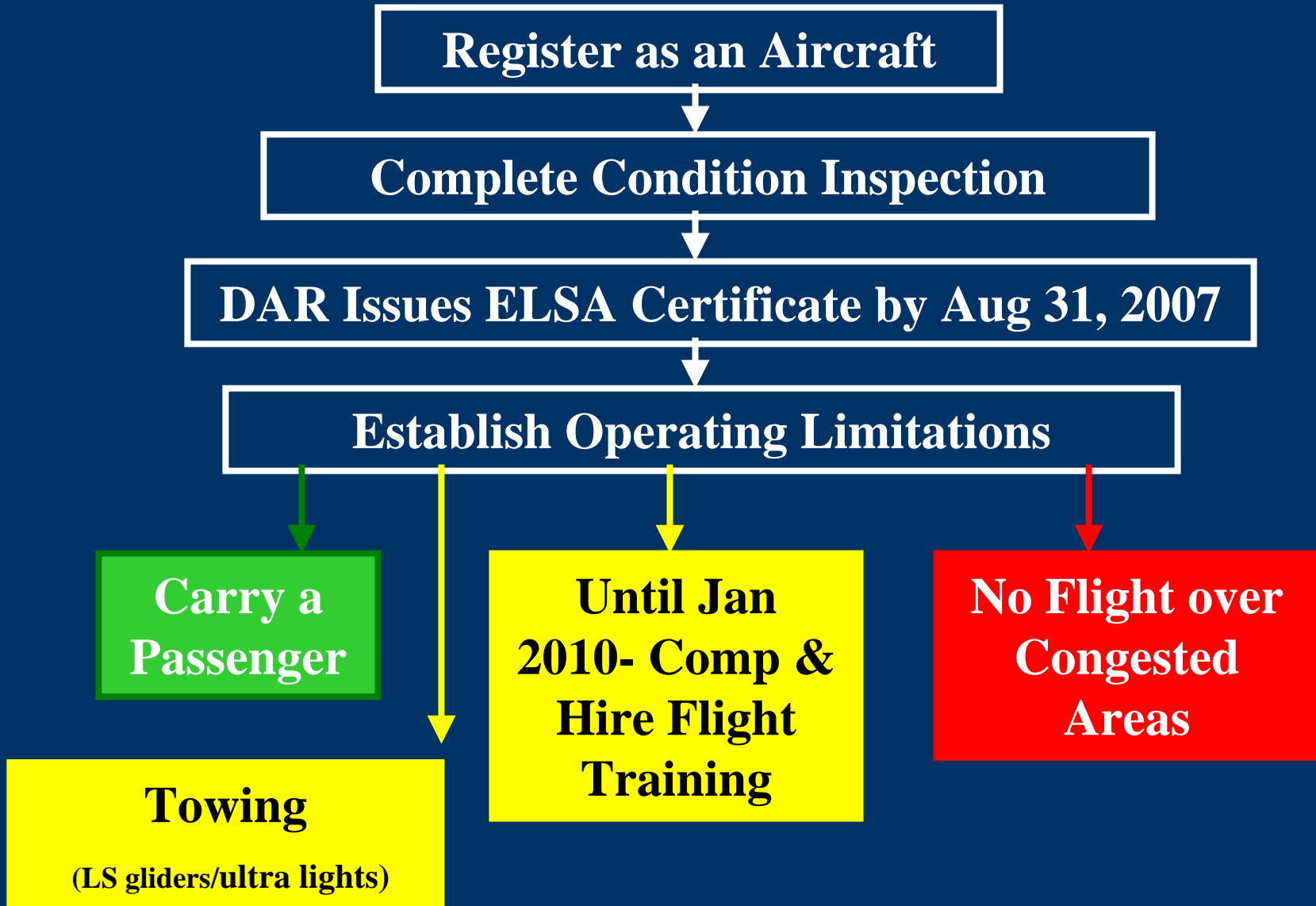
# What Aircraft Can a Sport Pilot Fly?

