Modernization of Special Airworthiness Certification (MOSAIC) Fact Sheet

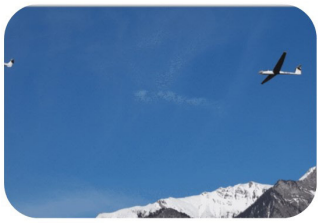
- Building upon the foundation of the 2004 final rule Certification of Aircraft and Airmen for the Operation of Light-Sport Aircraft, **MOSAIC** responds to evolving aviation and airmen needs, providing for future growth and innovation while maintaining the highest level of safety.
- **MOSAIC** increases the availability of safe, modern, and affordable aircraft for recreational aviation, flight training, and certain aerial work.
- **MOSAIC** provides broad regulatory relief to the public based on 20 years of safety data.

Key Components of MOSAIC:

1. Light-Sport Category Aircraft Certification

2. Sport Pilot Certification

3. Maintenance and Repairman (Light-Sport)



4. Operations

Publication and Effective Dates

MOSAIC final rule was published on July 24, 2025, with two effective dates:

October 22, 2025
(90 days after publication)

- Pilot training and certification rules and privileges
- Repairman certification, maintenance rules, and tow-hitch installation
- Class G airspace and right-of-way rules

July 24, 2026
(365 days after publication)

- Removal of “light-sport aircraft” definition from 14 CFR § 1.1
- Airworthiness certification requirements
- Changes in operations, including operating limitations

1 Light-Sport Category Aircraft Certification

MOSAIC amends 14 CFR part 21 and adds part 22 to:

- Adopt more performance-based rules to expand and enable innovation in the classes of aircraft that may be certificated as light-sport category aircraft using consensus standards. This includes emerging aircraft types.
- Allow manufacturers of light-sport category aircraft to design and manufacture a broader array of aircraft, including rotorcraft and powered-lift.
- Remove prescriptive weight limits that hinder incorporation of safety-enhancing designs and equipment.
- Increase the maximum stalling speed for light-sport category airplanes (61 knots V_{SO}) and gliders (45 knots V_{SO}).
- Allow faster, higher-performing aircraft for personal travel.
- Enable more capable and robust aircraft for pilot training.
- Allow for increased capacities for passengers, fuel, and cargo.
- Allow new types of propulsion systems (like electric), any number of engines, new propeller types, and retractable landing gear.
- Allow aircraft with simplified flight controls, enabling reduced flight hours for pilot certification.

2 Sport Pilot Certification

MOSAIC 14 CFR part 61 Subpart J § 61.316 changes performance and design limitations, expanding what aircraft sport pilots can operate.

- Removes aircraft weight and airspeed limitation.
- Permits use of any powerplant type except turbo-jet powered.
- New V_{S1} maximum stalling speed (flaps retracted) of 59 knots CAS.
- Allows operating aircraft with retractable landing gear.
- Allows operating airplanes with manual controllable pitch propeller.
- Allows use of 4-seat airplanes but retains 2 occupant limitation.
- Night operation privileges.

NOTE: the aircraft must meet the above requirements at the time of original certification.

2 Sport Pilot Certification Cont.

New Simplified Flight Controls Designation and Required Training

- The FAA created a new type of aircraft with simplified flight controls which can be operated by any pilot at any certification level. This aircraft will have the automated ability to control the flight path using the available power and prevent loss of control under likely circumstances, regardless of pilot input. (§ 22.180)
- Model specific training and endorsement is required for pilots seeking to act as pilot-in-command of aircraft with the simplified flight controls designation. Pilots must possess the appropriate category and class rating or privilege.
- Simplified flight controls endorsement is available to all pilot certificate levels. (§ 61.31(l))
- Both part 61 subpart H and subpart K flight instructors are required to obtain the make and model endorsement prior to conducting flight instruction in that make and model of aircraft with simplified flight controls designation. (§ 61.195(m) and § 61.415(m))
- Sport pilot certification experience requirements are found under part 61 (subpart J) and flight instructor certificate with sport pilot rating experience requirements are found under part 61 (subpart K).

New Sport Pilot Practical Tests

The FAA published new sport pilot testing standards in § 61.14 titled:

- ***Sport Pilot Rotorcraft Category Helicopter — Simplified Flight Controls Privileges*** Airman Certification Standards.
- ***Flight Instructor with a Sport Pilot Rating for Rotorcraft Category Helicopter — Simplified Flight Controls Privileges*** Airman Certification Standards.

