



UGCX MANUAL PART 13

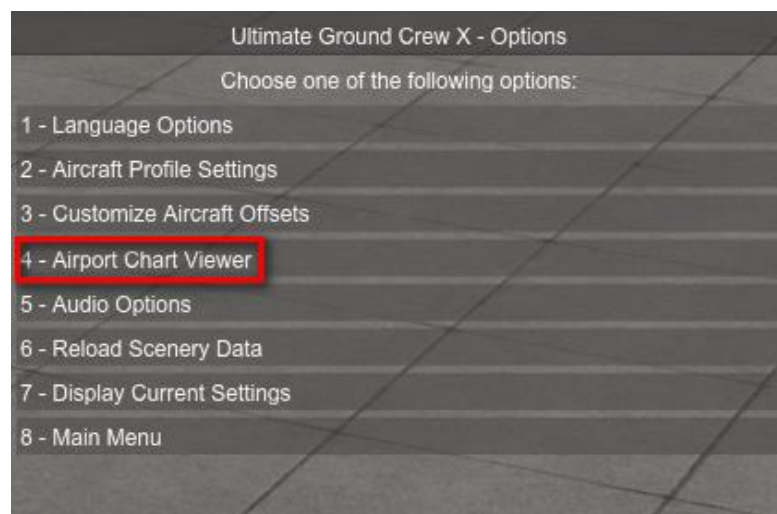
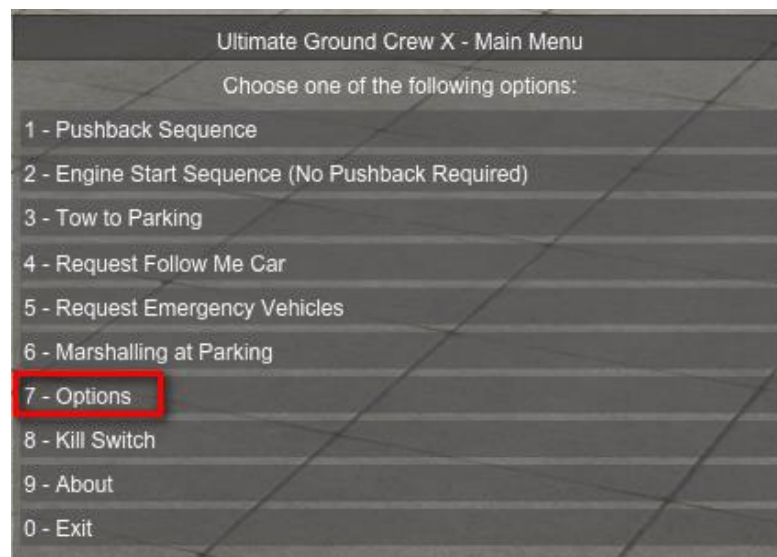
MANAGE CUSTOM PUSHBACK ROUTES

AIRPORT CHART VIEWER:

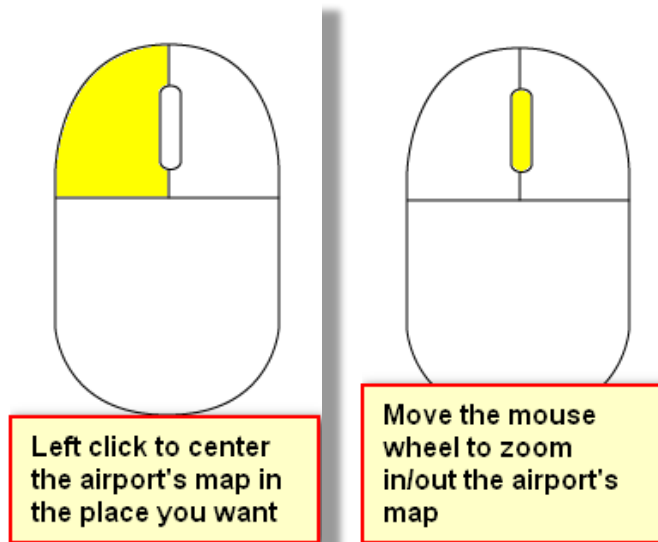
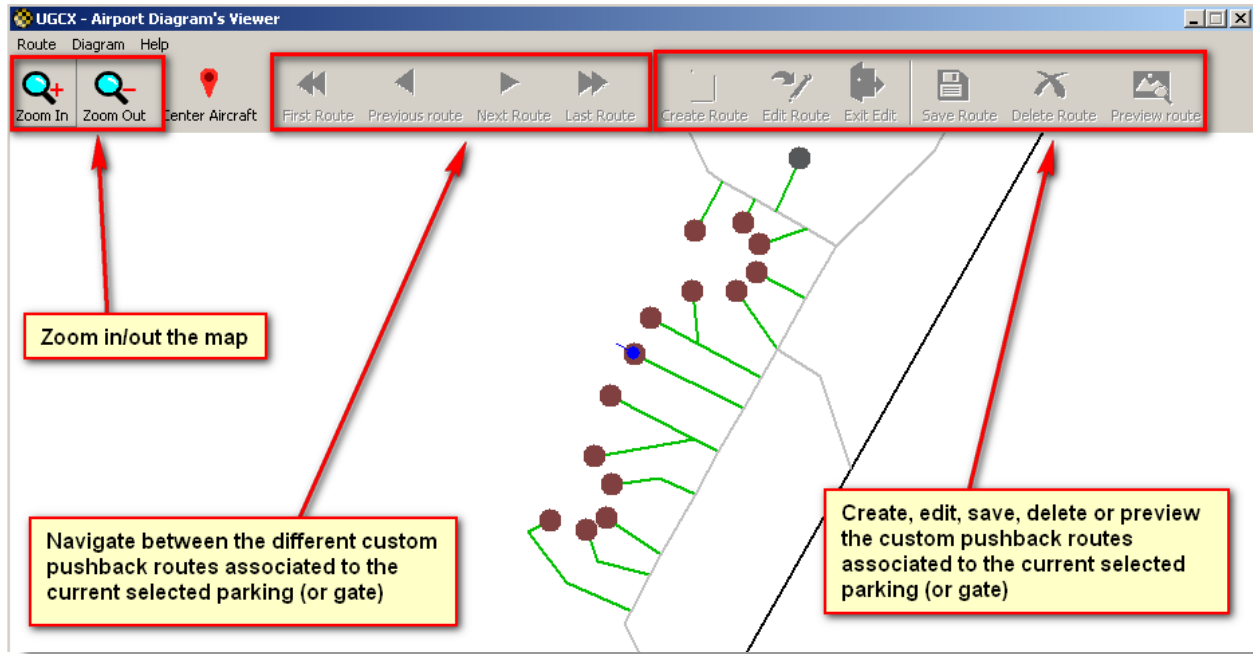
The airport chart viewer is essentially a map of the current airport where your aircraft is located. It's used for viewing the current airport's layout and to view the route that the tug or follow me truck will follow.

To open the airport chart viewer, follow these steps:

1. Open the UGCX 's main menu.
2. Go to "**Options**" then "**Airport Chart Viewer**".



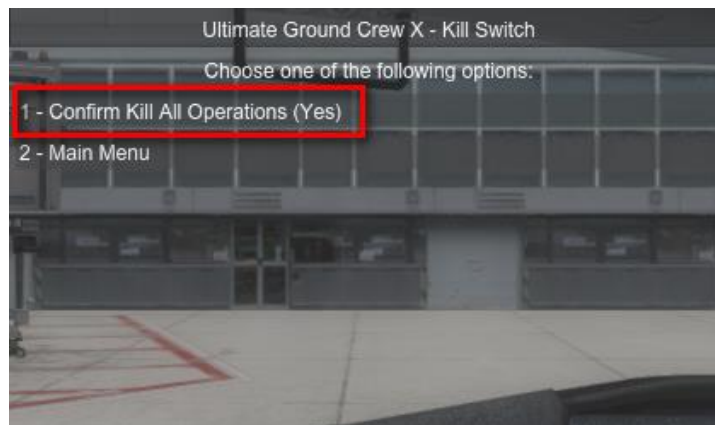
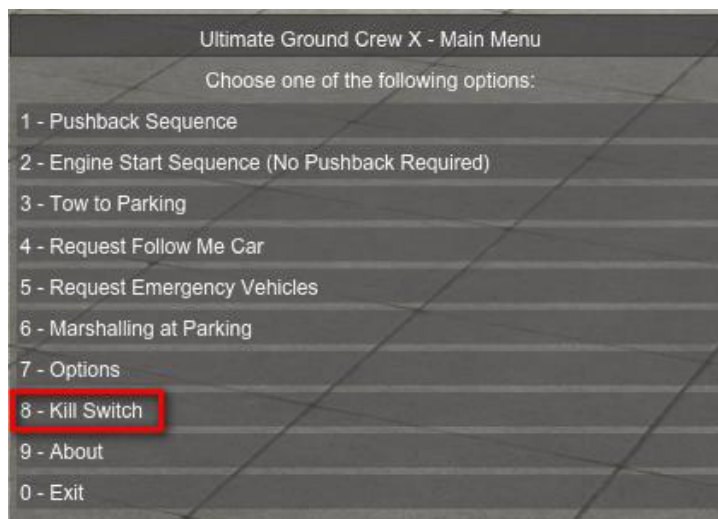
3. The "UGCX - Airport Diagram's Viewer" window appears.



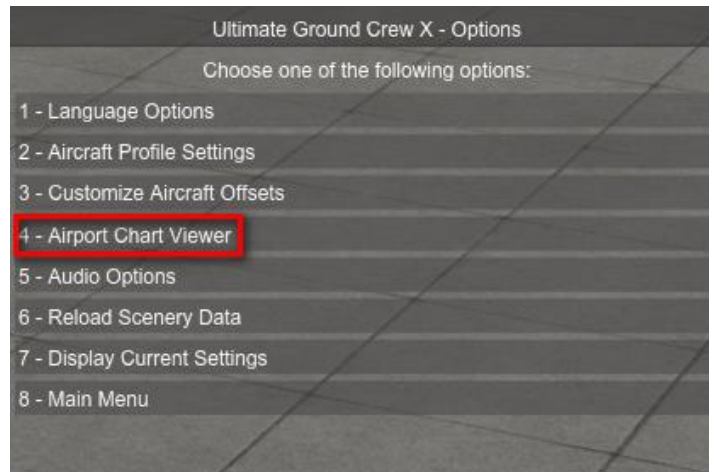
VIEWING EXISTING CUSTOM PUSHBACK ROUTES ASSOCIATED WITH A SPECIFIC PARKING LOCATION:

To view existing custom pushback routes associated with a specific parking or gate location, follow these steps:

1. Place your aircraft in the airport that has the parking spot that you would like to see.
2. Ensure, you are not running any UGCX ground service. If you are already running a UGCX ground service, then kill all ground operations, as shown below:

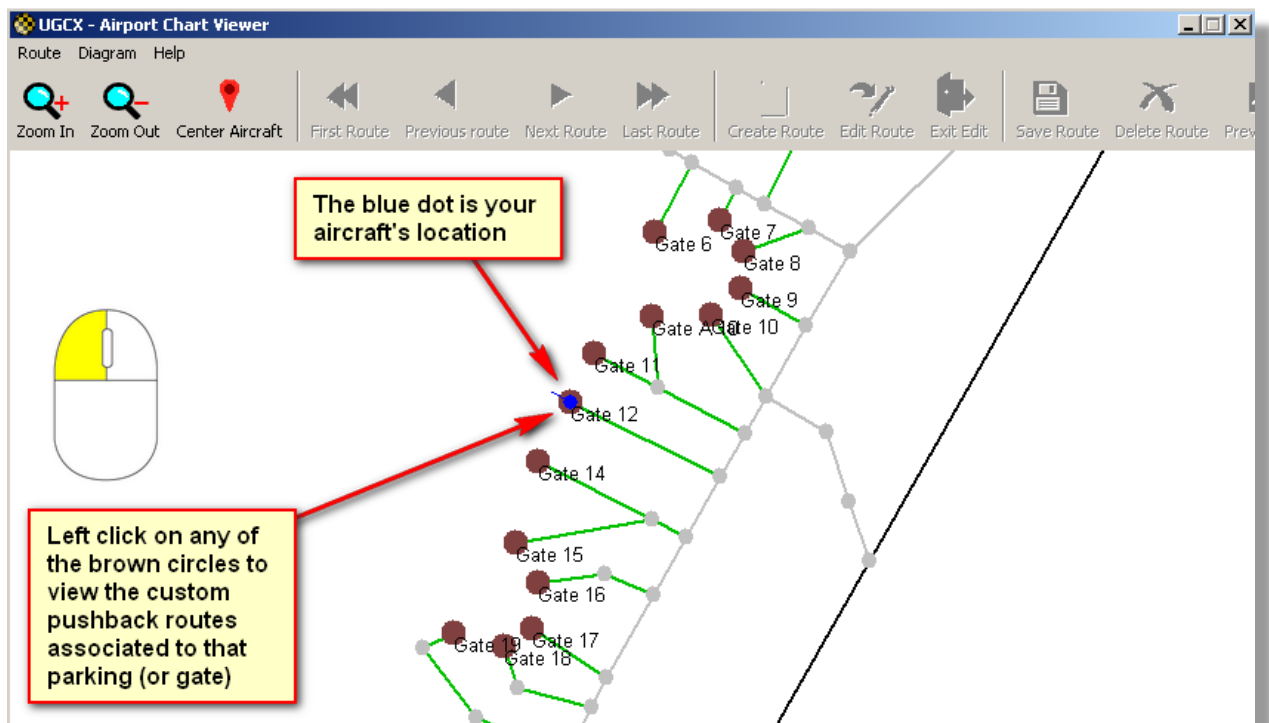


3. Go to the UGCX 's main menu, then "**Options**" and select "**Airport Chart Viewer.**"



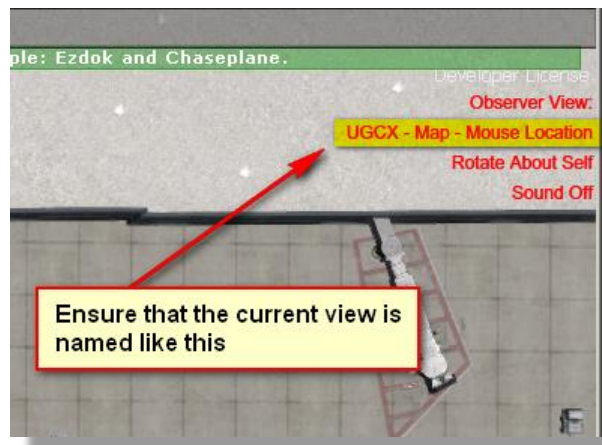
4. The "**UGCX – Airport Chart Viewer**" window appears. Each brown circle represents a parking (or gate) in the map.

Now left click on any parking (or gate) to view any existing custom pushback route previously associated with that location.

