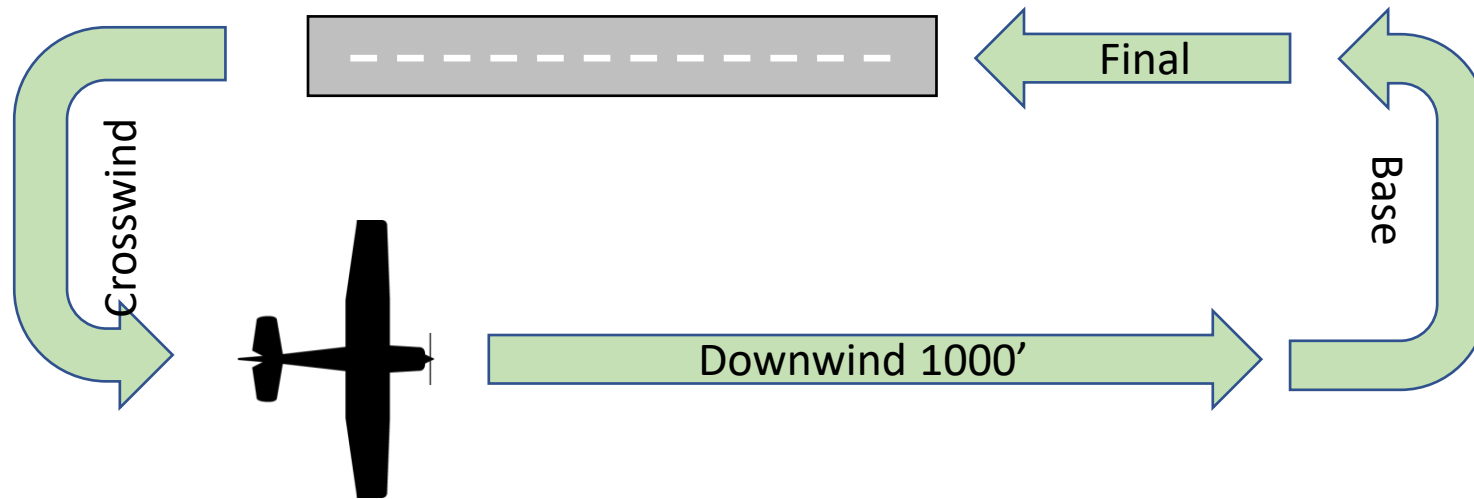# The Traffic Pattern Cookbook

Dennis Strein, FI(A)

13/11/2020
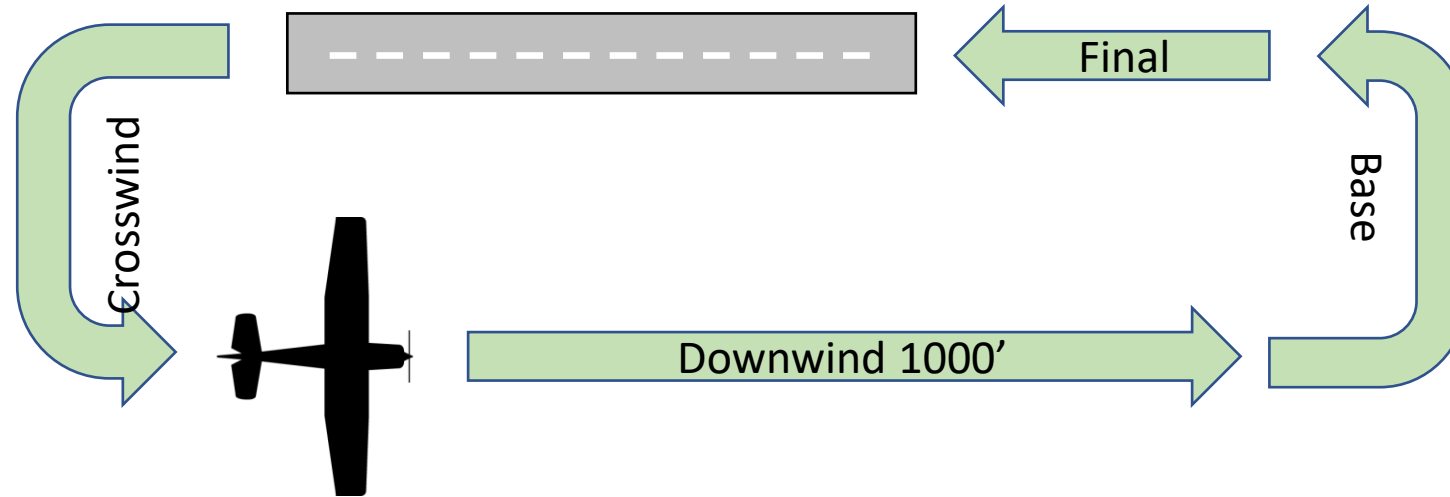
Controlled airfield: Flying traffic circuits

+ Best practice is to report downwind and follow instructions

D-ECBX downwind runway 27

...

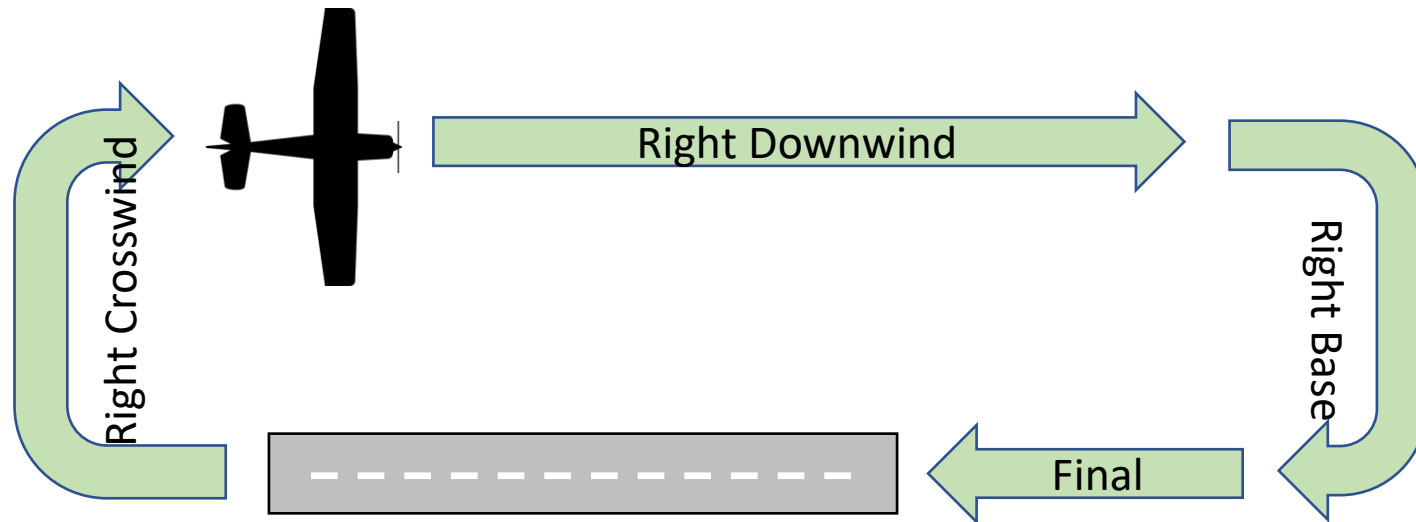D-ECBX runway 27 cleared touch and go, traffic circuit

Uncontrolled airfield: Flying traffic circuits

Crosswind

Final

Base

Downwind 1000'

+ Report downwind, base and final. When there is no conflicting traffic it is common to only report base

(D-ECBX downwind runway 27)
D-ECBX base runway 27 for touch and go
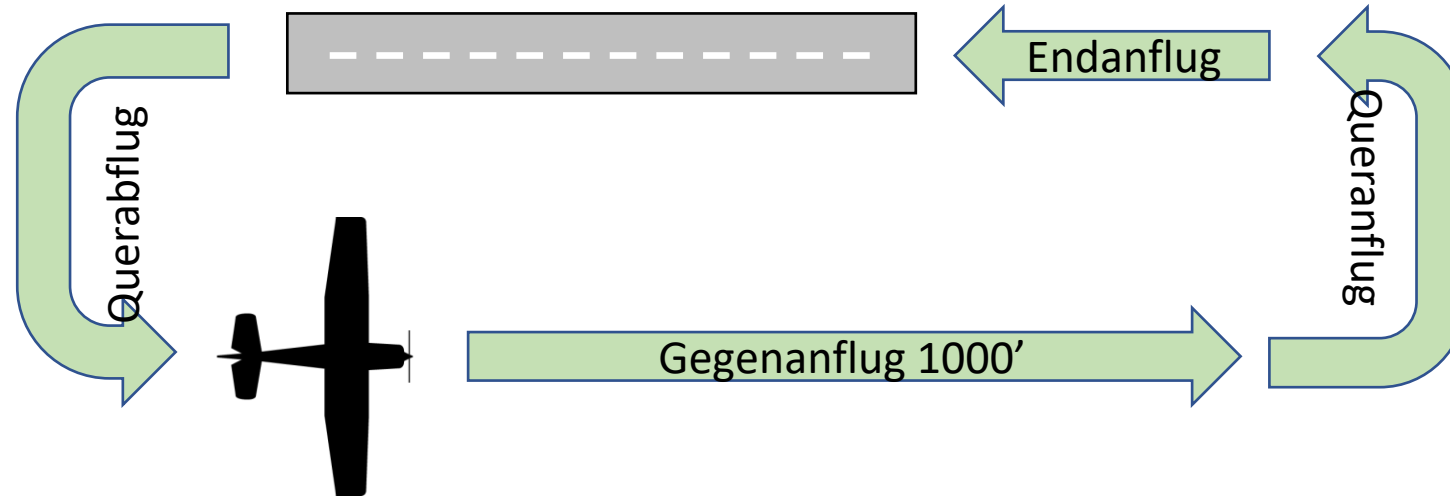(D-ECBX final runway 27)

Right-hand circuits

- do not skip the "right"

D-ECBX right downwind runway 27
D-ECBX right base runway 27 for touch and go
D-ECBX final runway 27