Sport pilots or flight instructors with a sport pilot rating seeking to **add** an airplane privilege or helicopter simplified flight controls privilege to an existing pilot certificate or flight instructor certificate must take a practical test with a pilot examiner.

3 *Maintenance and Repairman (Light-Sport)*

Changes to Maintenance of Light-Sport Category Aircraft

- Airworthiness Directive (AD) compliance is mandatory, while compliance with manufacturer-issued safety directives (SDs) is recommended.
- Major repairs and major alterations must be authorized by either the manufacturer or a person acceptable to the FAA.
- Authorization for minor repairs and minor alterations is not required.
- Major alterations and major repairs must be performed and inspected in accordance with maintenance and inspection procedures developed by the manufacturer or a person acceptable to the FAA.

Changes to Light-Sport Repairman Certificate Eligibility and Privileges

(Reference 14 CFR §§ 65.107 and 65.109)

- U.S. citizenship not required.
- Certificate privileges are defined by aircraft category: Airplane, Glider, Rotorcraft, Powered-lift, Weight-Shift-Control, Powered Parachute, and Lighter-Than-Air (LTA).
- Certificate limitations, based on training, are issued by aircraft class: Rotorcraft-gyroplane, Rotorcraft-helicopter, LTA-airship, and LTA-balloon.
- Certificate privileges for experimental aircraft now also include:
  - **Amateur-built aircraft (EAB)** – § 21.191(g)
  - Kit-built light sport – § 21.191(k)
  - Former light-sport category – § 21.191(l)
- Inspection-rated repairmen may only work on aircraft they own; N-Number and serial number are no longer listed on the certificate.

NOTE: EAB aircraft with operating limitations issued prior to Oct. 22, 2025 must obtain revised operating limitations that permit a light-sport repairman to perform the annual condition inspection.
NOTE: EAB Repairman Certificates issued under 14 CFR § 65.104 were not addressed in the MOSAIC rulemaking. Eligibility, privileges, and limitations for these certificates are found in 14 CFR § 65.104 and have not changed.

Changes to Light-Sport Repairman Training Course Acceptance

- Codified requirements for training course providers:
  - Administer a course test
  - 70% passing test score per § 65.17
  - Issue a certificate of completion
  - Have appropriate facilities, equipment, & materials
  - Have appropriately qualified instructors
- Training course acceptance issued based on aircraft category, and class when applicable (e.g., Airplane, Rotorcraft-Gyroplane).
- Maintenance rating training courses must include applicable content from the mechanic Airman Certification Standards (ACS). FAA-acceptance is based on course content instead of specified course hours.
- Course content that was FAA-accepted and being taught before the MOSAIC final rule continues to be “appropriate” content.

4 Operations

MOSAIC Changes: Part 91 Flight Operations

New Experimental Aircraft Operations

- Allows the FAA to issue operating limitations for certain aircraft with experimental airworthiness certificates to conduct operations over densely populated areas, in congested airways, or both, for all phases of flight.
- Allows former military aircraft that have an experimental airworthiness certificate to operate under certain new purposes, like repositioning the aircraft for operation as a public aircraft.

New Flight Operations

- Restricted category aircraft
  - Allows relocation to exhibitions, trade shows, and other events.
- Light-sport category aircraft
  - Allows aerial work operations for certain light-sport category aircraft.
  - Specifies additional requirements to tow a glider or an unpowered ultralight vehicle IAW § 91.309 and § 21.190 for compensation or hire.
  - Allows a maximum limit of 4 occupants for airplanes and 2 occupants for other aircraft (sport pilots are still limited to 2 occupants).
- Experimental aircraft space support vehicle flights
  - Codifies space support vehicle flight operations for certain experimental aircraft to conduct space support flights.
  - Allows for carriage of persons or property for compensation or hire without an air carrier certificate or exemption.

New Operating Rules

- Towing: gliders & unpowered ultralights
  - Clarifies allowable process to attach a tow hitch to eligible light-sport category aircraft.
- Right-of-way rules
  - Clarifies and revises operating rules to include more aircraft, including those with non-traditional forms of propulsion.
- Operations in Class G airspace
  - Includes more aircraft and improves aircraft separation by considering operational needs, aircraft configurations, and speeds to enhance avoiding dissimilar aircraft.