

#### Pilot tips and tricks

## IFR tutorial, step-by-step

# a guide for flying IFR on VATSIM for pilots with limited experience

#### SWR9000 REPOSITIONING FLIGHT FROM LSGG TO LSZH

This bulletin explains most of the basic tasks and actions of the pilots, when performing an IFR flight from gate to gate. Our flight is a repositioning flight of an empty B777-300ER and will lead from Geneva (LSGG) to Zurich (LSZH) with Bâle-Mulhouse (LFSB) as the alternate airport - a short flight. We will cover from planning of the flight through preparation of the aircraft, conducting all phases of the journey up to docking at the arrival gate. Special emphasis is given to the interaction with ATC.



To facilitate the tracking of the sequence of actions, a flow chart is available in Annex A.

Based on this document you will **not** learn how to operate your aircraft. It's all about conducting a flight, taking into account the external circumstances on the basis of existing knowledge of managing the plane itself. Learning how to fly your aircraft as well as operating your specific simulator is a task you have to go through yourself. It includes a lot of reading aircraft manuals and trying out a lot of things during a flight. But please, do not go online on VATSIM for these type of learning flights, it would result in a poor experience for yourself, other pilots and the ATCOs. VATSIM is a marvellous environment for pilots who DO ALREADY KNOW how to handle their aircraft. Don't be discouraged – you certainly will get there as we all did.

For this flight, we try to do our explanations non-aircraft-specific whenever possible. If not suitable we use a Boeing 777-300ER as the reference. As you may use a different aircraft, you will have to base your activities on the AFM (aircraft flight manual) of your specific aircraft.

## 1. Preliminary remarks

Before we start to push buttons in the aircraft, let's have a look at some explanations, which might be useful in order to understand the scope and the specific circumstances of any flight on VATSIM.

#### 1. A. Explanation on checklists, flows and memory items

Handling an aircraft is a precise science. There is little room for creativity and improvisation. In order to maximize the reliability of pilot's actions, they are trained to use flows, checklist



and memory items as some of their tools. These three items do coexist and are never a replacement for one another and they strongly contribute to make the operation of an aircraft safe and trustworthy. In order to do this flight successfully, it is recommended to get yourself familiar with the flows and checklists of your aircraft.

A flow is a defined sequence of actions, which pilots usually know by memory. The flow ensures a fluent completion of the actions, without referring to a list after every single item. Executing a flow although efficient can be erroneous, as pilots may accidentally skip an item without noticing. Therefore, a flow is always (mostly) verified by the end using the respective checklist.

Example: AFTER LANDING FLOW

•	Speedbrake	DOWN
•	APU	as required
•	Engine anti-ice	as required
•	Landing lights, strobe lights	OFF
•	WXR, TERR	OFF
•	Autobrake	OFF
•	Flaps	UP

A checklist is a fixed (written) list of items, which pilots must ensure that they have executed them all correctly item by item. Checklists do exist for many phases of the flight (Preflight, before take-off .... prior to descent ... shutdown and many more). Checklists are often built into the aircraft displays in electronic form (at least for modern aircrafts) and filled out automatically once an item has been executed.

Example: AFTER LANDING CHECKLIST

(in a modern aircraft like the B777-300ER when calling the after-landing-checklist, the items already done are marked in green, so pilots can check at a glance, whether the checklist is completed)

•	Speedbrake	DOWN
•	Landing lights	OFF
•	Strobe lights	OFF
•	Weather radar	OFF
•	Autobrake	OFF
•	Flaps	UP

APU as required

Memory items are flows, which pilots are obliged to know by heart at any point in time. They are used for a sequence of actions in urgent situations. Memory items do only tackle the most important actions for the emergency situation. They are usually followed by the execution of a checklist (non-normal-checklist), which deals with the less urgent activities required for the incident.

Example: MEMORY ITEMS - ENGINE (L/R) SURGE/STALL

•	Autothrottle Arm Switch (L/R)	OFF
•	Thrust Lever (L/R)	RETARD
•	Fuel Control Switch (L/R)	CUTOFF
•	APU Selector	START/ON
•	Transponder Mode Selector	TA ONLY



#### 1. B. Explanation on "top-down-ATC"

On VATSIM, there are several ATC stations with different areas of responsibilities. From top down:

Radar LSAS\_CTR, LSAG\_CTR, LSAZ\_E\_CTR, ...

