

# . Advisory Circular

**Subject:** Certification of Repairmen (Light-Sport Aircraft)

 Date: 2/8/13
 AC No: 65-32A

 Initiated by: AFS-300
 Change:

This advisory circular (AC) provides the public with information regarding the certification of repairmen (light-sport aircraft (LSA)) with maintenance and inspection ratings, the acceptability of training courses, and the continued airworthiness of LSA. The guidance contained in this AC is based on the Final Rule, Certification of Aircraft and Airmen for the Operation of Light-Sport Aircraft, which was published in the Federal Register (FR) on July 27, 2004. The rule became effective September 1, 2004.

/s/

for

John M. Allen Director, Flight Standards Service

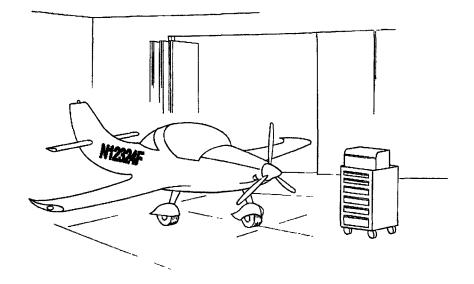
Paragraph	Page
INTRODUCTION	1
1. Purpose	1
2. Background	
3. Definitions	
4. Overview	
5. Request for Information	
6. Availability	
CHAPTER 1. CERTIFICATION OF REPAIRMEN (LIGHT-SPORT AIRCRAFT)	9
Section 1. General	9
100. Repairman (LSA) Certificate	9
101. Certificated Persons Who Can Work on Special and Experimental LSA	
102. Classes of LSA Identified on Repairman (LSA) Certificates	10
103. Basic Eligibility Requirements to Qualify for a Repairman (LSA) Certificate	
104. Repairman (LSA) Ratings	11
105. Thru 109. Reserved	11
Section 2. Repairman (Light-Sport Aircraft) with an Inspection Rating	12
110. Privileges and Limitations of a Repairman (LSA) Certificate with an Inspection	10
Rating § 65.107	
111. Specific Requirements to Obtain a Repairman (LSA) Certificate with an Inspectio	
Rating	12
112. Types of Training Courses for a Repairman (LSA) Certificate with an Inspection Rating	10
<ul><li>113. Contents of a Repairman (LSA) Inspection Rating Training Course</li><li>114. After the Test</li></ul>	
114. After the rest	
113. Thru 119. Keserveu	15
Section 3. Repairman (Light-Sport Aircraft) with a Maintenance Rating	16
120. Privileges and Limitations of a Repairman (LSA) Certificate with a Maintenance	
Rating	16
121. Specific Hour Requirements to Obtain a Repairman (LSA) Certificate with a	
Maintenance Rating	
122. Types of Training Courses for a Repairman (LSA) with a Maintenance Rating	
123. Difference Between Training Courses	
124. Information Contained in Eight Individual Training Modules	
125. The Maintenance Rating Modular Training System	22

### CONTENTS

Paragrap	bh	Page
126.	Performance of Major Repairs and Major Alterations by a Repairman (LSA) with a	
	Maintenance Rating	
	Applying for a Repairman (LSA) Certificate	
128.	Thru 199. Reserved	24
CHAPT	ER 2. HOW TO BECOME A REPAIRMAN (LIGHT-SPORT AIRCRAFT)	
	TRAINING COURSE PROVIDER	25
200.	How to Ensure a Repairman (LSA) Inspection or Maintenance Rating Training	
	Course is Acceptable to the FAA (an Overview)	
	Testing Procedures for the Repairman (LSA) Course with a Maintenance Rating	
202.	Term of Validity for Repairman (LSA) Certificates with Inspection or Maintenance	
	Ratings	28
203.	Term of Validity for FAA Acceptance of Inspection and Maintenance Rating	
	Training Courses	
	Level of Training	
205.	Thru 299. Reserved	28
СНАРТ	ER 3. CONTINUED AIRWORTHINESS OF EXPERIMENTAL AND SPECIAL	
	LIGHT-SPORT AIRCRAFT	29
300.	Continued Airworthiness	29
301.	ELSA	29
302.	SLSA	29
303.	Continued Airworthiness Requirements for ELSA	29
304.	Continued Airworthiness Requirements for SLSA	31
305.	Requirements for SLSA Condition Inspections	31
306.	Maintenance and Alteration of SLSA.	32
307.	Repairman (LSA) with a Maintenance Rating: Replacement of a Propeller on an	
	SLSA and Aircraft Maintenance Records	33
308.	Thru 399. Reserved	33
	DIX 1. CONTINUED AIRWORTHINESS OF EXPERIMENTAL AND	
	SPECIAL LIGHT-SPORT AIRCRAFT—SAMPLE MAINTENANCE	
	RECORD ENTRIES (4 PAGES)	1
	<b>RECORD ENTRIES (4 I AGES)</b>	1
Figu	re 1. Sample Entry for Annual Condition Inspection for an Experimental Light-Sport	
E:	Aircraft (ELSA)	1
Figu	re 2. Sample of a Major Alteration Entry for an Experimental Light-Sport Aircraft (ELSA)	1
Figu	re 3. Sample of a Major Repair Entry for an Experimental Light-Sport Aircraft	
	(ELSA)	
Figu	re 4. Sample of a Maintenance Record Entry for an Experimental Light-Sport Aircra	ft
	(ELSA)	2

Paragraph Pa	age
Figure 5. Sample of Annual Condition Inspection for a Special Light-Sport Aircraft (SLSA)	3
Figure 6. Sample of How to Record a Major Repair in the Aircraft Maintenance Records for a Special Light-Sport Aircraft (SLSA)	
Figure 7. Sample of How to Record a Major Alteration in the Aircraft Maintenance Records for a Special Light-Sport Aircraft (SLSA)	
APPENDIX 2. REPAIRMAN (LIGHT-SPORT AIRCRAFT) CERTIFICATION (6 Pages)	
Figure 1. Sample FAA Form 8610-2, Repairman (Light-Sport Aircraft) Application	
(Inspection Rating) (Front Side) Figure 2. Sample FAA Form 8610-2, Repairman (Light-Sport Aircraft) Application	1
(Inspection Rating) (Reverse Side) Figure 3. Sample FAA Form 8610-2, Repairman (Light-Sport Aircraft) Application	2
(Maintenance Rating) (Front Side)	3
Figure 4. Sample FAA Form 8610-2, Repairman (Light-Sport Aircraft) Application (Maintenance Rating) (Reverse Side)	4
Figure 5. Sample FAA Form 8060-4, Temporary Airman Certificate (Inspection Rating, Weight-Shift-Control Aircraft)	5
Figure 6. Sample FAA Form 8060-4, Temporary Airman Certificate (Maintenance Rating, Weight-Shift-Control Aircraft)	
APPENDIX 3. FREQUENTLY ASKED QUESTIONS (6 PAGES)	1

#### **INTRODUCTION**



1. **PURPOSE.** This AC provides information on the certification of repairman (LSA), the requirements for the issuance of inspection and maintenance ratings, how to develop a repairman (LSA) training course, and the procedures for obtaining a determination that the course is acceptable to the Federal Aviation Administration (FAA). This AC also provides information on the continued airworthiness of LSA.

2. BACKGROUND. During the past 15 years, advances in ultralight design and engineering, and the introduction of a wide range of new materials, have resulted in ultralight vehicles that operate under Title 14 of the Code of Federal Regulations (14 CFR) part 103, evolving into larger, heavier, and faster two-seat aircraft. These aircraft are commonly referred to as "fat ultralights" and have often been operated outside the regulations applicable to ultralight vehicles and amateur-built aircraft. To address these developments, the FAA issued new rules such as those creating primary category aircraft and the recreational pilot certificate. However, these regulatory solutions met with limited success.

a. Aviation Rulemaking Advisory Committee (ARAC). In 1991, the FAA created the ARAC. ARAC addressed these new aircraft as part of its tasking and in June of 1995, the FAA specifically revised the ARAC's tasking statement to address a petition to create the sport pilot certificate.

**b.** LSA and the Sport Pilot Certificate. On July 14, 1998, the ARAC submitted its recommendations to the FAA. The ARAC recommendations form the foundation on which the rule creating LSA and the sport pilot certificate is based. The Final Rule "Certification of Aircraft and Airmen for the Operation of Light-Sport Aircraft" (Sport Pilot Rule), was published in the FR on July 27, 2004 (69 FR 44772). The rule became effective September 1, 2004.

### 3. **DEFINITIONS.**

"The difference between the right word and the almost right word is the difference between lightning and lightning bug."—Mark Twain



**a.** Airworthiness Directive (AD). A directive issued by the FAA when an unsafe condition is found to exist in a product and the condition is likely to exist or develop in other products of the same type design. The FAA uses ADs to notify aircraft owners and operators of an unsafe condition and to require its correction. Special light-sport category aircraft (SLSA) and non-FAA-approved components installed on SLSA's do not have ADs issued against them. Title 14 CFR part 39 applies to an SLSA certificated as 14 CFR part 21, § 21.190 to installed type certificate (TC) components only. If an AD is issued against a TC'd product that may become part of SLSA, the manufacturer of the aircraft is required to issue a safety directive providing instruction on how to address the safety defect outlined in the AD on the specific SLSA in accordance with the current editions of:

- American Society for Testing and Materials (ASTM) Designation F2295, Standard Practice for Continued Operational Safety Monitoring of a Light Sport Airplane;
- ASTM Designation F2415, Standard Practice for Continued Airworthiness System for Light Sport Gyroplane Aircraft;
- ASTM Designation F2483, Standard Practice for Maintenance and the Development of Maintenance Manuals for Light Sport Aircraft; and
- ASTM Designation F2241, Standard Specification for Continued Airworthiness System for Powered Parachute Aircraft.

**b.** Annual Condition Inspection. A detailed inspection accomplished once a year on a LSA in accordance with instructions provided in the maintenance manual supplied with the aircraft. The purpose of the inspection is to look for any wear, corrosion, or damage that would cause an aircraft to not be in a condition for safe operation.

**c.** Ballistic Parachute. A device intended to be used by a pilot in the event of an emergency. It consists of a large parachute attached to the aircraft that is deployed by a rocket. Once deployed, the parachute opens and the aircraft descends to a survivable landing.

**d.** Calibrated Airspeed (CAS). CAS is the indicated airspeed of an aircraft, corrected for position and instrument error. CAS is equal to true airspeed in standard atmosphere at sea level.

**e.** Category. With respect to aircraft certification, a grouping of aircraft based on intended use or operating limitations. Examples include: transport, normal, utility, acrobatic, limited, restricted, experimental, light-sport, and provisional.

**f.** Class. With respect to aircraft certification, a broad grouping of aircraft having similar characteristics of propulsion, flight, or landing. For example, in the light-sport category there are airplanes, gliders, balloons, airships, powered parachutes, weight-shift control aircraft, and gyroplanes.

g. Continued Airworthiness Support ASTM F2295, Section 5. The manufacturer of a LSA shall maintain an Operational Safety Monitoring System as a normal business conduct.

**h.** Experimental Amateur-Built Aircraft Certificated Under § 21.191(g). An amateur-built aircraft may qualify to be operated with sport pilot privileges if it meets the definition of a LSA in 14 CFR part 1, § 1.1, General definitions. The amateur-built aircraft will be maintained and inspected in accordance with the FAA operating limitations issued to the amateur-built aircraft.

**i.** Experimental Operating Light-Sport Aircraft (ELSA). A LSA issued an experimental certificate under § 21.191(i).

**j.** "**Fat**" **Ultralight.** An aircraft that has not been issued an airworthiness certificate and does not meet the definition of ultralight vehicle in part 103, § 103.1, typically because it exceeds the weight, speed, fuel, or number of seats specified for ultralight vehicles in that regulation. These aircraft were certificated under § 21.191(i)(1) to become ELSA.

**k.** Gyroplane. Means a rotorcraft whose rotors are not engine-driven, except for initial starting, but are made to rotate by action of the air when the rotorcraft is moving and whose means of propulsion, consisting usually of conventional propellers, is independent of the rotor system.

**l.** Heavy Maintenance. Any maintenance, inspection, repair, or alteration a manufacturer has designated that requires specialized training, equipment, or facilities.

**m. Kit Aircraft.** With respect to this AC, an aircraft that has been partially or completely fabricated, but not completely assembled by a manufacturer that builds aircraft to an industry consensus standard. The ELSA kit is based upon an aircraft make and model that has been issued an SLSA in the light-sport category by the FAA. This ELSA aircraft meets the ASTM standard at certification and is certificated as a § 21.191(i)(2) aircraft.

**n.** Light-Sport Aircraft. Means an aircraft, other than a helicopter or powered-lift that, since its original certification, has continued to meet the following:

(1) A maximum takeoff weight (MTOW) of not more than:

(a) 1,320 pounds (600 kilograms) for aircraft not intended for operation on water; or

(b) 1,430 pounds (650 kilograms) for an aircraft intended for operation on water.

(2) A maximum speed in level flight with maximum continuous power  $(V_H)$  of not more than 120 knots (kts) CAS under standard atmospheric conditions at sea level.

(3) A maximum never-exceed speed ( $V_{NE}$ ) of not more than 120 kts CAS for a glider.

(4) A maximum stall speed or minimum steady flight speed obtained in a specific configuration  $(V_{S1})$  without the use of lift-enhancing devices of not more than 45 kts CAS at the aircraft's maximum certificated takeoff weight and most critical center of gravity (c.g.).

