

Welcome to FeelThere's Tower! Simulator 3 air traffic control simulator

This software is an in depth air traffic control simulation. If you skip at least this quickstart guide, likely you won't be able to enjoy this simulation. Please take the time before you jump into the controller's position.

As the Tower Controller your task is to provide guidance to all aircrafts within your control space. To achieve this, you will be issuing commands like entering or crossing a runway, assigning taxiway routes and clearing them for take off or landing with an appropriate and safe separation both in-air and on-ground.

Tower! Simulator 3 by feelThere is programmed to follow, more or less, United States of America Federal Aviation Administration (FAA) and European (EUROCONTROL) guidelines for traffic control.

Before using the voice recognition abilities of Tower! Simulator 3, you must 'train' your computer to recognize your voice.

IMPORTANT:

- Tower! Simulator 3. only recognizes typed or spoken English, the international language of air traffic control.
- A high quality microphone improves Speech's ability to interpret your voice.
- Keeping background noises to a minimum improves Speech's ability to interpret your voice.

Because of differences between an individual's speech or pronunciation, and limitations with Microsoft's Speech API, FeelThere doesn't guarantee that voice recognition will work flawlessly for all users.

For Tower to 'listen' to your voice commands the < TAB > must be pressed and held using the left-mouse-button. When speaking commands Tower! will display the command the voice recognition believes you are stating on the Command screen panel. The entire command phrase must be stated for the instruction to be accepted by Tower! Simulator 3.

If Tower does not recognize your instruction and clears the Command screen line, it is best to release the <TAB> button before speaking again.

More details on how to configure and train the Speech API are available from Microsoft.

Taxiways and general aviation callsigns are identified using these ICAO pronunciation codes;

Letter – Code						
A – Alpha	J – Juliet	S - Sierra				
B – Bravo	K – Kilo	T – Tango				
C – Charlie	L – Lima	U – Uniform				
D – Delta	M – Mike	V – Victor				
E – Echo	N – November	W – Whiskey				
F – Foxtrot	O – Oscar	X – X-ray				
G – Golf	P – Papa	Y – Yankee				
H – Hotel	Q – Quebec	Z – Zulu				
I – India	R – Romeo					

Numbers used in callsigns, taxiways and runways are identified using these ICAO phonetic pronunciation codes:

Number – Code	
0 – Zero	5 – Five
1 – One	6 – Six
2 – Two	7 – Seven
3 – Three	8 – Eight
4 – Four	9 – Niner

Tower! Simulator 3 use fantasy airlines (Real airlines are available as add-on on our website) AIRLINE CALLSIGNS - 3 letter codes, callsign, full name

- TAB, LESLIE, Trans American, United States
- FRT, FIELD AIR, Feelthere International Airlines, United States
- TGB, GLOBE, Trans Global, Europe
- VAL, VALUE, Value, United States
- BLA, LAKES, Big Lakes, United States
- CBA, CHESHIRE, Cheshire Blue, Europe
- BTV, WHITE SAND, Be There Vacation, Europe
- DEN, DENALI, Denali Airlines, United States
- RAA, RAINIER, Rainier Air, EUROPE
- ANG, GOLDSUN, Gold Sun Air, Asia
- LAW, LATITUDE, Latitude Airways, Europe
- UAX, OZZY, Uluru, Australia
- EMF, PACKAGE, Express Mail Freight, Europe
- PAV, PATIENCE, Silent Valley Airline, Asia
- MAX, MAGIC, Magic Express, USA

By default, the F1 key will put you into the controller's normal position, and various F keys will move you around preset radar views. You can overwrite them by moving to any position and hitting the CTRL+Function key wherever you want to save the view.

When in **single-player mode** Tower places you simultaneously in two controller positions: Tower and Ground Controller.

