

VA-Meeting 2015 - Pilot Briefing LSZH

Introduction

Welcome to Zurich (LSZH / ZRH), the biggest and busiest airport in Switzerland. The purpose of this Pilot Briefing is to familiarize you with the local procedures and to give you some hints to make your arrival/departure in Zurich as comfortable as possible. If you have any questions, feel free to contact us: info@vameeting.vacc.ch.

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General information

Airport overview

Zurich airport is split into a northern and a southern part by runway 28. Terminal E “Midfield”, located on the North Apron, is the primary terminal for Non-Schengen¹ flights. Since reopening the completely newly built Terminal B, measures and the associated infrastructure necessary for handling Non-Schengen flights, are provided on the South Apron as well. Terminal A is solely capable of handling Schengen flights, since no passport control is required to enter or leave.

If you cannot find a free gate, you may also use a stand. The **Charlie** and **Delta** stands at the southern end of the airport are primarily used for medium aircrafts; also, the **Hotel** stands north of terminal A

¹ http://en.wikipedia.org/wiki/Schengen_Agreement

can be assigned. The India stands are typically used by smaller aircraft like the Avro RJ100. All stands can provide both Schengen and Non-Schengen flights because they are served by buses. Business aircrafts operate from **GA Sector 1 & 3** and **Whiskey** stands, at times from **Delta** positions. Cargo aircrafts use **Foxtrot** and **Whiskey** stands.

A lot of general information about Zurich Airport can be obtained here: charts.vacc.ch/LSZH

Charts

Please download and study the relevant charts for your flight in advance. A complete set of charts can also be downloaded from our website: <http://charts.vacc.ch/LSZH#charts>

Frequencies

The following list shows the relevant frequencies you may need for your flight to/from Zurich.

Identification	Frequency	Callsign	Remarks
LSZH_ATIS	125.720	Zurich ATIS	Automatic Terminal Information Service
LSZH_DEL	121.920	Zurich Delivery	IFR Clearance
LSZH_N_GND	121.850	Zurich Apron	Movements north of runway 28
LSZH_S_GND	121.750	Zurich Apron	Movements south of runway 28
LSZH_GND	121.900	Zurich Ground	Assistance of Tower
LSZH_TWR	118.100	Zurich Tower	Report callsign only
LSZH_APP	135.220	Zurich Arrival	Arrivals via RILAX and NEGRA
LSZH_W_APP	118.000	Zurich Arrival	Arrivals via BLM and GIPOL
LSZH_F_APP	125.320	Zurich Final	Report callsign only
LSZH_DEP	125.950	Zurich Departure	Report passing altitude on initial call
LSAS_CTR	128.050	Swiss Radar	Main frequency of Swiss Radar
LSAS_X_CTR	Various	Swiss Radar	Other frequencies of Swiss Radar used during high traffic loads; X: alphanumeric key

Sceneries

There are sceneries available for all common simulators. As not all ILS approaches (28 & 34) are part of any default scenery, we highly recommend using one of the sceneries listed on our website: <http://charts.vacc.ch/LSZH#sceneries>. If you already use one of them, please make sure you have the latest version installed.

IMPORTANT: The ILS frequency of the main landing runway 14 has been changed to **111.75 MHz** with AIRAC 1501. If you are using AIRAC 1501 or later in your FMC and have not installed a suitable update for your scenery, you will have to select the old frequency 108.3 MHz manually, to receive the ILS signal. Check the frequency setting early during approach.

Slots

The slots for the VA-Meeting are essential, as they guarantee a properly organized traffic flow in Zurich! Therefore you should try everything possible to comply with it. The most important point is that you are connected to the network latest at the **online time**, in order to catch your slot. The online time is earlier than the slot time you booked! Please have a close look at your slot information and the difference in time. ATC of vACC Switzerland and their partners will make their best efforts to handle you on time.

Callsign

Because we identify you and your slot by your callsign, you have to use exactly the same callsign at the day of the event, as you used during booking. In case your callsign is already in use, login with a different callsign and inform the Delivery ATC immediately.

VA Code

We will analyse all traffic to/from Zurich to identify the registered VA with the most flights done. The name of the winner VA will be published approximately a week after the event. In order for your VA flight to count, you have to use the **unique VA code** provided by your VA staff. This code must also be a part of your **flightplan remarks**. In addition you have to **complete your flight**. Also if you should disconnect during the flight due to network capacity reasons, you can login again and continue your flight, our system will detect you again. Wait about 5 minutes when you arrive at your parking position, then you can be sure that your flight will count for your VA. A website where you can see the status of your flight which our system detected will be announced on the day of the event.

