# Aero Club Dauphiné
# Aviation English Master Class
## Session 6

James Crowley

and the ACD FCL055 team

http://crowley-coutaz.fr/jlc/FCL055

# Radio Practice Speaking Order

| No. | Pilots |
|-----|--------|
| 1 | JA |
| 2 | ~~HBF~~ |
| 3 | FB |
| 4 | JCE |
| 5 | JG |
| 6 | JYL |
| 7 | HM |
| 8 | FM |
| 9 | PP |
| 10 | GRP |
| 11 | ~~JT1~~ |
| 12 | ~~JT2~~ |
| 13 | JPT |
| | **ATC** |
| 1 | MP |
| 2 | MS |

# Session Planning (*revised*)

| | |
|---|---|
| 17 March | The FCL055 Rating, Course structure, Presentation of Participants, Information resources, ATIS, AWOS and ASOS |
| 24 March | Formation of flight crews, ATIS practice, Sample preflight briefings |
| 31 March | Preflight Briefings |
| 7 April | Radio Communication rules and practice for Taxi and Departure |
| 14 April | ACD – General Assembly (no session) |
| 21 April* | Airfield briefings. Radio Practice for departure and taxi |
| 28 April | **Departure, Arrival and Flying the pattern** |
| 5 May | Pattern and Enroute Position Reporting |
| 12 May | Abnormal and Emergency Situations, war stories |
| 19 May | Arrival, Landing, Fuel and Parking, Arrival Briefings, |
| 26 May | FCL 055 VFR practice Exam |

*Jim in Texas

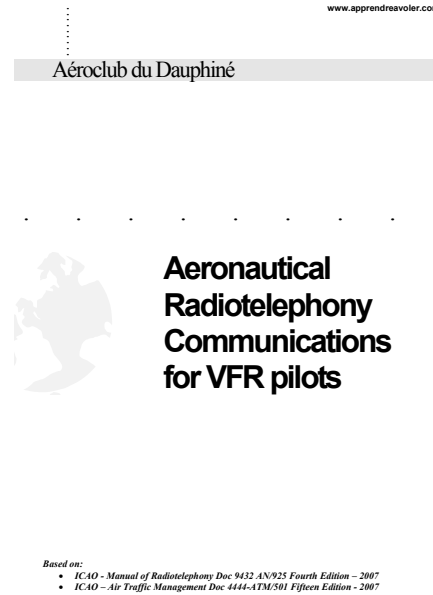# Aviation English Master Class

Plan:

- Taxi Instructions

- Basic Aerodrome Pattern

- Pattern Reporting  Phraseology
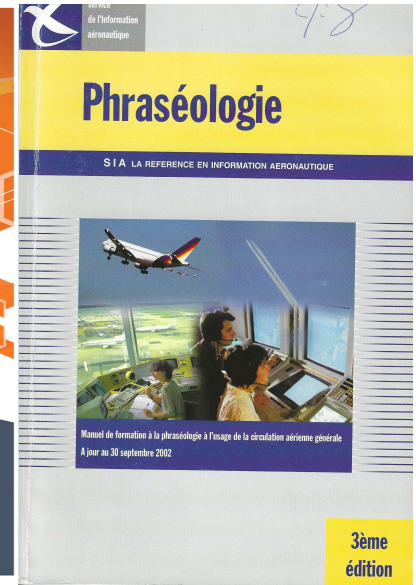
# Sources for VFR Phraseology
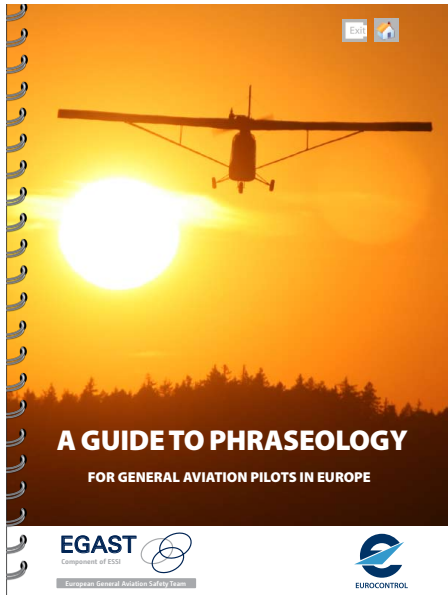


Eurocontrol
A Guide to Phraseology



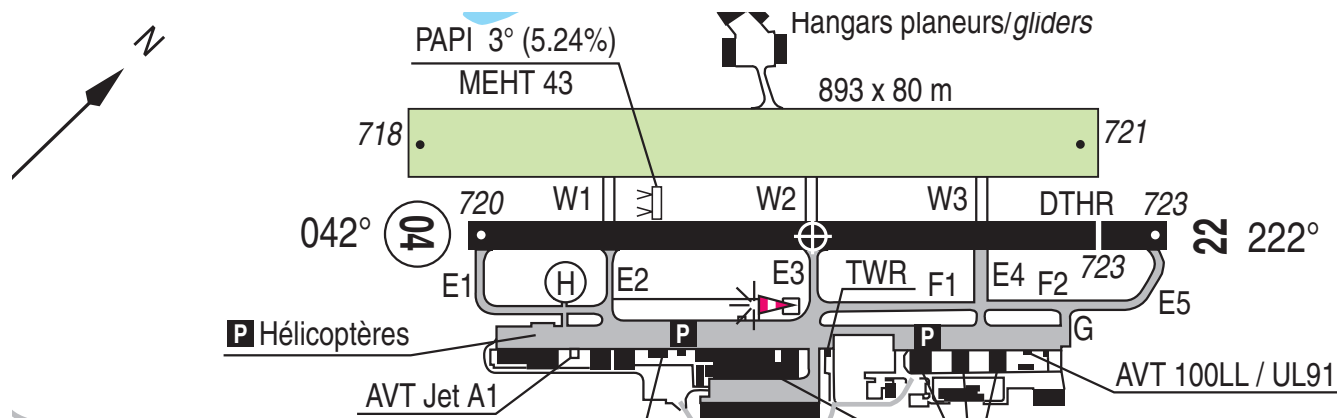ACD Aeronautical Radiotelephony Communications for VFR (J.-Y. Larnaudie)



VFR Phraseology (Nav Canada)



SIA Phraséologie

# Aeronautical Radiotelephony Communications

**(from: A GUIDE TO PHRASEOLOGY FOR GENERAL AVIATION PILOTS IN EUROPE)**



**(from page 17): Taxi Clearance**

…taxi clearances contain a clearance limit, which is the point at which you must stop unless further permission to proceed is given.
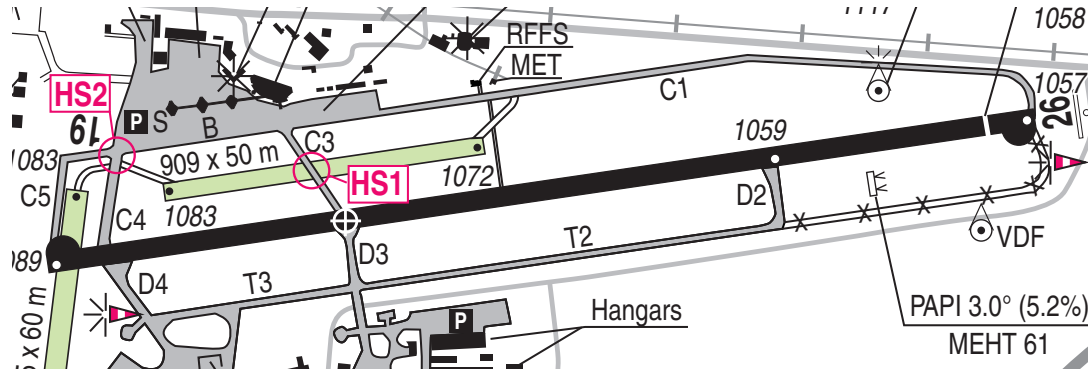
**Example:**

**Ground:** Robin F-PT, Taxi to holding point E1 runway 04, contact Tower on 121.0 when ready for departure.

**Pilot:** Taxi to holding point E1 runway 04, contact Tower on 121.0 when ready for departure, Robin F-PT

(E1 is a clearance limit)

