



What is a Gyroplane?

Gyroplanes are a cross between a helicopter and an airplane. Mostly like a helicopter the gyroplane is a rotorcraft and uses rotorblades as a spinning wing to fly. Unlike a helicopter the rotorblades are not powered directly by the engine and they use a propeller for forward movement.

Gyrocopter, Gyroplane, Autogyro? Do they all mean the same thing?

In general **YES**. However, there are minor technical differences.

Autogyro The term Autogyro is used to describe the first style of gyroplanes. These are tractor-style gyroplanes that have a fuselage that looks like a conventional aircraft.

Gyrocopter This is the most common term used by the general public. The term gyrocopter is a **product name** owned by the Bensen company. Sort of like the term Kleenex is a brand name but not all tissues are Kleenex some are just tissues.

Gyroplane In the United States the FAA's official term is gyroplane. Gyroplane is the term most used by the pilots and people in the hobby.



Magni



AeroCopter

SnoBird



Rotordyne



Sparrow Hawk



If you would like to learn more about about gyroplanes and other personal rotorcraft JOIN THE PRA



Popular Rotorcraft Association



www.pra.org

NOTE:

Even if you are an experienced pilot you still must get lessons from a gyroplane certified instructor.

Gyroplanes are relatively easy to fly but are not fixed wing aircraft or helicopters. Gyroplanes have some very unique attributes that require gyro specific training!

Want to know about Gyroplanes?



This pamphlet contains basic information about Gyroplanes, Gyrocopters and Autogyros.

For more information contact www.PRA.org

Why Fly A Gyroplane?

A Gyroplane can maneuver and land in a very small area. They have a wide flight envelope of 10mph to 100+ mph. Gyroplanes are the most maneuverable of all aircraft.



Gyroplanes are among the least expensive aircraft to operate

Gyroplanes like no other craft give a 'magic carpet' ride akin to 'flying like Super Man'. Imagine driving your lawn chair out onto a runway then taking off in a few hundred feet. Your lawn chair has the power to weight ratio of an F-16 and astonishing maneuverability. Before you is no aircraft body only your legs and the control stick.

A well made and stable gyroplane can handle wind and wind gusts better than almost all general aviation aircraft if piloted by an experienced pilot.

Gyroplanes are inexpensive to purchase and easy to build compared to other sport and general aviation aircraft.

Gyroplanes are easy to store and transport. It is common practice to keep your gyroplane in the garage and trailer it to a local airport to fly.

Can I fly my gyroplane out of my backyard?

Perhaps, if you have a very flat, smooth grass runway about 800 to 1000 feet long.

Can you fly a Gyroplane Under Ultralight Regulations?

Yes, you can fly a rotorcraft as an ultralight if you like. That means you can fly without a license and you can purchase one completely built, if it qualifies under the FAA Part 103 ultralight regulations as an ultralight aircraft. Although you can fly an ultralight gyro without a license you still **MUST have training**.

Are Gyroplanes Safe?

Gyros are safe, in fact virtually the safest aircraft type there is. However, the safest aircraft is still no match for an **untrained or unsafe pilot**.

Consider an in flight **engine out scenario** on a fixed wing aircraft, helicopter and gyro.

Fixed wing aircraft; when the engine stops in flight, you must descend to hold your airspeed. Even with the slowest of airplanes you'll need a few hundred feet of flat open ground to land safely.

Helicopter; the pilot must quickly transfer to autorotation. If at any point, the rotor blade rotation speed decays too much, all control is lost.

A Gyro is ALWAYS in the autorotation mode. If the engine stops in flight, simply hold your airspeed and pick your landing spot. At landing you "flare" to trade the stored energy of the blades for a soft zero airspeed landing. A gyro has full control and makes a normal landing even without engine power.

How Do Ultralight Gyroplanes Compare To Trikes, Powered Parachutes and Fixed Wing Ultralights?

Ultralight Gyroplanes can handle windy conditions, have a strong fuselage, can not stall and can travel at the maximum allowable ultralight airspeed. Ultralight Gyroplanes do not require you to replace old or worn wing fabric, canopies or body surfaces.

How much do they cost and what kinds are there?

Good stable single place gyroplane kits and used gyroplanes start at about \$8K and up to about \$25K. The average cost of an open cockpit 2-place gyroplane starts at about \$15K through about \$80K. Enclosed 2-placed gyroplanes start at around \$20K and go up and up and...

Here are a few brands:

