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MOSAIC Overview



- Dramatic expansion of LSA category
- Removal of definition of LSA from FAR Part 1
- Addition of new FAR Part 22 for LSAs
- No explicit weight limit
- 59kt Vs Clean stall speed limit for Sport Pilots
- 59 KCAS (no flaps) Airplanes
- 45 KCAS (no flaps) Gliders & WSC
- 61kt Vs1 Landing speed for Sport Aircraft
- 250kt max speed
- 4 seats allowed 2 occ. for SP
- Multi-engine is allowed
- Electric propulsion is allowed
- Turbine propulsion is allowed
- Variable pitch is allowed
- Retractable gear is allowed
- Rotorcraft are allowed
- Powered Lift are allowed
- Night flight allowed with Basic Med + Endorsement



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Here is a HIGH LEVEL look at what MOSAIC brings:

MOSAIC

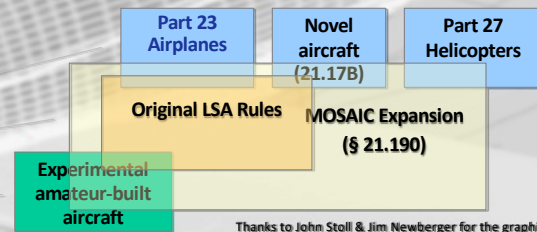
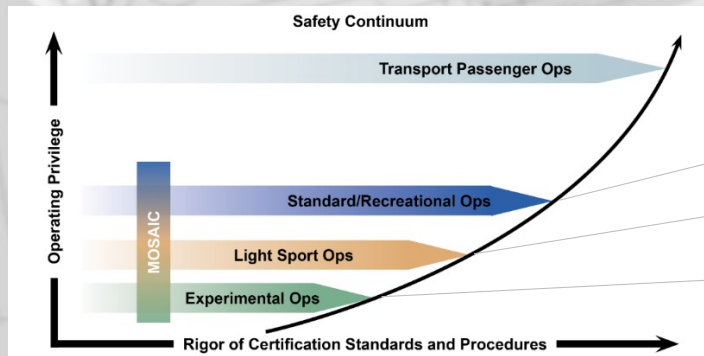
**Modernization of Special
Airworthiness Certification
Answers to Common Questions
& Concerns**



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2 of the primary missions of MOSAIC were to Revitalize General Aviation and to make flying more simple, hence safer.

Safety Continuum



Thanks to John Stoll & Jim Newberger for the graphic.

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- First, here is the reasoning behind the whole MOSAIC process –
- An important Concept at the FAA is the SAFETY CONTINUUM

This is a principle guiding the agency's approach to regulating aviation safety. It moves away from a one-size-fits-all approach. This flexible framework allows the FAA to balance safety risks with the needs of the aviation industry and the flying public, while also encouraging innovation.

Some points of this graphic

- Increasing the scope of LSA continues the tailoring philosophy from Part 23
 - This Makes the safety benefits of LSA more accessible, reducing reliance on experimental amateur built
 - LSA can be an entry point for innovative technologies that can “grow” along the spectrum
 - This Attempts to separate the operational and airworthiness aspects more clearly for Sport Pilot, and Simplified Flight Control
- SO, HOW IS IT ALL WORKING< SO FAR?

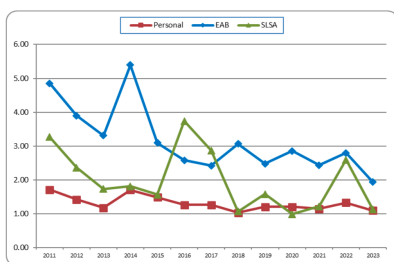
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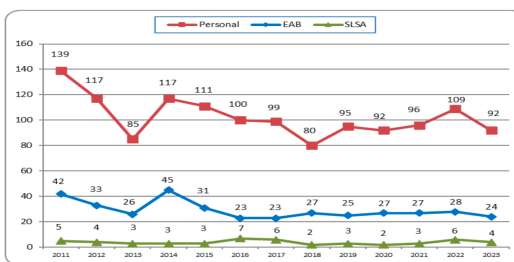
Fatal Accidents

Amateur-Built, Light-Sport Category, and TC/Personal Airplanes

Accidents Per 100,000 Hours



Accident Counts



Fleet hours per year:

- TC/personal: ~8 million
- Experimental amateur-built (EAB): ~1 million
- Light-Sport Category: ~200,000

1 of 2

Really, Pretty well.

