

Topic 5: FAQs

1. How do you steer a hang glider? Shifting the pilot's weight with respect to the glider controls hang gliders. Pilots are suspended from a hang strap connected to the glider's frame (hence the name "hang" glider). By moving forward and backward and side-to-side at the end of this hang strap, the pilot alters the center of gravity of the glider. This then causes the glider to pitch or roll in the direction of the pilot's motion and thus allows both speed control and turning.
2. How high/far can a hang glider go? This depends a lot on the conditions in which they are flown, but flights in excess of 480 kms (300 miles) in length and altitudes of well over 5250 m (17,999 ft) MSL (mean sea level) have been recorded. More typically, pilots in the summer in the west part of North America will frequently achieve altitudes of 1524 m to 3,048 m (5,000 to 10,000 ft) AGL (above ground level) and fly for over 160 km (100 miles).
3. How long do flights last? Again this depends on conditions, but a high altitude flight is frequently several hours in duration. On good days, pilots don't have to land until the sun goes down.
4. Where can gliders launch and land? Pretty much any slope that is relatively free from obstructions is steeper than about 6 to 1 and faces into the wind can be used to foot launch a hang glider. The pilot just runs down the slope and takes off when the air speed reaches 24 to 32 km/h. (or 15 to 20 mph). Alternatively, towing by trucks, stationary winches, and ultralight aircraft allows gliders to get into the air when no hills are available.

Where a hang glider can be landed depends somewhat on the skill of the pilot. An experienced pilot should be able to put a glider safely into any flat spot clear of obstructions bigger than about 15 m x 60 m (50 by 200 ft). This area requirement can vary somewhat, though, depending on wind conditions and the surrounding terrain.

5. How safe are hang gliders? Hang gliders are as safe as the person flying them. Like any form of sport aviation, hang gliding can be dangerous if pursued carelessly. Gliders are now certified for airworthiness, and hang gliding instruction has been standardized. Students learn from certified instructors using a thorough gradual training program. Despite these advances, people still make judgment errors and aviation is not very forgiving of such. The majority of pilots fly their entire careers without sustaining a serious injury.
6. What is a Paraglider? A paraglider is a foot-launched, ram-air, aerofoil canopy, designed to be flown and landed with no other energy requirements than the wind and gravity.

7. What are the main component parts of a Paraglider? A canopy (the actual "wing"), risers (the cords by which the pilot is suspended below the canopy), and a harness are the main components. In addition, the brake cords provide speed and directional control and carabiners are used to connect the risers and the harness together.
8. Is a Paraglider the same thing as a parachute? No. A Paraglider is similar to a modern, steerable skydiving canopy, but different in several important ways. The Paraglider is a foot-launched device, so there is no "drouge," 'chute, or "slider," and the construction is generally much lighter, as it doesn't have to withstand the sudden shock of opening at high velocities. The Paraglider usually has more cells and thinner risers than a parachute.
9. What is the difference between a Hang-glider and a Paraglider? A Hang-glider has a rigid frame maintaining the shape of the wing, with the pilot usually flying in a prone position. The Paraglider canopy shape is maintained only by air pressure and the pilot is suspended in a sitting or supine position. The Hang-glider has a "cleaner" aerodynamic profile and generally is capable of flying at much higher speeds than a Paraglider.
10. Why would anyone want to fly a Paraglider when they could fly a Hang-glider? A Paraglider folds down into a package the size of a largish knapsack and can be carried easily. Conversely, a Hang-glider needs a vehicle with a roof-rack for transportation to and from the flying site, as well as appreciable time to setup and stripdown. It's also somewhat easier to learn to fly, as a Paraglider flies at much slower speeds.
11. What are research flights? A research flight is usually one of the last steps in the airplane design process. After a new type of airplane has been planned on paper and on a computer screen, a full-size working version (prototype) is built. These prototypes are tested several times by specially trained research pilots. Before research flights are made, the technology and design of the prototype are thoroughly tested with flight simulators and wind tunnels.