Traffic Pattern

What

To assure that air traffic flows into and out of an airport in an orderly manner, an airport traffic pattern is established.

If the pilot is familiar with the basic rectangular pattern, it is easy to make proper approaches and departures from most airports, regardless of whether or not they have control towers.

Which Way do We Takeoff and Land - Controlled

For the rest of this lesson ‘runway’ will be not only the large section of pavement/grass/dirt used but also the direction you are using.

For each large section of pavement/grass/dirt, there are actually two runways.

Which Way do We Takeoff and Land - Controlled

On any runway you will see giant runway numbers at both ends.

The number indicate which way you takeoff and land.

Cobb County International Airport (KRYY) has runways 9 and 27.

Runway 9 = takeoff/land to the east

Runway 27 = takeoff/land to the west.

Which Way do We Takeoff and Land - Controlled

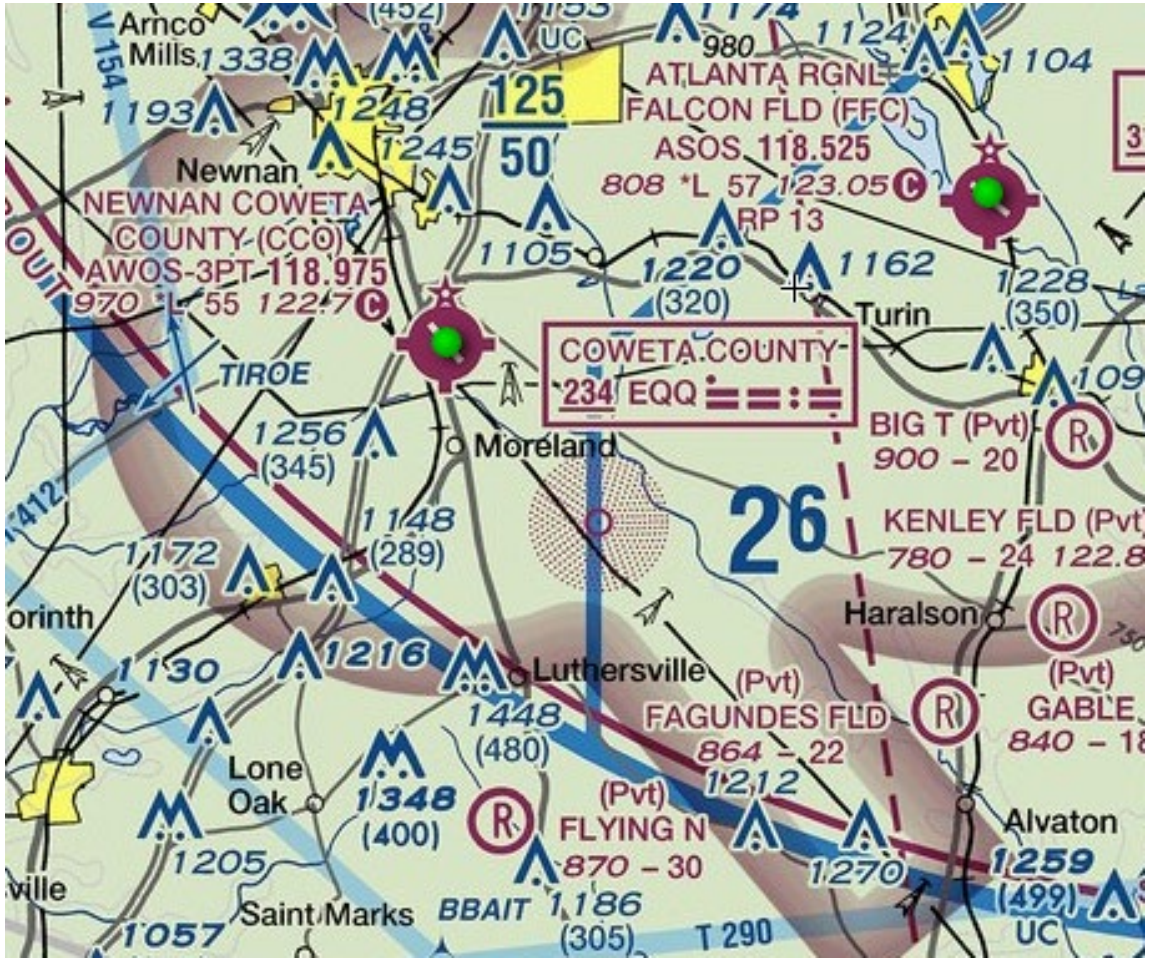
At an airport with a tower the controllers will tell you which runway to use.

