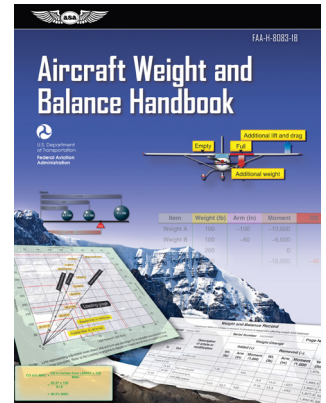




UPDATE

Aircraft Weight and Balance Handbook

The following addendum, dated October 2025, revises FAA-H-8083-1B, *Aircraft Weight and Balance Handbook*, published by the FAA in 2016.



FAA
Flight Standards Service
General Aviation & Commercial Division
Training & Certification Group
Testing Standards Section

FAA-H-8083-1B, Weight & Balance Handbook—Addendum

Due to the Modernization of Special Airworthiness Certification (MOSAIC) Rule, which was published on July 18, 2025, and is effective October 22, 2025, the FAA created this addendum to the Weight & Balance Handbook, FAA-H-8083-1B. Until the revision of FAA-H-8083-1B is published, this addendum is considered part of the current edition of the handbook and should be used as a reference.

*In **Chapter 2, Weight and Balance Theory**, the first paragraph of the Manufacturer-Furnished Information section on pages 2-10 will be revised as follows:*

When an aircraft is initially certificated, its empty weight and EWCG are determined and recorded in the weight and balance record, such as the one in Figure 2-16. Notice in this figure that the moment is expressed as “Moment (lb-in/1,000).” This is a moment index, which means that the moment, a very large number, has been divided by 1,000 to make it more manageable. Chapter 4, Weight-Shift-Control, Powered-Parachute, and Amateur-Built Aircraft—Weight and Balance Control, discusses moment indices in more detail.

*The title of **Chapter 4** on page 4-1 will change to “Weight-Shift-Control, Powered-Parachute, and Amateur-Built Aircraft—Weight and Balance Control”*

*In **Chapter 4, Weight-Shift-Control, Powered-Parachute, and Amateur-Built Aircraft—Weight & Balance Control**, the Introduction on page 4-1 will be revised as follows:*

This chapter discusses the weight and balance procedures for weight-shift-control (WSC), powered-parachute (PPC), and amateur-built aircraft. [Figure 4-1]

*In Chapter 4, **Weight-Shift-Control, Powered-Parachute, and Amateur-Built Aircraft—Weight & Balance Control**, the caption for Figure 4-1 on page 4-2 will be revised as follows:*

Here are some examples of weight-shift control aircraft: powered parachutes, gliders, airplanes, hot air balloons, and amateur-built aircraft (from top left, clockwise).

*In Chapter 4, **Weight-Shift-Control, Powered-Parachute, and Amateur-Built Aircraft—Weight & Balance Control**, Introduction, the LSA Definition of Term subsection on page 4-2 will be revised as follows:*

Light-Sport Category Aircraft

Light-sport category aircraft have less restrictive maintenance requirements and may be maintained and inspected by traditionally certificated aircraft maintenance technicians (AMT) or by individuals holding a Repairman: Light Sport certificate, and (in some cases) by their pilots and/or owners.

*In Chapter 4, **Weight-Shift-Control, Powered-Parachute, and Amateur-Built Aircraft—Weight & Balance Control**, Weight and Balance, the first two paragraphs of the WSC Aircraft subsection*

Weight-Shift-Control (WSC) Aircraft

The definition for WSC can be found in 14 CFR part 1. A WSC aircraft used for sport and private pilot flying must be registered with an FAA N-number, have an airworthiness certificate, a pilot's operating handbook (POH), and/or limitations with a weight and loading document aboard.

As mentioned earlier, WSC aircraft are commonly called trikes. These aircraft have few options for loading because they lack places to put useful load items.

*In Chapter 4, **Weight-Shift-Control, Powered-Parachute, and Amateur-Built Aircraft—Weight & Balance Control**, Weight and Balance, the Powered Parachutes subsection on page 4-4 will be revised as follows:*

Powered parachutes have many of the same characteristics as WSC aircraft when it comes to weight and balance. They have the same limited loading. A powered parachute acts like a pendulum with the weight of the aircraft hanging beneath the inflated wing (parachute). The point at which the inflated wing attaches to the structure of the aircraft is adjustable to compensate for pilots and passengers of varying weights. With a very heavy pilot, the wing attach point would be moved forward to prevent the aircraft from being too nose-heavy. Figure 4-5 illustrates the structure of a powered parachute and the location of the wing attachment.

A powered parachute used for sport and private flying must be registered with an FAA N-number, have an airworthiness certificate, a POH, and/or limitations with a weight and balance document aboard. The aircraft must be maintained properly by the aircraft owner or other qualified personnel, and the aircraft logbooks must be available for inspection. Always refer to the POH for weight and balance information specific to the powered parachute being flown. For additional information, refer to the Powered Parachute Flying Handbook (FAA-H-8083-29).

*In Chapter 7, **Center of Gravity Change After a Repair or Alteration**, the first paragraph of the Major Alteration and Repair section on page 7-3 will be revised as follows:*

Within the following text, information concerning major repairs or major alterations does not apply to any aircraft within the light-sport category.