

Petition for Rulemaking

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Enhanced Light Sport Program

In order to enhance the success of the Light Sport program and to encourage more people to fly, or to continue to fly, and in light of the new BasicMed program, the following changes are suggested to be made to the Light Sport Program in order to maintain the simplicity of the Light Sport program while keeping it relevant to changing conditions in the current general aviation marketplace. This update to the Light Sport Program is hereinafter referred to as the Enhanced Light Sport Program.

Summary of Program

Enhanced Light Sport Aircraft

1. Maximum takeoff weight increased to 3,000 pounds
2. Maximum occupants increased to 4 people – 1 pilot and 3 passengers
3. Maximum level airspeed of 160 knots using CAS, maximum power, sea-level, standard day,
4. Maximum stall (Vs1) speed of 55 knots

Enhanced Sport Pilot Certificate

1. Maximum altitude increased to 14,000 feet MSL
2. Night flight permitted with training and endorsement and other limitations

Enhanced Repairmen's Inspection Certificate

Allows second-hand buyers who are both the owner and operator of experimental amateur built LSA's to perform the annual condition inspection on their aircraft after obtaining a Repairmen's Certificate with Inspection Rating by taking an FAA approved course(s) for the make and model of aircraft and engine that they own and operate.

Discussion of Program and it's Benefits

Increasing the maximum takeoff weight and allowing additional occupants

1. Better handling in windy or turbulent conditions.
2. Better durability of the airframe for pilot training.
3. Better competition for LSA manufacturers. The original promise of an under \$100,000 aircraft was never realized by the light sport community. Allowing greater weights will bring in competition from the likes of the Cessna 150/152/172 series, increase the supply of light sport eligible aircraft, and ultimately, drive down the cost LSA aircraft.
4. American's are getting larger and the current crop of LSA aircraft are cramped and uncomfortable for the average-sized American.
5. The higher weight limit will allow the LSA market to better experiment with new designs and approaches, for example, carrying a third person in a jump seat or using that space for camping gear.

Increasing the maximum speed and stall speed

1. Allows for faster cross-country trips.
2. Keeps the maximum speed low enough so that the plane does not get ahead of the pilot while keeping a low enough clean stall speed to allow for the higher maximum gross aircraft weight.
3. Closes the gap with the newly created airspeed limitation of 250 knots imposed on private pilots flying under BasicMed.

Increasing the maximum altitude

1. Increasing the maximum altitude to 14,000 feet MSL providing four additional VFR cruising altitudes (10,500, 11,500, 12,500, and 13,500 feet) that will allow faster, higher flying LSA aircraft to better separate from slower, lower flying LSA aircraft.
2. The maximum altitude increase to 14,000 MSL or 2,000 AGL whichever is higher will make it safer and more convenient for pilots flying out west, particularly in the mountainous areas.

Allowing Night Flying

Part of the wonder of flying is seeing how beautiful our country is from the air at night, not necessarily for travel to any given destination, but simply for recreation or sport. Given that night flying presents its own set of challenges and risks, the Enhanced Light Sport Program would allow night flying only with appropriate training by a certified instructor who would endorse the Enhanced Light Sport pilot's logbook that such training has occurred. This training and knowledge would include controlling the aircraft by reference to instruments only, and night flying training. Additionally, the Enhanced Light Sport Pilot would only be able to fly at night if three conditions were met: (1) visibility of no less than 5 statute miles, (2) no cloud ceiling along the path of flight, and (3) a visible half-moon or more. These requirements would provide adequate moon lighting of the landscape and any scattered clouds to enhance safety and reduce the risk associated with night flying. Additionally, similar requirements for carrying passengers would apply to Enhanced Light Sport Pilots, particularly 3 full stop landings at night within the last 90 days.

Allowing second-hand owners of EAB LSAs to perform their own Annual Condition Inspection

1. Second-hand ownership of experimental LSAs is growing due to the economics of the buy vs build decision. There are currently thousands of experimental planes, many of which fit into the LSA category and many of which will end up on the market for used aircraft.
2. Many second-hand owner's are unaware of the safety issues of the experimental planes they buy. By encouraging them to get training in the proper inspection of the aircraft and engine they are flying, they will become safer pilots.
3. In many areas of the country it is difficult to find A&P's that are willing to work on experimental aircraft or experimental engines. This may have to do with both a lack of familiarity and liability exposure.
4. Given that experimental aircraft may deviate from the kit manufacturer's plans, the training course would include a section that would highlight the typical modifications that builders make to that particular aircraft's plans, what to look out for safety-wise for unplanned modifications, and when to get help from either the kit plane manufacturer or from a certified A&P.

Modifications to the Federal Aviation Regulations to Implement the Program

1. Modify the definition of Light-sport aircraft in section (1)(i) of Subchapter A, Part 1, Section 1.1 General Definitions of the FAR by striking “1,320 pounds (600 kilograms)” and replacing with “3,000 pounds” and in (1)(ii) by striking “1,430 pounds (650 kilograms)”.
2. Modify the definition of Light-sport aircraft in section (2) of Subchapter A, Part 1, Section 1.1 General Definitions of the FAR by striking “120 knots” and replacing with “160 knots”.
3. Modify the definition of Light-sport aircraft in section (4) of Subchapter A, Part 1, Section 1.1 General Definitions of the FAR by striking “45 knots” and replacing with “55 knots”.
4. Modify the definition of Light-sport aircraft in section (5) of Subchapter A, Part 1, Section 1.1. General Definitions of the FAR by striking “2 persons” and replacing with “4 persons”.
5. Modify the definition of Light-sport aircraft in section (6) of Subchapter A, Part 1, Section 1.1. General Definitions of the FAR by striking the entire sentence “A single, reciprocating engine, if powered” and replacing with “A single reciprocating engine or electric motor, if powered.”
6. Modify FAR Section 61.315(c)(5) by striking “At night.” and replacing with “At night, unless you have met the requirements specified Section 61.329.”
7. Add FAR Section 61.329 with the following language “If you hold a sport pilot certificate and seek privileges to operate a light sport aircraft at night, you must receive ground and flight training. The authorized instructor who provides this training must provide a logbook endorsement that certifies you are proficient in the following aeronautical knowledge areas and areas of operation.
 - (a) Flight proficiency in basic instrument maneuvers in accordance with Section 61.107(b)(1)(ix)
 - (b) Flight proficiency in night operations in accordance with Section 61.107(b)(1)(xi)
 - (c) Aeronautical experience in night flight training in accordance with Section 61.109(a)(2)
 - (d) Aeronautical experience in control and maneuvering of the airplane solely by reference to instruments accordance with Section 61.109(a)(3)”.
8. Modify FAR Section 61.315(c)(11) by striking “10,000 feet” and replacing with “14,000 feet”.
9. Add FAR Section 61.315(c)(20) with the following language “At night when the flight or surface visibility is less than 5 statute miles, there is a cloud ceiling along the route of flight, or there is less than a half-moon visible.”

10. Add FAR Section 61.409(q) with the following language “Basic instrument maneuvers, in order to provide the training and endorsement specified in Section 61.329”
11. Add FAR Section 61.409(r) with the following language “Night operations, in order to provide the training and endorsement specified in Section 61.329”
12. Modify FAR Section 65.104(a)(2) by striking the entire sentence and replacing with the following language “Be the primary builder of the aircraft to which the privileges of the certificate are applicable, or be a second-hand owner and operator of the aircraft and complete a 24-hour training course, acceptable to the FAA on inspecting that make and model of aircraft and on inspecting the make and model of that aircraft’s engine to which the privileges of the certificate are applicable;”.