

GETTING STARTED IN THE SPORT OF POWERED PARACHUTING



“Approaching with Due Diligence”

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So you have been bit by the flying bug! This may have been a life-long dream to fly, a mid-life goal, or you may have had flying experience and now decided that flying, low and slow in a powered parachute is exactly what you need. You may have taken some preliminary steps to investigate what it takes to get seriously involved in the sport. You have found that manufacturers seem more than anxious to sell you an aircraft. You may have scanned the internet and found dozens of what seem to be great deals on used aircraft. And you may have been told by somebody that learning to fly a powered parachute is a piece of cake!” Now what?



I can tell you from watching the experience of many prospective powered parachute pilots that many jump right in and live to regret their impulse decision for a variety of reasons. I also know dozens who spend years over analyzing and never making a decision to take a step forward. We offer this simple checklist of issues as a way of prompting you to investigate with “due diligence” and then get on with fulfilling your dream. Here is a summary of the primary decisions that you should make before you make an investment of time, money and other resources:

- ✓ What type of flying are you most interested in?
- ✓ Would you prefer to fly a simple single seat aircraft or do you envision carrying passengers?
- ✓ What is involved in learning to fly?
- ✓ Do you want to purchase a new aircraft or a used aircraft?
- ✓ Are you a builder, or do you mainly want to just fly?
- ✓ What other expenses are involved in owning a powered parachute?
- ✓ Do you have support available including instructors, flight examiners, qualified maintenance personnel and factory resources?
- ✓ Do you have places to fly and people to fly with?

Let's take these issues one at a time.

WHAT TYPE OF FLYING ARE YOU MOST INTERESTED IN?

We'll stay focused on light sport aviation and Ultralights, assuming you may have already checked out the costs and requirements to fly a general aviation aircraft and earn a private pilot rating or higher. But within the light sport world there are a variety of great ways to fly. These include powered parachutes, airplanes, weight shift (trikes), gyrocopters and even balloons. The powered parachute is a good choice for those who don't mind travelling at only 30 mph and wandering not more than about 75 miles on a typical local flight. And the powered parachute remains one of the safer ways to fly since it is not a three axis aircraft and therefore is resistant to stalls, rolls, loops and other maneuvers that might be possible in an airplane. The powered parachute is easier to learn to fly because of these characteristics. The powered parachute is a fair weather aircraft and we generally don't fly in winds greater than 15 mph. If you want to fly farther, faster, or in a wider range of weather conditions, and don't mind the additional hours required to train, then the powered parachute might not be for you.

WOULD YOU PREFER TO FLY A SIMPLE SINGLE SEAT POWERED PARACHUTE OR DO YOU ENVISION CARRYING PASSENGERS?

Answering this question is not as easy as it seems. Nearly all prospective powered parachute pilots that I meet are convinced that they need a two-seat aircraft because they will certainly be flying their spouses, children and friends. And nearly all powered parachute pilots learn that not everyone is quite as enthusiastic as they are to launch into the atmosphere and indeed spend 90% of their flight time alone in their two seaters.

The real decision here has more to do with costs and training. If you purchase what is termed a true part 103 ultralight powered parachute you avoid a good deal of the complications. Part 103 refers to the federal aviation regulation that defines an ultralight powered parachute as a vehicle weighing no more than 254 pounds without pilot, having only one seat and having no more than 5 gallons of gas capacity. If the powered parachute you purchase meets these criteria then the FAA says that there are no age requirements, no training requirements, no medical, and the operating rules and regulations are quite simple. We'll talk more later in this article about training. Nonetheless the ultralight is cheaper to purchase, cheaper to learn to fly and cheaper to maintain.



If you decide to purchase a two seat powered parachute then you need to learn the legal requirements for aircraft certification with the FAA (not required with Ultralights), and the training certification requirements for earning a sport pilot certificate.

WHAT IS INVOLVED IN LEARNING TO FLY?

As previously reported, legally there is NO training requirement whatsoever if you purchase a legal Part 103 ultralight powered parachute. And you will find manufacturers and individuals who will sell you one without being a bit more truthful. While there are many who have 'self-taught' themselves and lived to talk about it, these are often the folks who indeed end up crashing early and often. If you connect with a reputable, experienced powered parachute flight instructor you will always learn that you should enroll in at least an abbreviated training course. The Western Powered Parachute Association, as an example offers a seven lesson ultralight-pilot course at a reasonable cost. This course is often covered over a three day period and at the end of the course you will be competent and feel proficient, and be able to fly safely for a lifetime!

If you have headed down the path to a two seat powered parachute then you may start with the solo course that leads to a student pilot license. That will allow you to fly your two-seater legally until you complete the requirements for the Sport Pilot Certificate. That certificate requires a minimum of 12 hours of flying, 2 solo, and 10 hours dual flight instruction (in the air with the instructor in a powered parachute equipped with fully functioning dual controls). All of this training must be accomplished by an FAA certified flight instructor who is rated in powered parachutes.



