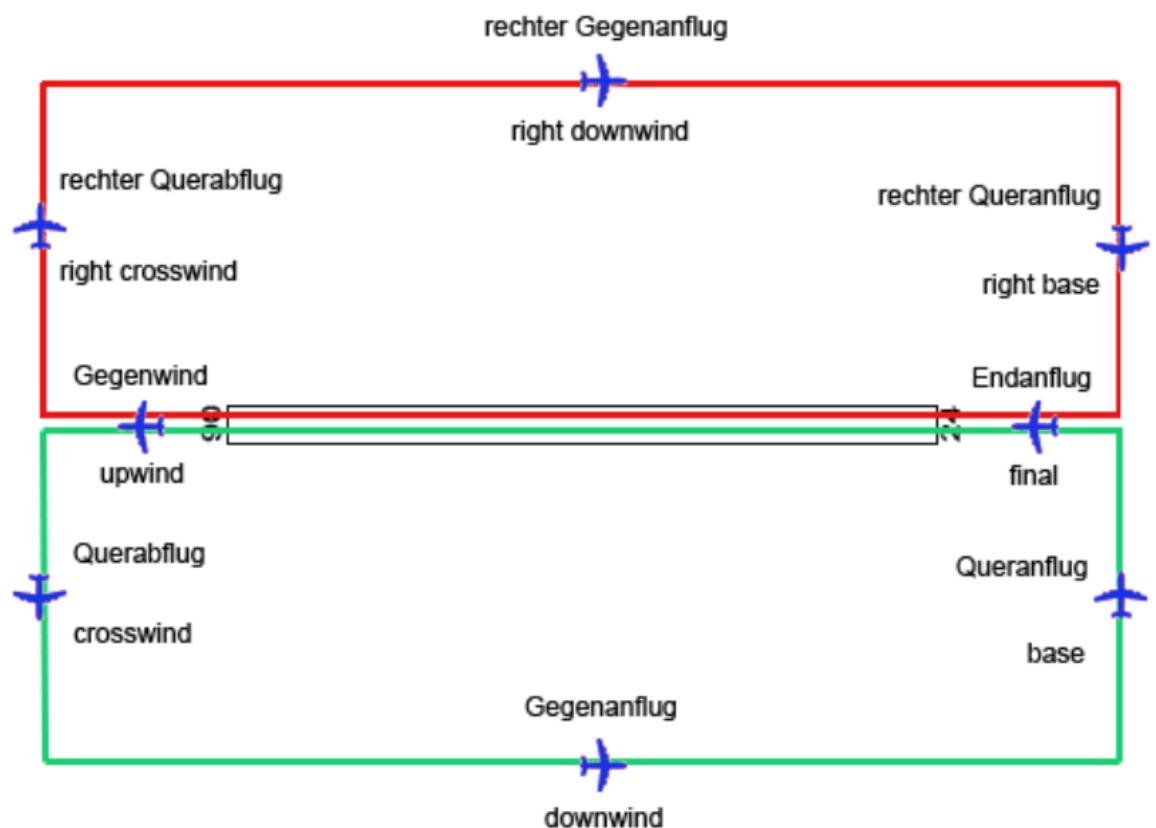


Traffic circuit

The **traffic circuit** or **traffic pattern** (**German: Platzrunde**) ensures that approach and departure procedures at uncontrolled airfields run smoothly and, above all, safely. They provide orientation and prevent serious collisions. They also help pilots to develop their flying skills, as they can use the circuits to make as many landings as possible in a short amount of time. Particularly in private pilot training, traffic circuits are flown at the beginning to give the student pilot a feel for take-offs and landings. Traffic circuits are only defined and published for uncontrolled aerodromes. At controlled aerodromes, air traffic controllers direct the aerodrome traffic, but the vocabulary remains the same. The traffic circuit is usually flown at **1000 ft AGL**.



If we mention "traffic circuit", a "crosswind", "downwind" or "base", this refers to the sections of the **standard traffic circuit** (left turns).

If you want to refer to the corresponding sections of the right-hand circuit shown in red in the picture, you speak of the "right traffic circuit", the "right crosswind", "right downwind" or "right base".

The same applies to the German words.

There is no "Right Upwind" or "Right Final", as these sections are identical for the right-hand traffic circuit and standard traffic circuit.

Unless otherwise specified by the responsible aviation authority, aerodrome circuits are flown at a distance of approx. 1.5 km (1 NM) from the runway and to the **left** (counterclockwise) so that the

pilot sitting on the left can keep an eye on the runway throughout the entire maneuver. If we take off in the other direction due to the wind or are instructed by the tower to turn right, everything remains the same. The only difference is that we now report the right upwind, right downwind and right base. The final is given without directional information.