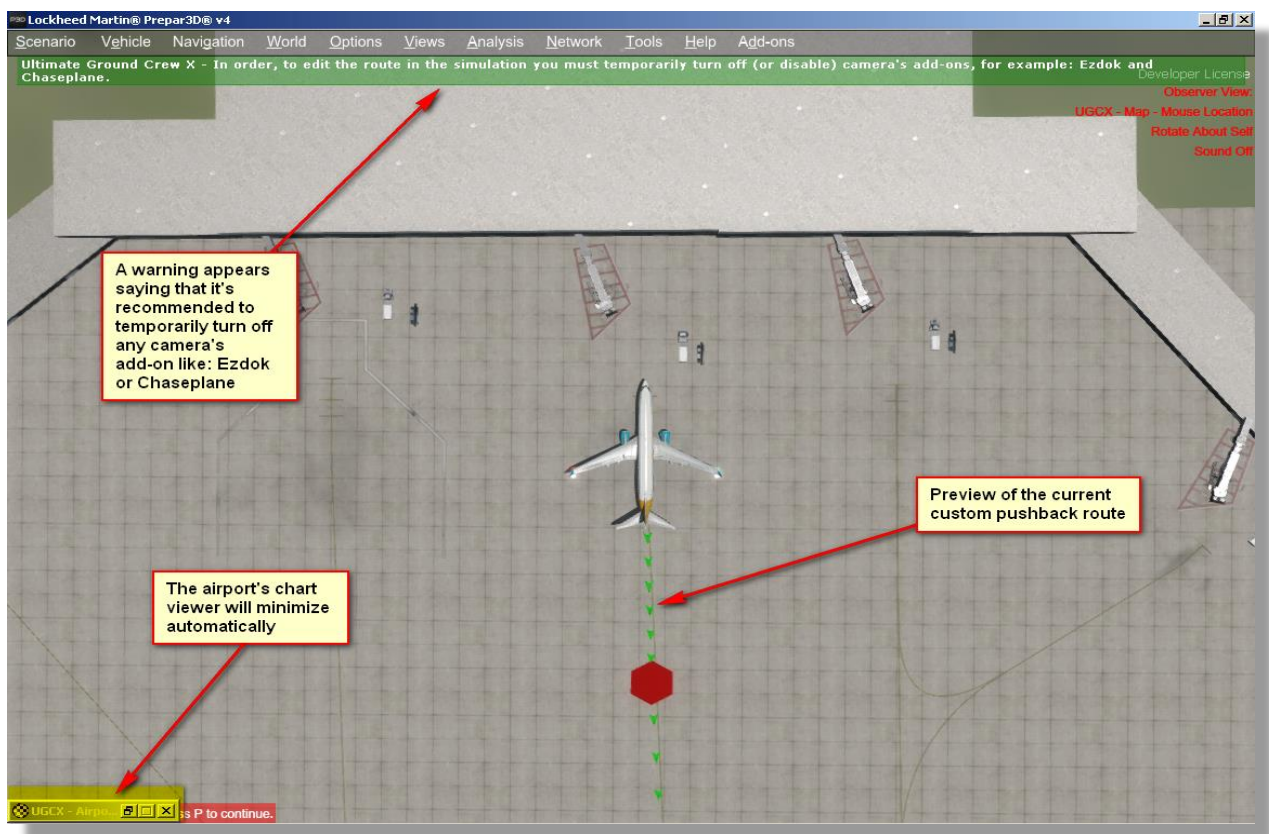


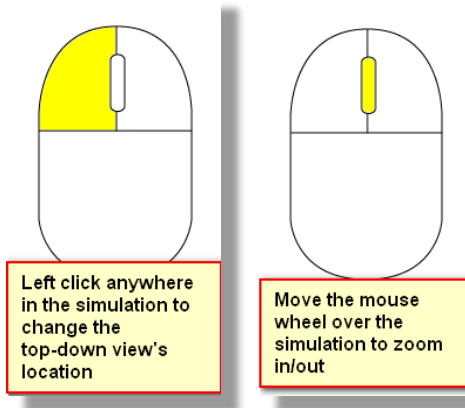
5. **IMPORTANT:** At this point, if you have any camera's add-on installed, like **Ezdok**, or **Chaseplane**, try to **temporarily disable them**. This is because UGCX's custom top-down

view could be affected as these camera's add-ons modify the camera's view location.
Ensure that you see on the screen the following:

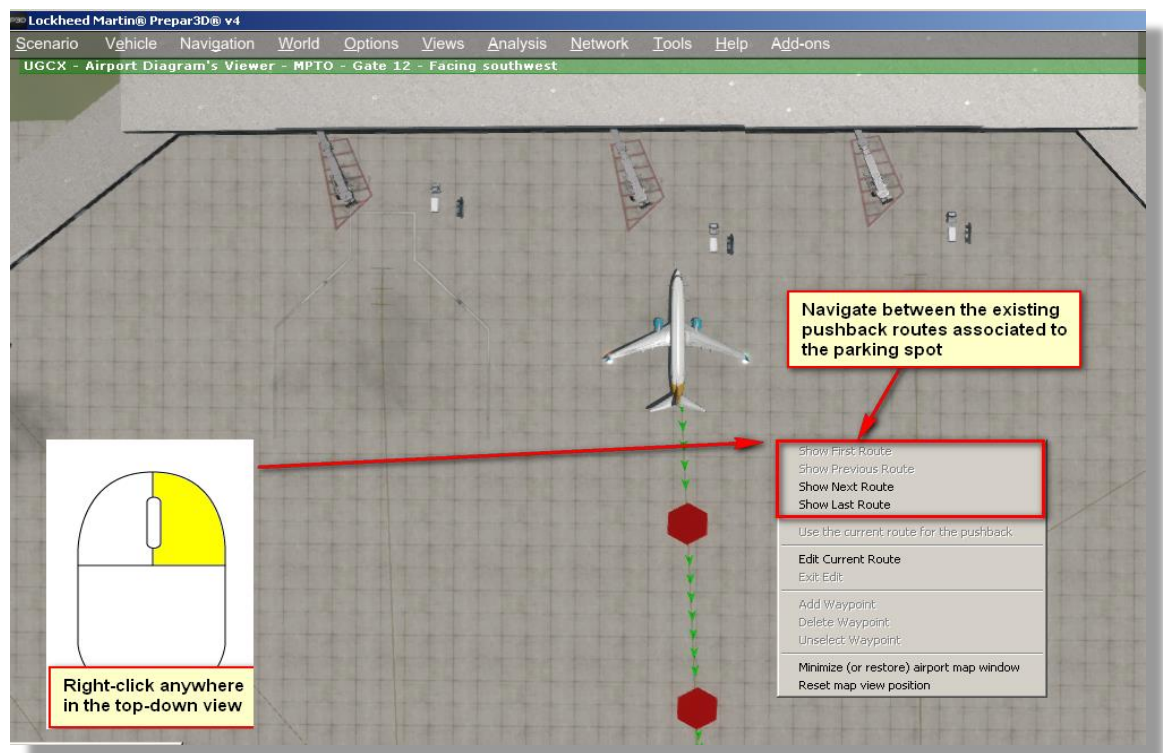


6. The "Airport's Chart Viewer" window will be minimized **automatically**, and you will see a preview of the current custom pushback route in the UGCX's custom top-down view in the simulation.





7. At this point you can navigate through the existing custom pushback routes associated with the selected parking location; you just need to:
 - a) Right-click anywhere on the top-down view
 - b) A pop-up menu will appear on screen.
 - c) Use the menu options shown in the picture below for navigate between the existing custom pushback routes associated to the parking location.



Optional: You could also use UGCX's hot keys. Check out "**UGCX Manual Part 4 - Optional Key Assignments**" manual **page #5** for more information on how to setup these hot keys.

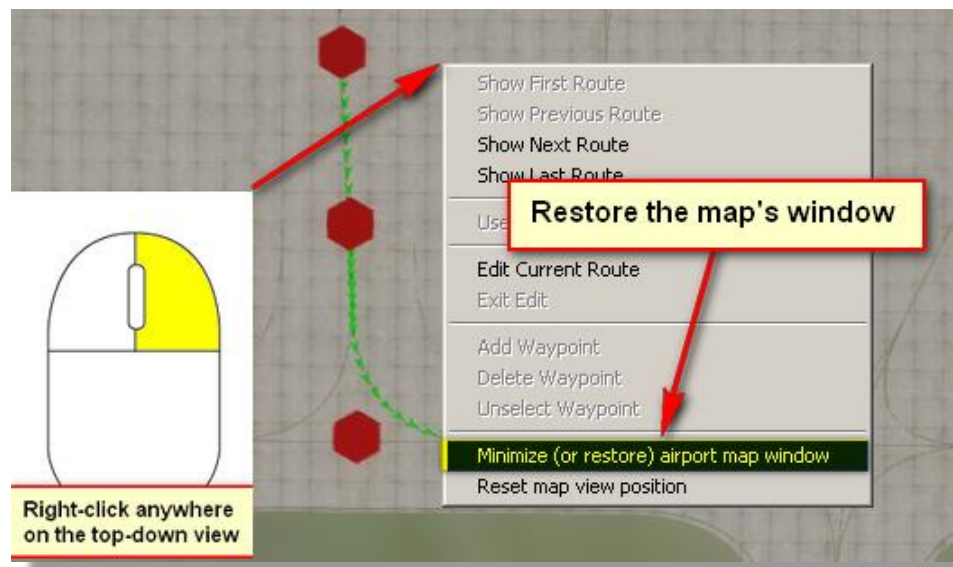
The initialization file entries that need to be configured are:

- **ShowNextRouteKey:** Show the next custom pushback route linked to the current selected parking spot.
- **ShowPrevRouteKey:** Show the previous custom pushback route associated with the current selected parking spot.

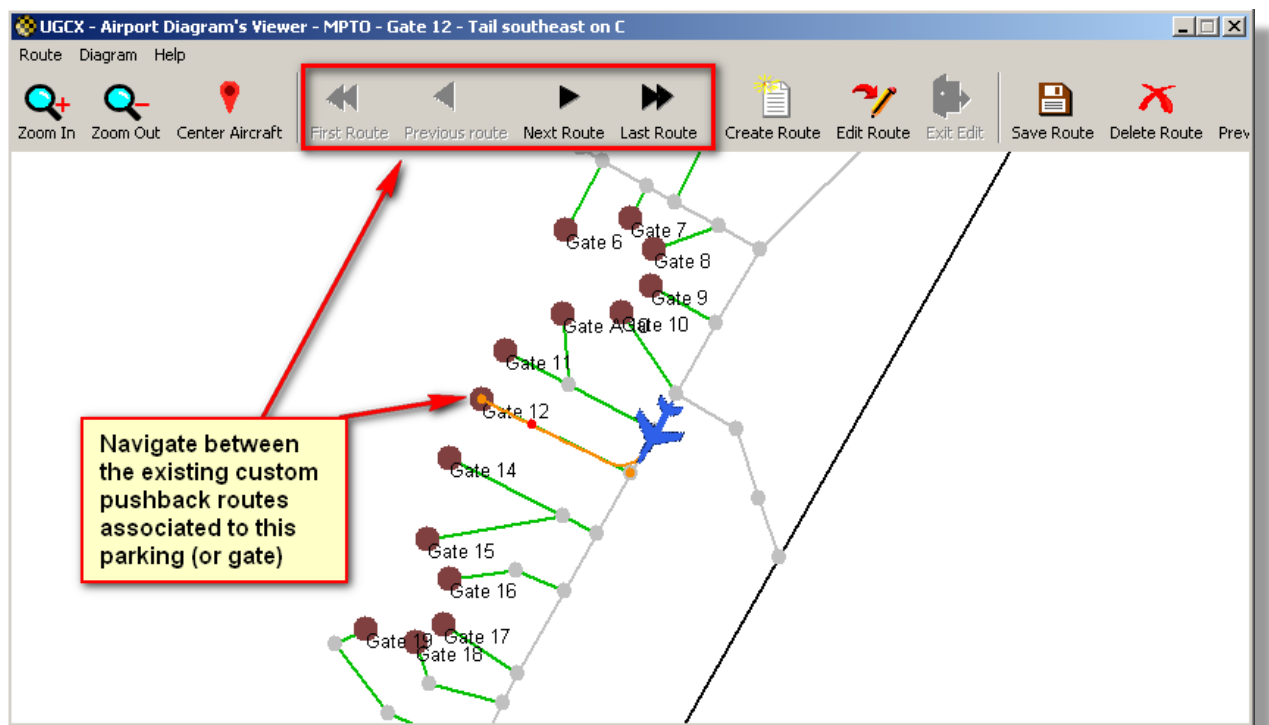
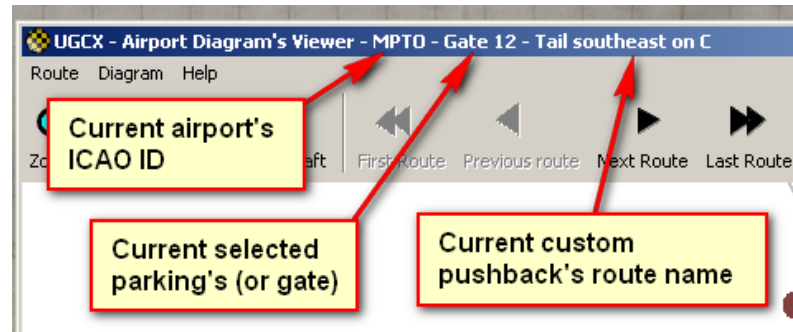
Optional: If you do not want to use the hot keys, you can restore the "**Airport's Chart Viewer**" window and click on the toolbar's navigation buttons as shown below:



An alternative method is:



Optional: As an alternative, you could configure the “MinRestMapWindow” hot key in the initialization’s file, for **minimize/restore** the airport’s map window. For more information, check out "UGCX Manual Part 4 - Optional Key Assignments" manual, page #7.

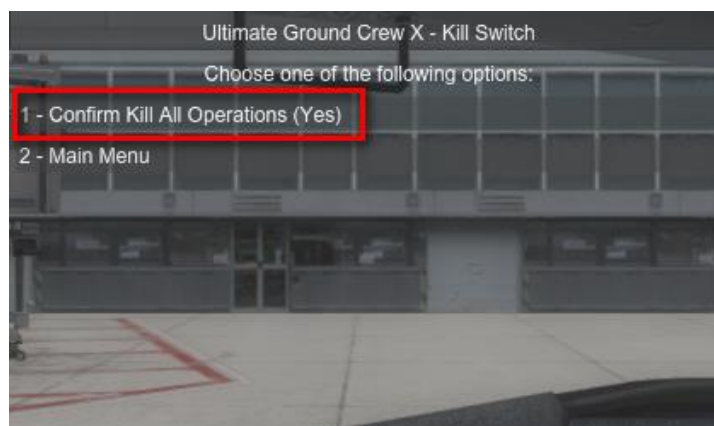
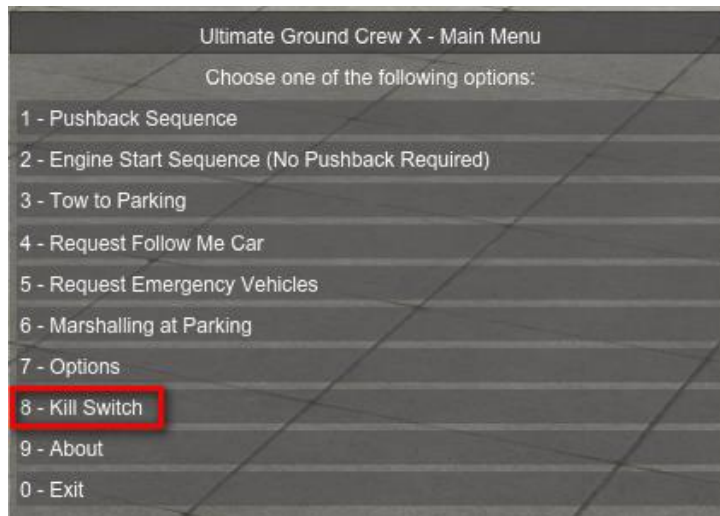


8. Done!

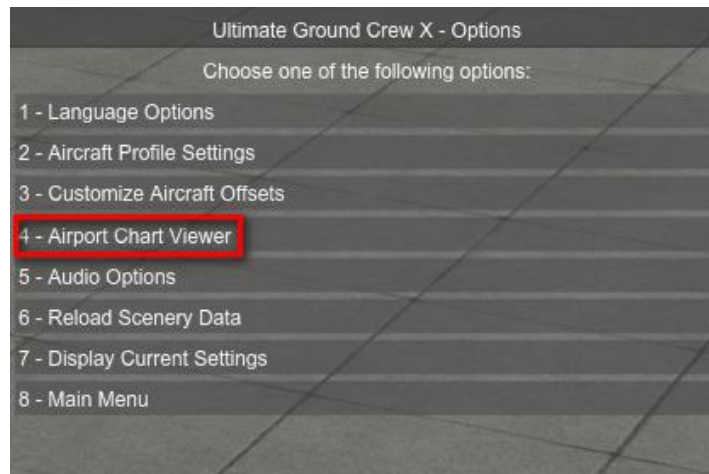
CREATING A NEW CUSTOM PUSHBACK ROUTE ASSOCIATED WITH A SPECIFIC PARKING SPOT:

To create a new custom pushback route associated with a specific parking or gate spot, follow these steps:

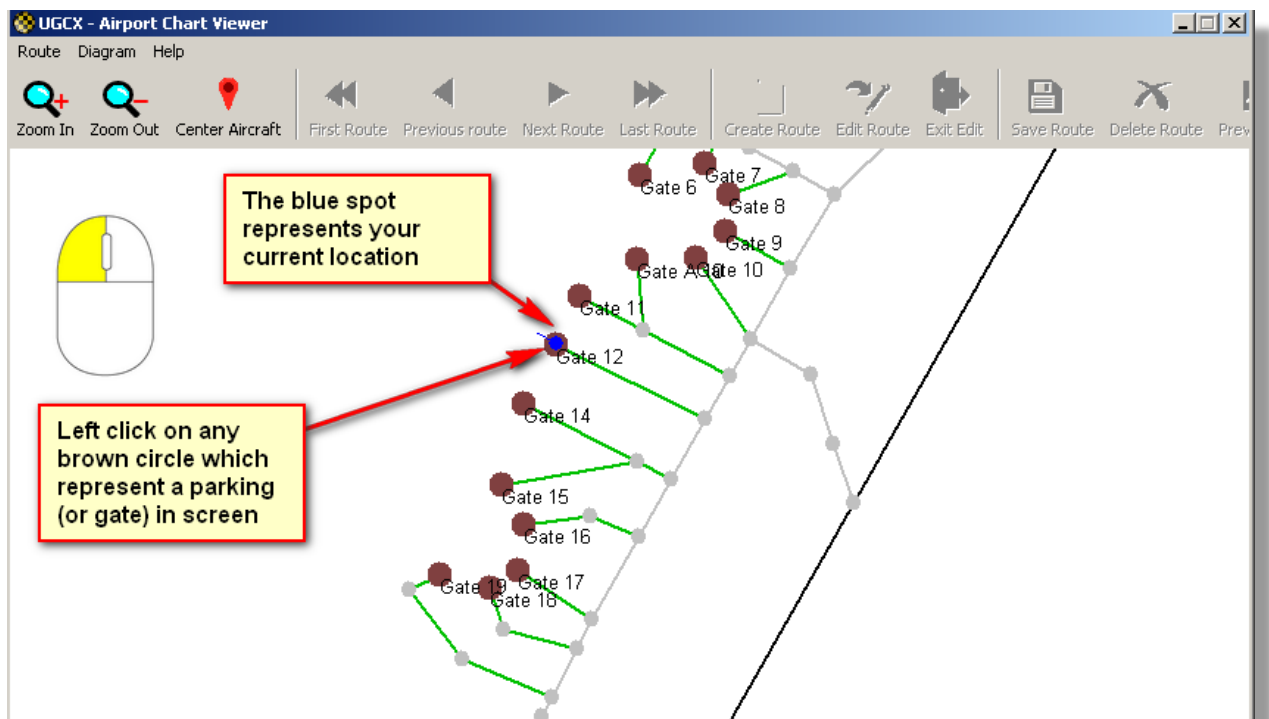
1. Place your aircraft in the airport that has the parking spot that you would like to work with.
2. Ensure you are not running any UGCX ground services. If you are already running a UGCX ground service, then kill all ground operations using the Kill Switch:



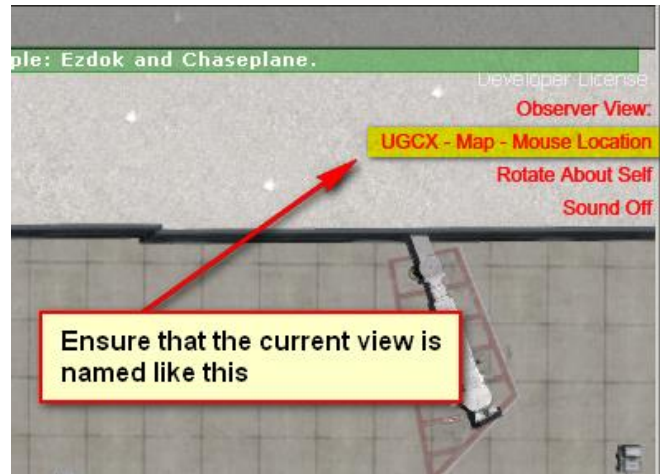
- Go to the UGCX 's main menu, then "**Options**" and finally select "**Airport Chart Viewer**"



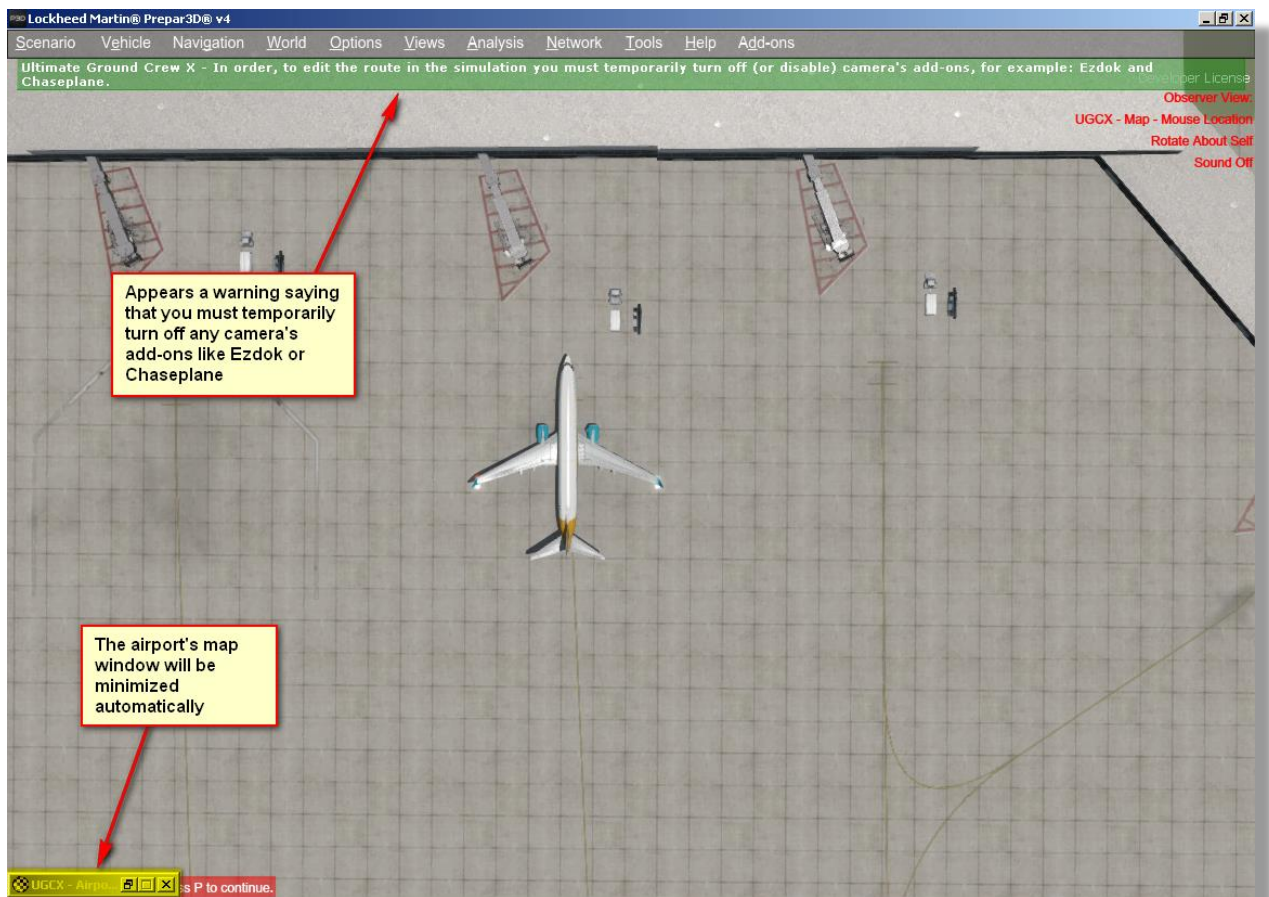
- The "**UGCX - Airport Diagram's Viewer**" window appears. Each brown circle represents a parking (or gate) in the map. Now left click on any parking or gate in the map.

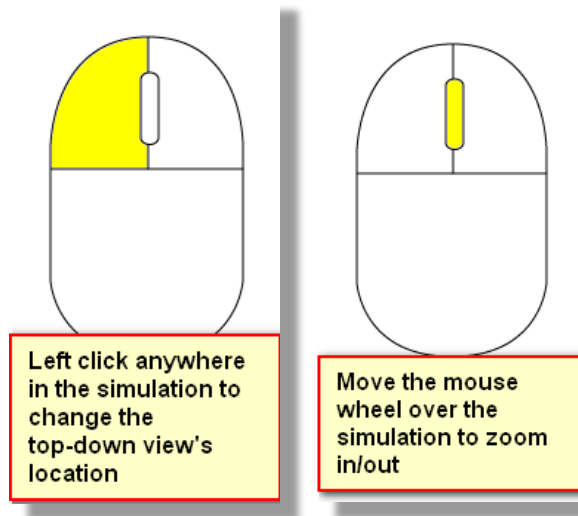


- IMPORTANT:** At this point, if you have any camera's add-on installed, like **Ezdok**, or **Chaseplane**, try to **temporarily disable them. Ensure that you see on the screen the following:**



- The "Airport's Chart Viewer" window will be minimized **automatically**, and you will see a top-down view of the simulation.

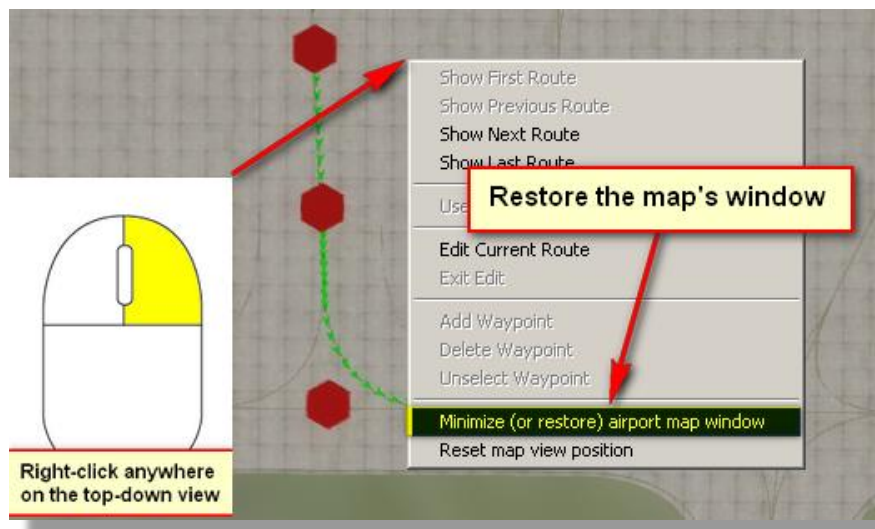




7. Restore the "Airport's Chart Viewer" window

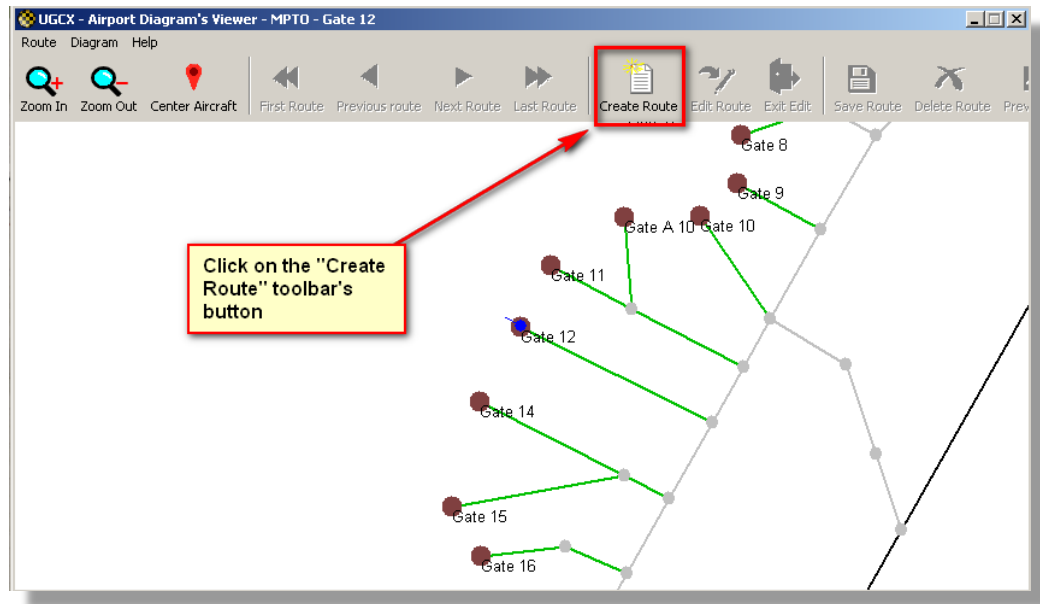


An alternative method is:



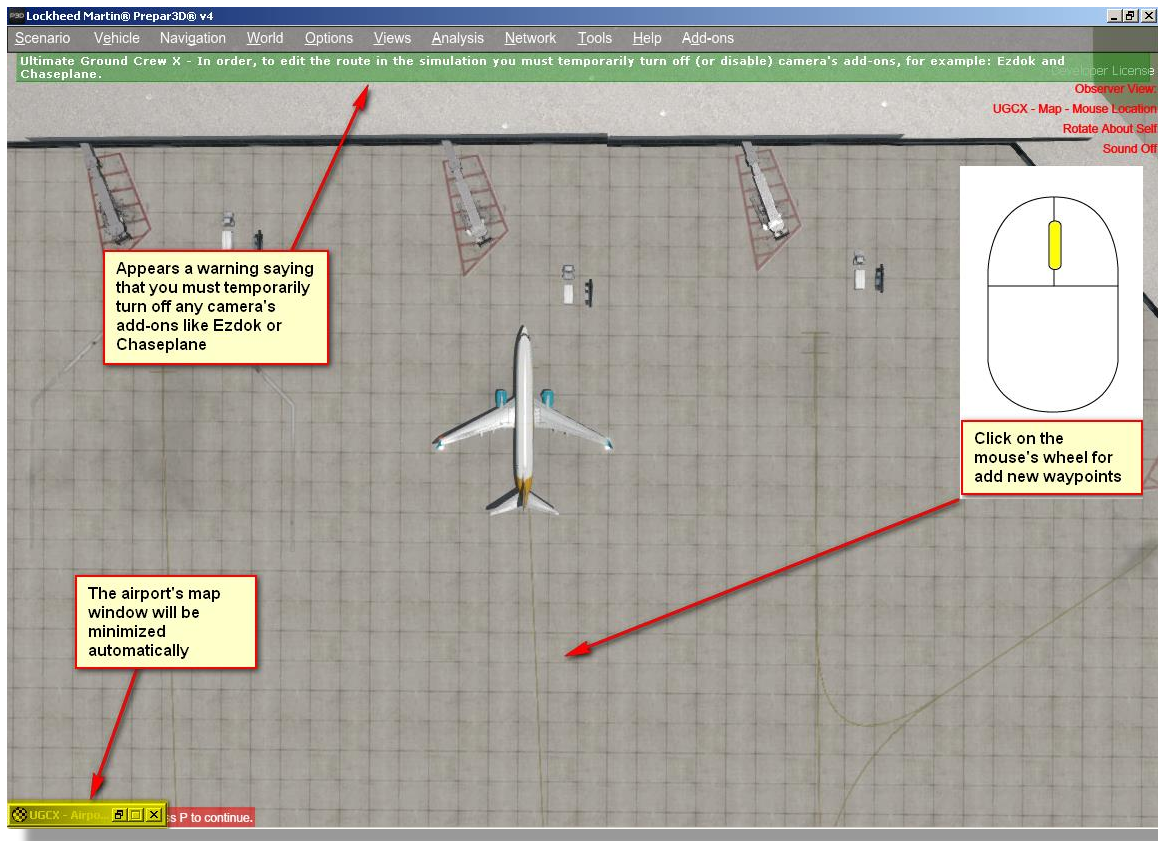
Optional: As an alternative, you could configure the “MinRestMapWindow” hot key in the initialization’s file, for **minimize/restore** the airport’s map window. For more information, check out "UGCX Manual Part 4 - Optional Key Assignments" manual, at page #7.

8. Click on the "Create Route" toolbar's button, as shown below:



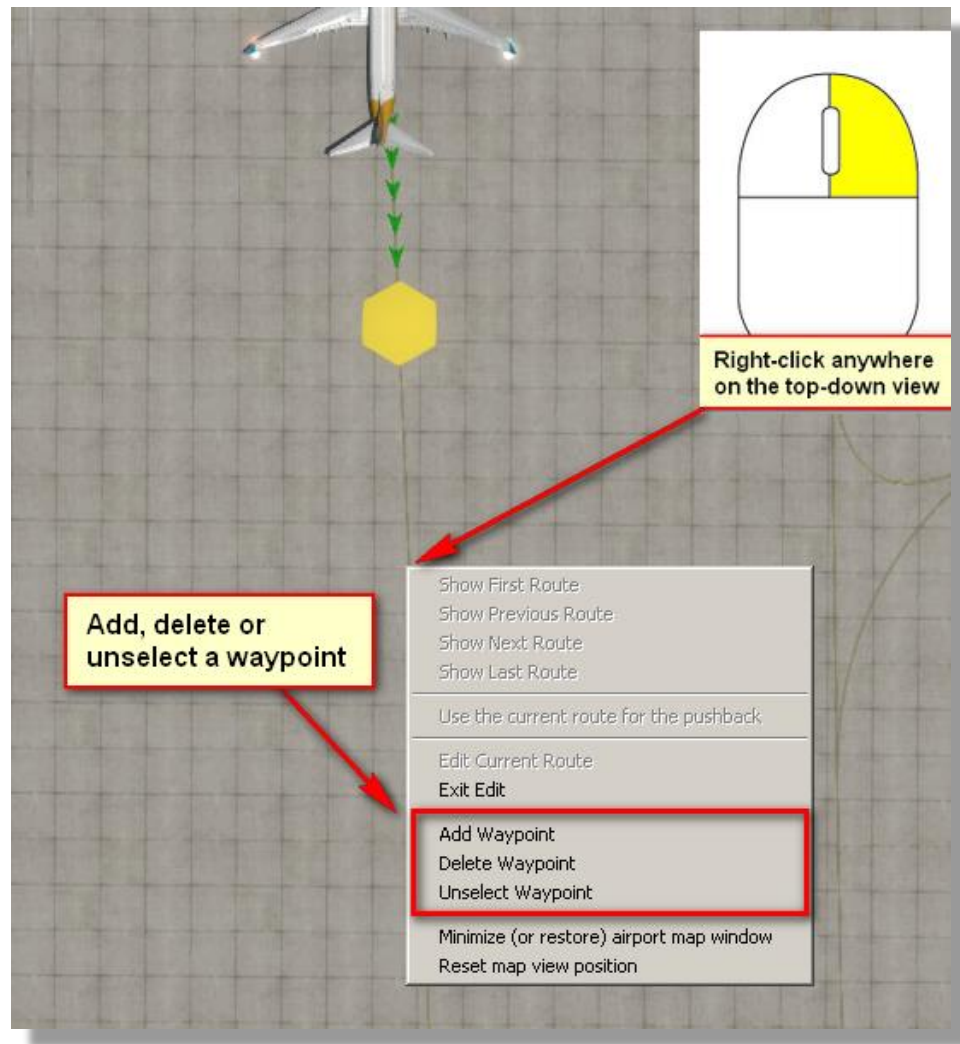
9. The "Airport's Chart Viewer" window will be minimized automatically, again. But this time you will be able to draw the route directly in the simulation.