# Taxi Instructions: Unfamiliar



The term "unfamiliar" can be used to inform ATS that you are not familiar with the taxiways and may not be able to receive abbreviated, complex or fast-paced information. The ATS unit will offer you direct or uncomplicated routing and to pay attention your safety.
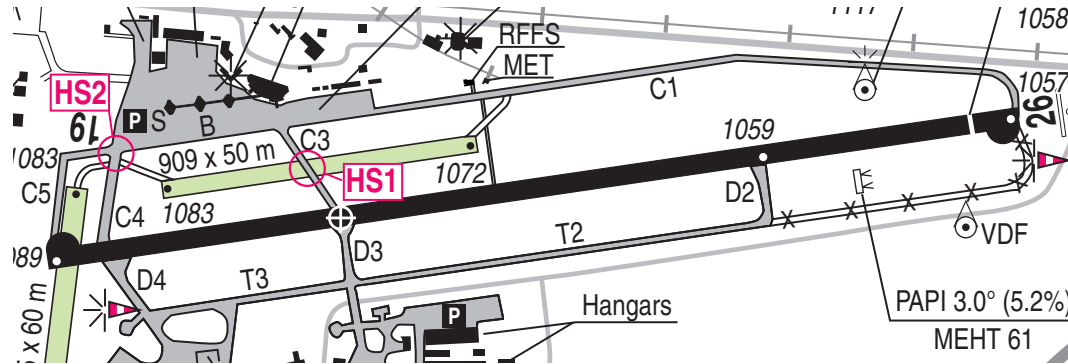
**Example**:

**Pilot**:     Clermont Ground, Robin F-GTPT, on apron Sierra with information Hotel, Unfamiliar with Airport. Request taxi to Runway 08 for VFR departure to Grenoble.

**Ground**:  Robin FGTPT, Clermont Ground, Right turn on taxiway B, taxi to intersection C4.

**Pilot**:      Right turn on taxiway B, taxi to intersection C4, Robin F-PT

(Note that intersection C4 is a clearance limit)

# Taxi Instructions: Progressive Taxi



If you are unfamiliar with an airport or unsure of your position, you may request Progressive Taxi. The controller will divide your taxi route into manageable sections and issue you instructions for each section
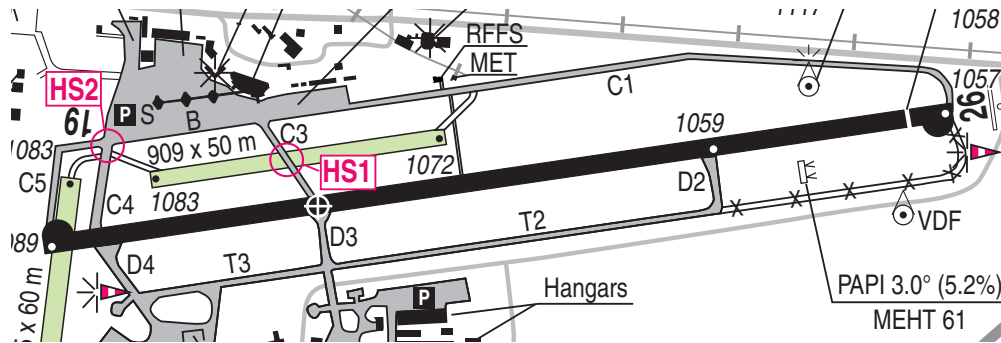
**Example**:

**Pilot:**  Clermont Ground,  Runway 08 vacated at D2, unfamiliar with airport, request progress taxi to terminal, Robin F-GTPT

**Ground**:  Robin F-PT, Clermont Ground, Progressive Taxi to Terminal, turn right on taxiway T2 and taxi to intersection D3.

**Pilot:**  Right on taxiway T2 and taxi to intersection D3, F-PT

# Departure Instructions
## (from Nav Canada VFR Phraseology)



ATC may issue specific departure instructions. This is NOT a take-off clearance.
Example

**ATC**:          (aircraft call sign) (instruction)
**Pilot**:          (instructions) (aircraft call sign)

**Example**:
**Pilot:**       Clermont Tower, Robin F-GTPT, holding short of runway 08 at C4, ready for departure.
**Tower**:     Robin F-PT, After departure, fly Runway heading, climb 2500 feet and contact Clermont approach on 122.225.
**Pilot**:       After departure, Fly runway heading, climb 2500 feet and contact Clermont approach on 122.225,   Robin F-PT

# Takeoff

(from Nav Canada VFR Phraseology)

*To take off from a controlled runway, you must be issued a clearance containing the words CLEARED FOR TAKEOFF.*

*Ensure you are holding short of the appropriate runway and are ready to take off before contacting ATC. When you receive your take-off clearance, it is good practice to repeat the runway number in your read back.*

**Aircraft**: (ATC unit call sign) (aircraft call sign) HOLDING SHORT RUNWAY (runway number, ready for departure)

**ATC**: (aircraft call sign) CLEARED FOR TAKEOFF RUNWAY (runway number)

**Example**:

**Pilot**: Clermont Tower, F-GTPT Holding short of Runway 08 at C4, Ready for departure

**Tower**: Robin F-PT wind 150, 3 kts Cleared for takeoff runway 08

**Pilot**: Cleared for Takeoff runway 08, F-PT

# Immediate Takeoff
## (from Nav Canada VFR Phraseology)

*Tower may ask if you are able to perform an immediate departure. This means that because of other traffic, no extra time can be spent on the runway. You must taxi onto the runway and take off with no delay. If you are unable to do this, say "unable", remain holding short, and the tower will issue you a standard take-off clearance when able.*

**Example**:
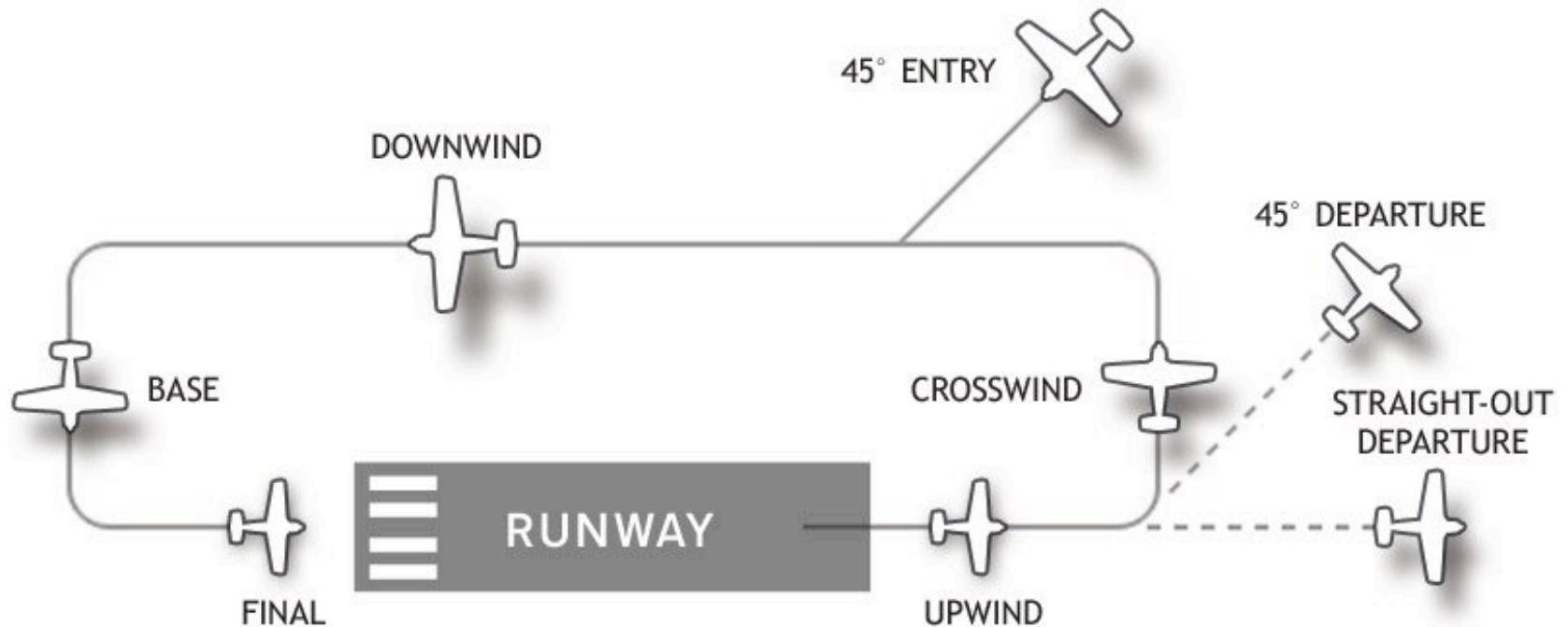**Pilot**: Clermont Tower, F-GTPT Holding short of Runway 08 at C4, Ready for departure
**Tower**: F-PT, are you able an immediate departure?
**Pilot**: Affirm, Robin F-PT
**Tower**: Robin F-PT wind 150 3 kts, Cleared for immediate takeoff runway 08
**Pilot**: Cleared for immediate takeoff runway 08, F-PT

