

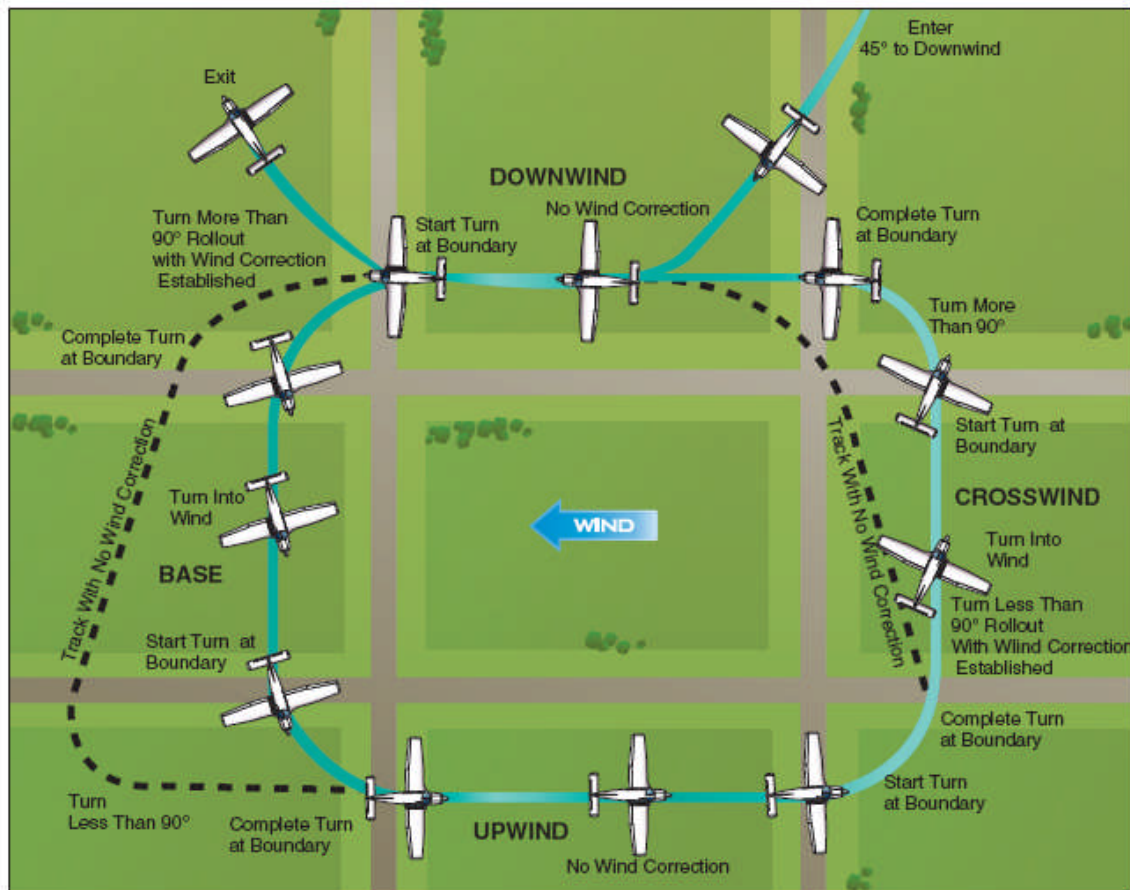
The following exercises are designed to sharpen your skills by flying precise patterns over visible ground landmarks.

The graphics are courtesy of the FAA and can be found in their Airplane Flying Handbook. The full manual is located at:
http://www.faa.gov/library/manuals/airplane_handbook/

