

Safety Bulletin

Reducing preventable go-arounds

26 NOVEMBER 2015

There are approximately 100 reported go-arounds each month across Australian civilian-controlled aerodromes. A range of factors can cause a go-around; the most common being weather (windshear, crosswind or downwind), an approach becoming unstable or to maintain a runway separation standard—normally due to the preceding take-off or landing aircraft requiring longer on the runway than expected. While there is no intention of dissuading pilots or controllers from initiating a go-around when circumstances dictate, research has shown that some go-arounds are preventable.

At recent Airservices/industry workshops¹ about go-arounds, a range of topics were discussed including air traffic control (ATC) and pilot actions that contribute to the need for a go-around. There are a range of specific ATC or pilot actions that contribute to go-arounds and the following themes were identified to be consistent across both roles:

- misaligned expectations between the pilot and the controller
- ‘can do’ attitude
- communication.

Misaligned expectations

The safety and efficiency of operations are a priority of both pilots and ATC, however there are significant differences in perspectives and some misunderstanding of each other’s expectations.

- **Pilot:** generally speaking, a pilot’s perspective in the approach phase is based on one aircraft—theirs. Descent and approach are primarily based on energy management—configuring the aircraft to enable a stable approach² and landing to be flown.
- **ATC:** the controller’s perspective is based on consideration of all of the aircraft—of different types, both arriving and departing—and assessing how to fit each into this four dimensional ‘puzzle’ in the most efficient and safe manner.

Although pilots may believe that ATC is acutely aware of their particular flight and specific approach profile, and controllers do receive training on aircraft performance and profiles, in general terms **ATC will not be aware of what is happening in the cockpit and the specifics of how a particular descent/approach is progressing.**

¹ This Safety Bulletin was developed by an Airservices/Industry Go-around Working Group. It has been written for both pilots and controllers and has also been released as an Airservices internal S@fetybyte.

² Although airlines generally define more specific requirements, the International Federation of Air Line Pilots Association (IFALPA) defines a stabilised approach as one where:

- the aircraft is in its landing configuration (landing flap set and wheels down) and
- is stable in path, vertical profile and speed at or before 1000 feet above ground level in instrument meteorological conditions and 500 ft in visual meteorological conditions.

Although not the primary consideration, operational efficiencies do have a significant impact on the smooth flow of aircraft. Aircraft of the same type may fly different profiles for various reasons such as airline standard operating procedures or pilot preference. Weather and other operational factors can lead to changes to profiles and, wherever possible, both ATC and pilots will try to make operational efficiencies. Add to this other cockpit and ATC factors that are generally invisible to the other party, and aircraft management may appear to become a controlled, yet time-critical scramble to have aircraft fit into the puzzle in the most efficient manner possible.

In this scenario, given that pilots and controllers may not have the complete picture of the other party, **it is imperative that they have a complete awareness of their own situation and speak up if the current or proposed profile is outside of their requirements or capabilities for the approach.** Unfortunately, another factor—the ‘can-do’ attitude—can impact the pilot’s or controller’s inclination to speak up.

‘Can do’ attitude

A common attribute of pilots and controllers is a ‘can-do’ attitude—a willingness to tackle a job and get it done and be very positive about your ability to achieve success. While this is generally a valuable attribute in aviation, it has led to occasions where the safest option to say “no” or “unable to comply” to a request or instruction has not been taken.

Communication

A key means of communication that is important in the prevention of go-arounds is occurrence reporting. ATC generally report all go-arounds of scheduled public transport aircraft. The report is purely from the controller’s perspective and is unlikely to include any pilot input, unless offered by the pilot. This means that the ‘real’ reason for a go-around may not be known and any ATC factors that led the pilot to go-around cannot be considered.

Common factors contributing to go-arounds

Specific pilot/aircraft factors contributing to go-arounds include:

- differences in aircraft performance across industry, even within the same company and/or the same aircraft type
- incorrect runway occupancy information leading to aircraft requiring longer on the runway (for example, aircraft reporting “ready” when they are not really ready)
- aircraft speed control, speed requirements and non-communication of such
- late communication of a pilot’s request, or inability to meet, an ATC instruction until too late.

The following ATC factors may contribute to the requirement for an aircraft to go-around:

- track shortening (reducing track miles)
- speed and altitude requirements that negatively impact the management of an aircraft’s energy (for example, being held high and fast, or requiring a deceleration on descent)
- ATC not factoring wind into aircraft instructions
- inappropriate or unrealistic final approach intercepts and late turns onto final
- late runway changes or advice of approach requirements.

What can we do to reduce preventable go-arounds?

The aviation industry is undertaking a range of activities to reduce unstable approaches and preventable go-arounds. These include:

- forwarding pilot go-around reports to Airservices to provide a more complete picture of the occurrence
- expanding familiarisation programs between Airservices and industry to provide pilots and controllers an opportunity to enhance their understanding of each other's operations
- making available information products on unstable approaches for all areas of industry. For example, the following Civil Air Navigation Services Organisation (CANSO) products have been developed for pilots and ATC:

[Flyer — Important tips for pilots/ATCOs — avoiding unstable approaches](#)

[Booklet - Unstable Approaches: Air Traffic Control Considerations](#)

[Flyer: An ATC Perspective on Unstable Approaches](#)

From an individual pilot/controller perspective, remember to:

- understand the perspective, capabilities and limitations of each other and speak up immediately if you are in any doubt regarding an aircraft's profile
- communicate your intentions early to help the other party share your mental model
- speak up early if you have specific requirements or are unable to comply with a request or instruction
- include as much information as you can when submitting reports for go-arounds to allow them to be used in the development of programs and procedures aimed at reducing the likelihood of go-arounds.

Further information

For further information please contact safety.promotions@airservicesaustralia.com