Gyroplane Approaches for Landing

There are three types of approaches for landing a gyroplane.

I. Standard Approach
II. Reduced Power Approach (to simulate emergency landing)
III. Vertical Descent Approach

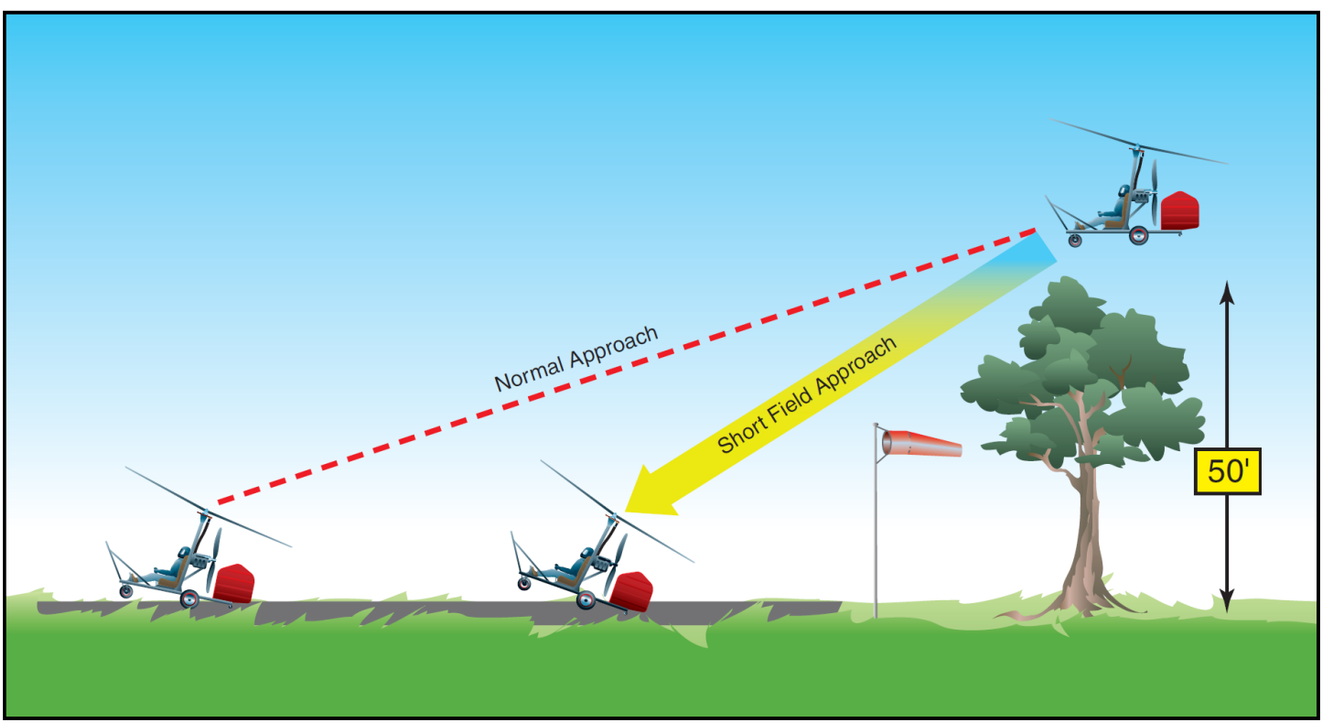
I. STANDARD APPROACH

- Descend from pattern altitude while maintaining the appropriate descent airspeed.
- The final approach distance from the end of the runway will vary depending on the power setting for a given approach speed
  - o The use of <u>less power</u> results in a steeper descent
  - o The use of <u>more power</u> results in a flatter descent

The standard approach for landing is <u>not recommended</u> where the runway is relatively short **and/or** has obstacles near the approach threshold. See"Vertical Descent Approach" below

II. REDUCED POWER DECENT FOR SIMULATED EMERGENCY APPROACH FOR LANDING

- While it is necessary for flight instructors to dedicate a reasonable amount of time for teaching/ practicing simulated engine failures (180-degree turn to land), the majority of flight training time should be dedicated to practicing the approaches and landings that a pilot will use on a regular basis.
- This approach for landing should <u>only</u> be practiced with the engine running.
- Because of the steep descent, this approach should be practiced close to the end of the runway.
- Use a power setting that generates near zero thrust at the desired approach speed of the aircraft.
- In an actual engine out emergency landing, the pilot will be subjected to a totally different environment than those conditions experienced during controlled training situations, e.g. varying wind conditions, unfamiliar geographical locations and terrain and heightened emotional intensity associated with a true emergency.
- The pilot is expected to use his/her best pilot skills, judgment, and procedures during actual engine failure.