Click on the mouse wheel (middle button) to add waypoints to the new custom route.



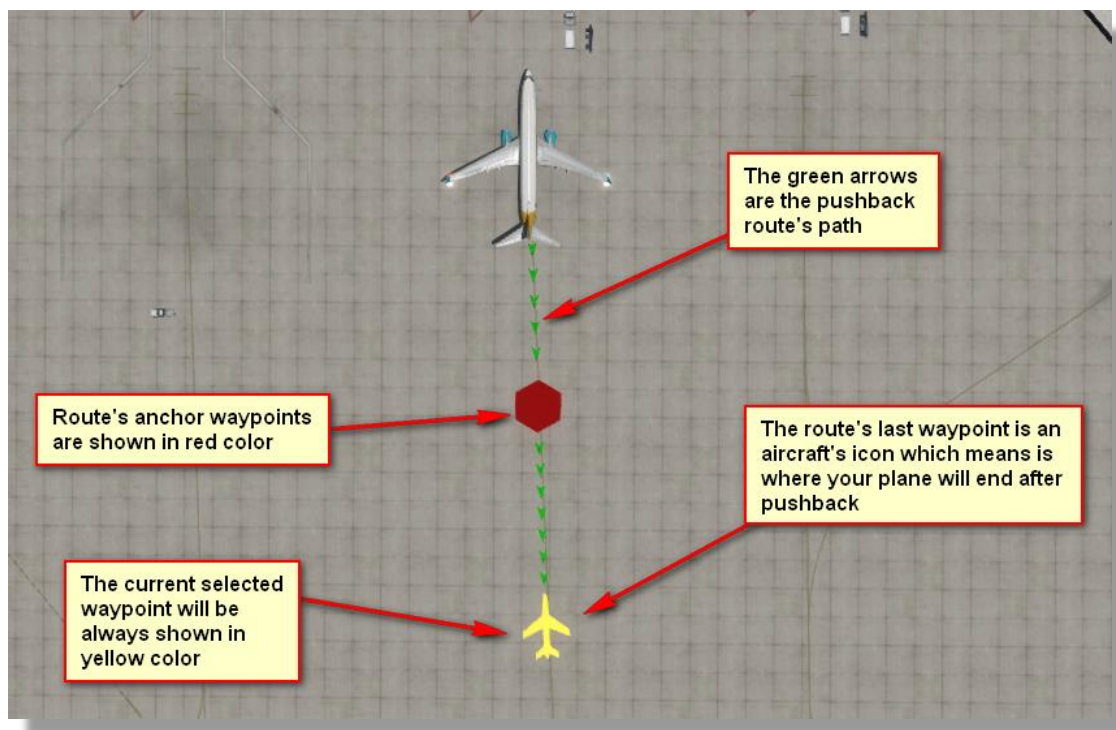
Optional: As an alternative, you could also add waypoints, by following these steps:

- Right-click anywhere on the top-down view
- A pop-up menu will appear on screen.
- Select the **"Add Waypoint"** menu option, as shown below:

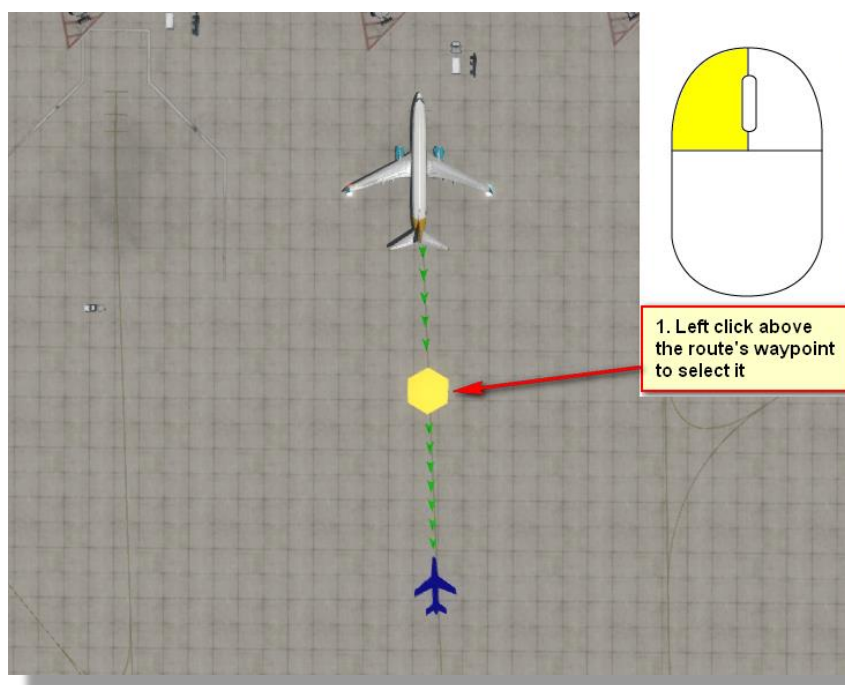


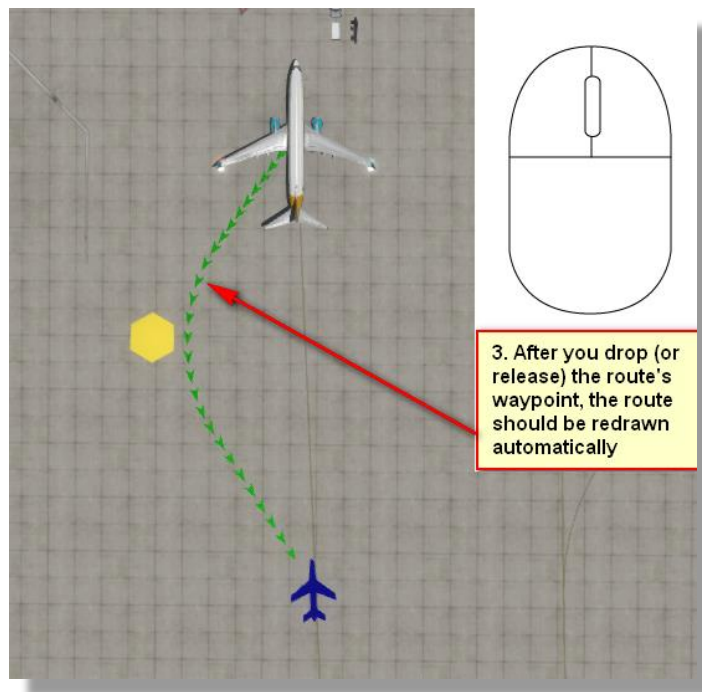
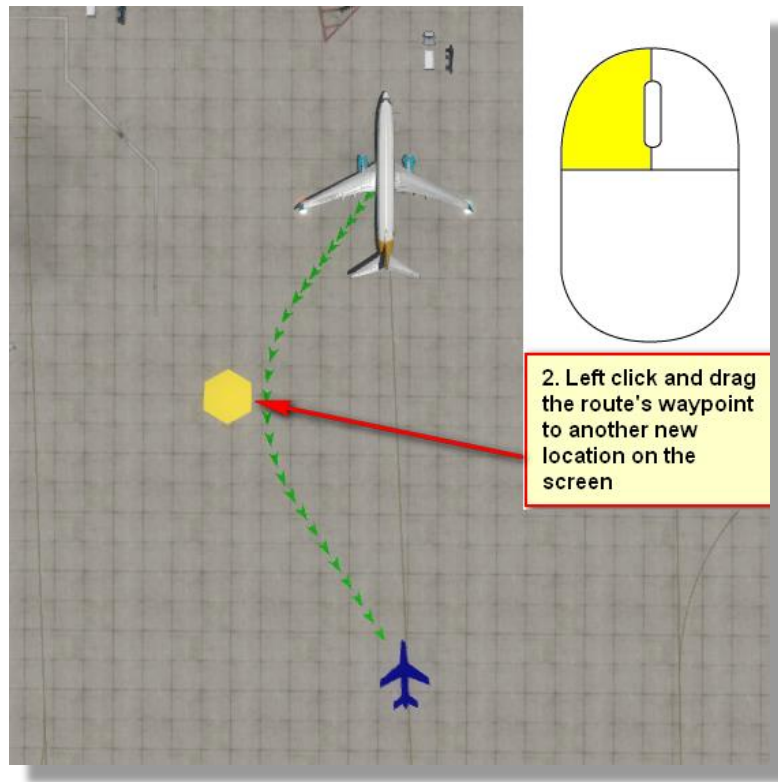
10. Add as many waypoints as you need. Also, you need to know that:

- The last waypoint will have the aircraft's icon, which is the place where your aircraft will stop after pushback.
- The route's anchor waypoints are red polygons.
- The route's waypoints that are in yellow indicate the current selected waypoint in the route.



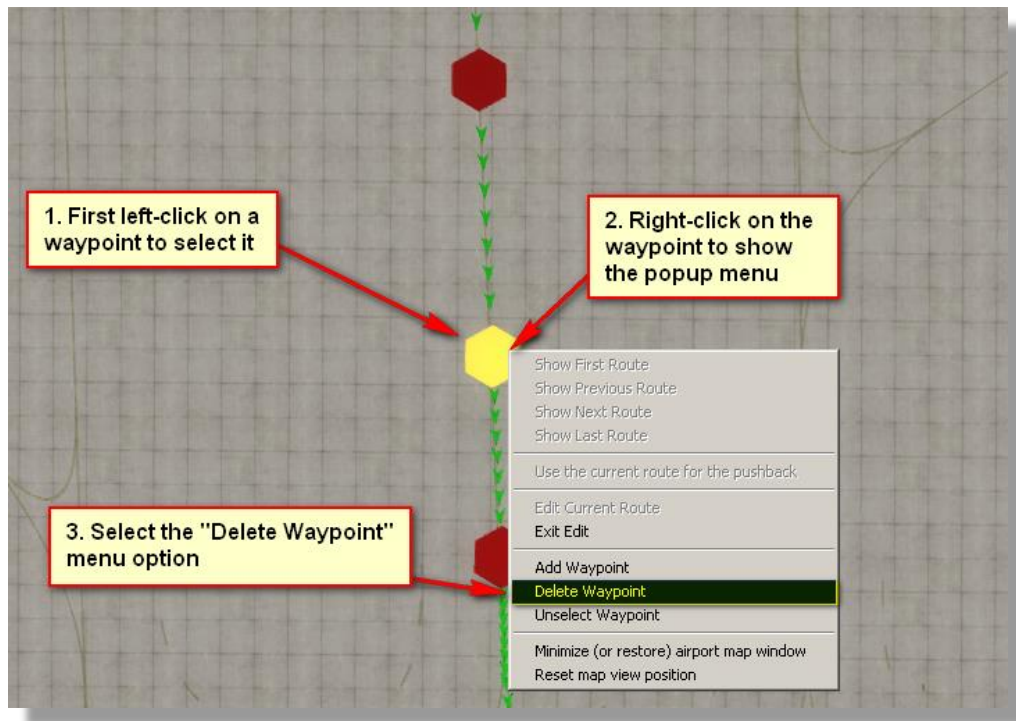
11. To move or reallocate each waypoint you just need to left click above the route's waypoint. After it turns yellow, you can left click and drag it anywhere in the top-down view, and then release it, and the pushback route's path, shown in green, should be redrawn automatically.





12. To delete a waypoint, follow these steps:

- a) Left click on a waypoint (red polygon) to select it.
- b) Right-click on the selected waypoint.
- c) A pop-up menu will appear on screen.
- d) Select the **"Delete Waypoint"** menu option, as shown below:



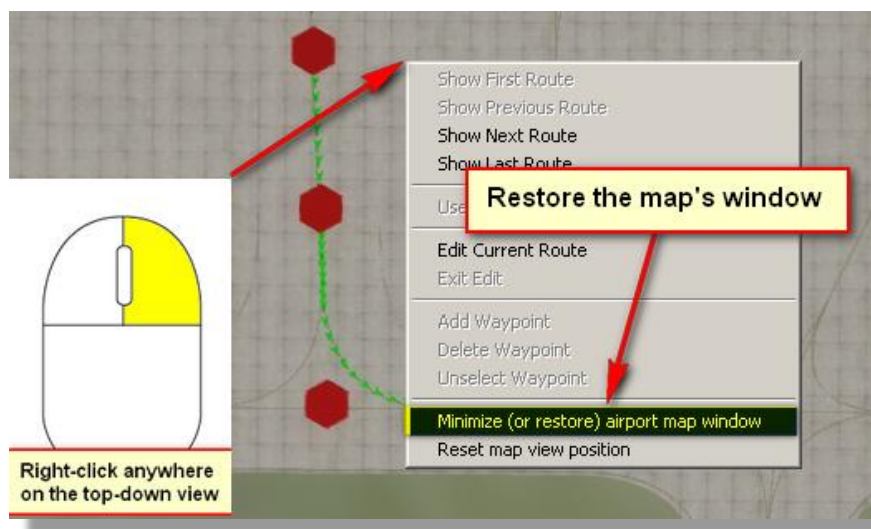
Optional: As an alternative, you can use a UGCX's hot key, configured in the initialization file. If you didn't configure it, then you can check out the **"UGCX Manual Part 4 - Optional Key Assignments"** manual, **page #5**. The initialization file entry that needs to be configured is:

- **DelSelWpntKey:** Deletes the current selected waypoint, when editing the custom pushback route directly in the simulation (top-down view).

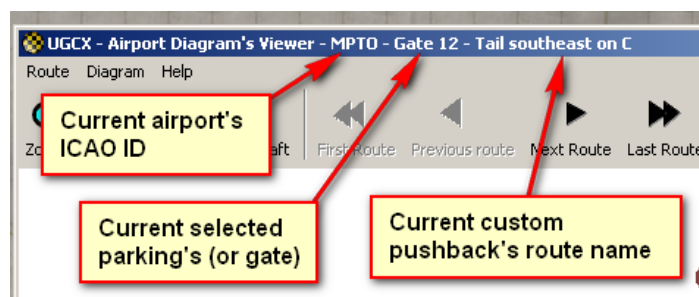
Optional: If you do not wish to use a hot key, you can restore the **"Airport's Chart Viewer"** window, as shown below:

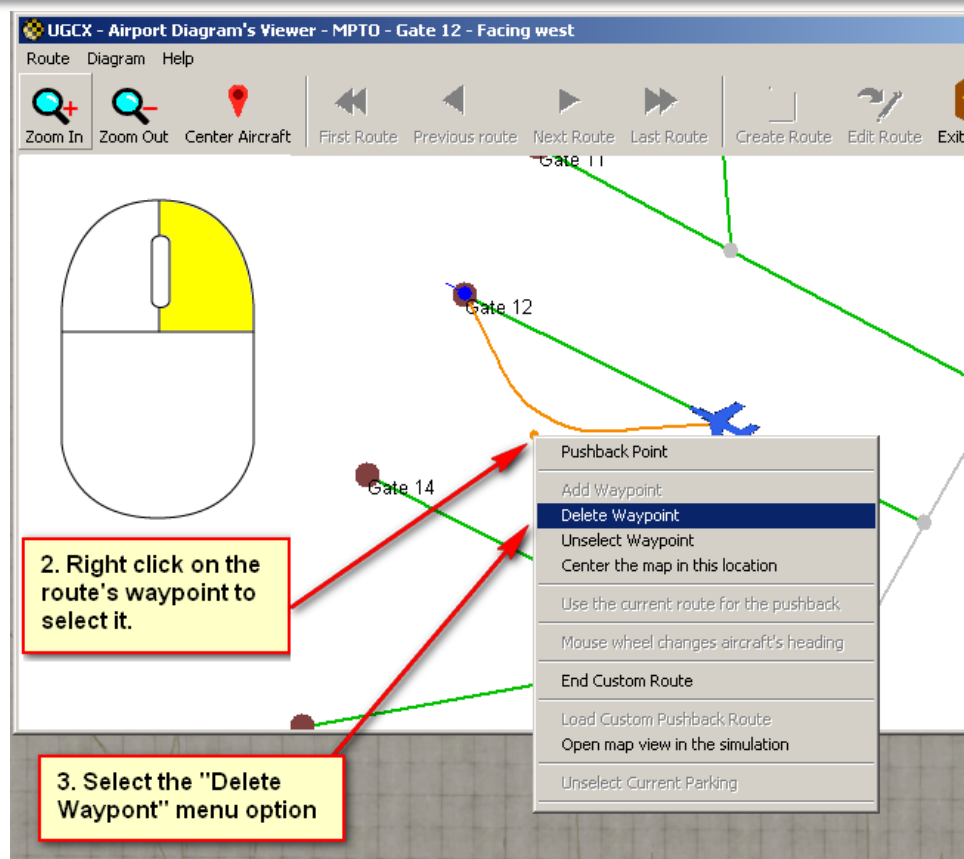
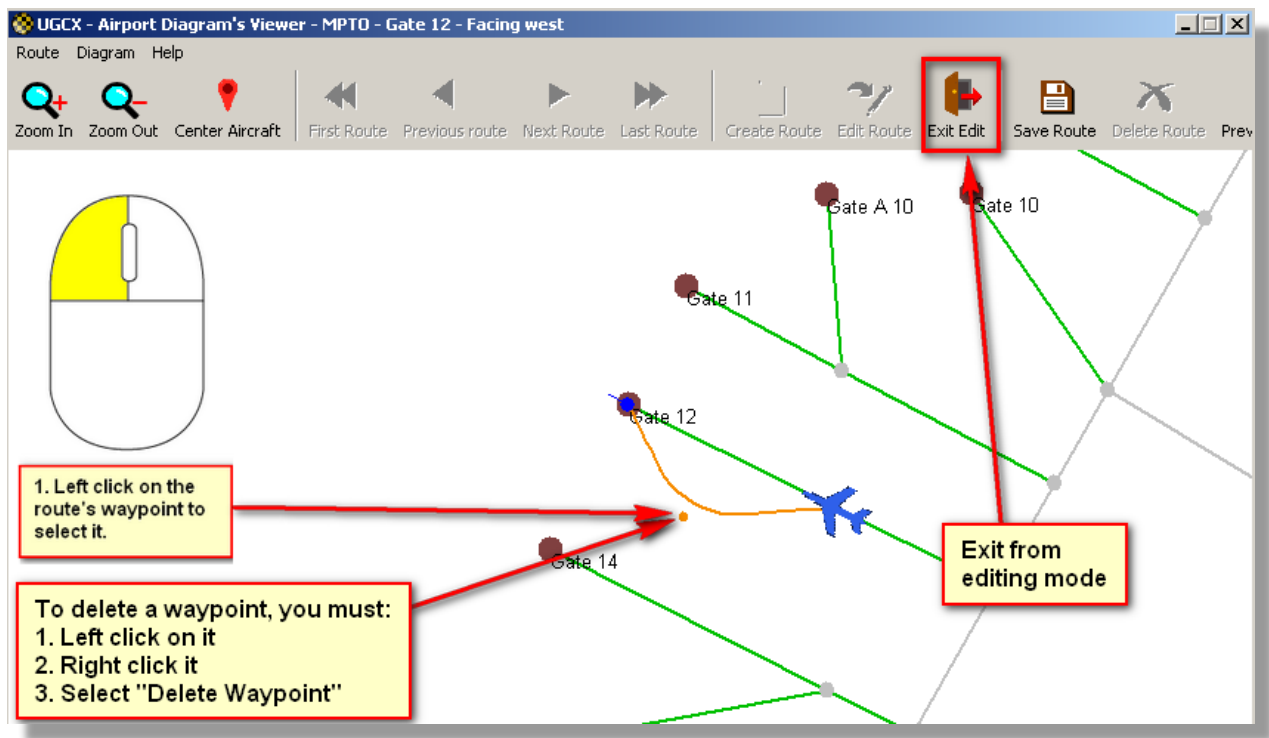