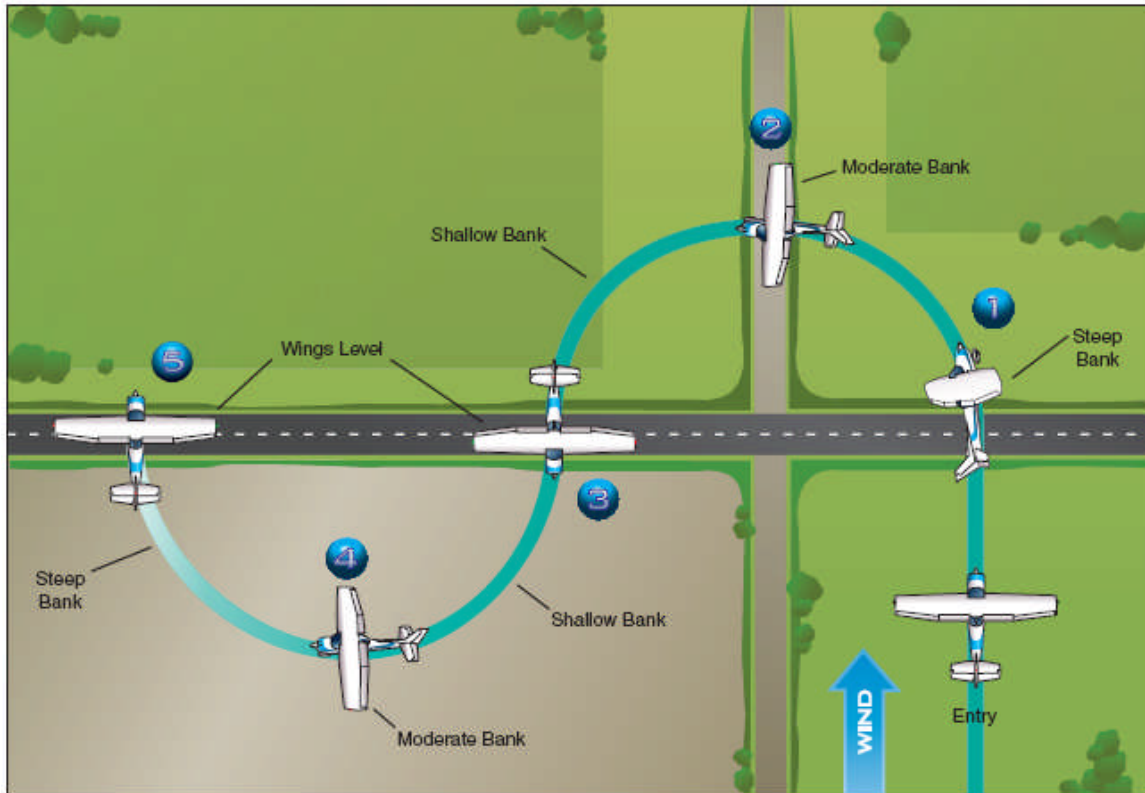
and is contained in seven Adobe PDF files (each around 2mb) available for download.

I show eight different patterns that you can fly. At the end this document, I've included directions to points where you can practice near Lakeland airport (KLAL).

