

NORMAL TAKEOFF

The normal takeoff assumes that a prepared surface of adequate length is available and that there are no high obstructions to be cleared within the takeoff path. The normal takeoff for most amateur-built gyroplanes is accomplished by prerotating to sufficient rotor r.p.m. to prevent blade flapping and tilting the rotor back with cyclic control. Using a speed of 20 to 30 m.p.h., allow the rotor to accelerate and begin producing lift. As lift increases, move the cyclic forward to decrease the pitch angle on the rotor disc. When appreciable lift is being produced, the nose of the aircraft rises, and you can feel an increase in drag. Using coordinated throttle and flight control inputs, balance the gyroplane on the main gear without the nose wheel or tail wheel in contact with the surface. At this point, smoothly increase power to full thrust and hold the nose at takeoff attitude with cyclic pressure. The gyroplane will lift off at or near the minimum power required speed for the aircraft. V_X should be used for the initial climb, then V_Y for the remainder of the climb phase.