* or manufacturer's recommendation

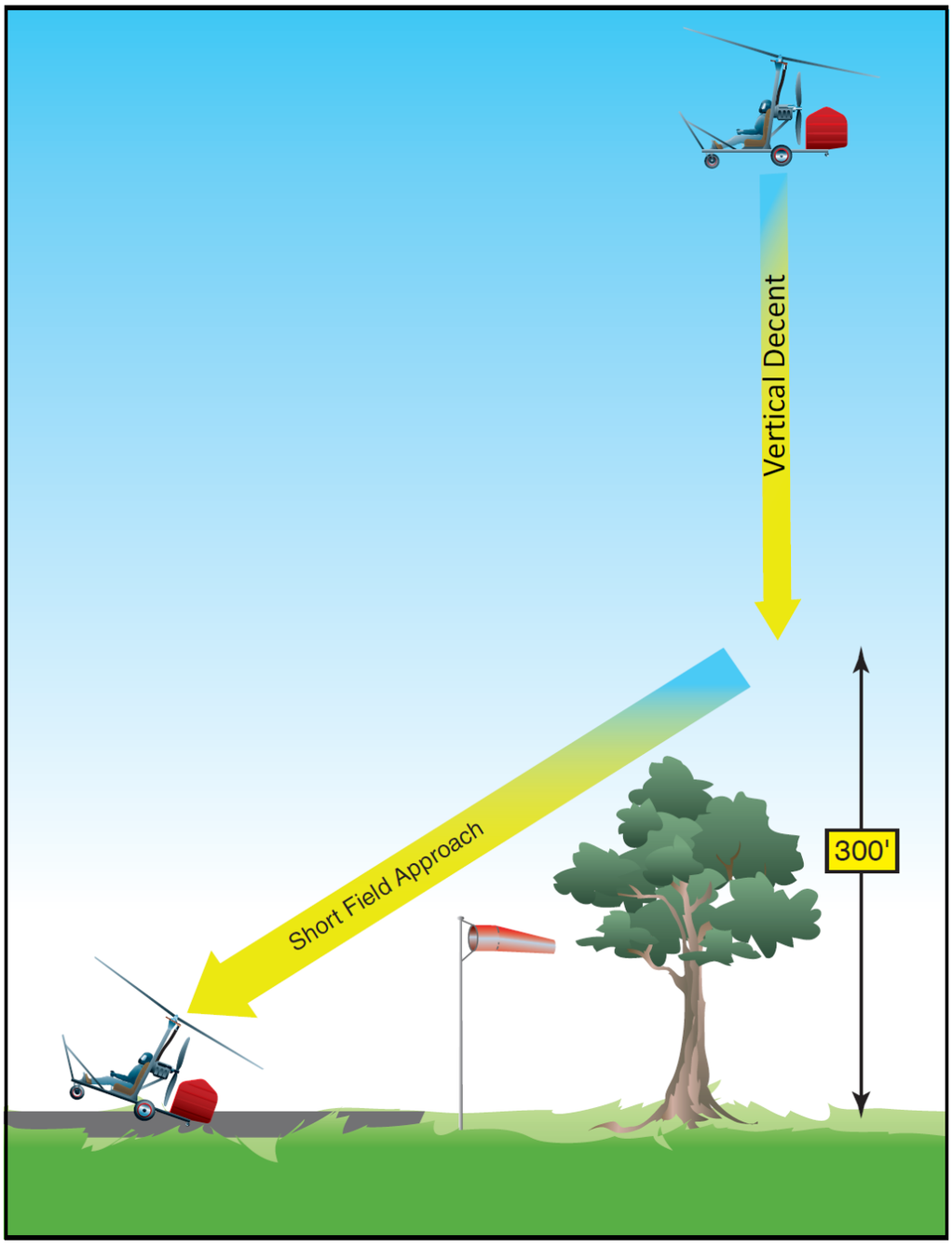
III. VERTICAL DESCENT APPROACH

Benefits:

- This approach is useful when landing on a shorter runway and if there are obstacles
- This allows the pilot to better determine the best possible touchdown spot and to avoid obstacles with a greater margin of safety.
- Base-to-final pattern will be closer to the runway.

Procedure:

1. Begin final approach from pattern altitude closer to the threshold of the runway
2. Adjust the throttle to 3000* RPM
3. Reduce air speed to 40 MPH* by pulling the cyclic slightly aft
4. Maintain this approach descent configuration until reaching 300 feet AGL
5. At 300 feet AGL, gently move the cyclic forward to regain 60 MPH* approach speed for landing
6. Use additional power, if needed.
7. Maintain aircraft alignment with the centerline of the runway using rudders for control during the completion of the landing.



NOTE: The above approaches are based on 2 place gyroplanes. Air speeds will vary depending on aircraft manufacturer's recommendations.

* or manufacturer's recommendation