Arrival LSZH\_APP, LSZH\_W\_APP, LSZH\_F\_APP, LSGG\_APP, ...

Tower LSZH\_TWR, LSZH\_2\_TWR. LSZG\_TWR

Ground LSZH\_GND, LSZH\_S\_GND, LSZH\_N\_GND, LSGG\_A\_GND, ...

Delivery LSZH\_DEL

Not all stations are constantly online, obviously. If one station is missing, the next upper station will cover the responsibility of the missing lower station. Example: if LSZH\_S\_GND is missing, then LSZH\_TWR will cover on its behalf. If LSZH\_TWR is missing, then LSZH\_APP will cover.

#### 1. C. Single pilot cockpit

In real life, a complex aircraft is usually operated by two pilots. Different in a simulation environment, where you are most of the time on your own – but confronted with the same tasks two pilots handle in reality. Experience shows that this challenge can be successfully met by well-trained pilots – maybe with the exception of malfunctions or emergencies.

To keep up with all the requirements and specifically with the short delays within which you are expected to comply with ATC instructions, a single pilot must be extremely well organized. Imagine a pilot who reacts to a heading instruction by ATC only after a delay of let's say 60 seconds. This creates an unpredictable situation for ATC.

It is strongly recommended, that all VATSIM pilots train themselves several times in offline mode, in order to get up to the required skills-level and speed of actions as if they were in a 2-pilot cockpit.

#### 1. D. VATSIM - a learning environment - however ...

In real life pilots as well as ATCO's (air traffic controllers) undergo an extensive amount of training, topped with frequent skill tests in order to be ready to execute their challenging duties successfully and error free. Additionally, after graduating, they fulfil the job under the supervision of an expert for a period of time.

In VATSIM the same applies to ATCOS, although their amount of training is a bit less extensive than in real life. Nevertheless, ATCOS spend a significant amount of their free time in making themselves fit to serve pilots and create an environment, where everybody can enjoy this fascinating hobby.

For pilots in VATSIM things are quite different. There is almost no formal training and skill tests required before you start flying online. The purpose of VATSIM is to learn while doing. However, let us point out clearly, there are limits to the apparent freedom of this principle.

I am happy to list some requirements any pilot should be able to fulfil, before starting to fly online. Don't forget, your simulator does not have to be connected to VATSIM all the time. There is the possibility for you to fly offline and train yourself, without being confronted to a realistic simulation environment, where everybody (ATCOS and fellow pilots) depends on you being skilled enough to be part a joyful environment for everybody.

Here is our list:

Required flying skills when flying IFR (VATSIM Pilot Basics)



- you must be able to fly your aircraft permanently within the safety limits of the flight envelope (<a href="https://skybrary.aero/articles/flight-envelope">https://skybrary.aero/articles/flight-envelope</a>)
- you must be able to fly a heading according to instructions by ATC
- you must be able to change your flight level and maintain the new one
- you must be able to adhere to a specific speed instructed or to inform ATC if you were not able to maintain the requested speed
- you must be able to fly a SID a STAR and a transition correctly and according to charts adhering to the restrictions published (speed and/or altitudes)
- you must be able to fly a holding according to its published parameters
- you must be able to interact with ATC using the correct phraseology
- you must be able to execute instructions from ATC within seconds!!

#### Personal skills:

- you must stay attentive all the time and immediately identify radio calls, which are directed to you
- you must understand and read back instructions to you and execute them immediately
- you must never leave the cockpit without permission from ATC. Don't request anything longer than 5 minutes (a biological break is ok, grabbing a coffee is ok, a full dinner will not fit into 5 minutes) – ATC needs you to comply with their instructions to avoid conflicts with other planes
- You must be sure you understand ATC instructions correctly, therefore we suggest
  - o you permanently consider, what may come next from ATC
  - you study the charts carefully, also when in the air and maintain your situational awareness all the time (<u>Situational Awareness | SKYbrary</u> <u>Aviation Safety</u>)
  - you ask for repeating a message if you have doubts of its meaning ("say again")

