

# Modernization of Special Airworthiness Certification (MOSAIC)

Pilot Certification and  
Operations

Presented to:

By:

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# Overview

- **Summary of changes from previous requirements**
- **Effective dates**
- **Final rule details pertaining to pilot training and testing**
- **Final rule part 91 changes**
- **MOSAIC references**



# MOSAIC Final Rule Pilot Certification Provisions (14 CFR Part 61)

- This rule separates light sport category aircraft certification requirements from the sport pilot certification requirements and removes the former § 1.1 light-sport aircraft definition.
- Additionally, the rule expands what aircraft sport pilots can operate and adds operational privileges that require additional training and qualification.
- The rule also adds make and model specific training and endorsement requirements for pilots seeking to act as PIC of aircraft with the simplified flight controls designation.



# MOSAIC Final Rule Dates

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

- **October 22, 2025 (90 days after publication)**
  - Pilot 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



# MOSAIC Part 61 Changes



# New Aircraft Limitations for Sport Pilots

The MOSAIC final rule removes “light-sport aircraft” definition from 14 CFR part 1.1. Revised aircraft design and performance limitations for sport pilots are listed in the new 14 CFR § 61.316. Here are some of the changes to the aircraft limitations:

- Removal of the aircraft weight and speed limitation
- Use of any powerplant type except turbo-jet
- New maximum  $V_{s1}$  stall speed of 59 knots CAS for airplanes, flaps retracted
- Allows use of 4 seat airplanes, but retains 2 occupant limitation
- Can operate aircraft with a retractable gear
- Can operate airplanes with manual controllable pitch propeller
- New rotorcraft-helicopter privilege (only those equipped and certificated with the simplified flight controls designation)



# New Aircraft Limitations for Sport Pilots

- § 61.316(a) If you hold a sport pilot certificate, you may act as pilot in command of an aircraft that, since its original certification...
- “Since Original Certification” requirement:
  - Modifications to aircraft to reduce the  $V_{s1}$  speed *after* its original certification cannot qualify an airplane for sport pilot use.
  - Modifications to reduce seating capacity *after* its original certification cannot qualify for sport pilot use.



# Separate Stall Speed Limitations

- The pilot certification section of the final rule established a maximum  $V_{s1}$  CAS stalling speed of 59 knots under **§ 61.316**, to *indirectly* limit the weight and cruise speed for **airplanes** that a sport pilot can operate without using a prescriptive weight limit.
- The aircraft certification section adopted an independent 61 knot  $V_{so}$  maximum stalling speed limit for the certification of light-sport aircraft under **§ 22.100**. This allowed for a significant expansion of what aircraft can be certificated using consensus standards under part 21.



# Vs Speed Determination

- Review the aircraft type certificate data sheet (TCDS) or flight manual for the stall speed at the time of aircraft certification.
- $V_{s1}$  cannot be more than 59 knots CAS.
  - Note: To find the TCDS, go to [drs.faa.gov](https://drs.faa.gov) and type in TCDS in the search bar on left side. Pick the aircraft manufacturer and type of airplane.



# New Operational Privileges for Sport Pilots

- Aircraft with a *retractable landing gear*;
- Airplanes with *manual adjustable pitch propeller*; and
- *Night operations* using Basic Med or FAA medical qualification requirements.

Note: Additional training and instructor qualifying endorsements are required for these additional (but optional) sport pilot operating privileges.

Regulations: § 61.316(b), § 61.331, § 61.329



# New Sport Pilot Night Operations Privilege § 61.329

- Sport pilots can now conduct night operations after obtaining additional category and class specific night training experience.
    - 3 hours of night flight training in the specific category and class from an authorized instructor that includes-
      - At least one cross country with a landing at least 25 nm from departure point
      - 10 takeoffs and landings to a full stop at night
  - Sport pilots are required to have at least a valid third-class medical certificate or meet the requirements of Basic Med (§ 61.23(c)(3)) to operate at night.
  - Must receive a logbook endorsement from an authorized instructor certifying that they meet training requirements in specific category and class.
- \* A private pilot or higher may count night experience but will still need instructor endorsement under § 61.329(c).



# New Sport Pilot Night Operations Privilege

- Sport pilots can now conduct night operations after obtaining additional category and class specific night training experience and a qualifying flight instructor endorsement.
- Sport pilots are required to have at least a valid third-class medical certificate or meet the requirements of Basic Med (§ 61.23(c)(3)) to operate at night.