At an airport without a tower (‘uncontrolled’), you have a choice but some days it feels like a negotiation or stand off with other pilots.

Right or Left Traffic?

Standard traffic pattern turns are always to the left, unless the airport specifies it otherwise.

RP = Right Pattern…Right Turns



Which Way do We Takeoff and Land – Uncontrolled

Takeoff and land into the wind unless there is a good reason to use the opposite direction.

At an airport without a tower, it is up to the pilot to decide which (side of the) runway to use.

The Windsock

Most airports have frequencies that you can use to check the weather…but a windsock is always accurate and current

The wind is going into the large hole

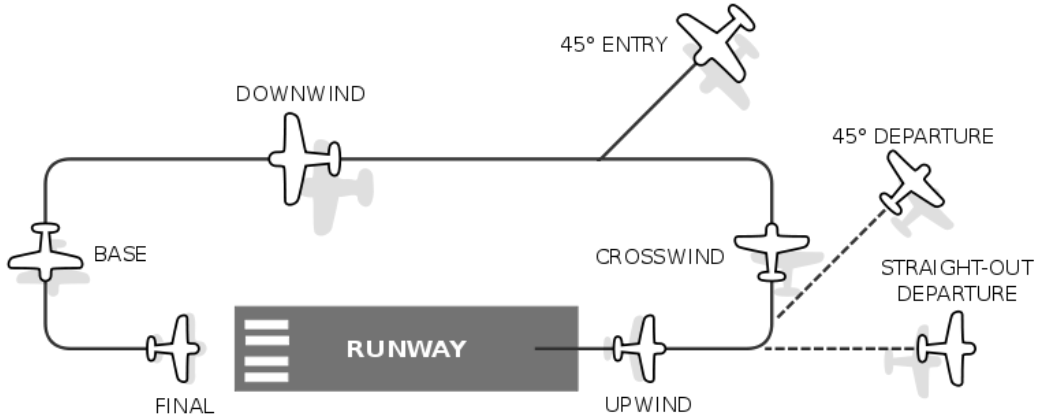
The windsock ‘points’ to the runway to use.

The Standard Pattern

The traffic pattern altitude is usually 1,000 feet above the elevation of the airport surface.

At some airports like the Griffin public airport it is nonstandard…it is 800 AGL

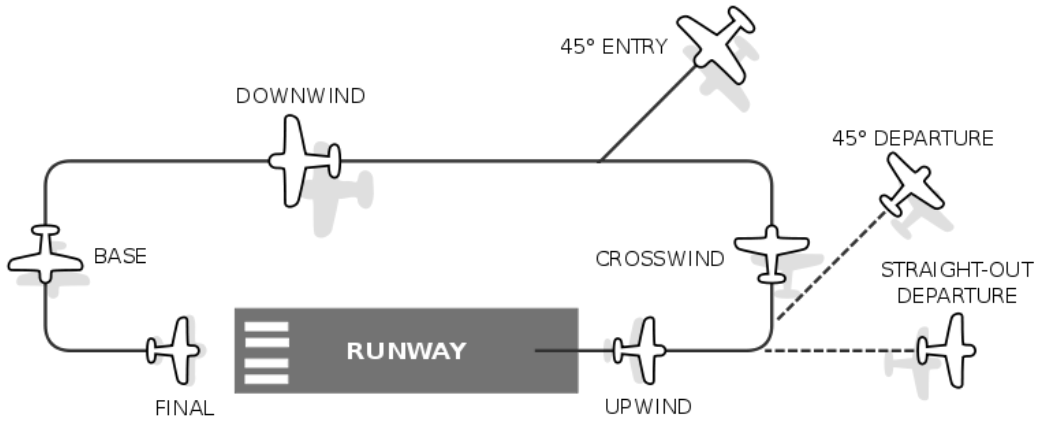
The use of a common altitude at a given airport is the key factor in minimizing the risk of collisions



