

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

July 2004

www.faa.gov/avr/afs/sportpilot



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 (650kg) (aircraft intended for water operations),
- 1 or 2 occupants,
- Single engine (reciprocating),
- Maximum stall speeds – 45 knots (no-lift enhancing devices),
- Maximum airspeed - 120 kts V_h (max power level flight),
- Fixed landing gear (repositionable-land on water/retractable-gliders), 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 January 31, 2008.

Towing exemptions (ultralight vehicles)

- Expires August 31, 2007

Tandem ultralight training and operations in hanggliders/paragliders (powered/unpowered) will continue under 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)



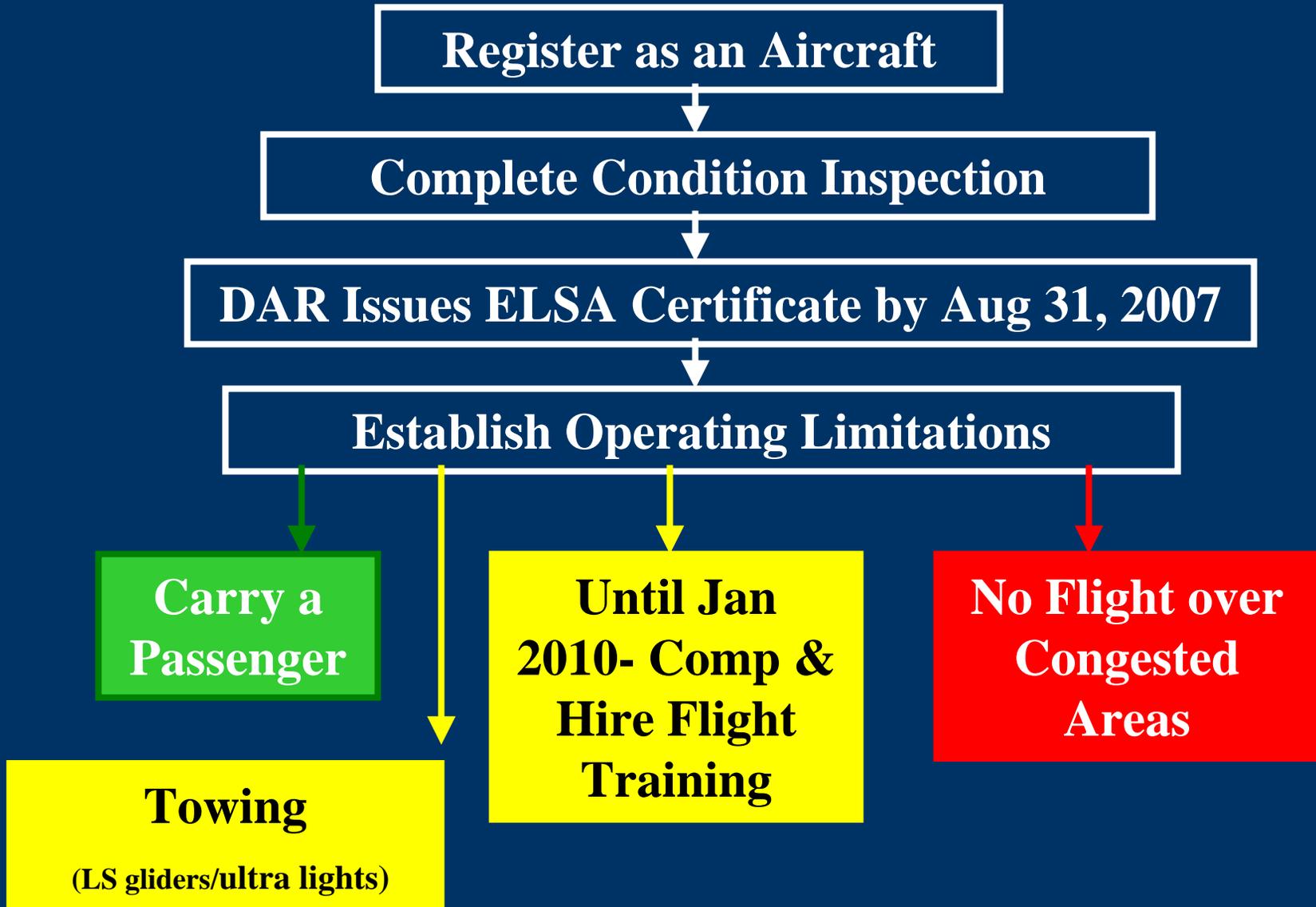
What Aircraft Can a Sport Pilot Fly?

