



User Manual

Contents

Introduction.....	4
Getting Started.....	5
Example VFR Flight.....	8
Example IFR Flight.....	16
Example IFR with a SID and STAR.....	21
Creating Flights For VoxATC.....	26
Starting Enroute.....	26
Registration.....	27
Option Menus.....	27
Taxi Menu.....	28
Enroute Menu (IFR).....	28
Enroute Menu (VFR).....	28
Arrival Menu.....	28
FSX Settings.....	28
Setting up Speech Recognition.....	29
<i>VoxATC Reference</i>.....	30
Call-Signs.....	30
Initial Contact.....	30
Contact Instruction.....	30
Monitor Instruction.....	31
Initial Contact After Handover.....	31
Traffic Advisory.....	31
Altitude Instructions.....	32
Heading Instructions.....	32
Altimeter Setting.....	33
Hold Position Instruction.....	33
Frequency Change Request.....	33
Temporary Frequency Change Request.....	34
Position Report.....	34
Transponder Setting.....	35
Squawk.....	35
Proceed Direct.....	35
ATIS.....	36
Clearance Delivery.....	36
Departure Clearance Request.....	36
Departure Instructions Request.....	36
Departure Clearance.....	36
Ground.....	38
Taxi Request.....	38
Tower.....	38
Takeoff Request.....	39
Takeoff Clearance.....	39
Pattern Entry Instructions.....	39
Landing Clearance.....	40
Missed Approach.....	40
Departure.....	41
Center.....	41
Altitude Change Requests.....	41
Request Traffic Advisories.....	41
Hold Instruction.....	41
Descend Via STAR.....	42
Cleared Via STAR.....	42
Approach.....	42
Instrument Approach Procedure.....	43
Approach Clearance.....	43

Approach Requests	43
Weather Avoidance Request	43
Flight Service Station	44
Initial Contact FSS	44
Opening / Closing Flight Plans with an FSS	44
Unicom / Multicom	45
Arriving at Unicom Airports	45
Departing Unicom Airports	46
Position Fix Request	46
Request Descent	47
Resume Own Navigation	47
<i>VoxATC Panel.....</i>	48
Recent Communications	49
<i>VoxATC Settings.....</i>	50
Call-Sign Types.....	50
Traffic Density	51
Speech Volume	51
Average Speech Rate	51
Setting Prompt Text Colors.....	51
Setting The Prompt Text Font.....	51
Call-signs and Frequencies	51
Emergencies	51
First Officer Available	52
Enroute Hold	52
Enroute Traffic Instructions	52
<i>VoxATC Indexer</i>	53
<i>Flight Plan Trainer.....</i>	53
<i>Setting up a SID and/or STAR</i>	55
Adding a SID	55
Adding a STAR.....	56
Finishing the SID STAR set up	56
Editing a previously saved flight.....	56
<i>Setting up Joystick Buttons & Keyboard Keys.....</i>	57
<i>Setting up the Voices VoxATC will use.....</i>	59
<i>VoxATC Panel Setup</i>	60
<i>Finding your way to the takeoff runway or parking at your destination.....</i>	60
Taxi Route Indicated By Green Lights.....	61
Taxiway Centre Light Remover.....	62
<i>Handing Over Communications to the First Officer.....</i>	62
<i>Flying in UK / European Airspace.....</i>	64
<i>Trouble Shooting.....</i>	64
No radio reception.....	64
No response from ATC	64
ATC responds with 'Last aircraft say again'	64
ATC refuses requests	65
Slow response or speech generation.....	65
VoxATC prompts you to contact an enroute unit (center or approach) on start up but you are on the ground at your departure airport.....	65

Introduction

VoxATC provides a simulated ATC environment for FSX with integrated voice recognition. Now what you say does matter, the controllers will be listening to your requests and checking your read backs. All the chatter you hear is generated by intelligent agents that are either controllers or pilots currently in the airspace. VoxATC runs alongside FSX and replaces its native ATC.

If you have not installed VoxATC with integrated recognition and text to speech engines, SAPI 5 compliant engines must be installed for VoxATC to run. these can be obtained by downloading and installing Microsoft's SAPI 5 SDK

If you add new scenery or aircraft to FSX you should run the [VoxATC Indexer](#).

The version of VoxATC as installed is a demo and can only be used for 7 days.

For unrestricted use VoxATC must be registered (see Registration).

Getting Started

To get the best performance from VoxATC, the computer speech settings should be setup as follows:

Go to the control panel and select speech on if you are not running Vista. If you are running Vista, select Text To Speech and click on the 'Speech Recognition' tab.

On the displayed dialog click on the 'Configure Microphone' button and follow the instructions the wizard gives.

If you are running Vista ensure that you have a US English speech recognition engine selected (such as the 'Microsoft Speech Recognizer 8.0 for Windows (English - US)).

If you are not running Vista, after configuring the microphone, click 'Settings' in the 'Recognition Profiles' section. Set the sliders as shown.



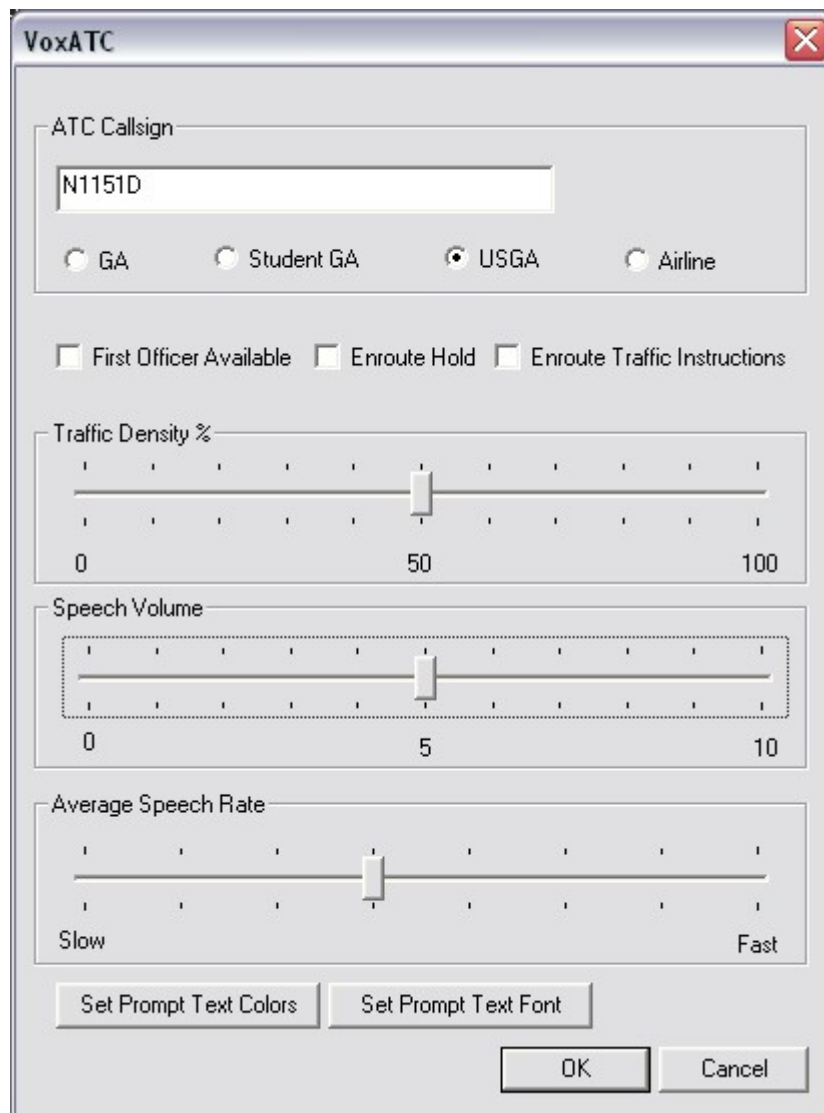
The speech recognition system needs a certain amount of training to get used to your voice using standard ATC phraseology. Start The Flight Plan Trainer by clicking on the Windows Start button selecting 'All Programs-VoxATC X-Flight Plan Trainer'. First go through general training by

clicking on the 'General Training' button and following the instructions given by the training wizard.

The Flight Plan Trainer can also be used for training for specific flight plans. Before you start, it is worthwhile running through one of the example flights. To do this click on the browse button and navigate to the Flight Simulator X Files folder in your 'My Documents Folder' and select either 'IFR Kansas City Intl to Eppley.FLT' or 'VFR Kansas City to Eppley.FLT'. After a flight plan file has been selected the Flight Plan Training' button will be enabled. Click on the Flight Plan Training' button and follow the instructions given by the training wizard (for more information see [Flight Plan Trainer](#)).

If you have a serial number or registration code you should register VoxATC now (see [Registration](#)).

You may want to set your own call sign or change other settings. To do this select Start - All Programs - VoxATC X - VoxATC Settings. The form below will be displayed.

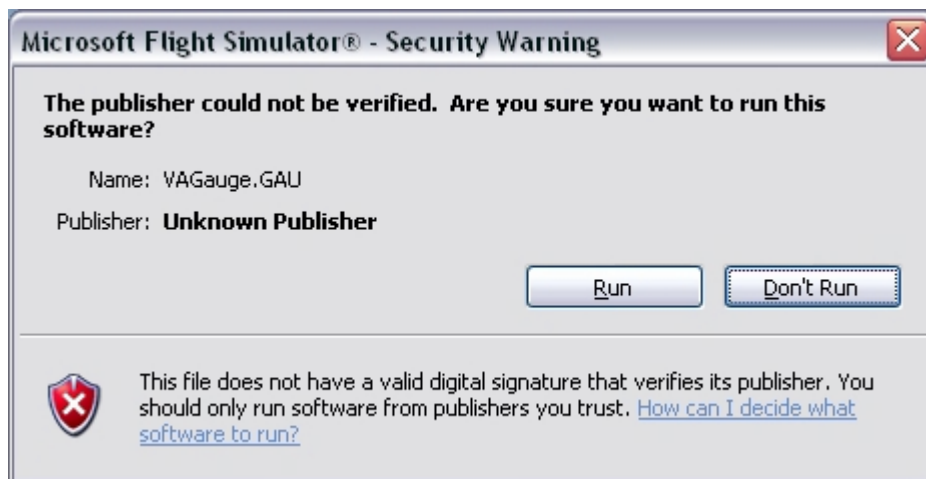


You can set your callsign and [Call-Sign Type](#), set [Enroute Hold](#), [Traffic Density](#), [Speech Volume](#), [Average Speech Rate](#), [Prompt Text Colors](#), [First Officer Available](#) and [Prompt the Text Font](#).

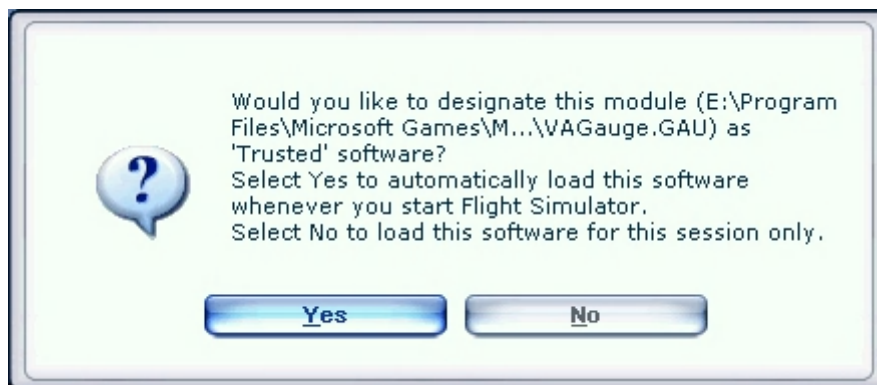
You are now ready for your first flight.

Start Flight Simulator X (ensure that the built in ATC has been disabled see [FSX Settings](#)).

After installing VoxATC, the next time you run FSX it will display the following dialogs:



Click the Run button as this gauge file (VAGauge.GAU) is required by VoxATC.



Click the 'Yes' button as VAGauge.GAU is required by the VoxATC Panel

Ensure that you have created or loaded a flight that includes a flight plan (either VFR or IFR). If the [VoxATC Panel](#) is not being displayed, select The [VoxATC Panel](#) will be displayed which gives information on what to do and say. If you want to display all the optional requests or reports that you can make at any stage of a flight, press the '0' (zero) key. This will display a list of options in the VoxATC Panel window.

Example VFR Flight

Having started up Flight Simulator X, choose 'Free Flight' from the left hand list and click on the Load button. Choose 'VoxATC Kansas City VFR' from the list displayed. You will be positioned on the general aviation ramp at Kansas City International Airport with a flight plan to Eppley (Omaha).

If the [VoxATC Panel](#) is not displayed, select Views - Instrument Panel - VoxATC.

The [VoxATC Panel](#) will guide you by telling when to tune the comm1 radio and exactly what to say at any time.