An alternative method is:



Optional: As an alternative, you could configure the “MinRestMapWindow” hot key in the initialization’s file, for **minimize/restore** the airport’s map window. For more information, check out "UGCX Manual Part 4 - Optional Key Assignments" manual, at page #7.





13. **IMPORTANT:** All custom pushback routes should have a "**pushback point**". The "**pushback point**" is one of the route's anchor waypoints (*red polygon*) that initially, on previous versions, was used to define the final direction of the pushback, and the location where the ramp agent walks to make the "X" sign.



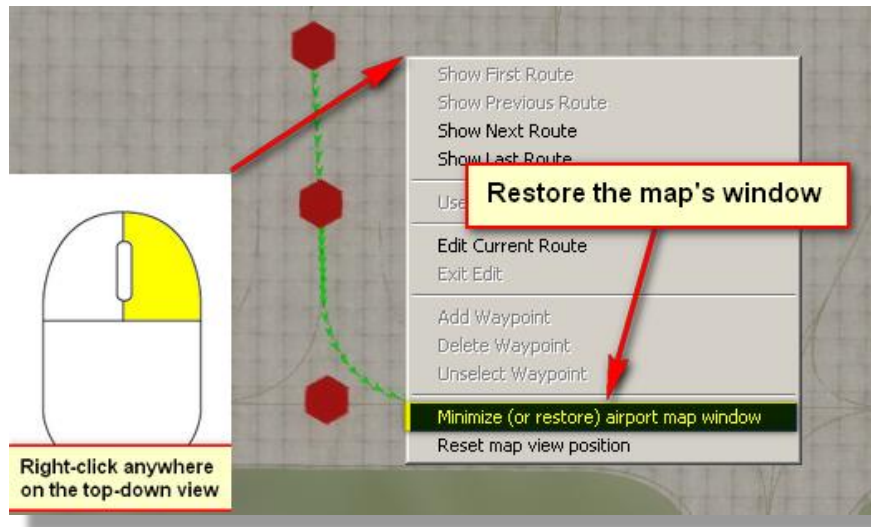
From **version 1.7**, the "**pushback point**" is only the place where the ramp agent makes the "X" sign. The pushback's final direction (or orientation) is defined by the last aircraft's shape icon's orientation that you see on the map and in the simulation.

To define a "**pushback point**", you still need to go back to the airport's map window, by following these steps:

- a) Restore the airport's map window

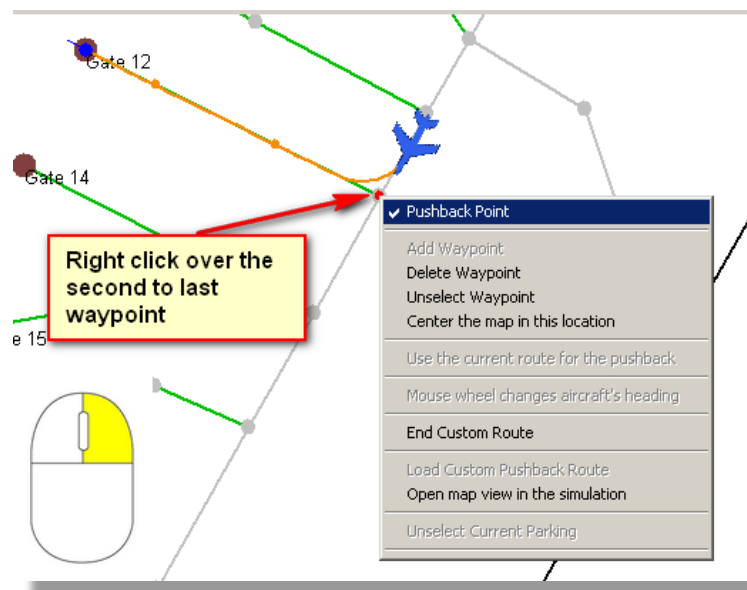


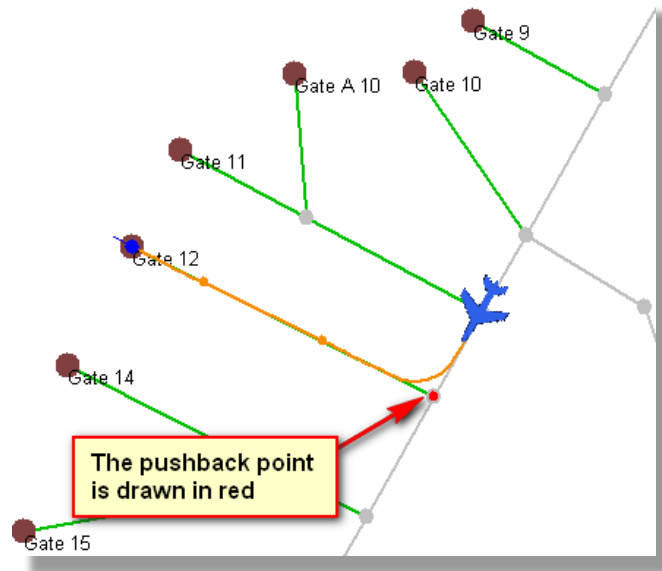
An alternative method is:



Optional: As an alternative, you could configure the “MinRestMapWindow” hot key in the initialization’s file, for **minimize/restore** the airport’s map window. For more information, check out "UGCX Manual Part 4 - Optional Key Assignments" manual, at **page #7**.

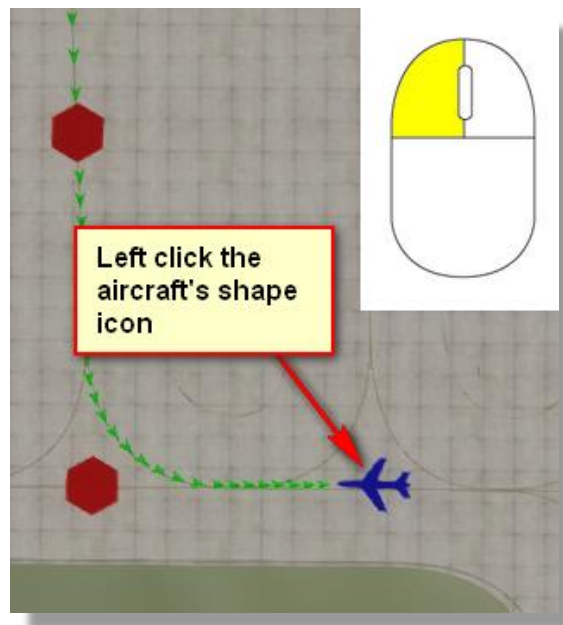
- b) Right click the second to last anchor’s waypoint. A sub-menu appears above the map's window. Then select the **"Pushback Point"** menu option.



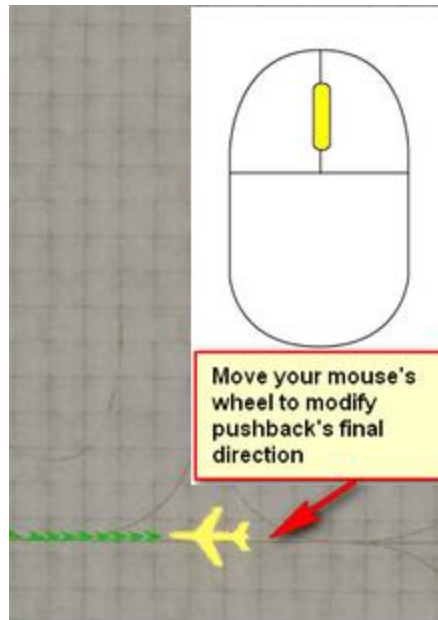


14. In order to define the pushback's final orientation (or direction), you need:

- a) Click over the aircraft's shape icon, in the airport's map window or in the simulation.

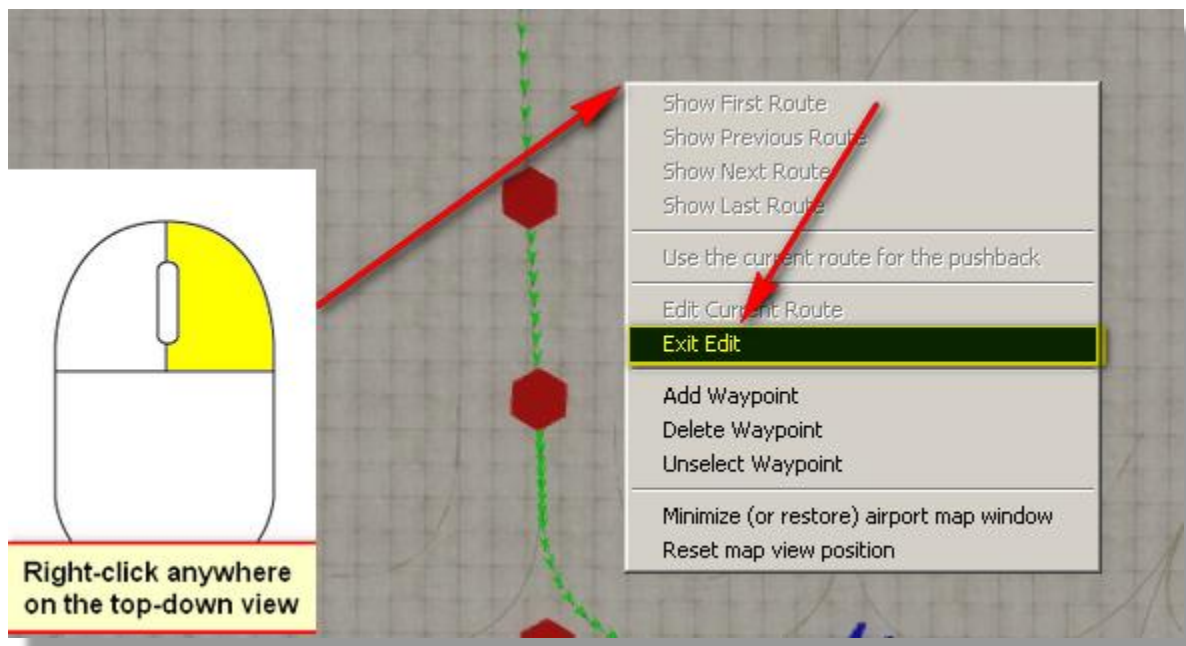


- b) Once you see the aircraft's shape icon become yellow, rotate the aircraft's shape icon orientation with your mouse wheel.



15. When done, exit from the editing mode using these steps:

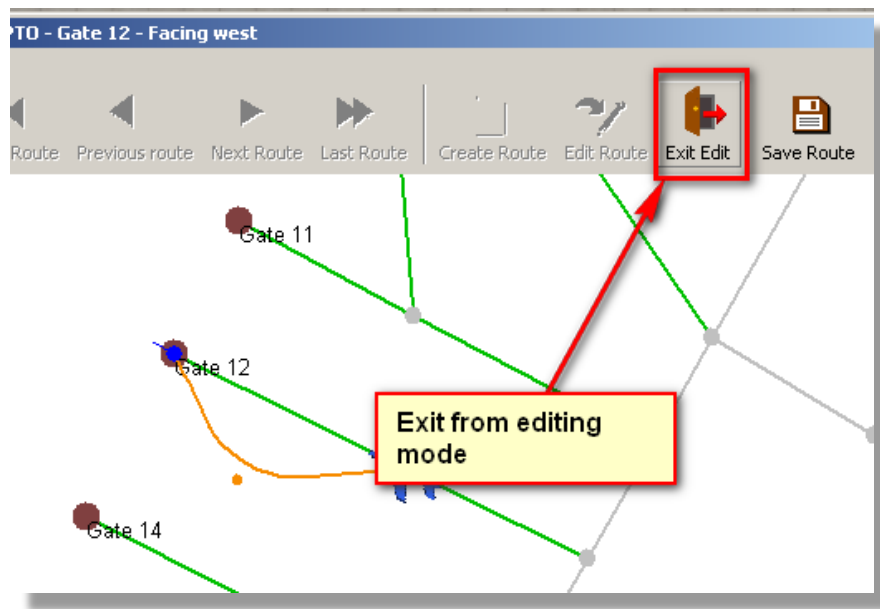
- Right-click anywhere on the top-down view
- A pop-up menu will appear on screen.
- Select the **"Exit Edit"** menu option, as shown below:



Optional: As an alternative, you can use a UGCX's hot key, configured in the initialization file. If you haven't configured it, then you can check out the "**UGCX Manual Part 4 - Optional Key Assignments**" manual. The initialization file entry that needs to be configured is:

- **ExitEditModeKey:** Exit from the edit custom pushback mode. This only works when editing the custom pushback route directly in the simulation (top-down view).

Optional: Another method, restore the "**Airport's Chart Viewer**" window, then click on the "**Exit Edit**" toolbar's button as shown below:



16. You will be prompted to set a name to the new custom pushback route.

By default, the module assigns a name to it automatically.

IMPORTANT: The route's name must be written in English because the system later will attempt to translate and use a phonetic version of it for use with Voice Control, and because the ground crew will use the phonetic version to acknowledge the pilot's command using sound files.

You can preview the phonetic version by clicking on the "**Generate Phonetic Version**" button as shown in the picture below.

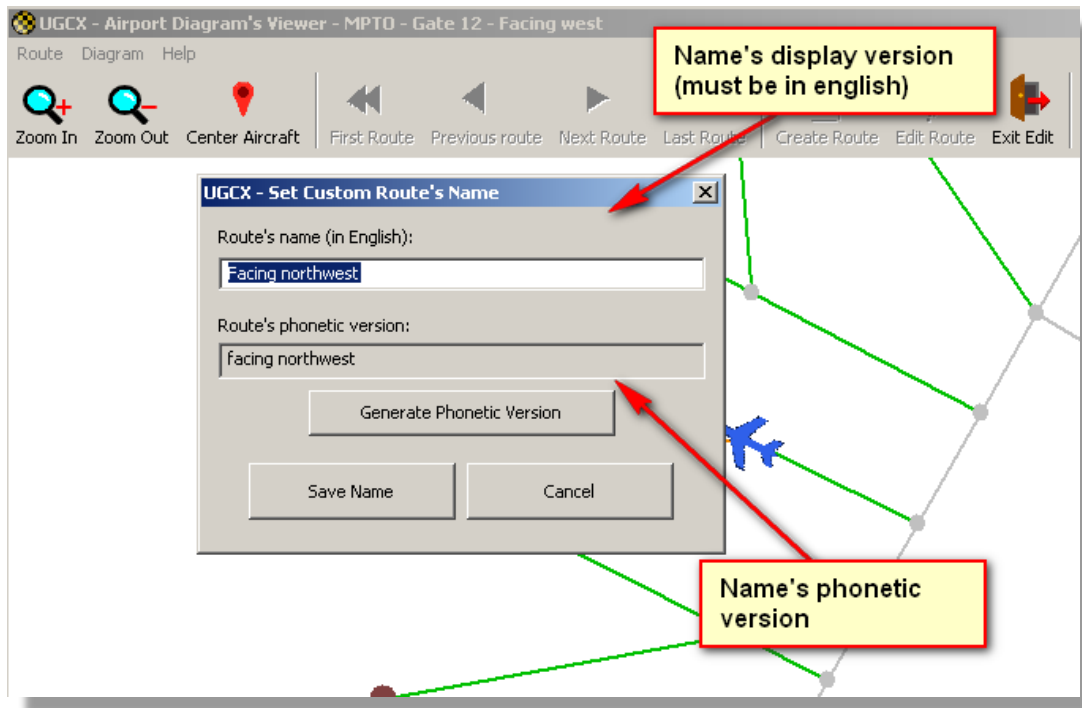
There is a limit on which English words you can use in custom pushback route names.

