Go-Around Hazards©

Reasons the go-around is considered difficult:

- Pilot indecision which results in too much runway behind you and not enough in front.
- Pilot optimism in belief that he can salvage a poor approach to make a good landing.

There are several common faults typical to the go-around. Most problems occur when power is first added and before flaps are raised.

Remember--The idea that just adding power to an airplane will make it fly slower is another example of a flying contradiction. In every other situation in life, adding power makes things go faster. This phenomenon is best demonstrated at altitude. Establish the airplane in trimmed low cruise of 70 kts. Add full power with a touch of rudder to hold heading. The nose will rise and the aircraft will slow. Do this again without the use of rudder to note the effect of P-factor. Do it again with flaps and slower airspeeds.

Most control problems occur in the interval between power application and removal of flaps. The pitch up and left turning of the nose must be ANTICIPATED and corrected BEFORE it occurs. Putting more than one finger behind the yoke on a go-around is a 'probable cause' of over reaction and abrupt control movements.

For some reason many students think that the carburetor heat must go off before throttle application. It doesn't. The throttle should be applied smoothly first and then the carb heat taken off with the thumb to get full power. The position of the carb heat control was designed to be pushed in with the right thumb. A too rapid application of throttle can cause the engine to load up with excess fuel. This causes a delay in getting full power. Smooth throttle operation will give smooth engine operation and allow smoother application of rudder. It is surprising how often students seem to think that the hand must stay frozen on the throttle to keep it in. It doesn't. Keep the friction lock of the throttle snug. By holding the throttle you will fail to get the flaps up. The yoke pressure makes them think that something is wrong with the trim. There isn't. Once full power is applied the right hand goes immediately to the flap switch.

Reasons the go-around has a disproportionate number of accidents is related to:

- Failure to initiate at first indication of a problem.
- Failure to use rudder to maintain directional control.
- Failure to anticipate effects of power.
- Incorrect use of flight controls, especially ailerons, flaps and rudder

Forgetting to bring up flaps is the most common student fault. Aircraft are certified, when new, to be able to climb at 2-degrees in normal, utility, and aerobatic categories with full flaps. Just as old instructors have more trouble making the climb into an aircraft, so do old airplanes have trouble making the climbs for which they were originally certificated. The stall during the go-around is most likely to occur if the aircraft is not allowed to accelerate in level flight while slowly bringing up the flaps. At approach speeds a rapid removal of flaps will precipitate a stall.

As in many flying situations, instinctive reactions can bite you. Your normal reaction time to a ballooned landing flare or a bounced landing may create sensations and flight attitudes that cause problems. Your reaction time of one second to make the situation worse. You are pushing or pulling on the yoke at the wrong time. The only correct procedure is to GO-AROUND. Apply full power, hold the aircraft level, milk up the flaps, stay level to obtain climb speed, climb out and make a new landing approach.

There is a go-around situation called 'getting-behind-the-power-curve' that arises when the go-around is delayed. Behind the power curve means that your angle of attack is so great that there is insufficient power to climb. Gaining speed requires a certain loss of altitude. instinctive reactions overcome training until an obstacle gets so close that both power and instinctive raising the nose occurs due to perceived danger. The result is a nose high, low speed, prelude to an accident. A delayed go-around that adds incremental power changes can create this situation where there is no more power available and altitude must be surrendered. If the altitude is not available a go-around is not possible. Get the power off so that a crash/bounce will not make you airborne and behind the curve at ever a higher altitude.

When you have been flying a while, you expect to land...every time. The go-around becomes unusual, abnormal, and unprepared for. When ATC calls a go-around you are usually high enough and fast enough to perform without any special anticipation. The lower and slower you get into the landing procedure the less likely will you be prepared for the go-around. Do not add additional trim in anticipation of making the flare attitude easier. Such additional trim will greatly increase the control pressures and likelihood of a go-around stall.

A crosswind landing increases the likelihood of a go-around. Because of the possibility of uncorrected drift. You don't want to land with side loads on the landing gear or off runway. The crosswind go-around requires the pilot to make a change in orientation. While the landing is made with a wing-low heading parallel to the runway, the go-around requires a wings-level crab heading at an angle to the runway.

At some airports a go-around may not be possible due to geographical features. This one-way airport should never be attempted without good proficiency both in flying and judging aircraft performance. It is best to overfly at a safe altitude before making your approach.

Fly the airplane is # 1. The go-around is a standard procedure. It is not an emergency even if the FAA implies it is. The go-around is a precautionary option. Properly performed it is neither difficult or of any particular hazard. You don't need to tell the tower anything until they ask your intentions. A go-around should be made when there is a significant deviation from your intentions or a requirement for some radical maneuvering. A go-around is a ‘sound’ controlled maneuver. Listen for the ‘sound’ of full power, acceleration, vy, and then climb.