It is obvious that junior pilots will struggle with some of these requirements in the beginning. This is how you can make your life easier:

- Practice your flying skills in offline mode until you reach a level, where you feel comfortable and are permanently "ahead of your plane"
- Don't start flying online at a busy airport or one with complex layout and procedures
- Chose a quiet airport, put your plane on a remote stand and do nothing else than listen to the frequencies, trying to understand the messages and the readbacks.
- When you feel ready, start flying online. To indicate your stage of juniority, put "new to VATSIM" into the remark section of your flight plan.
- When starting a conversation with an ATCO, you can add the word "student" prior to your callsign, but only once per station on the first transmission

#### GENEVA APRON, STUDENT SWR9000, REQUEST PUSH AND START

#### Always keep in mind:

- Being junior is a privilege VATSIM offers to its pilots
- Being junior allows for learning on the job and making one or the other mistake if not avoidable

#### but

- Being junior is not a free-pass to be lazy, poorly prepared, insufficiently trained, unfriendly or excessively demanding



We are sure, you will find your way of becoming a happy and smart pilot, enjoy your experience and make a positive contribution to VATSIM and all its members.

## Documents required

It is still too early to push buttons in the aircraft. There is some preparation to be done in the briefing room. In order to perform any flight with best practice and according to standards, we strongly suggest that you always have the necessary documents ready. For this flight you will need:

- The aircraft specific information
  - o AFM of your aircraft (including checklists, flows and memory items)
- The navigation charts (<u>vACC Switzerland airport and charts</u>)
  - o Ground charts of LSGG, LSZH and LFSB (origin, destination and alternate airport)
  - SID charts of LSGG (16 charts!)
  - o STAR charts of LSZH, LFSB and LSGG (in case of return required),
  - o Approach charts for the RWY in use at LSGG, LSZH, LFSB
  - o [The enroute chart over Switzerland]
- The weather information (<u>METAR & TAF flightsupport.ch</u>)
  - o The METAR of LSGG and LSZH
  - The TAF of LSZH and LFSB (updated LSZH METAR will be required again prior to descent)
  - o Enroute weather information
- The airport information
  - o ATIS of LSGG (available on your pilot client, when station active)
  - o The NOTAMS of LSGG, LSZH and LFSB (<u>Latest NOTAM Briefing | NOTAM Info</u>)

Please make sure to have all these documents at hand before you continue reading – as such you will benefit most.

After you have digested all these preliminary remarks, hold the documents and your AFM ready, breathe and grab a coffee. We may turn now to our flight from Geneva to Zurich.

## Flight planning

Flight planning, although not very spectacular, is one of the most critical activities prior to the flight. It will define all (most) of the parameters necessary to prepare the aircraft correctly for the upcoming journey. Flight planning must be done prior to entering the cockpit. In a simulation environment it can be done before even launching the simulator and placing the aircraft on its initial position.

ACTIVITY	MAIN CONTENT	ОUТРИТ
Compute the flight plan	Input: origin and destination, alternate airports, OBT, ZFW, call sign, aircraft type. Compute: route, cruise level, enroute time, fuel required, load sheet Use a tool like <a href="mailto:SimBrief">SimBrief</a> or others	First waypoint, Route (airways and waypoints), last waypoint (beginning of the STAR) Cruise level, Fuel