- ◆ If you are a Sport Pilot, you can ONLY fly Aircraft that meet the Light-Sport Aircraft definition.
- ◆ This includes:
  - Transitioning “Ultralight Like” Aircraft
  - Newly Manufactured Aircraft
  - Previously Certificated Aircraft

# What are the Transitioning Aircraft?

- ◆ Two-place Ultralight training vehicles operating under the part 103 training exemption.
- ◆ Unregistered Ultralight Like Aircraft that exceed the limitations of part 103:
  - Weight, Speed, Fuel Capacity
  - Number of Occupants

# How do I Transition my "Ultralight Like Aircraft"



# What are the Newly Manufactured Aircraft?

- ◆ **Comply with Industry Consensus Standards**
- ◆ **Complete Ready-to-Fly Aircraft**
- ◆ **Assembled from Kit** (manufacturer built one under consensus standards)
  - **No 51% Build requirement**

## **BEFORE YOU BUY-**

**– Be sure it is an kit that it can be certificated as ELSA kit-built.**

- ◆ **Manufacturer Issues “Statement of Compliance” for your aircraft or kit by serial number.**

# How do I Certicate my New Special Light Sport Aircraft?

Register the Aircraft

Complete Condition Inspection

DAR Issues SLSA Certificate

**Make-Model Eligibility for Kit**

Establish Operating Limitations

Carry a Passenger

Comp & Hire Flight Training & Rental

Flight over Congested Areas

**Towing**  
(LS gliders/ultra lights)

**Must Comply with Manufacturer's Safety Directives**

# How do I Certificate my Experimental Kit-Built Light-Sport Aircraft?

Complete the Kit Assembly - Register the Aircraft

Complete Condition Inspection

DAR Issues ELSA Airworthiness Certificate

Establish Operating Limitations

Carry a Passenger

No Comp & Hire  
Flight Training  
or Rental

Flight Over  
Congested  
Areas

No Towing

Manufacturer's Safety  
Directives are Recommended

# What about Imported Newly Manufactured Aircraft?

## **SAME CORE REQUIREMENTS:**

- ◆ Aircraft or Kit Must Comply with Industry Consensus Standards
- ◆ Manufacturer Issues "Statement of Compliance" for your aircraft or kit by serial number.

## **PLUS:**

- ◆ Country of Manufacture is U.S. Bilateral Partner
- ◆ New Aircraft Eligible for Flight Authority (e.g. on Foreign Aircraft Registry and No Previous A/W certificate).

# What are the Previously Certificated Aircraft?

## ◆ Standard Category

- Piper, Aeronca, Luscombe, Taylorcraft, Ercoupe, etc.

## ◆ Experimental Amateur-Built

- Kit Fox, Rans, Air Creation

## ◆ Other (Primary Category)

## ◆ FAA will post list on AFS-610 website

# What About Previously Certificated Aircraft?

Standard Category

Amateur-Built

Original Type Certificate  
Values Used to Meet Definition

**Retains Original Airworthiness Certificate  
& Maintenance Requirements**

No Changes to Operating Limitations

**May Operate Aircraft when Exercising Sport Pilot Privileges**

# Aircraft in the LSA Definition “Box”

**Transitioning  
“Ultralight Like”  
Aircraft**

**Newly  
Manufactured  
“Kit-Built”**

**Standard Category**

**Newly Manufactured  
“Ready-to-Fly”**

**Amateur Built**

# What Are the New Identification Requirements in Part 45?

## Part 45 - Identification and Markings

- "N" numbers
  - ◆ Powered parachutes
  - ◆ Weight-shift control aircraft
- "Placarding"
  - ◆ ELSA – "Experimental"
  - ◆ SLSA – "Light-Sport"
  - ◆ Reference AC 45-2



# Pilot and Flight Instructor Certification



# Sport Pilot and Sport Pilot CFI Certification

- Sport pilot certificate
- Flight instructor certificate
  - ◆ Sport pilot rating