(5) A maximum seating capacity of no more than two persons, including the pilot.

(6) A single, reciprocating engine, if powered.

(7) A fixed or ground-adjustable propeller if a powered aircraft other than a powered glider.

(8) A fixed or feathering propeller system if a powered glider.

(9) A fixed-pitch, semi-rigid, teetering, two-blade rotor system, if a gyroplane.

(10) A non-pressurized cabin, if equipped with a cabin.

(11) Fixed landing gear, except for an aircraft intended for operation on water or a glider.

(12) Fixed or retractable landing gear, or a hull, for an aircraft intended for operation on water.

(13) Fixed or retractable landing gear for a glider.

**o.** Lighter-Than-Air Aircraft. Lighter-than-air aircraft means aircraft that can rise and remain suspended by using contained gas weighing less than the air that is displaced by the gas.

**p.** Line Maintenance. Any repair, maintenance, scheduled checks, servicing, inspections, or alterations not considered heavy maintenance that is approved by the manufacturer and is specified in the manufacturer's maintenance manual.

**q.** LSA Repairman "Inspection." U.S. FAA-certificated repairman (LSA) with an inspection rating as defined by 14 CFR part 65, § 65.107 authorized to perform the annual condition inspection on ELSA that the repairman owns.

**r. LSA Repairman "Maintenance."** U.S. FAA-certificated repairman (LSA) with a maintenance rating as defined by § 65.107 authorized to perform line maintenance and return to service (RTS) aircraft certificated as Special LSA. Authorized to perform the annual condition/100-hour inspection on an LSA.

### s. Major Repairs and Alterations ASTM F2483, Section 9.

(1) All major repairs or alterations made to aircraft subsequent to its initial design and production acceptance testing to applicable ASTM standards and sale to a consumer must be evaluated relative to the requirements of the applicable ASTM design and production acceptance specification(s).

(2) The manufacturer or other entity that performs the evaluation of an alteration or repair shall provide a written affidavit that the aircraft being altered will still meet the requirements of the applicable ASTM design and performance specification subsequent to the alteration.

(3) The manufacturer or other entity that performs the evaluation shall provide written instructions and diagrams on how, who, and the level of certification needed to perform the alteration or repair. The instructions must include ground and flight testing that complies with the original ASTM production acceptance testing standard, as appropriate, to verify the alteration was performed correctly and the aircraft is in a condition for safe operation.

(4) The manufacturer or other entity that performs the evaluation shall provide information to the owner of the aircraft for the documentation of the alteration in the aircraft's records.

### NOTE: Major repairs and alterations on TC'd products installed on SLSA, 337s apply as per 14 CFR part 43.

t. Minor Repair, Alteration, or Maintenance. Any repair, alteration, or maintenance for which instructions provided for in the maintenance manual(s) supplied to the consumer of the product are considered minor. Part 43 applies to SLSA except for non-FAA-approved products the recording of major alterations and repairs (337) is not required.

**u.** Maintenance. Maintenance means inspection, overhaul, repair, preservation, and the replacement of parts, but excludes preventive maintenance.

v. Manufacturer. Any entity engaged in the production of an LSA or component used on an LSA. For an LSA issued a special airworthiness certificate under § 21.190, an entity that has built the LSA under a consensus standard and assumed the responsibility for the continued airworthiness of that aircraft.

w. Owner/Operator Responsibilities: ASTM F2295, Section 5. Each owner/operator of a LSA shall read and comply with the maintenance and continued airworthiness information and instructions provided by the manufacturer.

### y. Ready-to-fly Condition.

(1) An aircraft is considered ready-to-fly when the following is accomplished:

- Aircraft is 100 percent assembled,
- Engine has been test run,
- Flight controls have been rigged,
- Weight and Balance (W&B) has been computed,
- Record of these actions has been recorded in the aircraft's maintenance records, and
- Aircraft is registered and a special airworthiness certificate has been issued.

(2) Once meeting these conditions, the aircraft's wings and other components can be removed for shipping purposes and the aircraft can still be considered ready-to-fly.

**z.** Safety Directive ASTM Designation F2483. A directive issued by a manufacturer of a special LSA intended to correct an existing unsafe condition. Compliance with safety directives is addressed in 14 CFR part 91, § 91.327 and the recording is required in § 91.417. Safety directives are addressed in applicable consensus standards which include provisions for maintaining the continued airworthiness of an aircraft and correcting safety-of-flight issues. Safety directives are considered mandatory on SLSA.

(1) Safety Alert. For notifications that require immediate action, see ASTM F2295.

(2) Service Bulletin (SB). For notifications that do not require immediate action but do recommend future action, see ASTM F2295.

(3) Notification. For notifications that do not necessarily recommend future action but are primarily for promulgation of continued airworthiness information, see ASTM F2295.

**aa. Special Light-Sport Aircraft (SLSA).** An aircraft issued a special airworthiness certificate in the light-sport category under § 21.190.

**bb. Standard Category, TC'd Aircraft.** A TC'd aircraft may qualify to be operated with sport pilot privileges if it meets the definition of LSA aircraft. The TC'd aircraft will be maintained and inspected in accordance with parts 43 and 91. For a list of eligible TC aircraft, see the FAA Light Sport Web site at:

http://www.faa.gov/aircraft/gen\_av/light\_sport/media/ExistingModels.pdf.

**cc.** Task-Specific Training ASTM F2483. A manufacturer of a product may require type-specific training in order to accomplish a task in either the maintenance manual or in an authorization for a major repair, maintenance, or alteration. The FAA does not give approval to these task-specific training programs for SLSA. A manufacturer may specify any task-specific

training it determines is appropriate to accomplish a task. Examples of task-specific training include:

- Engine manufacturer heavy maintenance or overhaul school (or both),
- Experimental Aircraft Association (EAA) SportAir Fabric Covering School,
- Parachute manufacturer repair course, and
- Aircraft manufacturer course.

**dd. Weight-Shift-Control Aircraft.** A powered aircraft with a framed, pivoting wing, and a fuselage controllable only in pitch and roll by the pilot's ability to change the aircraft's center of gravity with respect to the wing. Flight control of the aircraft depends on the wing's ability to flexibly deform rather than the use of control surfaces.

**4. OVERVIEW.** This AC has three major chapters that will address the requirements for the certification of repairman (LSA), and how to obtain a determination from the FAA that a repairman (LSA) training course is considered acceptable. The chapters and content are:

- Chapter 1, Certification of Repairman (Light-Sport Aircraft).
- Chapter 2, How to Become a Repairman (Light-Sport Aircraft) Training Course Provider.
- Chapter 3, Continued Airworthiness of Experimental and Special Light-Sport Aircraft.
- Appendix 1, Continued Airworthiness of Experimental and Special Light-Sport Aircraft—Sample Maintenance Record Entries.
- Appendix 2, Repairman (Light-Sport Aircraft) Certification.
- Appendix 3, Frequently Asked Questions.

**5. REQUEST FOR INFORMATION.** Due to the number of changes within the LSA community, the FAA encourages public participation in updating this document. Please send comments, suggestions, or information about this AC to:

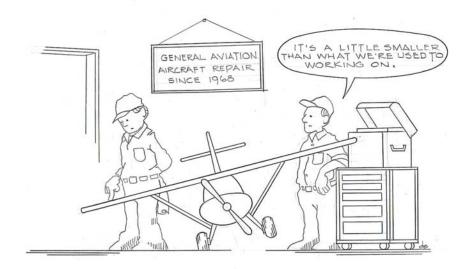
Federal Aviation Administration Headquarters Aircraft Maintenance Division, AFS-300 5th Floor, 950 L'Enfant Plaza, S.W. Washington, DC 20024

**6. AVAILABILITY.** You may obtain a copy of this AC from the FAA Web site at http://www.faa.gov/regulations\_policies/advisory\_circulars.

#### CHAPTER 1. CERTIFICATION OF REPAIRMEN (LIGHT-SPORT AIRCRAFT)

#### **SECTION 1. GENERAL**

"In aviation, good enough is not good enough!"-Patrick Poteen, Sergeant, U.S. Army, Ret.



#### 100. REPAIRMAN (LSA) CERTIFICATE.

**a. Maintaining LSA.** As part of the development of the sport pilot rule, the FAA addressed concerns about who would maintain LSA after these aircraft were certificated. The solution was to issue a repairman (LSA) certificate, similar in function to the repairman certificate that is issued to the builder of an experimental amateur-built aircraft. This repairman (LSA) certificate complements certificates issued to Airframe and Powerplant (A&P) mechanics and appropriately rated repair stations.

**b.** Section 65.107 Certified. The actual fabrication of the aircraft does not involve the owner of an SLSA. He or she usually has not acquired the necessary skills to maintain and inspect the aircraft. Therefore, to properly maintain these aircraft, the repairman must have received training and testing and be certified under 65.107.

### 101. CERTIFICATED PERSONS WHO CAN WORK ON SPECIAL AND

**EXPERIMENTAL LSA.** Certificated persons who may perform work on special and experimental LSA are:

- An appropriately rated repair station.
- A certificated airframe and/or powerplant mechanic.
- A certificated repairman (LSA).

### NOTE: To perform maintenance, 100-hour inspections, annual condition inspections, and RTS on an SLSA, see § 91. 327.

NOTE: Certificated part 145 repair station repairman, airframe mechanics, powerplant mechanics, and trained repairmen (LSA) are certified under part 65.

**NOTE:** Maintenance providers must have manufacturers' maintenance data and tools to inspect and maintain the aircraft to return the aircraft to service in a condition for safe operation.

NOTE: To perform an annual condition inspection on ELSA certificated under § 21.191(i), certificated part 145 repair stations; certificated part 65 A&P mechanics; and repairmen (LSA) must perform the inspections in accordance with inspection procedures developed by the aircraft manufacturer. See § 91.319(e)(f)(g).

#### 102. CLASSES OF LSA IDENTIFIED ON REPAIRMAN (LSA) CERTIFICATES.

- a. LSA Classes. Repairman (LSA) certificates are issued for the following LSA classes:
  - (1) Airplane.
  - (2) Glider.

(3) Lighter-than-air: balloon and airship.

- (4) Weight-shift-control aircraft.
- (5) Powered parachute.

(6) Gyroplane (limited to gyroplanes issued experimental certificates under 21.191(i)).

**b.** Inspection or Maintenance Eligibility. The class of aircraft eligible for inspection or maintenance is identified on the repairman (LSA) certificate.

### **103. BASIC ELIGIBILITY REQUIREMENTS TO QUALIFY FOR A REPAIRMAN** (LSA) CERTIFICATE. An applicant for a repairman (LSA) certificate must:

- Be at least 18 years of age.
- Read, speak, write, and understand English. If you cannot meet one or more of these requirements due to medical reasons, the FAA may place a limitation(s) on your certificate and rating.
- Demonstrate the requisite skill to determine if an LSA is in a condition for safe operation (e.g., by a Certificate of Completion from an acceptable training program).
- Be a U.S. citizen, or a citizen of a foreign country who has lawfully been admitted for permanent residence in the United States.

**104. REPAIRMAN (LSA) RATINGS.** The repairman (LSA) certificate has two ratings: "inspection" or "maintenance." The rating is identified on the repairman certificate with the appropriate limitation.

**a. Inspection Rating Overview.** The owner of an ELSA may apply for a repairman certificate with an inspection rating after completion of the required 16 hour training course. The training must be for the same class of aircraft for which the owner seeks inspection privileges. This rating allows an aircraft owner to perform the required annual condition inspection on an aircraft that he or she owns, which has been issued an airworthiness certificate under § 21.191(i). The aircraft will be identified on the owner's repairman certificate by registration and serial number. If an individual owns several similar makes and models of LSA or owns an LSA in another class, that individual will be issued a repairman certificate that lists each aircraft that the repairman is eligible to inspect if the required training is completed.

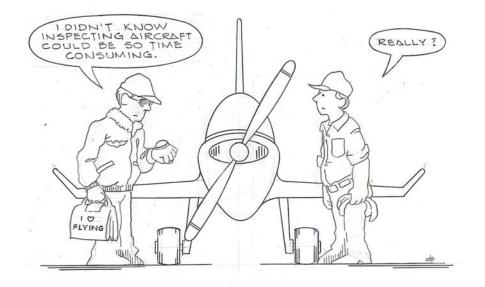
### b. Maintenance Rating Overview.

(1) Any individual may apply for a repairman (LSA) certificate with a maintenance rating after completion of the required training for a specific class of LSA. The length of required training varies depending on the class of aircraft for which the owner seeks privileges. A repairman with a maintenance rating may perform maintenance and required inspections on SLSA within the class of his or her rating. A repairman may also hold several aircraft class ratings on his or her repairman certificate. Each rating will also allow the individual to perform the annual condition inspection for LSA within that class.

(2) Prior to approving any aircraft or part for return to service the repairman performing the work must have previously performed the work concerned satisfactorily. If the repairman has not previously performed the work, he or she may show his or her ability to do the work by performing it to the satisfaction of the FAA or by performing it under the direct supervision of an appropriately certificated, rated, and experienced mechanic or repairman. The repairman performing the work also must understand the current instructions of the manufacturer and the maintenance manuals for the work. The FAA would not consider it appropriate for a repairman with a maintenance rating to perform an engine overhaul for the first time on a two or four-cycle engine unless that repairman, for example, could show that he or she has successfully completed additional training on the overhaul of the specific make and model engine from the engine manufacturer or other accepted training provider. See the current edition of ASTM F2483, paragraph 9.