Regulation: § 61.329



# New Sport Pilot Retractable Gear Operations Privilege

- MOSAIC permits sport pilots to act as PIC of an **aircraft** with retractable landing gear. Pilots are required to have specific training and an endorsement prior to operating an aircraft with retractable landing gear.
- Sport pilots have two options to comply with these requirements:
  - A sport pilot may satisfy the training and endorsement requirements required for operating complex airplanes as specified in § 61.31(e); or
  - A sport pilot may receive and log ground and flight training from an authorized instructor in an aircraft that has retractable landing gear and receive an endorsement from the instructor certifying that they are proficient to operate that aircraft.

Regulations: § 61.316(b), § 61.331(a),



# New Sport Pilot Manual Pitch Propeller Privilege

- MOSAIC permits sport pilots to act as PIC of an **airplane** with a manual controllable pitch propeller. Pilots are required to have specific training and endorsement requirements prior to operating an airplane with a manual controllable pitch propeller.
- Sport pilots have two options to comply with these requirements:
  - A sport pilot may satisfy the training and endorsement requirements required for operating complex airplanes as specified in § 61.31(e); or
  - A sport pilot may receive and log ground and flight training from an authorized instructor in an airplane that has a manual controllable pitch propeller and receive an endorsement from the instructor certifying that they are proficient to operate the airplane.

Regulations: § 61.316(b), § 61.331(b),



# Subpart K CFI Limitations § 61.415

- If you hold a flight instructor certificate with a sport pilot rating, you may only provide flight training in an aircraft meeting the performance limits and design requirements of § 61.31 and are subject to the following limits:
  - (k) Cannot carry more than one person.
  - (l) requires a flight instructor to have received the training and endorsement in an airplane with a manual controllable pitch propeller or an aircraft with a retractable landing gear aircraft prior to providing flight instruction in those aircraft.
    - Do this by complying with § 61.331 or § 61.31.



# New Sport Pilot CFI Night Operations Privilege § 61.415(n)

- Qualifications to provide night flight training to sport pilots
  - Any subpart H flight instructor
  - Any subpart K flight instructor
    - Must complete the required training and receive the § 61.329 endorsement in specific category and class.
- A subpart K instructor can receive training from a subpart H instructor or another subpart K instructor that is qualified



# Subpart K CFI Privileges § 61.413

- A flight review or operating privilege for a sport pilot, or training to maintain or improve the skills of a sport pilot.
- (d) A person who holds a flight instructor certificate issued under subpart K may receive compensation for providing flight training in accordance with this subpart.



# Sport pilot certificate privileges

- Airplane single engine land or sea class
- Glider category
- Rotorcraft gyroplane
- Lighter-than-air airship
- Lighter-than-air balloon
- Powered parachute
- Weight Shift Control
- Rotorcraft Helicopter with simplified flight controls designation only



# Sport pilot certificate privileges

- No powered-lift sport pilot privilege was created.
- What is simplified flight controls (SFC)? This will be determined by AIR during aircraft certification. As of today, there are no aircraft certified with such designation and no determination has been made on what SFC will look like.



# New Sport Pilot Rotorcraft-Helicopter Privilege

## New Sport Pilot Helicopter Privilege with Simplified Flight Controls Design Requirement

- Allows sport pilots to obtain a rotorcraft helicopter privilege but restricted to those equipped with simplified flight controls.
- New requirements for flight instructors with a sport pilot rating (Subpart K) seeking to conduct training in helicopters with simplified flight controls.

Regulations: § 61.311, § 61.313(a)(9), § 61.409, § 61.411(h)



# Practical Test Required When Adding an Airplane or Helicopter Privilege

- A sport pilot “proficiency check” can no longer be used to add an airplane (or new helicopter) privilege to an existing sport (or higher grade) pilot certificate.
- The FAA now requires sport pilots and flight instructors with a sport pilot rating seeking to add an airplane (or new helicopter privilege) to their existing pilot or flight instructor certificate to successfully accomplish a practical test with a designated pilot examiner.

Regulations: § 61.321(b), § 61.419(e)



# Simplified Flight Controls Model-Specific Training and Instructor Endorsement Requirement

Pilots seeking to act as PIC of an aircraft with a simplified flight controls designation must obtain model-specific training and a qualifying instructor endorsement for each specific make and model aircraft. Pilots must already have the appropriate category and class rating or privilege before obtaining the simplified flight controls instructor qualifying endorsement.

