Cockpit Conversation

Go-around Decision Making

By Ross Engle & Rick Reierson

In the interest of improving the aviation safety culture of Idaho and beyond, the Idaho Division of Aeronautics produces publications such as Standard Operating Procedures (SOPs) related to our most popular airstrips and the annual Idaho Aviation Accident Scorecard (IAASC).

From the 2017 IAASC, we have learned that many of Idaho's flying accidents occurred in the landing phase of flight, involving factors such as unstable approaches. Ineffective and potentially unsafe go-arounds often come too late, or at the wrong location—thus, the go-around decision is the important point of focus in our approaches and situational awareness.

While over-flying the runway to look for wind and runway conditions, the pilot should define that point in their

Things To Know

Aircraft taking off on a runway covered with one-half inch of ice slush use about 14% more runway distance to become airborne than under normal conditions. Two inches of slush increase the length of takeoff as much as 50%.

The odds against collision in the air are 4 million to one. Your chances of safely completing a trip in the air is 99.99983.

Pilots of the 101-330 hour experience level are the most accident prone - with the 1001-3000 group right on their heels.

As an aid to sluggish will-power, be reminded that your body requires 3 hours to get rid of one ounce of alcohol.

approach where he/she will be committed to landing. Before this defined point, the pilot has the option to go-around if the approach does not appear to meet the appropriate criteria for a safe landing. Executing a go-around, for safety's sake, should be primary in the pilot's decision making. Do not be concerned about what others in the air or on the ground may think, but make sure to communicate clearly to your fellow pilots when a go-around decision has been made to replace a landing that was originally communicated.

A lot of things factor into the location point a pilot defines at which he/she commits to land:

- Aircraft performance can my airplane climb to a safe altitude?
- Meteorological conditions do I anticipate downdrafts, or other unfavorable conditions?
- Other air traffic are there other aircraft in the vicinity, ahead or behind, my location?
- Terrain characteristics if I turn in for final, am I totally committed to land? Or do I have a safe, alternative go-around route available?

The aircraft should be stabilized—with regards to speed, altitude, and configuration—at the time the aircraft arrives at the landing commitment point defined by the pilot. If the aircraft is not stabilized (e.g. too fast, too high, not configured, or the situation just doesn't look/feel right) when the pilot arrives at the landing commitment point defined, the right decision is to execute a go-around.

When a go-around decision is made, the following things need to happen:

- Full-Power: applied.
- Flaps: partially, or fully retracted.

- Landing Gear: retracted (if applicable to the aircraft).
- Directional Control: maintained.
- Communication: inform the aircraft in your vicinity of your go-around change in plans.

Nearly all NTSB final reports conclude the cause of aviation accidents to be a "loss of directional control." When full-power is added, after the aircraft is configured more closely for landing, aircraft trims may be less ideally placed. The state C206 typically lands with full elevator trim up. Adding full-power in this configuration would result in a nose-high attitude, and the reduction of airspeed, if not corrected. With practice, the pilot can anticipate this situation and be aware of these potential issues related to a go-around scenario. Once the pilot has configured the plane appropriately, per the POH, it is necessary to maintain the proper airspeed to clear any obstacles before "cleaning-up," or reconfiguring, for either cruise flight, or canyon maneuvering flight. Then, at a safe go-around altitude/route, the pilot can reassess his/her approach and determine whether to re-try the landing, or pass on the airstrip altogether, based on conditions.

Most likely, landing at an airstrip isn't a necessity, but rather, a great recreational opportunity for the pilot (and possibly passengers). Let's enjoy these opportunities, and be safe! If a pilot is inexperienced, or uncomfortable executing approaches or go-arounds, it is prudent and wise to hire an experienced pilot/CFI to teach and share the local knowledge and procedures of the airstrips we wish to safely enjoy.

Page 8 Rudder Flutter