Standard Entry

The traffic pattern is normally entered at a 45° angle to the downwind leg.

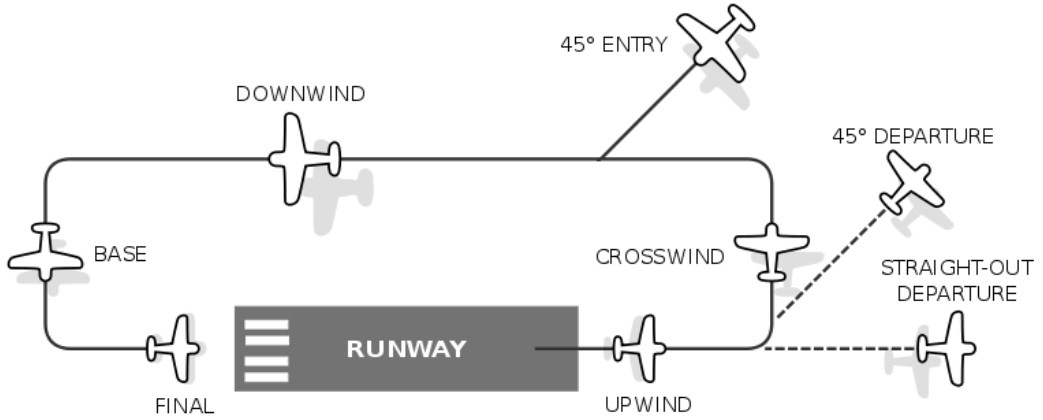
You should arrive at the pattern altitude…not above or below.



Downwind Leg

The downwind leg is a course flown parallel to the landing runway, but in a direction opposite to the intended landing direction.

This leg is flown approximately 1 / 2 to 1 mile out from the landing runway and at the specified traffic pattern altitude.



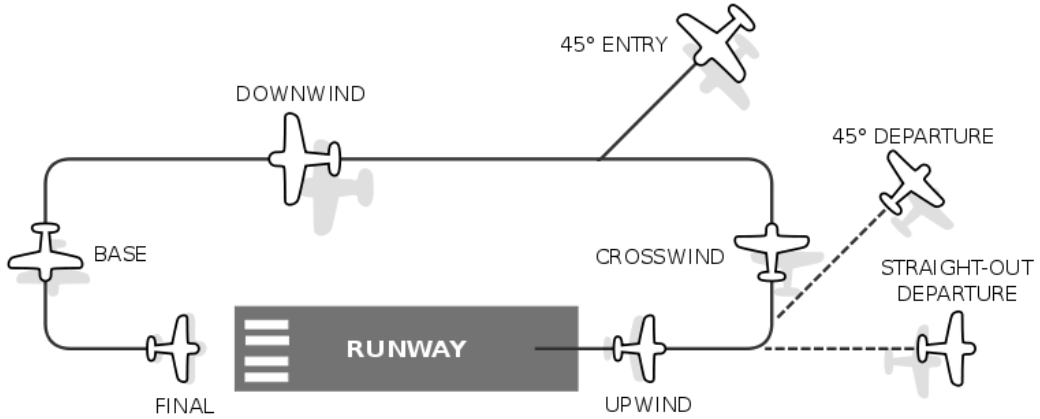
Downwind Leg

When flying on the downwind leg, the pilot should complete all before landing checks and extend the landing gear if the airplane is equipped with retractable landing gear.