- ◆ 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 are the Medical Certificate Requirements for Sport Pilot?

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

- Student Pilot Seeking Sport Pilot Privileges
- 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



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 ultralight pilot:

- 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 September 01, 2004

Meet Medical and Eligibility

On or Before January 31, 2007 - Credit for Aeronautical Knowledge, Proficiency, and Experience Requirements

61.309,
.311, .313

Provide a Certified Copy of Records From An FAA Recognized Ultralight Organization

List All Category and Classes Authorized

Pass an FAA Sport Pilot Knowledge Test

Pass an FAA Sport Pilot Practical Test

Sport Pilot Certificate Issued

All Category and Class Privileges Endorsed in Logbook

How to Become a Sport Pilot ... If a Registered Ultralight Pilot After September 01, 2004



If You Are an FAA Certificated Pilot and want to Exercise Sport Pilot Privileges:

Hold at Least a Recreational Pilot Certificate

X-C Training if a Rec Pilot 61.101(c)

Hold Category and Class Ratings for the LSA Flying

U.S Drivers License or FAA Medical

Additional Category and Class Privileges Endorsed in Logbook

Current Flight Review

3 Takeoffs and Landings within 90 days
(if carrying a passenger)

Operate only FAA Certificated LSA

Comply with all Sport Pilot Privileges and Limits

Exercise Sport Pilot Privileges

If you are a Registered Ultralight Instructor, Before September 1, 2004 :

Hold at Least a Sport Pilot Certificate

On or Before January 31, 2008, Meet Aeronautical Experience-Minimum Total Flight Time Only (61.411)

Provide a Certified Copy of Records From An FAA Recognized Ultralight Organization

List All Category and Class Seeking

Provide a Certified Copy F.O.I. Knowledge Test

Pass an FAA Sport Pilot CFI Knowledge Test

Pass an FAA Sport Pilot CFI Practical Test

All Category and Class Privileges Endorsed in Logbook

CFI Certificate with Sport Pilot Rating Issued

If you are a Registered Ultralight Instructor, After September 1, 2004 :

Hold at Least a Sport Pilot Certificate

Meet All Aeronautical Knowledge, Proficiency, and Experience Requirements

61.407,
.409, .411

Provide a Certified Copy of Records From An FAA Recognized Ultralight Organization

List Specific Category and Class Seeking

Or Training from a SP CFI

Pass both the FAA F.O.I. And Sport Pilot CFI Knowledge Test

Pass an FAA Sport Pilot CFI Practical Test

Specific Category and Class Privileges Endorsed in Logbook

CFI Certificate with Sport Pilot Rating Issued

If You Are an FAA CFI and You Want to Train Sport Pilots and SP CFIs:

Hold a Current and Valid CFI

Valid Pilot Certificate, Meet Currency, Hold Appropriate Endorsements.

Appropriate Category and Class Ratings in LSA

Additional Category and Class Privileges Endorsed in Logbook

U.S Drivers License or FAA Medical
(If acting as PIC)

5 hours PIC make and model or "set"

Provide Training in only FAA Certificated LSA

Comply with all Sport Pilot CFI Privileges and Limits

Exercise Sport Pilot CFI Privileges

Sport Pilot or Sport Pilot CFI...

If You Want to Add an 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)

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.

Special Light-Sport Aircraft -- Inspection Requirements

Annual Condition Inspection: Required by the aircraft's Operating Limitations, must be performed by:

- A repairman with a maintenance rating;
or
- A & P mechanic; or
- A properly rated FAA Repair Station.

Special Light-Sport: Inspection Requirements

100 hour inspection: Required by the aircraft's Operating Limitations on all SLSA used for flight training (for hire), must be performed by:

- A repairman with a maintenance rating;
or
- A & P mechanic; or
- A properly rated FAA Repair Station.

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

- ◆ 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

Thank you for your kind attention !

www.faa.gov/avr/afs/sportpilot

afs600.faa.gov/