### 105. THRU 109. RESERVED.

"Attitude is a little thing that makes a big difference."—Leo Weston, former FAA Inspector



**110. PRIVILEGES AND LIMITATIONS OF A REPAIRMAN (LSA) CERTIFICATE WITH AN INSPECTION RATING § 65.107.** A person holding a repairman (LSA) certificate with an inspection rating is limited to performing the annual condition inspection on an ELSA certificated under § 21.191(i)(1) that the repairman owns and that is identified on the repairman certificate by the aircraft registration and serial number. Non-ownership of the aircraft identified

NOTE: Section 65.107 certificated repairmen (LSA) may not return to service a TC'd or amateur-built aircraft.

on the holder's repairman certificate will suspend the privileges of the certificate.

**111. SPECIFIC REQUIREMENTS TO OBTAIN A REPAIRMAN (LSA) CERTIFICATE WITH AN INSPECTION RATING.** To obtain the certificate, the owner of an ELSA must successfully complete a 16-hour training course acceptable to the FAA on the inspection requirements that focus on the particular class of ELSA owned by the repairman.

112. TYPES OF TRAINING COURSES FOR A REPAIRMAN (LSA) CERTIFICATE WITH AN INSPECTION RATING. There are six courses; one for each class of ELSA. They are:

- Airplane.
- Glider.
- Lighter-than-air: balloon and airship.
- Weight-shift-control aircraft.
- Powered parachute.
- Gyroplane.

### 113. CONTENTS OF A REPAIRMAN (LSA) INSPECTION RATING TRAINING

**COURSE.** The FAA has audited each 16-hour training course that it has specifically determined to be acceptable, and has found each course adequate to train an individual with a limited maintenance background to properly inspect his or her own ELSA. The training is to a level of proficiency that will enable the repairman, without assistance, to make a sound judgment whether or not the aircraft is in a condition for safe operation. Each of the six inspection rating training courses should contain at least the following elements:

**a. Regulations and Guidance.** Regulations and other guidance applicable to LSA, including:

- (1) Operating limitations.
- (2) Annual condition inspection record entry.
- (3) ADs.
- (4) Manufacturer's safety directives.
- (5) Consensus standard for the specific class of LSA that is the subject of the course.

**b.** Inspection Procedures. Inspection procedures as found in the current edition of AC 43.13-1, Acceptable Methods, Techniques, and Practices—Aircraft Inspection and Repair:

- (1) Use of manufacturer's data/manuals:
  - (a) Personal safety and manufacturer's inspection checklists.
  - (**b**) W&B/loading.
- (2) Detection of the following:
  - (a) Corrosion.
  - (**b**) Cracks.
  - (c) Deformation.
  - (d) Excessive wear.
- (3) Proper use of:
  - (a) Safety techniques.
  - (b) Torque procedures.
  - (c) Personal safety equipment.

**c.** Theory and Discussion. Aircraft theory of flight and discussion of aircraft systems to include proper operation and inspection of critical areas that are prone to failure or fatigue for at least the following systems:

- (1) Airframe, including:
  - (a) Instrumentation.
  - (b) Landing gear.
  - (c) Brakes.
  - (**d**) Flight controls.
  - (e) Rigging.
  - (f) Balloon envelope, basket, and burners, if applicable.
- (2) Engine, ignition, fuel, and oil systems.
- (3) Propeller and gear reduction unit, if applicable.
- (4) Accessories, including but not limited to:
  - (a) Ballistic parachute.
  - (b) Floats and skis.

**d. Inspection Checklist.** Use of an inspection checklist recommended by the manufacturer or, for airplanes, the checklist located in the current edition of AC 90-89, Amateur-Built Aircraft and Ultralight Flight Testing Handbook, appendix 1. The inspection rating training course will also address recording the inspection in the aircraft maintenance records.

e. Review of Training. Review/critique of training provided.

**f.** Test. A final knowledge test that contains no less than 50 multiple choice questions covering the complete course. For an applicant to be considered as having successfully completed the course, he or she should achieve an 80 percent score or higher on the test the first time it is given.

### **114. AFTER THE TEST.**

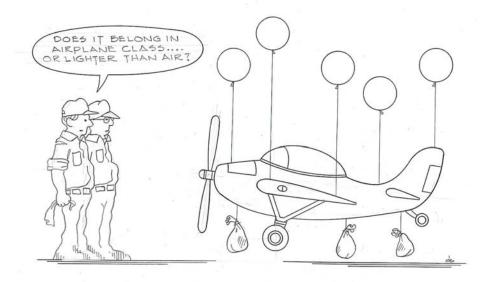
a. FAA Repairman (LSA) Certificate with Inspection Rating. After satisfactorily completing the test, the applicant takes the course provider's certificate of completion and additional documentation (described in paragraph 127) to the local Flight Standards District Office (FSDO), where upon review, an FAA repairman (LSA) certificate with inspection rating will be issued. (See Appendix 2, Figure 6, Sample FAA Form 8060-4, Temporary Airman Certificate (Maintenance Rating, Weight-Shift-Control Aircraft).)

**b.** Certificate of Completion. A signed certificate of completion declares that the individual has passed the course's knowledge test and has demonstrated the skills necessary to perform the duties of the repairman (LSA) with the inspection rating. The repairman keeps the original certificate of training for his records. The FSDO keeps a copy for processing.

### 115. THRU 119. RESERVED.

### SECTION 3. REPAIRMAN (LIGHT-SPORT AIRCRAFT) WITH A MAINTENANCE RATING

"Any unknown is unacceptable in aviation."—Angelo Mastrulo, Mechanic



**120. PRIVILEGES AND LIMITATIONS OF A REPAIRMAN (LSA) CERTIFICATE WITH A MAINTENANCE RATING.** A person holding a repairman (LSA) certificate with a maintenance rating may perform maintenance and required inspections on SLSA and perform annual condition inspections on ELSA. The repairman can also perform ADs and or Aircraft Manufacturer Safety Directives issued against FAA-approved products installed on SLSA. Repairman privileges do not extend to performing maintenance on aircraft issued a standard airworthiness certificate or any kind of special airworthiness certificates other than those issued under §§ 21.190 and 21.191(i), even if those aircraft meet the definition of LSA as identified in § 1.1 (e.g., Piper J-3 Cub or RV-4). Each airman is also limited to the appropriate class of aircraft on which he or she received training (e.g., weight-shift-control aircraft or powered parachutes).

121. SPECIFIC HOUR REQUIREMENTS TO OBTAIN A REPAIRMAN (LSA) CERTIFICATE WITH A MAINTENANCE RATING. The applicant for a maintenance rating must successfully complete one of the five class rating courses that range between 80 to 120 hours. Each course must be acceptable to the FAA. Courses specifically determined to be acceptable to the FAA have been assigned an FAA course number. Courses without an FAA course number may not be acceptable to the FAA. The training course requirements are based on a modular system composed of core modules and specific class modules. Combinations of core and specific class modules determine the number of hours required for each individual class of aircraft. Each training course should address the inspection techniques and maintenance practices necessary to maintain that particular class of LSA.

### **122. TYPES OF TRAINING COURSES FOR A REPAIRMAN (LSA) WITH A MAINTENANCE RATING.** There are five courses, which, by class, are:

- Airplane.
- Glider.
- Lighter-than-air: balloon and airship.
- Powered parachute.
- Weight-shift-control aircraft.

NOTE: The FAA will not provide a gyroplane course because gyroplanes are not eligible for a special airworthiness certificate in the light-sport category under § 21.190 at this revision.

#### **123. DIFFERENCE BETWEEN TRAINING COURSES.**

**a.** The Repairman (LSA) Maintenance Rating Course. Unlike the fixed 16-hour repairman (LSA) inspection rating course, the repairman (LSA) maintenance rating course is designed to be flexible and allow a repairman (LSA) to earn multiple ratings without duplicating training already received. The requirements are structured in modules for which the repairman can customize training for the class of LSA that he or she will maintain. There are three required "core" modules and five "class" modules. Course length depends on the complexity of the aircraft addressed in the course.

**b.** Five Classes of Eligible SLSA. There are five classes of SLSA eligible for maintenance training; they are airplane, weight-shift-control aircraft, powered parachute, lighter-than-air, and glider. Since gyroplanes cannot be certificated as SLSA, no maintenance rating for gyroplanes is currently available. The modules are designed on a 65 percent lecture and 35 percent practical training format. All training courses should result in a level of proficiency that will enable the repairman, without assistance, to perform maintenance on the aircraft so that when the work is completed the aircraft is in a condition for safe operation. To ensure this standard of training, the course should be limited to 16 students per instructor for a lecture and 8 students for each practical project. The total number of students may increase to 25 students per instructor for a lecture and 13 students or less for each practical project if the training facility is an FAA-approved 14 CFR part 147 school or can meet the requirements of part 147, §§ 147.13, 147.15, 147.17, and 147.19.

NOTE: Each individual module should have either a review or a test. Each maintenance course should have a final test of no less than 50 test questions with multiple-choice answers that address each applicable module. The applicant should achieve an 80 percent score or higher on the final test to pass the course. If the applicant fails the final test, the training facility may retest the applicant on the module(s) failed. The retest should have a different set of test questions than the original test and only address the material the applicant failed. The applicant should take the retest within 30 days from the date of the failed test.

### 124. INFORMATION CONTAINED IN EIGHT INDIVIDUAL TRAINING MODULES.

a. Module 1: (16 hours) Regulatory/Maintenance Overview (Core Module). This module should contain the following:

(1) Regulations overview: 14 CFR parts 1, 21, 39, 43, 45, 65, and 91.

(2) Industry-developed ASTM consensus standards including, but not limited to, continued airworthiness requirements and inspection practices/techniques, use of hand tools, torque wrenches, safety practices, and identification of aviation hardware.

(3) Use of manufacturer's safety directives and FAA ADs.

(4) Use of airframe, engine, appliance, and propeller manufacturer's manuals, instructions, and maintenance recordkeeping.

- (5) Personal safety.
- (6) Review or test.

**b.** Module 2: (24 hours) Airframe General (Core Module). The training provider should provide students with at least two representative aircraft or have training aids, mockups and detailed course presentation materials for use in place of actual LSA. The examples used on the mockups need not to be in an Airworthy condition but must be complete enough to conduct maintenance and inspection training for any practice session. This module should contain the following:

- (1) Weight, balance, and loading.
- (2) Performing minor repairs and minor alterations.
- (3) Inspection of composite structures and minor repairs.
- (4) Electrical system, theory, inspection, and troubleshooting.
- (5) Material and processes.
- (6) Corrosion cause and prevention.
- (7) Fluid lines and fittings.
- (8) Ground operations and servicing.
- (9) Review or test.

c. Module 3: (45 hours) Engine and Propeller (Core Module). The training provider should make at least three representative engines (e.g., two different two-cycle engines and one four-cycle engine) available for this module. This module should contain the following:

(1) Theory of two- and four-cycle engine operation (fuel, magneto and electronic ignition, and lubrication systems).

(2) Service, inspection, and maintenance of engines.

(3) Troubleshooting of two- and four-cycle engines.

(4) Inspection, checking, troubleshooting, service, and repair of engine-cooling systems.

(5) Theory, inspection, and maintenance of propellers and ground adjustable propellers.

(6) Engine run-up practices and procedures.

(7) Service, inspection, and maintenance of feathering or folding propellers used on gliders.

(8) Inspection, checking, servicing, and troubleshooting electrical or mechanical engine instrumentation.

(9) Servicing of oil and fluids.

(10) Removal and replacement of engine accessories such as spark plugs, exhaust systems, wiring, carburetor, fuel pumps, etc.

(11) Review or test.

**d.** Module 4: (35 hours) Airplane Class (Class Module). The training provider should make at least two representative airframes, or have training aids, mockups, and detailed course presentation materials for use in place of actual LSA. The examples used on the mockups do not need to be in an Airworthy condition but must be complete enough to conduct maintenance and inspection training available for this module. This module should contain the following:

(1) Theory and operation of flight controls.

(2) Aircraft rigging including flight controls, landing wires, and flying wires.

(3) Removal and installation of sail cloth covering on wings and tail surfaces.

(4) Inspection of fabric coverings on fuselage, wings, and tail surfaces.

(5) Disassembly and assembly of wings, flight controls, and accessories.

(6) Removal and installation of the engine, including fuel system, instrumentation, and accessories.

(7) Inspection and troubleshooting of aircraft/engine instrumentation, magneto, and electronic ignition systems.

(8) Use of manufacturer's manuals and technical data during projects.

(9) Identification and inspection of critical areas.

(10) Inspection and minor repairs to applicable airframe structures.

(11) Ballistic parachutes: theory, installation, operation, and inspection.

(12) Inspection and maintenance of floats/repositionable landing gear, wheels, and brakes.

(13) Theory of fuel system operation and inspection.

(14) W&B.

(15) Review or test.

e. Module 5: (19 hours) Weight-Shift-Control Class (Class Module). The training provider should make at least two representative aircraft available, or have training aids, mockups, and detailed course presentation materials for use in place of actual LSA. The examples used on the mockups do not need to be in an Airworthy condition but must be complete enough to conduct maintenance and inspection training for this module. This module should contain the following:

(1) Theory and operation of flight controls.

(2) Assembly and disassembly of the aircraft.

(3) Aircraft rigging.