Check information	METAR, TAF, ATIS, NOTAMS	Wind, QNH,
	Our flight plan for today will be: LSGG N0363F160 SOSAL N871 BERSU LSZH	Visibility,
	Note 1: the flight plan usually does not indicate how you will reach from LSGG to the first waypoint (SOSAL). This part of the route is called "departure". The standardised departure routes are called SID (standard instrument departure) and will be instructed by ATC individually for each flight, depending on runway-in-use, type of aircraft and other parameters. However, you can figure out the expected SID yourself from the SID charts (see below).  Note 2: Once in the air, it is always essential to be aware of the actual clearance limit. At this very moment you will only be cleared to proceed up and until the last waypoint in your flight plan. This is BERSU. Unless you receive a clearance from ATC to proceed further, you will have to hold at BERSU. This hold is clearly defined and published on the arrival charts: Inbound course 049 degrees, right turn, 1 min leg.  Note 3: simbrief does not always issue a correct flight level (specifically for countries, which apply a deviation of the standard EAST/WEST rule [France, Italy, Switzerland, Spain, Portugal]). Furthermore, there may be level specifications for airways. Today's cruise level must be even, due to a specification for airway N871 (a particular case, overruling the standard). For further	N0363F160 indicates the cruising speed (363KN true airspeed) and the cruise level (FL160)  Between SOSAL and BERSU you follow airway N871. An airway is not necessarily a straight line, but includes several waypoints.
Define the elements of the departure	reference google "semicircular rule"  Departure RWY (from ATIS)	Expected clearance
clearance – RWY, SID and initial climb altitude. (The "official" clearance will be issued to you when asking for the	<ul> <li>RWY 22</li> <li>SID (from SID charts – look for the SID's which lead from RWY to first waypoint)</li> <li>SOSAL1L, SOSAL1R or SOSAL1J</li> <li>Initial Climb (from SID chart)</li> <li>FL90</li> <li>Squawk (from ATC during clearance)</li> </ul>	will be: SWR9000, cleared to LSZH, RWY22, SOSAL1 departure, climb FL90, Squawk
clearance)	Squawk (Holli ATC during clearance)	Squawk LLLL



Calculate the take-off parameters	Zero fuel weight, Fuel, Thrust setting (derate, ref temp), Flaps setting, V1, VR, V2, Trim, Initial climb altitude, RWY heading Transition altitude	Will need to be keyed into the FMS at some point during the preparation of the aircraft
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We now have all the elements required, to set-up the aircraft once we reach the cockpit. The planning details are available from Annex B. of this document. You can now launch your simulator and position the aircraft on a suitable stand, which is not yet occupied by another VATSIM pilot.

## 4. Phases of the flight

## 4. A. Aircraft preparation

ACTIVITY	MAIN CONTENT	CHECKLIST, REMARKS
	Place your aircraft on an empty stand, which suits the size of your plane.  Never on a taxiway or a runway.  Check before on VATSIM RADAR or other tools, whether the chosen stand is not already occupied.	Launch your simulator. Launch your pilot client, connect your headset and check the microphone and the headphones.
CONNECT TO VATSIM	Click connect, enter call-sign (SWR9000) and aircraft type (B77W).	Tune in an active frequency and check reception of audio.
FILE YOUR FLIGHT PLAN TO VATSIM	For those who have done the planning with simbrief, the transmission can be done directly out of simbrief.	Before filing, check the items in the flightplan once more.
Pre-Flight procedures	See AFM, NAV lights ON	Pre-Flight checklist
	Top off fuel to the requested level	
Cockpit preparation	See AFM, input route and cruise level into FMS	Cockpit preparation checklist
Compute the take-off parameters	Using Simbrief "Performance & tools"	



REQUESTING CLEARANCE	Clearance is usually requested with the ATC-station called "DELIVERY". At LSGG - as an exception – clearance is issued by "GROUND" (see charts: airport briefing - 3.2 ATC clearance)  GENEVA GROUND, SWR9000, BOEING777, INFORMATION KILO, STAND16, REQUEST IFR CLEARANCE TO ZURICH  SWR9000, RWY22, CLEARED LSZH, SOSAL1L DEPARTURE, INITIAL CLIMB FL90, SQUAWK 6742  It may be helpful to prepare the word "CRAFT" on your notes to speed-up writing down the clearance.  C: LSZH cleared to R: SOSAL 1L, RWY 22 route  A: FL90 altitude  F: frequency  T: 6742 transponder  CLEARED LSZH, RWY22, SOSAL1L DEPARTURE, INITIAL CLIMB FL90, SQUAWK 6742, SWR9000  After you have received and readback the clearance, remain on the frequency and request start-up on this frequency, unless you are instructed to change to another station.	Note: you have defined the departure clearance already by yourself, take these notes.  Note: SID may alter, depending on the type of aircraft you are flying. For our tutorial flight with a heavy B77W the route to our first waypoint SOSAL is SOSAL1L. (less heavies may be given SOSAL1J).  Note: "F" for frequency is used at airports, where the frequency change after departure from TOWER to DEPARTURE is done by the pilot at a defined altitude, without instruction from ATC. There you can note for example: F: 119.530 at 2000ft
Complete the setting	See AFM. Input RWY, SID and TA into FMC. Load wind information into FMC. Input the take-off parameters into FMC and MCP.	
Departure briefing	Weather, Radio, Push-back, Taxi route, RWY information, Take-off procedure and configuration, SID procedure, Comm failure,	
Take-off briefing	RWY, V1, VR, V2, Route, Initial climb, Actions in case of abnormal situations	
Load and trim calculation	ZFW and TOCG input into FMS	
Before start procedure	See AFM, Arm VNAV and LNAV, Arm A/T, V2 set, HDG set, ALT sets (to initial climb altitude), Trim set, Autobrake RTO, Beacon on	Before start checklist