Multiplayer mode allows you to designate who is the Ground and Tower controller. More than one controller can act as Tower as well as Ground. The primary responsibility of the **Tower Controller** is to oversee and ensure sufficient runway separation exists between landing and departing aircrafts. The **Ground Controller** is in charge of the safety of aircrafts that are taxiing on taxiways or inactive runways. Up to 6 frequencies can be used

Controlling Departures

Ordering an aircraft to take off as soon as they arrive at the runway isn't all there is to being a controller. Your role is to assure ample aircraft separation, and provide a reasonable and safe flow of traffic away from the airport to avoid conflicts with arriving aircraft. This is done by properly spacing inbound aircraft AND sequencing departures into the traffic flow.

Aircraft separation is generally defined by the phase of flight the aircraft is currently in (takeoff, climb, cruise, descent, and landing) and the size of the aircraft are categorised according to weight.

- P Prop
- **T** TurboProp
- **B** Business
- R Regional jet
- N Narrow Body Jet
- W Wide Body Jet
- C Cargo

Once the game starts you must select at least one arrival runway to receive arrivals. The various letters represent the various types of aircrafts which can be allowed to land on that runway.

Leading/Trailing	Super Heavy	Heavy	Medium	Light
Super Heavy	MRS	6 NM	7 NM	8 NM
Heavy	MRS	4NM	5 NM	6 NM
Medium	MRS	MRS	MRS	5 NM
Light	MRS	MRS	MRS	MRS

If time based separation is used you still need to maintain a minimum 1000' vertical separation between planes.

Leading/Trailing	Super Heavy	Heavy	Medium	Light
Super Heavy	-	120 secs	180 secs	180 secs
Heavy	-	-	120 secs	120 secs
Medium	-	-	-	120 secs
Light	-	-	-	-

You can request different distance based separation from the approach by selecting the corresponding button.

Planes landing and taking off from parallel runways must be separated also. Normally at least 3600 feet between the runways required for fully independent plane movements. Between 760' and 3600' of the runways it is allowed to land planes with 1,5 mile separation.

However there are certain airports where these rules don't apply so we implemented a selection where you can set the rules for the given airport.

After takeoff, normal practice is to transfer control to departure as soon as possible to reduce workload. It is your responsibility not to clear the next aircraft for takeoff until the departing aircraft is safely away. Once you are certain the flight is clear, you can instruct the pilot to contact Departure.

Controlling Arrivals

Tower! Simulator 3's AI TRACON (Terminal Radar Control) controller will lead the aircraft to final approach (*you will not see or hear these commands*) from cross-country flight control. You cannot manage arriving aircraft until the pilot contacts you stating, "With you." Even if you see her strip on your board, or see his aircraft return on your radar screen you must wait until the pilot calls for your control.

There is a Golden Rule: No aircraft may land when another aircraft is on the runway.

For more information and help, please visit our Youtube Channel and find <u>Tower!</u> <u>Simulator 3 playlist for our tutorial videos</u> or <u>join our community on Discord</u>.

Commands, Instructions

#airplane1; RUNWAY; #runway1

Example: LATITUDE 1234, RUNWAY 10

This is how you instruct the plane to taxi to the runway

#airplane1; RUNWAY; #runway1; VIA; #taxiway1; #taxiway2; #taxiway3; #taxiway4; #taxiway5; #taxiway6

Example: LATITUDE 1234, RUNWAY 10 via A B

This is same as above but at this time we give a specific routing to the runway

#airplane1; RUNWAY; #runway1; HOLD SHORT OF TAXIWAY; #taxiway1; VIA

;#taxiway2;#taxiway3;#taxiway4;#taxiway5;#taxiway6

Example: LATITUDE 1234, RUNWAY 10 hold short of taxiway C via A B

This is same as above but at this time we give a specific routing to the runway but asking the pilot to hold short at taxiway C

#airplane1; RUNWAY ;#runway1; AT ;#taxiway1; VIA ;#taxiway2;#taxiway3;#taxiway4;#taxiway5;#taxiway6 Example: FIELD AIR 123, RUNWAY 10 AT F VIA A B G

This is a complex instruction asking the plane to take off from Runway 10 but at this time from the F intersection (instead of the end of the runaway) and make sure it will taxi using taxiway A, B and G

#airplane1; RUNWAY ;#runway1; AT ;#taxiway1 Example: FIELD AIR 123, RUNWAY 10 AT F

You Instruct the plane to take off from the intersection of Runway 10 and taxiway F instead of the end of the runway.