The allowed words are: **Link, Facing, Tail, Taxiway, Via, On, Nose.**

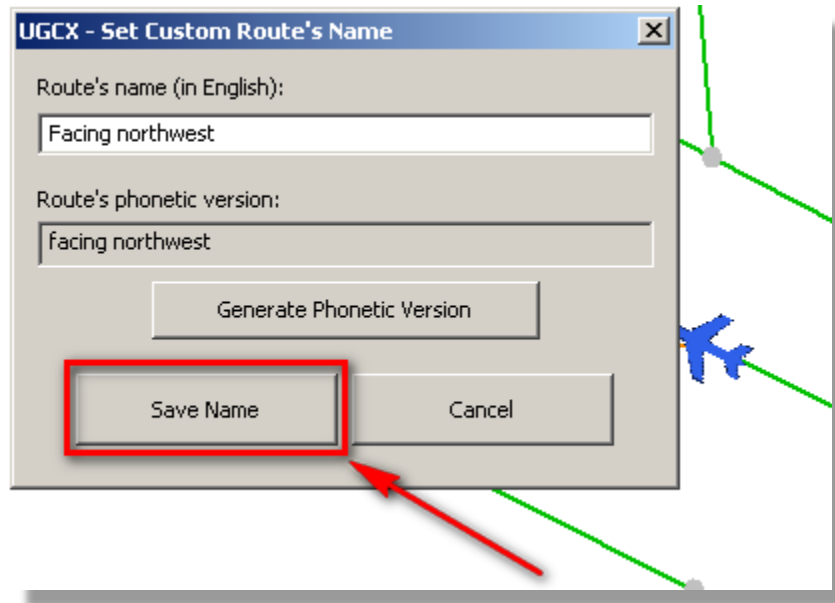
Also, you are allowed to use alphanumeric strings; these will be converted into NATO phonetic alphabet version. Moreover, you are allowed to use cardinal direction abbreviations, like **NW, SW, SE, NE**, these will be converted to **northwest, southwest, southeast and northeast.**

For example, study the table below:

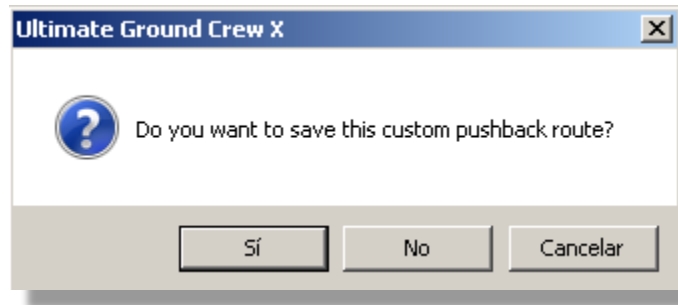
Custom Pushback Route's Name	
Display Version	Phonetic Version
Tail SW on C	Tail southwest on charlie
Link northeast on R6	Link northeast on romeo six
Nose south on taxiway B5	Nose south on taxiway bravo five
Facing east on M	Facing east on mike
Tail NW via A5	Tail northwest via alpha five



When you are done click on the "**Save Name**" button, as shown below:



17. After setting a name to your custom pushback route, you will be prompted if you would like to save the route.



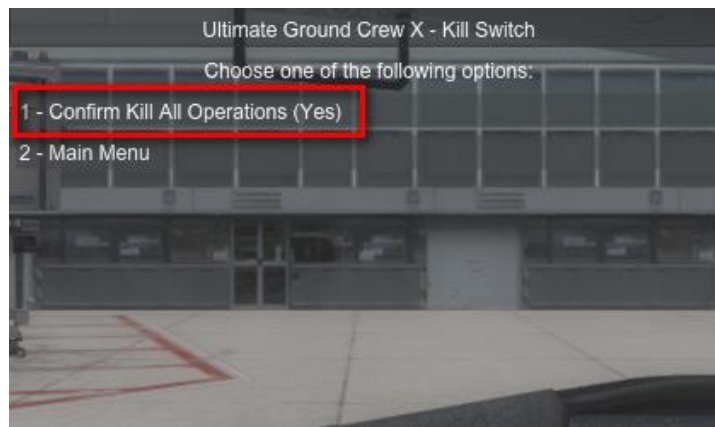
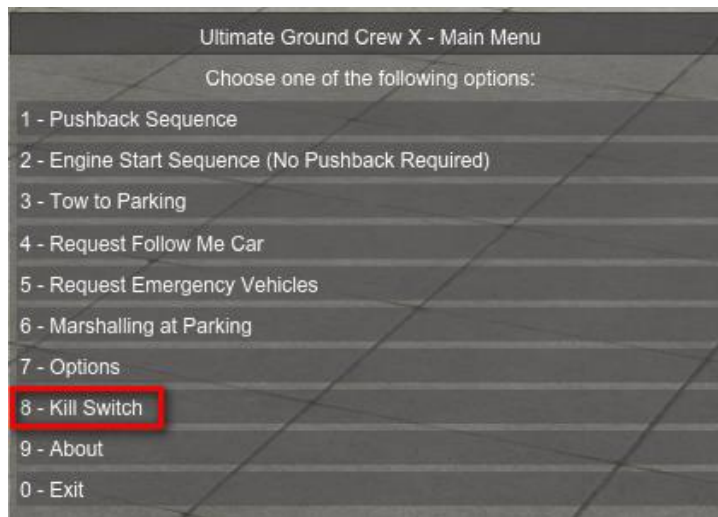
18. Once you have finished, close the airport's map window.
19. Start a pushback sequence.
20. If using **MENU CONTROL**, your saved routes will be listed on the menu and you can choose which one you want to use.

If using **VOICE CONTROL**, you would just speak the appropriate phrase as per the Voice Pushback Tutorial. Remember to pay attention to the cardinal heading!

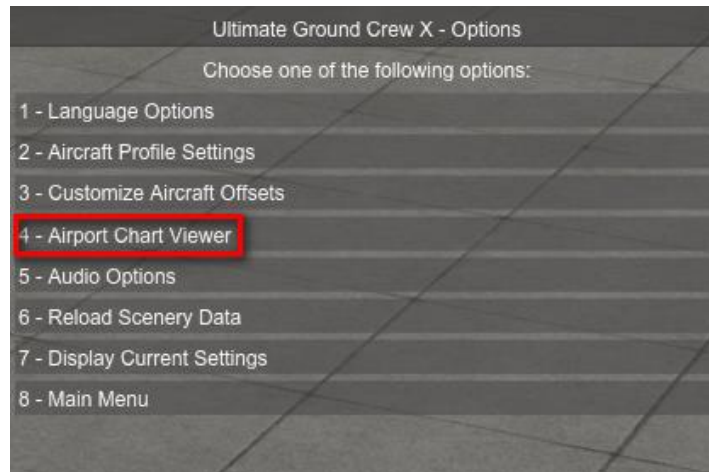
EDITING EXISTING CUSTOM PUSHBACK ROUTES:

To edit an existing custom pushback route associated to a specific parking or gate location, follow these steps:

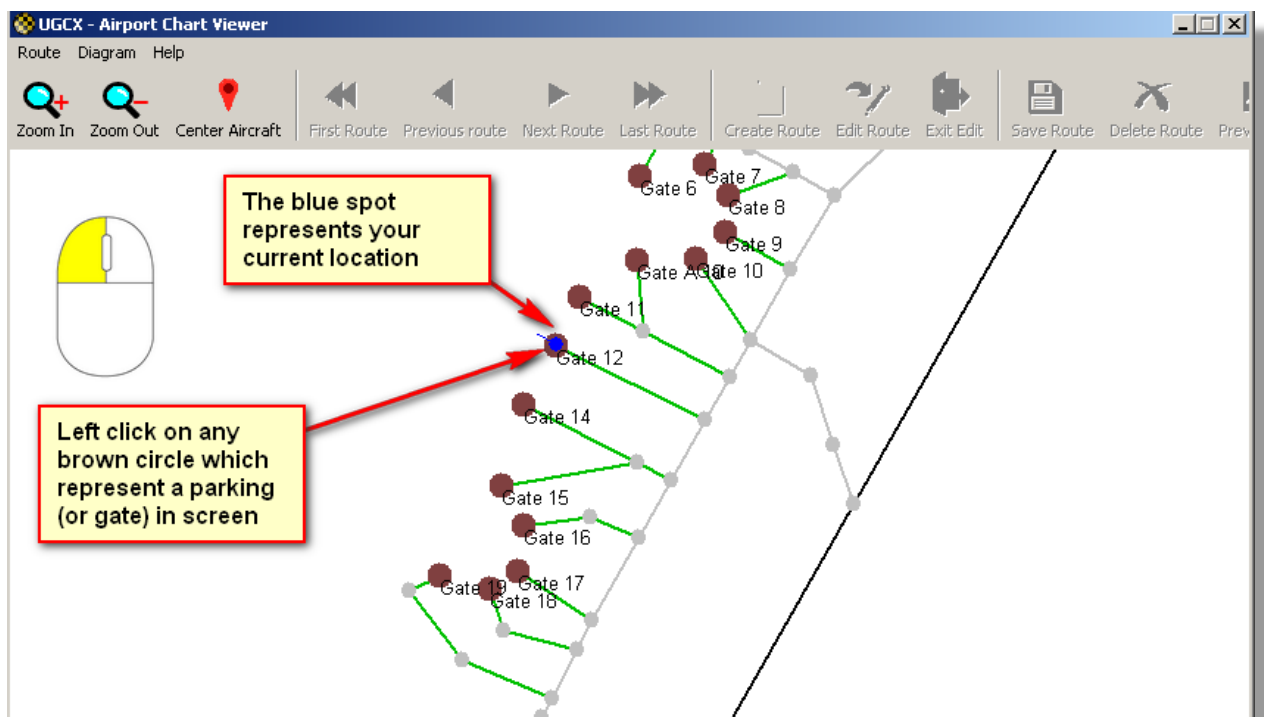
1. Place your aircraft in the airport that has the parking spot that you would like to see.
2. Ensure you are not running any UGCX ground service. If you are already running a UGCX ground service, then kill all ground operations, as shown below:



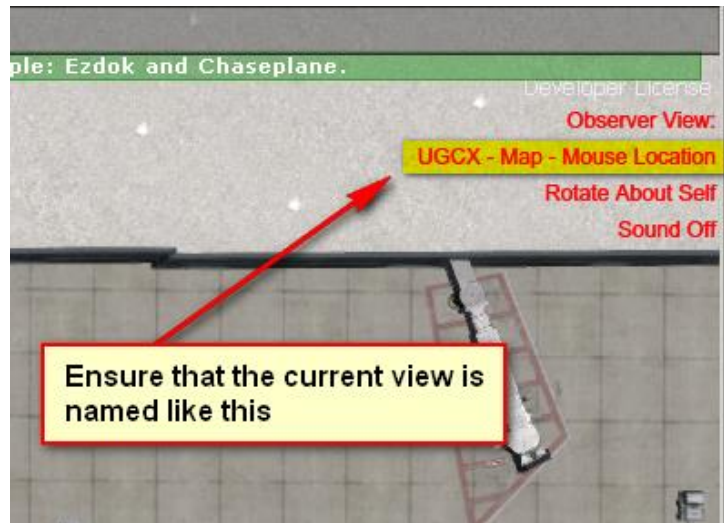
3. Go to the UGCX 's main menu, then "**Options**" and finally select "**Airport Chart Viewer**"



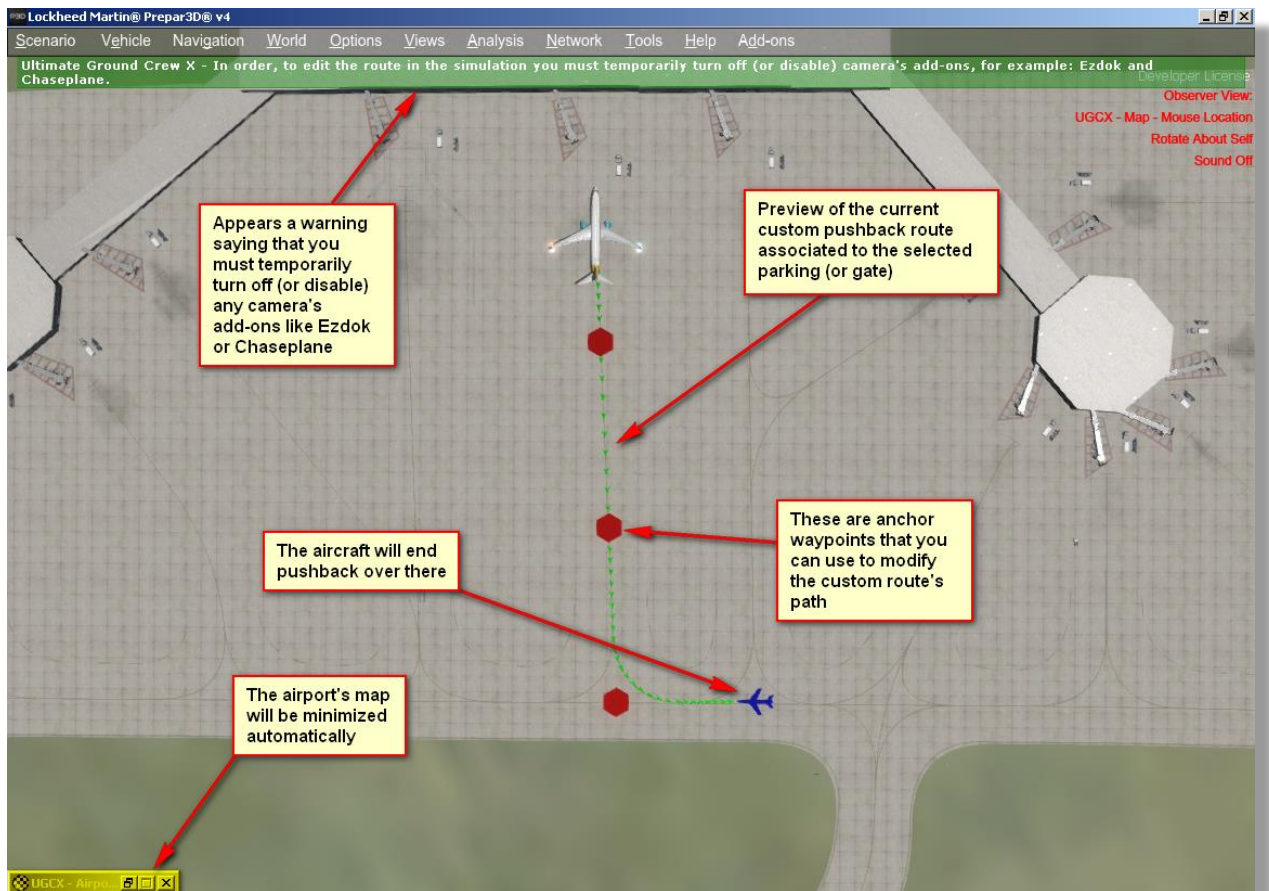
4. The "UGCX - Airport Diagram's Viewer" window appears. Each brown circle represents a parking (or gate) in the map. Now left click on any parking or gate in the map.