Uncontrolled airfield: Speak German

- At (small) uncontrolled german airfields prefer German language as not all pilots in the pattern will understand English
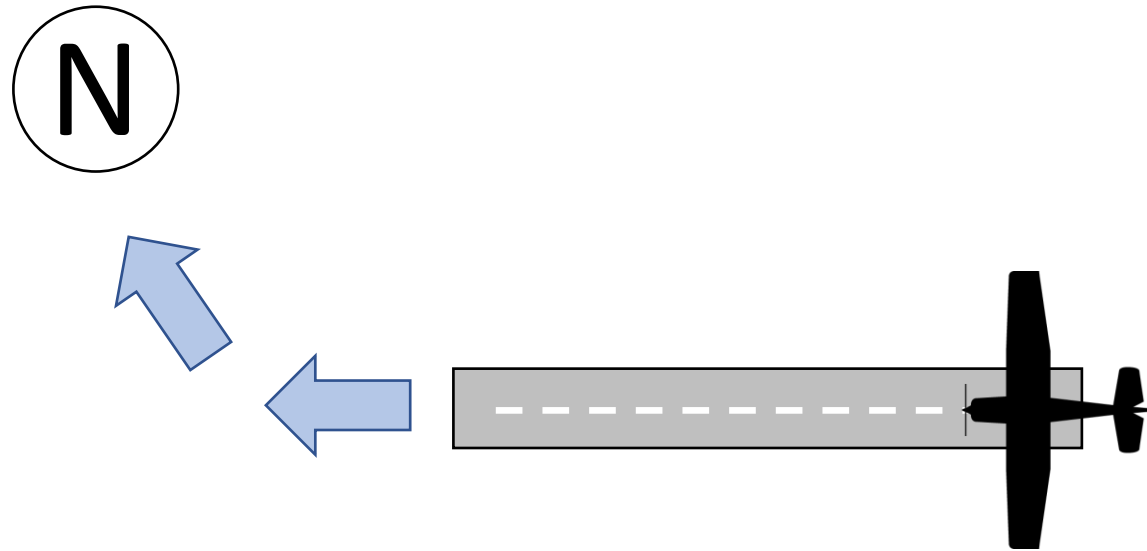
(D-ECBX Gegenanflug Piste 27)
D-ECBX Queranflug Piste 27 für Aufsetzen und Durchstarten
(D-ECBX Endanflug Piste 27)
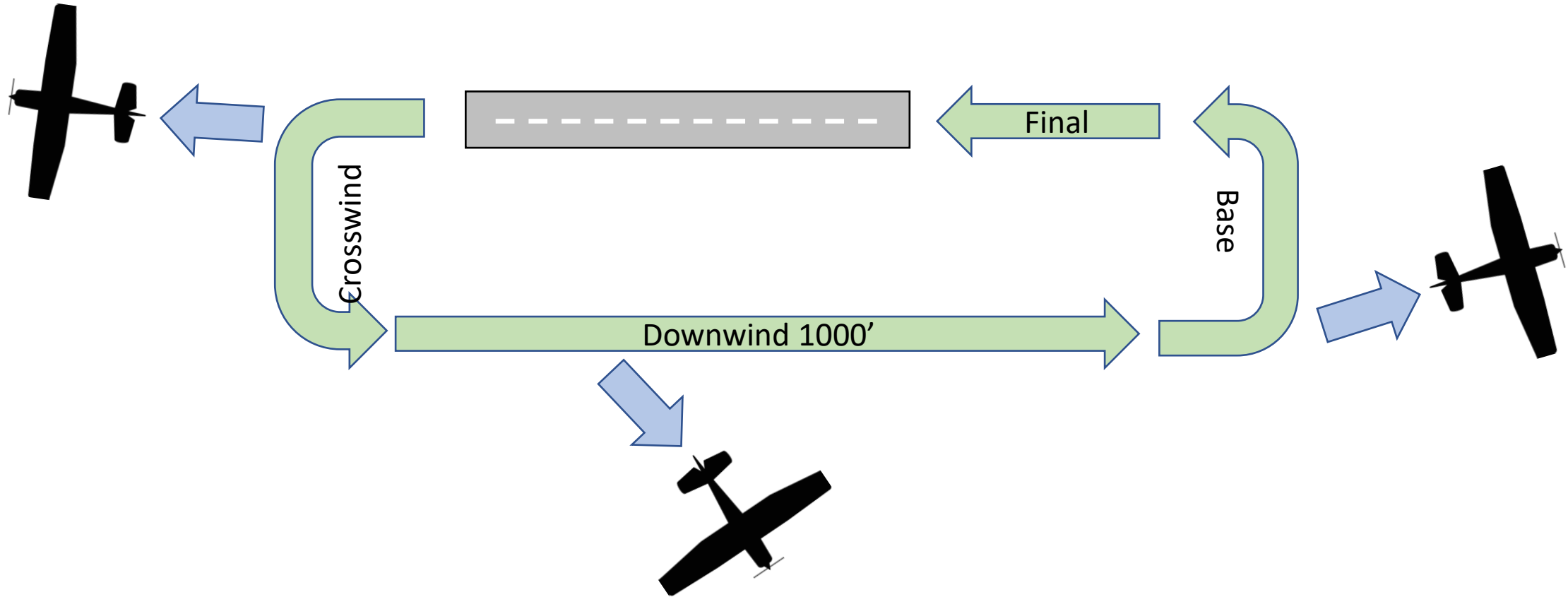
Departures

Controlled airfield: Follow instructions

+ Follow the ATC clearances and be done with it

+ Not many differences across Europe

- In a CTR class D you are still legally responsible for traffic and terrain avoidance. Do not rely on the controller blindly!

D-ECBX leave control zone via N, right turn approved, runway 27 cleared for take-off
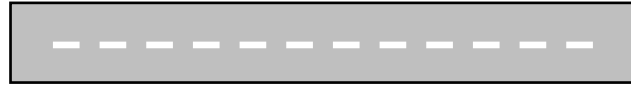
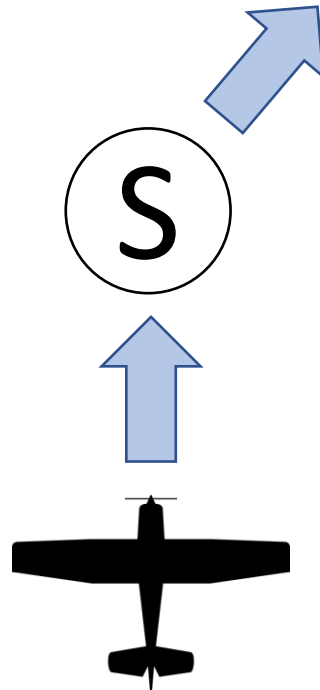# Uncontrolled airfield: Leave via the circuit

Crosswind

Final

Base

Downwind 1000'

D-ECBX Lining up and taking off runway 27
D-ECBX Leaving traffic pattern to the south

# Approaches

Controlled airfield: Follow instructions

+ Follow the ATC clearances and be done with it

+ Not many differences across Europe

S

- In a CTR class D you are still legally responsible for traffic and terrain avoidance. Do not rely on the controller blindly!

- Clearances usually do not include descent instructions. Plan your decent!

D-ECBX 5 minutes south of S ... for landing
D-ECBX Enter via S join ... for runway 27 ...

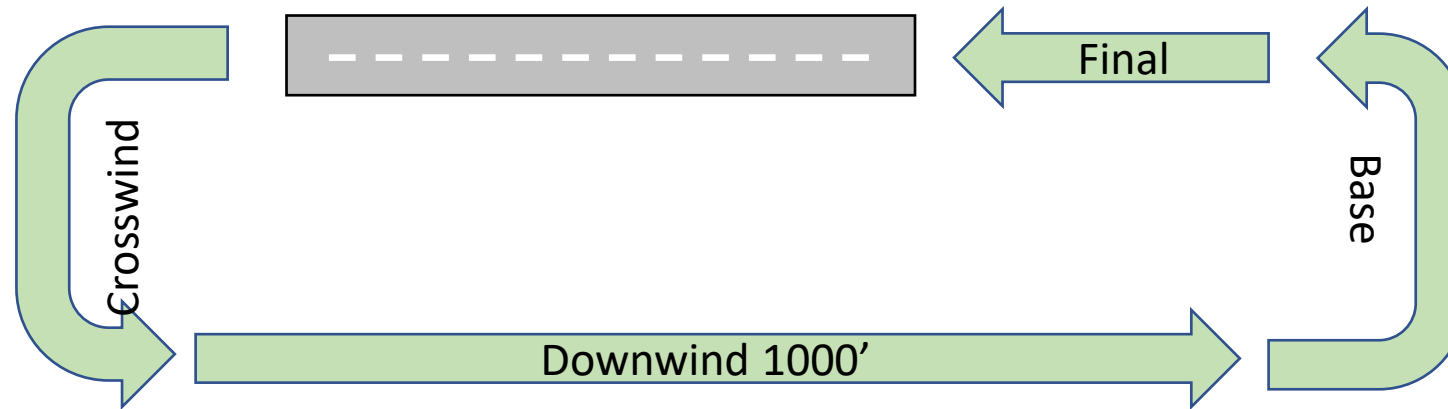# Uncontrolled airfields: Approach via the pattern

Final

Base

Crosswind

Downwind 1000'
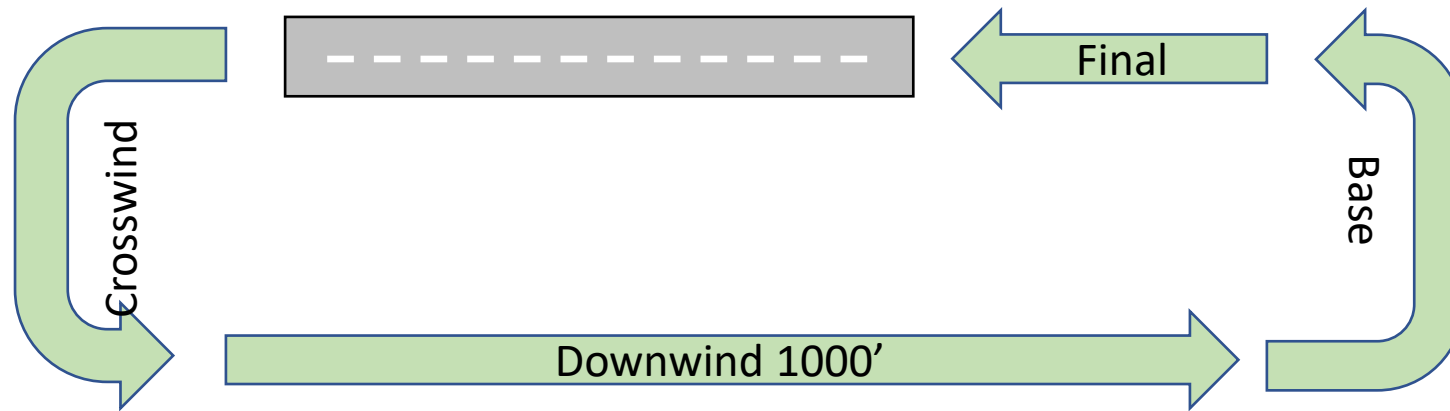
+ At uncontrolled airfields you decide at your own discretion

?