#airplane1; RUNWAY ;#runway1; CLEARED TO LAND EXAMPLE: LESLIE 123 RUNWAY 10 cleared to land

Each arriving plane must receive a landing clearance before they can land

#airplane1; RUNWAY ;#runway1; CLEARED FOR TAKEOFF EXAMPLE: LATITUDE 2 RUNWAY 10 cleared for takeoff This is the command to approve a takeoff clearance

#airplane1; RUNWAY ;#runway1; CLEARED FOR IMMEDIATE TAKEOFF

EXAMPLE: LATITUDE 2 RUNWAY 10 cleared for immediate takeoff

This is the command to approve a takeoff clearance and telling the pilots to start their takeoff roll without hesitation or stopping on the runway

#airplane1; RUNWAY ;#runway1; CLEARED FOR TAKEOFF UPON REACHING ALTITUDE ;#bignumber1; CONTACT DEPARTURE

EXAMPLE: MAGIC 8, RUNWAY 10 cleared for takeoff upon reaching 2000 contact departure

This is a time saving command, instead of asking the plane to contact the departure once it's airborne, you can ask the pilot to automatically switch over to departure upon reaching a certain altitude

#airplane1; RUNWAY; #runway1; CLEARED FOR IMMEDIATE TAKEOFF UPON REACHING ALTITUDE; #bignumber1; CONTACT DEPARTURE

This is another version of the command above

#airplane1; RUNWAY ;#runway1; CLIMB TO ;#bignumber1; ON REACHING CONTACT DEPARTURE CLEARED FOR TAKEOFF

This is another version of the command above

#airplane1; RUNWAY ;#runway1; CLIMB TO ;#bignumber1; ON REACHING CONTACT DEPARTURE CLEARED FOR IMMEDIATE TAKEOFF

This is another version of the command above

#airplane1; RUNWAY ;#runway1; CLIMB TO ;#bignumber1; ON REACHING TURN LEFT HEADING ;#number1; CONTACT DEPARTURE CLEARED FOR TAKEOFF

EXAMPLE: VALUE 76, RUNWAY 10 climb to 1000 on reaching turn left heading 120, contact departure cleared for takeoff

This is a complex command asking the plane to turn to a certain direction after takeoff (for example for spacing) and then contact departure automatically

#airplane1; RUNWAY ;#runway1; CLIMB TO ;#bignumber1; ON REACHING TURN LEFT HEADING ;#number1; CONTACT DEPARTURE CLEARED FOR IMMEDIATE TAKEOFF

This is another version of the command above

#airplane1; RUNWAY ;#runway1; CLIMB TO ;#bignumber1; ON REACHING TURN RIGHT HEADING ;#number1; CONTACT DEPARTURE CLEARED FOR TAKEOFF

This is another version of the command above

#airplane1; RUNWAY ;#runway1; CLIMB TO ;#bignumber1; ON REACHING TURN RIGHT HEADING ;#number1; CONTACT DEPARTURE CLEARED FOR IMMEDIATE TAKEOFF

This is another version of the command above

#airplane1; RUNWAY ;#runway1; LINE UP AND WAIT EXAMPLE: LATITUDE 23 RUNWAY 10 line up and wait

This is a command for the plane to take it's takeoff position on the runway but don't start the takeoff roll, just wait

#airplane1; RUNWAY; #runway1; LINE UP AND WAIT BEHIND NEXT LANDING AIRCRAFT

This is a variation of the above command, but you can issue it while another plane is on the final. Only once that traffic lands, the plane will take its position on the runway.