Click on the button labelled 'Enable' in the top left hand corner of the [VoxATC Panel](#). and VoxATC will initialize

Tune the comm1 radio to the ATIS (Automatic Terminal Information Service) frequency, at Kansas City International the ATIS frequency is 128.35.

The recorded ATIS message gives various weather details, the altimeter setting, the current runway in use and a phonetic code letter. It is important to note the current ATIS code (announced as "Information" within the ATIS message) as you will use this when contacting ATC units at Kansas City International. Also set your altimeter to the setting given.

As you will be flying out of a Class B airport the first ATC contact is Clearance Delivery to obtain departure instructions. This will require you to use your call-sign for the first time (see [Call-signs](#)). While using VFR example situation your call-sign is cessna one one five one delta.

Tune the com radio to 135.7 and make [Initial Contact](#) with the clearance controller.

You require departure instructions to depart north to Eppley at five thousand feet (see [Departure Instructions Request](#)).

To do this listen a while on the frequency to ensure that no one is currently speaking, key the Microphone (press the space bar) and say

"International Clearance cessna one one five one delta will depart north for Eppley at five thousand"

and unkey the mike (release the spacebar).

It is important to remember to key the mike before saying anything, or an embarrassing silence will ensue.

The convention used from now on will be what you say will be in **bold** the reply from the controller in *italics*.

Now listen carefully here come your departure instructions to be complied with after takeoff

International Clearance - cessna one one five one delta cleared to enter bravo airspace after departure fly heading zero eight five climb and maintain three thousand squawk three zero one three

The clearance given contains the heading and height to be flown after departure and the [Transponder Setting](#) or [Squawk](#) code.

Read back the clearance as given

You - cessna one one five one delta cleared to enter bravo airspace after departure fly heading zero eight five climb and maintain four thousand squawk three zero one three

The exact heading height and transponder code given may vary from the example above.

If all the elements of your read back are correct the controller will respond with

International Clearance - cessna one one five one delta read back correct

Acknowledge this with your call sign

You - cessna one one five one delta

Otherwise the controller will repeat any parts of the instructions not read back or read back incorrectly. These then be repeated correctly.

Should you need the instructions repeated say

You - cessna one one five one delta say again

and the instructions will be repeated. Say again can be used at any time to get controllers to repeat the last message that has yet to be read back or acknowledged.

Set the transponder code as given.

You are now ready to taxi. Set the comm1 radio to the Kansas City Ground frequency 121.65

When the frequency is clear establish contact and make a [Taxi Request](#)

You - International Ground cessna one one five one delta at gate golf seven with information bravo ready taxi with clearance

International Ground - cessna five one delta taxi to runway one niner right left via delta and mike and golf and alpha

Read this back and start taxiing to runway zero one left using taxiways bravo and alpha. See [Finding your way to the takeoff runway or parking at your destination](#) if you need help navigating to the runway.

You - taxi to runway one niner right left via delta and mike and golf and alpha cessna five one delta

Now its time to get the FSS ([Flight Service Station](#)) to open your flight plan.

Call ground and make a [Temporary Frequency Change Request](#).

You - cessna five one delta request temporary change to Columbia radio one two two point two

International Ground - cessna five one delta report back on frequency

You - cessna five one delta

Tune comm1 to 122.1 and make contact with the FSS ([Initial Contact FSS](#)).

You - Columbia radio cessna one one five one delta one two two point one Kansas City International

Columbia radio - cessna one one five one delta Columbia radio go ahead

Request that your flight plan is opened at the time in UTC that you estimate you will be taking off see [Opening / Closing Flight Plans with an FSS](#) (the time will almost certainly be different from that shown below).

You - cessna one one five one delta request you open my flight plan to Eppley at one zero two zero zulu

Columbia radio - cessna one one five one delta will open your flight plan to Eppley at one zero two zero zulu

You - cessna one one five one delta

Retune to International ground (121.65) and report back on frequency

You- cessna five one delta back on frequency

International Ground - cessna five one delta roger

Taxi out to the runway hold.

As you approach the holding point for runway zero one left you will be issued with a [Contact Instruction](#) by the Ground controller.

International Ground - cessna five one delta contact International Tower one two five point seven five

You - one two five point seven five cessna five one delta

Tune the Comm1 radio to 125.75

After your pre-takeoff checks select the tower frequency and when there is a pause in the exchanges make your [Takeoff Request](#)

You - International Tower cessna one one five one delta ready for takeoff

If the runway is not available, the tower controller will issue a [Hold Position Instruction](#), otherwise you will be cleared for takeoff.

International Tower - cessna five one delta wind one eight zero at one zero cleared takeoff

You - cleared takeoff cessna five one delta

After takeoff follow the departure instructions (see above).

When you are approximately 5 miles from the airport the Tower will hand you over to Kansas City Departure

International Tower - cessna five one delta contact Kansas City Departure one two four point seven

You - one two four point seven cessna five one delta

Set the comm1 radio frequency to 124.7 and make an [Initial Contact After Handover](#).

You - Kansas City Departure cessna five one delta with you at two thousand

(give your present altitude)

Kansas City Departure - cessna five one delta roger

From now on until the radar service is terminated you must listen out for [Heading Instructions](#) and [Altitude Instructions](#) addressed to you.

Example:

Departure - cessna five one delta turn left heading one three zero climb and maintain four thousand

You - turn left heading one three zero climb and maintain four thousand cessna five one delta

On reaching the limit of radar coverage, Departure will terminate the radar service and approve a change of frequency.

Departure - cessna five one delta radar service terminated squawk one two zero zero frequency change approved

You - one two zero zero cessna five one delta

Set the transponder to 1200.

During the enroute stage of the flight you will want to request flight following from the Air Route Traffic Control Centers (see [Center](#)).

Tune comm1 to Minneapolis Center 127.9 and make [Initial Contact](#)

You - Minneapolis Center cessna one one five one delta

Minneapolis Center - cessna one one five one delta Kansas City Center go ahead

You need to provide three things at this point:

A [Position Report](#) for your current location

Your destination

Your request ([Request Traffic Advisories](#))

You - cessna one one five one delta one zero miles south Saint Joseph at four thousand vfr to Eppley request traffic advisories

Minneapolis Center - cessna one one five one delta squawk four zero six six and ident remain clear

You - four zero six six cessna one one five one delta

Set the transponder to 4066 and press the ident key (' I ' on the keyboard).

The actual transponder code may vary from the example above.

Once Center has seen you ident they will come back with

Minneapolis Center - cessna one one five one delta radar contact altimeter two niner niner six
read back the altimeter setting (see [Altimeter Setting](#))

You - altimeter two niner niner six cessna five one delta

When enroute you may then receive a [Traffic Advisory](#) or two

Minneapolis Center - cessna five one delta traffic one o'clock 3 miles four thousand southbound

You - roger cessna five one delta

Enroute you may be given a [Contact Instruction](#). As you move out of range of one transmitter you will have to retune to a closer one on a different frequency. Although the center may be the same, after tuning to the new frequency you should recontact the controller.

Minneapolis Center - cessna five one delta contact Minneapolis Center one two five point six five
read back the frequency

You - one two five point six five cessna five one delta

Tune the comm1 radio to 125.65 and make an [Initial Contact After Handover](#).

You - Minneapolis Center cessna five one delta with you at five thousand

Minneapolis Center - cessna five one delta roger altimeter two niner niner niner

You - altimeter two niner niner niner cessna five one delta

As you approach within 30 miles of Eppley its time to contact the Approach unit of Eppley's class C airspace. First make a [Frequency Change Request](#).

You - cessna five one delta request frequency change to Omaha Approach one two four point five

Minneapolis Center - cessna five one delta squawk one two zero zero frequency change approved

You - one two zero zero cessna five one delta

Set the transponder to 1200.

Before contacting Omaha Approach you must listen to the ATIS for Eppley.

Select the Eppley ATIS frequency (120.4) and listen to the recorded announcement

Select the Omaha Approach frequency (120.1) and make [Initial Contact](#)

You - Omaha Approach cessna one one five one delta

Approach - cessna one one five one delta Omaha Approach go ahead

You need to provide three things at this point:

A [Position Report](#) for your current location

The ATIS code

An indication of your intentions ([Approach Requests](#))

You - cessna one one five one delta two four miles south Eppley at four thousand with information charlie landing Eppley

Omaha Approach - cessna one one five one delta squawk three zero four six and ident

You - three zero four six cessna one one five one delta

Set the transponder to 3046 and press the ident key (' I ' on the keyboard).

The actual transponder code may vary from the example above.

Once Approach has seen you ident they will come back with

Omaha Approach - cessna one one five one delta radar contact report airfield in sight

You - cessna five one delta

Continue toward Eppley airport until

Omaha Approach - cessna five one delta contact Omaha Tower one three two point one

You - one three two point one cessna five one delta

Select the tower frequency (132.1) and call the tower

You - Omaha Tower cessna one one five one delta with you at two thousand niner hundred

(give your present altitude)

The tower will come back with your [Pattern Entry Instructions](#).

Omaha Tower - cessna five one delta enter left base runway three two

You - enter left base runway three two cessna five one delta

Enter the Eppley pattern as instructed. Within two miles of the runway threshold you should receive your [Landing Clearance](#)

Omaha Tower - cessna five one delta cleared to land runway one eight

You - cleared to land runway one eight cessna five one delta

If you don't receive a landing clearance you may have to go around (left pattern)

You - cessna five one delta going around

Omaha Tower - cessna five one delta roger

After landing you will be told to vacate the runway

Omaha Tower - cessna five one delta turn right any intersection

You - cessna five one delta

After you vacate the runway the Tower will hand you off to ground

Omaha Tower - cessna five one delta contact Omaha Ground one two one point niner

You - one two one point niner cessna one five delta

Select the ground frequency (121.9)

You - Omaha Ground cessna one one five one delta request taxi instructions

Omaha Ground - cessna five one delta taxi to taxi to park niner via lima and bravo and alpha and kilo

You - taxi to park niner via lima and bravo and alpha and kilo cessna five one delta

And close the flight plan

You - cessna five one delta request temporary frequency change to Columbia radio one two two point three five

Omaha Ground - cessna five one delta report back on frequency

You - cessna five one delta

Tune comm1 to 122.2

You - Columbia radio cessna one one five one delta one two two point three five Eppley

Columbia radio - cessna one one five one delta Columbia radio go ahead

You - cessna one one five one delta request you close my flight plan from Kansas City International at one one two zero zulu

Columbia radio - cessna one one five one delta will close your flight plan from Kansas City International at one one two zero zulu

You - cessna one one five one delta

Retune to ground (121.9)

You - cessna five one delta back on frequency

Omaha Ground - cessna five one delta roger

Taxi back to the ramp head held high your flight complete. See [Finding your way to the takeoff runway or parking at your destination](#) if you need help navigating to the assigned parking.

Example IFR Flight

Having started up Flight Simulator X, choose 'Free Flight' from the left hand list and click on the Load button. Choose "VoxATC Kansas City IFR" from the list displayed. You will be positioned on the general aviation ramp at Kansas City International Airport with a flight plan to Eppley (Omaha).

If the [VoxATC Panel](#) is not displayed, select Views - Instrument Panel - VoxATC.

The [VoxATC Panel](#) will guide you by telling when to tune the comm1 radio and exactly what to say at any time.

Click on the button labelled 'Enable' in the top left hand corner of the [VoxATC Panel](#). and VoxATC will initialize

Having started up Flight Simulator select Select Flights from the Flights menu. Choose 'VoxATC Kansas City IFR' from the list of 'My Saved Flights'. You will be positioned on the general aviation ramp at Kansas City International Airport with a flight plan to Eppley (Omaha).

Select VoxATC from the modules menu and check 'Enable VoxATC' and 'Display Prompt Window'. The [VoxATC Panel](#) will guide you by telling when to tune the comm1 radio and exactly what to say at any time. Click the OK button.

Tune the comm1 radio to the ATIS (Automatic Terminal Information Service) frequency, at Kansas City International the ATIS frequency is 128.35.

The recorded ATIS message gives various weather details, the altimeter setting, the current runway in use and a phonetic code letter. It is important to note the current ATIS code (announced as "Information" within the ATIS message) as you will use this when contacting ATC units at Kansas City International. Also set your altimeter to the setting given.

Contact delivery to obtain the departure clearance.

Tune the com radio to 135.7 and make [Initial Contact](#) with the clearance controller.

To do this listen a while on the frequency to ensure that no one is currently speaking, key the Microphone (press the space bar) and say

"International Clearance cessna one one five one delta"

and unkey the mike (release the spacebar).

It is important to remember to key the mike before saying anything, or an embarrassing silence will ensue.

The controller will come back with "cessna one one five one delta International Clearance go ahead".

From now on is what you say will be in **bold** the reply from the controller in *italics*.

