What if the motor quits?

It's a glider!

You'll coast slowly down and in full control of direction. The glider flies about 6 feet forward for every foot lost (a 6 to 1 glide ratio) so you'll be descending at 4 mph while gliding forward at just over 20. You can land in a space smaller than the average yard but responsible pilots stay within gliding distance of safe landing options. A motor failure is rarely more than an inconvenience.

Flying without the motor

Paragliding, or free flying, can be done using your paramotor wing but with a different harness. Free flyers rely on updrafts from thermals or air blowing up hills, so they gravitate to mountainous areas. You can also get towed up although towing is surprisingly dangerous if not done properly. Never, ever try towing without a certified, experienced tow operator.

Most free-flight launch sites require pilot ratings from the U.S. Hang Gliding and Paragliding Association (www.USHPA.org).

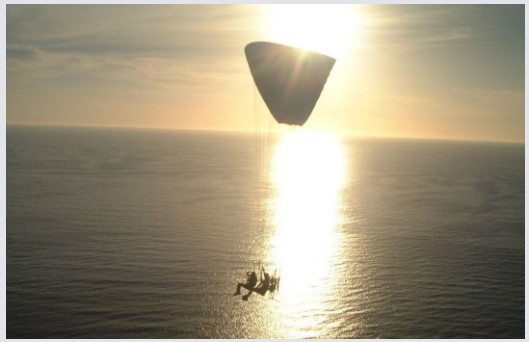
Can I take people up?

In short, no. The simple ultralight rule we operate under, *Federal Aviation Regulation Part 103,* is for solo operations only. However, properly qualified USPPA instructors can take you up with two place foot-launched powered paragliders. This valuable tool is for training only. It requires significant experience, knowledge and skill since you must manage the motor, wing and another person at the same time.

If your desire is to take others up in two-place craft, seek out the Sport Pilot license. It lets you carry a passenger in Light Sport certified aircraft. For more information, visit www.USUA.org.

If you want the most personal form of flight, you've found it with *powered paragliding*. Visit www.USPPA.org to find out more. Enjoy!

Left: Don't use age as an excuse—William Shatner, pictured here, was 72 years old when he foot launched a powered paraglider and flew into a charity event. And that was after taping clips for the USPPA's *Risk & Reward* safety video. Many pilots enjoy wheel launching well into their 70's and beyond.



Fast Facts

Altitude: Up to 18,000 feet although most pilots fly between 200 and 2000 feet above ground level (AGL).

Speed: 20-35 mph although most fly about 25 mph.

Weight: About 65 lbs ready to launch including fuel. The wing weighs about 15 pounds but the pilot doesn't feel it. A cart for wheel launching will add about 50 pounds.

Cost (New): $4500-$12,000 Motor, $1700-$4500 Wing, $1200-$2500 Training, $1000-2500 cart (optional). The worst place to skimp on is training. Your life (and wallet) depends on quality instruction!

Payload: 170 - 400 Lbs. Powerful tandem units provide the highest payload.

Fuel: 1 to 5 US Gallons of auto fuel or avgas mixed with 2-stroke oil. A few motors (4-stroke) require no mixing.

Endurance & Range: 1-3 hours, 40-70 miles (calm)

Transport & Storage: Small Car or shipped affordably in boxes and stored in a room corner. Most carts fold or collapse for transport in a pickup bed.

Motor: 12-25 hp 2-Stroke, 12-15 hp 4-stroke, 8-12 hp electric.

Propeller: 30 to 51 inch wood or composite with from 2 to 4 blades. Most props are spun through reduction drives.

Launch/Land Area: 200 x 400' minimum with a another 400' clear climbout zone. Experienced pilots can safely fly out of a space half that size.

Training Time: 1 to 3 days for first flight and 5 to 8 days to become independent.

Getting Started: Visit USPPA.org for a USPPA/USUA certified instructor in your area. Do that before buying equipment, not all instructors will teach on all units.