Must knows

Please ensure before the event that you are totally aware of the following procedures and manipulations regarding your aircraft, FMS and flight planning.

- + FMS: your flight management system, which ensures you fly the correct routing. You know how to work it and fly directs.
- + Holding: you know what a holding is, how to program it into the FMS and activate it. Familiarize yourself where can you expect holdings. Should you be unable to fly a holding, you should know at least how to fly an orbit. In this case, advise ATC!
- + Orbit: also called three-sixty, a 360 degrees turn, used for sequencing purposes.
- + Descent management: you know which descent rate you need, depending on your current speed, in order to reach a certain level at a given time.
- + Speed definitions: you know the differences between IAS (indicated airspeed), TAS (true airspeed), GS (ground speed), MACH (mach speed), which scales are used at which instruments, which speed you have to consider for the flight planning and that ATC will always give you speed restrictions in IAS or MACH.

NO GOs, but already happened

- + If not sure about an ATC instruction – ASK! Nothing worse than doing what you think the controller could have said, because it is usually not. Request a text transmission if you cannot understand an instruction.
- + Mixing up ZULU² and local times
- + Right turns after departure from runway 28 or 16: Some FMS misinterpret the SID routing and initiate a right turn which causes dangerous traffic alerts with landing traffic on runway 14, ensure to turn left and fly by hand, if necessary
- + Coming online at your departure airport when you should be at the arrival waypoint of LSZH
- + Coming online later than the “latest online time”
- + Questions like “What is a holding?”, “What is an orbit?” or “What is a three-sixty?”

Outbound from Zurich

Preparation and Startup

Check for a free gate at http://vameeting.vacc.ch/free_gates on the event website before you log in and choose your initial parking position according to it. Please remember to set **squawk mode standby** on ground. Check that after you have connected to the network.

The event website provides a **latest online time** according to the slot you have booked. Please keep in mind that this online time is before your booked slot time which is actually the **startup time**. Calculate enough time for monitor ATIS, ask for clearance, the startup, pushback und taxi. Think of

the busy frequencies and that you might wait therefore for some time. If you are not online and ready on time, you might lose your slot and wait for another free one. Please keep in mind that all provided times are in ZULU². Therefore make sure you know the correct local time (in your region) corresponding to ZULU.

Due to the expected high traffic, you might be instructed by Delivery to monitor the Apron frequency. This means, you only switch the frequency as requested but you do NO initial call. This saves time on the busy Apron frequency. The Apron controller will call you when he is ready to handle you.

ATC: "Swiss 14, readback correct, monitor Apron 121.750."

If you do not have to expect any delay, you will receive a startup clearance from Apron.

ATC: "Swiss 14, startup approved."

This means, you can continue with your startup preparations (close doors, turn on APU ...) and you can expect the pushback in a few minutes. It does NOT allow you to start the pushback. This first movement needs an additional clearance!

Pilot: "Swiss 14, ready for pushback."

ATC: "Swiss 14, pushback approved, facing west."

"Startup approved" does NOT mean "Pushback approved"

But the pushback clearance can also be given together with the startup.

ATC: "Swiss 14, startup and pushback approved, facing west."

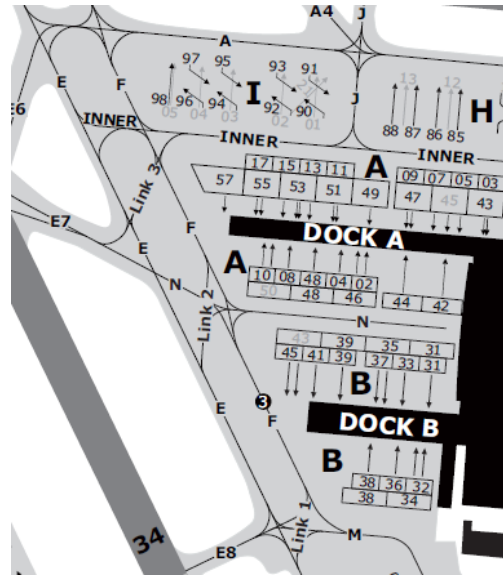
The facing instruction is optional, but indicates the direction your aircraft nose should look to after the pushback. If you have been instructed to monitor Apron, you do not need to report "ready for pushback". The controller will call you.

² http://en.wikipedia.org/wiki/Zulu_time#Time_zones

Ground movement

Please refer to the latest charts on our website to prevent of confusion with taxiway designators. North of terminal A, there is a taxiway called **INNER** (pronounce as one word). South of runway 28, between the taxiways Echo and Foxtrott, 3 **Links** were added when the new terminal B got into service. At the same time, **INNER** and Foxtrott have been rerouted and a part of the old **INNER** is now named **November**.