Once you complete the flight time requirements you will be required to take an FAA written examination, followed by an FAA "Practical Test" that consists of oral questioning and an inflight examination conducted by an FAA Designated Pilot Examiner. This may sound daunting, but if you connect with the right organization and instructors you will find the experience more painless than it initially sounds, and totally satisfying in the end with the earning of an FAA sport pilot license.

Cost needs to be a part of your decision here too. Solo training courses in an ultralight usually range from \$750 to nearly \$2000 depending on many factors including whose aircraft you train in, the speed of training and the method of ground school.

Achieving a Sport Pilot license is an investment ranging from \$1500 to over \$4000, again dependent on many factors. Some manufacturers, such as Six Chuter International LLC packages sales of their aircraft with sizable discounts on the training program that goes with it.

DO YOU WANT TO PURCHASE A USED AIRCRAFT OR A NEW AIRCRAFT

The first step in this decision is to make sure that you are purchasing a LEGAL aircraft! There are some manufacturers and a lot of individuals who will sell you an aircraft without explaining the legal requirements. One set of requirements are the previously mentioned specifications to meet Part 103's definition of an ultralight. It is not difficult to find what appear to be some great deals on single seat powered parachutes that in fact do not meet the specifications and are therefore not legal unless issued an airworthiness certificate and registered with an N number issued by the FAA. And, these single seat aircraft would then require the pilot to have a Sport Pilot License to operate them legally.

The next step of legal requirements relate to the two seaters. These are considered flight sport, must be issued an N number by the FAA and have a valid airworthiness certificate in addition to a few other registration and paperwork requirements. Again, if you are searching the internet and sadly even talking with some manufacturers, you may never hear a discussion about these certification requirements.

Once you have focused on acquisition of a legal powered parachute then the new or used question can be considered. There are in fact a lot of very good deals on the used market for legal single and two-seat aircraft. We would always recommend that you purchase a used aircraft only when you are dealing with a reputable organization or seller, when the history of the aircraft is known and when the maintenance and condition of the aircraft can be proven. Even with all of these issues satisfied you know that you will be investing in an aircraft that likely has no warranty remaining. The other issue is to consider whether the original manufacturer of the aircraft is still in business and therefore able to provide ongoing parts and other support. You will learn that there are very few powered parachute manufacturers still open for business.

A new powered parachute, while carrying a healthy price tag, will usually come with warranties on all components including the airframe, the engine, electronics and the canopy. You will learn in your investigation that new aircraft that are being sold by reputable manufacturers are all usually in about the same price range. All powered parachute manufacturers who sell legal light sport powered parachutes use the same engines, the same electronics and the same canopies. The differences are usually found in design differences of the airframe.

Purchasing new should only be done when you know that the manufacturer is approved by the FAA to build and distribute legal light sport aircraft. While years ago there were nearly 40 powered parachute manufacturers, today there are only about half a dozen who have invested and earned the approval of the FAA.

Another slightly more complex decision is to purchase an Experimental Light Sport or a 'Special Light Sport' certified aircraft. Essentially the aircraft are the same and this is a question of FAA certification method. The primary difference in these categories is that the Special Light Sport certified aircraft is fully assembled, prepared, test flown and certified by the FAA before it leaves the factory. That typically comes with a higher cost associated with it due to assembly and paperwork required by the FAA. Special Light Sport aircraft are required to conduct sport pilot training, so if you are



Six Chuter Paragon 912.
Special Light Sport-Full Dual Controls!

an instructor or have any intention of instructing this is the direction you need to go. If you are an individual owner you can legally be trained in an Experimental Light Sport aircraft, if it is equipped with fully functioning dual controls. If you own a Special Light Sport certified aircraft the maintenance requirements are more stringent and expensive as all repairs and serious maintenance must be done by a certified repairman. If you own an Experimental Light Sport certified powered parachute, you the owner are allowed to do all maintenance and even repairs.

ARE YOU A BUILDER OR DO YOU MAINLY JUST WANT TO FLY?

If you enjoy the prospect of building your own powered parachute from an FAA approved kit you can save thousands of dollars. But if you decide to build from a kit you need to find out from the manufacturer how complicated it will be, what skills and what tools are required, and what the average build time is. Then you need to be realistic about your ability and patience to build from a kit.

The fact is Six Chuter International LLC is one of the very few powered parachute manufacturers who still offer their aircraft in full kit form. In fact, Six Chuter has been supplying kits for well over 20 years, with a long proven history of satisfied builders and owners. While the company also does full factory assembled and test flown special light sport aircraft, they continue to market their kits to many customers who indeed enjoy the process of building and the thrill of flying something that they have put together with their own hands.