# Sport Pilot/CFI Certificate

Sport pilot certificate or flight instructor certificate with a sport pilot rating:

- No category or class ratings
- Category or class privileges endorsed in pilot logbook
- New FAA form 8710-11 processed for certificate
- Credit experience towards higher certificates

# Sport Pilot/CFI Certificate

Age and language requirements –

- Parallels existing regulations

Comply with all applicable part 61, part 91, and NTSB 830 regulations –

- Flight review
- Currency
- Aircraft equipment



# What about the.....Medical ?

Operations Requiring A Medical Or U.S. Driver's License - Other Than Balloon or Glider

- **A Student Pilot Seeking Sport Pilot Privileges in a Light-sport Aircraft**
- **A Pilot Exercising the Privileges of a Sport Pilot Certificate**
- **A Flight Instructor Acting As PIC of a Light-sport Aircraft**

# A Person Using a Current and Valid U.S. Driver's License Must....

- Comply With Each Restriction and Limitation Imposed on Your Drivers License
- Comply With Any Judicial or Administrative Order Applying To The Operation of a Motor Vehicle



# A Person Using a Current and Valid U.S. Driver's License Must....

- **Not Have Been Denied Your Most Recent Application For A Medical Certificate** (If You Have Applied for Medical Certificate)
- **Not Have Your Most Recently Issued Medical Certificate Suspended or Revoked** (If You Have Been Issued A Medical Certificate)
- **Not Had Your Most Recent Authorization for a Special Issuance of a Medical Certificate Withdrawn** (A Special Issuance Is Not A Denial)

# A Person Using a Valid Medical or Current and Valid U.S. Driver's License Must....

- Not Know or Have Reason to Know of Any Medical Condition That Would Make You Unable to Operate a Light-sport Aircraft In A Safe Manner



# How to Become a Sport Pilot

## ◆ If new or unregistered:

- Student Pilot
- Meet Experience Requirements (Min Flight Time)

Airplane 20 Hrs

Glider 20 Hrs/3 Hrs

Gyroplane 20 Hrs

Airship 20 Hrs

Balloon 7 Hrs

PPC 12 Hrs

WSC 20 Hrs

- Knowledge Test
- Practical Test from FAA Designee (DPE)

# How to Sport Pilot ... If a Registered Ultralight Pilot Before Sept 01, 2004

- Meet Medical and Sport Pilot Eligibility Requirements
- Must Not Meet Aeronautical Knowledge, Proficiency or Experience Requirements
  - ◆ Provide a Certified Copy of Records From An FAA Recognized Ultra-light Organization (January 31, 2007)
    - List All Category and Classes Authorized
- Pass an FAA Sport Pilot Knowledge Test
- Pass an FAA Sport Pilot Practical Test (SPE)

# How to Sport Pilot ... If a Registered Ultralight Pilot On or After Sept 01, 2004

- Meet Medical and Sport Pilot Eligibility Requirements
- **Must** Meet Aeronautical Knowledge, Proficiency and Experience Requirements
  - ◆ Provide Records (certified copy) from an FAA Recognized Ultralight Organization or training from a SP CFI
    - Category, Class and Make and Model Sought
- Pass an FAA Sport Pilot Knowledge Test
- Pass an FAA Sport Pilot Practical Test
  - ◆ FAA Sport Pilot Examiner (SPE)

# How to exercise Sport Pilot privileges ...

## If already certificated as a:

### ◆ Recreational Pilot

- Sport pilot privileges authorized, with X-C training and endorsement (61.101(c))

### ◆ Recreational Pilot or higher –

- ◆ Category and class rating
- ◆ Flight review
- ◆ Currency

# How to...Sport Pilot/CFI or higher ...

## If You Want to Add a Additional Category or Class Privileges

- Receive the Training From a Authorized Instructor
- Make Application on a FAA Form 8710-11
- Pass a Proficiency Check From a Authorized Instructor (Other Than The Flight Instructor That Trained You)

