



Go-Arounds

The decision to go around is a standard procedure, but could have a greater impact on aviation accident rates than any other.

A Flight Safety Foundation (FSF) study found that 54 per cent of all aviation accidents could have potentially been prevented by going around.

Any time a pilot identifies that their landing or approach is compromised, they must see going around as a viable and safe alternative. If there is any doubt, there is no doubt – go around!

CAA Aviation Examiner, John Parker, is unequivocal.

“Go-arounds are not an emergency procedure. A pilot should be praised for making the decision to go around.”

A Stable Approach

A pilot could decide to go around for any number of reasons, whether due to low visibility, runway incursion, aircraft positioning, or windshear.

Often, the decision is made due to an unestablished approach, so what factors should a pilot consider when assessing whether their approach is stable?

The FSF Approach and Landing Accident Reduction Tool Kit includes the following elements of a stabilised approach:

- » The aircraft is on the correct flight path, requiring only small heading or pitch changes to maintain it;
- » Speed is not less than V_{REF} (note: V_{REF} is the calculated minimum speed at the 50-foot point for a normal landing);

- » The aircraft is correctly configured for landing;
- » Power setting is appropriate for configuration;
- » All briefings and checklists have been completed.

The criteria may differ slightly between operators, but the basic principles are the same.

Decision Time

A decision to go around should always be taken as early as possible, before a critical situation develops. Again, if there is any doubt – go around.

Rocky Rua, Flight Safety Officer at CTC Aviation, believes training, and Standard Operating Procedures can make the decision simple.

“A pilot must maintain a high level of situational awareness, and must initiate a go-around if they identify any variables sitting outside the parameters of a stable approach. We ensure that happens with our SOPs,” he says.

“We teach our standard approach patterns with two gates on the final approach track which ensure the aircraft is positioned correctly. If the two gate criteria are not met, then a go-around must be initiated.”

In the interest of safety, go-arounds can be initiated at any stage of the landing. As a rule of thumb however, the *minimum* go-around height on approach should be no lower than the



highest obstacle or terrain at the top of the strip, or along the projected climb-out path.

Knowing the Risks

While it is important to see the go-around as a normal part of flight, it is just as important to be aware of the risks involved with the manoeuvre.

Loss of spacing is a possibility following, or during, a go-around, so a pilot must always maintain situational awareness. Position as required to maintain visual contact.

Another possibility is loss of control, so it is important to remain calm and focused throughout. Being well practised and following procedure are key.

"When flying, aviation should mostly be boring and procedural. If it's getting exciting, you're doing it wrong," says John Parker.

Be wary of relying entirely on nose attitude during a go-around procedure, making sure to monitor the airspeed indicator so speed doesn't degrade dangerously. This is doubly important in hill country where false horizons can affect judgement.

Performing the Go-Around

If the go-around was initiated due to traffic on the runway, or you're unsure of traffic considerations on the ground, it is advisable to perform the procedure to the right of centreline. This ensures that any aircraft on the runway, or climbing out, remain in sight to the pilot's left.

The best way to approach a go-around is to power up, clean up, and climb.

Always use the maximum permissible power during a go-around. There is no point keeping a reserve of power, particularly in a tight situation. It pays to remember that the extra power may result in a strong upwards pitch, particularly in an aircraft trimmed for descent with flaps extended.

Clean-up is important, as full flap go-arounds can result in disaster. Most light aircraft achieve their best angle of climb with zero or takeoff flap set. Ensure the aircraft has sufficient speed before reducing flaps so as to avoid a stall condition.

As the aeroplane accelerates, the nose should be on the horizon. At a safe height and airspeed, with a positive rate of climb, the remaining flap is raised gradually. Once at climb speed, it can then climb to circuit height.

"It's better to accelerate over the aerodrome than over the obstacles at the end," says John.

The aeroplane should be flown upwind along the climb-out path to the normal crosswind turn point. Turning crosswind early will shorten the downwind leg and may rush preparation for the approach. Any decision to turn early must consider other traffic in the circuit and must have ATC approval, if in controlled airspace.

With the aeroplane established in the normal climb, and trimmed, it may be necessary to advise ATC or other traffic that you are "going around".

Rocky Rua reminds us of the old adage Aviate – Navigate – Communicate.

"We put a big emphasis on the 'Aviate'. People want to jump on the radio and communicate, but they should take the time to fly the aircraft first," he says. ■