Welcome to Lesson 4b of ATCpro! Now it’s time to get to what you have been waiting for! To try your hand at controlling airplanes. This lesson will be set up exactly the same as the previous with the Computer controllers only now you are in charge!

Setup the scenario the same as before on the Duty Desk. Many of the settings will not have to be changed, but I’ll go through them again to double check.

Facility ABQ – Albuquerque Sunport

Weather: East flow, Wind 080 degrees at 5 knots, few clouds.

Traffic: Departures - Commercial 100%, everything else 0%

Note: set to Custom 100% instead of Commercial 100% if custom traffic database is installed.

Arrivals - all set to 0%

Other – all set to 0%

Position: Now set both North and South to User control.

Time: set from your current time and day to 9:08 Wednesday

Click the Begin Your Shift button.

When the program finishes loading, go ahead and pause the sim to rearrange the pop up windows on the scope for our controlling session.

On the Comm panel Click on the TX SEL and RX SEL buttons on the 1st 2nd and 3rd rows as before. You can close this window to get it out of the way.

On the Left side of the scope you will see the Flight Information strip window. Resize the window to take up less space by dragging the arrows that appear at the top and bottom of the window. You can move the smaller window to an out of the way location like over here on the right.
In the blue Communications History window on the lower left you can resize this window too to take up less space in the same way as the Strip window by dragging the arrows.

Click on the RANGE button on the DCB bar at the top of the scope. Roll your mouse on top of the button and Zoom in until it reads 36 and click to lock it in.

Next click on the MAPS button on the DCB. Click on #14 ZAB-SEC to see the Center controller airspace boundaries and frequencies.

Next click on the ARR DEP button on the right of the DCB. Click on KABQ. Click on #309 MNZNO2 (manzano 2). This is a departure procedure map for our departing aircraft. Click on DONE to get back to the scope.

I will unpause now to continue with the scenario... You can see a message in red text to press shift enter to begin position relief. I will do this now to hear the briefing.

Notice in the Flight Plans list on the left side of the scope the first line shows AAL 1332. At 1610 on the system clock AAL 1332 will disappear from the flightplan list and appear in a new list of Albuquerque Tower Departures you will next hear the dialog between AAL1332 and the Tower as he departs on runway 8.

I will pause the sim now so we can go over the voice commands you will be using and practice them.

Now with the sim paused, I will say the commands you will need to say to AAL 1332 and you can make sure they are interpreted correctly by the speech recognition system as they are transcribed in the Comm History window.

To speak over the radio you press down the right or left Ctrl key on your computer keyboard while you are speaking and release the key when you are done speaking. This is called the push to talk key. You will need to get in the habit of pushing the button before you begin speaking so you don’t clip off your first sounds. Speak in a normal tone of voice and not too slow. You may find you get better recognition if you speak quickly and smoothly while pronouncing the words carefully. If you are not getting any response at all your mic may not be configured correctly so go back and watch the lesson 2a for setting up sound settings.

The first thing you will say to the pilot is his or her callsign followed by “Radar Contact”. I will say that now and you can see how it shows up on the Comm history window:

American 13 32, radar contact

Note that when saying the callsign you must speak the pairs of numbers together, such as thirteen thirty two. If you say one tree tree two you will not be recognized.

The next command you need to give is “American 13 32, proceed direct to Yug Loo”.

The next command you need to give is “American 13 32, join the Manzano two departure”
If you are having trouble with Yug Lu or Manzano two not being recognized you can look them up in the info window to see how the phonetic pronunciation is written to be correctly recognized.

Now that you have built up your confidence for giving commands over the radio it is time to try it with the simulated pilot. Don’t worry if it takes you a few tries to get the command correct at first. You have plenty of time. When you are ready, unpause the sim and give each of the commands we practiced, one at a time. If you want you can give up to three commands in the same sentence, but for now, stick to one at a time.

With the sim unpaused we see the datatag of AAL 1132 pop up in the center of the scope. It will be white this time because it is under your control. You now “own” it.

I’ll demonstrate the voice commands now...

American 13 32, radar contact

(readback), radar contact, American 13 32

American 13 32, proceed direct to YUG LOO

(readback) proceed direct to YUG LOO, American 13 32

American 13 32, join the Manzano two departure

(readback), join the Manzano two departure, American 13 32

If you make a mistake and the command is not recognized or incorrectly recognized, just say it again. If you are really struggling you can use the mouse to select from a command menu that I will demonstrate in the next lesson 4c. Controllers in real life must learn to speak all their commands and you will have more fun if you do too.

Notice now in the Flight Strip window there is a strip for AAL 1332 that shows useful information about the flightplan and records the clearances and waypoints given.

Watch AAL 1332 follow the route while climbing. By the time he has reached Yug Loo it is time to give a climb command. You can pause the sim again and practice like we did before until you feel comfortable with the command. I will say it now:

“American 13 32, climb and maintain flight level 2 0 0”

“(readback), climb and maintain flight level 2 0 0, American 13 32”

Note that you need to say the numbers as individual digits such as two zero zero. If you say 200 you won’t be recognized correctly. As a rule of thumb hundreds and thousands are spoken individually such as niner thousand five hundred. Ten thousand is spoken as one zero thousand, and seventeen thousand
is spoken as one seven thousand. Higher than 1 7 thousand is where the flight levels begin, known as transition altitude. 1 8 thousand and higher is spoken as a flight level “flight level one eight zero”, or 2 0 thousand as “flight level two zero zero”.

The aircraft will turn left at Manzano and head for the FATTee’s waypoint. Once he’s past Manzano you can start the handoff process to the next controller, in this case Albuquerque Center sector 94. Let’s skip ahead to that point...

To make a handoff to Center you need to type the letter “C” and you will see it appear on the preview area on the lower right side of the scope, then click on the “S” of the datatag. If it is done correctly you will see the Center sector Id appear in the middle of the datatag’s second line. After a minute the “S” will change to a “C”. When Center is ready to accept the handoff, the datatag will flash then the datatag will turn green. This means the Center controller has accepted the handoff of AAL 1332.

Let’s do the handoff key command now... Type C then click on the S of the aircraft target. Notice the C94 in the middle of second line of the datatag. Then the datatag flashes and turns green.

Now Pause the sim to practice the next voice command.

You can now give the pilot the Center controller’s frequency to change to, in this case one tree tree point six five. Note when giving the numbers of a frequency you always say each digit and “point” for the decimal point, not “dot”. Outside of the United states the word decimal is usually used

I will say it now: “American 13 32, contact Albuquerque Center 133.65”

Practice this until you feel comfortable with saying the command and are getting good recognition.

Unpause the sim when you are ready and give the frequency change command:

“American 13 32, contact Albuquerque Center 133.65”

“(readback), contact Albuquerque Center 133.65, American 13 32”

The pilot will readback that he is contacting Center and his datatag will reduce to a C with the altitude of the aircraft when it is fully under the control of the Center controller.

You are now an official controller of simulated airplanes. Congratulations!

I encourage you to watch this lesson a few times then try it yourself to get some practice and confidence giving voice commands to aircraft.

In the next lesson 5a I demonstrate the same scenario with the use of mouse menu commands that can be used instead of voice commands. This may make it easier for you to learn what commands to use in any given controlling situation and run the sim before you have learned how to speak voice commands.
Click the X in the upper right corner of the scope to end the session.