(4) Use of manufacturer's manuals and technical data during projects.

(5) Inspection, removal, and installation of fabric covering material.

(6) Inspection and minor repairs to applicable airframe structures.

(7) Inspection, removal, and installation of the engine and accessories.

(8) Inspection and troubleshooting of aircraft and engine instrumentation and ignition systems.

(9) Theory of fuel system, operation, and inspection.

(10) Inspection and maintenance of landing gear, wheels, and brakes.

(11) Ballistic parachutes: theory, installation, operation, and inspection.

(12) Weight and loading.

(13) Review or test.

**f.** Module 6: (19 hours) Powered Parachute Class (Class Module). The training provider should make at least two representative aircraft available, or have training aids, mockups, and detailed course presentation materials for use in place of actual LSA. The examples used on the mockups do not need to be in an Airworthy condition but must be complete enough to conduct maintenance and inspection training for this module. This module should contain the following:

- (1) Theory and operation of flight controls.
- (2) Assembly and disassembly of the aircraft.
- (3) Aircraft rigging and safety practices.
- (4) Inspection of the parachute, including removal and replacement.
- (5) Inspection and minor repairs to applicable airframe structures.
- (6) Inspection, removal, and installation of the engine and accessories.
- (7) Inspection and troubleshooting of aircraft and engine instrumentation.
- (8) Use of manufacturer's manuals and technical data during projects.
- (9) Weight and loading.
- (10) Inspection of landing gear, wheels, and brakes.
- (11) Review or test.

**g.** Module 7: (64 hours) Lighter-Than-Air Class (Class Module). The training provider should make at least one representative aircraft available, or have training aids, mockups, and detailed course presentation materials for use in place of actual LSA. The examples used on the mockups do not need to be in an Airworthy condition but must be complete enough to conduct maintenance and inspection training for this module. This module should contain the following:

- (1) Theory and operation of lighter-than-air aircraft.
- (2) Inspection of fabric and minor repairs.
- (3) Inspection of the burner assembly, basket, and fuel tanks.
- (4) Removal and installation of baskets and burners.
- (5) Cleaning of burners and nozzles.
- (6) Use of manufacturer's manuals and technical data during projects.

(7) Review or test.

h. Module 8: (40 hours) Glider Class (Class Module). The training provider should make at least one representative aircraft available, or have training aids, mockups, and detailed course presentation materials for use in place of actual LSA. The examples used on the mockups do not need to be in an Airworthy condition but must be complete enough to conduct maintenance and inspection training for this module. If course attendees wish to be rated on gliders with a retractable or fixed engine with a feathering propeller installed, the attendees should also complete Module 3. This module should contain the following:

- (1) Theory, operation, and rigging of flight controls.
- (2) Inspection and minor repair to fabric covering on wings, fuselage, and tail surfaces.
- (3) Use of manufacturer's manuals and technical data during projects.
- (4) Identification and inspection of critical areas.
- (5) Inspection and minor repairs to applicable airframe structures.
- (6) Ballistic parachutes: theory, installation, operation, and inspection.
- (7) Inspection and maintenance of wheels and brakes and wheel retract systems.
- (8) W&B.
- (9) Inspection of the wing folding/removal mechanism.
- (10) Review *or* test.

### 125. THE MAINTENANCE RATING MODULAR TRAINING SYSTEM.

**a.** Training Completion. To complete the training required for the issuance of repairman (LSA) certificate with a maintenance rating for a particular class of aircraft, an applicant should complete the following modules as appropriate:

(1) Airplane. Modules 1, 2, 3, and 4 for a total of 120 hours of instruction.

(2) Weight-Shift-Control Aircraft. Modules 1, 2, 3, and 5 for a total of 104 hours of instruction.

(3) Powered Parachute. Modules 1, 2, 3, and 6 for a total of 104 hours of instruction.

(4) Lighter-Than-Air. Modules 1 and 7 for a total of 80 hours of instruction.

(5) Glider. Modules 1, 2, and 8 for a total of 80 hours of instruction. If the repairman intends to maintain powered gliders, module 3 should also be taken for a total of 125 hours of instruction. To obtain a glider or powered glider in addition to an airplane (1) rating they must

complete airplane Modules 1, 2, 3, 4, and Module 8 parts 1, 3, 4, 7, 9, 10 for a total 139 hours of instruction.

**b.** Additional Class Ratings. This system allows a repairman with the maintenance rating limited to airplane, weight-shift-control aircraft, lighter-than-air, or glider class to obtain an additional class ratings (e.g., powered parachutes) by taking only Module 6 (19 hours of instruction) rather than 80 hours required for the original rating. A repairman (LSA) who applies for another rating must take his or her original certificate of completion for the training used to obtain his or her original rating, plus the new certificate of completion to the local FSDO. After review, the applicant will be issued a new repairman certificate with the maintenance rating showing both the original class rating and the new class rating.

### 126. PERFORMANCE OF MAJOR REPAIRS AND MAJOR ALTERATIONS BY A

**REPAIRMAN (LSA) WITH A MAINTENANCE RATING.** A repairman may not perform a major repair or major alteration on a product produced under an FAA approval. However, prior to performing a major repair on a product not produced under an FAA approval, the repairman may need to complete additional training acceptable to the FAA and appropriate to the work performed. This training may consist of additional training in areas such as welding, overhauls, engine gear reduction units, major repairs to structures, or major repairs to fabric. For example, if a repairman with a maintenance rating successfully completed an LSA engine manufacturer's course in overhaul of a particular make and model engine or gear reduction unit or an LSA manufacturer's course that teaches welding of steel or aluminum structures, he or she would be permitted to perform major repairs to those manufacturers' products (see definitions (major repairs and alterations)).

**127. APPLYING FOR A REPAIRMAN (LSA) CERTIFICATE.** To apply for a repairman (LSA) certificate with either an inspection or maintenance rating, the applicant must present the following documentation to his or her local FSDO:

**a. Photo Identification.** A valid U.S. driver's license, passport, or other documentation that will show the applicant meets the age and citizenship eligibility requirements for the certificate.

b. Complete FAA Form 8610-2, Airman Certificate and/or Additional Rating Application. A sample of the completed form is in Appendix 2, Repairman (Light-Sport Aircraft) Certification. FAA Form 8610-2 is available at your local FSDO or at: http://www.faa.gov/forms. The applicant can find a list of the locations for each local FSDO at: www.faa.gov/about/office\_org/field\_offices/fsdo. (See Appendix 2, Figure 1, Sample FAA Form 8610-2, Repairman (Light-Sport Aircraft) Application (Inspection Rating) (Front Side) and Figure 2, Sample FAA Form 8610-2, Repairman (Light-Sport Aircraft) Application (Inspection Rating) (Reverse Side) for a sample application for an inspection rating. See Appendix 2, Figure 3, Sample FAA Form 8610-2, Repairman (Light-Sport Aircraft) Application (Maintenance Rating) (Front Side) and Figure 4, Sample FAA Form 8610-2, Repairman (Light-Sport Aircraft) Application (Maintenance Rating) (ration for a sample application for a sample application for a maintenance rating.) **c. Proof of Training.** Show proof of completion of training, which confirms that you have received appropriate training for the rating sought. Proof of training would be a certificate of training or graduation. The certificate of training should contain:

(1) An FAA course acceptance number;

- (2) The name of the organization providing the training;
- (3) Hours of training received;
- (4) Name of the primary instructor;
- (5) Name of the course;

(6) Make and model of aircraft, if for inspection rating, or name of category of LSA for maintenance rating; and

(7) The date you received the instruction.

**d. Proof of Ownership.** To apply for a repairman certificate with an inspection rating, the applicant must show proof of ownership of an aircraft in the class of LSA for which he or she received training. Upon review and acceptance of the documentation, an FAA inspector will issue a temporary repairman certificate (LSA) with the applicable rating. (See Appendix 2, Figure 5, Sample FAA Form 8060-4, Temporary Airman Certificate (Inspection Rating, Weight-Shift-Control Aircraft) and Figure 6, Sample FAA Form 8060-4, Temporary Airman Certificate (Maintenance Rating, Weight-Shift-Control Aircraft).)

**e.** Lack of Applicable LSA. If the applicant completes a course for a repairman (LSA) certificate with an inspection rating but does not yet own an applicable LSA, the certificate will not be issued.

**f.** Selling the Aircraft. If the holder of the repairman certificate "inspection" under § 65.107 sells his or her aircraft, the repairman certificate becomes void. If he or she purchases another same class LSA certificated under § 21.191(i), the holder can take the original training certificate to the FSDO and have a repairman certificate issued for the same class of aircraft. If he or she purchases an LSA in another class, the repairman would have to receive the 16 hours of approved training for the new class of aircraft owned to be issued a repairman "inspection" certificate under § 65.107.

### 128. THRU 199. RESERVED.

### CHAPTER 2. HOW TO BECOME A REPAIRMAN (LIGHT-SPORT AIRCRAFT) TRAINING COURSE PROVIDER

"You cannot teach a man anything, you can only help him discover it within himself."-Galileo



### 200. HOW TO ENSURE A REPAIRMAN (LSA) INSPECTION OR MAINTENANCE RATING TRAINING COURSE IS ACCEPTABLE TO THE FAA (AN OVERVIEW).

NOTE: Before seeking a determination that a training course is acceptable to the FAA, the training provider should read the current edition of FAA Order 8000.84, Procedures to Accept Industry-Developed Training for Light-Sport Repairmen, available on the FAA Web site at http://www.faa.gov/regulations\_policies/orders\_notices.

**a.** Requesting a Determination. A person requesting a determination that a training course for a repairman (LSA) inspection or maintenance rating is acceptable to the FAA should provide the information specified in subparagraph 200b below to:

Federal Aviation Administration Light Sport Aviation Branch, AFS-610 ATTN: Light-Sport Standardization Board (LSSB) P.O. Box 25082 Oklahoma City, OK 73125

**b. Providing the Information.** The information that should be provided to the FAA's Light Sport Aviation Branch (AFS-610) includes:

- (1) A letter of request;
- (2) Name and address of the person or company providing the training;
- (3) Training course location;

(4) Telephone number;

(5) Contact person;

(6) What repairman rating and class of SLSA the course is applicable to;

(7) A statement that the training provider will allow the FAA access to any training location; and

(8) Written documentation or a CD in a format acceptable to the FAA, which contains:

(a) A course outline describing the subjects taught and the amount of instruction in each subject. The course should consist of approximately 65 percent instructional course material and 35 percent practical training.

(b) A description of the training aids (e.g., videotapes, DVDs, computer presentation programs), parts, tools, etc., used in the course.

(c) Handbooks and handout material.

(d) A description of the method of instruction.

(e) A sample certificate of completion.

(f) A course critique.

(g) Course tests, including procedures for retaining course test results for at least a 2-year period.

(h) A description of the instructor's qualifications (instructor should be a mechanic with an A&P rating with a minimum of 5 years of experience in General Aviation (GA) aircraft maintenance or 5 years of experience in LSA manufacturing).

(i) A schedule of where and when the training will be provided over the next 24 months. If the course is given at a fixed location, the attendees should receive a description of the facilities. If the course will be available at multiple locations, provide a general description of how the instructor will provide the training at these locations.

(j) A list by make and model of the LSA for use in the practical portion of the training.

(k) A description of how the training course provider will assign a proctor to collect the student course critiques and send them to AFS-610.

**c.** Determining Acceptability. After making a determination that a training course is acceptable to the FAA, the LSSB will:

(1) Provide a letter of acceptance to the applicant stating that the course is acceptable to the FAA and that an FAA database of acceptable repairman (LSA) training courses will list course for a period not to exceed 24-calendar months from the date of the letter. At least 60 days prior to the end of the 24-calendar month period, the training provider should submit to the FAA any revisions to the information previously provided in order for a course to remain listed as acceptable to the FAA.

(2) Assign a number to each course. The course numbering system will indicate the type of course (e.g., light-sport repairman inspection, airplane course (LSRIA)), the month and year of that the course was determined to be acceptable (e.g., 0705) and the sequential number of the course (01). Listed below are examples of designations for repairman (LSA) inspection courses:

(a) Light-sport repairman inspection, airplane: LSRIA070501

(b) Light-sport repairman inspection, powered parachute: LSRIPP070501

(c) Light-sport repairman inspection, weight-shift-control: LSRIWS070501

(d) Light-sport repairman inspection, gyroplane: LSRIGP070501

(e) Light-sport repairman inspection, lighter-than-air: LSRIL070501

(f) Light-sport repairman inspection, glider: LSRIG070501

(3) If the FAA determines a course is not acceptable, AFS-610 will inform the person seeking the determination.

**201. TESTING PROCEDURES FOR THE REPAIRMAN (LSA) COURSE WITH A MAINTENANCE RATING.** The maintenance course for each of the 5 classes of SLSA should contain at least a knowledge test with 100 multiple choice questions. Each final test should be further subdivided into three broad areas: regulatory, technical, and recordkeeping. The course provider should administer the final test to each student and grade the test. The passing grade should be no less than 80 percent. Once the student has passed the knowledge test and demonstrated the skills necessary to be a repairman, the course provider should issue a certificate of completion. The person receiving the certificate of completion may then present the certificate of age, and citizenship (described in paragraph 127a) to the local FSDO. Upon review of the documentation, and determination of compliance with regulatory requirements, the FAA will issue a repairman (LSA) certificate with a maintenance rating.