### 4. B. Pushback and taxi

REQUEST PUSHBACK and ENGINE START	Make sure that you are fully prepared to pushback (truck connected, setup completed,) prior to requesting it.  SWR9000, REQUEST PUSH AND START  SWR9000, FOR PUSHBACK CONTACT APRON ON 121.855  121.855 SWR9000  GENEVA APRON, SWR9000, GATE 16, REQUEST PUSH AND START  SWR9000, GENEVA APRON, PUSH AND START  PUSH AND START APPROVED, FACING NORTH-EAST, SWR9000	When pushing back, you enter the area of APRON or GROUND. This is why DELIVERY sends you over to one of these stations before getting the clearance for pushback.  When instructed to switch frequency, the name of the new station is never read back – only the frequency.
Pushback procedure	Set timer	
Engine start procedure	See AFM	Engine start checklist
Before taxi procedure	See AFM, Hydraulics, Generators, Packs, Flaps, Trim, Check controls	Before taxi checklist
REQUEST TAXI CLEARANCE	Write down the taxi clearance at the moment you receive it and readback from your notes  SWR9000, REQUEST TAXI  SWR9000, TAXI HOLDING POINT RWY22, VIA INNER, LINK 5 AND ALPHA / GIVE WAY TO THE EASYJET AIRBUS A320 TAXIING FROM THE LEFT ONTO INNER / HOLD SHORT ALPHA  TAXI HOLDING POINT RWY22, VIA INNER, LINK 5 AND ALPHA / GIVE WAY TO THE EASYJET AIRBUS A320 TAXIING FROM	Before requesting taxi make yourself familiar with all the potential taxi routes you may be given. You know your position – you know the departing runway. There are not 100 possibilities to get there. The better you are prepared the better you will understand the following taxi instruction.
	THE LEFT ONTO INNER / HOLD SHORT ALPHA, SWR9000	



SWR9000, CONTINUE TAXI	Defens take off
	Before take-off checklist
CONTINUE TAXI, SWR9000	CHECKIISC

## 4. C. Take-off, climb and cruise

REQUEST TAKE-OFF CLEARANCE	SWR9000, BEHIND LANDING EASYJET AIRBUS A320 ON 2 MILES FINAL, LINE-UP RWY22 INTERSECTION BRAVO AND WAIT BEHIND BEHIND LANDING EASYJET AIRBUS A320 ON 2 MILES FINAL, LINE-UP RWY22 INTERSECTION BRAVO AND WAIT BEHIND, SWR9000 Strobe lights on when entering the RWY SWR9000, WIND 240 DEGREES 5 KNOTS, RWY22 INTERSECTION BRAVO CLEARED FOR TAKE-OFF  RWY22 INTERSECTION BRAVO CLEARED FOR TAKE-OFF, SWR9000 Landing lights on when cleared to take-off, Taxi lights OFF	Note 1: The ATC communication with DEPARTURE and RADAR is not covered in this document.  Note 2: You must never change to another ATC station by yourself. Always wait for being instructed.  Note 3: When making the initial call to the next ATC station, you should always indicate your altitude. By that the ATCO can check, whether his radar indicates correctly.  Example:  LANGEN RADAR, SWR9000, FL347 CLIMBING FL380
Take-off procedure	When positive climb – gear up	After take-off checklist
Climb procedure	See AFM, when passing TA, Set Altimeter to Std when passing 10000, landing lights OFF	Climb out checklist
Cruise procedure	See AFM, monitor instruments, check fuel quantity, check ETA, check deicing, check lights,	