USPPA

For more about powered paragliding, including a list of certified schools and critical safety information, visit the U.S. Powered Paragliding Association at www.USPPA.org

Powered Paragliding

The Most
INCREDIBLE
form of
Personal Flight
EVER DEVISED!

ParamotorFlying

Fifteen minutes after parking you're ready for flight. It's just you and the most personal aircraft ever devised.

You throttle up and start to run. Your wing fills with air and springs to life, coming overhead as you squeeze a handheld trigger to throttle up. With a few more steps you're flying.

The view is essentially unobstructed and control is precise. With experience, a pilot can fly within inches of his or her desire. The experience can range from serene to invigorating depending on what you like.

Many flyers like just tooling around, enjoying a new perspective while others favor fine control, carving it up and thrilling to the G's. The same wing that is used for powered paragliding (PPG), also known as paramotoring, can be used for motorless paragliding (PG) too.

What is a powered paraglider?

Paragliding is the simplest form of flight: no plane, no windows, just you in control, flying through the air. It launches from a field, transports easily, and is inherently stable while offering amazingly precise control. The paraglider itself has no rigid structure—you sit in a seat, suspended by lines. The paramotor, a backpack power unit on a frame with attached harness, provides thrust for climb and flying around. Wheels can be used that let you roll aloft instead of run. They make it easier to learn and are a bit easier on your legs but aren't quite as versatile.

Our craft is *not* a parasail or powered parachute, both of which use very stable, but far less efficient wings.

Physical requirements

The motor does most of the work. If you'll be foot launching, you must be able to walk around and handle the motor's weight but certainly don't need to be an athlete. The wing carries the motor's weight. Ages range from 13 years old into the 70's and beyond.

License, the Law, & Where you can fly

No license is required although training is incredibly important. PPG's are minimally regulated under the Federal Aviation Administration's Part 103. Essentially we can fly during daytime in wide-open areas. We must avoid flying over people, near big airports and a few other locales.

Private open fields, some smaller airports, and a few parks are great places to fly. One beauty of the sport is that we don't need an airport! Most state and national parks are off-limits to us but do allow overflight.

There are many groups of pilots who have established local flying sites where you can launch. Courtesy of neighbors is important so as to minimize complaints.

Fear of heights

Ask just about any pilot if they're afraid of climbing ladders and the answer will be yes. Human nature is to be afraid of heights, a healthy response to obvious risk. Nearly everybody starts with that fear and they overcome it after a few flights. Once you internalize how secure the harness and wing is, there is little to fear.

Training

Different courses are available, but be very careful to pick a qualified, certified instructor with an organized program. Make sure they use the USPPA syllabus or equivalent and have thorough emergency training including simulator rehearsal. Make sure that, if towing is used, USPPA tow guidelines are followed. Solo pilot certification is available for student (PPG1), pilot (PPG2) and advanced pilot (PPG3) levels through the USPPA/USUA. Visit www.USPPA.org for a list of schools and instructors.

You can reasonably expect to have your first flight (achieve the PPG1) in 3 days but are far from ready to be considered a pilot (PPG2). Accelerated courses, which take significant extra precautions, can get someone a flight on their first or second day. Expect 5 to 8 days to earn a PPG2 rating.

What weather can I fly in?

This is a light-wind sport. Generally up to 12 mph is OK for foot launching and about 8 mph if on wheels. Under certain conditions, experienced pilots can fly in stronger winds. We generally prefer mornings and evenings to avoid mid-day's bumpy air. At most beach locations, you can fly all day.

Some pilots seek out the stronger mid-day conditions to go soaring without the motor but that incurs some unavoidable added risk.

What is the risk?

Powered paragliding is about as safe as other forms of recreational aviation. Pay close attention to your instructor and respect the prop to minimize risk. Like any recreation that involves a human in motion, there is risk. Training, and the first few hours of flight, are most critical. We estimate that overall risk is about like motorcycle riding or flying small airplanes, but more than driving a car.

What risk there is comes mostly from pilot error, not equipment malfunction. A conscientious pilot with the right attitude and good instruction can make this sport incredibly safe.