- Have a plan!

Uncontrolled airfield: Communicate

Crosswind

Base

Final

Downwind 1000'
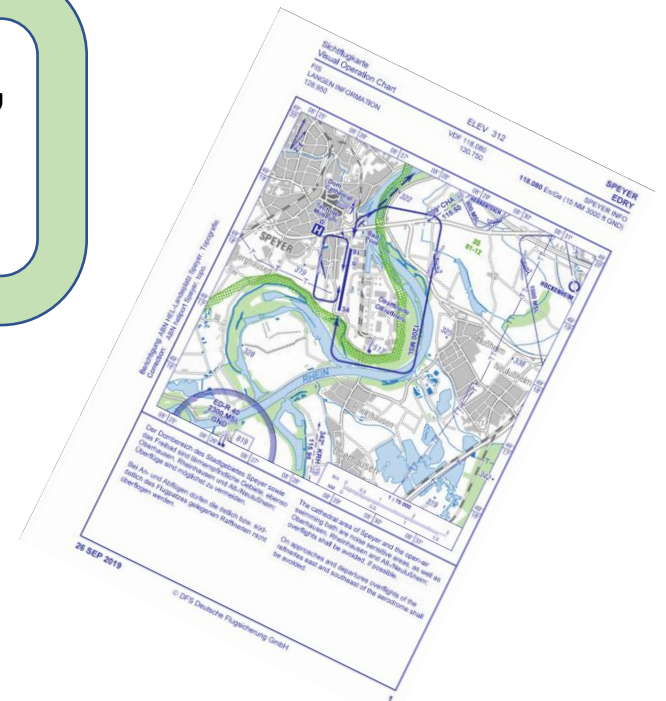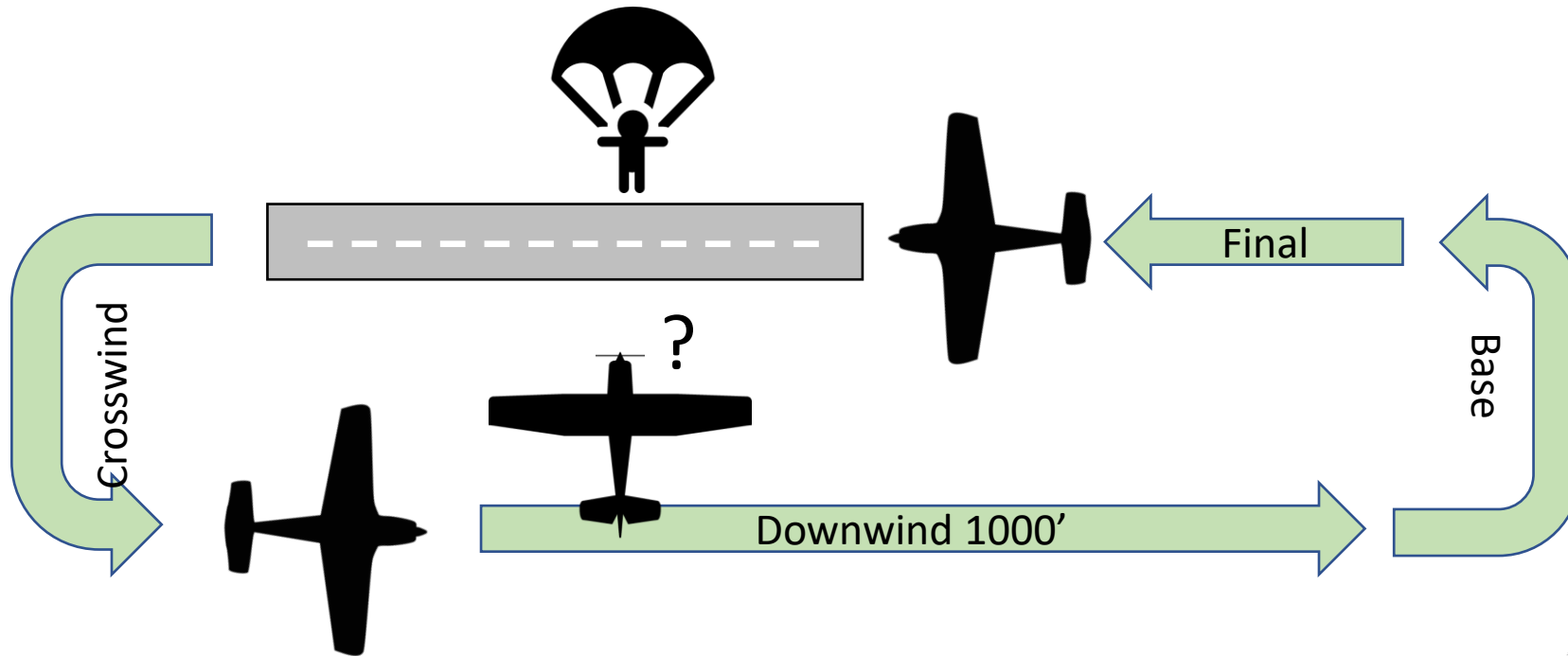
- You are not alone in the sky. Follow best practices and communicate: Who am I, where am I, what are my intentions

D-ECBX C150, 5 minutes south of the field … for landing
D-ECBX Will make a straight-in approach/will report downwind next/…

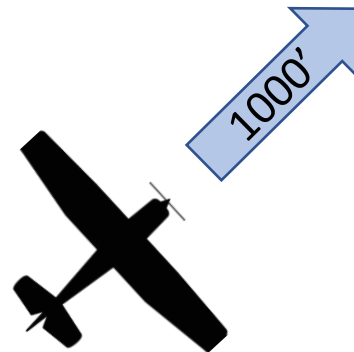# Spot the airfield and traffic pattern

- Prepare carefully before flight with the approach chart. If you cannot spot the field and pattern do not approach!

45° downwind join at pattern altitude

Crosswind

Final

Base

Downwind 1000'

1000'
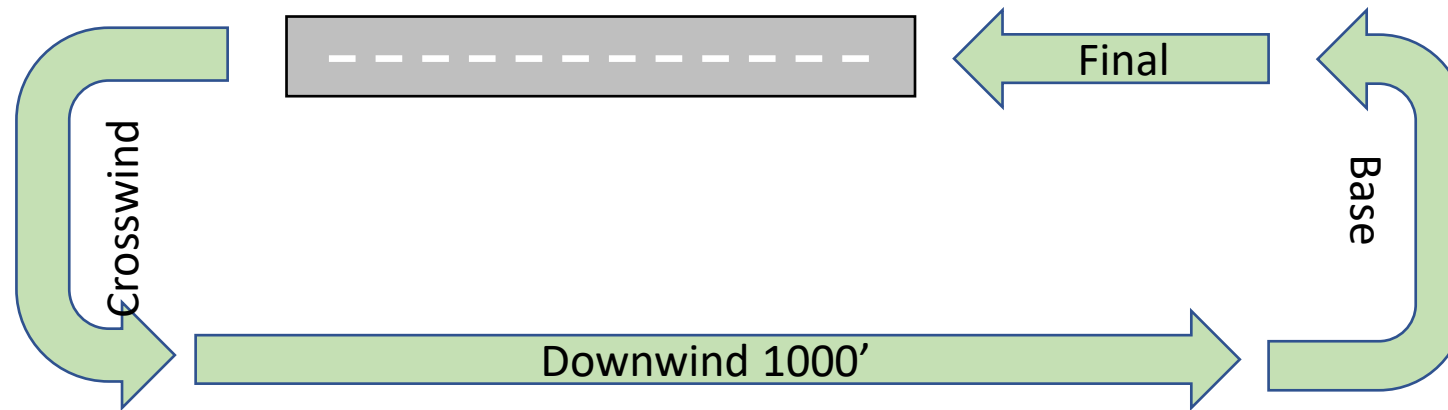
+ The gold standard in Germany

+ Makes it easy to stay away if there is traffic in the pattern

- You will mess up with traffic at pattern altitude if you are lost. Make sure you have the field in sight