# How to...Sport Pilot Instructor

## If new:

- Have A Sport Pilot Certificate or Higher
- **Must** Meet Aeronautical Knowledge, Proficiency and Experience Requirements (All Logbook Entries and Training)

Airplane	150 Hrs	Glider	25Hrs/100 Hrs	Gyroplane	125 Hrs
Airship	100 Hrs	Balloon	35 Hrs	PPC	100 Hrs
WSC	100 Hrs				

- Pass F.O.I. and CFI-SP Knowledge Test
- Pass FAA CFI-SP Practical Test (SFIE)

# How to...If you are a Registered Ultralight Instructor, before September 1, 2004 :

Before January 31, 2008, a Flight Instructor Certificate must ...

- ◆ Hold at Least a Sport Pilot Certificate
- ◆ Must Meet Aeronautical Knowledge, Proficiency and Experience Requirements
  - Provide Records From an FAA Recognized Ultralight Organization (Certified Copy)
- ◆ F.O.I. (unless registered u/I instructor)
- ◆ CFI-SP Knowledge Test (category specific)
- ◆ CFI-SP Practical Test (SFIE)

# How to...Sport Pilot Instructor

## If FAA CFI :

- Privileges Authorized If You—
  - ◆ Hold Category and Class Privileges
  - ◆ Comply with limits for Sport Pilot Instructor 61.415
  - ◆ Have logged 5 Hours of Flight Time in the Make and Model or Set of Light-Sport Aircraft
  - ◆ Currency

# Private Pilot Certification

## Private pilot --

- Weight-shift-control category rating –  
(Land and Sea class)
- Powered parachute category rating -  
(Land and Sea class)
  - ◆ Privileges --
    - Night (aircraft certificated)
    - Above 10, 000 feet MSL
    - All airspace (aircraft certificated)
    - Any other private pilot privileges...

# Recreational Pilot Certification

## Recreational pilots –

- Sport pilot privileges authorized, with X-C training and endorsement (61.101(c))
- May operate in class B, C, or D airspace, with training and one-time endorsement
- May operate outside U.S. with agreement from foreign country



# Experimental Aircraft – 61.31(k) Sport Pilots and Higher

- ◆ Recreational pilots and higher must have a category and class rating when carrying a passenger in an experimental aircraft.
- ◆ Sport pilots must always have category and class privileges when operating any experimental aircraft, regardless of passenger carriage.
- ◆ 61.63 or 61.163 establish transitioning provisions

# Inspection and Maintenance



# FIRST A LITTLE REVIEW:

There are two kinds of Light-Sport airworthiness certificates:

- Experimental Light-sport aircraft (ELSA)
- Special Light-sport aircraft (SLSA)

# CLASSES OF LIGHT-SPORT AIRCRAFT

- ◆ Experimental light-sport has six classes: airplane, glider, lighter-than-air, powered parachute, weight-shift and gyroplane.
- ◆ Special light-sport has five classes: airplane, glider, lighter-than-air, powered parachute and weight-shift.

# WHAT ARE THE INSPECTION REQUIREMENTS FOR ELSA?

- ◆ Operating limitations require an annual condition inspection to determine if the aircraft is safe to operate.
- ◆ Inspection may be performed by an FAA certificated Light-sport repairman, an A & P, or a properly rated repair station.

# What are the Maintenance Requirements for ELSA?

- ◆ There are no FAA requirements for a certificated person to perform maintenance, repairs or alterations to ELSA.
- ◆ This is because there are no standards or regulations for the maintenance of experimental aircraft. So anyone can work on these kinds of aircraft... similar to amateur-built.

# What are the Maintenance Requirements for SLSA ?

Because these aircraft may be operated for hire, the following applies:

- Annual condition inspection
- Maintenance performed in accordance with part 43. Except for recording major repairs and major alterations.

# What are the Maintenance Requirements for SLSA? (CONT.)

- ◆ If a “special” light-sport manufacturer issues a safety directive under the consensus standard, that safety directive must be complied with.



# What are the Maintenance Requirements for SLSA ? (CONT.)

- ◆ Airworthiness directives issued against FAA approved products installed on the aircraft must be complied with.