You can see on the cart on the left accidents per 100,000 hours EAB safety is improving. LSA has gotten right there with TC's planes. AND on the right chart, which is accident counts, EAB and LSA have fewer accident counts than GA, expected, as there are presently so many fewer LSA aircraft.



Let's get into some Frequently Asked Questions we get at LAMA –
This information comes from the published MOSAIC rule and direct communications with Brian Cable and Jim Newberger
FAA AIR 630 Brian Cable Manager, Organization and System Policy
FAA AIR 632 Jim Newberger Production and Airworthiness. Jim did much of the writing in MOSAIC and is the most intimately familiar with the details.

When is it real???



- Sport Pilot privileges to fly existing aircraft take effect on October 22, 2025
- Airworthiness Certification of new (M)LSA aircraft take effect on July 24, 2026.

WHEN IS IT REAL???

Sport Pilot privileges to fly existing, newly defined LSA aircraft take effect on October 22, 2025. That is, a Sport Airman can fly an existing aircraft that meets the new definition.

60-70% of the general aviation fleet will be sport pilot eligible whether you are a Sport Pilot Airman or are private pilot exercising Sport Pilot privileges

That means you can fly any Sport Pilot Eligible aircraft, regardless of the aircraft's certification basis.

New MLSA won't be available until July 24, 2026



MOSAIC Effective Date



October 22, 2025

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So, Sport Pilot privileges to fly existing, newly defined LSA aircraft take effect on October 22, 2025.

MOSAIC



•Q – HOW & WHAT can I fly?

- Current driver's license- NO FAA medical OR Basic Med
- Clean stall speed (V_{s1}) of 59 KCAS or less
- Up to 4 seats - just ONE passenger
- No added paperwork or check-rides
- Just understand Sport Pilot & fly

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How and WHAT can I fly?

As a Sport Pilot or Private Pilot (who has not been denied a medical)

You can fly with a current and valid driver's license in place of an FAA medical or BasicMed. Light Sport has ALWAYS been the easiest way to fly!

You can fly:

- Any "Sport Pilot Eligible" aircraft with a Clean stall speed (V_{s1}) of 59 KCAS or less and a maximum level flight speed (V_H) of 250 knots calibrated. - MAX weight is not part of the definition.
- An Aircraft that has up to 4 seats but with only ONE passenger
- No additional paperwork or check-rides for SPORT PILOTS OR PRIVATE PILOTS or higher. Just understand & fly within Sport Pilot privileges.

In Addition -

WITH appropriate training and endorsements, a sport pilot will be able to fly an aircraft:

- With a manual controllable pitch propeller and/or retractable landing gear
- At night with either an FAA medical or BasicMed

This all happens on October 22, 2025

HOW & WHAT can I fly?



Older Two-Seat Trainers

Cessna 120, 140, 150, 152

Piper Tomahawk

Beechcraft Skipper

Grumman American AA-1

Ercoupe

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How and WHAT can I fly?

HOW & WHAT can I fly?



Legacy Four-Seat Aircraft

Cessna 170, 172 (*except IO-360-powered variants like T-41B, R172K, FR172*)

175 (*including P172D models*)

182 (*models through 182D*)

Piper PA-28 series 140, 150, 160, 180, 181 Archer III

Beechcraft Bonanza **some variants may qualify V35B...**

VS1 varies by model; older Bonanza models are usually around 58–59 knots

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How and WHAT can I fly?

MOSAIC impact on current aircraft that meet 1,320 lbs/120 kts



- **Q - Do I have to do anything different to keep flying my current 1,320 lb SLSA?**
- **Q - Do have to do anything different to fly a new MLSA built in about a year?**

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Q - Do I have to do anything different to keep flying my current 1,320 lb SLSA models?

A. No. Existing LSA continue operating as before.

Q - Do have to do anything different to fly a new MLSA built in about a year?