D-ECBX 5 minutes south ... will report downwind next
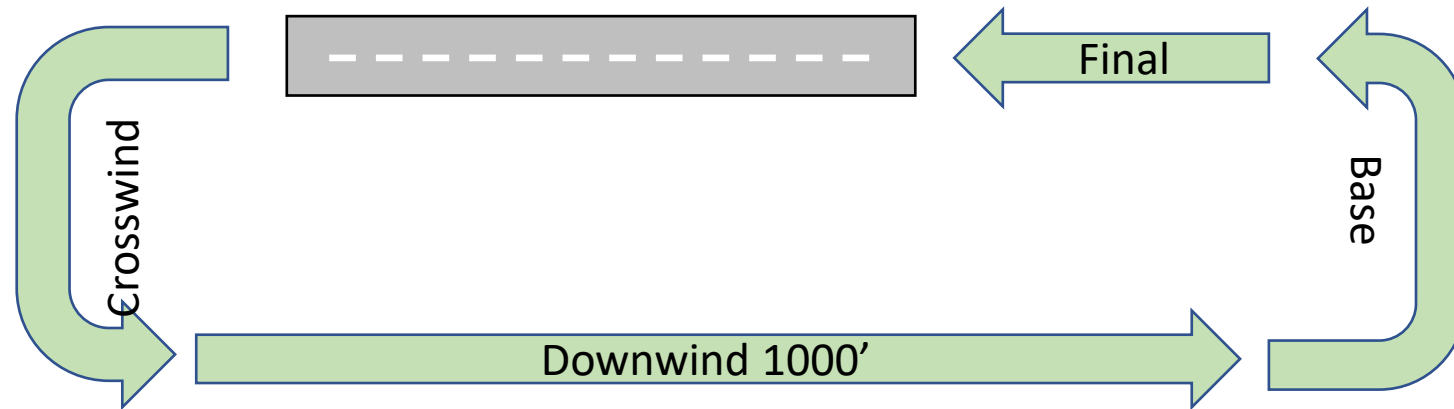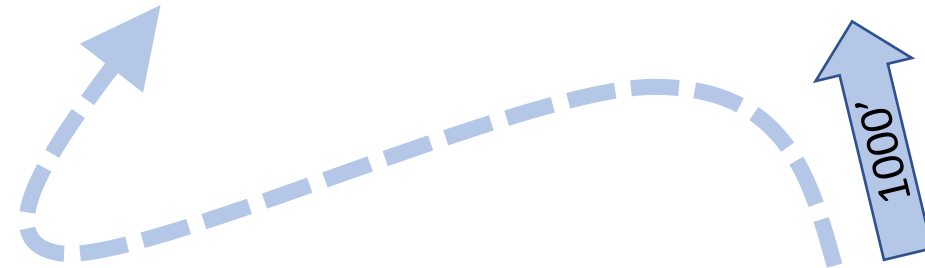D-ECBX joining downwind runway 27

Straight into downwind
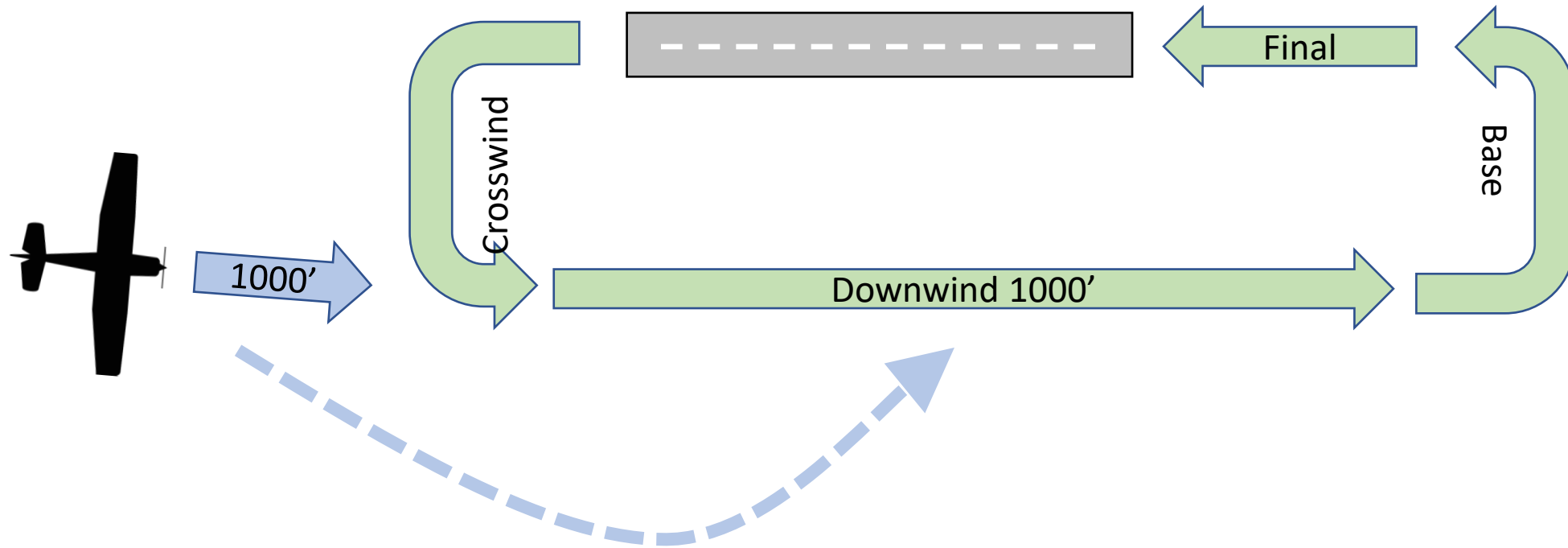
\+ Common variation with better overview of traffic in the circuit

\- Traffic in crosswind may not expect you there

Direct base

+ Common variation to avoid unnecessary diversion

- Traffic turning base may not expect you there

D-ECBX 5 minutes south-east … will join direct base runway 27
D-ECBX Base runway 27

Straight-in (direct) approach

Crosswind

Base

Downwind 1000'

+ Common variation to avoid unnecessary diversion

- Watch out for traffic in base!
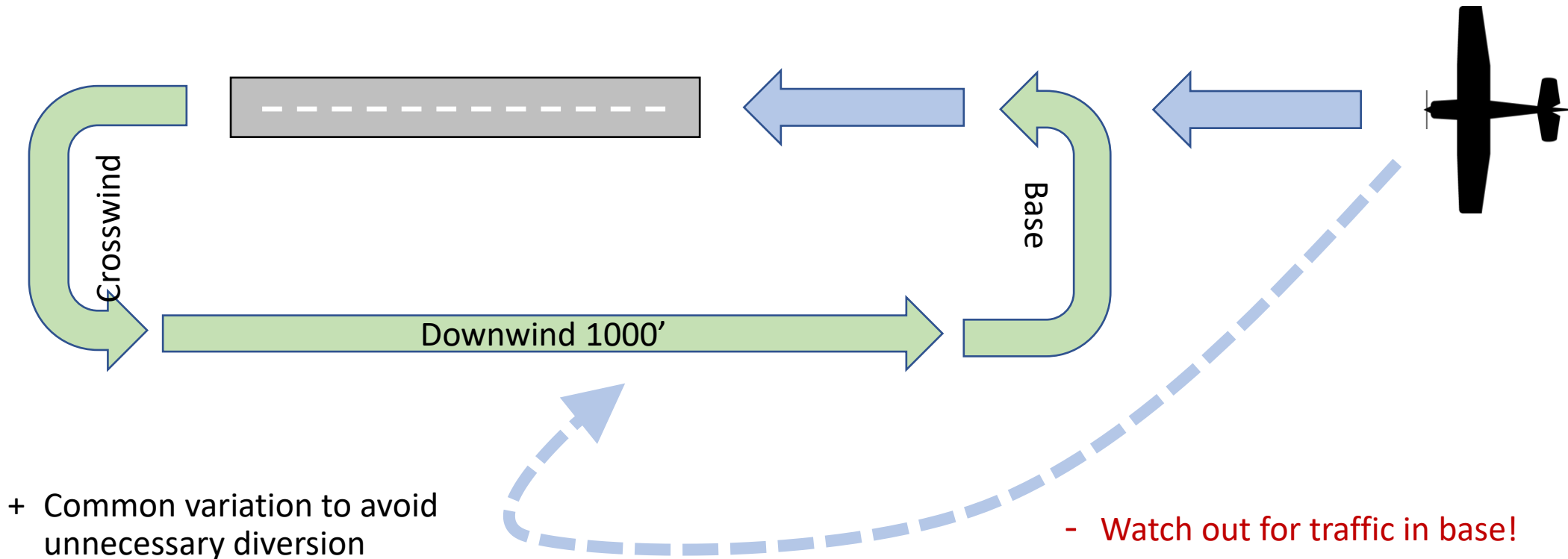
D-ECBX 5 minutes east ... will make a direct approach runway 27
D-ECBX Long final runway 27
D-ECBX Short final runway 27

From the dead side: Fly around the field

Crosswind

Downwind 1000'

Final

Base
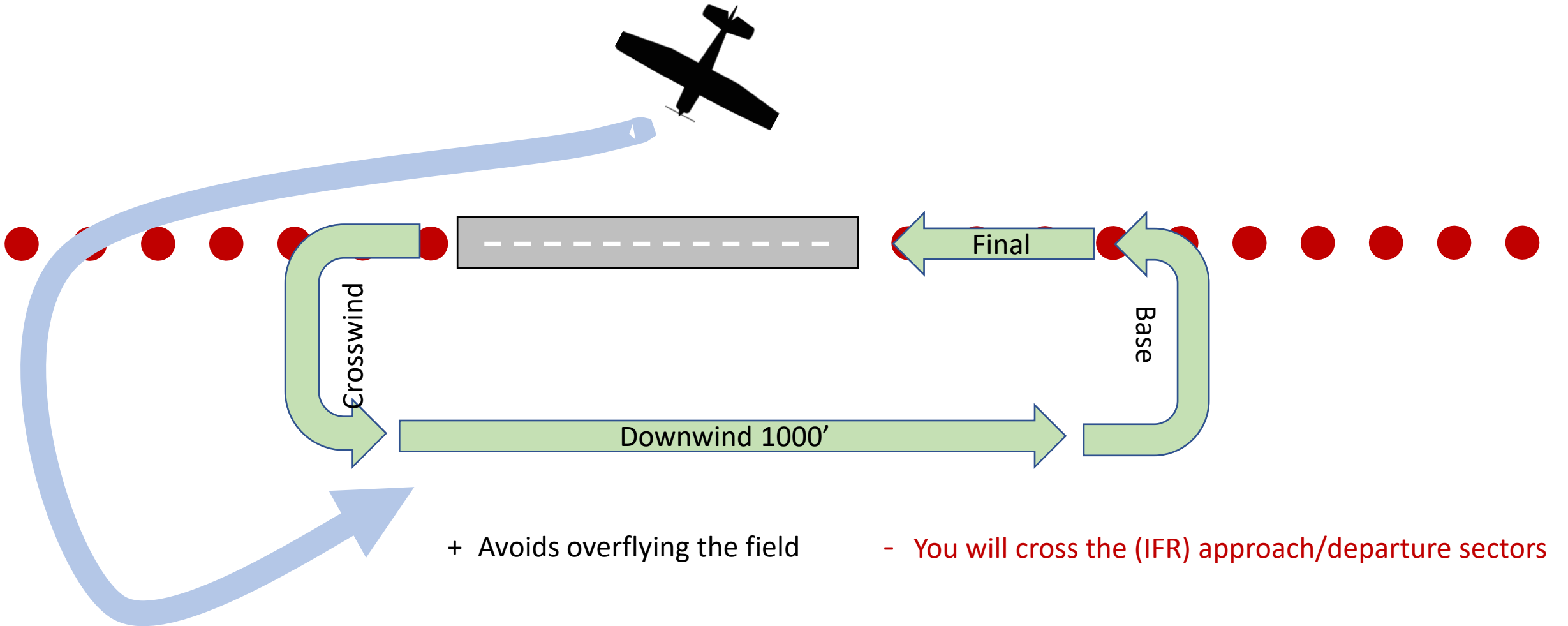
\+ Avoids overflying the field   -   You will cross the (IFR) approach/departure sectors