#airplane1; RUNWAY ;#runway1; CLIMB VIA RUNWAY HEADING TO ;#bignumber1; ON REACHING TURN LEFT TO HEADING ;#number1; CLEARED FOR TAKEOFF

EXAMPLE: VALUE 45 RUNWAY 28 climb via runway heading to 1000, on reaching turn left to heading 320 cleared for takeoff

By this command we ask the pilot to continue the runways heading until a certain altitude where we ask to turn to heading 320 and we finish the command by a takeoff clearance



#airplane1; RUNWAY ;#runway1; CLIMB VIA RUNWAY HEADING TO ;#bignumber1; ON REACHING TURN LEFT TO HEADING ;#number1; CLEARED FOR IMMEDIATE TAKEOFF

This is another version of the command above

#airplane1; RUNWAY ;#runway1; CLIMB VIA RUNWAY HEADING TO ;#bignumber1; ON REACHING TURN RIGHT

TO HEADING; #number1; CLEARED FOR TAKEOFF

This is another version of the command above

#airplane1; RUNWAY ;#runway1; CLIMB VIA RUNWAY HEADING TO ;#bignumber1; ON REACHING TURN RIGHT

TO HEADING; #number1; CLEARED FOR IMMEDIATE TAKEOFF

This is another version of the command above

#airplane1; WIND IS CALM RUNWAY ;#runway1 CLEARED TO LAND

EXAMPLE; VALUE 45, wind is calm RUNWAY 10 cleared to land

It's a variation of the landing clearance where you optionally tell the pilot about the calm winds.

#airplane1; WIND IS CALM RUNWAY ;#runway1 CLEARED FOR TAKEOFF

This is another version of the command above

#airplane1; WIND IS; #number1; AT; #number2; KNOTS RUNWAY; #runway1; CLEARED FOR TAKEOFF

EXAMPLE: MAGIC 878, wind is 276 at 15 knots, RUNWAY 15 cleared for takeoff

With this command you tell the pilot about a 15 kts wind coming from 276 degrees and you issue a takeoff clearance

#airplane1; WIND IS ;#number1; AT ;#number2; KNOTS RUNWAY ;#runway1; CLEARED FOR IMMEDIATE TAKEOFF

This is another version of the command above

#airplane1; PUSHBACK APPROVED EXPECT RUNWAY ;#runway1

EXAMPLE: LESLIE 23 pushback approved, expect runway 31

On initial contact the departing plane will ask for pushback. You approve it by this command and by telling the expected takeoff runway, the pushback truck will position the plane in the general direction of the runway.

#airplane1; APPROVED EXPECT RUNWAY ;#runway1

EXAMPLE: N345RT approved, expect runway 31

On initial contact the departing plane starting from a position without a pushback truck or a plane that doesn't need a pushback truck will ask you for startup instead of pushback. You approve it by this command allowing them to startup and get ready to taxi to the runway.

#airplane1; CONTACT DEPARTURE

EXAMPLE: VALUE 10 contact departure

This is the command you give in the air to send the plane over to the next air traffic controller after takeoff or after go around

#airplane1; GO AROUND

EXAMPLE: MAGIC 218 go around

It's an instruction for a plane to abort it's landing and maintaining its present heading overfly the airport. You have a choice then to either (preferred) ask the pilot to contact departure and the next air traffic controller (computer controller) will guide the plane back to the runway again or you can also issue various commands to the pilot to make their landing again.

#airplane1; STANDBY

EXAMPLE: LATTITUDE 456, stand by

When an airplane calls you it expect you to answer within a relatively short period of time. If you are busy just answer by this command to let the pilot know, you heard the request and will return back to him.

#airplane1; CONTINUE TAXI

EXAMPLE: MAGIC234, Continue taxi

If you stop a plane during taxi by the HOLD SHORT command, you can approve further taxi clearance by this command.