You should now make a [Departure Clearance Request](#)

You - cessna one one five one delta ready for clearance Eppley

You should be ready to note down the key points of the [Departure Clearance](#)

International Clearance - cessna one one five one delta cleared to Eppley Airport as filed maintain three thousand squawk three zero one three

Should you need the clearance repeated say **cessna one one five one delta say again**

You - cessna one one five one delta is cleared to Eppley Airport as filed maintain four thousand three zero one three

International Clearance - cessna one one five one delta read back correct

You - cessna one one five one delta

You are now ready to taxi. Set the comm1 radio to the Kansas City Ground frequency 121.65

When the frequency is clear establish contact and make a [Taxi Request](#)

You - International Ground cessna one one five one delta at gate golf one zero with information bravo ready taxi with clearance

International Ground - cessna five one delta taxi to runway one niner right via delta and mike and golf and alpha

Read this back and start taxiing to runway zero one left using taxiways bravo and alpha. See [Finding your way to the takeoff runway or parking at your destination](#) if you need help navigating to the runway.

You - taxi to runway one niner right via delta and mike and golf and alpha cessna five one delta

Taxi out to the runway hold.

As you approach the holding point for runway zero one left you will be issued with a [Contact Instruction](#) by the Ground controller.

International Ground - cessna five one delta contact International Tower one two five point seven five

You - one two five point seven five cessna five one delta

After your pre-takeoff checks select the tower (125.75) frequency and when the frequency is clear make your [Takeoff Request](#)

You - International Tower cessna five one delta ready for takeoff

If the runway is not available, the tower controller will issue a [Hold Position Instruction](#), otherwise you will be cleared for takeoff.

International Tower - cessna five one delta after departure turn left heading zero niner zero wind one eight seven at one zero cleared takeoff

You - after departure turn left heading zero niner zero cleared takeoff cessna five one delta

After takeoff follow the departure instructions and clearance (see above).

When you are approximately 5 miles from the airport the Tower will hand you over to Kansas City Departure

International Tower - cessna five one delta contact Kansas City Departure one two four point seven

You - one two four point seven cessna five one delta

Set the comm1 radio frequency to 124.7 and make an [Initial Contact After Handover](#).

You - Kansas City Departure cessna five one delta with you leaving two thousand climbing three thousand

(give your present altitude)

Kansas City Departure - cessna five one delta roger

From now on until you are handed off to center you must listen out for [Heading Instructions](#) and [Altitude Instructions](#) addressed to you.

Example:

Departure - cessna five one delta turn left heading one three zero climb and maintain four thousand

You - turn left heading one three zero climb and maintain four thousand cessna five one delta

As you approach the limits of the Kansas City International class B airspace you will be instructed to climb to your filed enroute altitude, to [Proceed Direct](#) to Saint Joseph and handed over to Minneapolis City Center

Kansas City Departure - cessna five one delta climb and maintain six thousand proceed direct saint joseph contact Minneapolis Center one one niner point six

You - leaving five thousand climbing six thousand one one niner point six cessna five one delta

Set the comm1 radio frequency to 127.9 and make an [Initial Contact After Handover](#).

You - Minneapolis Center cessna five one delta with you leaving six thousand climbing seven thousand

Minneapolis Center - cessna five one delta roger altimeter two niner niner six

You - altimeter two niner niner six

While you are enroute you may be instructed to contact the center controller on a different frequency. Read back the new frequency, tune to the new frequency and make [Initial Contact After Handover](#).

As you approach Eppley the center controller will instruct you to descend

Minneapolis Center - cessna one five delta descend and maintain five thousand

You - leaving seven thousand descending five thousand cessna five one delta

You will then be handed over to Omaha approach

Minneapolis Center - cessna five one delta contact Omaha Approach one two four point five

You - one two four point five cessna five one delta

Tune the comm1 radio to 124.5 and make an [Initial Contact After Handover](#).

You - Omaha Approach cessna five one delta with you at five thousand

Approach will reply with initial [Heading Instructions](#), [Altitude Instructions](#) the [Instrument Approach Procedure](#) and [Altimeter Setting](#).

Omaha Approach - cessna five one delta fly heading three four zero descend and maintain two thousand eight hundred expect vectors to I L S runway one eight approach Eppley altimeter two niner niner two

You - fly heading three four zero descend and maintain two thousand eight hundred altimeter two niner niner two cessna five one delta

You will receive further [Heading Instructions](#) and [Altitude Instructions](#) until you are ready to establish yourself on the localizer when you will receive an [Approach Clearance](#)

Omaha Approach - cessna five one delta maintain two thousand eight hundred until established on localizer cleared for I L S runway one eight approach monitor Omaha Tower one three two point one

You - maintain two thousand eight hundred cleared for I L S runway one eight approach one three two point one cessna five one delta

You have been issued a [Monitor Instruction](#) so just tune to the tower frequency and listen, no contact is required.

Tune to Omaha Tower 132.1

You should soon be cleared to land

Omaha Tower - cessna five one delta cleared to land runway one eight wind one eight seven at one zero

You - cleared to land runway one four right cessna five one delta

If you do not receive a landing clearance before your decision height or if for any reason you need to abandon the approach see the last part of this flight example.

After landing you will be told to vacate the runway

Omaha Tower - cessna five one delta turn right any intersection

You - cessna five one delta

After vacating Tower will hand you off to ground

Omaha Tower - cessna five one delta contact Omaha Ground one two one point niner

You - one two one point niner cessna one five delta

Select the ground frequency (121.9)

You - Omaha Ground cessna five one delta request taxi instructions

Omaha Ground - cessna five one delta taxi to park niner via golf cessna five one delta

You - Taxi to park niner via golf cessna five one delta

Taxi back to the ramp your flight is complete

If you need to abort the landing declare a [Missed Approach](#)

You- cessna five one delta missed approach I L S runway one four right

Omaha Tower - cessna five one delta fly published missed

Fly the publish missed approach and comply with any other instructions the tower issues

You will be told to contact Approach, when checking in request another approach

Omaha Tower - cessna five one delta contact Omaha Approach one two four point five

You - one two four point five cessna five one delta

after tuning to 124.5

You - Omaha Approach cessna five one delta with you at two thousand request another approach

Omaha Approach - cessna five one delta roger fly heading three three zero climb and maintain three thousand expect vectors to I L S runway one four right approach

You - fly heading three three zero leaving two thousand climbing three thousand cessna five one delta

Continue with the arrival as above.

Example IFR with a SID and STAR

Having started up Flight Simulator select Select Flights from the Flights menu. Choose 'VoxATC Kansas City to Minneapolis St Paul Intl IFR' from the list of 'My Saved Flights'. You will be positioned on the general aviation ramp at Kansas City International Airport with a flight plan to Minneapolis St-Paul International

Select VoxATC from the modules menu and check 'Enable VoxATC' and 'Display Prompt Window'. The [VoxATC Panel](#) will guide you by telling when to tune the comm1 radio and exactly what to say at any time. Click the OK button.

Tune the comm1 radio to the ATIS (Automatic Terminal Information Service) frequency, at Kansas City International the ATIS frequency is 128.35.

The recorded ATIS message gives various weather details, the altimeter setting, the current runway in use and a phonetic code letter. It is important to note the current ATIS code (announced as "Information" within the ATIS message) as you will use this when contacting ATC units at Kansas City International. Also set your altimeter to the setting given.

Contact delivery to obtain the departure clearance.

Tune the com radio to 135.7 and make [Initial Contact](#) with the clearance controller.

To do this listen a while on the frequency to ensure that no one is currently speaking, key the Microphone (press the space bar) and say

"International Clearance lear one one five one delta"

and unkey the mike (release the spacebar).

It is important to remember to key the mike before saying anything, or an embarrassing silence will ensue.

The controller will come back with "lear one one five one delta International Clearance go ahead".

From now on is what you say will be in **bold** the reply from the controller in *italics*.

You should now make a [Departure Clearance Request](#)

You - lear one one five one delta ready for clearance minneapolis saint paul

You should be ready to note down the key points of the [Departure Clearance](#)

International Clearance - lear one one five one delta cleared to minneapolis saint paul international airport chief three departure saint joseph transition then as filed squawk three zero one three

Should you need the clearance repeated say **lear one one five one delta say again**

You - lear one one five one delta is cleared to minneapolis saint paul international airport chief three departure saint joseph transition then as filed three zero one three

International Clearance - lear one one five one delta read back correct

You - lear one one five one delta

You are now ready to taxi. Set the comm1 radio to the Kansas City Ground frequency 121.65

When the frequency is clear establish contact and make a [Taxi Request](#)

You - International Ground lear one one five one delta at gate golf one zero with information bravo ready taxi with clearance

International Ground - lear five one delta taxi to runway one niner right via delta and mike and golf and alpha

Read this back and start taxiing to runway zero one left using taxiways bravo and alpha. See [Finding your way to the takeoff runway or parking at your destination](#) if you need help navigating to the runway.

You - taxi to runway one niner right via delta and mike and golf and alpha lear five one delta

Taxi out to the runway hold.

As you approach the holding point for runway zero one left you will be issued with a [Contact Instruction](#) by the Ground controller.

International Ground - lear five one delta contact International Tower one two five point seven five

You - one two five point seven five lear five one delta

After your pre-takeoff checks select the tower (125.75) frequency and when the frequency is clear make your [Takeoff Request](#)

You - International Tower lear five one delta ready for takeoff

If the runway is not available, the tower controller will issue a [Hold Position Instruction](#), otherwise you will be cleared for takeoff.

International Tower - lear five one delta wind one eight seven at one zero cleared takeoff

You - cleared takeoff lear five one delta

After takeoff fly the chief three departure saint joseph transition and climb to eight thousand. If you don't have the plates proceed to the Saint Joseph VOR at 8000.

When you are approximately 5 miles from the airport the Tower will hand you over to Kansas City Departure

International Tower - lear five one delta contact Kansas City Departure one two four point seven

You - one two four point seven lear five one delta

Set the comm1 radio frequency to 124.7 and make an [Initial Contact After Handover](#).

You - Kansas City Departure lear five one delta with you at two thousand

(give your present altitude)

Kansas City Departure - lear five one delta roger

As you approach the limits of the Kansas City International class B airspace you will be handed over to Minneapolis City Center

Kansas City Departure - lear five one delta contact Minneapolis Center one one niner point six

You - one one niner point six lear five one delta

Set the comm1 radio frequency to 127.9 and make an [Initial Contact After Handover](#).

You - Minneapolis Center lear five one delta with you at eight thousand

Minneapolis Center - lear five one delta roger altimeter two niner niner six

You - altimeter two niner niner six

As you approach the end of the departure (Saint Joseph VOR) you will be stepped up toward your cruise altitude.

Minneapolis Center - lear five one delta climb and maintain one two thousand

You - climb and maintain one two thousand lear five one delta

While you are enroute you may be instructed to contact the center controller on a different frequency. Read back the new frequency, tune to the new frequency and make [Initial Contact After Handover](#).

As you approach Eppley the center controller will instruct you to descend via the kasper two arrival mason city transition

Minneapolis Center - lear one five delta descend via the kasper two arrival mason city transition

You - descend via the kasper two arrival mason city transition lear five one delta

Plan your descent so that you arrive at the end point of the procedure (SLIKK) at 6000.

If you don't have the approach plate head for the SLIKK intersection

You will then be handed over to minneapolis approach

Minneapolis Center - lear five one delta contact minneapolis approach one two five point zero

You - one two five point zero lear five one delta

Tune the comm1 radio to 125.0 and make an [Initial Contact After Handover](#).

You - minneapolis approach lear five one delta with you at five thousand

Minneapolis approach - lear five one delta roger minneapolis saint paul international altimeter two niner niner two

You - altimeter two niner niner two lear five one delta

Continue on the arrival procedure, as you approach SLIKK minneapolis approach will issue vectors to your final approach.

Minneapolis Approach - lear five one delta fly heading one two zero descend and maintain three thousand expect vectors to I L S runway three zero left approach

You - fly heading one two zero descend and maintain three thousand lear five one delta

You will receive further [Heading Instructions](#) and [Altitude Instructions](#) until you are ready to establish yourself on the localizer when you will receive an [Approach Clearance](#)

Minneapolis Approach - lear five one delta maintain two thousand seven hundred until established on localizer cleared for I L S runway three zero left approach monitor minneapolis tower one one niner point niner seven

You - maintain two thousand seven hundred cleared for I L S runway three zero left approach one one niner point niner seven lear five one delta

You have been issued a [Monitor Instruction](#) so just tune to the tower frequency and listen, no contact is required.

Tune to Minneapolis Tower 119.97

You should soon be cleared to land

Minneapolis Tower - lear five one delta cleared to land runway three zero left wind one eight seven at one zero

You - cleared to land runway three zero left lear five one delta

If you do not receive a landing clearance before your decision height or if for any reason you need to abandon the approach see the last part of this flight example.