D-ECBX 5 minutes north ... will report downwind next
D-ECBX Joining downwind runway 27

From the dead side: Overhead join German style

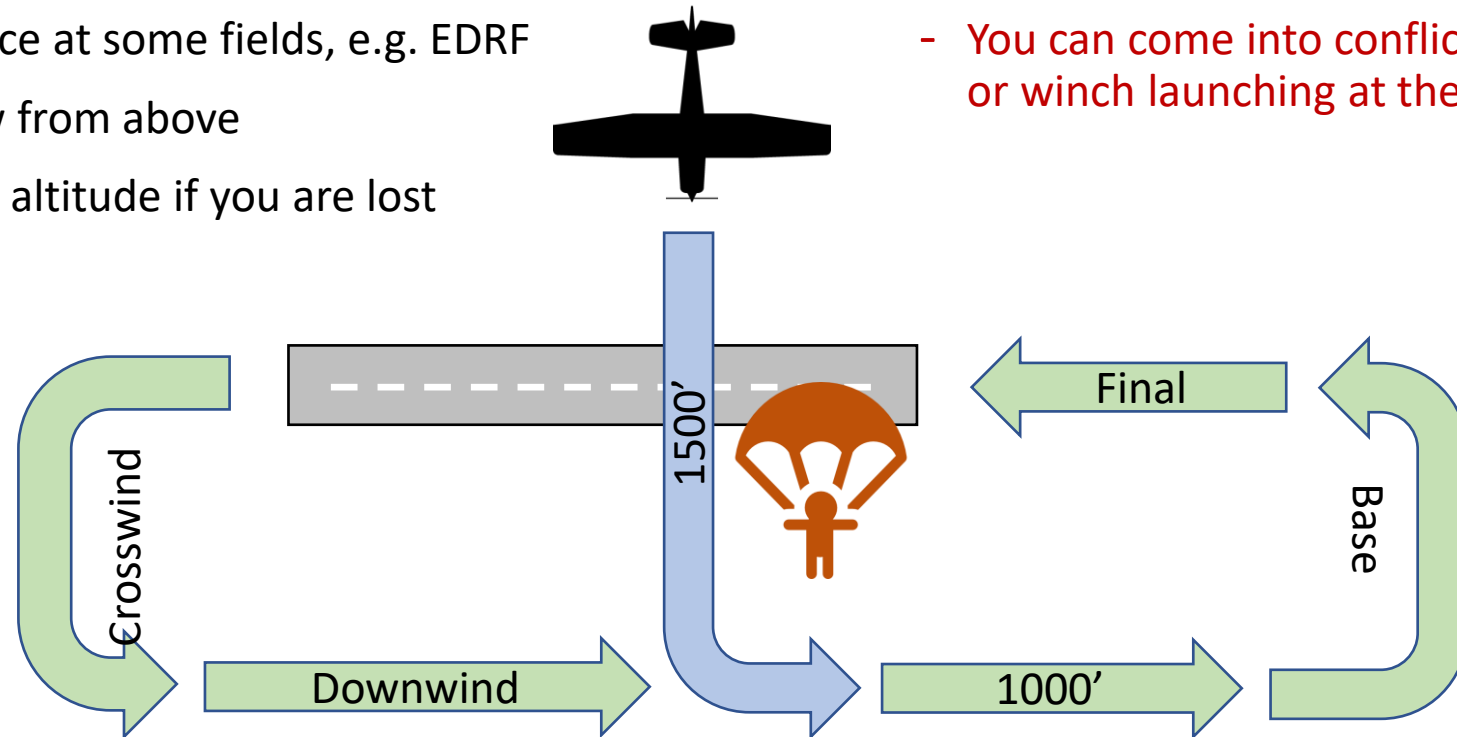+ Used to be best practice at some fields, e.g. EDRF

+ Gives you an overview from above

+ You are above pattern altitude if you are lost

- You can come into conflict with parachuting or winch launching at the airfield

1500'

Crosswind

Downwind

1000'

Base

Final

D-ECBX 5 minutes north ... will overfly the field and report overhead next
D-ECBX overhead the field at xxx feet
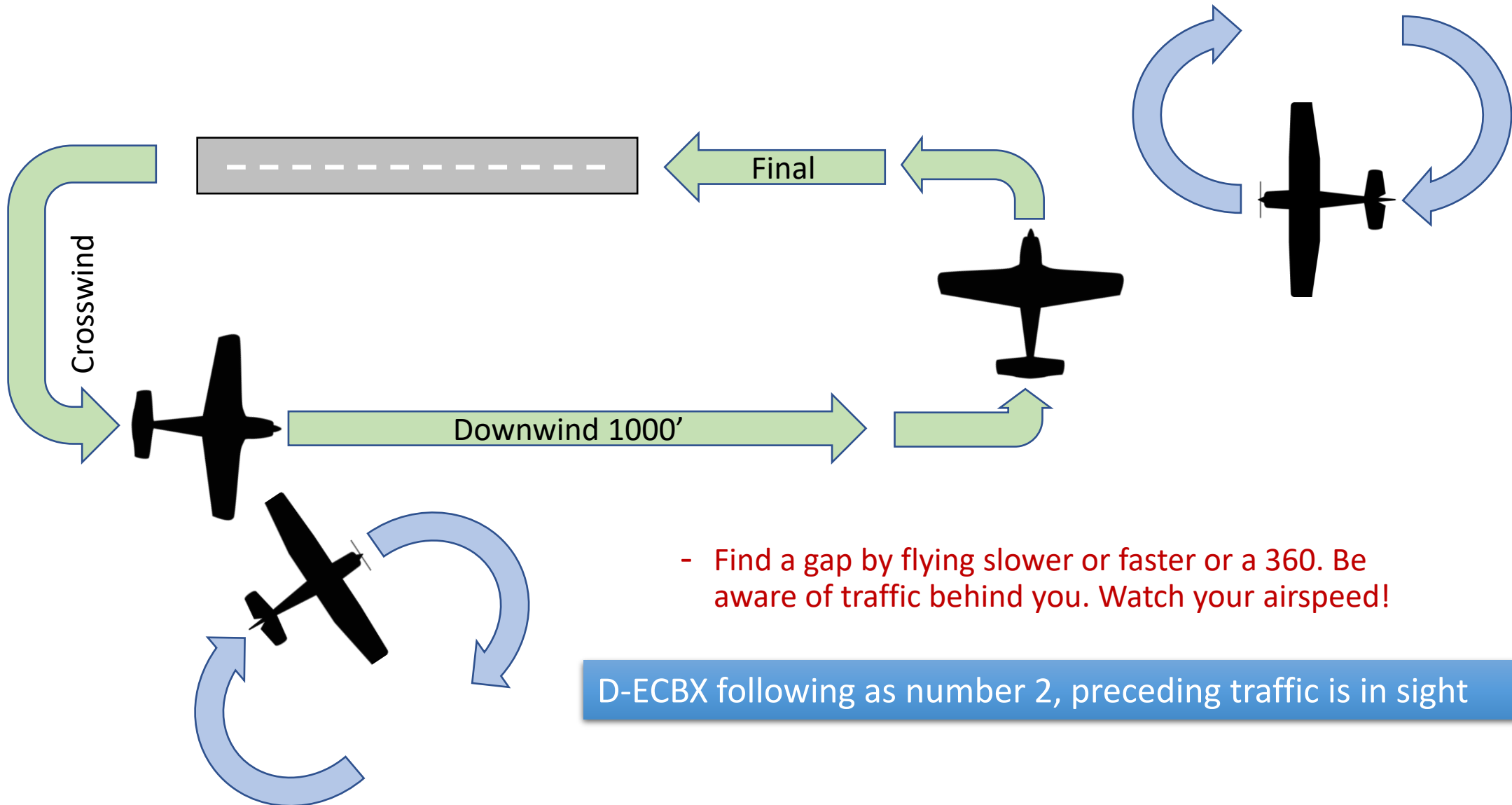D-ECBX Joining downwind runway 27