#### 4. D. Descent and arrival

Check information	METAR, TAF, ATIS, NOTAMS	RWY in use, TRL, Wind, QNH, Visibility,
Descent preparation procedure	See AFM, Set Ref-approach-speed, set autobrake, set minimum altitude, Preselect QNH, set TRL, when passing 10000ft landing lights ON	Descent checklist
	IMPORTANT: Remember the clearance limit. BERSU. Prepare holding at BERSU: Inbound course 049 degrees, right turn, 1 min leg.	
	Program it into the FMS well ahead. As such you avoid stressful situations. To prevent an unwanted holding, you can ask ATC for further clearance shortly before BERSU:  SWR9000, APPROACHING CLEARANCE LIMIT	
Approach briefing	See AFM When passing TRL, set QNH	Approach checklist
	SWR9000, CLEARED BERSU2G ARRIVAL, DESCEND FLIGHT LEVEL 130	
RECEIVE CLEARANCE FOR STANDARD ARRIVAL ROUTE	CLEARED BERSU2G ARRIVAL, DESCEND FLIGHT LEVEL 130, SWR9000	Now your clearance has been extended. Don't miss to delete the BERSU holding
	In case of dense traffic, ATC may request you to hold anyway:	from your FMS. You can proceed up and until GIPOL (the
	SWR9000, DESCEND FLIGHT LEVEL 110, HOLD GIPOL AS PUBLISHED, EXPECT RWY14	end-point of the BERSU2G arrival). Again, if you do not receive any further
	DESCEND FLIGHT LEVEL 110, HOLD GIPOL AS PUBLISHED, EXPECT RWY14, SWR9000	clearance you will have to hold at GIPOL.
	Program GIPOL holding into the FMS – on the charts you will find the details (077°/R/1min).	



RECEIVE CLEARANCE FOR ARRIVAL TRANSITION	SWR9000, CANCEL HOLD, CLEARED GIPOL14 TRANSITION  OR SWR9000, CANCEL HOLD, PROCEED DIRECT ZH408  CANCEL HOLD, PROCEED DIRECT ZH408, SWR9000  Again, there is a limit to this clearance. On the chart you will find OSNEM as the last waypoint of this transition. OSNEM is the FAF (final approach fix), the beginning of the approach into RWY14. Should you miss a clearance for the approach, ask ATC prior to reaching OSNEM. Holding at the FAF is quite unusual.	ZH408 is a waypoint on the GIPOL14 transition; after reaching this waypoint you are expected to follow the remaining part of the transition without any further instruction  Attention: without the charts ready, you will never figure out to which transition ZH408 belongs!!
VECTORING	In order to create an effective arrival sequence, ATC may start at a certain moment to give instructions to fly a certain heading (this is called vectoring). From this moment you are no longer cleared to follow your route from the flight plan, but to follow the heading instructions instead. As such, any clearance limit has now become obsolete. It is now up to ATC to guide you towards the final approach.  SWR9000, TURN LEFT HEADING 350, DESCEND 6000FT, QNH 1017  TURN LEFT HEADING 350, DESCEND 6000FT, QNH 1017, SWR9000  Push the heading knob, turn it to 350.  Modify the flight plan in the FMS and put the FAF (OSNEM in our case) on top. Although your aircraft does not follow the flight plan at this very moment (you are in HDG mode as consequence of the vectoring), you will need an updated FMS to avoid your plane going the wrong way in case of an automated go around.	Note: Starting to fly a heading instead of the track of the flight plan is initiated by pushing the heading knob on the MCP (FCU at Airbus). The aircraft will switch off the LNAV mode and will immediately start turning to the set heading. This is why your heading bug should always be set to the actual heading during the flight. Failing to do so may result in an unwanted turn.



#### 4. E. Approach and landing

SWR9000, TURN RIGHT HEADING 110, DESCEND 4000FT, CLEARED ILS14, REPORT ESTABLISHED

TURN RIGHT HEADING 110, DESCEND 4000FT, CLEARED ILS14, **WILCO**, SWR9000

Arm the localizer, when captured, arm the ILS. Before reaching the FAF, extend the gear. Report "established" to ATC. Arm the speedbrakes.

