

“Hold short” – “Vacate”

Ground movement can be tricky

Pilot tips and tricks

For the best understanding of this bulletin I suggest, you take the LSZH ground chart at hand. All examples will relate to situations present at LSZH.

1. The runways – No 1 danger area

Aircrafts on a runway are either accelerating to high speed or approaching with high speed and therefore unable to manoeuvre around other traffic. For this reason, other traffic has to keep well off the runway to create a safe space for departing or landing vehicles. This safe space does not only include the area of concrete, but also a space around the concrete in order to create a sufficient margin of safety. In this bulletin we will have a closer look at situations around the runway and how traffic on the ground shall behave.

2. Entering the runway area - clearance mandatory

In no situation any aircraft is allowed to enter the runway area without a distinctive authorisation to do so. A sheer taxi instruction to a runway does never include the permission to position the aircraft on the runway itself.

BIGJET 123, TAXI RUNWAY 34 VIA N, LEFT E AND E8

This clearance asks Bigjet to taxi via Alpha and Charly to runway 34, which means it has to stop at a position **outside the runway area**, in general at the so-called holding point.

BIGET 123, LINE-UP RUNWAY 34

BIGJET 123, RUNWAY 34, [INTERSECTION ECHO8], CLEARED TO TAKE-OFF

Any of these two instructions will allow Bigjet to enter the runway and either position the aircraft ready for departure or to depart right away.

The same principle applies when crossing a runway, regardless of whether it is active or not.

BIGJET 123, TAXI RUNWAY 32 VIA INNER AND KILO, ON KILO CROSS RUNWAY 28

This above instruction includes to enter and cross runway 28.

BIGJET 123, TAXI RUNWAY 32 VIA INNER AND KILO

This instruction does not mention runway 28 (which will need to be crossed to reach runway 32) and therefore the aircraft has to stop on KILO and wait until it is cleared to cross runway 28.

3. Holding point

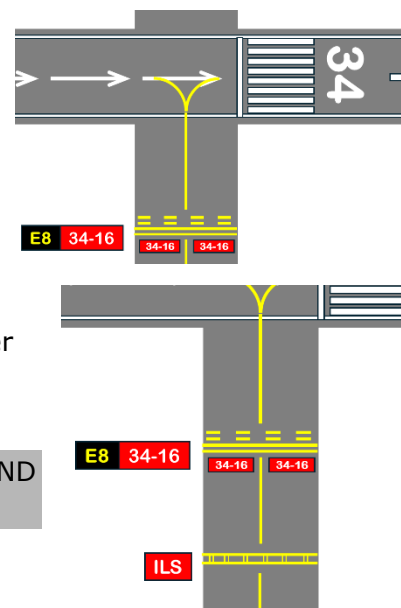
3. A. Two types of runway holding points

As long as an aircraft is NOT cleared to enter the runway area, it will have to stop before the respective holding point. This is usually marked by a specific sign on the taxiway.

BIGJET 123, TAXI HOLDING POINT RWY34 VIA E AND E8

In case of low visibility and the existence of ILS approach in use, ATC may request to hold even further away from the runway, in order not to disturb the ILS signal. This "ILS holding point" is marked differently.

BIGJET 123, TAXI HOLDING POINT RWY34 VIA E AND E8, HOLD SHORT OF ILS CRITICAL AREA



3. B. Examples

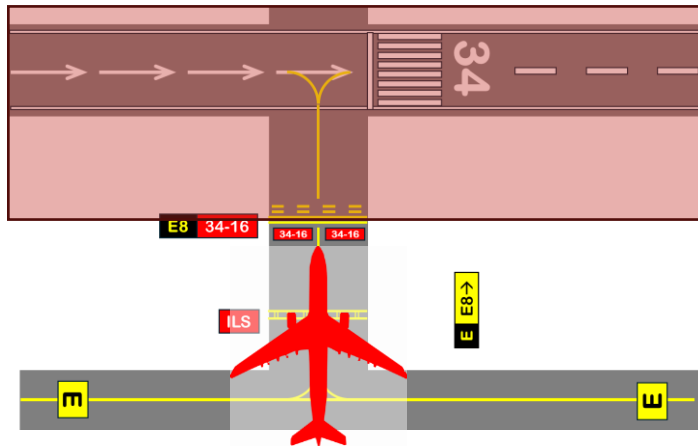
BIGJET 123, TAXI RUNWAY 34 VIA N, LEFT E AND E8

This instruction will require to stop the aircraft with all parts of it on the landside of holding point E8.