Avoiding traffic

Right-of-way
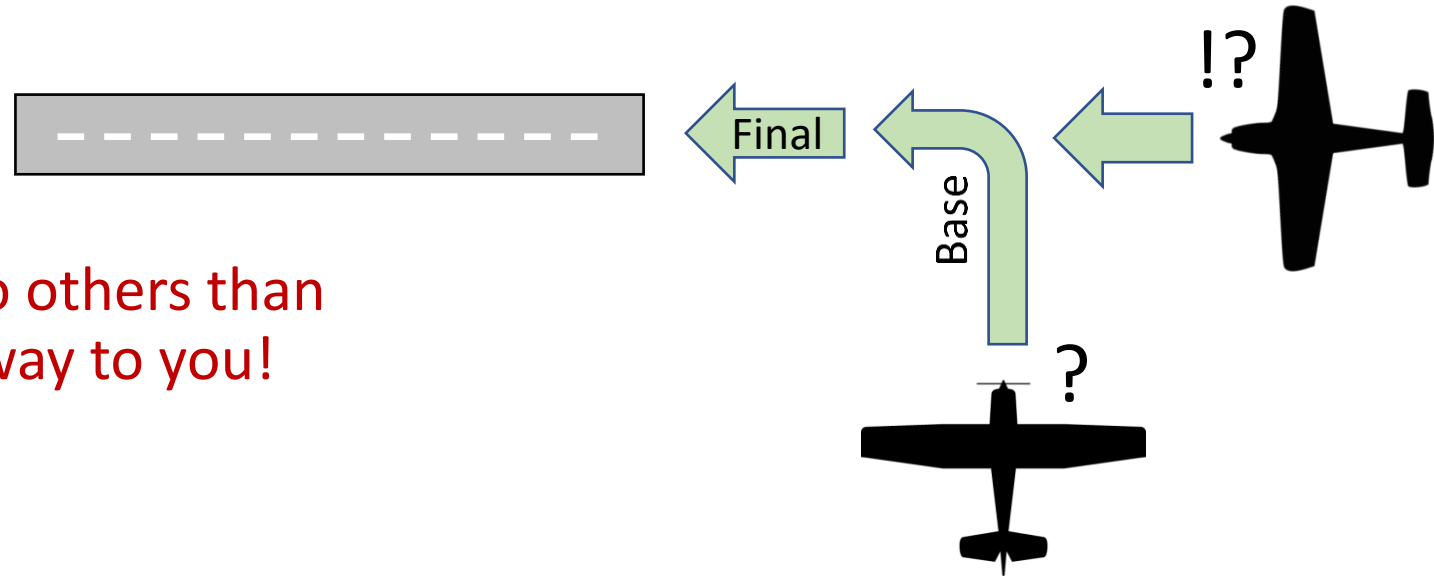
- It is better to give way to others than to rely on them to give way to you!
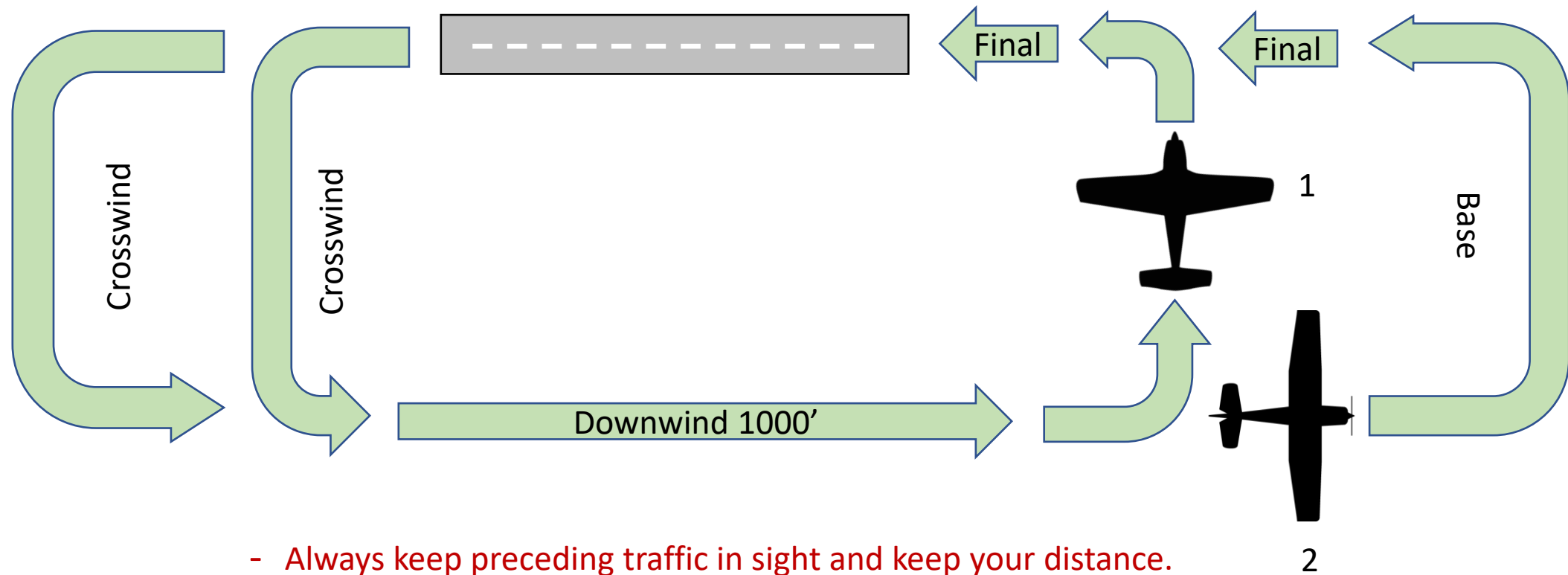
SERA rules:

Converging. When two aircraft are converging at approximately the same level, the aircraft that has the other on its right shall give way, ...

Landing. An aircraft in flight, or operating on the ground or water, shall give way to aircraft landing or in the final stages of an approach to land. (i) When two or more heavier-than-air aircraft are approaching an aerodrome ... for ... landing, aircraft at the higher level shall give way to aircraft at the lower level, but the latter shall not take advantage of this rule to cut in front of another which is in the final stages of an approach to land, or to overtake that aircraft.

# When outside: Give way to traffic in the pattern

Crosswind

Final

Downwind 1000'

- Find a gap by flying slower or faster or a 360. Be aware of traffic behind you. Watch your airspeed!

D-ECBX following as number 2, preceding traffic is in sight

Inside the pattern: Preceding traffic

Crosswind

Crosswind

Final

Final

Base

Downwind 1000'

1

2

- Always keep preceding traffic in sight and keep your distance.
  Slowing down can be dangerous. It is better to extend the pattern

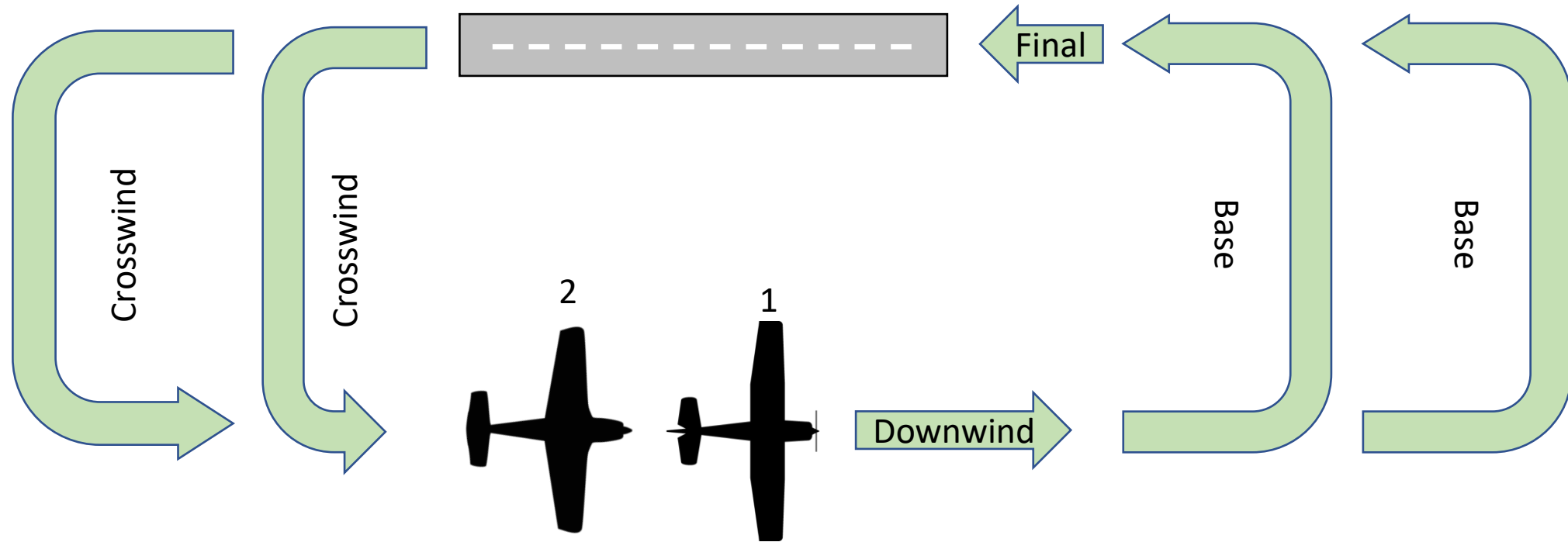D-ECBX extending downwind, following as number 2

