ATCpro Lesson 5b Video script

Version 1, 5-30-17 ATCpro ver. 1.1.20.0 D. Logan

Note: to recreate the traffic as seen in the lesson, from an older schedule database, please download and install the files in ATCproTutorial traffic db files.zip. See included readme install instructions. To see the traffic, set the slider to "Custom" 100% instead of "Commercial" 100% (see below).

<div align="center">Narrator</div>

Welcome to Lesson 5b of ATCpro! This lesson will demonstrate how to handle one arriving aircraft at the Albuquerque facility using keyboard command only. I will introduce some new commands and how to use more map overlays with arriving aircraft.

Let's get a new scenario setup on the Duty Desk.
Make the following settings:

Facility ABQ – Albuquerque Sunport

Weather options – User generated weather: East flow, Wind 080 degrees at 5 knots, **Storms!** (this will be IMC – instrument meteorological conditions)

> **Click "Generate Weather System" button**
>
> Note: Make sure in the text below the map it indicates **dep: 08, 12** (departure runways 8 and 12) if not you may not have set the wind direction correctly or clicked the generate button.

Traffic: Departures - all set to 0%

> Arrivals - ***Commercial*** 100%,

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

> Other – all set to 0%

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

Time: set from your current time and day to 11:22 Saturday (note if you run this time slot again you can right click on the time and select a previous time from the drop down list)

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 row (if not already on). You can close this window to get it out of the way if you want.

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.

Unpause the sim and I'll explain what's going on.

The first thing I want to do is observe the briefing so we know that the scope is under our control. If you forget to listen to the briefing and take control of the scope the controller on duty will continue giving commands to the aircraft in his sector and that can get very confusing.

Notice here is Sky West 44 62 coming along showing a C as he is under the control of the center controller.
Let's go ahead and pause again so we can make some changes on the DCB.

Click on the range button and roll your mouse until it shows a range of 24. Click again to lock it in.

Click on Maps then click on map 6 to show the minimum vector altitudes or MVA. Notice these numbers that stand for altitudes in hundreds of feet We want to make sure were not descending an aircraft below the minimum altitude that is safe.

Unpause for now and notice SKW 44 62's datatag is white and flashing. That means a center controller is trying to hand him off to us. Click on the Charlie of the datatag and it will change to a November for our position. Now a flight strip will pop up in the strip window under arrivals.
Flight SKW 44 62 has just called us up to say he is on our frequency and that he has listened to the current ATIS information broadcast with the (current letter) that contains basic weather conditions, active runways, etc.

Now we can let him know he is with us and what runway to expect which is runway 8 since the wind is from the east.

Pause the sim again. Before we begin giving keyboard commands let me explain a little about how to give them. (I suggest printing the keyboard command reference table on pages 24-26 of the Quick Start manual).

To give keyboard commands in ATCpro you must make sure the scope is active by clicking anywhere on it and confirm that the compass rose numbers around the outside of the screen are not red. Now when you type on the keyboard the text will appear in the preview area that is by default on the lower left side of the scope. Go ahead and type a little now so you see where the preview area is.
You can use the backspace key to erase the text. To clear the line and start over press the Esc key.

You can actually type any command with the sim paused to make sure you get it right then unpause the sim before pressing Enter to give the command the command. You can even go through an entire

session in this way by pausing and typing commands then unpausing if you want until you get comfortable. Be aware if the sim is not paused and you wait more than a few seconds before typing a command the preview area will be cleared automatically.
Note: that not all voice commands are available in keyboard form so eventually you will need to learn to give voice commands.

All keyboard commands (as in voice commands) must begin with the aircraft's callsign. To enter the callsign start by typing # then the full callsign as shown on the flight strip or list. A shortcut to fill in the correct callsign is to right click on the aircraft datatag letter. There is a popup menu of commands that will fill in many of the correct text commands but for this tutorial I will explain how type in the commands manually.
The basic format of keyboard commands is #Callsign<space>XX,12
is the pound or hash symbol, Callsigh is the aircraft callsign, <space> is a single space, XX is the two digit command code, and 12 is the value as indicated in the reference table.

