



Safety Brief #111 Perform a 360 and Rejoin Downwind (2/8/2025)

Subject: When tower instructs you to “do a right or left 360 and rejoin the downwind” for spacing.

It has become more common for Metro Tower (KBJC) ATC controllers to instruct pilots to perform a 360-degree turn and ‘rejoin’ the downwind leg in the traffic pattern. The main reason is to alter the spacing and sequencing of your position relative to other airplanes in front of you. This may also include modifying spacing to support IFR traffic flying straight in on an instrument approach. Another method ATC uses to create adequate spacing is with “Tower will call your base leg” which was discussed in a previous Safety Briefing. Rejoining downwind at the ‘normal’ distance from the runway is expected by ATC and required to ensure safety.

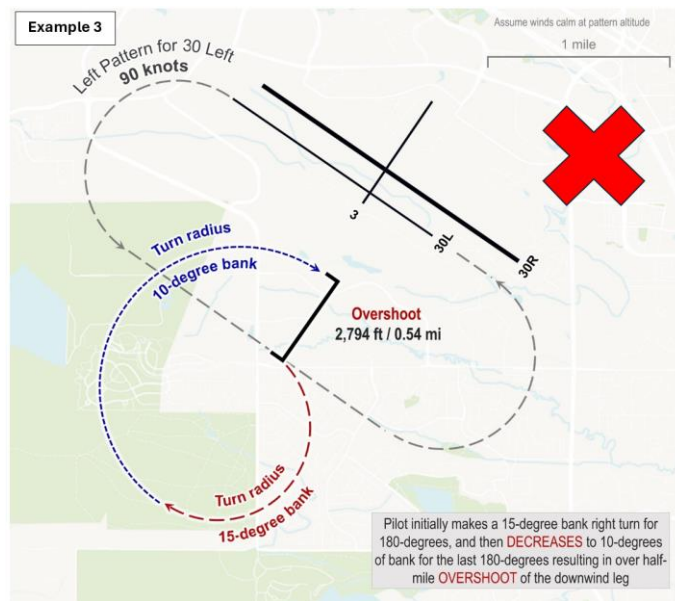
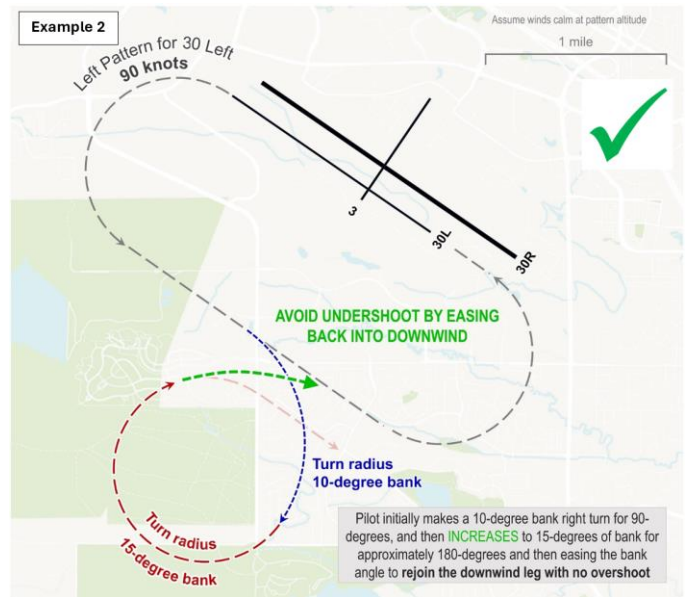
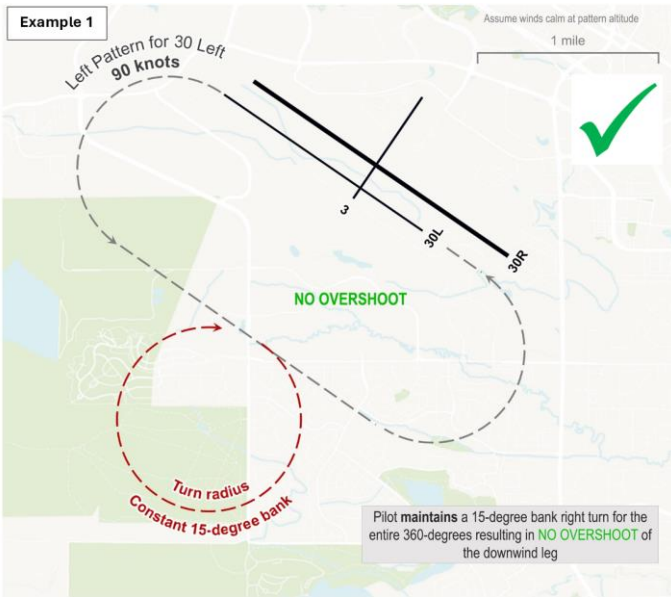
When performing the ‘360’, it is critical to complete the 360-degree turn with your position being accurate for re-entry/rejoin into the downwind. Here are several points explaining why this maneuver requires **extra attention** when executing:

- You are at Traffic Pattern Altitude (TPA) which is close to the ground. Maintaining TPA is critical, and ATC expects it.
- ATC has a good estimate of when you will rejoin. Flying an oddly shaped flight path will impact ATC planning.
- Do not delay. Begin executing the turn immediately as ATC has a good estimate when you will rejoin.
- Ensure the readback to ATC is correct, verifying right or left turn as instructed. Ensure ATC and you agree.
- Do not get slow. You may have been preparing for landing and be at a reduced power setting and airspeed. In the 360-degree turn, maintain a consistent airspeed that is well above a stall speed.
- Maintain proper rudder coordination. This is a high workload aspect of the flight and at ‘less than cruise’ speed. Avoid slips and skids.
- Do not exceed bank angles above 30-degrees. This is not a place for a steep turn, which will not speed up your clearance for landing. This is also not what ATC is expecting.
- DO NOT OVERSHOOT. Always be looking outside at your downwind reference point for planning the rejoin.

How best to ‘complete’ the 360 and rejoin the downwind (using ‘right 360’ for these examples):

- **Good (picture example 1):** The pilot executes a shallow to medium bank turn with consistency and is wings level exactly where they started (back in the downwind).
 - o It may be challenging to be ‘perfect’.
- **Good (picture example 2):** The pilot begins the ‘360’ with a shallow bank turn and later slightly increases the angle of bank to at most ‘medium’.
 - o Part way through the turn the pilot will have good visibility to where the downwind position should be and can maneuver with shallow to medium bank turns. This is similar to a 45-degree pattern entry where the pilot can easily maneuver preventing getting too close to the runway.

- **Bad (picture example 3):** The anxious pilot initiates a turn with a medium or higher bank angle and then realizes they are a bit too steep for their comfort.
 - o The pilot naturally reduces the angle of bank; however, this leads to rejoining the downwind inside the traffic pattern. This overshoot puts the aircraft in a position that could lead to further maneuvering, conflicts with other aircraft, or an overshoot on base to final if not corrected.



(credit director of art: Justin Sen)

As always, feel free to reach out to any of our instructors for additional help or insight as needed.

(link to all Safety Briefings: <https://www.mattbeyer.com/safety/>)

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