



The “Lighter” Side of Aircraft Maintenance

Light-sport aircraft (LSA) is probably the fastest growing group of aircraft in general aviation these days. These aircraft are dynamic, multi-framed, simple-to-operate, relatively inexpensive, and make an excellent option for those who wish to slip the surly bonds. Furthermore, there is great appeal in the fact that obtaining a sport pilot certificate requires fewer training hours than for a private pilot, and that medical eligibility comes in the form of a valid driver’s license (unless having been previously denied, revoked, suspended, or found ineligible for an airman medical certificate). These aircraft were designed for those who want to fly just for the pure pleasure of it.

In its inception year, 170 sport aircraft were registered. The year after that the numbers increased to 1,273 and the year after that, the group exploded with an additional 4,793 registrations. Although relatively young — LSA is just ten years old — there are now over 9,000 active registrations between special (SLSA) and experimental (ELSA) certificates. The numbers have climbed steadily throughout the years and with every new aircraft registered, the need for light-sport aircraft maintenance also grows.

An LSA repairman certificate complements the certificates issued to airframe and powerplant mechanics and repair stations. If you are already an FAA certificated A&P, you don’t need much more to get in on LSA maintenance action — just the class-appropriate tools and manuals to work, and for a repair station — the appropriate ratings. However, if you aren’t a fully qualified A&P, you can still acquire an LSA repairman certificate. The bonus to this is that the hours you put in for one can be used to eventually obtain the other.

There are two ratings for LSA repairman: inspection and maintenance. An inspection rating (LSRI) allows you to accomplish the condition inspection on your own ELSA. The condition inspection is your once-a-year duty to check out the aircraft and ensure it is ready to meet the conditions of safe flight. It is performed in accordance with 14 CFR part 43, Appendix D. There is no rating for maintenance actions performed on experimental LSA. These are light-sport aircraft that you have assembled from a kit or purchased already built. However, the aircraft is still required to be kept in a condition for safe operation.

The LSA repairman certificate with a maintenance rating (LSRM) allows you to perform maintenance and inspections on SLSA and the condition inspections on an ESLA for hire or for compensation. This is, admittedly, the exact opposite of an A&P certificate where an inspection authorization (IA) endorsement is a more advanced credential.

The path to earning an LSA repairman certificate starts with being at least 18 years of age, being able to speak, read, write, and understand English, being a U.S. citizen or lawful permanent resident, and completing a 16-hour condition inspection “how-to” course for just the inspection rating. To get the additional maintenance rating you must attend a class-specific, FAA accepted course that will provide instruction in accordance with 14 CFR part 65.107 (<http://go.usa.gov/BuT4>). Course lengths vary by aircraft class with airplane privileges being the longest at 120 hours, weight-shift control aircraft and powered parachute taking 104 hours, and lighter-than-air and glider taking only 80 hours.

To find a training course, check out the light-sport page on <http://1.usa.gov/14MhleM>, and from there click on the “light-sport repairman training providers and courses” link, which can also be found here: go.usa.gov/BSd3. You can also do an internet search to find one closest to your area. The link provides a couple of options, but wherever you eventually decide to go, make sure it is an FAA accepted provider. It is also a good idea to make sure the school can provide the training to meet your specific needs.

Once you have earned your LSA repairman certificate there are no renewal requirements and no limits on how many class privileges you may obtain. It is always a great idea to stay up on the latest developments in aviation maintenance, though. You can do this by reaching out to the manufacturers of your equipment or your aircraft — these companies tend to be pretty eager to show off the latest developments — or you can take a few online courses from the maintenance hangar section of FAAsafety.gov.

The light-sport aircraft “movement” is exciting, fun-loving, and more popular than ever. It fills the niche between the simpler ultra light aircraft, and the heavier types typically marked for transport. By learning to maintain LSA you can ensure your place in the future of recreational general aviation.