WHAT OTHER EXPENSES ARE INVOLVED IN OWNING A POWERED PARACHUTE?

There are a lot of very cool products out there to supplement your flying experience and many owners spend literally thousands, customizing, and equipping their aircraft and themselves. But there are a few basics that are definite considerations. These include:

- **Transport.** Most powered parachute pilots trailer their aircraft from field to field much like trailering a boat to various lakes. Basic transport can be with a simple utility trailer, however, you need to be careful to learn the footprint of the aircraft you will buy. Most require slightly over sized, non-standard trailers. If you envision travelling far to attend events or just to enjoy flying in various areas of the country then a covered trailer is nearly mandatory. A covered trailer protects your investment and becomes your portable hangar. Again, be careful to consider the size of trailer required for your particular aircraft.
- **Training.** This was discussed earlier so be sure and consider this as a primary cost of acquiring an aircraft. If you fly a two seat powered parachute you will also need to anticipate a flight review every two years with a certified flight instructor. Flight reviews usually range from \$150 to \$400 and require a minimum of one hour of ground and one hour of flight training. The flight review is designed to keep you safe, legal and proficient.
- **Helmets and Intercom.** Some pilots fly without helmets but you will find that our pilot culture encourages helmets as basic safety equipment. The helmets and intercom systems used for light sport are really quite specialized and available from only a couple of reputable vendors.
- **Radio.** If you will always fly alone, never with another powered parachute in the sky with you, and in remote areas away from airports and more complicated airspace you might not need a radio. Most of the powered parachute pilots we equip and train purchase a simple hand held VHF aviation radio that is compatible with the helmet and intercom system.
- **Maintenance.** The typical powered parachute pilot carries a nice small set of personal tools so that they can conduct routine in the field maintenance. There is also an annual inspection of condition required for FAA certified light sport aircraft. If this inspection is completed by a qualified repairman expect to pay an average of \$400 a year. An owner can also take a 16 hour repairman course that earns them a certificate and privilege to conduct their own annual inspection. The cost of that course is about the same as an annual inspection and thus a very good investment of time and effort.
- **Registration and Taxes.** This is a final area that you need to investigate and is specific to your state requirements. There is a cost associated with the first time inspection and issuance of an airworthiness certificate, but this is quite often included in the pricing of new aircraft, or already done if you purchase used. The FAA now requires "re-registration" every few years, but that is only a \$5 process. States vary, but most require that FAA certified aircraft be registered with the state aviation authority, and thus another fee. And this registration is usually shared with the state department of revenue, thus the need to check on sales tax requirements.

DO YOU HAVE SUPPORT AVAILABLE INCLUDING INSTRUCTORS, FLIGHT EXAMINERS, QUALIFIED MAINTENANCE PERSONNEL AND FACTORY RESOURCES?

As you conduct your due diligence in the areas detailed above you will soon discover whether or not the support resources are available. Unfortunately there are many areas of the country where these are far and few between. If you will be earning a sport pilot license and your nearest instructor is a thousand miles away, you need to anticipate the logistics and costs involved not only in the training, but also the travel to get there. The same issue needs to be considered in each of the other areas. Who will be available to conduct your flight test? Where will you be able to take your aircraft for maintenance and service? And if you need parts and factory support, how available is that?

DO YOU HAVE PLACES TO FLY AND PEOPLE TO FLY WITH?

Some could get through this entire list of issues and satisfy them all, but discover in the end that there really isn't a practical place to fly your powered parachute. And if you are a social person at all you may discover that you are indeed all by yourself in a wilderness with no other participants to share the sport with.

If you are in an urban area with only general aviation airports available you will need to learn from an instructor and perhaps the airport managers whether you will be able to operate from the airport and within the more complicated airspace that surrounds many cities. Most powered parachute pilots operate either from smaller more rural airports, or from open private fields.

The EAA (Experimental Aircraft Association) has a network of clubs called chapters across the United States. Many of these chapters are focused on 'Ultralight' or light sport. And this may be a great place to start by meeting others and learning about where they fly locally. Of course if you are located in the more rural areas that comprise most of America you are likely to find more flying locations than you will be able to explore in a lifetime!

THE END OR THE BEGINNING?

This article can make entry into the sport seem daunting. But the other perspective is to understand that any of life's great adventures worth undertaking require time, resources, and learning as suggested above. It doesn't matter whether it is rock climbing, water skiing or recreational flying. All come with requirements and effort. The real question is how bad you desire the achievement.

This article has been offered to help you move forward towards the achievement of becoming a powered parachute pilot with a full understanding of what is involved. Taking the time to conduct the level of due diligence suggested in this article will help save you money, save you time and most of all give you some level of guarantee of success and enjoyment.

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