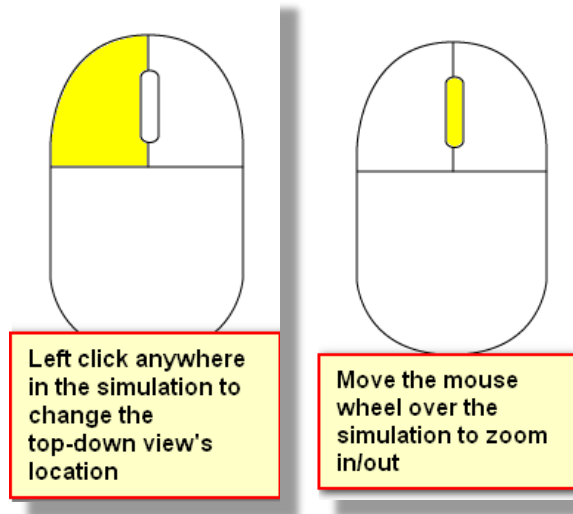


5. **IMPORTANT:** If you have any camera's add-on installed, like **Ezdok**, or **Chaseplane**, try to **temporarily disable them** to avoid conflicts with UGCX. **Ensure that you see on the screen the following:**

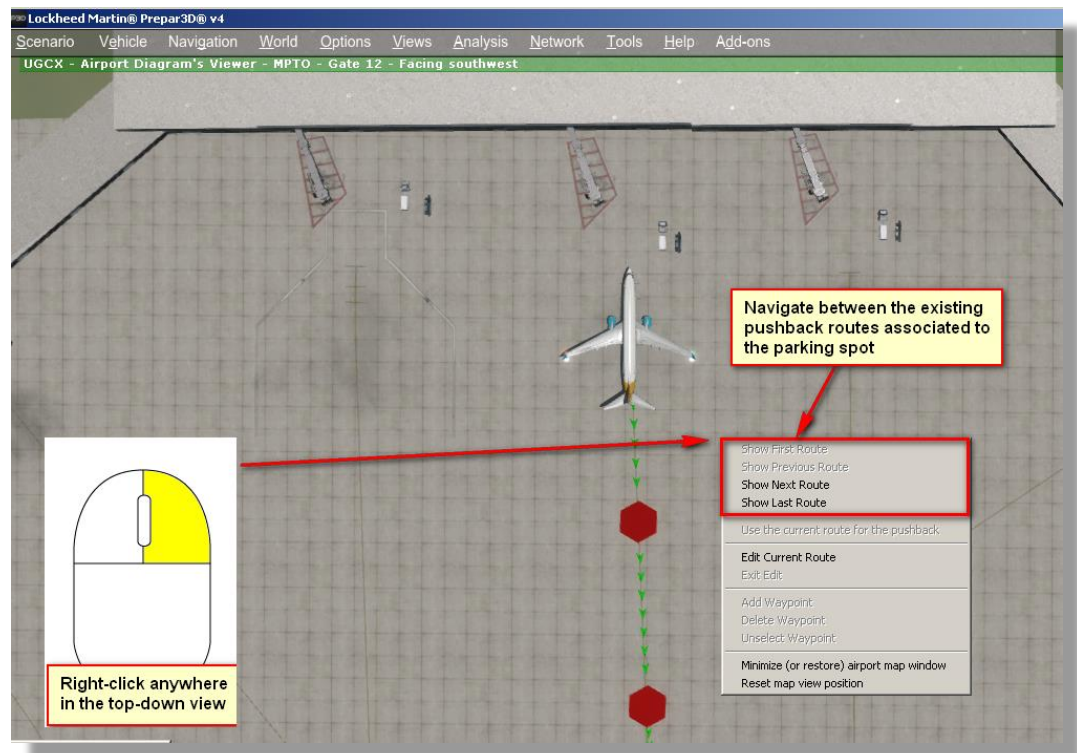


- The "Airport's Chart Viewer" window will be minimized automatically, and you will see a top-down view of the current custom pushback route's preview.





7. At this point you can navigate through the existing custom pushback routes associated with the parking location; you just need to:
 - a) Right-click anywhere on the top-down view
 - b) A pop-up menu will appear on screen.
 - c) Use the menu options shown in the picture below for navigate between the existing custom pushback routes associated to the parking location.

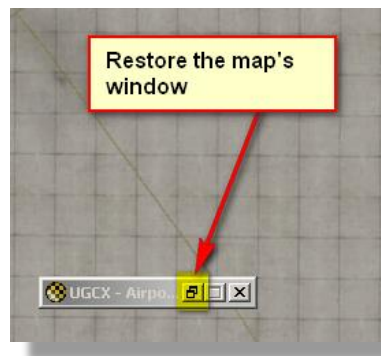


Optional: You could also use UGCX's hot keys, configured in the initialization file, if you didn't have configure it, then you can check out the "**UGCX Manual Part 4 - Optional Key Assignments**" manual, at **page #5**.

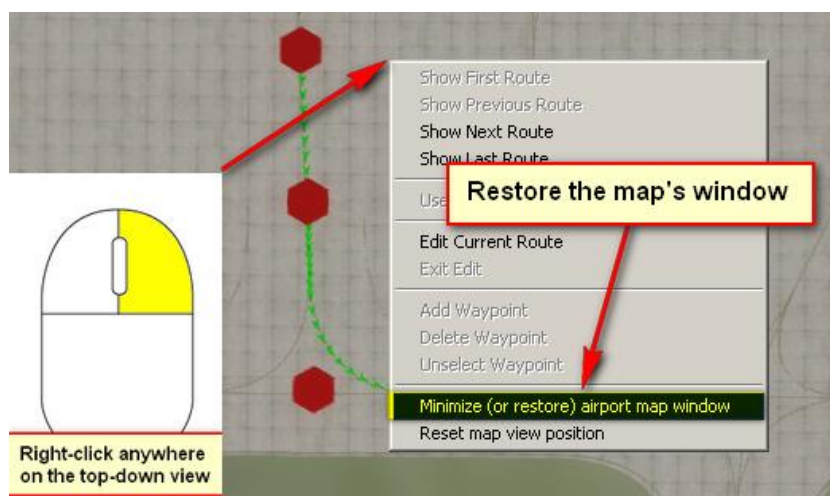
The initialization file's entries that needs to be configured are:

- **ShowNextRouteKey:** Show the next custom pushback associated to the current selected parking spot.
- **ShowPrevRouteKey:** Show the previous custom pushback associated to the current selected parking spot

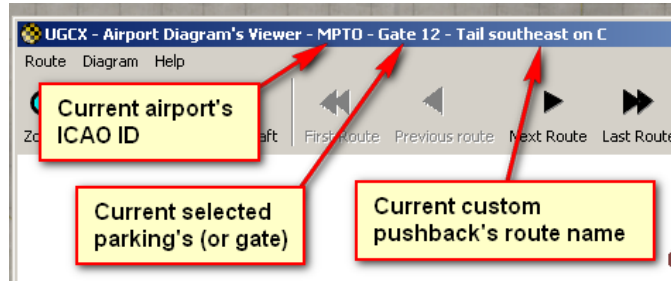
Or if you would like, you could restore the "**Airport's Chart Viewer**" window, and click on the toolbar's navigation buttons, as shown below:



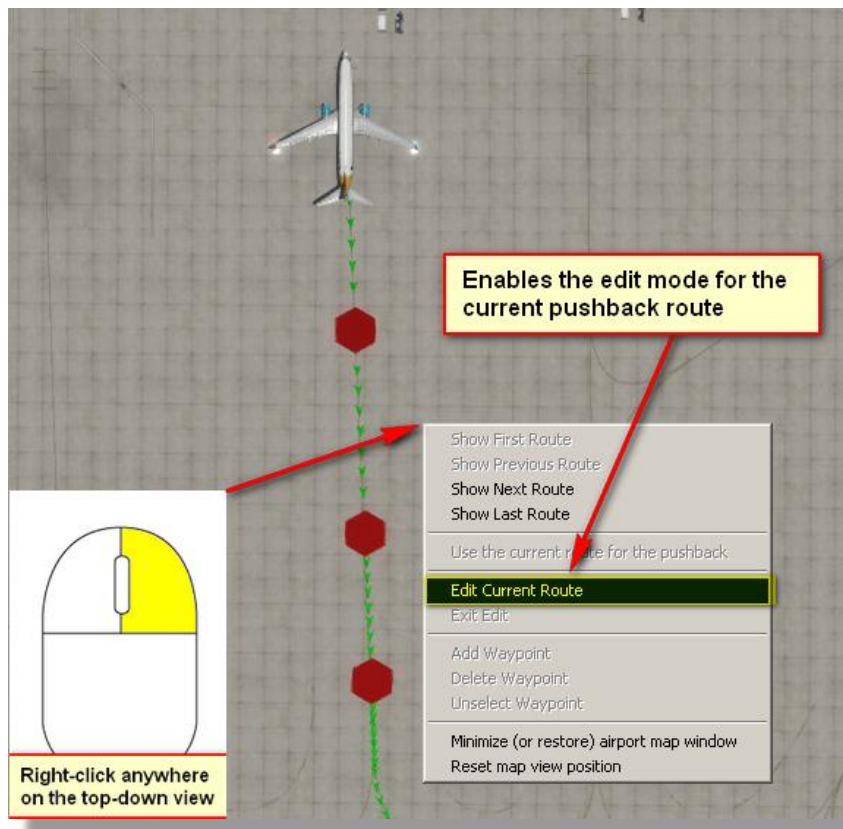
An alternative method is:



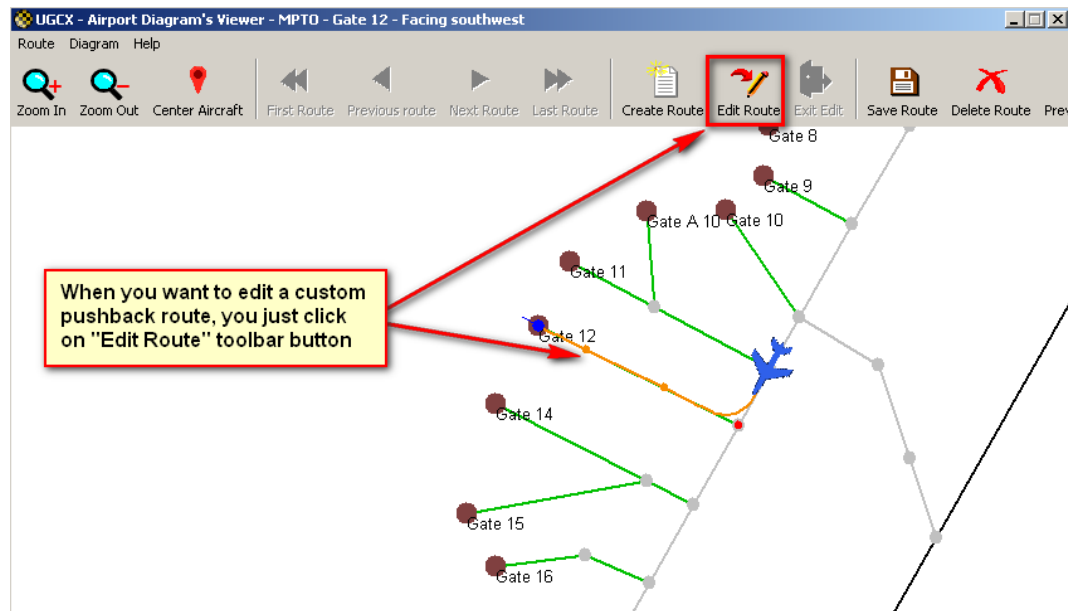
Optional: As an alternative, you could configure the “MinRestMapWindow” hot key in the initialization’s file, for **minimize/restore** the airport’s map window. For more information, check out "UGCX Manual Part 4 - Optional Key Assignments" manual, at page #7.



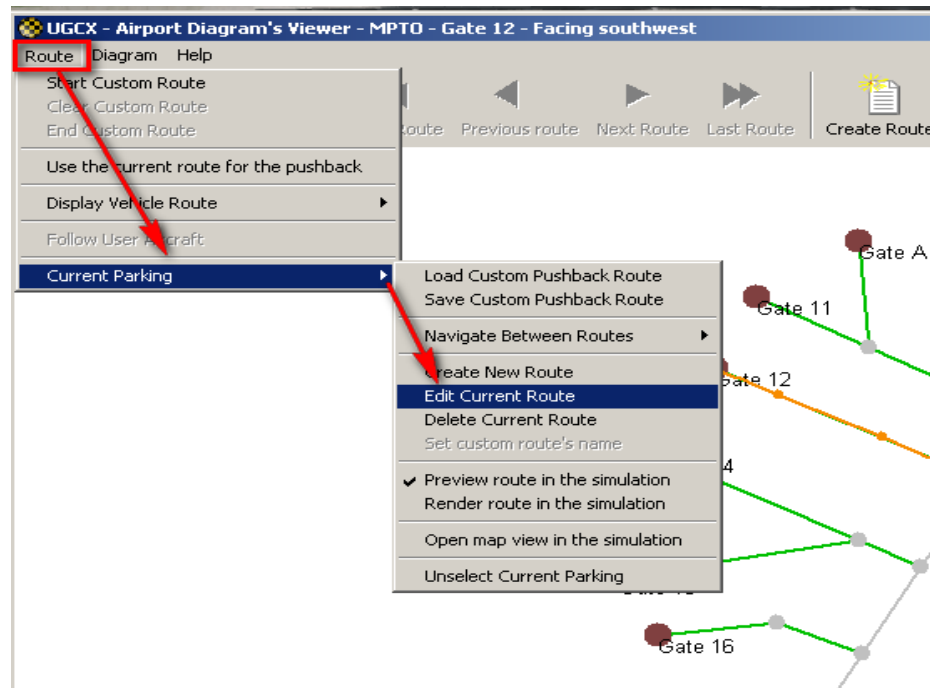
8. Once you find the custom pushback route that you would like to edit, follow these steps:
 - a) Right-click anywhere on the top-down view
 - b) A pop-up menu will appear on screen
 - c) Select the "**Edit Current Route**" menu option, as shown below:



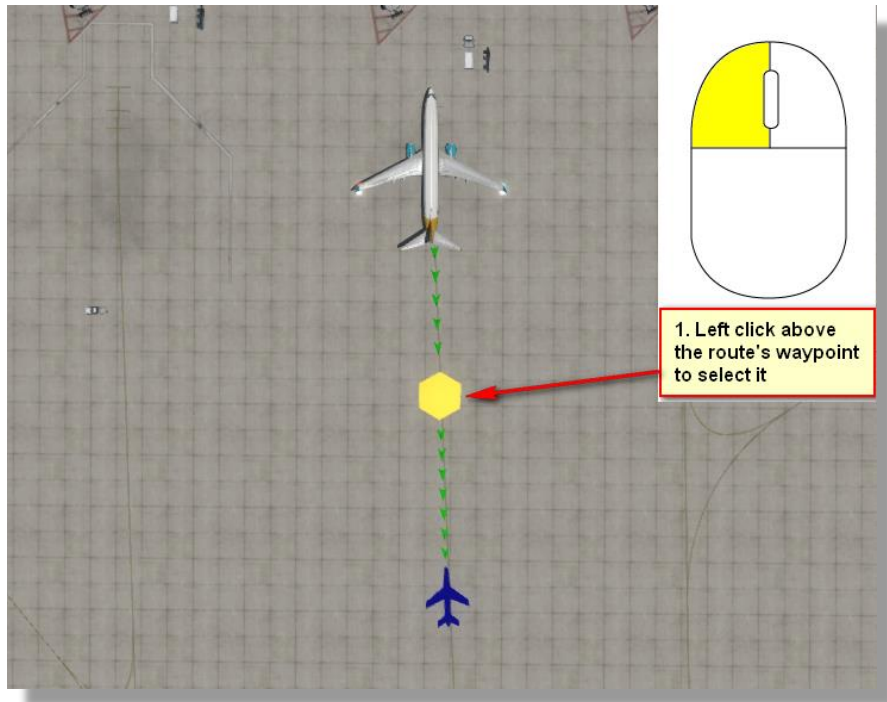
Optional: As an alternative, click the **"Edit Route"** toolbar button.