After landing you will be told to vacate the runway

Minneapolis Tower - lear five one delta turn right any intersection

You - lear five one delta

After vacating Tower will hand you off to ground

Minneapolis Tower - lear five one delta contact minneapolis ground one two one point eight

You - one two one point eight lear one five delta

Select the ground frequency (121.8)

You - minneapolis ground lear five one delta request taxi instructions

Minneapolis Ground - lear five one delta taxi to gate charlie eight via alpha and charlie and papa

You - taxi to gate charlie eight via alpha and charlie and papa lear five one delta

Taxi back to the ramp your flight is complete

If you need to abort the landing declare a [Missed Approach](#)

You- lear five one delta missed approach I L S runway one four right

Minneapolis Tower - lear five one delta fly published missed

Fly the publish missed approach and comply with any other instructions the tower issues

You will be told to contact Approach, when checking in request another approach

Minneapolis Tower - lear five one delta contact Minneapolis Approach one two five point zero

You - one two five point zero lear five one delta

after tuning to 125.0

You - Minneapolis Approach lear five one delta with you at two thousand request another approach

Minneapolis Approach - lear five one delta roger fly heading three three zero climb and maintain three thousand expect vectors to I L S runway three zero left approach

You - fly heading three three zero leaving two thousand climbing three thousand lear five one delta

Continue with the arrival as above.

Creating Flights For VoxATC

Start FSX and select Free Flight from the menu list on the left. Click on the flight planner button and create and save the flight plan. Setup the weather, aircraft etc and then save the flight. Click the fly now button and start the flight. Set the VoxATC options and then enable VoxATC.

Always ensure that VoxATC is not enabled before ending or resetting a flight or loading a different one.

Starting Enroute

If you start VoxATC with the aircraft further than 6 nm from the flight plan departure airport, VoxATC will assume you are enroute. This is useful if you want to start a flight somewhere along your planned route or if you want to practice arrivals and approaches.

After starting VoxATC you will be prompted to tune to and contact an enroute facility (Approach or Center). After making contact the flight plan may be continued as if started from the departure airport.

Registration

To obtain a registration code or to enter a serial number or registration code to register VoxATC, go to VoxATC on the start menu and select 'Register VoxATC'.



Click on 'Get Registration Code' to obtain a code to register VoxATC. Internet Explorer will be started and a web page loaded which will enable you to get a registration code.

Once you have a serial number or registration code, enter it into the text box and click register. If the code or number is valid, a message box will confirm that VoxATC is now registered.

Option Menus

While running VoxATC you can display the current options for the stage of your flight by pressing the 0 'zero' key on your keyboard. This will display a numbered list in the [VoxATC Panel](#). You can

make a selection by keying the number of the item (1 is always cancel). A menu may have several pages of options so the first and last items select the previous or next menu page as appropriate. Not all stages of the flight have menus available. Currently there are three menus:

Taxi Menu

After receiving taxi instructions the taxi options menu can be displayed. This displays options to request taxi to any of the runways available at your current airport.

Enroute Menu (IFR)

During the enroute phase of your IFR flight the IFR Enroute Menu is available. This contains options for; [Altitude Change Requests](#), [Emergencies](#), [Weather Avoidance Request](#) and [Request Descent](#).

Enroute Menu (VFR)

While flying enroute VFR, the VFR Enroute Menu is available. This contains options to make a [Position Fix Request](#) with and without a bearing to your destination.

Arrival Menu

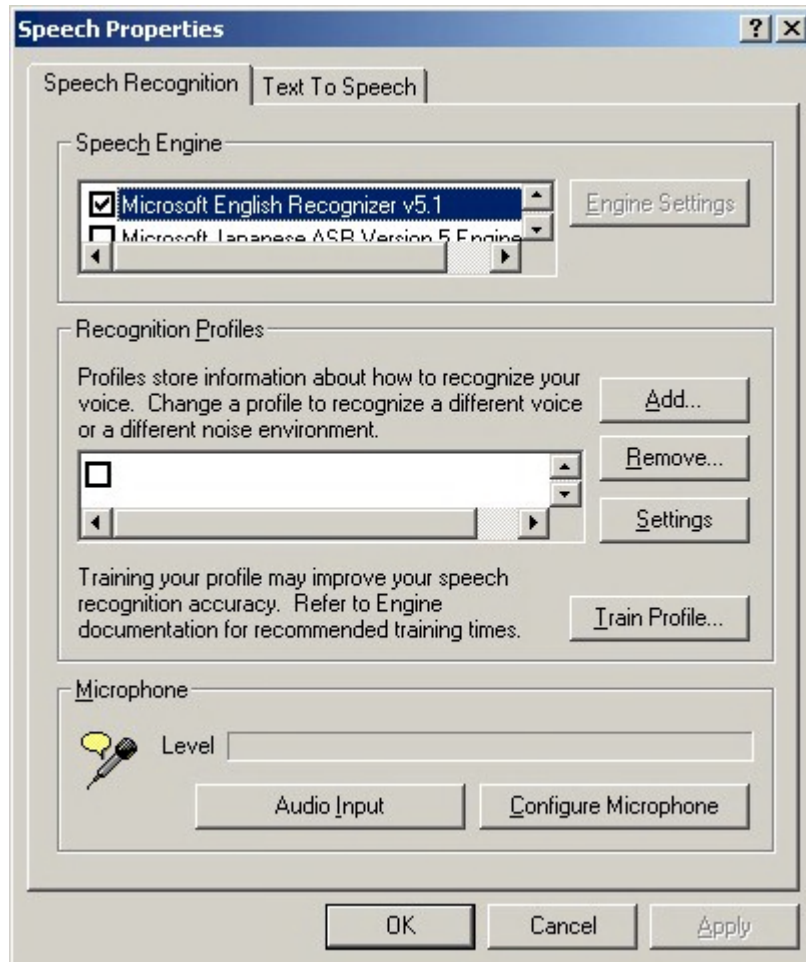
When being vectored to an approach or after being cleared for a non-vectored approach the Arrival Options Menu is available. From this you can select to request any of the approaches available at the destination airport.

FSX Settings

For best results the built in ATC and aircraft traffic should be disabled. After loading FSX click on the 'Settings' item on the left hand menu. Click the General button and ensure 'Show ATC text' is unchecked, Click the Sound button and ensure that the Voice box is unchecked. Click the 'Customize...' button in Display Settings. Click on the 'Traffic' tab and set Airline and General Aviation traffic to 0 %.

Setting up Speech Recognition

After installing the Microsoft Speech SDK (or any other SAPI 5 Compliant speech recognition system) you should set up the microphone you will be using and initially train the recognition engine to recognize your voice. Select the Speech icon from the control panel and the following dialog will be displayed.



A default profile should be selected, if not click on the Add button. Click on the Train Profile button and run through as many of the training scripts as you have time for.

VoxATC Reference

Call-Signs

Each aircraft and each air traffic control unit has its own call sign. Examples of aircraft control signs are cherokee one niner five six delta (N1956D) and cessna one two tree six bravo (N1236B). In these cases the call-signs are formed from the aircraft registration substituting a type designation for the N prefix. Call-signs may be shortened to the type, the last two digits or letters, cessna one one five one delta becoming cessna five one delta. A controller may shorten an aircraft call-sign after initial contact has been established. You should only use your shortened call-sign after the controller. Air traffic control unit call-signs are formed from their location and designated function (Minneapolis Ground, Omaha Tower, Kansas City Approach being examples).

Commercial operators may assign a call-sign containing a prefix and a number such as american218 or united316.

ATC call-signs may be shortened to the type of unit you are calling, thus 'international ground' becomes 'ground' or omaha approach becomes 'approach'. If you are having recognition problems you could try doing this (see [Trouble Shooting](#)).

Initial Contact

When first making contact with an ATC unit that you have not been handed over to you should do the following:

Select the frequency of the ATC unit.

Listen to ensure that no existing exchange is ongoing between the controller and an aircraft, wait for a suitable pause.

Make the first call (ATC unit call-sign followed by your call-sign)

Kansas City Approach cessna one one five one delta

After a short pause you should hear either of the following:

cessna one one five one delta Kansas City Approach go ahead. In this case continue with your report/request.

or

cessna one one five one delta Kansas City Approach standby. In this case wait and say nothing further until you are called back, the controller is busy with another aircraft.

Contact Instruction

Different ATC units have different areas of responsibility both functionally and geographically. When passing an aircraft on to another unit a controller is said to perform a handover. When this is done the aircraft is told to contact the new unit.

contact <call-sign> <frequency>

the frequency should be read back

Example

cessna five one delta contact international tower one two eight point two

one two eight point two cessna five one delta

The aircraft details are also passed to the new unit and thus do not have to be given on initial contact. See [Initial Contact After Handover](#).

Monitor Instruction

Similar to a [Contact Instruction](#) except that no check in is required from you. Just tune and listen

monitor <call-sign> <frequency>

The frequency should be read back

Example:

cessna five one delta monitor Omaha Tower one three two point one

one three two point one cessna five one delta

Initial Contact After Handover

After an in flight handover it is unnecessary to pass you full details all that is required is

<ATC unit call-sign> <aircraft call-sign> with you at <altitude>

Example:

Kansas City Departure cessna five one delta with you at two thousand

cessna five one delta roger

Traffic Advisory

These are issued by center controllers and have the following format

<aircraft call-sign> traffic <clock direction> <distance> <altitude> <heading>

they should be acknowledged with 'roger'.

Example:

cessna five one delta traffic eleven o'clock 3 miles five thousand southbound

roger cessna five one delta

Altitude Instructions

Issued by Approach, Tower, Departure or Center. They should be complied with immediately and read back in full.

climb and maintain <altitude>

descend and maintain <altitude>

the read backs can have the following formats -

leaving <present altitude> climbing <assigned altitude>

leaving <present altitude> descending <assigned altitude>

Examples:

cessna five one delta descend and maintain two thousand

leaving four thousand descending two thousand cessna five one delta

cessna five one delta climb and maintain four thousand

leaving two thousand climbing four thousand cessna five one delta

Heading Instructions

Issued by Approach, Tower, Departure or Center. They should be complied with immediately and read back in full.

fly heading <digit> <digit> <digit>

turn right heading <digit> <digit> <digit>

turn left heading <digit> <digit> <digit>

Example:

cessna five one delta turn left heading one one zero

turn left heading one one zero cessna five one delta

Altimeter Setting

The current local altimeter setting is provided by ATC when required, and should be read back.

altimeter <digit> <digit> <digit> <digit>

Example:

cessna five one delta radar contact altimeter two niner niner six

altimeter two niner niner six cessna five one delta

Hold Position Instruction

Issued by the tower controller in response to a takeoff request when the active runway is currently in use. Requires read-back.

Comply with this instruction by staying where you are and waiting for the controller to call you back.

Example:

cessna five one delta ready for takeoff

cessna five one delta hold position

hold position cessna five one delta

Frequency Change Request

When you are currently being serviced by an ATC unit you must request a frequency change before leaving your current frequency unless instructed to do so. A frequency change request has the following format

<aircraft call-sign> request frequency change to <ATC unit call-sign> <frequency>

Wait and acknowledge the approval before changing frequency

Example:

cessna five one delta request frequency change to Kansas City Approach one one niner point zero

cessna five one delta frequency change approved

cessna five one delta

Temporary Frequency Change Request

When you are in contact with an ATC unit and wish to change frequencies temporarily (to listen to an ATIS broadcast or to talk to an FSS) you must make the following request.

<call-sign> request temporary change to <call-sign> <frequency>

Example:

cessna five one delta request temporary change to Columbia radio one two two point zero

cessna five one delta report back on frequency

cessna five one delta

When you return to the frequency report in as below

<call-sign> back on frequency

Example:

cessna five one delta back on frequency

cessna five one delta roger

Position Report

A position report has the following format

<digits> miles <direction> <location> at <altitude>

or

off <airport> at <altitude>

The locations given must be one of those recognized by VoxATC (a named FSX airport or navaid).

Examples:

cessna one one five one delta one six miles southwest Mason City at four thousand five hundred

cessna one one five one delta off Kansas City Downtown at two thousand

Transponder Setting

The transponder aids the identification of an aircraft on a controller's radar display. Each aircraft being controlled within an airspace is assigned a code to set the transponder to. This code is detected by the ATC radar. An aircraft is instructed by ATC to 'squawk' that code. The transponder has five modes selected by the knob on the right. OFF, STBY and TEST are modes in which the transponder is inactive, when ON the transponder's code setting will be detected by the ATC radar and when in ALT mode the aircraft's altitude will also be displayed on the controller's radar display. The IDENT key is used to highlight the aircraft's position on the controller's display.

The transponder in FSX has no mode selection so the transponder is set by default to be in the ALT position. Also there is no IDENT. When running VoxATC IDENT is activated by pressing the 'I' key.