# Basic Aerodrome Pattern



The traffic pattern is divided into legs which form a rectangle.

Legs define a phase of flight associated with takeoff, landing, or closed pattern touch and go operations, entry and departure.

# Basic Aerodrome Pattern: Left or Right Pattern
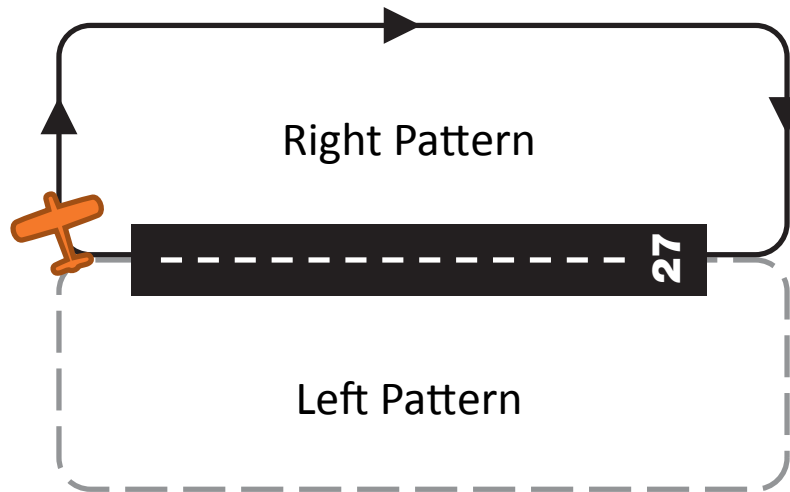


The visual circuit direction may be a left hand or a right hand pattern, determined by direction of turns.

By default, patterns are flown with Left turns.

If you are flying a right hand pattern you must include this in your transmissions.

**Pilot**: Right downwind Runway 27 for landing, Robin F-GTPT,

# Basic Aerodrome Pattern: Parallel Runways

Some aerodromes have parallel runways. These have the same numerical designator but they are distinguished by adding the word 'left' or 'right' after the number, e.g. 'Runway 27 left' and 'Runway 27 right'. At aerodromes with parallel runways you should take extra care and ensure you use the correct runway.
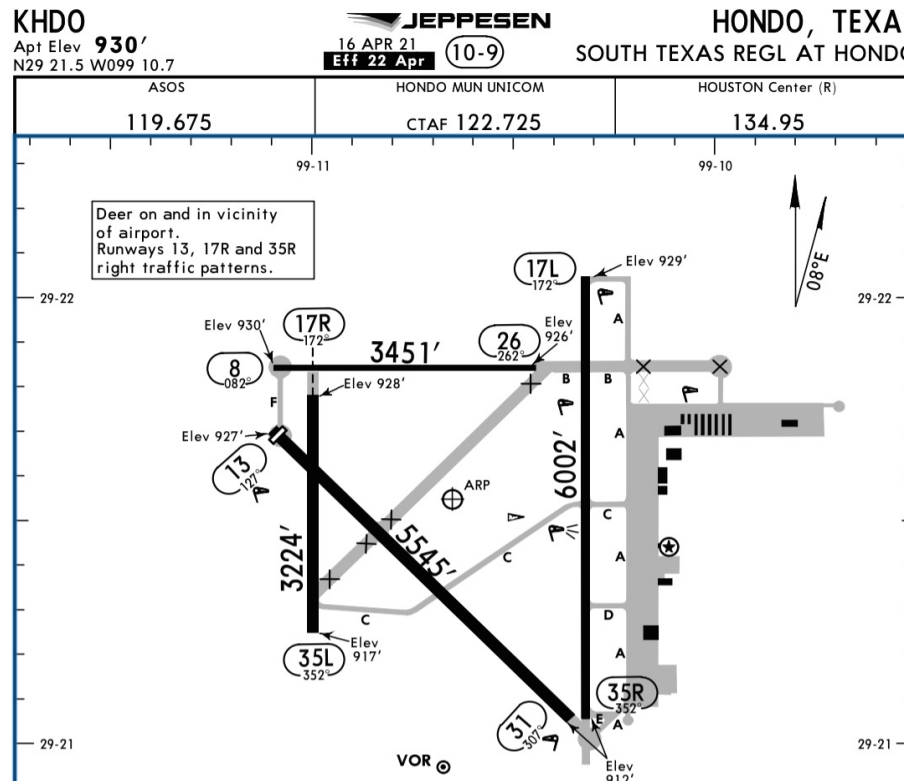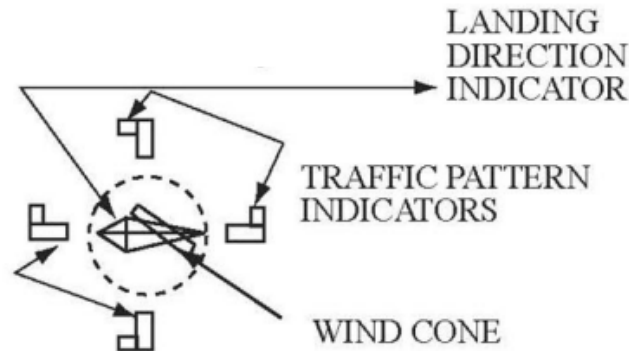
# Aerodrome Pattern: Left or Right Pattern?