Go around and overtake preceding traffic

Crosswind

Base

Final

Downwind 1000'
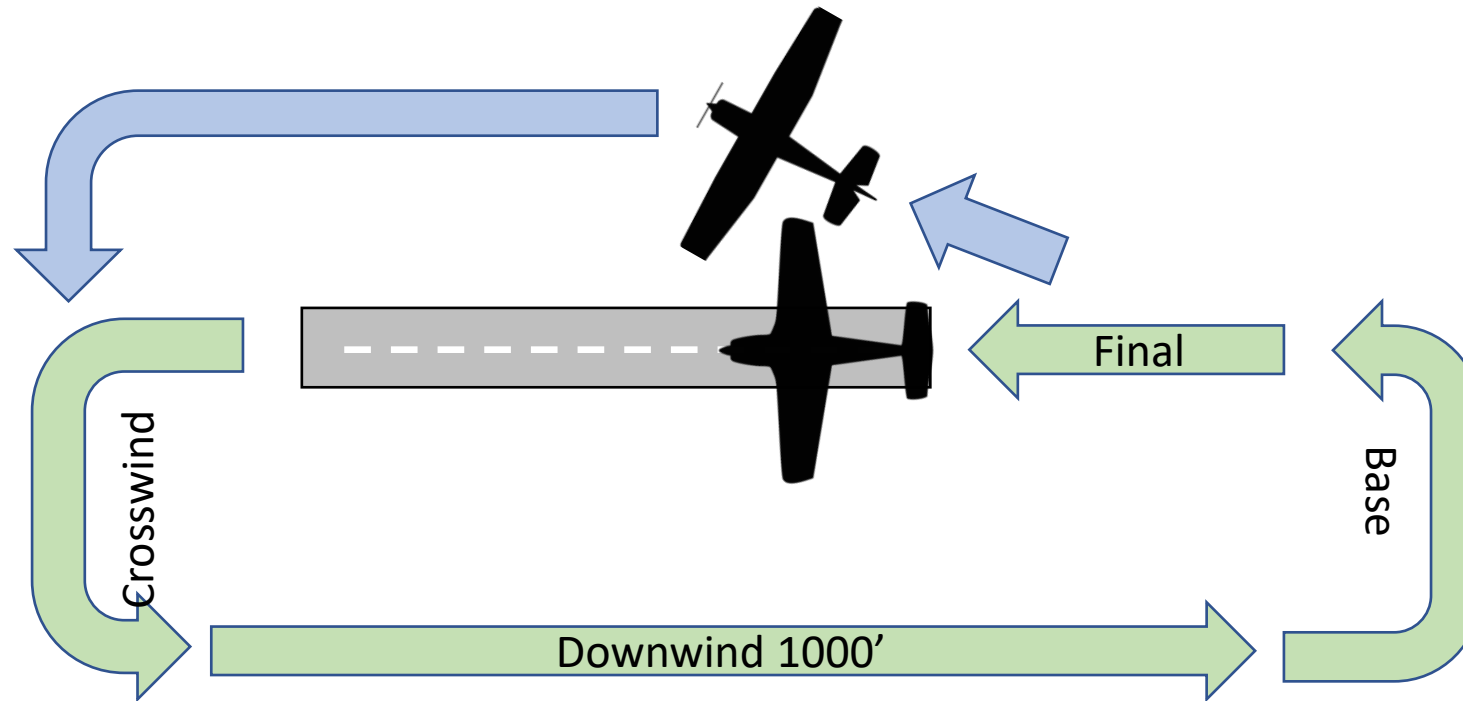
- Refuse to slow down on final to keep distance. Go around and overtake on the dead side
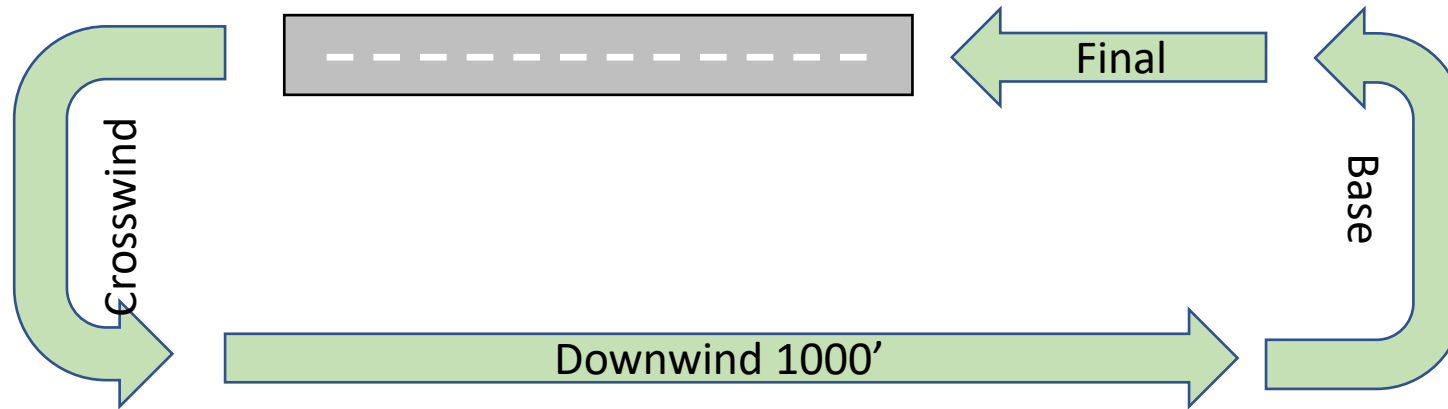
D-ECBX, going around, overtaking on the right

Inside the pattern: Traffic behind you

Crosswind

Crosswind

Final

Base

Base

2

1

Downwind

- With (faster) traffic behind you shorten the pattern to help keeping the distance. Turn into crosswind or base earlier. Ask whether they have you in sight when in doubt

Outside Germany
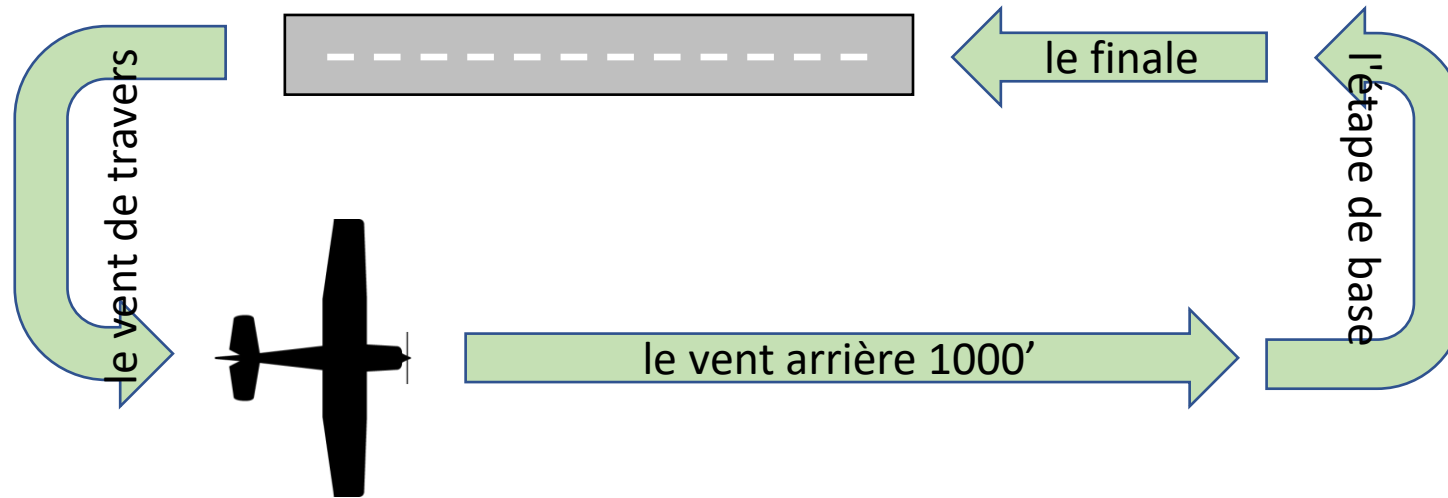
Where is the Flugleiter?

+ Outside Germany airfields with only air-to-air communication between pilots are more common, e.g. LFSH, LFGY

- Good communication is even more important when there is no moderation

Hagenau, D-ECBX, C150, 5 minutes south, will...

Flying circuits at French A/A airfields

le finale

l'étape de base

le vent de travers

le vent arrière 1000'

- French pilots speak French (only). Understanding at least the most important phrases is helpful

[Airfield], D-ECBX en vent arrière piste 27
[Airfield], D-ECBX en étape de base piste 27
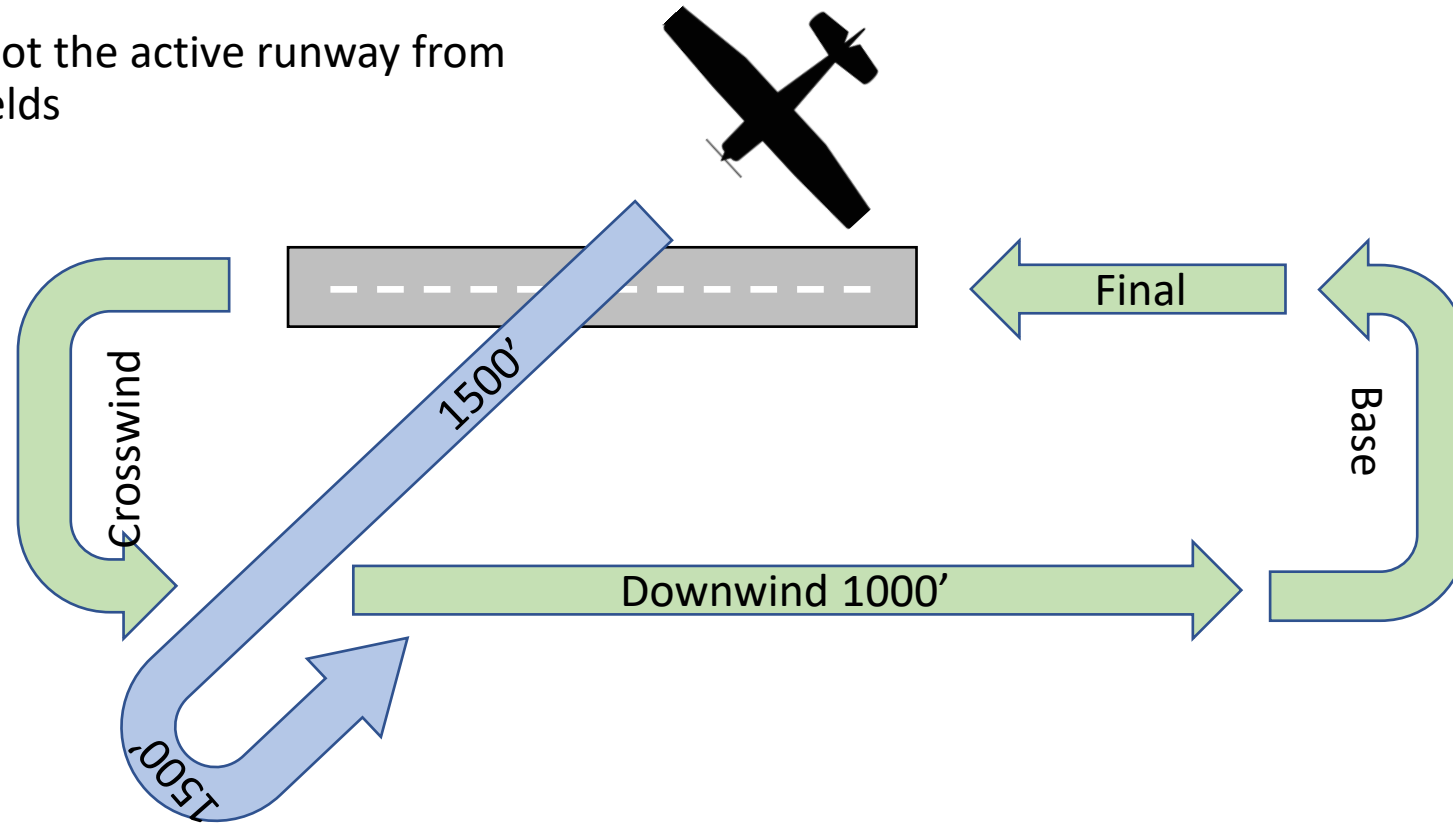[Airfield], D-ECBX en finale piste 27

