

## What is a Gyroplane?

Gyroplanes can be viewed as a cross between a helicopter and an airplane. Mostly like a helicopter, the



Gyroplane is a rotorcraft that uses rotorblades as a spinning wing to provide lift. Unlike a helicopter the rotorblades are not powered directly by the engine.

An engine and propeller push the gyroplane forward. The forward movement causes air to flow up through the blades, which in turn cause them to spin.

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

In general, Yes. However there are minor differences.

**Autogyro:** This term is used to describe the first style of gyroplanes that had an engine-driven propeller in the front of a fuselage, much like a conventional aircraft.

**Gyrocopter:** The term most commonly used by the general public, which is a product name for one of the original models of gyroplanes owned by the Bensen company. This is similar to the term Kleenex that describes one brand of tissue, but does not represent all tissues.

**Gyroplane:** Used by the FAA in the United States to describe this type of aircraft. Gyroplane is the term most often used by the pilots who own and fly these aircraft.

## Can you fly a Gyroplane under Ultralight Regulations?

Yes, you can fly a rotorcraft as an ultralight if the machine qualifies under the FAA Part 103 ultralight regulations. That means you can fly one without a license, and you can purchase one completely built. **However, you must have training.**

## Are Gyroplanes Safe?

Gyros are safe. Many people believe they are the safest aircraft type there is. Even so, the safest aircraft is still no match for an **untrained or unsafe pilot.**

Consider an in-flight engine-failure on a fixed-wing aircraft, a helicopter, and a gyroplane.

**Fixed-wing aircraft:** When the engine stops in flight, the pilot must descend to hold airspeed while choosing a landing site. Even with the slowest of aircraft the pilot needs a few hundred feet of flat, open ground to land safely.

**Helicopter:** If an engine stops in a helicopter, the pilot must quickly transfer to autorotation, meaning the rotorblades must be allowed to spin freely. If at any point during the autorotation the rotorblade rotation speed decays too much, control of the aircraft is lost.

**Gyroplane:** A gyro is always in autorotation mode. As with a fixed-wing pilot, the gyro pilot descends to maintain airspeed, but needs very little open space to land and stop safely.

## How do ultralight Gyroplanes compare to Trikes, Powered Parachutes and Fixed-Wing Ultralights?

Ultralight Gyroplanes can handle windy conditions, have a strong fuselage, cannot 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.

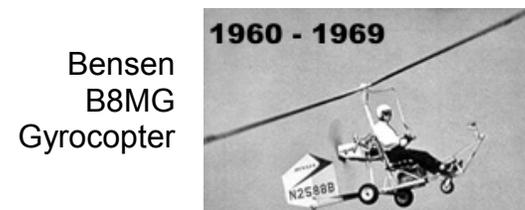
## How much do they cost and what kinds are there?

Good stable single-place gyroplane kits and used gyroplanes start at about \$8K and go up to \$23K for quality equipment and accessories. The average cost of an open cockpit 2-place gyroplane starts at about \$13K and goes up through \$40K. Enclosed gyroplanes start at around \$25K and go up and up and ...

## Looking Back



1919 - 1938  
Pitcarin-Cierva  
PCA 2  
Autogyro



1960 - 1969  
Bensen  
B8MG  
Gyrocopter

Also visit [www.rotaryforum.com](http://www.rotaryforum.com)

## Why Fly A Gyroplane?

A Gyroplane can land in a small area.

They have a wide

flight envelope of 10 mph to 100+ mph.

Gyroplanes are the most maneuverable of all aircraft and are among the least expensive aircraft to operate.

Gyroplanes, like few other aircraft give a “magic carpet” ride. An open-air gyroplane (no cockpit) is akin to flying like Super Man. Imagine driving your lawn chair out onto a runway and then taking off in a few hundred feet. Your lawn chair has the power-to-weight ratio of an F-16 and astonishing maneuverability. There is no aircraft body in front of you; only your feet 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 relatively inexpensive to purchase and easy to build compared to other sport and general aviation aircraft.

Gyroplanes can be stored at home and transported in readily-available trailers.

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. They have some very unique characteristics.



Just some of the gyroplanes you might see flying around the Pacific Northwest



Vortex



SparrowHawk



Lightning



RAF 2000



Gyrobee

## Want to know about Gyroplanes?



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

For more information visit [www.pra73.net](http://www.pra73.net) and [www.PRA.org](http://www.PRA.org)