•No, as a Sport Pilot airman, your privileges will be expanded to include the new definition aircraft. Appropriate training and endorsements required for LSA with a controllable pitch propeller and/or retractable landing gear And for night with either an FAA medical or BasicMed

Converting an existing aircraft to the expanded definition



- **Q - Can I convert an existing SLSA to the expanded definition?**
- **Q – Can I convert a current registered Experimental Exhibition category plane (that does not meet the current SLSA definition) to the expanded definition?**

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Q - Can I convert an existing SLSA to the expanded definition?

A – Not practically.

The Rule States: This rule does not provide a regulatory provision for light-sport category aircraft, certificated prior to July 24th, 2026, to increase the maximum takeoff weight above the 1,320- or 1,430 pound weight restriction in effect at the time of certification.

As discussed in section IV.Q, this rule implements a clean break in light-sport category manufacturing and certification requirements upon the implementation of part 22 requirements in this rule.

FAA does note that light-sport category aircraft manufacturers may petition for an exemption to increase the maximum takeoff weight of their existing certificated models and this may be a potential avenue for those that can meet the requirements of the part 11 exemption process.

Existing LSA will have to be upgraded to meet all Part 22 requirements with a new 8130-15. The Manufacturer will have to apply for a new Airworthiness Certificate and the FAA will have to accept and issue. This will require a petition for Exemption to the FAA showing the request is in the public interest. This could be a difficult pathway.

Q – Can I convert a current registered Experimental Exhibition category plane (that does not meet the current SLSA definition) to the expanded definition?

A – FAA currently does not allow this. Only by exemption

MOSAIC impact on SLSA



- **Q – My SLSA is capable of more weight in the country it was manufactured. Can I fly with the higher MTOW or Gross Weight?**

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Q – My SLSA is capable of more weight in the country it was manufactured. Can I fly with the higher MTOW or Gross Weight?

No, not as an SLSA.

MOSAIC impact on ELSA



- **Q – Can I convert my SLSA to ELSA before or after the new MOSAIC takes affect?**

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Q – Can I convert my SLSA to ELSA before or after the new MOSAIC takes affect?

A Yes. Before and after the MOSAIC Final Rule, rules allow an aircraft owner to “downgrade” its airworthiness certificate from an SLSA to an ELSA for any reason.

MOSAIC impact on SLSA to ELSA



- **Q – Can I change from SLSA to ELSA in order to increase the weight/seat/speed capability?**

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Q – Can I change from SLSA to ELSA in order to increase the weight/seat/speed capability?

Neither the pre- or post-MOSAIC rules precludes such alterations.

FAA does not encourage such alterations and there is no established procedure for doing so.

- However, it is important for aircraft owners to understand that—
 - 14 CFR 91.319(i) affirms that the FAA may prescribe additional operating limitations on experimental aircraft that the FAA considers necessary.
 - To identify necessary operating limitations, FAA Order 8130.2 already includes a standard operating limitation (see *Table D-1, operating limitation number 22, of Order 8130.2K*) that requires owners of experimental aircraft to notify the FAA before flying its aircraft after incorporation of a major change.

- For major alterations of ELSA not approved by the aircraft manufacturer, the FAA may amend operating limitations for that aircraft to reduce the exposure of the public to related risks.

So this means it is possible, but everything will have to be correct, and done correctly.

First the SLSA must be inspected to insure it conforms with the original design and is in current condition inspection. A new POH or Aircraft Handbook will have to be made with new specifications, capabilities, a new W&B and appropriate operating changes, placards etc. will need to be made. With this all complete, a new Airworthiness Certificate can be applied for with new operating limitations. If the Manufacturer “blesses” the conversion, it should be a pretty straight forward process. If not, it can still be accomplished, however, the FAA may make the Operating limitations more restrictive.

MOSAIC impact on Maintenance



• Q – What about LSA or EAB maintenance?

LSRM

- Expands the aircraft an LSRM will be able to maintain
- Experimental Amateur-Built aircraft
- Course changes to Requirements-based curriculum

LSRI

- Annual condition inspections on any EAB aircraft that they own

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How will this affect maintenance ?

There will be a Potential for non-builder owners of amateur-built aircraft to perform their own annual condition inspections.

Light Sport Repairmen with an Inspection rating (LSRI) may perform annual condition inspections on any Experimental Amateur-Built aircraft that they own (requires at least a two-day course)

Light Sport Repairmen (LSRM) will be able to work on all new M S-LSAs entering the market but not standard-category aircraft such as

Cessna 172s that will be Sport Pilot eligible.

LSRMs may perform annual condition inspections on all Experimental Amateur-Built aircraft

LSRM certification course changed from specific three week duration to a requirements-based curriculum that should be roughly the same length

MOSAIC impact on Maintenance



- **Q – Are there still Service Bulletins, Safety Directives, AD's?**

- SLSA Safety Directives
- AD's
- Minor alterations

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Other Impacts are S-LSA manufacturers' Safety Directives become advisory-only, not mandatory

(FAA Airworthiness Directives are mandatory if applicable)

Minor alterations and repairs may be performed on S-LSAs without manufacturer approval

Becoming effective October 22, 2025



Newly manufactured Light Sport Aircraft



**•Q – When will NEW
MLSA be available?**

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Q – When will NEW MLSA be available?



Newly manufactured Light Sport Aircraft



July 24th, 2026

Linda Sollars
adventure@lindasollars.com

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July 24th, 2026, new MLSA will be able to enter the market.

There is a process that has to occur

9 months after publication of the final rule the ASTM standards should be complete – the target date is April 17, 2026.

THEN about 3 months for the FAA to accept the standards.

Once the standards are accepted, Manufacturers can show compliance to the new standards and start selling new aircraft. So that comes out to 226 days to get the suite of standards completed for FAA acceptance.



Newly manufactured Light Sport Aircraft



ADVANCING STANDARDS
TRANSFORMING MARKETS

If you want Light Sport Aircraft **FASTER**,
contact:
Linda Sollars
adventure@lindasollars.com

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The faster standards are created and amended, and then accepted by FAA, the faster new LSA can be sold. Manufacturer and consumer engagement in standards development will drive this. That means YOU can make a difference in when new LSA's are available! You can do this by joining ASTM. You can make this all happen more quickly. You don't have to be an engineer.

We, ASTM F37, are meeting with FAA Sept 2 Brian Cable and Jim Newberger to look at schedules and steps forward

Other rules impacted by MOSAIC



- **Q - What other rules will a manufacturer, supplier or operator need to know about and comply with?**

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Q - What other rules does a manufacturer, supplier or operator need to know about and comply with?

NEXT SLIDE

Other rules impacted by MOSAIC



- A – The following, as applicable:
 - 1 – Definitions and Abbreviations
 - 21 – Certification Procedures for Products and Articles
 - **22 – Design, Production, and Airworthiness Requirements for Non-Type Certificated Aircraft**
 - 36 – Noise Standards: Aircraft Type and Airworthiness Certification
 - 43 – Maintenance, Preventive Maintenance, Rebuilding, and Alteration
 - 45 – Identification and Registration Marking
 - 61 – Certification: Pilots, Flight Instructors, and Ground Instructors
 - 65 – Certification: Airmen Other Than Flight Crewmembers
 - 91 – General Operating and Flight Rules
 - 119 - Certification: Air Carriers and Commercial Operators

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Primarily Part 22 – Design, Production, and Airworthiness Requirements for Non-Type Certificated Aircraft.

With that said, as in all regulations, there are definitions and tentacles that reach in many directions.

Where to find the MOSAIC Final Rule



• Q - Where will I find those new regulations?

The final rule is published in the Federal Register
(<https://www.federalregister.gov>).

A link is also posted at the LAMA website.

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adventure@lindasollars.com

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Q - Where will I find those new regulations?