GUMPS Check

Mindful of wind

Go Around Ready

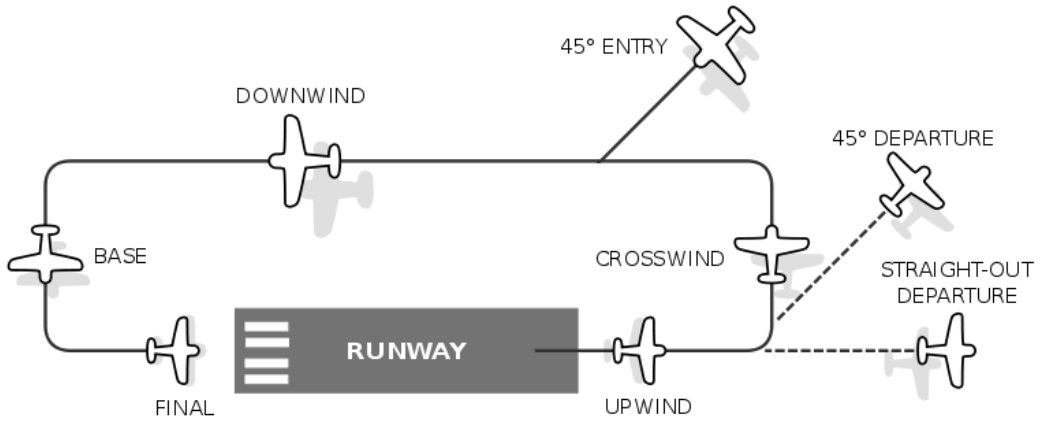


Downwind Leg

Flaps: 0

Pitch: +5 degrees

Airspeed: whatever is reasonable



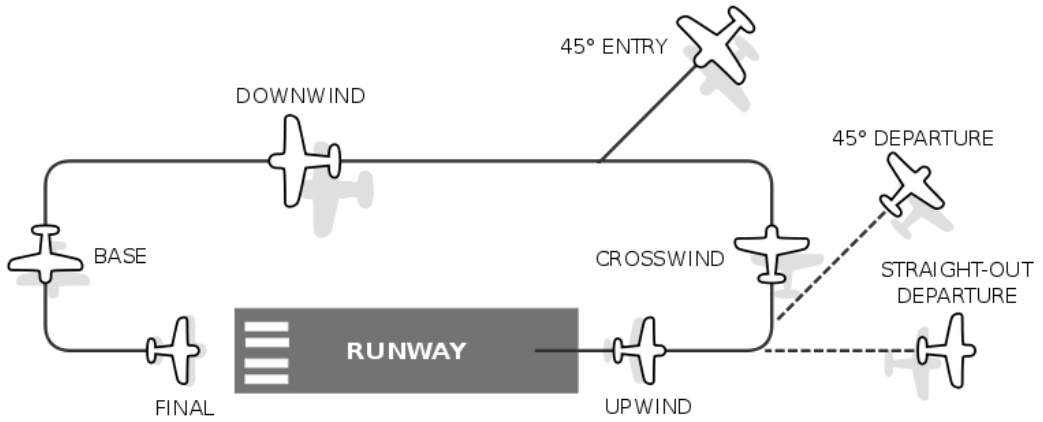
Abeam the numbers

Reduce power and begin a descent.