When planning a flight always check the circuit directions at your destination aerodrome.
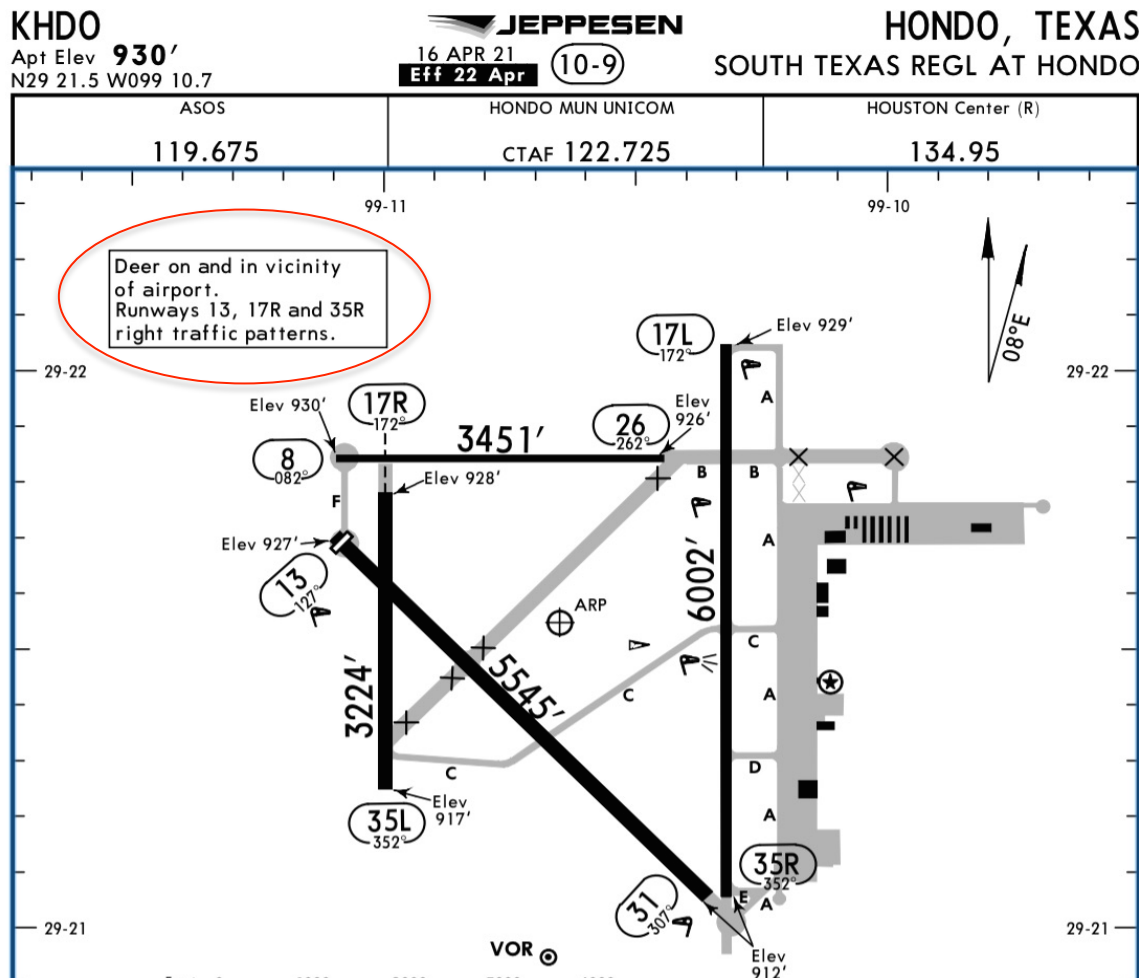
# Segmented Circle Airport Marker System



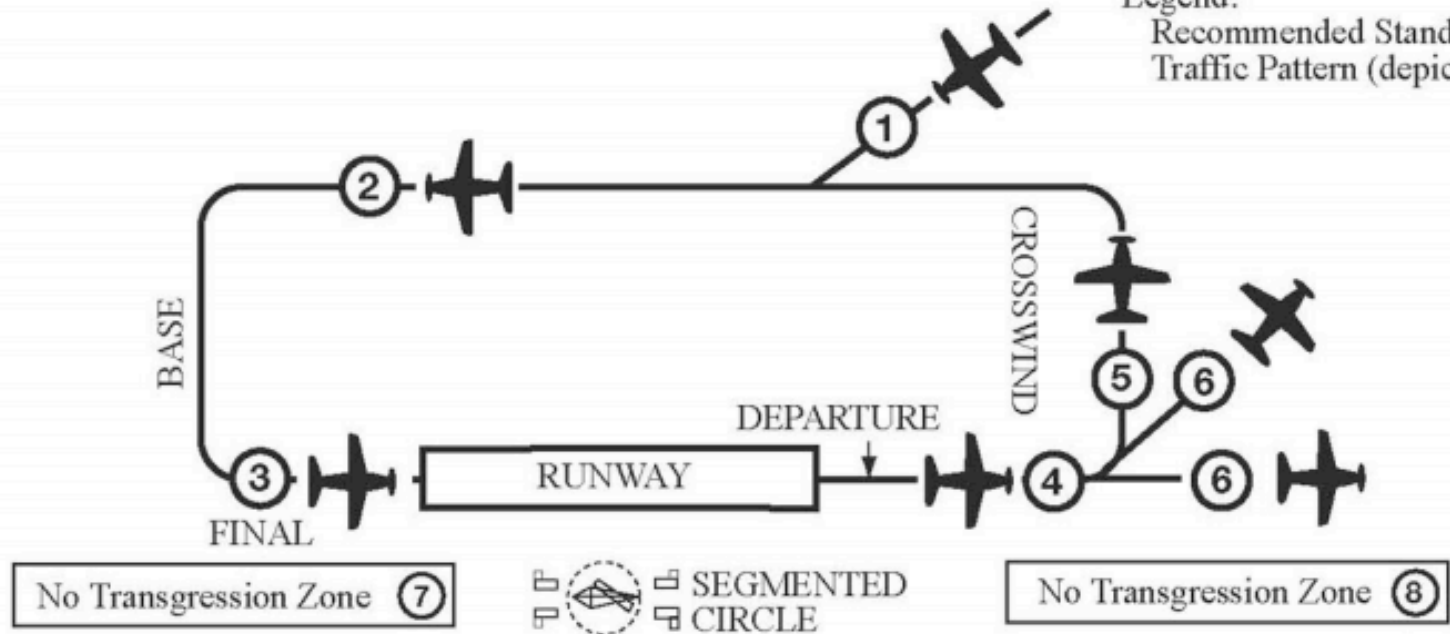Airfields may have a **Segmented Circle Airport Marker System**, composed of a:

**Segmented Circle** used to mark the center of a landing area;

**Wind Direction Indicator,** typically a wind cone;

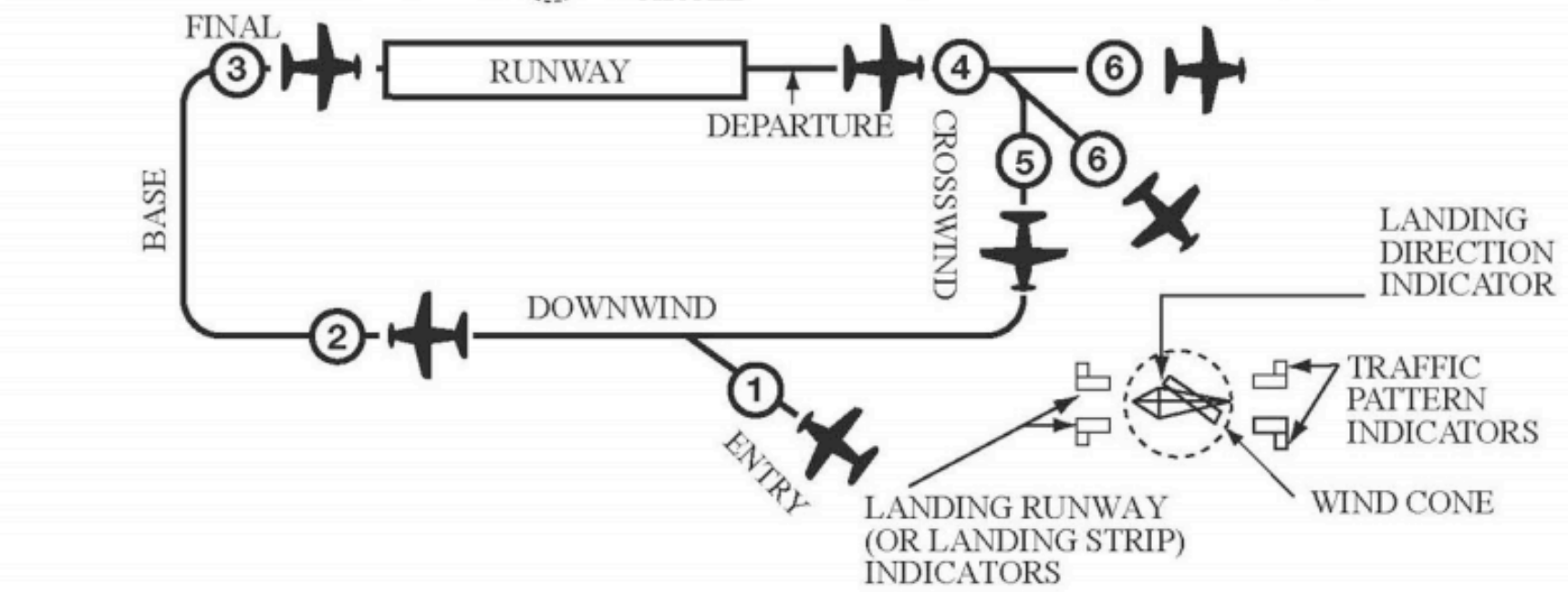**Landing Direction Indicator** to show the direction for landings and takeoffs;