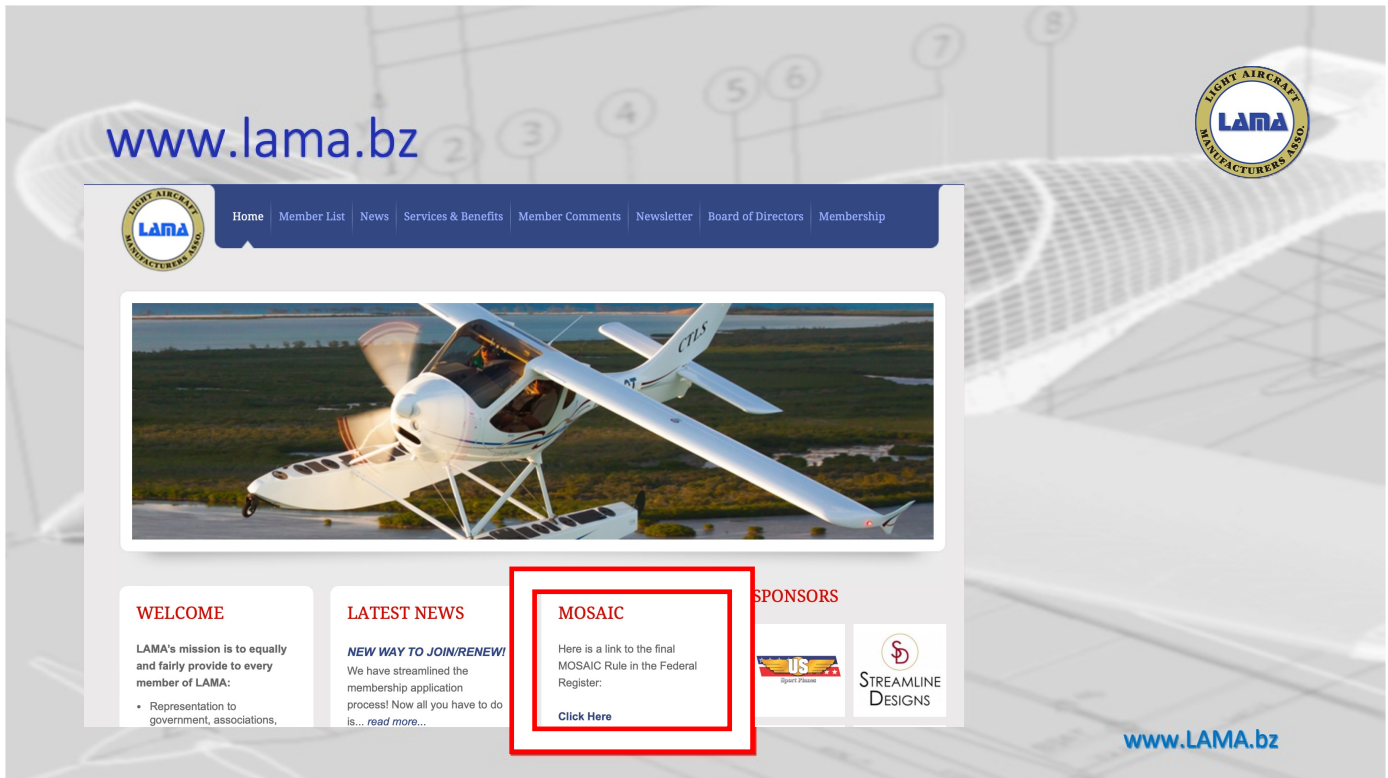
A – The final rule is published in the Federal Register
(<https://www.federalregister.gov>).

LAMA has a link to the final rule on our website.

Who can you contact to join ASTM and make this all happen as soon as we want?

Linda Sollars is on the ASTM F37 committee and she will get you all set up.

HERE is a link on the LAMA website for the final MOSAIC rule



The LAMA link also has other documents related to the development of and the final rule. Its pretty fascinating....

Who was it that can you contact to join ASTM and make this all happen as soon as we want?

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For FASTER LSA'S
Join ASTM!

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It has taken a great deal of effort to bring MOSAIC to where it is today. I know of no other country where industry and the public can work so well with the government FAA and have so much input for such a positive outcome.



Protecting and Expanding your Industry.

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**Thanks to all the LAMA
members!**

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Manufacturers Join LAMA and influence appropriate rulemaking.
Membership provides resources for us to shape policy and regulation.

LAMA is a volunteer association.