### 202. TERM OF VALIDITY FOR REPAIRMAN (LSA) CERTIFICATES WITH INSPECTION OR MAINTENANCE RATINGS.

**a.** End of Ownership or Operation. The repairman (LSA) certificate with an inspection rating is valid until the repairman no longer owns or operates the LSA identified on his or her certificate or the certificate is surrendered, suspended, or revoked. The repairman (LSA) certificate with a maintenance rating is valid until the certificate is suspended, or revoked.

**b.** Transfer of Ownership. If a repairman with an inspection rating transfers ownership of the aircraft that is identified on his or her repairman certificate, he or she can no longer perform annual condition inspections on that aircraft. If the repairman buys a replacement aircraft in the same class as the original aircraft, he or she can request that his or her local FSDO re-issue the repairman certificate with the registration and serial number of the new aircraft.

### 203. TERM OF VALIDITY FOR FAA ACCEPTANCE OF INSPECTION AND

**MAINTENANCE RATING TRAINING COURSES.** The FAA will only list a training course as acceptable for 24 calendar-months. At least 60 days prior to the end of the 24 calendar-month period, a training provider should provide the FAA with any revisions to the information previously provided in order for a course to remain listed as acceptable.

**204. LEVEL OF TRAINING.** Both the inspection and maintenance rating courses provide instruction at instructional level 3. Appendix A of part 147 identifies level 3 performance as a level where a student can perform the task by demonstrating a high level of skill.

### 205. THRU 299. RESERVED.

## CHAPTER 3. CONTINUED AIRWORTHINESS OF EXPERIMENTAL AND SPECIAL LIGHT-SPORT AIRCRAFT

**300. CONTINUED AIRWORTHINESS.** Continued airworthiness is a term used to describe the result of maintenance and preventive maintenance performed on an aircraft to maintain it in a condition for safe operation. Continued airworthiness is required to maintain the validity of an aircraft's airworthiness certificate. The aircraft's operating limitations also require continued airworthiness. The amount of continued airworthiness tasks owners/operators must perform to maintain an aircraft's airworthiness depends on the light-sport category in which the aircraft is certificated. ASTM F2295, Standard Practice for Continued Operational Safety Monitoring of a Light Sport Aircraft, is the standard practice for continued operation safety monitoring of a LSA.

**301.** ELSA. LSA that are issued an experimental certificate under § 21.191(i) have no established FAA or industry design standards to meet other than those standards identified in the aircraft's operating limitations. Operating limitations are a permanent part of the aircraft's Special Airworthiness Certificate and must remain in the aircraft during operation. Aircraft certificated under § 21.191(i)(2) and (i)(3) would have a maintenance manual with inspections required at certification, see § 21.193(e).

**302.** SLSA. To be issued an airworthiness certificate in the light-sport category under § 21.190, an aircraft must meet an industry-developed consensus standard acceptable to the FAA, which addresses aircraft design, production, and airworthiness. The aircraft's operating limitations address its continued airworthiness. The aircraft manufacturer has the authorization to make changes, issue safety directives, and approve major repairs and alterations in accordance with the ASTM standard the aircraft was built to at certification. The Aircraft Maintenance Manual (AMM) lists the persons authorized to perform maintenance and inspections including the training required to perform a specific task. All maintenance on an SLSA has to be done by persons certificated under part 65 in accordance with part 43 except the recording of major repairs and alterations on non-FAA-approved products.

### 303. CONTINUED AIRWORTHINESS REQUIREMENTS FOR ELSA.

**a. Details.** There are continued airworthiness requirements for aircraft issued experimental certificates for the purpose of operating LSA. The operating limitations issued with the ELSA airworthiness certificate include these requirements. These requirements ensure that the aircraft continues to be in a condition for safe operation. Part 43 does not apply to an ELSA certificated under § 21.191(i). Non-FAA-certificated persons can accomplish maintenance on an ELSA.

(1) Annual Condition Inspection. This is a detailed, in-depth inspection, performed once every 12-calendar months, of the aircraft and all of its component parts. If the inspection is overdue, the aircraft cannot be flown until an appropriately rated, part 65 certificated person has inspected the LSA and has made the required entry in the aircraft's maintenance records stating that the aircraft is in a condition for safe operation.

(2) Annual Condition Inspection Checklist. The inspection checklist may be one designed by the manufacturer of the aircraft or one developed by a certificated person performing the inspection. The inspection checklist must meet the scope and detail of part 43,

appendix D. The inspection checklist in AC 90-89, Amateur-Built Aircraft and Ultralight Flight Testing Handbook, Appendix 1, meets the scope and detail of part 43, appendix D and is highly recommended as a guide to develop an inspection checklist for individual makes and models of fixed wing aircraft.

(3) The annual condition inspection must be performed by:

(a) A repairman (LSA) with either an inspection rating on his own aircraft limited to his repairman certificate issued under § 65.107, or with a repairman maintenance rating for the class of aircraft that the repairman is inspecting.

(**b**) A mechanic with an A&P rating.

(c) An appropriately rated FAA repair station.

(4) The certificated person performing the inspection must record it in the aircraft's maintenance records in accordance with the inspection statement in the aircraft's operating limitations. (See Appendix 1, Figure 1, Sample Entry for Annual Condition Inspection for an Experimental Light-Sport Aircraft (ELSA)).

NOTE: If a major malfunction or defect is found during the annual condition inspection, it is strongly recommended that the repairman, mechanic, or repair station report the problem to the FAA and to http://av-info.faa.gov/sdrx within 72 hours for any FAA TC product, also have the aircraft owner report the program to the aircraft's manufacturer for any other part, assembly or product produced in accordance with the ASTM and the aircraft manufacturer. The LSA maintenance manual will have instruction for the report.

**b.** Major Alterations. If the aircraft is issued an ELSA certificate, a non-certificated person may perform additional maintenance, preventive maintenance, or alterations on the aircraft. If a non-certificated person performs a major alteration, as defined by § 1.1 (e.g., changing the engine to another model that increases the original engine horsepower by 10 percent or more), he or she must make a maintenance record entry and a new FAA Form 8130-6, Application for U.S. Airworthiness Certificate, and send it to the FAA Aircraft Registration Branch (AFS-750). A new FAA Form 8130-6 is required because he or she has modified the aircraft and it is no longer the same aircraft as identified on the original FAA Form 8130-6 in the aircraft's file. A Designated Airworthiness Representative (DAR) or FAA aviation safety inspector (ASI) will review the change(s) and issue new operating limitations for the aircraft. The issued operating limitations may require the aircraft to be put in a flight test area for a certain number of hours until the owner/operator has flight tested the new alteration and the aircraft is proven to be safe to operate within its design envelope. When the flight-testing is complete, the test pilot should sign the aircraft off as safe-to-fly in accordance with its operating limitations. (See Appendix 1, Figure 2, Sample of a Major Alteration Entry for an Experimental Light-Sport Aircraft (ELSA)).

**c. Major Repairs.** If any person performs a major repair on an ELSA, he/she should record that repair and the description of the data used to make the repair in the aircraft's maintenance records for future reference. It is strongly recommended that persons performing major repairs to an aircraft report any malfunction or defect concerning the aircraft to the FAA at http://av-info.faa.gov/sdrx and to the aircraft's manufacturer. (See Appendix 1, Figure 3, Sample of a Major Repair Entry for an Experimental Light-Sport Aircraft (ELSA)).

**d.** Maintenance. Any person may perform maintenance on an ELSA. (See Appendix 1, Figure 4, Sample of a Maintenance Record Entry for an Experimental Aircraft (ELSA)).

304. CONTINUED AIRWORTHINESS REQUIREMENTS FOR SLSA. An aircraft issued an SLSA airworthiness certificate under § 21.190 was designed, built, and certified in accordance with an industry consensus standard acceptable to the FAA. This standard is identified on the manufacturer's Statement of Compliance that is part of the aircraft's records. Due to design and production standards for SLSA, there are additional requirements for continued airworthiness to ensure the owner/operator maintains these aircraft in a condition for safe operation. For example, a certificated repairman or mechanic under part 65 must perform an annual condition inspection within 12 calendar-months. Also, the operating limitations may require the manufacturer to establish additional maintenance requirements. Examples of additional requirements concern compliance with safety directives issued by the manufacturer for non-FAA-approved products and ADs which may be issued for FAA-approved TC products installed on the aircraft. For TCs, see § 21.11. In accordance with part 43 owners/operators must accomplish these directives and any other maintenance. In addition, if using the SLSA for compensation or hire to tow a glider or to conduct flight training, the aircraft must have an additional inspection after every 100 hours of operation and recorded in the aircraft maintenance record.

NOTE: For FAA information on LSA, visit the FAA aircraft Web site at http://www.faa.gov/aircraft/gen\_av/light\_sport. The page has a lot of information including the list of certificated aircraft that can be flown with light-sport privileges. It also includes a list of the accepted FAA ASTM standards for SLSA certification.

**305. REQUIREMENTS FOR SLSA CONDITION INSPECTIONS.** Section 91.327, Aircraft having a special airworthiness certificate in the light-sport category: Operating limitations.

**a. Operating Limitations.** The aircraft operating limitations will require that the owner/operator perform a condition inspection within 12 calendar-months for an SLSA.

(1) A certificated repairman with a LSA maintenance rating, an appropriately rated mechanic, an appropriately rated repair station (in accordance with the applicable provisions of part 43 of this chapter and maintenance and inspection procedures developed by the aircraft manufacturer), or a person acceptable to the FAA, is required to maintain the aircraft.

(2) Once every 12 calendar-months, a certificated repairman (LSA) with a maintenance rating, an appropriately rated mechanic, an appropriately rated repair station (in accordance with inspection procedures developed by the aircraft manufacturer), or a person acceptable to the FAA performs a condition inspection.

**b.** Annual Condition Inspection Maintenance Record Entry. A sample annual condition inspection maintenance record entry for an SLSA is shown in Appendix 1, Figure 5, Sample of Annual Condition Inspection for a Special Light-Sport Aircraft (SLSA).

**c.** Additional Mandatory Maintenance Requirements for SLSA. In addition to the annual condition inspection, there may be additional mandatory maintenance requirements for SLSA. These additional requirements may take the form of, but are not limited to, manufacturer's safety directives for non-FAA-approved products and/or ADs issued against FAA-approved products installed on the aircraft. Maintenance providers will note these additional maintenance requirements to be accomplished by the owner/operator as authorized in the aircraft operating limitations issued with the aircraft's SLSA airworthiness certificate.

### 306. MAINTENANCE AND ALTERATION OF SLSA.

**a.** Maintenance and Alterations. Any maintenance or alteration that the repairman, mechanic, or repair station performs on an SLSA, they must accomplish using data supplied by the manufacturer and performed by a repairman (LSA) with a maintenance rating, a mechanic with an A&P rating, or a repair station appropriately certificated for that class of SLSA in accordance with part 43.

**b. Preventive Maintenance.** The holder of any pilot certificate may perform preventive maintenance on an SLSA; however, the holder of a sport pilot certificate may only perform preventive maintenance on an aircraft owned or operated by that pilot, unless prohibited by the aircraft's operating limitations.

**c. Major Repairs.** Persons that can perform maintenance, major repairs or alterations. A certificated repairman with an LSA maintenance rating, an appropriately rated mechanic, or an appropriately rated repair station in accordance with the applicable provisions of part 43 of this chapter and maintenance and inspection procedures developed by the aircraft manufacturer or a person acceptable to the FAA.

**d.** Additional Training. To perform a major repair, a repairman (§ 65.107) with a maintenance rating, a mechanic with an A&P rating, or appropriately certificated repair station, may be required by the aircraft manufacturer to receive additional training. This training should be from either the manufacturer or from an industry-accepted training provider. A person certificated under § 65.71 who has received the task specific training and has the tools, manuals, and the required information from the aircraft manufacturer for the major repair or alteration may also provide any task-specific training. The aircraft manufacturer may require a level of certification of maintenance personnel to perform the major repair or alteration. (Refer to Appendix 1, Figure 6 and ASTM F2483 and F2295 for maintenance procedures.)

### NOTE: Any person performing a major repair should report malfunctions or defects of TC'd products to the FAA at http://av-info.faa.gov/sdrx within 72 hours, and components built to ASTM standard to the aircraft's manufacturer as per the manufacturer's maintenance manual instructions.

e. Major Alterations. If the owner wants a major alteration such as a new engine/propeller combination installed on the aircraft, the owner must obtain the manufacturer's consent and all applicable data prior to making the alteration. (See Appendix 1, Figure 7, Sample of How to Record a Major Alteration in the Aircraft Maintenance Records for a Special Light-Sport Aircraft (SLSA)).

(1) If the manufacturer issues a mandatory safety directive and the owner of the SLSA does not wish to comply with the directive, then the owner of the aircraft may not operate the aircraft before accomplishing the action specified in the directive.

(2) The owner may surrender the SLSA airworthiness certificate to the FAA or its representative and apply for an ELSA airworthiness certificate (§ 21.191(i)(3)) with new operating limitations for the aircraft if the aircraft owner does not accomplish compliance with the safety directive and the owner intends to continue to operate the aircraft. The owner can accomplish this action by filling out a new FAA Form 8130-6 and submitting it to the local FSDO. Upon review, the aircraft will be issued new operating limitations, which will limit the now ELSA aircraft from flight instruction. See the current edition of FAA Order 8130.2, Airworthiness Certification of Aircraft and Related Products, for instructions.