At large controlled aerodromes such as Berlin, Hamburg, Düsseldorf, Frankfurt and Munich, there are no published aerodrome circuits, so the pilot is given a little more freedom here. The reason for this is that there is a very wide range of aircraft flying at these airports, from small monoplanes to airliners. If a circuit were to be published, it would either be too large for a C172 or too narrow for an A320. At smaller, partly uncontrolled airfields, on the other hand, you will almost always find exactly published traffic circuits, which then usually avoid towns and villages.

Components of the traffic circuit

The aerodrome circuit consists of the following sections:

Abflug / Depature

In this phase, the pilot is climbing and takes all the necessary steps after take-off: Retract flaps, switch off landing lights, retract landing gear and other important steps prescribed by the checklist.

Querabflug / Crosswind

During the crosswind, the airplane should have reached the altitude of the traffic circuit. The altitude is approx. 1000 feet (ft) above airfield altitude.

Gegenanflug / Downwind

This section is parallel in the opposite direction to the active runway. Here the pilot gives their first position report by radio, reporting their callsign and the section of the traffic circuit they are in. Shortly afterwards, the tower confirms and every radio station at the airfield and the traffic circuit knows where the aircraft is located. The reason why the pilot only reports their position in this section is that other aircraft, e.g. coming from another airfield, enter the circuit through this section and might not notice other aircraft if they were not paying enough attention

Queranflug / Base

Here the pilot slowly begins the descent and reports their position. The landing checklist should also be worked through: Reduce power, switch on carburetor preheating, switch on landing lights, etc.

Endanflug / Final

In the last and most demanding phase, the pilot should have initiated all steps for landing. After the position report, Info / Tower gives the pilot the wind direction and speed so that these can be taken into account during landing, as well as the landing clearance at a controlled airfield. Unnecessary radio contact should be avoided now so that the pilot can concentrate fully on the landing.

Traffic circuit phraseology example

The components of a traffic circuit often form an important part of a VFR flight. In addition to arrivals and departures, it is also used by pilots to practice the important phases of a flight in the vicinity of the aerodrome.

The pilot reports to the responsible controller (delivery or ground - depending on the airport) and informs them of their intentions.

Platzrunde / Traffic circuit	
German	English
Sylt Turm, Moin, DEMAM	DEMAM, Moin , Sylt Turm
DEMAM, Moin , Sylt Turm	DEMAM, Moin , Sylt Turm
DEMAM, C172, Apron 2, eine Person mit Information Golf an Bord, für VFR Platzrunden, erbitte Rollen.	DEMAM, C172, Apron 2, one person with information Golf, for VFR traffic circuit, request taxi.
DAM rollen Sie zum Rollhalt Piste 32, über A und B, überqueren Sie Piste 06, QNH 1018.	DAM taxi to holding point runway 32, via A and B, cross runway 06, QNH 1018.
Rolle zum Rollhalt Piste 32 über A und B, überquere Piste 06, QNH 1018, DAM.	Taxi to holding point runway 32 via A and B, crossing runway 06, QNH 1018, DAM.
DAM Rollhalt Piste 32, abflugbereit.	DAM holding point rwy 32, ready for departure.
DAM fliegen Sie in den rechten Gegenanflug Piste 32, Wind 310 Grad 10 Knoten Piste 32, Start frei.	DAM join right downwind runway 32, wind 310 degrees 10 knots rwy 32, cleared for take off.
Anmerkung: Standard ist immer die linke Platzrunde. Soll der Pilot in die rechte Platzrunde bzw. in einen Abschnitt dort einfliegen, muss dies immer explizit dazu gesagt werden. Das gleiche gilt für Rechtskurven, die immer genehmigt werden müssen. Ansonsten muss der Pilot eine 270° Linkskurve fliegen.	
Fliege in den rechten Gegenanflug Piste 32, Piste 32 Start frei, DAM.	Joining right downwind runway 32, runway 32 cleared for take off, DAM.
Rechter Gegenanflug Piste 32, zur Landung, DAM.	Right Downwind rwy 32, for landing, DAM.

Anmerkung: Wenn der Pilot seine Absichten nicht von sich aus nennt, sollte der Lotse den Piloten fragen. Hier kann es die verschiedensten Möglichkeiten geben, was ein Pilot machen möchte.

DAM, Wind 310 Grad 10 Knoten Piste 32 Landung frei.	DAM, wind 310 degrees 10 knots runway 32 cleared to land.
Piste 32 Landung frei, DAM.	Runway 32 cleared to land, DAM.
DAM rollen Sie zum Apron 2 über D I.	DAM taxi to Apron 2 via D I.
Rolle zum Apron 2 über D I, DAM.	Taxi to Apron 2 via D I, DAM.

Note: If a pilot is cleared for one section of a traffic circuit, they are also cleared for all following sections of this circuit and is allowed to fly them autonomously. If, for example, you clear a pilot for downwind, they will turn into base and final on their own whenever they see fit. This also means that if you need to separate them from e.g. IFR traffic on final, you need to use one or more of the possible delaying techniques.

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