



Operating Experimental and Light Sport Aircraft in Flying Clubs (MOSAIC Update)

Revision Date: 2025

Introduction

Flying clubs often want to know if they can operate experimental, light-sport, or special light-sport aircraft (S-LSA), and whether members can get training in those airplanes. With the FAA’s Modernization of Special Airworthiness Certificates (MOSAIC) rule—finalized in 2025—the landscape has changed. The rule expands what qualifies as a light-sport aircraft and removes some of the roadblocks that previously made things complicated for non-commercial clubs. This update explains what has changed, what hasn’t, and what flying clubs should keep in mind.

Summary

Here’s a quick look at what the FAA allows under MOSAIC:

Aircraft Type	Can a Club Lease It?	Flight Training Allowed for Members?
LSA (MOSAIC definition)	Yes	Yes
S-LSA	Yes	Yes
E-LSA	No	Yes (but can’t be leased)
E-AB	Yes	Yes

Highlights: - MOSAIC broadens the Light Sport category to include more types of aircraft, more seats, and newer technology ([AOPA MOSAIC Summary](#)). - E-LSA aircraft still cannot be leased to clubs, but S-LSA and E-AB aircraft may be leased or owned by the club ([14 CFR 91.319](#)).

What Qualifies as Light Sport Under MOSAIC

The MOSAIC rule stretches the old boundaries of what “light sport” means. Aircraft that now meet the requirements to be flown under sport pilot rules include a much wider variety of models. The key features are:

- **Seats:** Up to four seats, instead of the old two-seat cap. However, Sport Pilots are still limited to carrying **only one passenger**, regardless of the total seating capacity.
- **Airspeed:** Up to **250 knots**, replacing the previous 120-knot limit, as long as the stall speed limits are respected.
- **Stall Speed:**
 - Up to **61 knots in landing configuration** if the pilot holds at least a Private Pilot certificate. **Effective: 7/22/2026**
 - Up to **59 knots in landing configuration** if the pilot is flying under Sport Pilot privileges. **Effective: 10/22/2025**
- **Engines:** Single reciprocating or turbine engine. Electric and hybrid propulsion are also allowed.
- **Propellers:** Adjustable and constant-speed props are permitted.
- **Landing Gear:** Retractable landing gear is allowed (except for seaplanes, which already had this).
- **Cabin:** Pressurized cabins are acceptable if the airplane meets the other limits.
- **Aircraft Types:** Includes airplanes, gyroplanes, helicopters, gliders, and lighter-than-air aircraft if they fit within these boundaries.

Thanks to these changes, familiar four-seat trainers like the Cessna 172 and Piper Cherokee can fall into the LSA category when flown under Sport Pilot privileges ([FAA MOSAIC Final Rule](#)).

Maintenance Requirements

- **S-LSA:** Must follow manufacturer instructions and ASTM standards. Condition inspections can be done by an A&P or a Light Sport Repairman-Maintenance (LSRM). Pilots may do preventive maintenance if the manufacturer allows it ([14 CFR 91.327](#)).
- **E-LSA:** Owners can handle their own maintenance. Annual inspections may be signed off by an A&P, LSRM, or a Light Sport Repairman-Inspection (LSRI) if it's their airplane ([FAA AC 65-32A](#)).
- **E-AB:** Owners can maintain their aircraft. Annual inspections need to be done by the original builder with a repairman certificate or by an A&P ([14 CFR 21.191\(g\)](#); [14 CFR 91.319](#)).

- **Big Picture:** MOSAIC changes which aircraft can be considered LSAs, but the maintenance rules themselves haven't shifted.
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Sport Pilot Impacts

- **Bigger Options:** Sport Pilots can now fly larger, more capable aircraft like a Cessna 172 or Piper Cherokee if the airplane meets the MOSAIC limits ([AOPA MOSAIC Summary](#)).
 - **Training Access:** Sport Pilots and students training toward Sport Pilot privileges now have more options, since training in experimentals and LSAs is fully supported under the new rule ([FAA MOSAIC Final Rule](#)).
 - **Medical:** Nothing changes here—Sport Pilots can still fly on just a driver's license medical ([14 CFR 61 Subpart J](#)). [14 CFR 61.303\(b\)](#)
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 - still applies.
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Leasing Nuances

- **S-LSA:** May be leased by clubs, provided they're only used for non-profit, non-commercial purposes ([FAA MOSAIC Final Rule](#)).
 - **E-LSA:** Leasing is still off the table under FAR 91.319(f). They must be owned by members or contributed without a lease ([14 CFR 91.319](#)).
 - **E-AB:** Leasing is possible if it's structured properly. Long-term, exclusive leases are treated as ownership ([FAA Order 5190.6B, Change 2](#)).
 - **Legacy Aircraft:** With the broadened definition, some standard-category aircraft now fall under LSA, which opens the door to more leasing opportunities.
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Example Scenarios

Scenario A: S-LSA in a Club

A club leases a factory-built Flight Design CTLS (S-LSA). Members fly it for checkouts, flight reviews, and proficiency. Each member pays their own CFI, and the maintenance follows ASTM standards with an LSRM handling the condition inspection. All above-board under MOSAIC.

Scenario B: E-AB in a Club

Four members co-own a Vans RV-12 (Experimental Amateur Built). One member needs a flight review, so they bring in a CFI. The instructor is paid directly, while fuel and upkeep are shared. Annual inspection is handled by an A&P. Perfectly legal within MOSAIC.

Scenario C: E-LSA Limitation

A club wants to lease an E-LSA converted from an S-LSA. That's not allowed under FAR

91.319(f). The only way to include it is if the club or members own it outright. It can still be used for training or personal flying, just not leased.

Scenario D: Sport Pilot Expansion

A Sport Pilot flies a Cessna 172 that qualifies under the new MOSAIC definition. They use their driver's license medical and complete a flight review with a club CFI. That's a real-world example of MOSAIC opening more doors.

Best Practices for Clubs

1. Stick to non-profit operations—no commercial flying for hire.
2. Make training arrangements clear: instructors get paid for their time, not the aircraft.
3. Keep thorough maintenance logs and follow the right rules for each aircraft type.
4. Be thoughtful about fleet planning—take advantage of MOSAIC flexibility but stay inside the lines on maintenance and leasing.