Since runway 28 splits the field in the middle, it often has to be crossed. Apron will advise you to contact Tower to get the crossing clearance. Unless instructed otherwise, hold short of runway 28 and report. You will get a crossing clearance.



Pilot: "Tower, Swiss 14, on F, holding short of runway 28."

ATC: "Swiss 14, on F cross runway 28, contact Apron 121.850."

You are requested to set squawk mode C not earlier than you are ready for departure. When approaching the runway, you can set mode C to indicate the Tower that you are fully ready, even if you are still on the taxiway.

Departure

Zurich Airport has three runways. In the preferential configuration, runway 28 is used for departures and runway 14 for landings. When there are strong winds from the north, generally runway 32 is active for departures and 28 for landings.

Study the SID chart corresponding to your route and expected departure runway carefully! Heavy aircraft mostly have to use the longest runway 16/34. All SIDs out of runway 16 describe shortly after airborne a left turn to avoid noise emissions over the city of Zurich. This procedure often causes difficulties because it is hard to integrate in the FMS. Therefore, we recommend you to fly that left turn manually or with the heading function of the autopilot. Take caution to not turn right!

The SIDs out of runway 34 is more or less a long left turn and normally no problem for the FMS.

Stay on the Tower frequency until advised. Prepare the departure frequency 125.950 latest before the take-off roll. You will be instructed to contact Departure without the frequency in the phrase, therefore you have to know and prepare the departure frequency before!

ATC: "Swiss 14, Contact Departure, Goodbye."

The initial climb altitude in Zurich for all departures is 5000 ft.

Do not climb higher, even if you cannot contact the departure controller until you reach 5000 ft. The transition altitude in Zurich is always 7000 ft.

In case you have to abort take-off, inform the Tower immediately and vacate the runway as instructed by the controller.

Maximum speed below FL100 is 250 kts or clean speed, whichever is higher.

Inbound to Zurich

Arrival

The event website provides you various time helps according to the booked slot in Zurich and your airspeed. You have to be online latest at the **online time**. Ensure that you are ready for **startup** latest 10 minutes before your **departure-slot**. You can find all three times in your slot booking details on the event website.

Adjust your speed during your flight to reach the assigned **arrival waypoint** (website) at the **arrival-slot** time. This is not the scheduled time of arrival you booked, but the primary target for you as a pilot to reach on time. Otherwise you may be diverted. Be aware that you usually have to start your descent before entering Swiss airspace. You should plan with a descent rate of minimum 1000 ft/min, meaning you will need approximately 3 nm to descend 1000 ft.

Study the arrival charts and have a close look at the holdings BERSU, GIPOL, RILAX, and AMIKI, as you may be instructed to enter a holding “as published”. Therefore, have the published holdings on your route preselected in your FMS, that you can activate them quickly when instructed. Also be aware that a holding can be given at any time and any place. In this case, at present heading, enter the hold with an in/outbound leg of 1 min, a speed of max 230 kts IAS and perform right turns.

Considering the following speeds during the Approach will help to a continuous flow of traffic.

Phase	Speed
Initial descend	~ 290 kts
Initial approach below FL100	250 – 210 kts
Intermediate approach until 12nm touchdown	210 – 180 kts
12nm to 8nm touchdown	180 – 160 kts
8nm to 5nm touchdown	160 kts decreasing
After 5nm touchdown	VApp (approach speed)

Independent of these suggestions, comply with any speed limitation by ATC until further notice.

Strictly adhere to your clearance limit! If you have no clearance to fly any further or no contact with the controller yet, enter the holding at your clearance limit as published.

All STARs end at one of the 3 IAF³ GIPOL, RILAX and AMIKI. You can expect radar vectors to the active ILS. For time reasons, report your callsign only on initial contact with Zurich Final.

Pilot: “Final, Swiss 15.”

³ IAF: Initial Approach Fix

Approach & Landing

Zurich has three runways. Four approaches are equipped with ILS equipment. During the event, the preferential runway system will be landing on runway 14. This system will be used up to 10kts tailwind component.

IMPORTANT: The ILS frequency of the main landing runway 14 has been changed to **111.75 MHz** with AIRAC 1501. If you are using AIRAC 1501 or later in your FMC and have not installed a suitable update for your scenery, you will have to select the old frequency 108.3 MHz manually, to receive the ILS signal. Check the frequency setting early during approach.