# Certification of Repairmen



# KINDS OF LIGHT-SPORT REPAIRMAN

- ◆ There is only one Repairman (Light-sport aircraft) Certificate.
- ◆ Eligible for two ratings:
  - Inspection.
  - Maintenance.



# INSPECTION RATING

- ◆ This rating is designed for the owner of an ELSA who wants to perform the annual condition inspection for the ELSA they own.



# MAINTENANCE RATING

- ◆ Can perform maintenance for hire on the class of SLSA trained on.
- ◆ Can perform the annual condition inspection on both ELSA and SLSA trained on.
- ◆ Can perform AD's and MFG safety directives to part 43 standards.

# INSPECTION RATING TRAINING

The owner must attend and pass a 16 hour course in the class of aircraft they own.



# MAINTENANCE RATING TRAINING

- ◆ Airplane class-----120 hours
- ◆ Weight-shift class-----104 hours
- ◆ Powered parachute-----104 hours
- ◆ Lighter-than-air class-----80 hours
- ◆ Glider class-----80 hours

# General Operating and Flight Rules - Part 91



# What Are the New Part 91 Requirements?

- Recreational and Sport Pilots
  - Operations in Class B Airspace
- Student Pilots (seeking sport pilot)
  - Operations in Class B, C, and D
- WSC and PPC
  - Traffic pattern – Class G
  - Right of Way
- WSC, PPC, Gyro
  - VFR – Night
  - Single pilot exams



# What Are the New Part 91 Requirements?

- LSA – Inoperative Equipment
- ELSA and SLSA
  - Operating Limitations
  - Maintenance and Inspections



# **Sport Pilot and Light-Sport Aircraft Milestones**

- ◆ **September 1, 2004 -- Effective Date of Rule**
  - **Certificated Pilots Can Exercise Sport Pilot Privileges and Operate Certificated Aircraft that Meet the Definition of Light-Sport Aircraft**
- ◆ **October 1, 2004**
  - **Transitioning ultralight-like aircraft can apply for "N" number (aircraft registration)**
- ◆ **October 2004**
  - **Practical Test Standards and Knowledge Tests Available to Public**
  - **Guidelines for Repairman Training Available to Public**
  - **First DPE and DAR Applications will be accepted by FAA**

# Sport Pilot and Light-Sport Aircraft Milestones

- ◆ November 2004
  - **First FAA DAR Training Course**
- ◆ January 2005
  - **FAA Ready to Issue:**
    - ◆ **First Sport Pilot Certificate**
    - ◆ **First Sport Pilot CFI Certificate**
    - ◆ **First ELSA Certificate**
    - ◆ **First SLSA Certificate**
    - ◆ **First Light-sport Repairman Certificate**
    - ◆ **First FAA DPE Training Course**
- ◆ February 2005 and beyond
  - **DAR and DPE courses as need**
  - **Education focusing on CFI roles and responsibilities**

# More Information On the Final Rule?

[www.faa.gov/avr/afs/sportpilot](http://www.faa.gov/avr/afs/sportpilot)

- ◆ Overview of Final Rule
- ◆ FAQ's
- ◆ Final Rule and NPRM
- ◆ Guidance and Policy Links – AFS-610
- ◆ Industry Websites Links



The FAA Created a New Branch

# Light Sport Aviation Branch - AFS-610

## ■ Mailing Address

405-954-6400

Light Sport Aviation Branch AFS-610

PO Box 25082

Oklahoma City OK, 73125

## ■ <http://afs600.faa.gov/>

- ◆ FAA Forms
- ◆ Policy
- ◆ Advisory Circulars



EMAIL your Questions:

[afs610-comments@faa.gov](mailto:afs610-comments@faa.gov)

# Thank you for your kind attention !

[www.faa.gov/avr/afs/sportpilot](http://www.faa.gov/avr/afs/sportpilot)

[afs600.faa.gov/](http://afs600.faa.gov/)