### 307. REPAIRMAN (LSA) WITH A MAINTENANCE RATING: REPLACEMENT OF A PROPELLER ON AN SLSA AND AIRCRAFT MAINTENANCE RECORDS.

Replacement of a propeller on an SLSA with one of the same manufacturer model/part number, pitch, and diameter is a maintenance action requiring a standard logbook entry. Replacement of a propeller having a different pitch and/or diameter is a major alteration, and the SLSA manufacturer must approve that major alteration. The maintenance provider must record a copy of the manufacturer's approval and a maintenance entry describing the removal and installation of the new propeller in the aircraft records. (See Appendix 1, Figure 7).

### 308. THRU 399. RESERVED.

### APPENDIX 1. CONTINUED AIRWORTHINESS OF EXPERIMENTAL AND SPECIAL LIGHT-SPORT AIRCRAFT—SAMPLE MAINTENANCE RECORD ENTRIES

### FIGURE 1. SAMPLE ENTRY FOR ANNUAL CONDITION INSPECTION FOR AN EXPERIMENTAL LIGHT-SPORT AIRCRAFT (ELSA)

### **REGISTRATION NUMBER:** N1995T

**DATE:** 3/15/06

AIRCRAFT TOTAL TIME: 436.2 hours.

I certify that this aircraft has been inspected in accordance with the scope and detail of 14 CFR part 43, appendix D on this date and is found to be in a condition for safe operation.

/s/ *Patrick Poteen* Patrick Poteen, Repairman LSI 123456789

### FIGURE 2. SAMPLE OF A MAJOR ALTERATION ENTRY FOR AN EXPERIMENTAL LIGHT-SPORT AIRCRAFT (ELSA)

### **REGISTRATION NUMBER:** N6464R

**DATE:** 1/3/07

AIRCRAFT TOTAL TIME: 31 hours.

Removed original axles and brake assembly. Installed new disk brake and axle assembly on both main gear and toe brakes in accordance with the Quick Stop Maintenance Manual. W&B revised. Operational check OK. Brake installation is in a condition for safe operation.

<u>/s/ Joseph R. Pilot</u> Joe R. Pilot, L.S. Pilot 987654321

# FIGURE 3. SAMPLE OF A MAJOR REPAIR ENTRY FOR AN EXPERIMENTAL LIGHT-SPORT AIRCRAFT (ELSA)

### **REGISTRATION NUMBER:** N70891

**DATE:** 2/10/05

AIRCRAFT TOTAL TIME: 431 hours.

Repaired cracked main gear support tube on left gear by welding a fish mouth repair in accordance with the current edition of AC 43.13-1, Chapter 4, Section 5, Figure 4-35. The left main gear support tube is now in a condition for safe operation.

/s/ Ted C. Welder

Ted C. Welder, L.S. Pilot 987654321

# FIGURE 4. SAMPLE OF A MAINTENANCE RECORD ENTRY FOR AN EXPERIMENTAL LIGHT-SPORT AIRCRAFT AIRCRAFT (ELSA)

**REGISTRATION NUMBER:** N9500M

**DATE:** 8/24/06

AIRCRAFT TOTAL TIME: 92 hours.

Replaced left main tire in accordance with Skyflash 5000 Maintenance Manual. Operational check OK, and the aircraft is in a condition for safe operation.

/s/ Jack Flash Tube

Jack F. Tube, L.S. Pilot 987654321

# FIGURE 5. SAMPLE OF ANNUAL CONDITION INSPECTION FOR A SPECIAL LIGHT-SPORT AIRCRAFT (SLSA)

### **REGISTRATION NUMBER:** N1995T

**DATE:** 3/15/05

AIRCRAFT TOTAL TIME: 436.2 hours.

I certify that this aircraft has been inspected in accordance with the RimFire, model 61 condition inspection as identified in the aircraft's instructions for continued airworthiness (ICA) on this date and is found to be in a condition for safe operation.

/s/ Leo Rim Fire

Leo R. Fire, Repairman LSM 133456789

### FIGURE 6. SAMPLE OF HOW TO RECORD A MAJOR REPAIR IN THE AIRCRAFT MAINTENANCE RECORDS FOR A SPECIAL LIGHT-SPORT AIRCRAFT (SLSA)

**REGISTRATION NUMBER:** N1995T

**DATE:** 3/15/05

AIRCRAFT TOTAL TIME: 436.2 hours.

Overhauled RimFire 435 engine gear reduction unit in accordance with RimFire Overhaul Manual, dated 2/2/04, revision 3. Engine gear reduction unit was installed and tested as per manufacturer's overhaul instructions and is determined to be in a condition for safe operation.

/s/ Bill Shade Tree Bill S. Tree, Repairman LSM 18095390

### FIGURE 7. SAMPLE OF HOW TO RECORD A MAJOR ALTERATION IN THE AIRCRAFT MAINTENANCE RECORDS FOR A SPECIAL LIGHT-SPORT AIRCRAFT (SLSA)

### **REGISTRATION NUMBER:** N70891

**DATE:** 3/15/05

AIRCRAFT TOTAL TIME: 436.2 hours.

Installed set of OBIE floats in accordance with the float manufacturer's installation instructions. See attached letter, dated 12/25/05, from aircraft manufacturer agreeing to the aircraft modification providing the statement that the aircraft meets the ASTM standard and compliance with 14 CFR § 1.1 (definitions). Aircraft W&B, flight manual, and equipment list are revised. Aircraft has been approved for return to a condition for safe operation and requires an operational flight check by a rated pilot to determine that the aircraft performs within its design and flight envelope.

/s/ Van Letter Sink

Van L. Sink, Repairman LSM 180953900

## APPENDIX 2. REPAIRMAN (LIGHT-SPORT AIRCRAFT) CERTIFICATION

### FIGURE 1. SAMPLE FAA FORM 8610-2, REPAIRMAN (LIGHT-SPORT AIRCRAFT) APPLICATION (INSPECTION RATING) (FRONT SIDE)

				Τ¥	PE O	R PI	RINT AL	L ENT	RIES	IN II	٧ĸ				Form	n App	proved	1 OM	B No. 2	120-	0022
U.S. Depart	tment of Transporta	tion																			
	: RAME	AIRMAN		REPAIRM	IAN		RRATI	NG AF		PAP	RACH SEI	IUTE RI NIOR ] SEAT ] BACK			HEST						
APPLICATION FOR:				(Specify	Ratin	g)					-	DRON			-u-						
AFFLICATION FOR.	A. NAME (First,		DOLUN									K.PE	RMAN	ENT MA	LING	ADDR	ESS				
7	B. SOCIAL SEC			Edsel Wi				HEIGHT	F	WEIGH	-л	1954	Fiper	RD							
ATION	XXX-3	0X-XXXX		1	0-07-19	54		68	IN	200				ND STR	EET, P	.O. BO	X, ETC				
ORM	F. HAIR Blond	G. EYES Blue		H. SEX Male	Ľ	NATIC	NALITY (C	tizenship) U.S.				Nowa CITY									
I. APPLICANT INFORMATION	J. PLACE OF BI	RTH		Sla	ipout, O	ĸ							E	73170					ZĪP ĒO	DE	
LICA	L. HAVE YOU E	VER HAD AN	AIRMAN	CERTIFIC	TAE SU	SPEND	DED OR RE	VOKED?				M.DO	-		HAVE	OUE	/ER HE	LD AND	FAAAIR	-	
APP		(If "Yes," exp	lain on an	attached s	heet key	ing to	appropriate	item numi	ber)					YPE: So	ortPibt				NO 🗖	YES	Ł
-	N. HAVE YOU E PERTAINING DRUGS OR S	TO NARCO	TIC DRU	JGS, MAR	JUANA	A, ANI	D DEPRES					NO				;	DATI	E OF F	INAL CO	NVICT	ION
	A. CIVIL EXPER	RIENCE		-				CE											FION F	OR	
E OR	D. GRAD	UATE	(1) N	AME AN	DLOC	ATIO	N OF SCI	HOOL													
PLIEC	COUR	PROVED SE	(2) S	CHOOL	NO.	(3	) CURRI	CULUM	FROM	WHIC	H GF	RADUAT	TED			(4) (	DATE				
II. CERTIFICATE OR RATING APPLIED FOR ON BASIS OF -	AND IS	NT HAS MA	NDED T	O TAKE T			ISS (1	) SCHO	OL NA	ИE			N	0.		(2) S	CHOOL	OFFIC	IAL'S SIG	NATU	RE
II. C RAT	F. SPECIA	LAUTHOR	ZATION	TO TAK		(1) D/	ATE AUTH	L	(2) D/	ATE AU	TH, EX	PIRES	(3) F	AA INSI	PECTO	R SIG	NATUR	E	(4) FA4	DISTO	OFC.
	(FAR 6			(1) S	ERVIC	E			(2) F	ANK	ORF	PAY LEV	/EL		(	3) MI	LITAR	YSP	ECIALI	YCC	DE
	COMPETE OBTAINED	IN		·	0.000	0.001		OT EVO		DELAT		O OF DA	FIGAT	F AUD I		100	150.5	00			
	B. APPLICANTS (Continue on s					L GRA	DUATES, L	IST EXPE	RIENCE	RELA	IING I	UGERTI	FIGAI	EAND	(A LINC	APP	LIED H	UR.			
Ш	DATES - MO				E	MPLC	YER AN	D LOCA	TION					TYP	E WC	RKF	PERFO	ORME	D		
RECORD OF EXPERIENCE	FROM	Т	0				Canadian	Valley			-				Dowe	red P	arach	uta			
EXPE							echnology	·····									n N12				
D OF							LSRIPPO				-						. 1234				
COR							Graduatio	n Date													
II. RE		1					xx/xx/	xxxx													
	C. PARACHUTE	RIGGER APP	LICANT	S:	SE/	AT	CHEST	BA	СК	LAF	>	FOR MAST					ACKE				
	INDICATE BY PARACHUTE	S PACKED	MANT									RATIN	IG		□ S RI	ENIO IGGE			MILIT. RIGGI		
IV. APPLICANTS CERTIFICAT		A. SIGN	ATURE				S BY ME	ON THI	S APPI	ICAT	ION /	ARE TR	UE	B. D	ATE	;	xx/xx	xxxx	x		
V. IENCE REQUIRE	LICANT MEETS THE MENTS OF FAR 6 AKE THE REQUIRE	E EXPER- 5 AND IS	DATE				INSPEC	TOR'S	SIGNA	TURE				-		FA	A DIS	TRIC	TOFF	CE	
Empreg. D.O.			TR .s.h.	Src #rt		FC	Rating (1)	SE ONI	Y	Ratin	0 (2)			Ra	ing (3)		_		Rating (	0	
	133.			~10																Ť	
						LII	INTATION	IS								946					
FAA Form 8610-2 (	2-85) SUPERSEDE														SG		1993	769	012/80	055	
	2-00 OUPEROEDE	ALVIOUS D	2000											0.			1993	103	J.200	200	

### FIGURE 2. SAMPLE FAA FORM 8610-2, REPAIRMAN (LIGHT-SPORT AIRCRAFT) APPLICATION (INSPECTION RATING) (REVERSE SIDE)

### **Results of Oral and Practical Tests**

			ME	CHANIC	2							PARACHUT	E RIGGER		
1. GENERAL -	Airfram	e and Pov	werplant								SEAT	PAS	s 🗖	FAIL	
ORAL TEST		PASS		EXPIR	ATION DATE:	F	AIL				BACK	PAS	s 🗆	FAIL	
QUES. NO.										ТҮРЕ	CHEST	PAS	s 🗆	FAIL	
PRACTICAL T	EST	PASS		EXPIR	ATION DATE:	F	AIL				LAP	PAS	s 🗇	FAIL	
PROJ. NO.	Τ											PAS	s 🗆	FAIL	
II. AIRFRAME STR	UCTURE	5						-		L		REMAR	KŜ		
ORAL TEST		PASS		EXPIR.	ATION DATE:	F	AIL								
QUES. NO.										0k	lahoma Dr	iver's	License	#34557	8878
PRACTICAL T	EST	PASS		EXPIR/	ATION DATE:	F	AIL				pires xx/				
PROJ. NO.															
III. AIRFRAME	SYSTEM	IS AND C	OMPONE	NTS											
ORAL TEST		PASS		EXPIR	ATION DATE:	F	AIL								
QUES. NO.	1	1						Ι							
PRACTICAL T	EST	PASS		EXPIR	ATION DATE:	I F	AIL								
PROJ. NO.															
IV. POWERPLANT	THEORY	AND MAINT	TENENCE		I			1							
ORAL TEST		PASS		EXPIR		F	AIL								
QUES.	1	Τ		T	DATE:			1							
NO. PRACTICAL TE	L	PASS		EXPIR		lF	AIL		-						
PROJ. NO,	Τ	Τ		Ľ	ATE:		1								
V. POWERPLANT	SYSTEMS	AND COM	PONENTS					1							
ORAL TEST		PASS		EXPIRA	ATION DATE:		FAIL								
QUES. NO.				'	DAIL.				-						
PRACTICAL TI	EST	PASS		EXPIRA	ATION DATE:	I I	FAIL								
PROJ. NO.				T.		-			-						
NO			L			DESIGNATE	D EXA	MINE	R'S	REP	ORT				
I have personal	y tested	this applic	ant in acco								-				
I HAVE INDICA THE RESULT A				_	ROVED PPROV	(Temporary Certifical	te Issued)				D (Temporary Certification ) - ORAL / PRACT				
ATTACH-			EPORT OF												
MENTS:			AA FORM 8				TEMPO					SEAL SYN	BOL CARD		
DATE TEST CO	MPLET	ED		EXAN	INER'S	SIGNATURE						DESIG	NATION NO.		
						APPLIC		ERTFI	CA.	TION					
THIS BLOCK M	UST BE	COMPLE	TED BY T		CANT A						RY CERTIFICATE	(FAA FORM 8	060-4)		
A. HAVE YOU B	EVER HA	D AN AIF	RMAN CER	TIFICATE	SUSPE	ENDED OR REV	OKED?			×	NO D	Yes If "Yes,	"explain on a	n attached sh	eet.
B. HAVE YOU EN PERTAINING DRUGS OR S	TO NAP	RCOTIC D	RUGS, MA	RIJUANA,	AND D	FEDERAL OR S EPRESSANT C	R STIMU	LANT			NO 🗆 YE	is	DATE OF I	FINAL CONVIC	TION
I CERTIFY THA	T THE S		NTS MADE								TE XX/XX/XXXX				
A. VIGNATU		ann ann S	- gii)							1	INSPECTOR	S REPOR	т		
I HAVE -							WI	THE	INDI		RESULT -	PARACHUT	E SEAL		
	THIS AP	PLICANT	S PAPERS	1			🖾 AF	PROVE	ED			SYMBOL AS	SIGNED		
PERSONALI ACCORDAN AND STAND	CE WITH							SAPPR	OVE	D			ER SHEET GR (Competency)		
					DAT	E		INS	SPEC	TOR'S	SIGNATURE		FAA DISTR	CT OFFICE	
						xx/xx/xx	x	Mr.	. FAA				xx	xxxxxx	

