# **Preface**

## Why supplements?

The foundation and body of knowledge for all pilots ground school is the , FAA "Pilot's Handbook of Aeronautical Knowledge" 8083-25B (PHAK). However, this is general and includes larger airplanes, twins, jets and the older technology systems.

For pilots learning to fly Light-sport aircraft (LSA), it is overwhelming and generally unproductive trying to figure out what to study and what not to study from this generalized FAA "Pilot's Handbook of Aeronautical Knowledge" 8083-25B.



So, these supplements to the book to provide a better perspective of Light Sport Aircraft and Sport Pilot.

Additionally, there are a number of aeronautical knowledge principles that will be explained better for an improved understanding of basic principles of flight. These fundamental principles have been lost in the wordy and detailed FAA "Pilot's Handbook of Aeronautical Knowledge" 8083-25B.

#### What about Light Sport Aircraft?

This covers the modern Light-Sport Aircraft category (Special S-LSA and Experimental E-LSA) introduced into law in 2004 as well as the classic standard category FAA certified LSA which fit the criteria of a LSA.

These classic standard category aircraft also meet the new definition of LSA and have been around for decades. So light sport aircraft includes the vintage Classic Standard Category and the new modern Special Light Sport Aircraft (LSA). Sport Pilots can fly both of these Light Sport Aircraft which offer many opportunities for flight.





Classic Standard Category Piper J-3 Cub LSA

Modern Special Category Light-Sport Aircraft

### FAA definition of a Light Sport Aircraft (LSA)

There is the official definition which includes the Classic Standard Category and the modern Special LSA.

Light-sport aircraft means an aircraft, other than a helicopter or powered-lift that, since its original certification, has continued to meet the following:

(1) A maximum takeoff weight of not more than—

- (i) 1,320 pounds (600 kilograms) for aircraft not intended for operation on water; or
- (ii) 1,430 pounds (650 kilograms) for an aircraft intended for operation on water.
- (2) A maximum airspeed in level flight with maximum continuous power (VH) of not more than 120 knots CAS under standard atmospheric conditions at sea level.
- (3) A maximum never-exceed speed (VNE) of not more than 120 knots CAS for a glider.
- (4) A maximum stalling speed or minimum steady flight speed without the use of lift-enhancing devices (VS1) of not more than 45 knots CAS at the aircraft's maximum certificated takeoff weight and most critical center of gravity.
- (5) A maximum seating capacity of no more than two persons, including the pilot.
- (6) A single, reciprocating engine, if powered.
- (7) A fixed or ground-adjustable propeller if a powered aircraft other than a powered glider.
- (8) A fixed or feathering propeller system if a powered glider.
- (9) A fixed-pitch, semi-rigid, teetering, two-blade rotor system, if a gyroplane.
- (10) A nonpressurized cabin, if equipped with a cabin.
- (11) Fixed landing gear, except for an aircraft intended for operation on water or a glider.
- (12) Fixed or retractable landing gear, or a hull, for an aircraft intended for operation on water.
- (13) Fixed or retractable landing gear for a glider.

## What type of pilots fly LSA?

Any private pilot or above, or any flight instructor can fly a modern LSA or classic LSA. Only a drivers license is the required medical eligibility to fly a LSA. Additionally, the Sport Pilot/LSA rules allow the following pilots to fly LSA:

- New pilots for sport pilot license
- Existing or expired private, instrument, commercial or ATP who want to transition to LSA using only their driver's license as medical eligibility (no FAA medical).
- Pilots who want to become a flight instructor with a sport pilot rating (CFIS) to teach sport pilots in LSA
- Existing CFI/CFII who want to teach in LSA or transition to teach in LSA with or without an FAA medical.