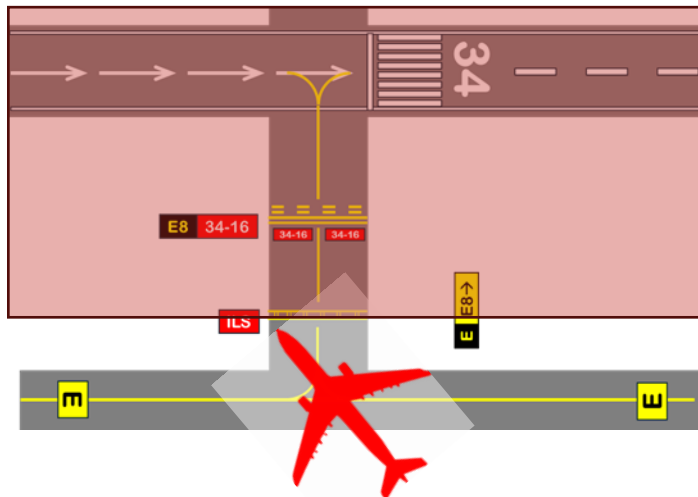
BIGJET 123, TAXI RUNWAY 34 VIA N, LEFT E AND E8, AT E8 HOLD SHORT OF RUNWAY 34

The hold short instruction will have the same effect, although it is self-explanatory, that an aircraft must not enter the runway without explicit permission.

See graphic below.



BIGJET 123, TAXI HOLDING POINT RWY34 VIA E AND E8, **HOLD SHORT OF ILS**
CRITICAL AREA



Here the hold short instruction is mandatory to specify, which holding point the aircraft must hold short of.

Note: in this example the aircraft cannot complete the full turn into E8, otherwise it would pass the relevant holding point.

4. Hold short

The instruction "hold short" does mean to NOT PASS BEYOND an indicated position (e.g. the holding point) by no means and by no part of the aircraft. That requires all parts of the aircraft to stay outside of the holding point. In the case of runway holding points, these points are clearly marked with ground paintings and/or posts aside the taxiway.

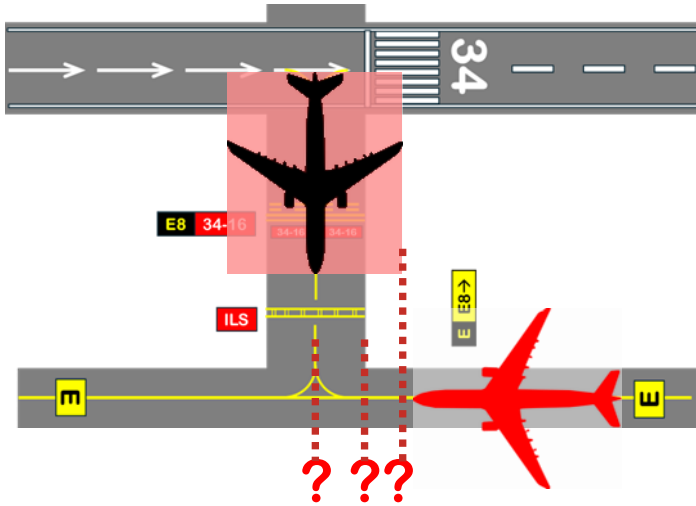
Slightly trickier is a hold-short-instruction at the intersection of two taxiways.

BIGJET 123, TAXI E AND A, HOLD SHORT OF K

There are (rare) cases where a position to hold short of a taxiway is marked. A2 at LSZH is such an example. But in general, these positions are nowhere marked.

BIGJET 123, TAXI E, HOLD SHORT OF E8

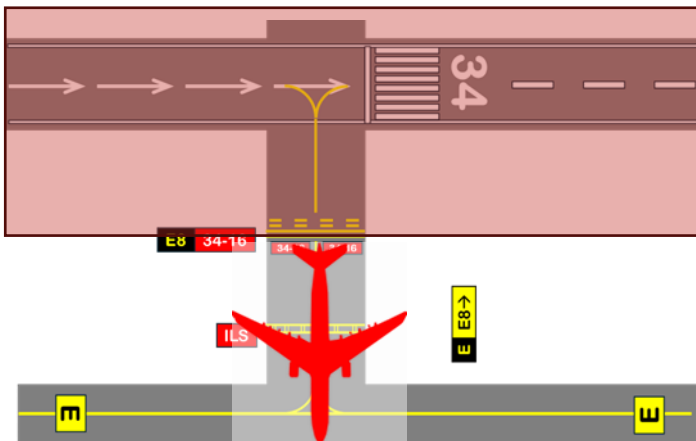
This means the plane must stop on E and not touch by no part the crossing taxiway E8 as for example another aircraft is about to vacate runway 34 via E8. But where exactly do you have to stop when there is no marking?



When being instructed to hold short of a taxiway, pilots must make sure not only to keep the pavement clear, but to also **allow the total wingspan of the crossing aircraft to pass**. Therefore, when asked to hold short of a taxiway, please make sure you stop early, and leave room for the wings as they extend well beyond the pavement.

5. Vacating the runway

After all the above, it has certainly become clear how far you will have to keep rolling when vacating the runway, in order to be fully clear of the runway area.



You got it. Please keep it rolling until ALL PARTS of your aircraft have passed the marking of the holding point. Should you stop too early, the following aircraft crew will be incredibly pleased to be sent on a go around, as the runway is still considered occupied.

Enjoy your flight experience with VACC Switzerland!

Hans Peter Baumgartner
Leader Pilot-Training-Department