**Traffic Pattern Indicator:** A pair of L-shaped indicators to indicate the direction of the traffic pattern.

Legend:
Recommended Standard Left-Hand
Traffic Pattern (depicted)

CROSSWIND

BASE

DEPARTURE

RUNWAY

FINAL

No Transgression Zone ⑦

SEGMENTED
CIRCLE

No Transgression Zone ⑧

FINAL

RUNWAY

DEPARTURE

CROSSWIND

BASE

DOWNWIND

CROSSWIND

ENTRY

LANDING
DIRECTION
INDICATOR

TRAFFIC
PATTERN
INDICATORS

LANDING RUNWAY
(OR LANDING STRIP)
INDICATORS

WIND CONE

Legend:
Standard Right-Hand
Traffic Pattern (depicted)

# Basic Aerodrome Pattern: Departure Leg
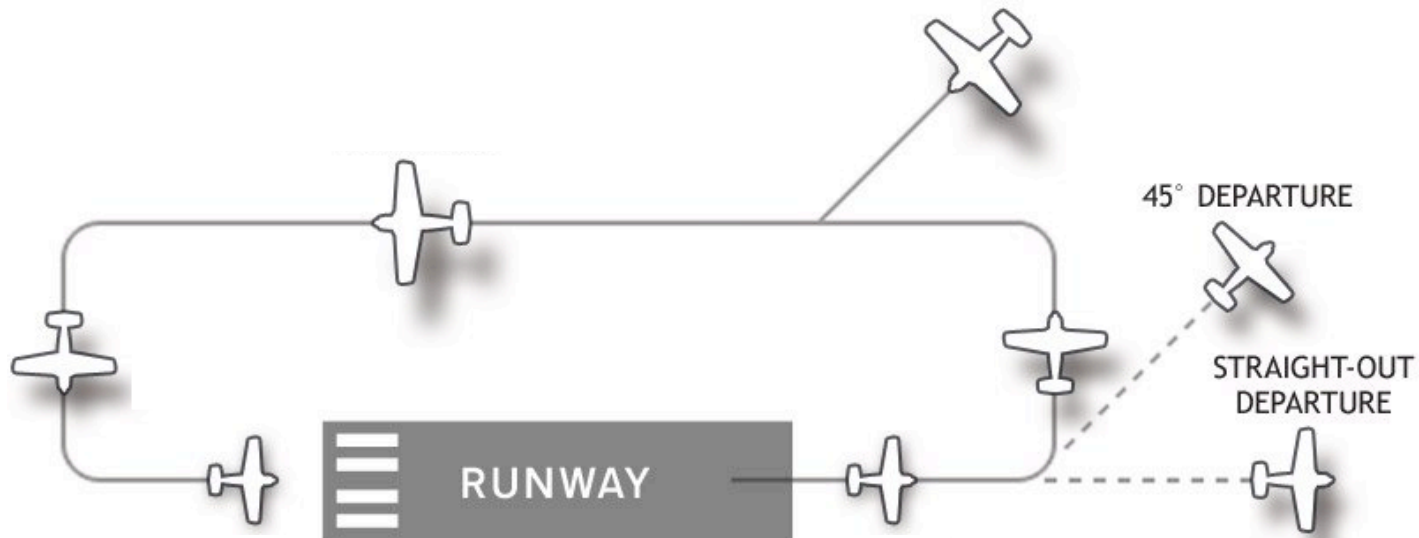


**Departure**: The flight path which begins after takeoff and continues straight ahead along the extended runway centerline. The **departure** climb continues until reaching a point at least 1/2 mile beyond the departure end of the runway and within 300 feet of the traffic pattern altitude

Departing Aircraft may exit 45° off in the direction of the pattern turn.

# Basic Aerodrome Pattern: Crosswind Leg
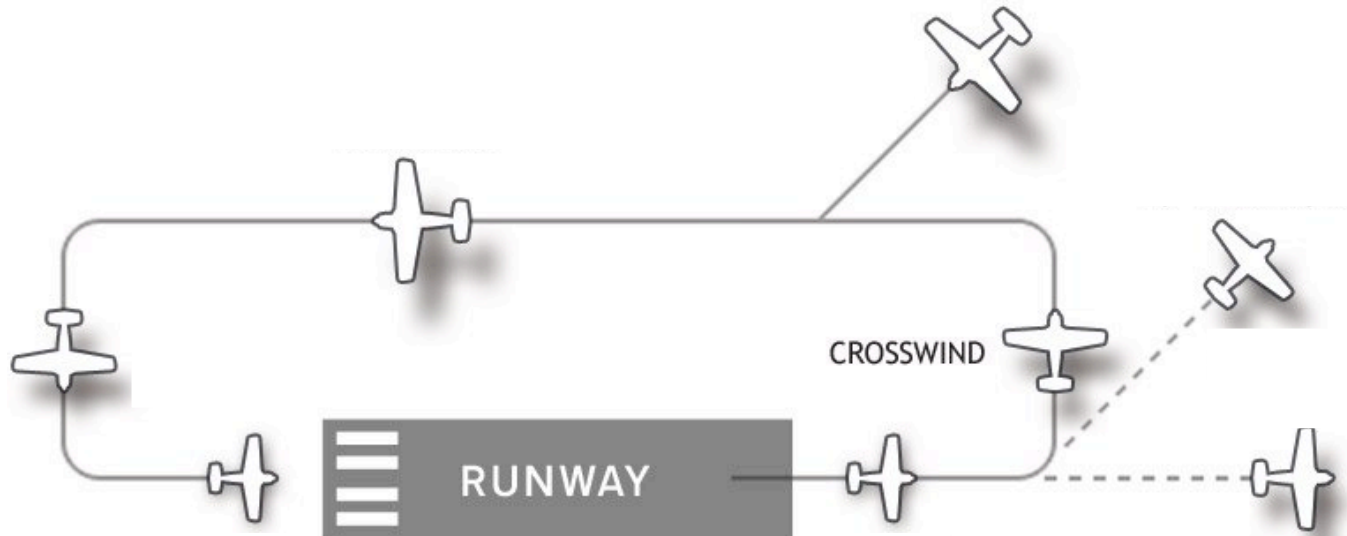


**Crosswind**: A flight path at right angles to the landing runway at the takeoff end.  The direction of the crosswind leg (left or right) is dictated by the airport publications, tower or a Segmented Circle Airport Marker System .

Look out for traffic entering the pattern at downwind.