It is important to understand the different meaning regarding the clearance of an ILS approach.

Phrase	Meaning
Cleared ILS	descend to the intermediate approach altitude (ILS14: 4000 ft), intercept LOC and, when established, descend with the glide*
Cleared LOC, descend with the glide	maintain current altitude, intercept LOC and descend with the glide* (even before being established on the LOC)
Cleared LOC, when established, descend glidepath / with the glide	maintain current altitude, intercept LOC and, when established, descend with the glide*
Cleared LOC or Intercept LOC	descend to the cleared altitude and intercept the LOC only

* descend with the glide or, if above the glide, start descend to intercept it

ILS = instrument landing system, LOC = localizer, GS = glide / glideslope

Study the missed approach procedures carefully, as Zurich is surrounded by high terrain. If you have to go around, follow the **published standard missed approach procedure** and respect the **correct climb altitude**. Also do not forget that the standard missed approach procedures **ends at a holding fix** if no ATC takes control before.

Mind that Zurich applies reduced runway separation. Therefore expect a late landing clearance (1-2 nm final). You do not need the landing clearance at your minimum! But you need it before touch down.

If you are on an approach to runway 14, you may be asked by the controller whether you are able for a swing-over to runway 16 or not. That means that you will continue on ILS approach runway 14 and then visually intercept the centerline of runway 16 to land. It is your decision to accept it or not. In case of missed approach after the swing-over, fly the missed approach procedure published for ILS 16.

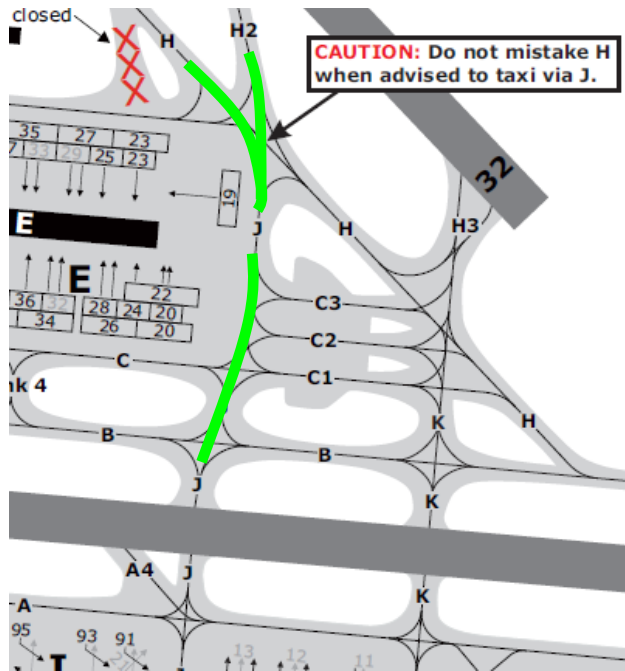
After landing on runway 14 **maintain high speed** (80 kts) to vacate via one of the two high-speed exits (H1 and H2). There is no need to slow down to 50 kts or less on the runway before vacating. The ATC may advise you to **expedite vacating** if you slow down too early and a succeeding aircraft is near the threshold. After landing on runway 16, also maintain high speed to vacate after the crossing of runway 10/28 via E7.

Taxi to Gate

Set your **squawk mode standby** as soon as you have vacated the runway.

Please refer to the latest charts on our website to prevent of confusion with taxiway designators. When vacated via **H1** or **H2**, you will normally be advised to taxi to the south of the airport via **J**. Initiate a slight right turn short after the high-speed exits and do not mistake H for J.

Since runway 28 splits the field in the middle, it often has to be crossed. Apron will advise you to contact Tower to get the crossing clearance. Unless instructed otherwise, hold short of runway 28 and report. You will get a crossing clearance.



Pilot: "Tower, Swiss 15, on J, holding short of runway 28."

ATC: "Swiss 15, on J cross runway 28, contact Apron 121.750."

North of terminal A, there is a taxiway called **INNER** (pronounced as one word). South of runway 28, between the taxiways **Echo** and **Foxtrot**, 3 **LINKS** were added when the new Terminal B was opened. At the same time, **INNER** and **Foxtrot** have been rerouted and a part of the old **INNER** is now named **November**.

Feedback

We appreciate your feedback on <http://fb.vacc.ch> or via mail to info@vameeting.vacc.ch.

Thanks for participating at the VA-Meeting 2015. We wish you a pleasant flight and hope to see you again at one of our other events (e.g. the monthly *Latitudinal Friday*, *Capital Sunday* and *Geneva – One by One* or simply our weekly *crossing tuesday*).