Squawk

This is an instruction to change the [Transponder Setting](#). it has the form

squawk <digit> <digit> <digit> <digit>

It should be read back as given or just the four digits

Example

cessna five one delta squawk four seven one one

four seven one one cessna five one delta

Proceed Direct

This instruction is given when ATC wants you to go directly to a given waypoint

proceed direct <location>

it should be read back

Example:

cessna five one delta proceed direct Saint Joseph

proceed direct Saint Joseph cessna five one delta

Upon reaching the waypoint you should resume your own navigation from that waypoint (fly your flight plan).

ATIS

Automatic Terminal Information Service, a recorded announcement on its own dedicated frequency which provides weather, arrival and departure information. The recording is updated at regular intervals, each recording being assigned a phonetic letter identifier (e.g. information bravo) which is used to indicate to ATC which announcement you have heard.

Clearance Delivery

ATC unit at class B and C airports from which clearances may be obtained for an IFR flight or departure instructions for a VFR flight.

Departure Clearance Request

Request for a departure clearance, has the following form

<call-sign> request departure clearance <airport>

Example:

cessna one one five one delta request departure clearance Eppley

Departure Instructions Request

A request made to clearance delivery when departing VFR from a class B or C airport it has the form

<call-sign> will depart <direction> for <location> at <altitude>

Example:

cessna one one five one delta will depart north for Eppley at six thousand

The locations given must be one of those recognized by VoxATC (any named FSX airport or navaid).

Departure Clearance

An IFR departure clearance has the following form and should be read back in full.

<call-sign> cleared to <location> [<Standard Instrument Departure name> <transition name> then]
[cleared] as filed maintain <altitude> squawk <digit> <digit> <digit> <digit>

Examples:

cessna one one five one delta cleared to Eppley Airport Chief two departure Saint Joseph transition then as filed maintain three thousand squawk one zero seven six

cleared to Eppley Airport Chief two departure Saint Joseph transition then as filed maintain three thousand squawk one zero seven six cessna one one five one delta

cessna one one five one delta cleared to Minneapolis International Airport cleared as filed maintain three thousand squawk one zero seven six

cleared to Minneapolis International Airport cleared as filed maintain three thousand squawk one zero seven six cessna one one five one delta

Ground

The ATC unit that controls movements on the airport ramps, aprons and taxiways.

Taxi Request

On first contact with ground control on departure a taxi request should be made with your current location and ATIS code

at <airport location> with information <ATIS code> request taxi [vfr] <destination location>

or if a departure clearance has been received

at <airport location> with information <ATIS code> ready taxi with clearance

Currently the only airport location recognized by VoxATC is 'the ramp'.

The destination locations given must be one of those recognized by VoxATC (any named FSX airport or navaid).

Examples:

cessna one one five one delta at the ramp with information bravo request taxi Eppley

cessna one one five one delta at the ramp with information bravo ready taxi with clearance

The response to this request will be an instruction to taxi to the current runway. This may include the designations of the taxiways to use

Example:

cessna five one delta taxi to runway zero one left via bravo

The taxi instruction should then be read back

taxi to runway zero one left via bravo cessna five one delta

Tower

The tower controller controls the active runway and the airspace in the immediate vicinity of the airport.

Takeoff Request

When ready to depart make this request to the tower

ready for takeoff

Example:

cessna three six bravo ready for takeoff

Takeoff Clearance

Given by the tower controller. Do not stray onto the active runway without one of these

cleared takeoff

it requires a read back

Example:

cessna five one delta cleared takeoff surface wind calm

cleared takeoff cessna five one delta

Pattern Entry Instructions

Tower controllers issue two types of pattern entry instructions

left traffic <runway> (indicating a left downwind entry)

and

make straight in <runway>

both must be read back

Examples:

cessna five one delta left traffic runway zero three

left traffic runway zero three cessna five one delta

cessna five one delta make straight in runway zero three

make straight in runway zero three cessna five one delta

Landing Clearance

Issued by the Tower do not touch down at a class B - D airport without one.

cleared to land <runway>

must be read back

Example

cessna five one delta cleared to land runway three two left

cleared to land runway three two left cessna five one delta

Missed Approach

If for any reason you can't complete an instrument approach declare a missed approach

<aircraft call-sign> missed approach <procedure name>

Example:

cessna five one delta missed approach I L S runway one four right

cessna five one delta fly published missed

Fly the published missed approach and comply with any other instructions the tower issues

You will be told to contact Approach, when checking in request another approach

Example:

cessna five one delta contact Omaha Approach one two four point five

one two four point five cessna five one delta

after tuning to 124.5

Omaha Approach cessna five one delta with you at two thousand request another approach

cessna five one delta roger fly heading three three zero climb and maintain three thousand expect vectors to I L S runway one four right approach

fly heading three three zero leaving two thousand climbing three thousand cessna five one delta

Departure

The departure controller is responsible for aircraft departing airports in class B and C airspaces. After takeoff from a class B or C airport aircraft are handed off from the Tower to Departure.

Center

Air Route Traffic Control Centers control the enroute phase of an IFR flight and provide flight following (traffic advisories) for VFR flights.

Altitude Change Requests

When flying enroute IFR you can request altitude changes as follows

<aircraft call-sign> request higher/lower

Example:

cessna five one delta request lower

or

cessna five one delta request higher

Request Traffic Advisories

When flying enroute VFR you may want to request traffic advisories. This request is usually combined with a [Position Report](#) and destination

<aircraft call-sign> request traffic advisories

Example:

cessna one one five one delta one zero miles south Saint Joseph at five thousand vfr to Eppley request traffic advisories

Hold Instruction

While enroute IFR you may be held at a VOR the hold instruction has the format

hold <direction> <VOR name> on radial <digit> <digit> <digit>, <digit> mile legs expect further clearance in <digit> minutes

when ATC is ready for you to continue beyond the hold

<call-sign> cleared via last routing

Example

cessna five one delta maintain seven thousand hold south Saint Joseph on radial three five six five mile legs expect further clearance in one zero minutes

maintain seven thousand hold south Saint Joseph on radial three five six five mile legs cessna five one delta

Subsequently

cessna five one delta cleared via last routing

cessna five one delta

Descend Via STAR

An instruction issued by ATC that you should descend via a STandard ARrival. Follow all altitudes as given in the procedure

cessna five one delta descend via Kaspr Two arrival Fort Dodge transition

The clearance should be read back in full

descend via Kaspr Two arrival Fort Dodge transition cessna five one delta

Cleared Via STAR

An instruction issued by ATC that you are cleared via a STandard ARrival. ATC will issue altitude instructions for the descent.

cessna five one delta cleared via Kaspr Two arrival Fort Dodge transition descend and maintain niner thousand

The clearance should be read back in full

descend via Kaspr Two arrival Fort Dodge transition descend and maintain niner thousand cessna five one delta

Approach

The Approach controller handles arrivals incoming to class B and C airports

Instrument Approach Procedure

A published procedure for approach to a runway

Example

I L S runway zero one left approach

Approach Clearance

Issued before the start of an approach procedure

cleared for <procedure name>

It should be read back in full

Example:

cessna five one delta maintain two thousand four hundred until established on localizer cleared for I L S runway one four right approach

**maintain two thousand four hundred cleared for I L S runway one four right approach
cessna five one delta**

Approach Requests

These indicate your intentions/desires to the approach controller

request transit bravo airspace at <altitude> to <location>

request advisories through the charlie airspace at <altitude> to <location>

landing <location>

The locations given must be one of those recognized by VoxATC (FSX named airports or nav aids).

Weather Avoidance Request

If you are enroute IFR and require vectors around weather ahead you can make the following request

request vectors around buildup ahead

The controller will then vector you around the weather ahead and back on track.

Example:

cessna five one delta request vectors around buildup ahead

cessna five one delta turn left heading two four zero

turn left heading two four zero cessna five one delta

Further instructions are issued to avoid the weather and return you to your previous track until.

cessna five one delta turn left heading one eight zero resume own navigation

Flight Service Station

For the purposes of VoxATC the Flight Service Station (FSS) is the ATC unit that opens and closes VFR flight plans.

Initial Contact FSS

The flight service specialist at the Flight Service Station you are contacting will be monitoring several remote communications outlets at different locations and on different frequencies. In order for them to reply to you they need to know where from and on what frequency you called. An initial call should thus have the format:

<FSS call-sign> <your call-sign> <frequency> <location>

Example:

Columbia radio cessna one one five one delta one two two point two Mason City

cessna one one five one delta Columbia radio go ahead

Opening / Closing Flight Plans with an FSS

Use the following for opening and closing flight plans

<call-sign> request you open my flight plan to <location> at <time>

<call-sign> request you close my flight plan from <location> at <time>

Example:

cessna one one five one delta request you open my flight plan to Eppeley at one zero two zero zulu

cessna one one five one delta request you close my flight plan from Kansas City International at one zero two zero zulu

Unicom / Multicom

Arriving at Unicom Airports

When arriving at an airport without a tower on a VFR flight plan, several options for traffic announcements will be displayed in the [VoxATC Panel](#).

1. Turning downwind
2. Turning base
3. turning final
4. On final
5. Clear of runway

Make the appropriate announcement by selecting the relevant option.

For IFR, the [VoxATC Panel](#) will display the appropriate announcement for the phase of the flight.

turning downwind

<airport> traffic <call-sign> turning <left/right> downwind for <runway> <airport>

turning base

<airport> traffic <call-sign> turning <left/right> base for <runway> <airport>

final

<airport> traffic <call-sign> turning final for <runway> <airport>

clear of the runway

<airport> traffic <call-sign> clear of <runway> <airport>

Example:

Mason City Traffic cessna one one five one delta turning left base for runway one two Mason City

Mason City Traffic cessna one one five one delta turning final for runway one two Mason City

Mason City Traffic cessna one one five one delta clear of runway one two Mason City

Departing Unicom Airports

Newton and Mason City airports have no tower, only a unicom operator who can provide airfield information.

Before taxiing call the Unicom operator

You - Mason City Unicom cessna one one five one delta

Unicom - cessna one one five one delta Mason City Unicom go ahead

You - cessna one one five one delta at the ramp request field advisory

Unicom - cessna one one five one delta altimeter two niner zero zero surface wind calm favored runway one two

You - altimeter two niner zero zero cessna one one five one delta

There is no controller at the airport you must announce your intentions to other aircraft and listen to what others are doing. Calls should be addressed to <airport> traffic and should end with a restatement of the airport name.

When taxiing to the runway

<airport> traffic <call-sign> taxiing to <runway> <airport>

before takeoff

<airport> traffic <call-sign> taking <runway> departing to the <direction> <airport>

when clear of the airport

<airport> traffic <call-sign> clear of the area to the south <direction> <airport>

Example:

Mason City Traffic cessna one one five one delta taxiing to runway one two Mason City

Mason City Traffic cessna one one five one delta taking runway one two departing to the south Mason City

Mason City Traffic cessna one one five one delta clear of the area to the south Mason City

Position Fix Request

Enroute during a VFR flight while in contact with an ATC unit for traffic advisories you may request a position fix.

<call-sign>request current position fix

or

<call-sign>request current position fix and bearing to<location>

The controller will reply with your position relative to the nearest airport.

Example:

cessna five one delta request current position fix and bearing to eppley

cessna five one delta you are one five miles east newton municipal eppley bearing three two zero at three zero miles

cessna five one delta

Request Descent

While flying enroute and approaching your destination you may come to your TOD (Top of Descent) without having been cleared to a lower altitude by ATC yet. At this point you may make a descent request. ATC will then clear you to an altitude suitable for arrival.

<call-sign>request descent

Example:

lear five one delta request descent

lear five one delta descend and maintain one six thousand

descend and maintain one six thousand lear five one delta

Resume Own Navigation

After receiving vectors from ATC, this instruction will be issued to indicate that you should resume following your flight plan as cleared.