# Basic Aerodrome Pattern: Downwind Leg
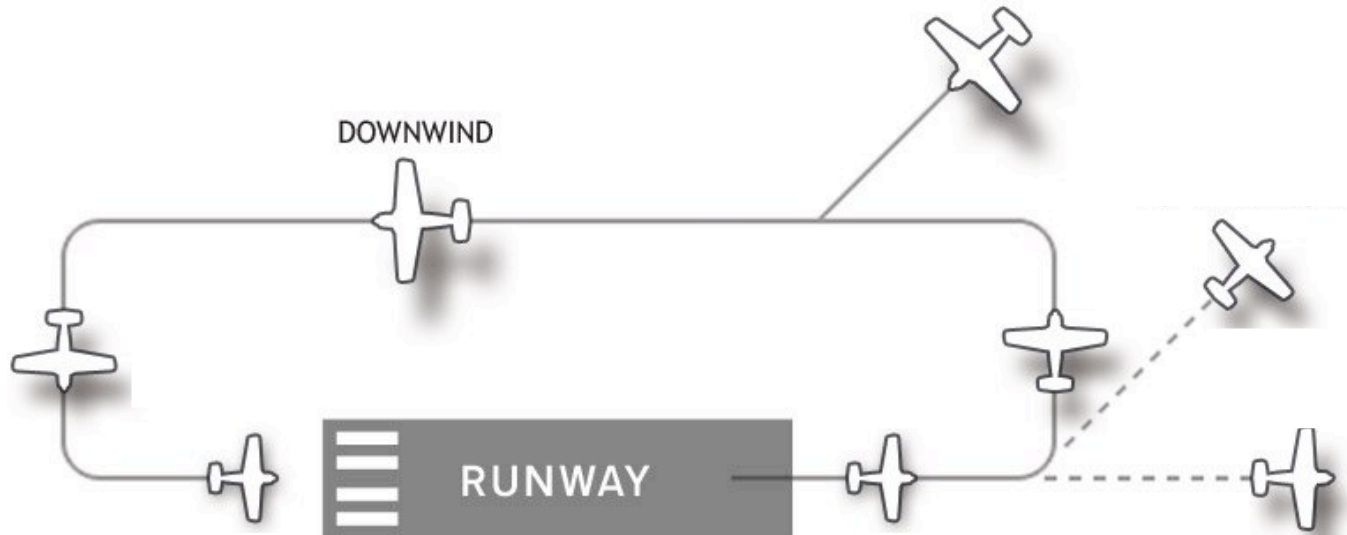


**Downwind**: A flight path parallel to the landing runway in the opposite direction of landing. This is the longest leg, and requires the most vigilance for traffic entering and departing.

In North America, arriving traffic should enter downwind at a 45 degree angle from outside the pattern. In France, arriving traffic enters directly on downwind (controlled aerodrome) or with an overhead entry (non controlled aerodrome).

# Basic Circuit Pattern Reporting
## (from Nav Canada VFR Phraseology)
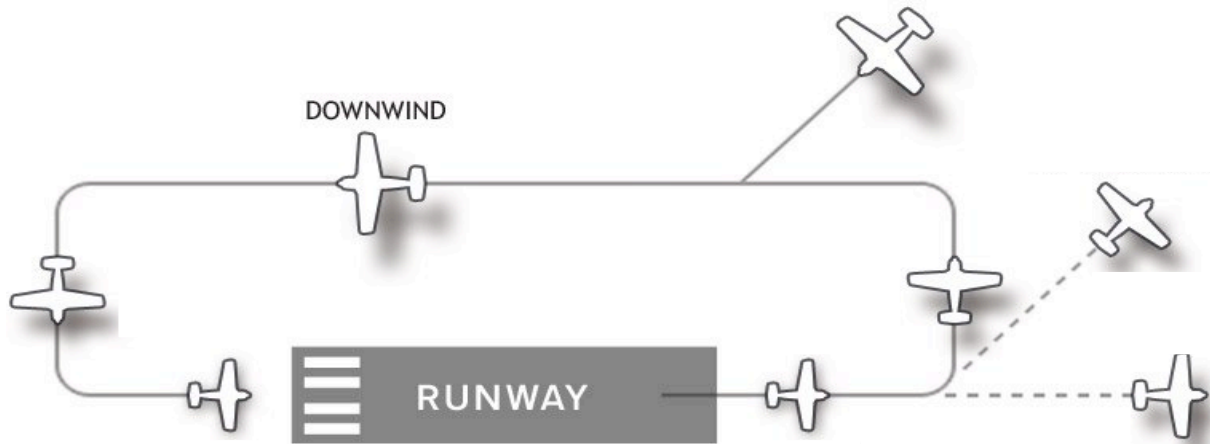


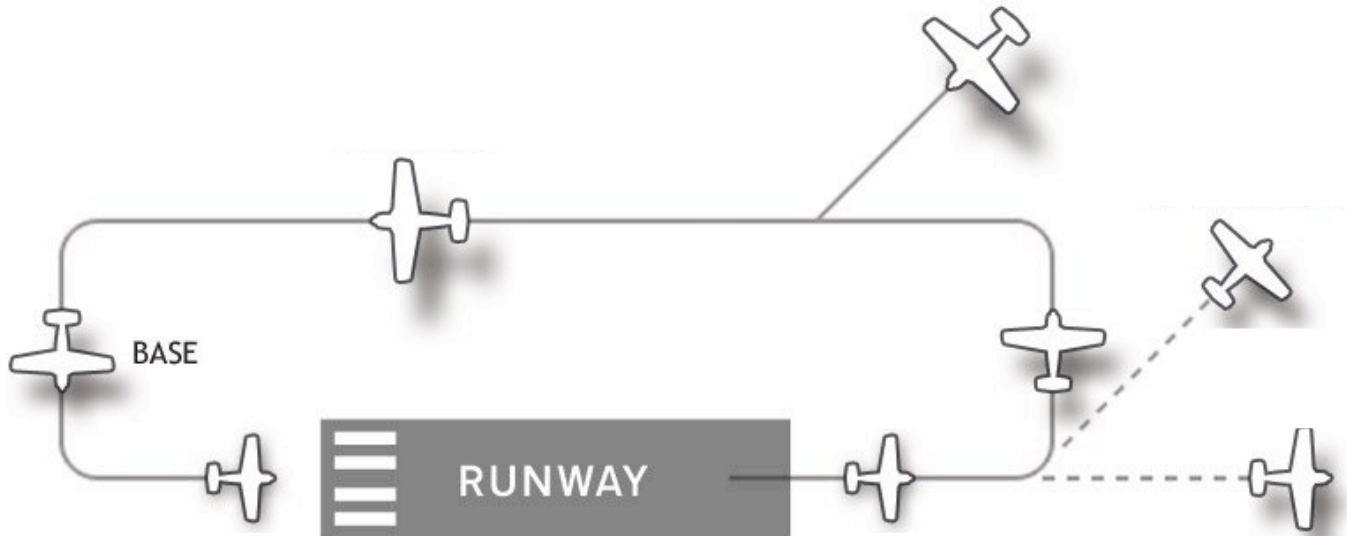*If entering circuit directly after takeoff,  report your position on downwind*


**Pilot** :     (aircraft call sign) DOWNWIND (intention)

**Example**

**Pilot**:     Robin F-PT  Downwind runway 04 for a touch-and-go

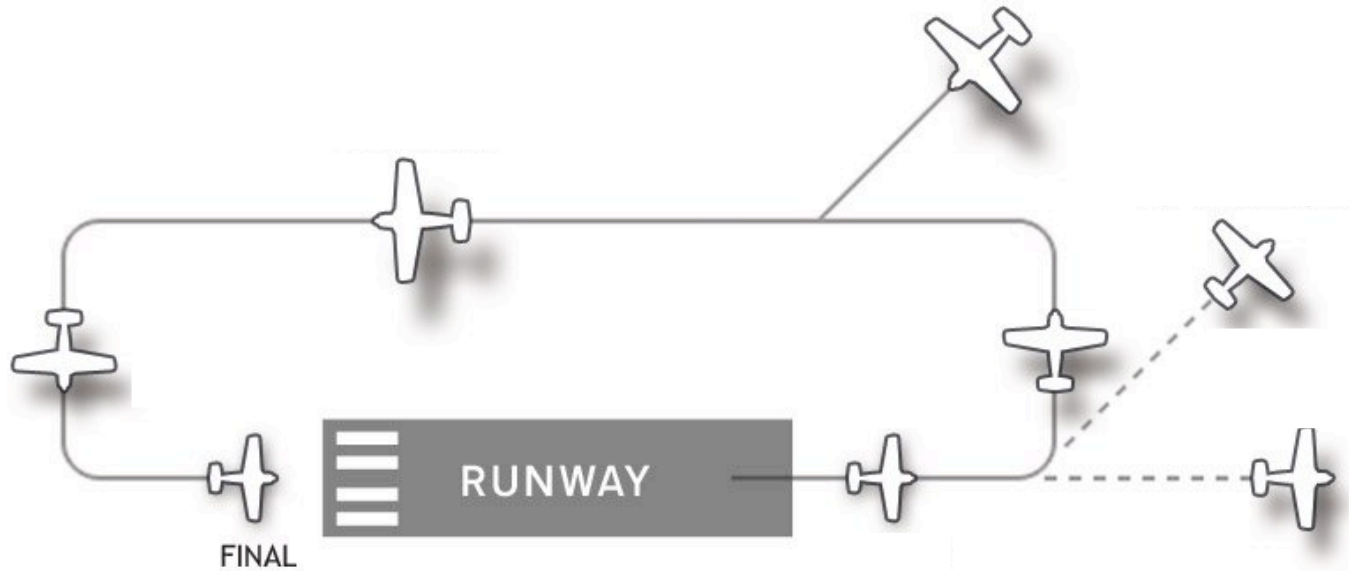**Tower**:   Robin F-PT number two report final

# Basic Aerodrome Pattern: Base Leg



**Base Leg:** A flight path at right angles to the landing runway off its approach end and extending from the downwind leg to the intersection of the extended runway centerline.