SWR9000, SPEED 180KNOTS UNTIL 6 DME

SPEED 180KNOTS UNTIL 6 DME, SWR9000

RECEIVE CLEARANCE FOR APPROACH

Set speed to 180, don't forget to set the flaps accordingly. Set missed approach altitude (from the chart ). At 6 DME (as instructed by ATC) reduce to final approach speed and set the flaps to final position. At callout "1000" you confirm with "stable" if that's the case. If not consider to "go around". At callout "minimums" you verify that the runway is in sight and everything

is ok. Confirm with "continue". If not

"go around". Keep in mind: GO AROUND IS ALWAYS AN OPTION. In case, inform ATC.

SWR9000, GOING AROUND

ATC might instruct you:

SWR9000, FOLLOW MISSED

APPROACH PROCEDURE
FOLLOW MISSED APPROACH
PROCEDURE, SWR9000

Usually, an instruction of the next reporting point will not be read back in detail. It's abbreviated by WILCO ("will comply").

Cleared ILS14, report established" is often subject of discussion on how to be interpreted correctly. Cleared for the ILS means that you are instructed to intercept the localizer (on the last assigned heading) and to follow it (lateral path) and then intercept the glidepath (on the last assigned altitude) and to follow it (vertical path or glide). "Established" is defined as "I follow the approach on my own". You can therefore report established the moment you follow the localizer, even before capturing the glide path. For ATC it is important that from the moment of "established", they do not have to assume responsibility for the terrain clearance any longer.



		Practice the detailed handling of a go-around procedure many times during offline-flights. The sequence of "pushing the buttons" is essential and there is very little time to reflect on it.
Landing procedure	See AFM, Set go-around altitude, runway turnoff lights ON	Landing checklist
RECEIVE LANDING CLEARANCE FROM LSZH_TWR	Meanwhile you have been handed over to tower:  SWR9000, YOU ARE NUMBER 2 BEHIND A SLOW PISTON AIRCRAFT  SWR9000  SWR9000, EXPECT LATE LANDING CLEARANCE  SWR9000  SWR9000, WIND 130 DEGREES 8 KNOTS, RWY14 CLEARED TO LAND  RWY14 CLEARED TO LAND, SWR9000	An information (not a clearance) is not read back. Its reception is confirmed by the callsign only. Wind information is as well considered "only" an information.  A clearance always needs to be read back completely.
Landing roll procedure	See AFM	
After landing procedure	See AFM, Landing lights and strobe lights OFF, Runway turnoff lights OFF, Taxi lights ON, APU as required, Autobrake OFF	After landing checklist