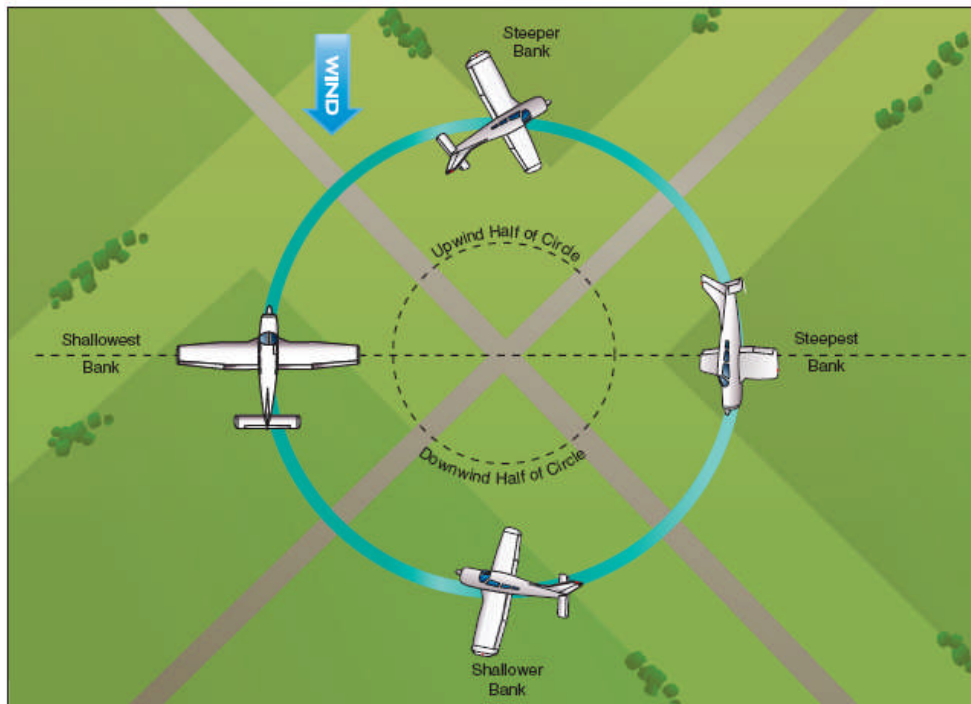
1. Rectangular Pattern



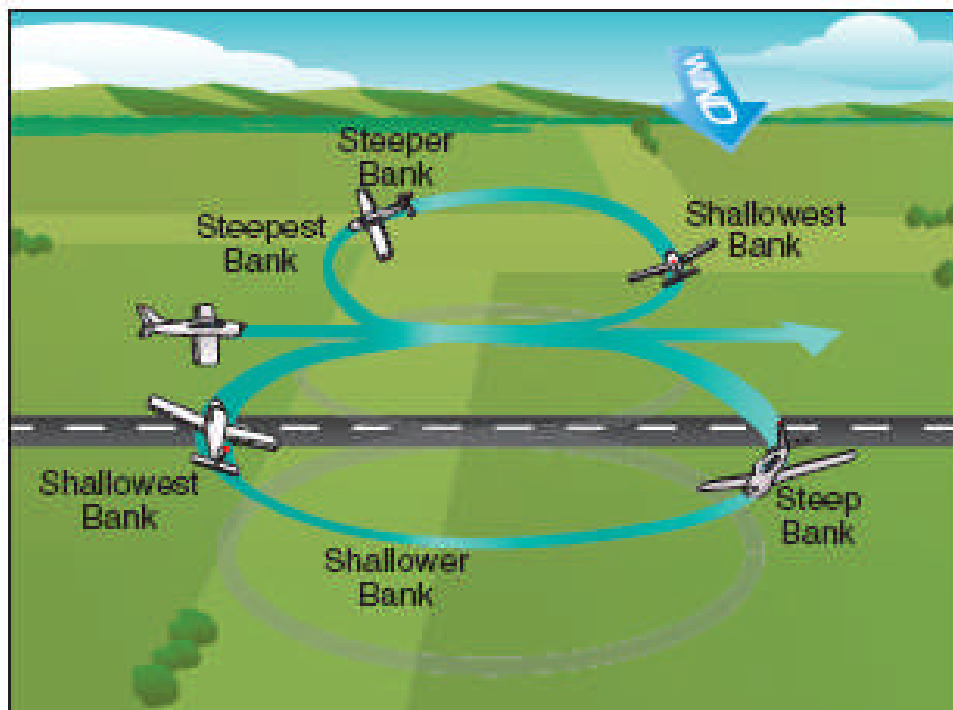
2. S turns along a road



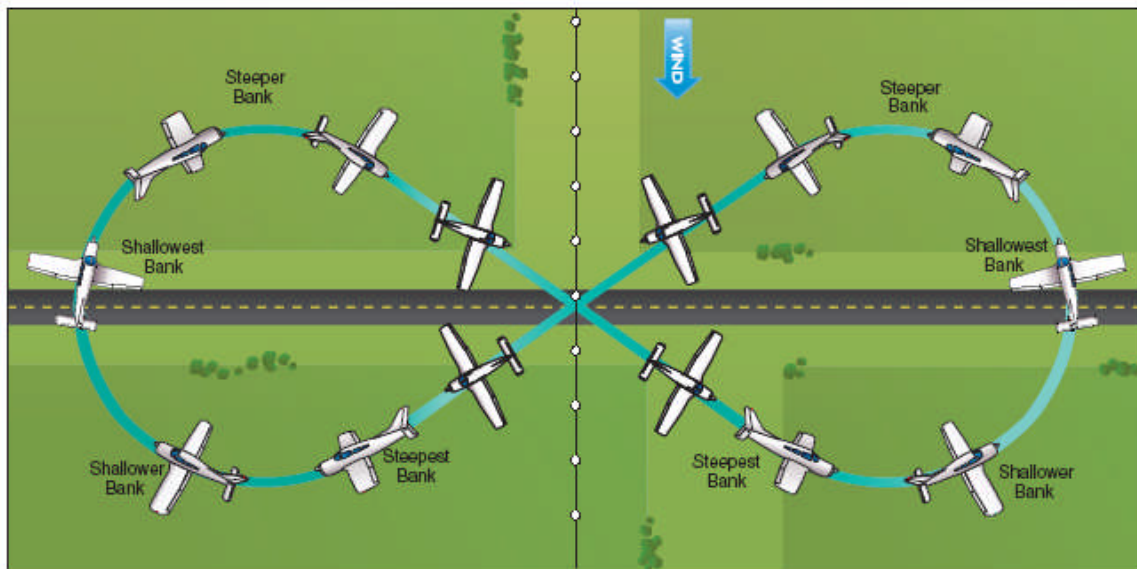
3. Turns around a point



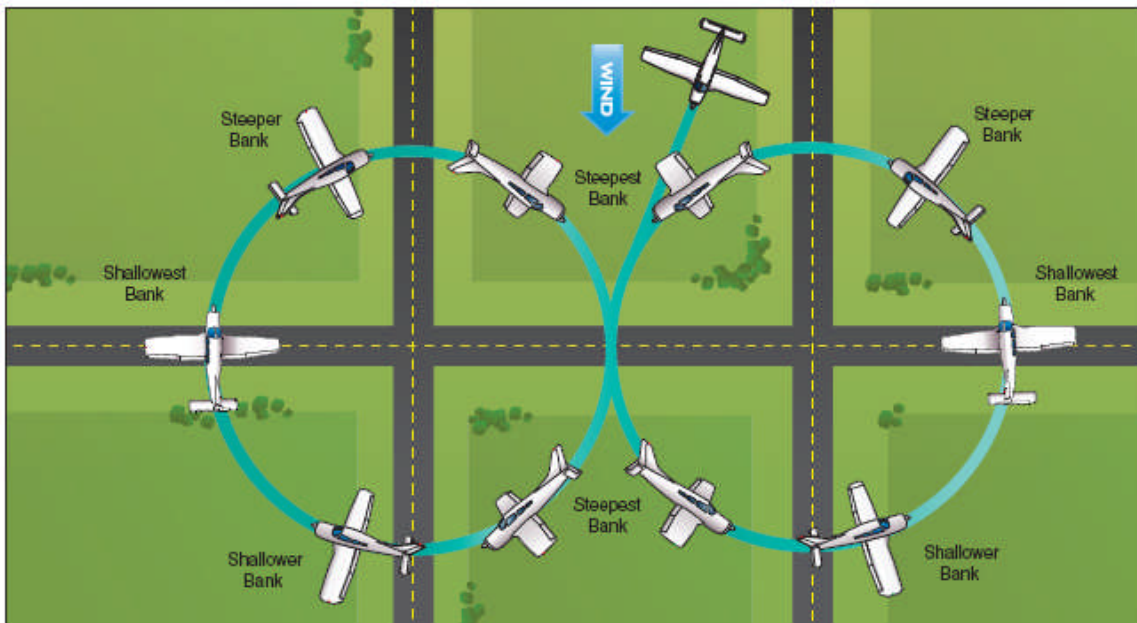
4. Eights along a road



5. Eights across a road

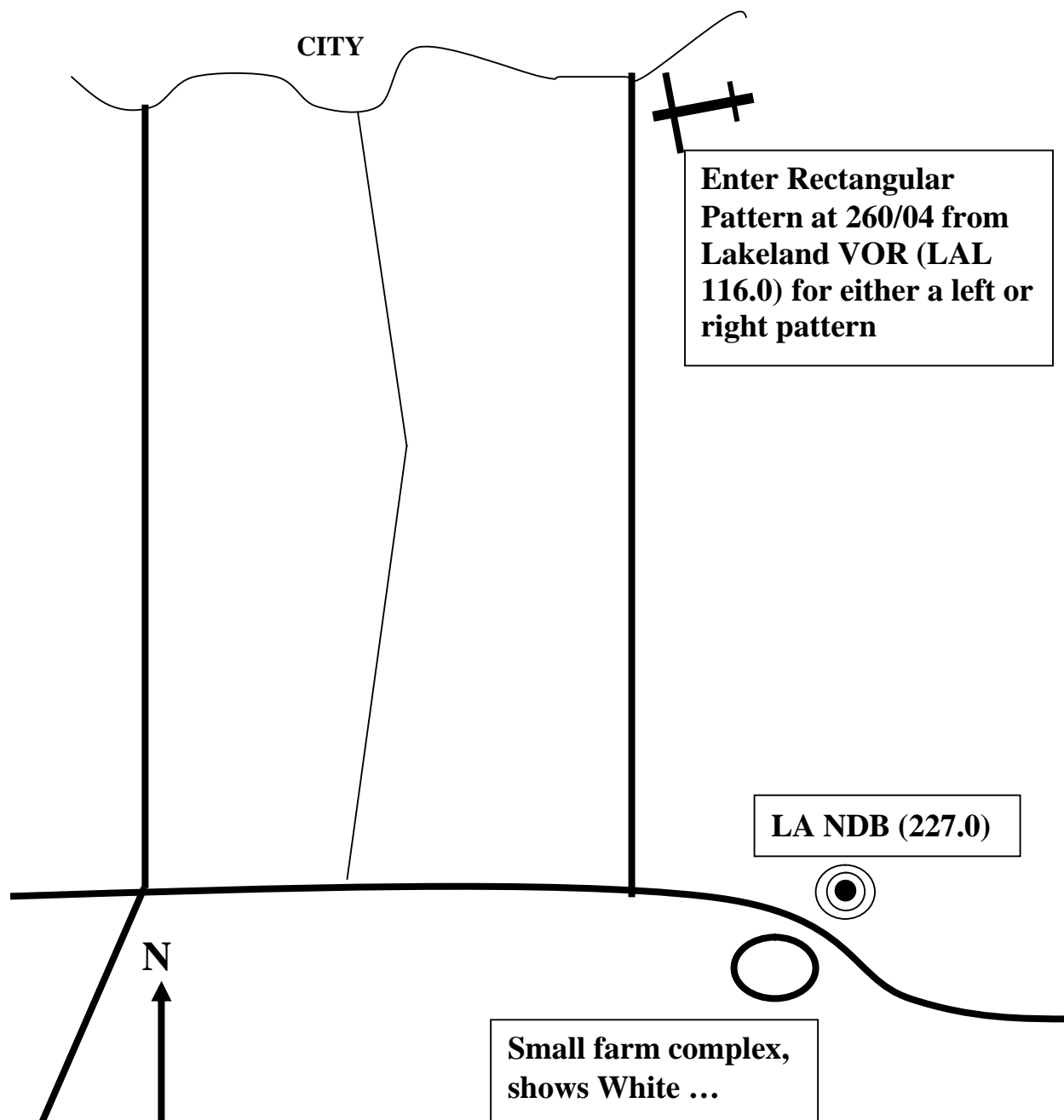


6. Eights around pylons (Pylon Eights)



In the location near KLAL, the one above is extremely difficult since the two parallel roads are so close to one another.

Area near Lakeland Airport available for practicing ground reference maneuvers.



Rectangular Pattern – use the two north/south (bolder) parallel roads, the east/west road (at the south end of the pattern) and the southern boundary of the city.

Turns around a Point – use the small farm complex (shows as a white area).

S – Turns Along a Road – the section of the east/west road (at the south end of the rectangular pattern) is good for this exercise

Eights – The various eights-patterns described above can be flown using the roads and intersections in this area.

Hints:

Use 1,100 feet MSL (about 1,000 feet AGL) for these exercises.

I find it easier to control the plane over the ground using the “W” (Panel On/Off) view. Hit the W key and remove the cockpit leaving the Mini-Panel for aircraft control. This view allows a better look at the ground.

While in the Panel Off view, (with NumLock On) you can use the 4 key (in a left bank) or the 6 key (in a right bank) to check your reference to the ground off a wing tip. Keep in mind that the 7 (keypad) and the 9 (keypad) keys give you a 45 degree look left and right of the nose respectively.

When flying Turns Around a Point, check your wingtip view and when in a left bank: if the point on the ground moves aft (left of wingtip center), steepen your bank to maintain the circle. If the point moves forward (right of wingtip center), shallow your bank. If your are in a right hand orbit, the directions would be reversed.

This is a Top-Down view from FS2004 of the Ground Reference Maneuver practice area near Lakeland Airport (KLAL).