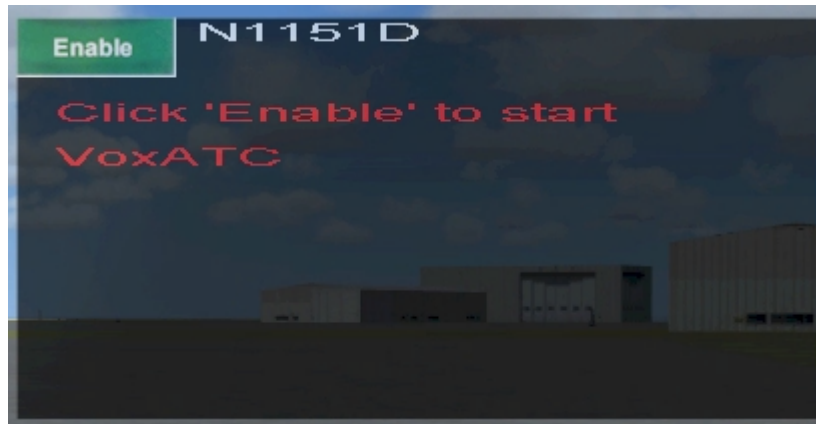
<call-sign>resume own navigation

Example:

cessna five one delta resume own navigation

cessna five one delta

VoxATC Panel



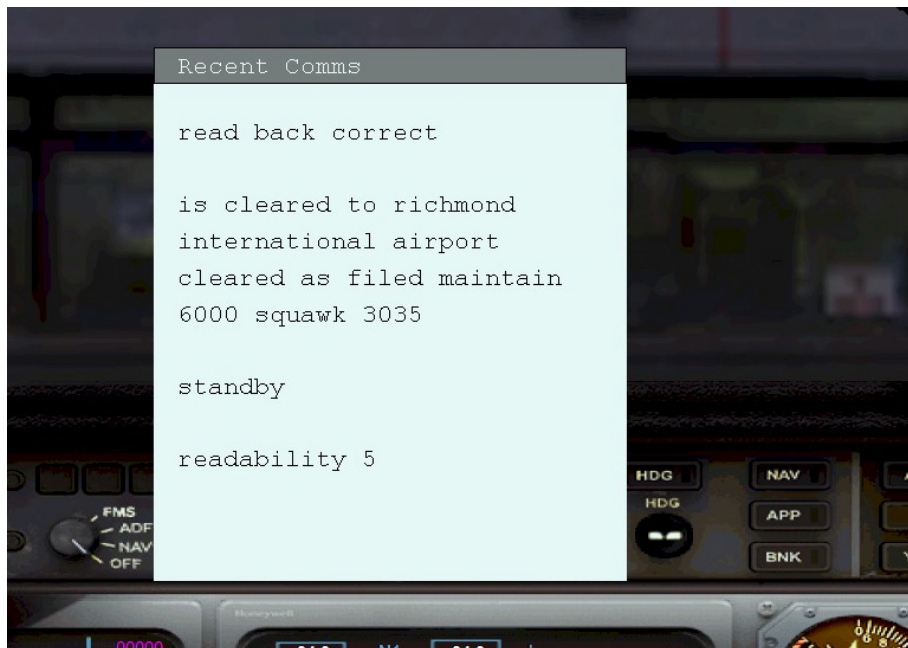
The VoxATC Panel can tell you what frequencies to tune to and what to say. It monitors the flight and listens to any communications you receive from ATC. It will then display instructions in the top part of its window (in red) and what to say (if anything) in the bottom half (in green). Once the PTT button has been pressed and released and the VoxATC Panel recognizes your callsign, the spoken text changes to blue to indicate that it has been transmitted (the VoxATC Panel assumes you have said it). It remains in the window in case you need to repeat it.

A list of options for requests or reports can be displayed by pressing the '0' (zero) key. You can then choose an option by pressing one of the numeric keys (0-9).

If the panel is not visible select Views - Instrument Panel - VoxATC from the FSX menu. If there is no entry for VoxATC in this menu, you need to run the [VoxATC Panel Setup](#).

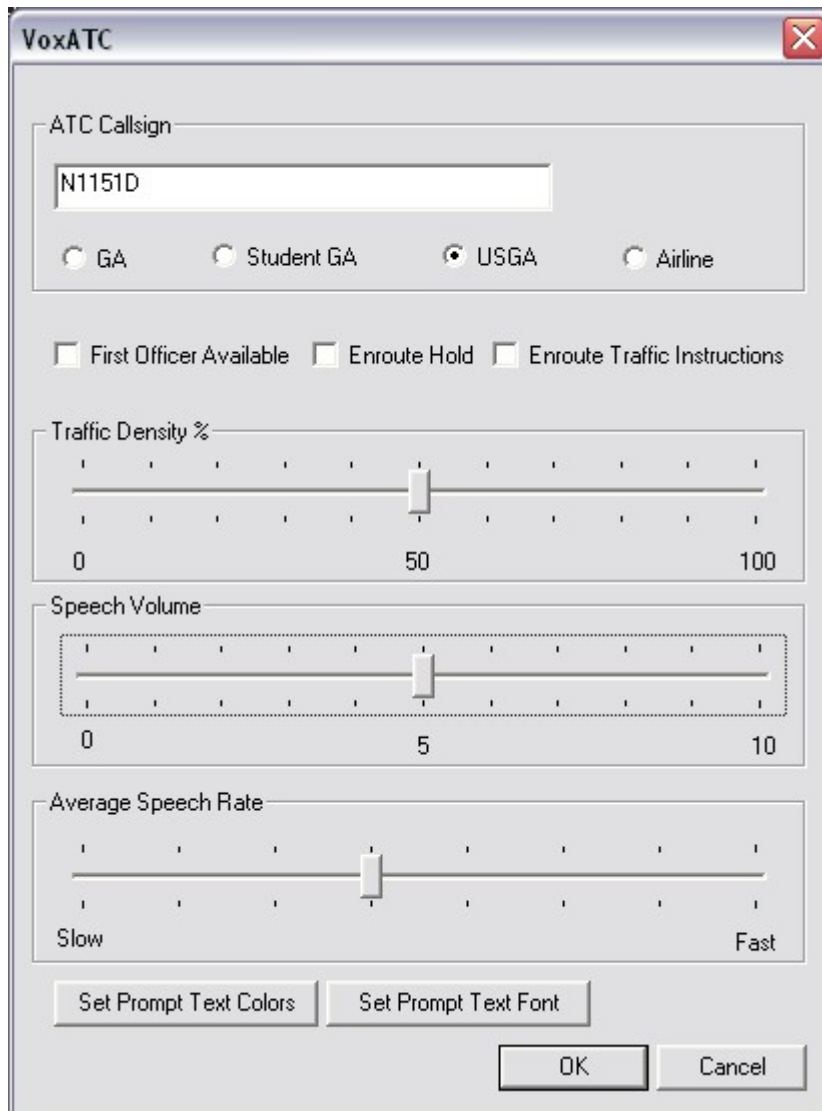
The panel can be resized by moving the mouse cursor to the panel edge (the cursor will change to a double headed arrow) pressing and holding the left mouse button and 'dragging' the panel edge to obtain the required height/width.

Recent Communications



You can display the most recent ATC communications by pressing the 'J' key. This will toggle the display of the last significant comms from ATC. You can also go to the FSX Views menu - Instrument Panels and select 'VoxATC Recent Comms'.

VoxATC Settings



Call-Sign Types

You may choose to use three different types of callsign:

GA - The letters that you specify will be converted into their phonetic equivalents, digits will be converted into their word representations. Thus GBBLM becomes 'golf bravo bravo lima mike' and N12345 'november one two three four five'.

USGA - The same as GA except a leading N becomes the aircraft type. N12345 will become 'cessna one two three four five'.

Airline - Letters will be enunciated as displayed, digits are converted into words. Thus united123 becomes 'united one two three'.

Traffic Density

The density of traffic in VoxATC can be set from the VoxATC settings dialog. This is displayed by selecting 'Modules' on the FSX and 'VoxATC' from the drop down menu.

Speech Volume

The volume of the speech generated by VoxATC can be adjusted on the VoxATC settings dialog, displayed by selecting 'Modules' on the FSX and 'VoxATC' from the drop down menu.

Average Speech Rate

You can adjust the average speed that the controllers and pilots speak on the VoxATC settings dialog. If you feel that the controller's rabbiting or drawling is not to your taste make adjustments here.

Setting Prompt Text Colors

To set the colors used to display text in the prompt window click on the Set Prompt Text. A dialog will be displayed which allows you to select the colours for the instruction text (default red), communications text (text to be spoken, default green) and spoken text (the color prompt text is displayed when the system has heard you say your callsign, default blue).

Setting The Prompt Text Font

To set the font of the text displayed in the prompt window, click on the Set Prompt Text button and use the dialog displayed to select the font to be displayed.

Call-signs and Frequencies

VoxATC uses the frequencies defined by FSX.

Emergencies

You can declare an emergency any time that you are airborne. An emergency call has the following format:

mayday mayday mayday <call sign> <emergency type> <request>

This version of VoxATC has five types of emergency currently defined, these are:

engine failure

fuel low

hydraulic failure

avionics failure

passenger critically ill

You can make any standard request, but will most frequently want vectors to the nearest suitable airport.

Example:

mayday mayday mayday cessna one one five one delta avionics failure request vectors to nearest airport

cessna one one five one delta cleared to Kansas City Downtown fly heading zero seven five descend and maintain five thousand

First Officer Available

When flying an IFR flight plan you can opt to have a first officer available to handle the radio communications, see [Handing Over Radio Communications to the First Officer](#)

Enroute Hold

If you fly an IFR flight plan with some VORs selected as waypoints you can opt to be held at the last VOR more than 40 NM from your destination. Select Enroute Hold on the VoxATC settings dialog. As you approach the hold VOR you will be issued a [Hold Instruction](#) by ATC.

Enroute Traffic Instructions

While flying an IFR flight plan you can opt to be issued with instructions to avoid traffic enroute. Select Enroute Traffic Instructions on the VoxATC settings dialog. From time to time the enroute controllers will then issue avoidance instructions:

Example:

cessna five one delta traffic alert twelve o'clock your level turn left heading two four zero

turn left heading two four zero cessna five one delta

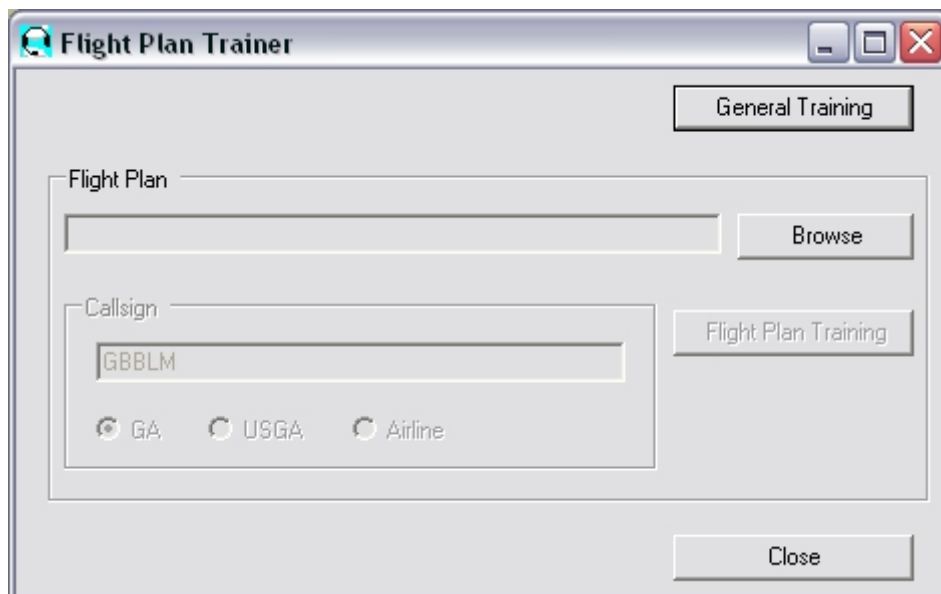
Further instructions are issued to avoid the traffic and return you to your previous track until.

cessna five one delta turn left heading one eight zero resume own navigation

VoxATC Indexer

After installing scenery or aircraft into FSX you must run the VoxATC indexer to update VoxATC's index of scenery and aircraft. A shortcut can be found in your Start Programs menu.

Flight Plan Trainer



The Flight Plan Trainer allows you to train the system in two ways:

General training involves common words and phrases that will be used during any flight

Flight plan training allows you to select a flight plan that you intend to fly and train the recognition system specifically for that flight. The recognizer will be trained for the actual call signs and locations that you will use.

After installing VoxATC you should run through general training at least once. General training can be selected by clicking on the general training button. The recognizer training wizard will then guide you through the training process.

To train the recognizer for a particular flight, browse for the flight file (saved from the FSX) and select a callsign. A callsign must conform to either the airline (<prefix> <digit> <digit> <digit>) or GA (N <digit> <digit> <digit> <digit> <letter>).

When the flight file has been selected and a callsign entered, the Flight Plan Training button will be enabled. After clicking this, a training session for your flight will be generated which you can then proceed with.

Remember:

Speak evenly with your normal tone of voice.

Avoid long pauses, umms and ahhs.

Try to enunciate as clearly as possible.

Don't clip your speech by starting before pressing the space bar and releasing the spacebar too soon.

While today's recognition software does a good job in most circumstances, no system can be 100% accurate, so expect some mis-recognition especially when you are not experienced with VoxATC phraseology.

Setting up a SID and/or STAR

The first few times you setup a SID or a STAR, you may want to use the SID STAR Setup Wizard. This will take you through the process step by step. Run the wizard from from VoxATC start menu (Sid Star Setup Wizard). As you get more experienced you can save time by using the utility described below.