Flaps: 10 degrees

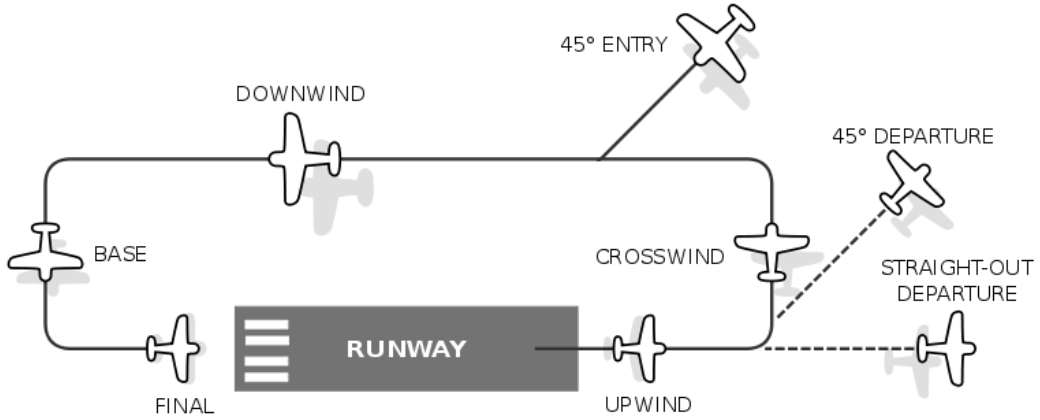
Pitch: -5 degrees

Airspeed: 85



Downwind to Base turn

The pilot should continue the downwind leg past a point abeam the approach end of the runway to a point approximately 45° from the approach end of the runway, and make a medium bank turn onto the base leg.