Spot the active runway from above

2000'
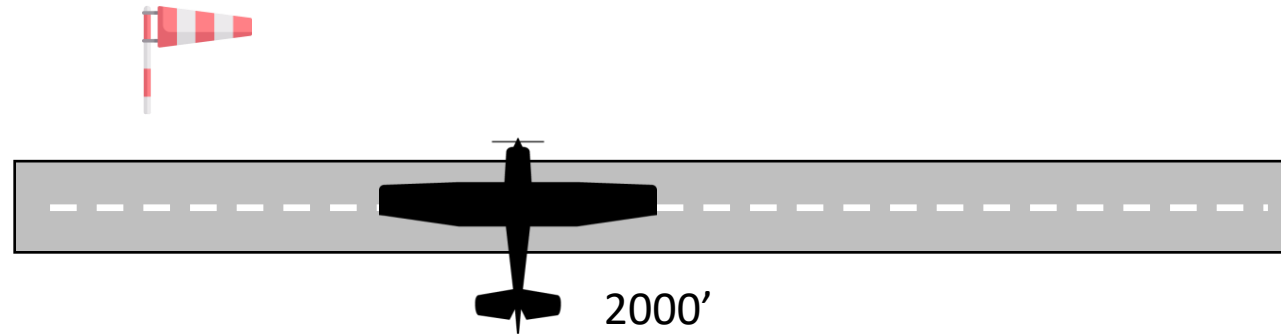
+ Best practice if you cannot determine the active runway by listening to other pilots

- Use standard overhead join procedures

From the dead side: Overhead join French style

+ Best practice to spot the active runway from above at A/A airfields

Crosswind

1500'

1500'

Final

Base

Downwind 1000'

D-ECBX 5 minutes north … will overfly the field and report overhead next
D-ECBX overhead the field at xxx feet, will join downwind runway 27
D-ECBX Joining downwind runway 27

Teardrop overhead join

+ Turn is performed the other way around
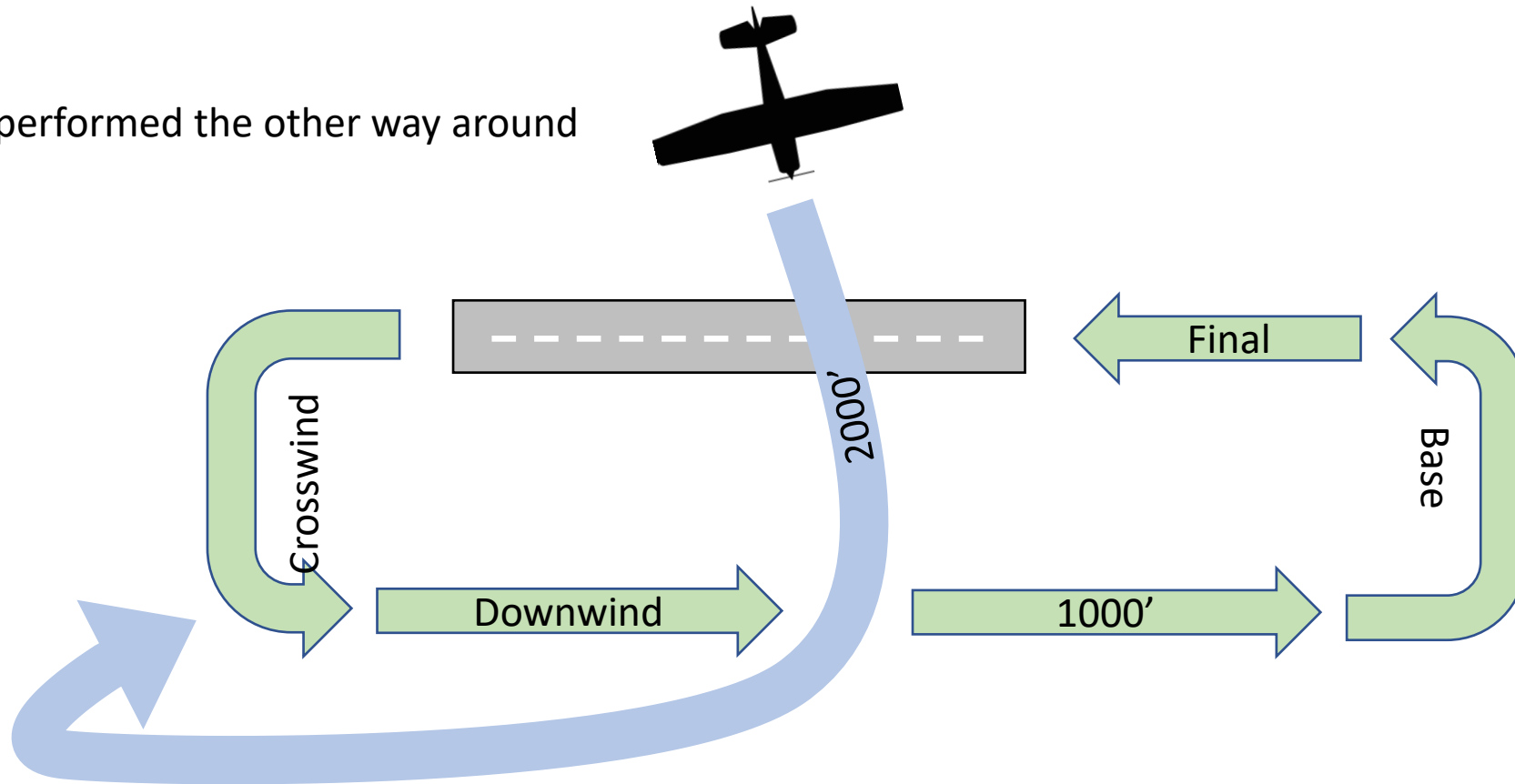
Crosswind

2000'

Downwind

1000'

Final

Base

D-ECBX 5 minutes north ... will overfly the field and report overhead next
D-ECBX overhead the field at xxx feet, will join downwind runway 27
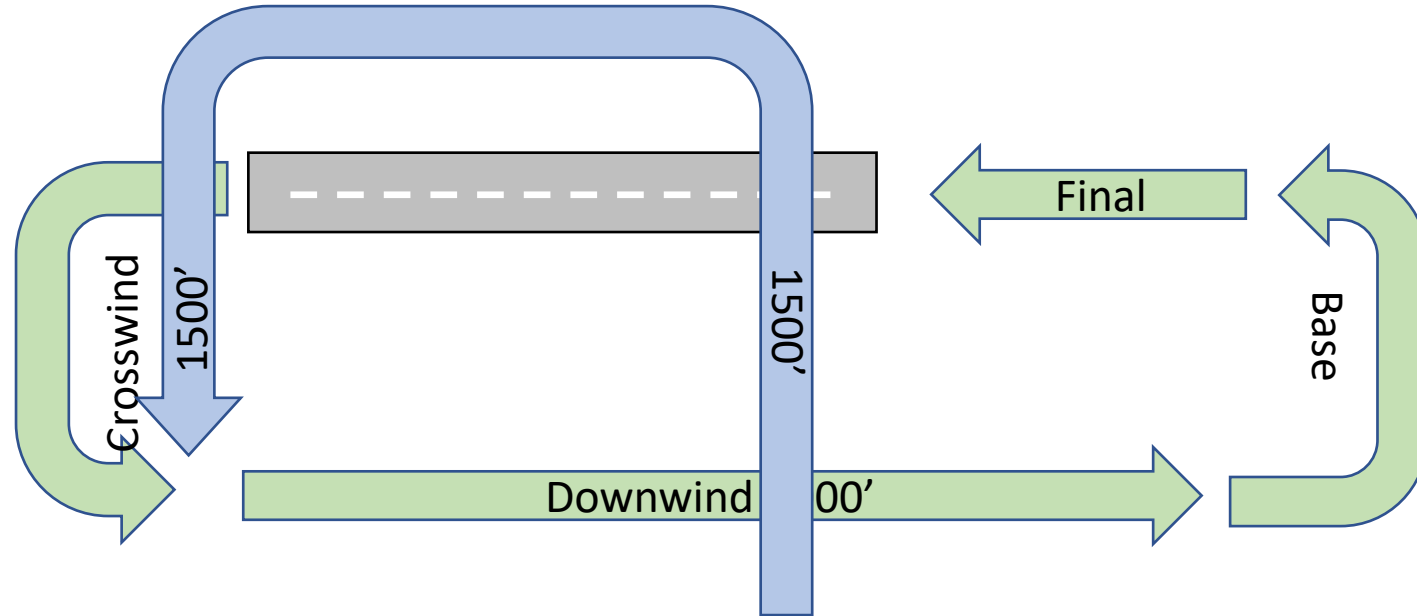D-ECBX Joining downwind runway 27

From the life side: Standard overhead join

+ Best practice when approaching from the life side, e.g. in France and the UK

D-ECBX 5 minutes south … will overfly the field and report overhead next
D-ECBX overhead the field at xxx feet, will join downwind runway 27
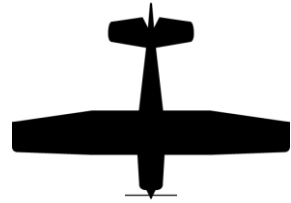D-ECBX Joining downwind runway 27

From the dead side: Overhead join UK style

- Enjoy!

Crosswind 1500' 3000' 1500'

Final

Base

Downwind   00'