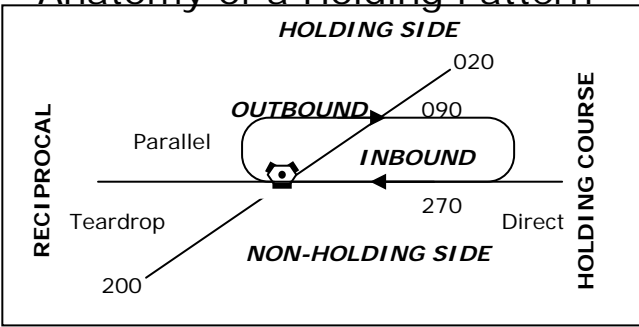


# HOLDING

## Anatomy of a Holding Pattern



### Components of hold:

- Direction from fix
- Holding fix
- Holding course
- Leg length
- Direction
- Altitude
- EFC time

### Example:

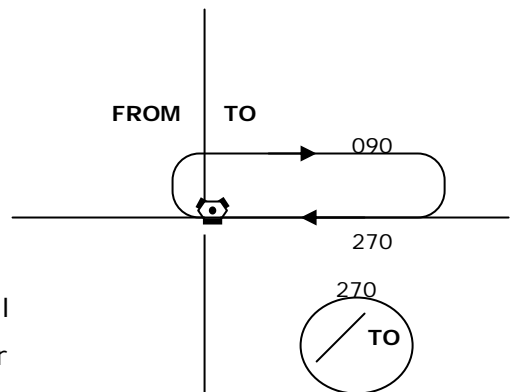
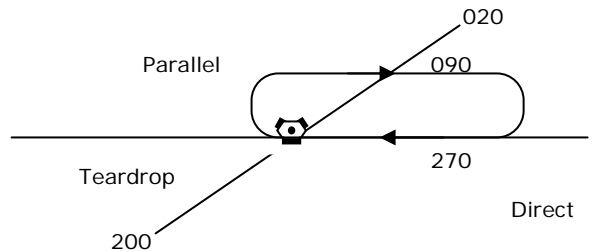
- Hold EAST of the
- ARMEL VORTAC on the
- 090 radial
- one-minute legs
- (standard is right)
- Altitude
- EFC at 0040

### Skills Needed for Holding:

1. Draw the pattern correctly:  
*When holding at a VOR, the number given is the OUTBOUND course heading. INBOUND course heading is its reciprocal.*
2. Determine the appropriate entry.
3. Prepare to enter the hold:  
*Slow to holding speed within 3 min of holding fix*
4. Enter the hold.  
*Turn - Time\* - Twist (inbound) - Throttle - Talk\*\**
5. Establish and maintain appropriate lateral spacing.
5. Use proper WCA to correct for wind drift.  
*When outbound, triple inbound drift correction.*

\* *Timing:* Inbound - wings level; 1 minute to fix is goal  
Outbound - abeam or wings level, whichever occurs later. Adjust as needed.

\*\* *Talk:* Report holding pattern entry and exit to ATC.



If lateral spacing is proper, needle will be "dead" on the side of the case when the inbound turn begins. Needle should begin to move within 45 degrees of inbound course. If no movement, stop inbound turn at 45 angle and wait until needle begins to move. If needle leaves side of case before 45 degree point, continue standard rate turn and then correct into the needle.

### Using HI to Visualize Entry:

- Mentally draw 70 degree line - to right for right patterns; to left for left patterns.
- Visualize sectors and determine proper entry.

