

## Holding Patterns Simplified

by Darren Smith, CFII/MEI from [IFR Checkride Reviewer](#)

The purpose of a hold is to park aircraft in the sky somewhere until ATC is ready to sequence the aircraft inbound for approach & landing. It can happen when TRACON can't get you passed off to Center (called a departure hold) or when TRACON can't get you sequenced into an approach (arrival hold).

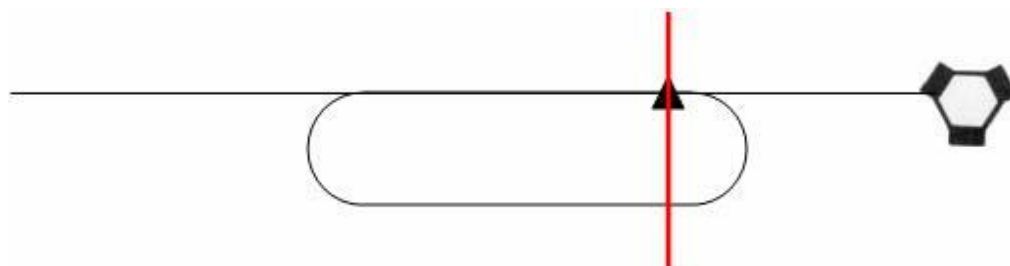
Holding patterns baffle most pilots. I see a lot of students holding up three fingers to the DG and mumbling nonsense to themselves. In order to end the confusion, and simplify this for easy learning, use this 3-step method described below. Once you get the idea, check your instrument textbook for a diagram that shows the "official method" of hold entries.

### The Easy Way...

**Step 1**, Diagram the instructions given. "Hold on the 270 Radial, west of the 15 DME fix from ABC VOR, standard pattern, 1 minute legs." Standard pattern means right turns.

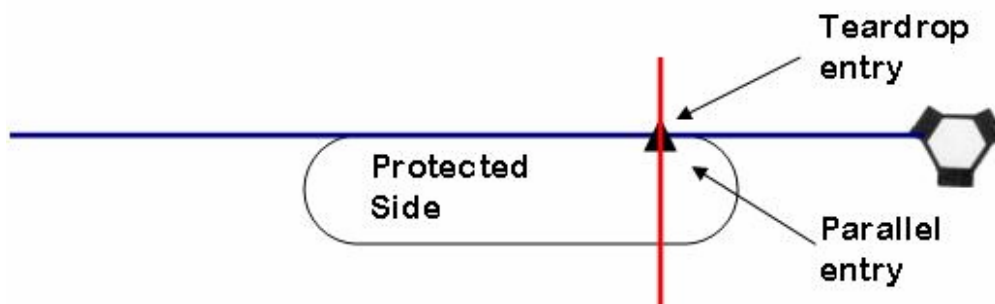


**Step 2**, Determine what side of the hold you are entering from. Here's the simple method that handles most of all hold entries.



- Chop the holding pattern in half as shown (see the red line). If you are entering from the fat side, it's always a direct entry. Go to Step 3 for an example.

- If you are entering the hold from the thin side, chop the holding pattern between the protected side and the non-protected side (see the blue line). If you are entering from a heading on the protected side, and thin side, it's always parallel entry. If you are entering on the non-protected side, and on the thin side, it's a teardrop entry.

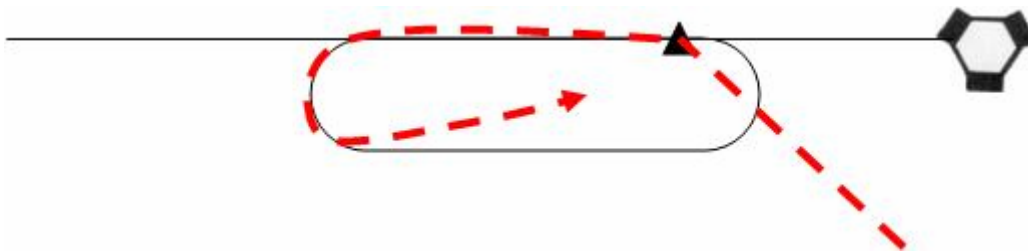


**Step 3.** What does each look like? As you can see from the red dashed line, sometimes your ground track executing the hold isn't perfect.

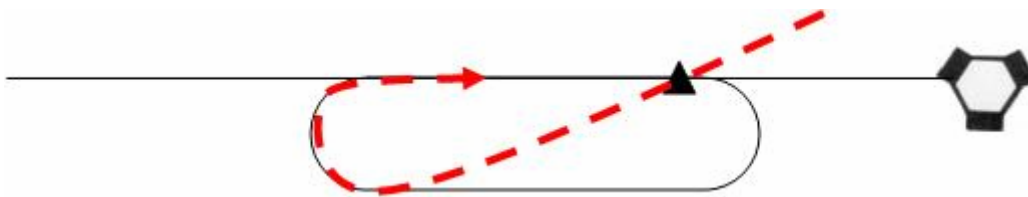
**Direct Entry**, entering on the fat side of the hold, in-bound heading for this example is approximately 060 degrees:



**Parallel Entry**, entering from the thin, protected side, in-bound heading for this example is approximately 330:



**Teardrop Entry**, entering from the thin, non-protected side, in-bound heading for this example is approximately 240 degrees:



## Examples of Holding

1. Holding at an outer marker.
2. Holding at an intersection of VOR radials.
3. Holding at a DME fix (or enroute fix).
  - a. Outbound hold - holding course away from navaid
  - b. Inbound hold - holding course toward navaid