SID & STAR Setup

Load Flight File VoxATC Kansas City Intl to Minneapolis St Paul Intl IFR.FLT loaded

Flight Plan

- STJ VOR
- LMN VOR
- MCW VOR
- FGT VOR
- SLIKK Intesection

SID

Name: chief three

Transition: saint joseph

End Waypoint: Latitude: N39°57.63' Longitude: W94°55.51' ID: STJ Select From FP

Altitude: 8000 Altitude ATC assigned:

STAR

Name: kasper two

Transition: mason city

Start Waypoint: Latitude: N43°5.68' Longitude: W93°19.79' ID: MCW Select From FP

End Waypoint: Latitude: N44°47.90' Longitude: W93°17.21' ID: SLIKK Select From FP

Start Altitude: 12000 Altitude ATC assigned:

End Altitude: 5000

OK Cancel

If you want to add a departure and/or arrival to a previously saved FSX flight with an IFR flight plan, use the Sid Star setup utility (You will find this in the VoxATC start menu). Initially all the fields of the form will be empty and only the Load Flight Plan and Cancel buttons will be enabled. Click on the Load Flight Plan button to select the FSX flight you want to add a procedure to (the flight must use an IFR flight plan). After loading, the flight plan waypoints are displayed in the list box on the left of the form.

Adding a SID

Enter the name of the SID into the SID Name text box. The name should be easily pronounceable, any numerals should be spelt out and letters their phonetic codes. For example a departure with a code of SFD8P would become 'seaford eight papa'. If the SID name is left empty no SID will be added to the flight.

Optionally a transition name can be added. As with the SID name this should be a pronounceable name not just a code.

The end point of the SID, SID/Transition should be entered as a latitude (in N | S ####*##.##' format), longitude (in E | W ####*##.##' format) and and ID. This is the point at which VoxATC will start stepping you up to your cruise height and clear you enroute. If your flight plan includes this waypoint, you can select it in the from the flight plan list of waypoints and then click the Select From FP button. The latitude, longitude and ID for that waypoint will then appear in the text boxes for the SID end waypoint.

The altitude (in feet above MSL) of the endpoint must be entered into the SID altitude text box. If the 'Altitude ATC Assigned' check box is selected, this altitude will be assigned with your departure clearance. Otherwise it is assumed that all vertical navigation is specified in the SID.

Adding a STAR

Enter the name of the STAR into the STAR Name text box. The name should be easily pronounceable, any numerals should be spelt out and letters their phonetic codes. For example an arrival with a code of DPE3H would become 'dieppe three hotel'. If the STAR name is left empty no STAR will be added to the flight.

Optionally a transition name can be added. As with the STAR name this should be a pronounceable name not just a code.

The start and end points of the SID, SID/Transition should be entered as a latitude (in N | S ####*##.##' format), longitude (in E | W ####*##.##' format) and and ID. Both the start and endpoints of your STAR can be selected from the displayed flight plan waypoints. Select from the flight plan list of waypoints and then click on the appropriate Select From FP button. The latitude, longitude and ID for that waypoint will then appear in the text boxes for the STAR start or end point. As you near the start point of the STAR you will receive a clearance from ATC to use that STAR/transition for arrival. When you reach the end point ATC will vector you to your approach.

The altitude (in feet above MSL) of the start and end point must be entered into the STAR altitude text boxes. If the 'Altitude ATC Assigned' check box is selected, this you will be instructed to descend to the start point altitude with your arrival clearance, otherwise you will be instructed to descend via the STAR (all vertical navigation is specified in the procedure).

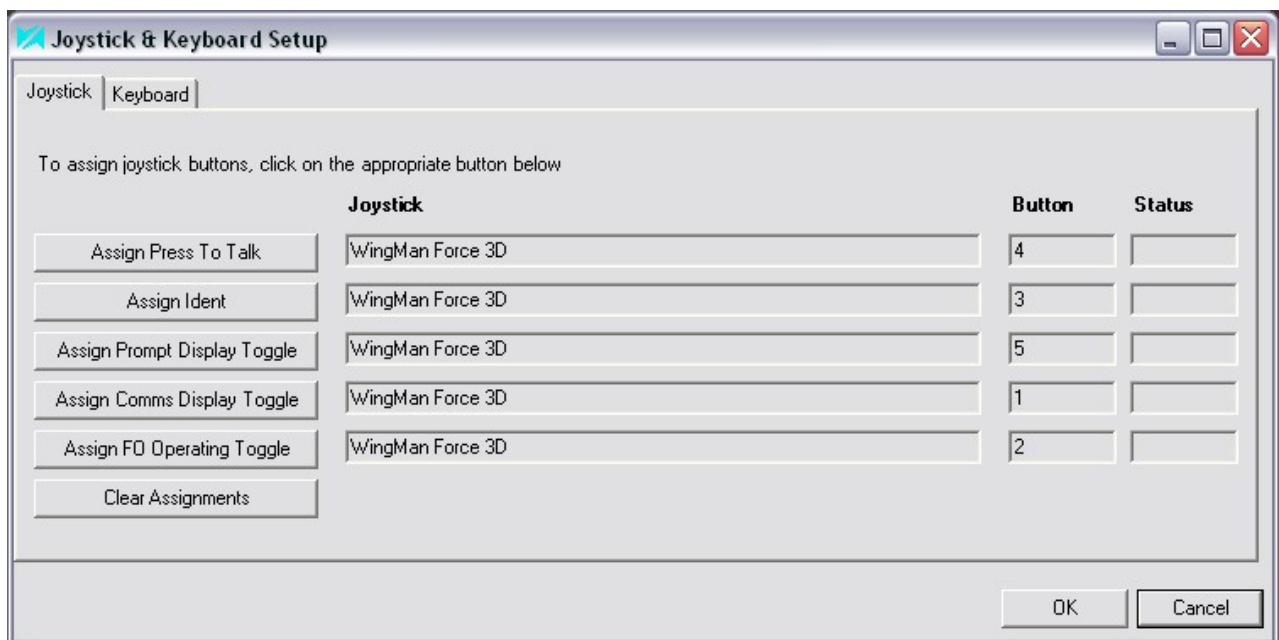
Finishing the SID STAR set up

When you have entered the relevant information for the procedures you wish to use on your flight click the OK button. This will save the procedures for use with the loaded flight.

Editing a previously saved flight

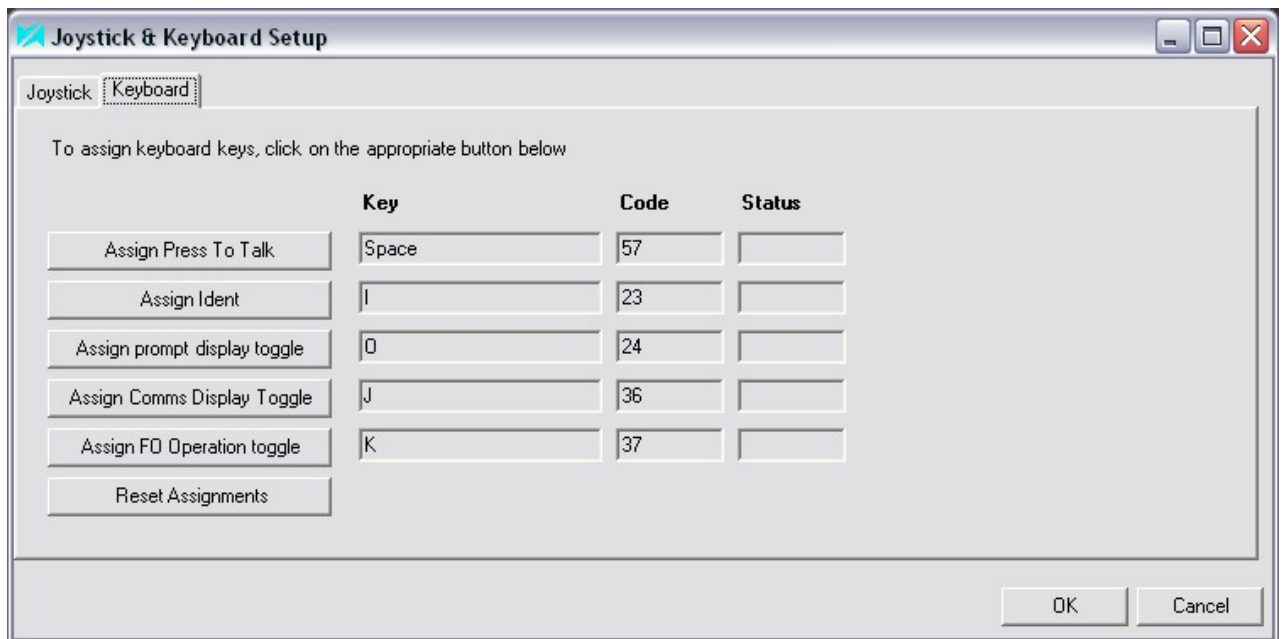
If you load a flight which has previously saved SID and/or STAR, the form will display the settings for those procedures. Any of these settings can be edited in the form. If you want to remove a SID or STAR, ensure that the appropriate Name text box is empty when you click the OK button to save the setup.

Setting up Joystick Buttons & Keyboard Keys



You will probably want to map PTT (press to talk), transponder ident, prompt window display toggle (show/hide), comms (recent) display toggle and FO (First officer) operating (active) toggle to buttons on to your game controllers. This can be achieved by running the Joystick & Keyboard Setup utility from the VoxATC programs menu. Initially your current assignments (if any) will be displayed. To assign PTT, click on the 'Assign Press to Talk' button. The current assignment will be cleared and you should now press the joystick button you want to use for PTT. This button will then be assigned to PTT. The same procedure applies to the other items displayed. The status boxes display 'Pressed' when the assigned buttons are depressed.

The Clear Assignments button removes all existing assignments.

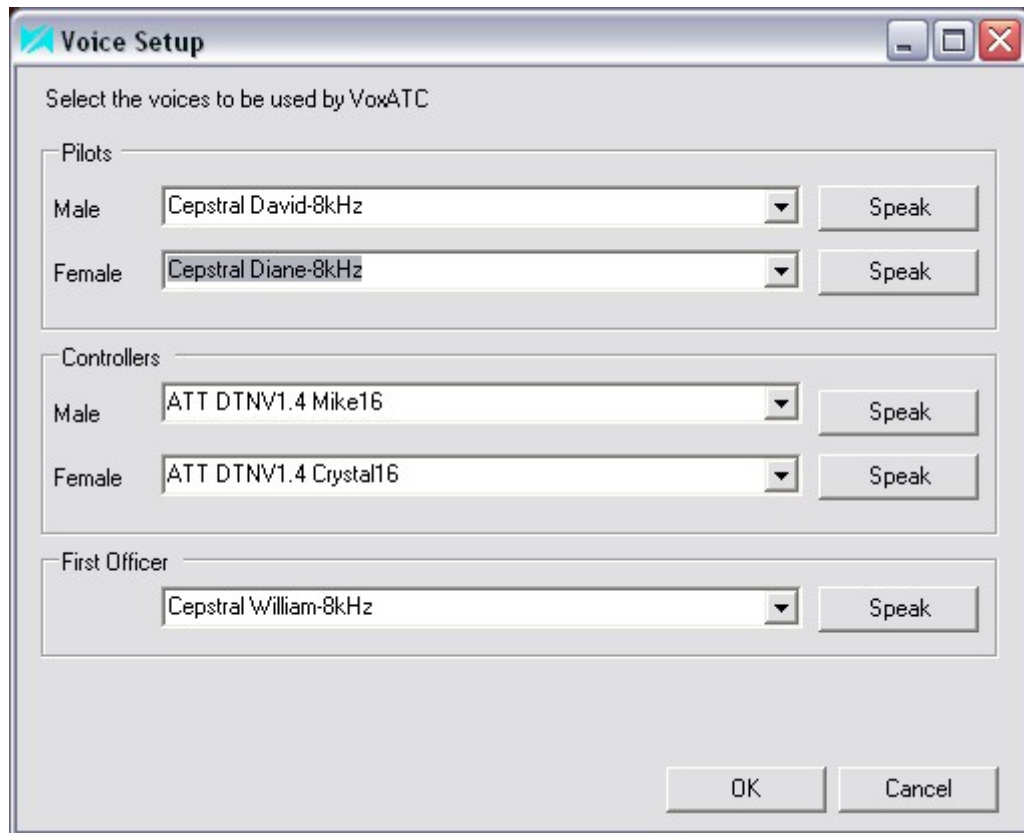


You can also change the keyboard keys that are used for PTT, Ident, prompt window display toggle, comms (recent) display toggle and FO (First officer) operating (active) toggle. To assign PTT, click on the 'Assign Press to Talk' button. The current assignment will be cleared and you should now press the keyboard key you want to use for PTT. This key will then be assigned to PTT. The same procedure applies to the other assignment items.