#airplane1; FOLLOW COMPANY DENALI46, Follow company

We can instruct a plane to follow the nearest same airline

#airplane1; TAXI TO TERMINAL HOLD SHORT OF TAXIWAY ;#taxiway1; VIA

;#taxiway2;#taxiway3;#taxiway4;#taxiway5;#taxiway6

#airplane1; TAXI TO TERMINAL VIA ;#taxiway1;#taxiway2;#taxiway3;#taxiway4;#taxiway5;#taxiway6

#airplane1; TAXI TO RAMP HOLD SHORT OF TAXIWAY ;#taxiway1; VIA

;#taxiway2;#taxiway3;#taxiway4;#taxiway5;#taxiway6

#airplane1; TAXI TO RAMP VIA; #taxiway1; #taxiway2; #taxiway3; #taxiway4; #taxiway5; #taxiway6

#airplane1; TAXI TO APRON HOLD SHORT OF TAXIWAY ;#taxiway1; VIA

;#taxiway2;#taxiway3;#taxiway4;#taxiway5;#taxiway6

#airplane1; TAXI TO APRON VIA; #taxiway1; #taxiway2; #taxiway3; #taxiway4; #taxiway5; #taxiway6

#airplane1; TAXI TO TERMINAL CROSS RUNWAY ;#runway1

#airplane1; TAXI TO RAMP CROSS RUNWAY ;#runway1

#airplane1; TAXI TO APRON CROSS RUNWAY ;#runway1

These are variations of the TAXI TO TERMINAL/APRON/RAMP command

#airplane1; HOLD SHORT OF RUNWAY ;#runway1;#runway2

#airplane1; HOLD SHORT OF TAXIWAY; #taxiway1; #taxiway2; #taxiway3; #taxiway4; #taxiway5; #taxiway6

EXAMPLE: DENALI345 Hold short of taxiway A/ runway 32L

By this command we ask the pilot to stop at a certain point of their taxi and wait for further instruction.

#airplane1; HOLD POSITION

EXAMPLE: MAGIC456 hold position

The plane will stop as soon it can during any movement

#airplane1; REPORT HEADING
#airplane1; REPORT POSITION
#airplane1; REPORT AIRSPEED

EXAMPLE: MAGIC3545 report heading/position/airspeed The plane will report you the requested information

#airplane1; TURN LEFT HEADING; #number1 #airplane1; TURN RIGHT HEADING; #number1

EXAMPLE: DENALI 4353 turn left/right heading two eight five

The heading must be between 001 and 360. By this command you ask the plane to turn to a certain heading.

#airplane1; TURN LEFT ;#number1; DEGREES
#airplane1; TURN RIGHT ;#number1; DEGREES

EXAMPLE: LATITUDE5453 turn left/right one five degrees

Similar to the previous command however the plane will turn relative to it's present heading

#airplane1; ENTER FINAL RUNWAY ;#runway1
#airplane1; CHANGE TO RUNWAY ;#runway1

By these commands you can ask the pilot to change the landing runway. This is not recommended as if the pilot is too close to landing it might reject it or will take some unexpected turn.

#airplane1; AFTER DEPARTURE FLY HEADING ;#number1; RUNWAY ;#runway1; CLEARED FOR TAKEOFF #airplane1; AFTER DEPARTURE FLY HEADING ;#number1; RUNWAY ;#runway1; CLEARED FOR IMMEDIATE TAKEOFF

#airplane1; AFTER DEPARTURE TURN LEFT ;#number1; DEGREES RUNWAY ;#runway1; CLEARED FOR TAKEOFF

#airplane1; AFTER DEPARTURE TURN LEFT ;#number1; DEGREES RUNWAY ;#runway1; CLEARED FOR IMMEDIATE TAKEOFF

#airplane1; AFTER DEPARTURE TURN RIGHT ;#number1; DEGREES RUNWAY ;#runway1; CLEARED FOR TAKEOFF

#airplane1; AFTER DEPARTURE TURN RIGHT ;#number1; DEGREES RUNWAY ;#runway1; CLEARED FOR IMMEDIATE TAKEOFF



These are combinations of previously explained commands. They are to be used to ensure separation between departing airplanes on parallel runways.

