ATCpro Lesson 5a Video script

Version 2, 6-13-16 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 5a of ATCpro! This lesson will demonstrate how to handle one arriving aircraft at the Albuquerque facility. I will introduce some new commands and how to use more map overlays with arriving aircraft.

First of all let's get a new scenario setup on the Duty Desk.
Make the following settings:

Facility ABQ – Albuquerque Sunport

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

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

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. (wait during briefing)

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. (wait)
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 letter "X" 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. I will give that command now:
Sky West 44 62, expect runway 8
(readback) expect runway 8, Sky West 44 62.

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. Notice on the flightstrip it says Lowbo which is the name of the arrival route that he is following. 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 command now:
Sky West 44 62 descend and maintain one one thousand.
(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 command now:
Sky West 44 62, turn right heading one tree five.
(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 command now:
Sky West 44 62 descend and maintain eight thousand.
(readback) descend and maintain eight thousand Sky West 44 62.

An alternative to giving vectors is to command him to go directly to any named waypoint such as Alpha bravo keybeck here which is a waypoint on the final approach path to runway 8. I'll give that command now so you can practice:
Sky West 44 62 proceed direct Albuquerque
(readback) proceed direct Albuquerque, 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 command now:
Sky West 44 62 turn left heading 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. We need to make sure he knows what direction to look for the airport, how far away it is and that he has the airport in sight before giving the visual approach clearance. I'll give those commands now:
Sky West 44 62 the airport is 11 o clock, one zero miles, report the airport in sight.
 (readback) airport in sight, Sky West 44 62

Now that he has the airport in sight we can give the visual approach clearance:
Sky West 44 62 cleared visual approach runway 8
(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:
Sky West 44 62 contact Albuquerque tower on 1 2 0 point tree
(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 next lesson 5b, I will demonstrate the use of keyboard commands for the exact same scenario of one arrival sky west 4462. You can click the x in the upper right to end the lesson.