Not all keys can be assigned including; the digits (0 -9), and Alt. If you try to assign one of these keys your selection will not be accepted until you press a key that can be assigned.

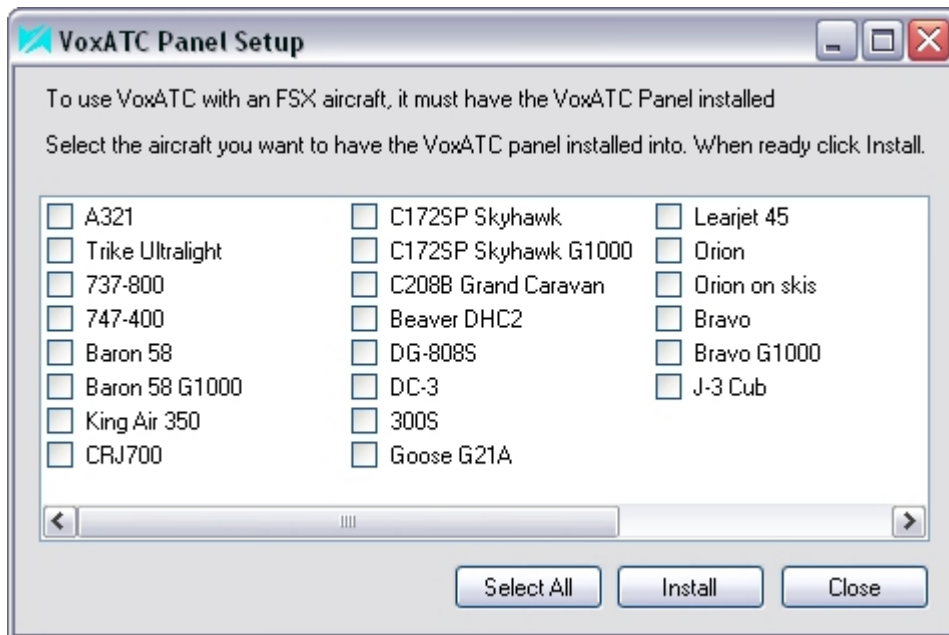
The assignments you make are not saved for use with VoxATC until the OK button is clicked. Cancel will exit without changing any existing assignments.

Setting up the Voices VoxATC will use



The voices that VoxATC will use can be selected by running 'Voice Setup' from the VoxATC program menu (see above). Choose the male and female voices for controllers and pilots from the drop down list of voices installed on your PC and click the 'Speak' button to preview. Some voices can take time to load, so you may have to wait to hear the selected voice. If you have four voices or more installed on your system, it's a good idea to ensure the controllers and pilots are assigned different voices. That way you don't have the same voice talking to itself.

VoxATC Panel Setup



The aircraft you intend to use VoxATC with must have the [VoxATC Panel](#) installed. To do this use the panel setup utility. To run it select Start - All Programs VoxATC X - VoxATC Panel Setup. Select the aircraft from the displayed list or click Select All. After selecting the aircraft click Install to setup the [VoxATC Panel](#) in those aircraft.

Don't forget to run the [VoxATC Indexer](#) and Panel Setup after installing new FSX aircraft.

Finding your way to the takeoff runway or parking at your destination

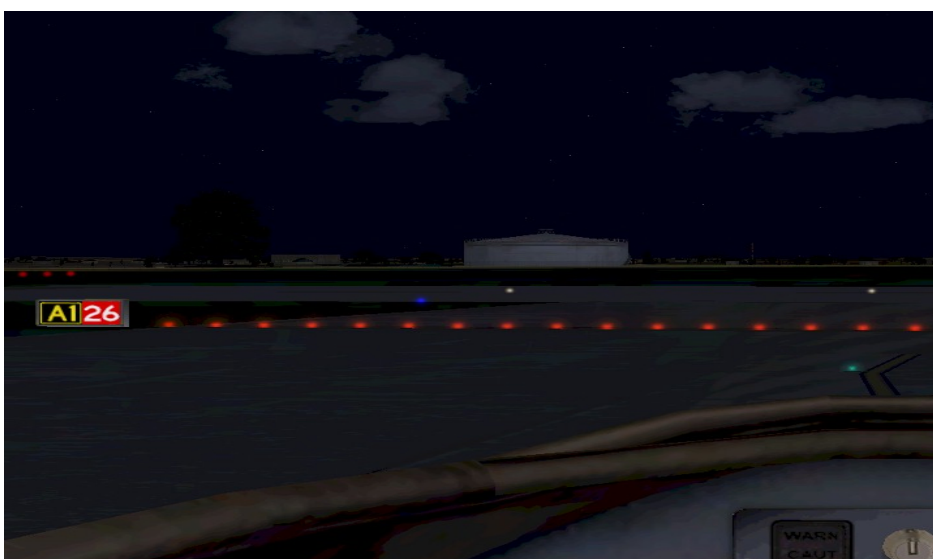
After receiving taxi instructions to your departure runway or, after landing, to parking you can display the taxi route. Press '0' to display the options menu and then press 1 'Show/Hide taxi route'. Your taxi route will be indicated by a series of purple cones positioned about a metre above the taxi way, pointing in the direction of the taxi destination. The threshold of the destination runway or the parking position is marked by two cones apex to apex. The 'Show/Hide taxi route' menu item toggles the display of the taxi route.

Taxi Route Indicated By Green Lights

At airports with a dedicated ground frequency, the route that ATC wants you to follow will be displayed as a line of green lights up the centre of the taxiway. You can then 'follow the greens' to the hold you have been cleared to.



When you reach the holding point, a line of red lights will be displayed across the taxiway. These will be displayed until you receive an onward clearance.



You can still toggle the display of the taxi cones (see above) if you so wish.

Taxiway Centre Light Remover

This is a utility that creates an overlay scenery file for an airport with all the green taxiway centre lights removed. The green lights used to indicate the assigned taxi route can be confused with those already present in the scenery.

By running the taxiway centre light remover, a scenery (.bgl) file for the airport is created in the VoxATC Substitutes scenery area. You should ensure that this scenery area has the highest priority (is at the top of the list of scenery areas). If you add scenery for an airport, you should run this utility again to ensure that the taxiways are correctly overlaid and the green centre lights removed.

When you run the utility, enter the ICAO code for the airport (e.g. EGLL for Heathrow).

Handing Over Communications to the First Officer

When flying larger aircraft, you would normally expect to have a first officer who handles radio communications when you are flying the aircraft. This function is available for IFR flights.

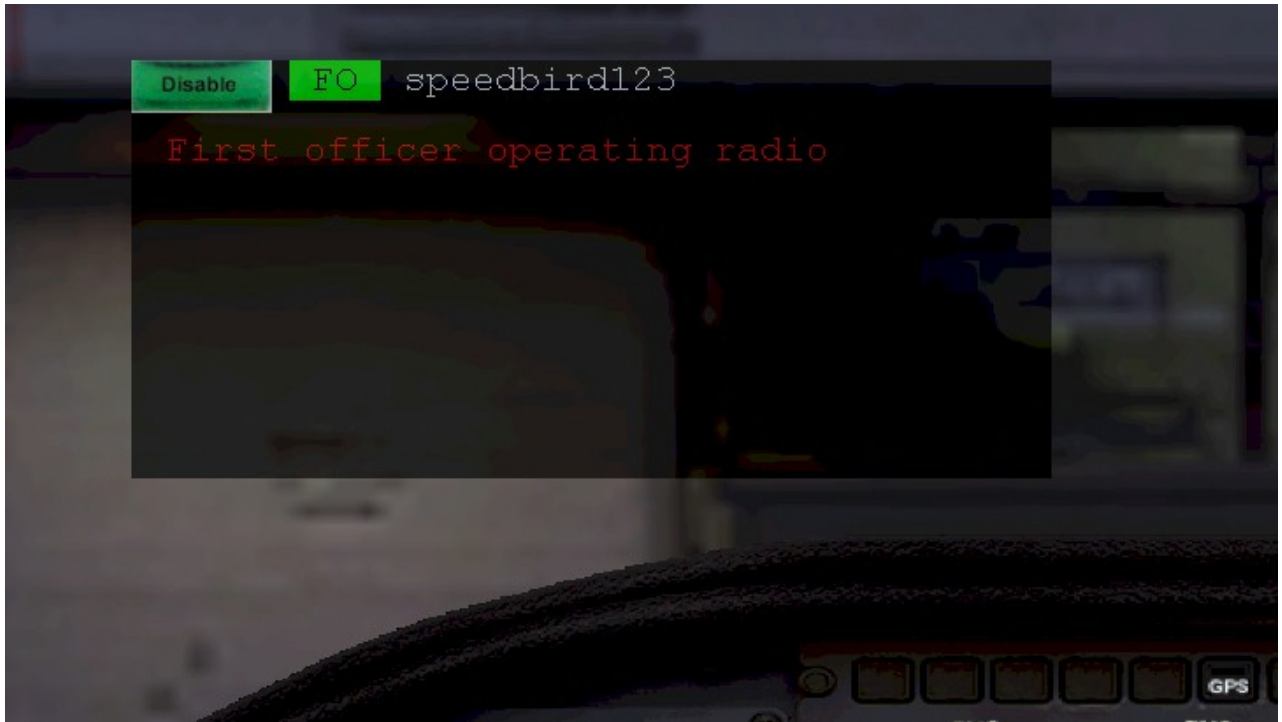
To have the first officer available on an IFR flight, run [VoxATCSettings](#) and check First Officer Available

When VoxATC has initialized, at the top of the VoxATC panel FO on a red background will be displayed.



The red background indicates that the first officer is not handling radio communications but is available. If 'FO' is not displayed, you have not set the first officer to be available or you are flying VFR.

To enable FO comms, press the K key on the keyboard. This is a toggle key and will also disable FO comms. When FO Comms is enabled 'FO' is displayed with a green background on the VoxATC panel



The first officer will now handle all radio communications. However there will be occasions when you will need to tell the first officer to make a call. These include calling for clearance, pushback, taxi and departure and making reports. The VoxATC panel will prompt you to tell the first officer to do this. You tell the first officer to make the call without pressing the PTT key, as if he were sitting next to you. If you don't want to speak, you can also get the FO to make the call by clicking (pressing and releasing) the PTT key.

If you want to take over radio comms yourself, press the K key to disable FO comms. This may not happen if the first officer is in the process of handling a comms exchange with ATC. Wait until the first officer has finished and try again

You can set up a joystick button to toggle FO Comms with the [Joystick Setup](#)

Flying in UK / European Airspace

VoxATC uses different phraseology and procedures when you are flying in the UK or Europe.

Frequencies are given using 'decimal' instead of 'point'.

QNH and QFE are used for altimeter setting.

The transition altitude is 3500.

'Pass your message' replaces 'go ahead'

'Ready for departure' replaces 'ready for takeoff'.

A UK supplement is available that adds LARS, FIRs, DACS, MATZ and FISO and A/G phraseology, see VoxATC.com for further information.

Trouble Shooting

No radio reception

On some systems the sound card may not permit more than one application access. If this is so there will be no speech output from VoxATC if sounds on FSX are enabled. In this case disable FSX sounds (toggled with Q on the keyboard).

Check that you have correctly tuned the comm1 radio to an ATC unit and the frequency is selected (in use not standby).

No response from ATC

Check that speech recognition is correctly set up on your system. You should be able to use the VoxATC trainer application. Set up speech recognition by selecting the speech icon in the control panel (see [Setting Up Speech Recognition](#)).

Check the correct frequency selected on the comm1 radio.

Check your current FSX location, you may be out of range.

Make sure you are keying the microphone (pressing the spacebar while you speak).

Try using the shortened call sign based on the unit type (ground, approach, tower etc).

ATC responds with 'Last aircraft say again'

Use shortened ATC call-signs and if specifying an airport location or waypoint try 'anyplace'

Example:

**unrecognizable clearance cessna five one delta ready for clearance
unrecognizableplace**

becomes

clearance cessna five one delta ready for clearance anyplace.

Repeated recognition mistakes indicate that you should use the [Flight Plan Trainer](#) and go through both the training for the flight plan and general training.

ATC refuses requests

There are a set sequence of calls expected when you arrive or depart an airspace. If you call a controller without being handed over properly or make a request at the wrong time you may get a response such as "Cannot approve clearance at this time". This can also occur when you make a request for a clearance that has already been given you.

One remedy is to request a frequency change (always approved) and make initial contact with the controller again.

Slow response or speech generation

If you are running on a CPU slower than 2 GHz with less than 512 MBs of RAM then expect slow running.

VoxATC prompts you to contact an enroute unit (center or approach) on start up but you are on the ground at your departure airport

A flight has been loaded while VoxATC is enabled. Disable and re-enable VoxATC. This can also happen if the aircraft is not positioned on the ground at the departure airport in the currently loaded flight plan (check the flight log).