#airplane1; EXIT AT TAXIWAY ;#taxiway1 EXAMPLE: N123FT exit at taxiway A

If the command is issued on time and if the plane can slow down after landing it will exit at the requested taxiway.

#airplane1; VACATE RUNWAY LEFT ONTO TAXIWAY ;#taxiway1 #airplane1; VACATE RUNWAY RIGHT ONTO TAXIWAY ;#taxiway1

These commands are the variations of the above this time telling in which direction to vacate the runway if the certain taxiway is crossing it so it can be taken in both ways.

#airplane1; RUNWAY ;#runway1; CLEARED TO LAND HOLD SHORT OF TAXIWAY ;#taxiway1; FOR CROSSING TRAFFIC

#airplane1; RUNWAY ;#runway1; CLEARED TO LAND HOLD SHORT OF TAXIWAY ;#taxiway1; FOR CROSSING TRAFFIC

#airplane1; RUNWAY ;#runway1; CLEARED TO LAND HOLD SHORT OF RUNWAY ;#runway2; FOR CROSSING TRAFFIC

#airplane1; RUNWAY ;#runway1; CLEARED TO LAND HOLD SHORT OF RUNWAY ;#runway2; FOR CROSSING TRAFFIC

EXAMPLE: DENALI 345 runway 25L cleared to land, hold short of taxiway A for crossing traffic

You instruct the plane to try to stop before a certain taxiway after landing. If the distance is too short the pilot answer will be "negative"

#airplane1; TAKE NEXT AVAILABLE EXIT ON LEFT
#airplane1; TAKE NEXT AVAILABLE EXIT ON RIGHT
EXAMPLE: MAGIC789 take next available exit on left/right

Must be issued no later than the arriving plane descends below 500 feet. It will then take the exit in the direction it was requested to. Note: it will not take the first exit as it needs a certain distance to slow down

was requested to. Note. It will not take the mist exit as it needs a certain distar

#airplane1; CONTACT GROUND #airplane1; CONTACT TOWER

EXAMPLE: DENALI 3443 contact/ground/tower on one two four point eight

During multiplayer this command is to be used to transfer airplane from one frequency to the other

#airplane1; CANCEL TAKEOFF

#airplane1; READ YOU ;#number1; BY FIVE EXAMPLE: MAGIC 242 read you four by five

From time to time a plane might ask you about how do you hear it. You can answer by thes numbers between one by five (the worst) to five by five (perfect)

#airplane1; CROSS RUNWAY ;#runway1 EXAMPLE: DENALI 3443 cross runway 23L

If a plane needs to cross a runway during taxi it will always stop and ask you a permission to cross it.

#airplane1; YOUR ARRIVAL GATE IS OCCUPIED TAXI AND HOLD AT THE INTERSECTION OF TAXIWAY

;#taxiway1; AND ;#taxiway2; VIA ;#taxiway3;#taxiway4;#taxiway5;#taxiway6

;#taxiway3;#taxiway4;#taxiway5;#taxiway6

EXAMPLE: GLOBE 343 taxi and hold short of the intersection of taxiway A and V via taxiway B and C

If for any reason you want a plane to taxi to a certain point without issuing a takeoff clearance or a taxi to terminal command.

#airplane1; CONTACT ;#freq1

EXAMPLE: DENALI 232 contact ground/tower on XXX.X

During multiplayer this is the command you need to use to send the plane from one controller to the other.

LAST PLANE CALLED EXAMPLE: Last plane called

The last plane who called will repeat the last transmission