Lookout for traffic arriving for a straight-in Landing.

# Basic Aerodrome Pattern: Final



**Final**: A flight path parallel to the landing runway in the landing direction.

Clearance to land must be issued to continue on final.

# Basic Circuit Pattern: Landing Clearance
## (from Nav Canada VFR Phraseology)

A landing clearance provides authorization to land. However, the decision on whether to land or pull up and go around is yours. If you initiate an Go-around (overshoot or rejected landing), advise ATC as soon as safely able. Once issued a landing clearance, you may land the aircraft on the designated runway and exit via an appropriate taxiway.

After landing, you do not require a clearance to exit the runway onto a taxiway

You must have a clearance to backtrack a runway.

You must have a clearance to cross an active runway during taxi.

**ATC:** (aircraft call sign) (traffic/hazard/obstacle information if necessary) (landing and exit instructions) (wind) CLEARED (land/touch-and-go/etc.) RUNWAY (runway number)

**Aircraft:** CLEARED (land/touch-and-go/etc.) RUNWAY (runway number)

# Landing Clearance Format
## (from Nav Canada VFR Phraseology)

A landing clearance provides authorization to land.

**ATC:** (aircraft call sign) (traffic/hazard/obstacle information if necessary) (landing and exit instructions) (wind) CLEARED (to land/ for touch-and-go/ etc.) RUNWAY (runway number)

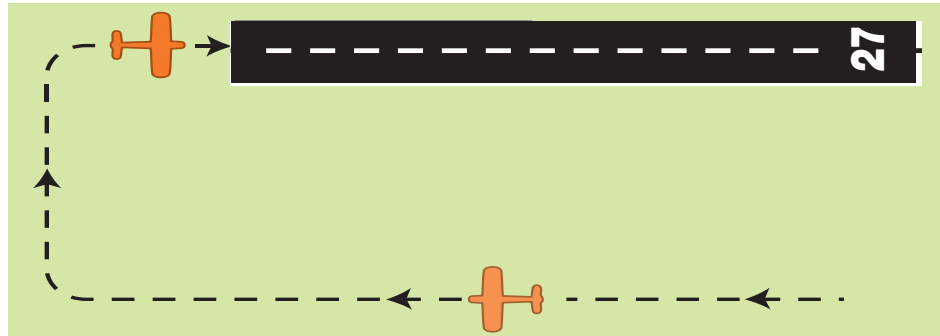**Aircraft:** CLEARED (to land/ for touch-and-go/etc.) RUNWAY (runway number)

**Example**:

**Tower**:   Robin F-PT, wind 030 at 5 knots, Cleared to land runway 09

**Pilot**:     Cleared to land runway 09, F-GPT

# Cleared for the Option
## (from Nav Canada VFR Phraseology)



You may request a variety of options for the final leg and touchdown portion of your circuit. These options include: touch-and-go, low approach, missed approach, stop-and-go, full stop landing, simulated rejected takeoff, reduced power takeoff or simulated engine failure. This request should be made as part of your downwind call.  If the circuit or airport is busy, you may not be issued clearance for the option.

**Example**:

**Pilot** :    Robin F-PT, Right downwind Runway 09, request the option

**Tower**:    Robin F-PT, Number one, cleared for the option Runway 09

# Basic Aerodrome Pattern: Go-Around



**Go-Around**: Pilot abandons the approach and rejoins the circuit.

A go-around may be conducted due to ATC instruction, occupied runway, unstable approach or improper trajectory.

(from Nav Canada) : On Go-around, unless otherwise advised by ATC, a VFR aircraft or an aircraft conducting visual approach should overfly the runway while climbing to traffic pattern altitude and enter the traffic pattern via the crosswind leg.

(in France we use a sidestep to the right)

# Basic Aerodrome Pattern: Upwind Leg
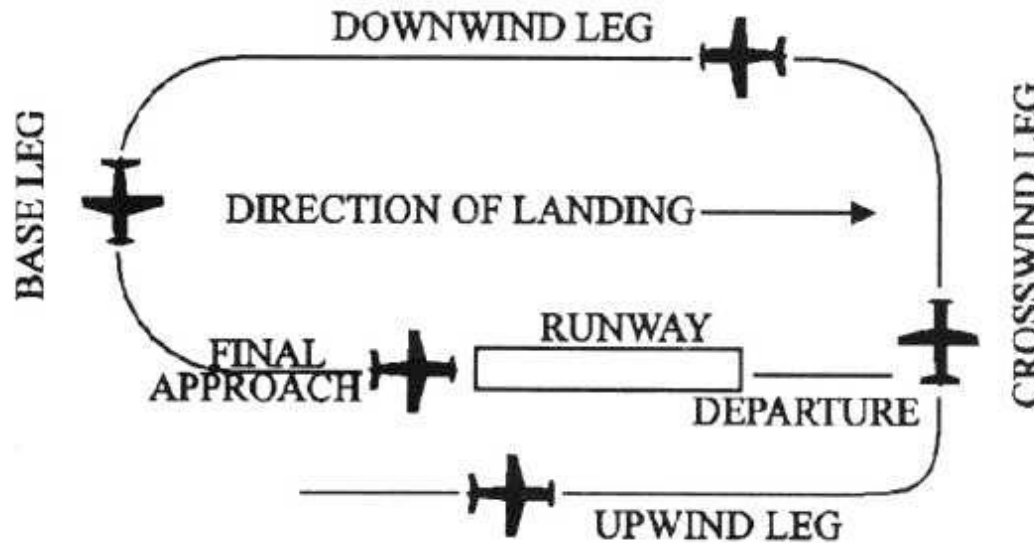


**Upwind**: A flight path parallel to the landing runway in the landing direction

The upwind leg is separate and distinct from the departure leg and often used to reference the flight path flown after takeoff (or a touch and go), or as part of a Go Around

# ATC Circuit Instructions
## (from Nav Canada VFR Phraseology)

Turn crosswind to follow traffic

Do not turn crosswind until you are in a position to follow traffic on downwind
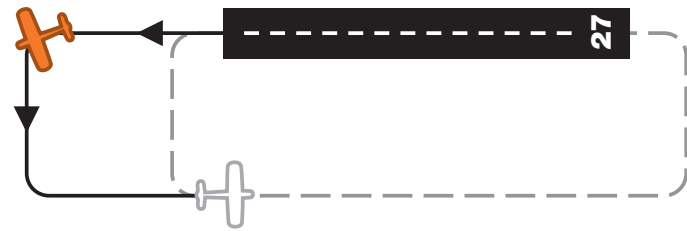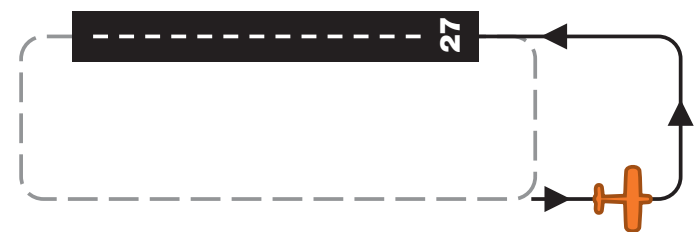
Extend downwind to follow traffic on final