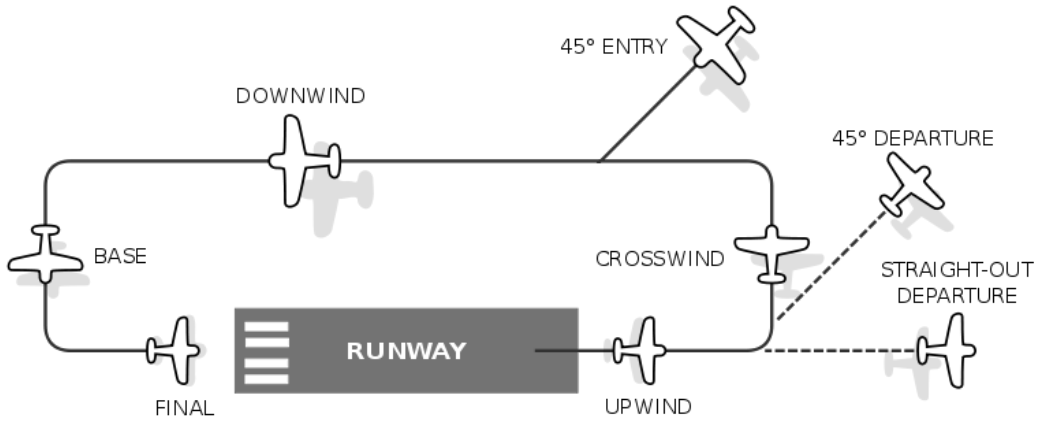


Base Leg

Flaps: 20 degrees

Pitch: -5 degrees

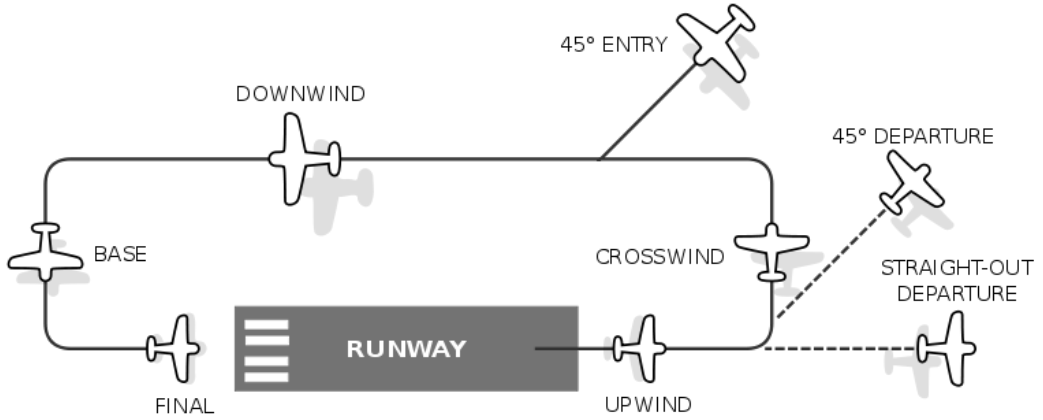
Airspeed: 75



Base Leg

The ground track of the airplane while on the base leg is meant to be perpendicular to the extended centerline of the landing runway.

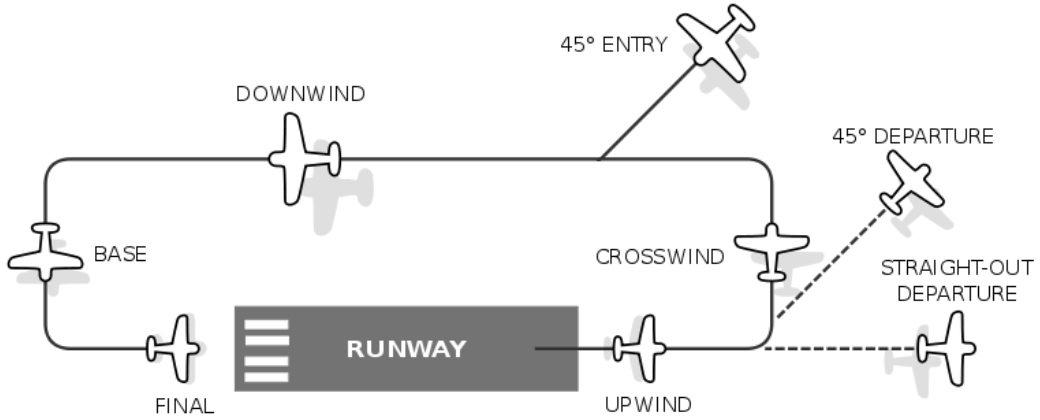
If you are in a high wind situation it is ok to have a crab angle.



Clear Right Clear Left

There could be other aircraft doing very wide patterns and not using the radios.

At most non towered airports having a radio installed is not required.



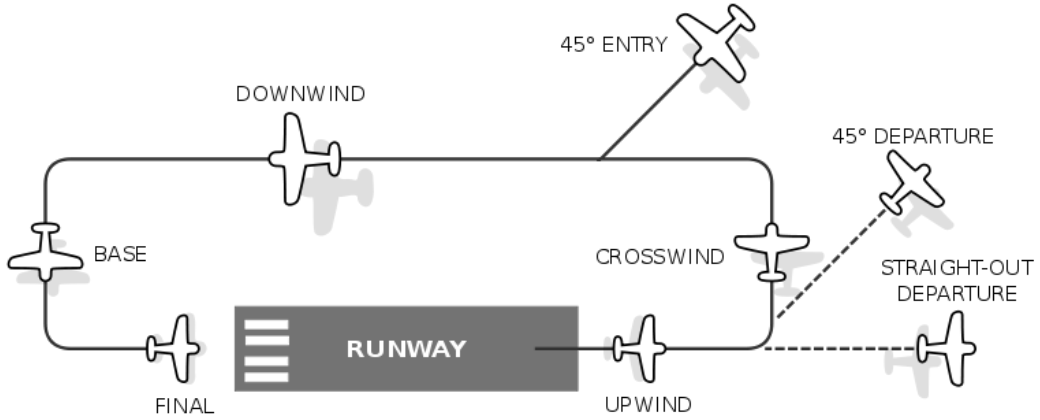
Final

Flaps: 30 degrees

Pitch: -5 degrees

Airspeed: 65, 60 at runway edge

Say out loud on loop: Speed Height Center Nose



Any questions I can answer or follow up later on?