### FIGURE 3. SAMPLE FAA FORM 8610-2, REPAIRMAN (LIGHT-SPORT AIRCRAFT) APPLICATION (MAINTENANCE RATING) (FRONT SIDE)

					TYPI	E OF	R PR	INT	AL	LEN	TRI	ES I	IN IN	IK				Fo	rm A	pprov	ved O	MB	No. 21	20-00	)22
	nent of Transporta iation Administr																								
		AIRMAN		TIFIC REPA			D/OF	R R/	ATIN	IG A	PPL				HUTE F	રાહહ	ER								
AIRFR/															NIOR ] SEA		MASTI	er Ches	т						
POWER	RPLANT		ght Spo	(Spe			7)			_				_	BAC		_	LAP							
APPLICATION FOR:	ORIGINAL ISSU/	ANCE 🗆 A	DDED R	ATING	-																				
	A. NAME (First,	Middile, Last)		Patric	o Jose	ph Po	iteen								K. P	ERM	VNENT N	AILIN	g adi	DRESS					
TION	B. SOCIAL SEC	URITY NO. XX-XXXX		C. D.(		b., Day 7-195			D, H	HEIGHT 72	IN	E.V	VEIGH 170	ſΓ			E <u>dae Of</u> AND ST				TC.				-
DRMA	F. HAIR Black	G. EYES Blue		H. SE Ma		I. N	IATION	ALIT	Y (CRE	zenship U.S.	J				Stri CIT	natow	n								
L APPLICANT INFORMATION	J. PLACE OF BI	RTH		т	ahlequ	iah, O	ж								OK		7317	0				- zi	IP CODE		_
LICA	L. HAVE YOU E	VER HAD AN	AIRMAN	CERTIF	ICTAE	SUS	PENDE	D OF	R REV	OKED?	'						J NOW O CATE?	RHAV	EYOU	JEVER	HELDA	ND F	AA AIRM	AN	_
APF.		(If "Yes," expl	ain on ar	n attache	d shee	t keyir	ng to ap	prop	riate il	lem nun	aber)						TYPE:				D	NO NO	ום כ	ÆS⊮	
2	N. HAVE YOU E PERTAINING DRUGS OR S	G TO NARCO	TIC DRI	JGS, N	ARIJU	IANA,	AND	DEP	RESS	ANT O	R ST	IMUL	ANT				YES				A.TE OF	FIN	AL CON	VICTIO	N
	A. CIVIL EXPER	RIENCE					B. MIL		RY	E					[	C	REPA					ATI	ON FO	R	
OR FOR	D. GRAD		(1) N	AME /	ND L	.OCA																			
PPLIED	OF AP COUR	PROVED	(2) 5	CHOC	L NO		(3)	CUF	RRIC	ULUM	FRO	OM V	VHIC	H GI	RADUA	TED			(4	4) DA"	E				
II. CERTIFICATE OR RATING APPLIED FOR ON BASIS OF -	AND IS PRACT	NT HAS MA RECOMME ICAL TEST	FAR 65	0 TAK	THE			s	(1)	SCHO							NO.					FICIAI	L'S SIGN	ATURE	
= 2		al Author Anic's Ora 5, 80)					1) DA1	re A	UTH.		C	2) DA1		TH.E	PIRES	(3	) FAA IN	SPEC	TORS	SIGNAT	URE	6	(4) FAA D	IST OF	2
	A. MILITARY COMPETE OBTAINED			(1)	SER	VICE					(	(2) R/	ANK	ORF	PAYLE	VEL			(3) 1	MILIT	ARY S	PEC	CIALTY	COD	E
	B. APPLICANTS (Continue on s					HOOL	GRAD	UATE	ES, LIS	ST EXP	ERIEI	NCE F	RELAT	'ING '	FO CER	TIFIC	ATE AND	RATI	NG AF	PPLIE	FOR.				
E	DATES - MO			_		EN	IPLO'	YER	AND	LOC	TIO	N					TY	'PE V	VOR	< PEF	FORM	NED			
III. RECORD OF EXPERIENCE	FROM	T	0				South	hunor	ot Tor	abaolo				_				Wai	iabt 9	25:0 0	ontrol				
EXPE							Sout			chnolo	99							we	igni a		ontrol				
OF B									Cente					_											
ORD										00001															
.REC										Date				_											
≡								xx /	xx / x																
	C. PARACHUTE			S:	F	SEA	T	CHE	EST	BA	CK		LAP	'	FOR MAS					PAC	KED A	S A	-		
	INDICATE BY PARACHUTE	S PACKED													RATI ONL	Y			SEN RIGO	lior Jer			NILITA		
IV. APPLICANTS CERTIFICATIO	N	I CERT A. SIGN First	ATUR					BY	ME	ON TH	IS A	PPLI	CATI	ON	ARE T	RUE	B.	DATE	I	xx	xx/xx	xx			
V. IENCE REQUIRE ELIGIBLE TO TAI	MENTS OF FAR 6	5 AND IS	DAT	E						ror's		NAT	URE						F	AA C	ISTRI	СТ	OFFICI	E	
Empreg. D.O.	.seal .con iss.	Act lev .	rR ∴s.h.	Src	#rte			R FA		SE ON	LY		Ratin	g <b>(2</b> )			R	tating (	3)			F	Rating (4)		
					Section of	1000000		100000				Notes and		CO.C.C.	City of California			10.0 10.00		C.C.C.C.C.C.	-	1	*******		20
	- T - T T T	- <b>-</b> -		1	T		LIM	TAT		s					Т	T	1 1	1		T				1 7	
		+ + +	+		-			+	-		$\vdash$		$\vdash$	_	_	+	$\left  + \right $	+		-		+	_	$\left  \cdot \right $	
	-85) SUPERSEDE		DITION									1					<u> </u>						12/800		_

Page 3

### FIGURE 4. SAMPLE FAA FORM 8610-2, REPAIRMAN (LIGHT-SPORT AIRCRAFT) APPLICATION (MAINTENANCE RATING) (REVERSE SIDE)

### **Results of Oral and Practical Tests** MECHANIC PARACHUTE RIGGER 1. GENERAL - Airframe and Powerplant SEAT PASS [] FAIL EXPIRATION ORAL TEST BACK PASS FAIL PASS FAIL DATE TYPE QUES. CHEST PASS 🗋 FAIL NO. EXPIRATION PRACTICAL TEST FAIL PASS LAP PASS [] FAIL DATE PROJ. PASS FAIL NO. II. AIRFRAME STRUCTURES REMARKS EXPIRATION ORAL TEST PASS FAIL DATE: QUES. Oklahoma Driver's License #345578878 NO. EXPIRATION expires xx/xx/xxxx PRACTICAL TEST PASS FAIL DATE PROJ. NO. III. AIRFRAME SYSTEMS AND COMPONENTS EXPIRATION ORAL TEST PASS FAIL DATE: QUES NO. EXPIRATION PRACTICAL TEST PASS FAIL DATE PROJ. NO. IV. POWERPLANT THEORY AND MAINTENENCE EXPIRATION ORAL TEST FAIL PASS DATE QUES NO. EXPIRATION DATE: PRACTICAL TEST PASS FAIL PROJ. NO. V. POWERPLANT SYSTEMS AND COMPONENTS EXPIRATION ORAL TEST PASS FAIL DATE QUES. NO. EXPIRATION PRACTICAL TEST FAIL PASS DATE PROJ. NO. DESIGNATED EXAMINER'S REPORT I have personally tested this applicant in accordance with pertinent procedures and standards, and I HAVE INDICATED THE RESULT AS: APPROVED (Temporary Cartificate Issued) APPROVED (Temporary Certificate NOT Issued) DISAPPROVED FAR 65. 80 - ORAL / PRACTICAL PASSED REPORT OF WRITTEN TEST SUPERSEDED CERTIFICATE LETTER ATTACH-MENTS: FAA FORM 8610-2 SEAL SYMBOL CARD ☐ TEMPORARY CERTIFICATE DATE TEST COMPLETED EXAMINER'S SIGNATURE DESIGNATION NO. APPLICANT CERTFICATION THIS BLOCK MUST BE COMPLETED BY THE APPLICANT AT THE TIME OF ISSUANCE OF TEMPORARY CERTIFICATE (FAA FORM 8060-4) A. HAVE YOU EVER HAD AN AIRMAN CERTIFICATE SUSPENDED OR REVOKED? ...... NO NO Yes If "Yes," explain on an attached sheet. B. HAVE YOU EVER BEEN CONVICTED FOR VIOLATION OF ANY FEDERAL OR STATE STATUTES DATE OF FINAL CONVICTION PERTAINING TO NARCOTIC DRUGS, MARIJUANA, AND DEPRESSANT OR STIMULANT DRUGS OR SUBSTANCES? 🖾 NO YES -----I CERTIFY THAT THE STATEMENTS MADE BY ME ARE TRUE. A. SIGNATURE (print and sign) B. DATE XX/XX/XXXX FAA INSPECTOR'S REPORT I HAVE -WITH THE INDICATED RESULT -PARACHUTE SEAL SYMBOL ASSIGNED EXAMINED THIS APPLICANTS PAPERS APPROVED PERSONALLY TESTED THIS APPLICANT IN DISAPPROVED ANSWER SHEET GRADED (Military Competency) ACCORDANCE WITH PERTINENT PROCEDURES AND STANDARDS DATE INSPECTOR'S SIGNATURE FAA DISTRICT OFFICE XX/XX/XXXX Mr. FAA XXXXXXXXX

### FIGURE 5. SAMPLE FAA FORM 8060-4, TEMPORARY AIRMAN CERTIFICATE (INSPECTION RATING, WEIGHT-SHIFT-CONTROL AIRCRAFT)

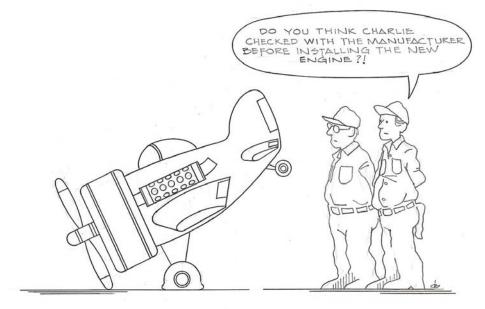
		-	SPORTATIC	TATES OF AMERICA DN—FEDERAL AV RMAN C	IATION ADMINI		III. CERTIFICATE NO. <b>PENDING</b>
	THIS CERTIFIES T	V.	: Sam I A 1954 PII NOWATA				
	DATE OF BIRTH	HEIGHT	WEIGHT	HAIR	EYES	SEX	NATIONALITY VI.
7	10-07-1954	68 in.	200	BLONDE	BLUE	м	USA
VII. AIRMAN'S SIGNATURE /S/ $Edsel\ William\ Ford$	Weig N123	ection ht-Shift-C	ontrol Ai	ircraft			
IATI	XIII.					1	SAMPLE
SIGN	THIS IS 🖾 AN ORI GRADE OF CERTIF		E 🗌 A REISS	UANCE OF THIS	DATE OF SUPE	RSEDED AIRM	MAN CERTIFICATE
N'S	В				R		ER'S DESIGNATION NO. OR 'OR'S REG. NO.
AIRMA	X. DATE OF ISSUA	NCE	X. SIGNATL	JRE OF EXAMINER	OR INSPECTOR		ERT NUMBER)
VII. A	03/15/2006		/s/ Geo	orge Axsmit	h	DATE DE NON	SIGNATION EXPIRES
FAA F	ORM 8060-4 (8-79)	U	SE PREVIOUS	S EDITION			

### FIGURE 6. SAMPLE FAA FORM 8060-4, TEMPORARY AIRMAN CERTIFICATE (MAINTENANCE RATING, WEIGHT-SHIFT-CONTROL AIRCRAFT)

	-		RMAN CE	-		PENDI
THIS CERTIFIES T	V.		haker EST CHELTH ELPHIA, PA		VE.	
DATE OF BIRTH	HEIGHT	WEIGHT	HAIR	EYES	SEX	NATIONALITY
10-07-1959	72 in.	170	BLACK	BLUE	м	USA
reverse of this ce						
RATINGS AND LIM		EPAIRM	IAN (LIGHT	SPORT A	RCRAF	"Γ)
	NTENAN					
<b>WEI</b> x111.	GHT-SHI	FT-CON	TROL AIRC			
WEI	GHT-SHI	FT-CON				SAMPL MAN CERTIFICATE
WEI XIII. THIS IS ⊠ AN ORI GRADE OF CERTIF	GHT-SHI	FT-CON		DATE OF SUPE	RSEDED AIR	IER'S DESIGNATION NO. C
WEI XIII. THIS IS ⊠ AN ORI GRADE OF CERTIF	GHT-SHII	FT-CON	SUANCE OF THIS	DATE OF SUPE	EXAMIN	MAN CERTIFICATE
WEI XIII. THIS IS 🛛 AN ORI GRADE OF CERTIF	GHT-SHII	FT-CON	UANCE OF THIS	DATE OF SUPE	EXAMIN INSPEC (INS)	MAN CERTIFICATE IER'S DESIGNATION NO. C TOR'S REG. NO.