Regulation: §61.31(l)



# Practical Tests conducted in Aircraft with Simplified Flight Controls Designation

**Testing in Simplified Flight Controls Aircraft:** Pilot applicants who complete the training and practical test in an aircraft equipped with simplified flight controls will receive a “make and model” simplified flight controls limitation on their pilot certificate.

Regulations: § 61.45(g)(4), § 61.45(h)

**Note:** Pilots who are issued a category and class rating (or privilege) with a simplified flight controls make and model limitation can have that limitation removed by accomplishing an additional practical test in the same category and class of aircraft equipped with “conventional” flight controls. [§ 61.45(h)(2)]



# Training Requirements for Pilots Seeking to Operate Another Make and Model of Aircraft with a Simplified Flight Controls

Pilots seeking to operate another make and model of aircraft with a simplified flight controls designation (in the same category and class) must receive additional training and an endorsement prior to operating as PIC.

Regulation: § 61.45(h)(1)



# Inapplicability of Pilot Experience Credit in Simplified Flight Controls Aircraft

Limits pilot experience credit obtained in an aircraft with the simplified flight controls designation from satisfying flight time experience requirements for a higher-grade of pilot certificate.

Regulation: § 61.9

Exception: private pilot applicants who present an aircraft with the simplified flight controls designation to conduct the practical test



# Flight Instructor Required Training and Endorsement in a Simplified Flight Controls Aircraft

Both part 61 subpart H and K flight instructors are required to obtain the make and model instructor qualifying endorsement prior to conducting flight instruction in that make and model of aircraft with the simplified flight controls designation.

Subpart H flight instructors are required to take their initial flight instructor practical test in an aircraft with conventional flight controls as a prerequisite to instruct in an aircraft with simplified flight controls.

Regulations: § 61.195(m) and § 61.415(m).



# Sport Pilot Provisions Retained Under MOSAIC

- General eligibility prerequisites
- Option to use a U.S. driver's license in lieu of a medical certificate
- Aeronautical experience requirements
- Knowledge and flight proficiency requirements
- Previous § 61.315 privileges and limitations



# MOSAIC Part 91 Changes



# Changes to Part 91 – Flight Operations

## Effective Date October 22, 2025

**Right-of-way rules** for converging aircraft now include more categories of aircraft, including those with non-traditional forms of propulsion.

- Right-of-way rules retained under MOSAIC
- MOSAIC updates
- Aircraft right-of-way priorities

Regulation: § 91.113(d)



# Changes to Part 91 – Flight Operations

**Operations in Class G airspace** involving the direction of aircraft turns are improved by:

- Including more aircraft by replacing “airplane” with “powered fixed-wing aircraft”
- Separating aircraft by operational needs, aircraft configurations, and speeds
- Enhancing avoidance of dissimilar aircraft

Regulation: § 91.126(b)



# Changes to Part 91 – Flight Operations

**Tow-hitch installation** process is clarified for eligible aircraft towing gliders and unpowered ultralight vehicles.

- Standard airworthiness certificate
- Special airworthiness certificate with type certificate
- Special airworthiness certificate without type certificate

Regulation: § 91.309(a)(2)



# Changes to Part 91 – Flight Operations

## Effective Date July 24, 2026

Forthcoming part 91 rules and guidance changes to FAA Order 8130.2 (upcoming revision M) include new experimental aircraft operations:

- Densely populated areas
- Former military aircraft

Regulation: § 91.319 and conforming amendments in § 21.191



# Changes to Part 91 – Flight Operations

## Effective Date July 24, 2026

Forthcoming part 91 rules and guidance changes to FAA Order 8130.2 (upcoming revision M) include new flight operations:

- Restricted category aircraft
- Light-sport category aircraft
- Space support vehicle flights

Regulation: § 91.313, § 91.327, § 91.331



# MOSAIC Rule/Guidance References

- To view the complete Modernization of Special Airworthiness Certification (MOSAIC) Final Rule use this link:
  - [Federal Register : Modernization of Special Airworthiness Certification](#)
- Guidance documents:
  - FAA Order 8900.1 Volume 5, Chapter 2, Sections 12 & 24
  - AC 61-65K Certification: Pilots and Flight and Ground Instructors
  - AC 61-146 Pilot Certification and Operations for Sport Pilots, Flight Instructors with a Sport Pilot Rating, and Simplified Flight Controls.



# Contact Information

- If you have further questions, please email AFS 810 at:
- [9-afs-800-correspondence@faa.gov](mailto:9-afs-800-correspondence@faa.gov).
- Please expect a 30 day turn around.



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