LANDING GEAR

The landing gear provides the mobility while on the ground and may be either conventional or tricycle. Conventional gear consists of two main wheels, and one under the tail. The tricycle configuration also uses two mains, with the third wheel under the nose. Early autogyros, and several models of gyroplanes, use conventional gear, while most of the later gyroplanes incorporate tricycle landing gear. As with fixed wing aircraft, the gyroplane landing gear provides the ground mobility not found in most helicopters.

WINGS

Wings may or may not comprise a component of the gyroplane. When used, they provide increased performance, increased storage capacity, and increased stability. Gyroplanes are under development with wings that are capable of almost completely unloading the rotor system and carrying the entire weight of the aircraft. This will allow rotary wing takeoff performance with fixed wing cruise speeds. [Figure 15-3]

Figure 15-3. The CarterCopter uses wings to enhance performance.