Continue on the downwind leg so that you can turn base to follow traffic

Continue downwind, I will advise base turn

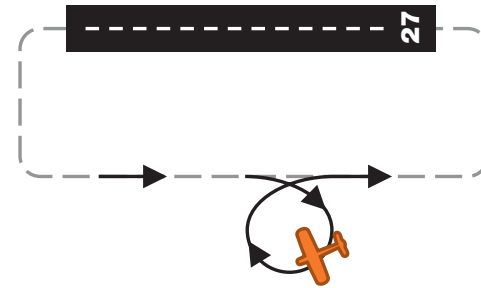Continue on the downwind until instructed to turn base

# ATC Circuit Instructions
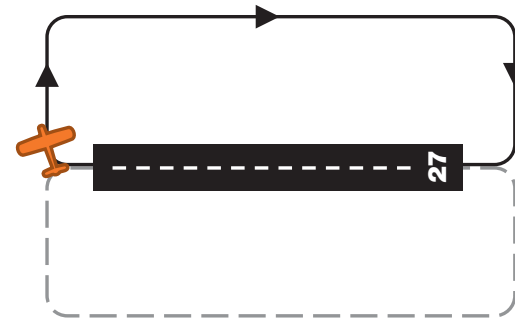## (from Nav Canada VFR Phraseology)

| | | |
|---|---|---|
| Do a right hand 360 | Perform a three hundred and sixty degree turn to the right and rejoin the circuit | |
| Make the next circuit right hand | Change from a left to a right hand circuit | |
| Direct to threshold | From your current position, fly in a straight line to the threshold of the specified runway | |

# ATC Circuit Instructions
## (from Nav Canada VFR Phraseology)



*If you are given an instruction that includes NOW, comply immediately as long as you are safely able. If you are unable, inform ATC.*
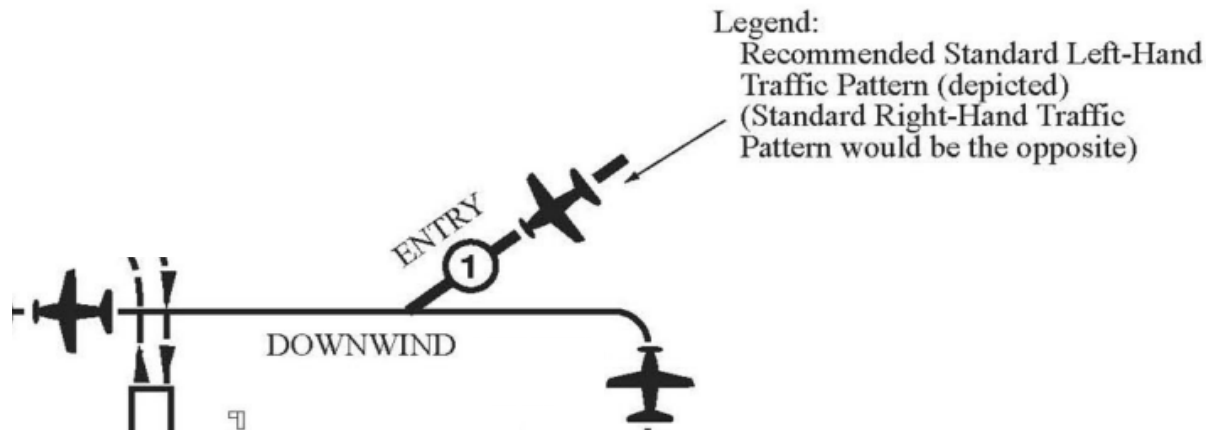
**ATC**:    (Aircraft) (ATC),  (instruction) NOW

**Example**:

**Tower**:   Robin F-PT, turn left base runway 27 NOW you are number one Cleared for the option

**Pilot**:    Left base runway 27 NOW , Cleared for the option, F-GPT

# Arrival and Entry



Legend:
Recommended Standard Left-Hand Traffic Pattern (depicted) (Standard Right-Hand Traffic Pattern would be the opposite)

In Canada and the US, **arriving** pilots are encouraged to **enter** the pattern downwind at 45 degrees. In France, pilots should enter the downwind leg from overhead or straight in.

Pilots may choose to execute a straight-in approach to final. Pilots on a straight-in approach must not disrupt the flow of arriving and departing traffic.

Pilots operating in the traffic pattern should be alert for aircraft executing a downwind entry or a straight-in approach.

# Arrival and Entry
## (from Nav Canada VFR Phraseology)
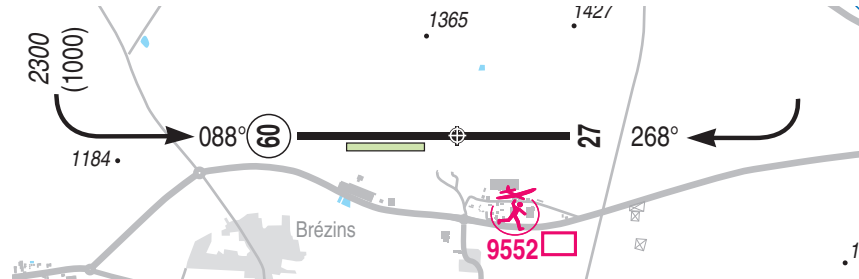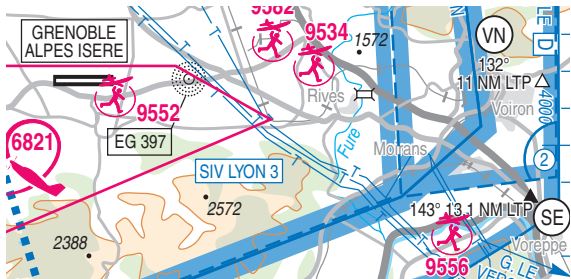


**Pilot**: (ATC unit call sign) (aircraft call sign) (position) (altitude) (intentions)

**Tower**: (aircraft call sign), (ATC unit call sign), Report (position)  (runway)

**Example**:

**Pilot**: Grenoble Tower,  Robin F-GTPT

**Tower**: Robin F-PT, Grenoble Tower

**Pilot**: Grenoble Tower,  Robin F-GTPT, VFR flight plan from Le Versoud, approaching SE,  2500 feet for landing, with information Bravo

**Tower**: Robin F-PT, Grenoble Tower, Report right downwind runway 09

**Pilot**: Report right downwind runway 09, Robin F-PT

# Traffic Advisory
## (from Nav Canada VFR Phraseology)

While flying VFR you are responsible for looking for traffic around you. In controlled airspace, if workload permits, ATC may advise you of traffic and provide separation; however, this does not relieve you of the responsibility to look for traffic as well.

Use the phrase LOOKING FOR TRAFFIC if you do not see the traffic. Use the phrase TRAFFIC IN SIGHT only if you see the traffic.
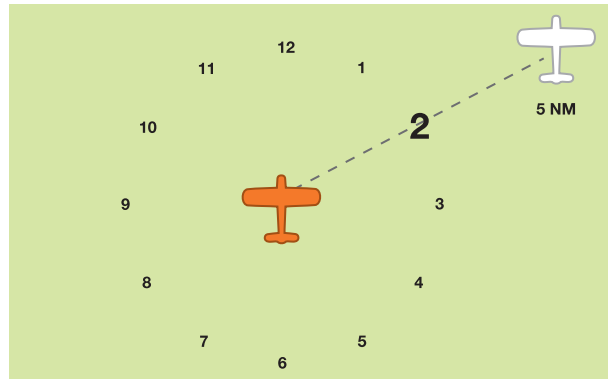
If you lose sight of traffic, inform ATS.

**ATC:** (aircraft call sign) TRAFFIC (position based on 12hr clock, direction, altitude, aircraft type)

**Aircraft:** LOOKING FOR TRAFFIC/TRAFFIC IN SIGHT (aircraft call sign)

# Traffic Advisory
## (from Nav Canada VFR Phraseology)



**ATC:** (aircraft call sign) TRAFFIC (position based on 12hr clock, direction, altitude, aircraft type)
**Aircraft:** LOOKING FOR TRAFFIC/TRAFFIC IN SIGHT (aircraft call sign)

**Example:**
**Tower**:   Robin F-PT, TRAFFIC  two o'clock, four miles, Southbound bound
         Cessna, same altitude.
**Pilot**:    Looking for traffic, Robin F-PT
**Pilot**:    Traffic in sight, Robin F-PT