## 4. F. Taxi to gate and shutdown

VACATING THE RUNWAY	After landing, break and vacate the RWY at the first feasible exit.	Should there be exits to both sides of the runway, and you don't know which side to go: ask ATC prior to touchdown.
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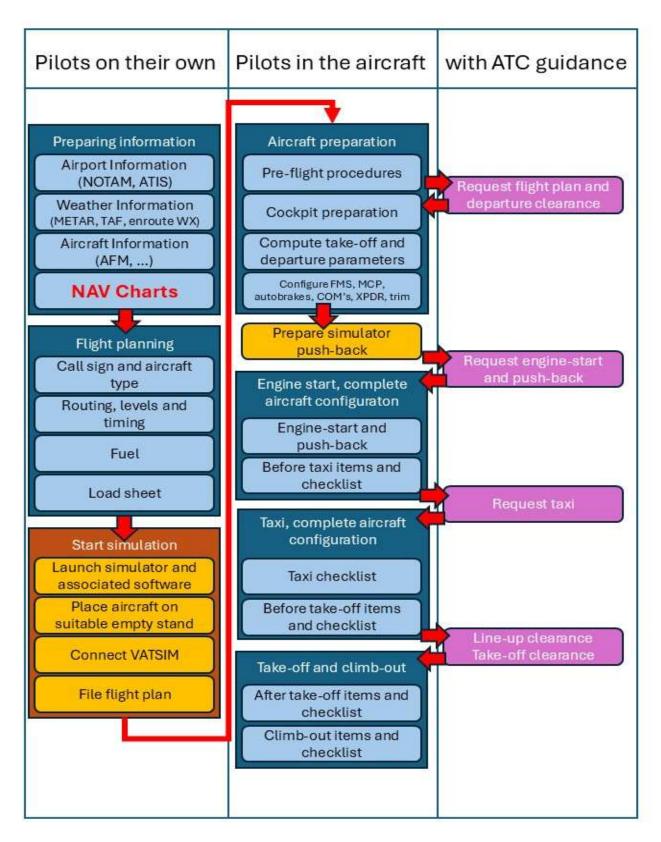
TAXI CLEARANCE AFTER LANDING	(Tower will hand you over to a ground station, which will issue the taxi clearance).  Taxi to the gate on the assigned taxi route. Don't forget to readback the route and ALL "hold-short" instructions.	That is probably one of the trickiest parts of the flight. You will receive a taxi clearance to the gate for which it is quite hard to prepare – as most of the time the gate is yet unknown. The only preparation you can do is have the ground chart ready on your knees. However, when you hear the taxi clearance, don't even try to find the taxi route on the chart – note it down on a piece of paper and read back from that paper. Only afterwards figure out on the chart which way to go.
Turning into the gate	Taxi lights OFF	
Shutdown procedure	See AFM	Shutdown checklist
Secure procedure	See AFM	Secure checklist

This concludes our tutorial for IFR flights. We hope that you could take one or the other useful information and wish you a lot of satisfactory flights on VATSIM.

For questions address to: vACC Switzerland Discord Pilot-Questions

vACC Switzerland – Pilot Training Department/HPB

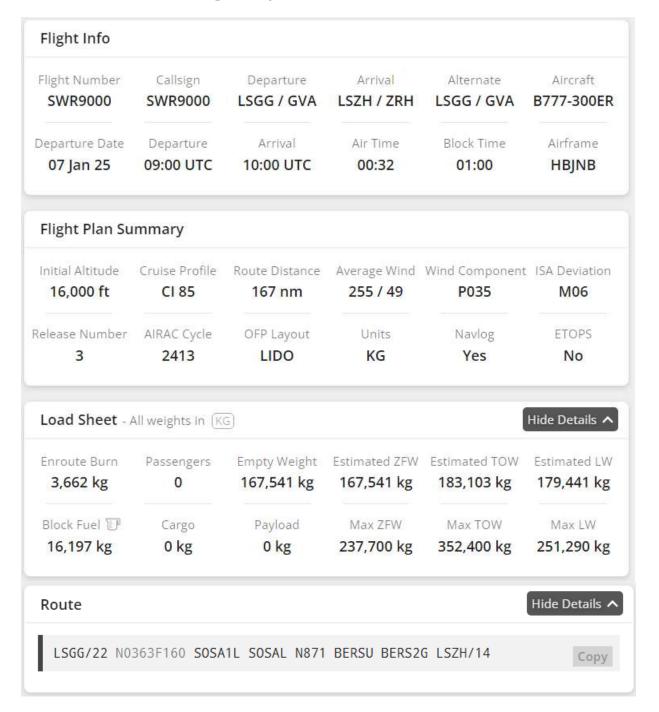
## Annex A. Sequence of actions



<sup>©</sup> Hans Peter Baumgartner, Pilot Training Department, vACC Switzerland



## Annex B. Planning output from simbrief.com

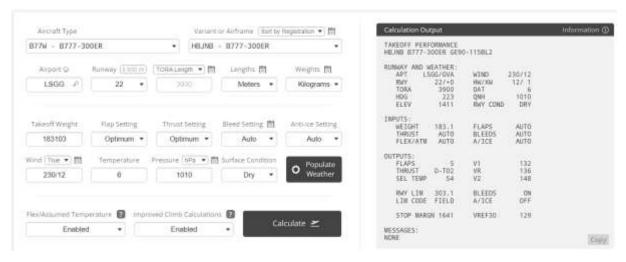






## Planning output from simbrief.com (cont'd)

#### Take-off performance:



#### **Landing performance:**

