

SKYWORKS AERONAUTICS

The Future of Urban Mobility



eGyro™

Enable practical eVTIOL inter and intra-city air taxi operations

1502-4100MPH+PilotMI

SPEED

SIZE IN PASSENGERS RANGE



A Gyroplane Offers:

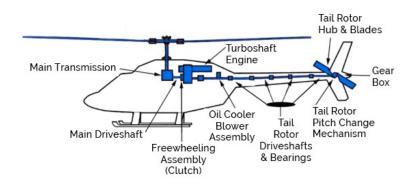
- o Lack of complexity that results in low acquisition and operating costs
- VTOL runway independence
- Competitive performance (speed, range, endurance) with a helicopter with improved efficiency, lower cost, and improved operating availability
- Stability in flight / simple operation
- o Inherent safety, can not stall and can land safely in power out situations



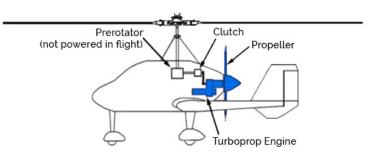
Comparison to a Helicopter

Powered Components Comparison

HELICOPTER



SKYWORKS HAWK 5









Gyroplane Basics

For a gyroplane in forward flight, the unpowered rotor creates lift through autorotation, with forward thrust provided by an engine-driven propeller(s) or by jet engine(s), much like an airplane.

Skyworks Aeronautics Hawk 5 gyroplane in sustained autorotative flight: the rotor is not powered; the propeller is providing forward thrust.





Air taxis, by their job description, will spend much of their time at low altitudes. While the eGyro[™] benefits from the security of autorotation at ANY altitude and thus has no need for ballistic parachutes, other types of Air Taxi aircraft which are based on distributed electric power and need to rely on ballistic parachutes raise serious safety questions:

1) The cords supporting the parachute can potentially become entangled with the rotors, particularly for an aircraft that has lost attitude control when the chute is deployed.

2) Even when properly deployed, the official minimum deployment height for ballistic recovery parachutes is 400 feet AGL in level flight.

3) Recent rulings by regulators promote autorotation. Mike Hirschberg of the Vertical Flight Society, observed that even for eVTOLs not intended for commercial operations, "controlled emergency landing requirements would have to be met, in a similar manner to a controlled glide or autorotation."





Click on above Skyworks logo to play video

