

for the gyroplane. When using the same indicated airspeed as that used for a normal approach at lower altitude, a high density altitude results in higher rotor r.p.m. and a slightly higher rate of descent. The greater vertical velocity is a result of higher true airspeed as compared with that at low altitudes. When practicing high-altitude landings, it is prudent to first learn normal landings with a flare and roll out. Full flare, no roll landings should not be attempted until a good feel for aircraft response at higher altitudes has been acquired. As with high-altitude takeoffs, it is also important to consider the effects of higher altitude on engine performance.

### **COMMON ERRORS DURING LANDING**

1. Failure to establish and maintain a stabilized approach.
2. Improper technique in the use of power.
3. Improper technique during flare or touchdown.
4. Touchdown at too low an airspeed with strong headwinds, causing a rearward roll.
5. Poor directional control after touchdown.
6. Improper use of brakes.

### **GO-AROUND**

The go-around is used to abort a landing approach when unsafe factors for landing are recognized. If the decision is made early in the approach to go around, normal climb procedures utilizing  $V_X$  and  $V_Y$  should be used. A late decision to go around, such as after the full flare has been initiated, may result in an airspeed where power required is greater than power available. When this occurs, a touchdown becomes unavoidable and it may be safer to proceed with the landing than to sustain an extended ground roll that would be required

to go around. Also, the pitch attitude of the gyroplane in the flare is high enough that the tail would be considerably lower than the main gear, and a touch down with power on would result in a sudden pitch down and acceleration of the aircraft. Control of the gyroplane under these circumstances may be difficult. Consequently, the decision to go around should be made as early as possible, before the speed is reduced below the point that power required exceeds power available.

### **COMMON ERRORS**

1. Failure to recognize a situation where a go-around is necessary.
2. Improper application of power.
3. Failure to control pitch attitude.
4. Failure to maintain recommended airspeeds.
5. Failure to maintain proper track during climb out.

### **AFTER LANDING AND SECURING**

The after-landing checklist should include such items as the transponder, cowl flaps, fuel pumps, lights, and magneto checks, when so equipped. The rotor blades demand special consideration after landing, as turning rotor blades can be hazardous to others. Never enter an area where people or obstructions are present with the rotor turning. To assist the rotor in slowing, tilt the cyclic control into the prevailing wind or face the gyroplane downwind. When slowed to under approximately 75 r.p.m., the rotor brake may be applied, if available. Use caution as the rotor slows, as excess taxi speed or high winds could cause blade flap to occur. The blades should be depitched when taxiing if a collective control is available. When leaving the gyroplane, always secure the blades with a tiedown or rotor brake.