As an example I will give the next keyboard command for our tutorial to tell SKW 4462 what runway and approach to expect now:
#SKW4462<space>XV,08
Unpause the sim and press Enter to give the command.
(readback) expect runway 8, Sky West 44 62.
If you didn't get it right, pause and try again.

Let's move on with the tutorial so pause the sim again so we can set up a couple more maps.
Click on the Maps button then click on arr / dep button, then KABQ. Click on map 405 which is the Lowbo3 standard terminal arrival route or STAR that will let us know what route he is taking coming in. Now click on approach then KABQ and then map number 208 which is an approach diagram for runway 8. Click on done.

Now click on shift then "PTL length" that stands for predicted track line. Roll your mouse until it shows a one point 0. This displays a line in front of the datatag that indicates where the aircraft will be in one minute, and it makes it easier to see where the aircraft is headed when giving turn commands to compass headings also known as "vectors".
You should be aware that being able to pause the sim and set up maps, routes and PTL settings is possible in a simulation with very little traffic and things going on. At a more realistic level you will rarely have time for this so it is good to get very familiar with how to set up your scope and save your preference settings.
Unpause the sim to continue

When we get the handoff from center SKW4462 is at 1 5 000. After crossing our airspace boundary we give an initial descent that is above the MVA which is 84 or 8400' Let's give him an initial descent to 1 1 000. I'll give the keyboard command now:
#SKW4462<space>DM,11000
 (readback) descend and maintain one one thousand Sky West 44 62.

Next we want to give him a heading so he'll be in a good position to line up for the runway of the airport. We can give him the heading along this line here, which is one tree five. I will give the keyboard command now:
#SKW4462<space>TR,135

(readback) turn right heading one tree five, Sky West 44 62.

Note that it is best to give the turn direction not just to say "turn heading one tree five". I have trouble sometimes to know instantly what turn direction to speak, so one technique that helps me to visualize which turn direction to use when an aircraft is pointing towards me on the scope, is to turn my head slightly in the proper direction and squeeze my right or left hand. Maybe that will be helpful to you.

When he crosses this next line of the MVA we can give the next step of the descent which can't be lower than 75 or 7500'. Since the field elevation of KABQ is 5355' we want to give an approach altitude that is roughly 3000' feet above ground level (or AGL). We will use 8000 as the final approach altitude here. I will give the descent keyboard command now:
#SKW4462<space>DM,8000
 (readback) descend and maintain eight thousand Sky West 44 62.

When he gets to the point where the bottom of the data tag is about touching this extended centerline of runway 8, we give him a command to turn onto the final approach heading of 080.
I'll give that keyboard command now:
#SKW4462<space>TL,080
 (readback) turn left heading 080, Sky West 44 62

Because the visibility is clear we will be giving Skywest 4462 a clearance for a visual approach.
I'll give the keyboard command now:
#SKW4462<space>AV,08
 (readback) cleared visual approach runway 8, Sky West 44 62

Do the handoff sequence to Tower by typing the letter T then clicking on the November of the datatag His datatag will turn green and the datatag letter will change to a T when he has been accepted by the tower. Note that at some larger facilities such as Miami and Atlanta the handoff is made automatically to Tower and you don't have to do the letter T key sequence.

Once you are sure he is lined up on the visual approach for runway 8, give the pilot the change to the tower's frequency with the keyboard command:
#SKW4462<space>FC,120.3
 (readback) contact Albuquerque tower on 1 2 0 point tree, Sky West 44 62

When the flight strip disappears from the flightstrip window you know Sky West 4462 is not owned by you anymore.

That's it for this lesson. In the lesson 6b, I will demonstrate the use of keyboard commands for the exact same scenario of one arrival sky west 4462 with ILS and RNAV instrument approaches. You can click the x in the upper right to end the lesson.