### APPENDIX 3. FREQUENTLY ASKED QUESTIONS

"Making mistakes simply means you are learning faster."-Weston H. Agor



1. Can Aircraft Such as J-3-Cubs, Cessna 120s, and Other Light 2-Place Type-Certificated Aircraft that Meet the Definition of Light-Sport Aircraft (LSA) in 14 CFR Part 1 be Maintained Like a Special Light-Sport Aircraft (SLSA)? No. While sport pilots may fly type-certificated or experimental amateur-built aircraft that meet the definition of a LSA, an aircraft previously issued a standard, primary, restricted, limited, or provisional airworthiness certificate (or an equivalent airworthiness certificate issued by a foreign country) cannot "cross over" and be certificated in the SLSA. Under certain very limited circumstances an aircraft previously issued an experimental certificate may be certificated as a SLSA. Owners and operators of aircraft with standard airworthiness Certificates must ensure that their aircraft have annual inspections, comply with Airworthiness Directives (AD), and have work on the aircraft performed in accordance with Title 14 of the Code of Federal Regulations (14 CFR) parts 43, 65, and 91. Experimental amateur-built aircraft must still be inspected in accordance with the aircraft's operating limitations.

2. Can a Cessna 150 Owner Obtain a Supplemental Type Certificate (STC) to Meet the Definition of an LSA? No. Although an owner may obtain an STC that causes an aircraft that previously did not meet the parameters of a LSA to now meet those parameters (such as by lowering the maximum takeoff weight (MTOW)), that STC cannot be used to qualify the aircraft as an LSA. The definition of LSA clearly states that an aircraft must meet the parameters of an LSA "since its original certification." An STC for an aircraft such as a Cessna 150, which reduces the aircraft's weight by removing seats, or by placarding fuel tanks for lower capacity, would fail to qualify the aircraft as an LSA since the aircraft exceeded the parameters of a light-sport at some time since its original certification.

**3.** How Many Types of Aircraft can be Operated as LSA? For example, aircraft that can be operated as an LSA may be certificated in the standard or primary category, or as an experimental amateur-built aircraft. The FAA, however, issues two airworthiness certificates specifically for LSA: the special airworthiness certificate in the light-sport category (SLSA) under 14 CFR part 21, § 21.190, and the experimental certificate for the purpose of operating a light-sport aircraft (ELSA) under § 21.191(i). Both special and experimental light-sport aircraft are issued a (pink) FAA Form 8130-7, Special Airworthiness Certificate.

### 4. What Kinds of Aircraft may be Certificated as ELSA or SLSA?

- Airplanes, gliders, lighter-than-air (balloons and airships), powered parachutes, weight-shift-control aircraft, and gyroplanes may be certificated as ELSA.
- Airplanes, gliders, lighter-than-air (balloons and airships), powered parachutes, and weight-shift control aircraft may be certificated as SLSA. A special airworthiness certificate in the light-sport category can not be issued for a gyroplane because the FAA has determined that it will not accept a consensus standard for these aircraft at this time.

**5.** What are the Inspection Requirements for an ELSA? The experimental certificate for the purpose of operating LSA is issued for aircraft used for pleasure/personal flying only. The ELSA that can tow a 14 CFR part 91, § 91.319(e)(1), light sport glider will need to have an 100 hour inspection in accordance with light sport operating limitations. The inspection requirements for these as aircraft as listed in the operating limitations for experimental amateur-built aircraft, which require the owner to perform an annual condition inspection.

6. What are the Maintenance Requirements for an SLSA? An aircraft issued a special airworthiness certificate in the light-sport category is also issued a pink or special airworthiness certificate. These aircraft cannot be used for compensation or hire, except to tow a glider or unpowered ultralight vehicle or to conduct flight training. The FAA does not limit the ability of a person to rent a SLSA; however, it does limit those operations that a person may conduct when operating the aircraft (SLSA). Because the owner/operator of these aircraft can engage in these operations, a different set of maintenance requirements apply. For example, the aircraft must meet the certification requirements § 21.190 to an industry-developed consensus standard acceptable to the FAA, meet 14 CFR part 43 maintenance requirements performed by maintenance providers certificated under 14 CFR part 65, and comply with § 91.327 operating limitations. All SLSA have to comply with the manufacturer's safety directives and FAA AD's applicable to type-certificated (TC) products installed on the aircraft.

7. What is a Consensus Standard? A consensus standard is an industry developed standard that applies to aircraft design, production, and airworthiness. It is accepted by the FAA for the purpose of certificating LSA. It includes, but is not limited to, standards for aircraft design and performance, required equipment, manufacturer quality assurance systems, production acceptance test procedures, operating instructions, maintenance and inspection procedures, identification and recording of major repairs and major alterations, and continued airworthiness. To obtain the American Society for Testing and Materials (ASTM) Committee standards on light-sport, visit www.astm.org.

**8.** How Many Different Repairman (LSA) Certificates Exist? There is only one certificate, repairman (LSA), but two ratings may be placed on the certificate: inspection and maintenance.

**9.** What Tasks can a Repairman (LSA) Perform with an Inspection Rating? The repairman (LSA) certificate is issued only to the owner of an aircraft issued an experimental certificate for the purpose of operating LSA. This certificate allows the owner to perform the annual condition inspection required by his or her aircraft's operating limitations. Each FAA repairman certificate will identify the owner's aircraft by registration number, class, and serial number and is only for that aircraft as long as the holder owns the aircraft.

# **10.** What Tasks can a Repairman (LSA) Perform with a Maintenance Rating? A repairman (LSA) certificate with this rating allows the repairman to perform, for hire, annual condition inspections on aircraft issued experimental certificates for the purpose of operating LSA under § 21.191(i). It also allows the repairman to approve for return to service (RTS) an aircraft issued a special airworthiness certificate in the light-sport category under § 21.190 after performing maintenance, preventive maintenance, or an alteration to include the required annual condition inspections on SLSA in the class for which the repairman is rated. Additionally, under this rating, the repairman can work on and approve a SLSA for RTS after completion of a manufacturer's safety directive or an AD on a TC'd product installed on the aircraft. These privileges are limited to the class of aircraft for which the repairman has received training, as identified on his or her FAA repairman certificate.

### 11. What are the Limitations of a Light-Sport Repairman with a Maintenance Rating?

The maintenance rating is limited to performing maintenance, preventive maintenance, and alteration functions on ELSA and SLSA aircraft. These privileges do not extend to the performance of a major repair or major alteration on a product produced under an FAA approval. The aircraft's consensus standard specifies that the manufacturer of the aircraft determine what is a major repair and major alteration. The same consensus standard requires the manufacturer to determine what additional training is required for the repairman to be qualified to perform those tasks. The repairman should contact the manufacturer to determine if the major repair or major alteration is authorized and determine if additional training is needed before performing the task.

12. May Experience Earned as Repairman (LSA) with a Maintenance Rating be Used to Meet the Experience Requirement in Part 65, § 65.77 for a Mechanic Certificate? A repairman (LSA) with a maintenance rating may document time worked on LSA. To apply for a mechanic certificate with airframe or powerplant rating, the repairman must document at least 18 months each of practical experience, working on either airframes or powerplants, or at least 30 months of practical experience working on airframes or powerplants concurrently. One month's practical experience is 160 hours of documented time. This time includes all time working on SLSAs and only condition inspection time on ELSA aircraft. Documentation should be in a written format, such as a log showing the date and number of hours spent performing the work, type of work performed, and the registration number of the aircraft the work was performed on. The log entries must be verifiable, which can be accomplished by either statements and/or initials from the individual's employer or supervisor or owner of the aircraft following each entry in the repairman's logbook.

# **13.** Can a Mechanic with Airframe and Powerplant (A&P) Ratings Perform Inspections and Maintenance on Both ELSA and SLSA?

**a.** Work That a Mechanic can Perform. A mechanic with A&P ratings can perform inspections and maintenance on both ELSA and SLSA however, the mechanic must remember that when working on SLSA, the aircraft's consensus standard, maintenance manual, and instructions for continued airworthiness (ICAS) must be used instead of TC data for non-FAA-approved products. Furthermore, on SLSA, both part 43 and the general privileges and limitations of § 65.81 still apply. To satisfy the requirements of § 65.81, the mechanic must have performed that work at an earlier date, was trained to do the work, or was supervised by another mechanic or repairman performing that task. If he has not performed that work at an earlier date, he may show his ability to do it by performing it to the satisfaction of the Administrator or under the direct supervision of a certificated and appropriately rated mechanic, or a certificated repairman who has had previous experience in the specific operation concerned. Also, the mechanic can take a manufacturer's task-specific training for the appropriate class of LSA, or component.

**b.** Maintenance Certifications. The current edition of ASTM F2483, paragraph 6.1, Line Maintenance, and paragraph 7.1, Heavy Maintenance Repairs and Alterations, states the manufacturer will list the minimum level of mechanic certification to perform the maintenance task. In the United States, on N-numbered SLSA, all maintenance providers able to RTS are to be persons certified under § 65.71 (A&P) and repairman under § 65.107.

14. Why is an ELSA or SLSA Signed-Off as "in a Condition for Safe Operation" Rather than "Airworthy" in its Maintenance Records? Typically, the definition of the word "Airworthy" means that an aircraft conforms to its FAA-approved type design and is in a condition for safe operation. SLSA and ELSA do not have an FAA-approved type design so the term "Airworthy" is not used. LSA must be inspected and maintained in a "condition for safe operation."

**15.** Who is Primarily Responsible for Maintaining an Aircraft in a Condition for Safe Operation and for Keeping Maintenance Records? The owner or operator is responsible in compliance with § 91.319 and SLSA § 91.327 operating limitations, for these tasks.

16. How is Aircraft "Time in Service" Defined and Recorded? Time in service, with respect to maintenance time records, means the time from the moment an aircraft leaves the surface of the Earth until it touches it at the next point of landing. Either a recording tachometer or Hobbs meter may compute total time, or it can be based on the pilot's recorded flying time. Total time in service should be recorded in the aircraft's maintenance records at each condition inspection see § 91.417.

**17.** FAA—How is a Major Alteration and Major Repair Defined? (See 14 CFR Part 1, § 1.1 Definitions.)

**a.** Major Alteration. A major alteration means an alteration not listed in the aircraft, aircraft engine, or propeller specifications:

(1) That might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or

(2) That is not done according to accepted practices or cannot be done by elementary operations.

b. Major Repair. A major repair means a repair:

(1) That, if improperly done, might appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or

(2) That is not done according to accepted practices or cannot be done by elementary operations.

**18. ASTM—How is a Major Alteration and Major Repair Defined?** (See ASTM standard F2483, Standard Practice for Maintenance and the Development of Maintenance Manuals for Light Sport Aircraft.)

**a.** Major Repair, Alteration, or Maintenance. Any repair, alteration, or maintenance for which instructions to complete the task excluded from the maintenance manual(s) supplied to the consumer are considered major.

**b.** Minor Repair, Alteration, or Maintenance. Any repair, alteration, or maintenance for which instructions provided for in the maintenance manual(s) supplied to the consumer of the product are considered minor.

# **NOTE:** For LSA and associated products built under a consensus standard, the manufacturer determines what is a major repair or major alteration.

**19.** What Can "Calendar-Year" Mean in Terms of Operating Limitations? Calendar-year is not exactly 365 days long. It can be as long as 396 days. A calendar-year runs to the last day of the 12th month after the previous inspection date. For example, if a LSA was given an annual condition inspection on July 1, 2005, the aircraft would need another condition inspection by August 1, 2006, 1 year and 31 days later.

**20.** Am I Required to Take "Manufacturer's Recurrent Training"? It is highly recommended for repairmen certified under § 65.107, and the A&P maintenance provider, if not active or previously trained in maintaining the manufacturer's products. See § 65.81.

**21.** When is a FAA Form 337 Required to be Issued on an SLSA Aircraft Certified by ASTM Under § **21.190?** FAA Form 337 is required only on TC'd products installed on a manufacturer's non-FAA-approved aircraft. The major repair or alteration must be approved by the aircraft manufacturer before maintenance is preformed (i.e., installing STC products).