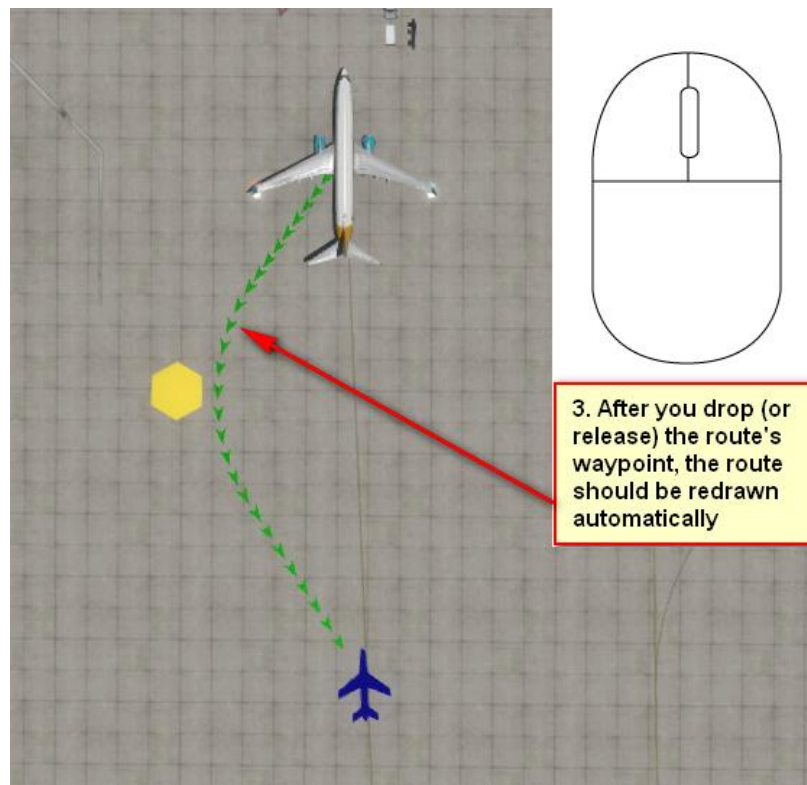
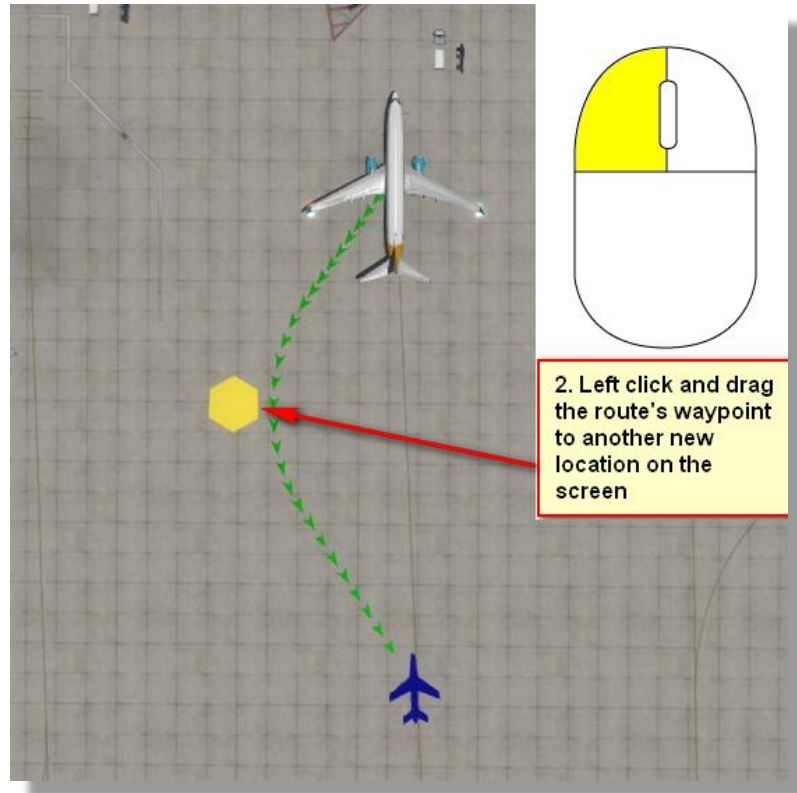


Optional: Another method is, thru the **"Route"** menu, then **"Current Parking"** and finally select the **"Edit Current Route"** menu option.



9. The "**Airport's Chart Viewer**" window will be minimized **automatically** and you will be able to edit the existing custom pushback route directly in the simulation.
10. To move or reallocate each waypoint you need to left click above the route's waypoint; after it turns yellow in color, you can left-click and drag it anywhere in the top-down view, then drop (or release it), and the pushback route's path, shown in green, should be redrawn automatically.





11. **IMPORTANT:** All custom pushback routes should have a "**pushback point**". The "**pushback point**" is one of the route's anchor waypoints (red polygon) that initially, on previous versions, was used to define the final direction of the pushback, and the location where the ramp agent walks to make the "**X**" sign.



From version 1.7, the "**pushback point**" is only the place where the ramp agent makes the "**X**" sign. The pushback's final direction (or orientation) is defined by the last aircraft's shape icon's orientation that you see on the map and in the simulation.

In order to define a "**pushback point**", you still need to go back to the airport's map window by following these steps:

- a) Restore the airport's map window

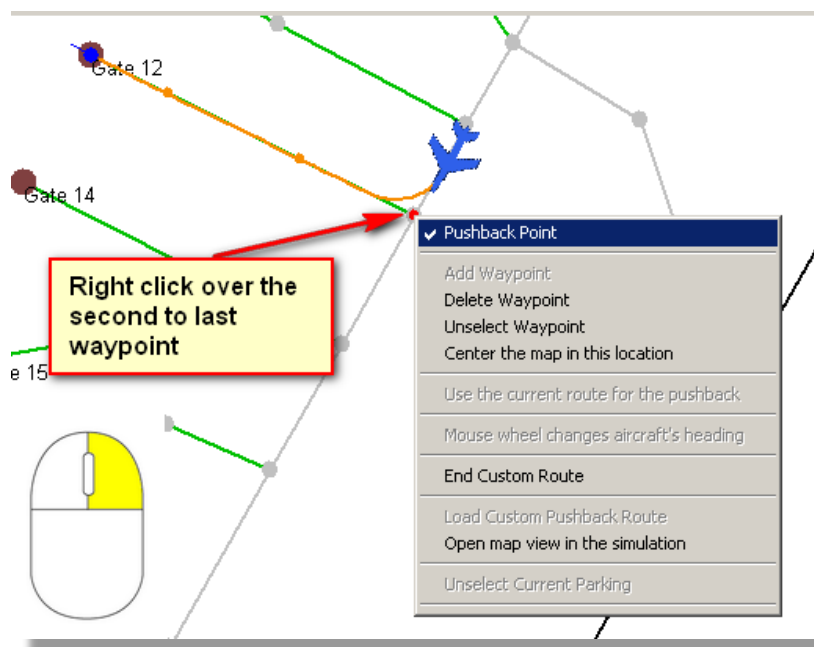


An alternative method is:



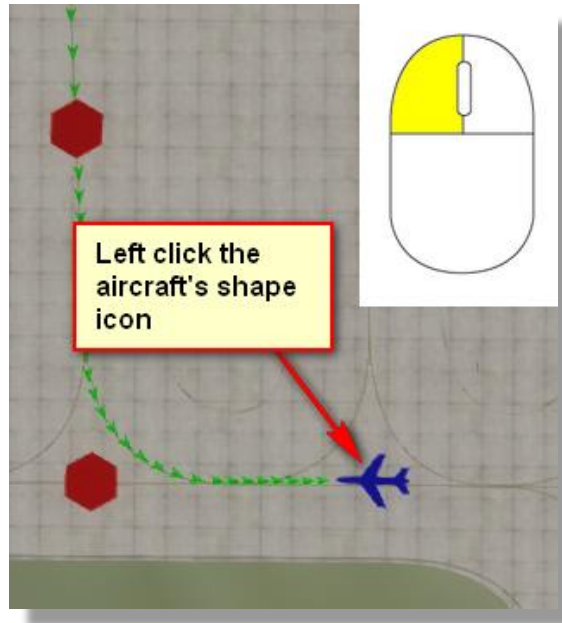
Optional: As an alternative, you could configure the "MinRestMapWindow" hot key in the initialization's file, for **minimize/restore** the airport's map window. For more information, check out "UGCX Manual Part 4 - Optional Key Assignments" manual, at **page #7**.

- b) Right click the second to last anchor's waypoint. A sub-menu appears above the map's window. Then select the "**Pushback Point**" menu option.

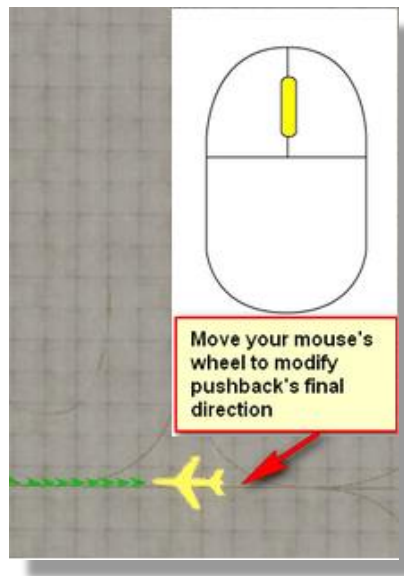


12. To define the pushback's final orientation (or direction), you need to:

- a) Click over the aircraft's shape icon in the airport's map window or in the simulation.

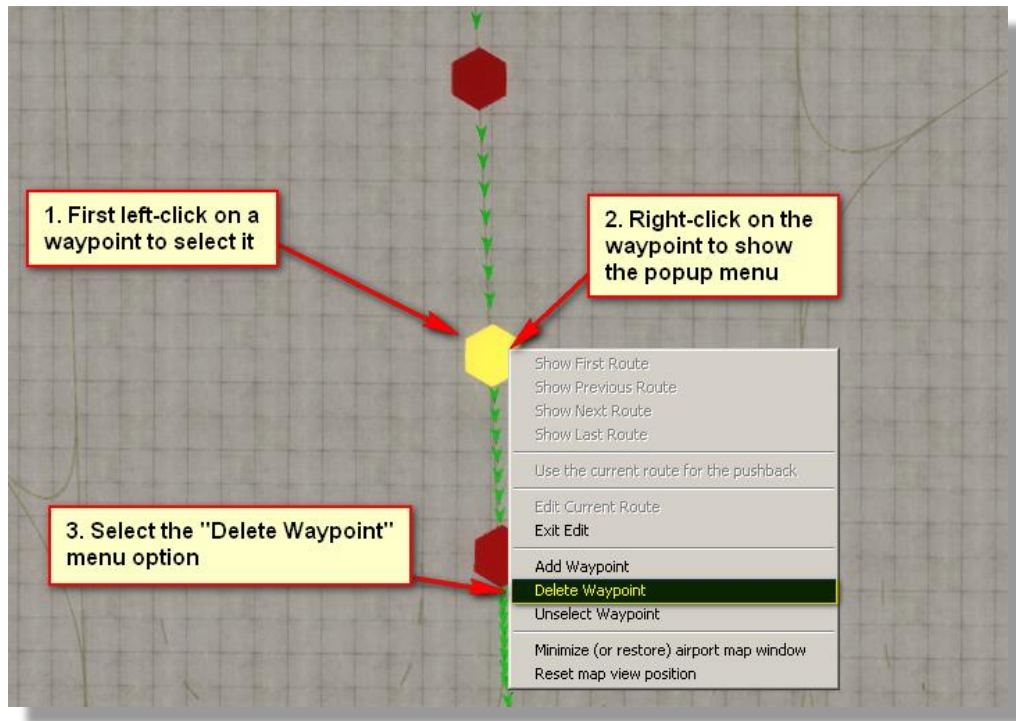


- b) Once you see the aircraft's shape icon turn yellow, rotate the aircraft's shape icon orientation with your mouse's wheel.



13. To delete a waypoint, follow these steps:

- a) Left click on a waypoint (**red polygon**) to select it.
- b) Right-click on the selected waypoint.
- c) A pop-up menu will appear on screen.
- d) Select the "**Delete Waypoint**" menu option, as shown below:



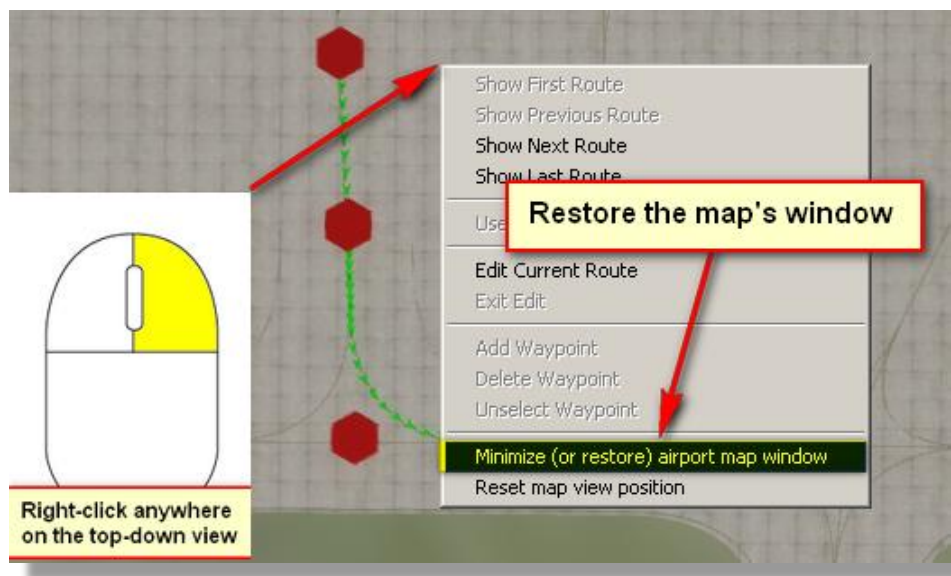
Optional: As an alternative, you can use a UGCX's hot key, configured in the initialization file. If you didn't configure it, then you can check out the "**UGCX Manual Part 4 - Optional Key Assignments**" manual, **page #5**. The initialization file's entry that needs to be configured is:

- **DelSelWpntKey:** Deletes the current selected waypoint, when editing the custom pushback route directly in the simulation (top-down view).

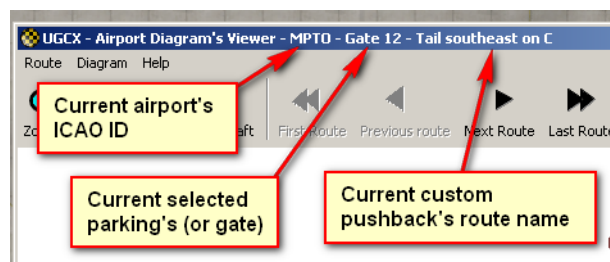
Or if you would like, you could restore the "**Airport's Chart Viewer**" window, as shown below:

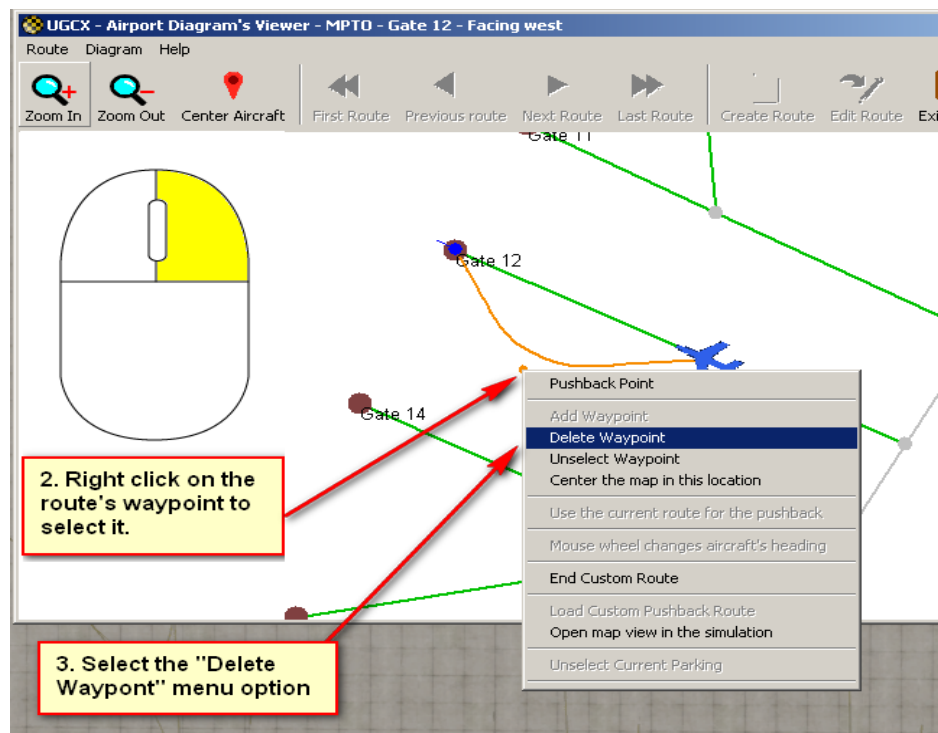
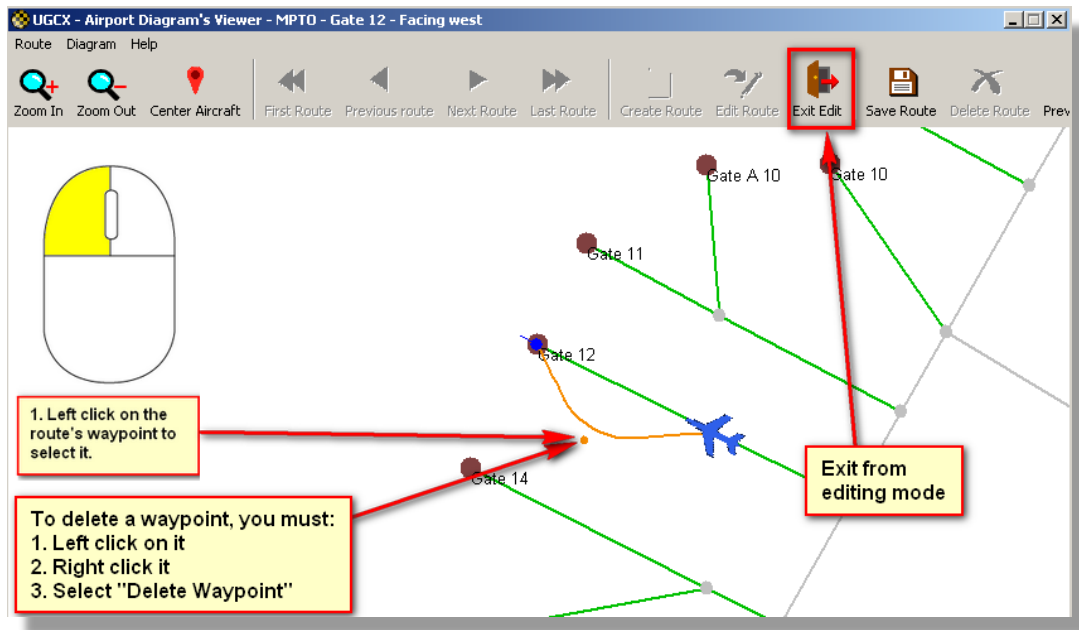


An alternative method is:



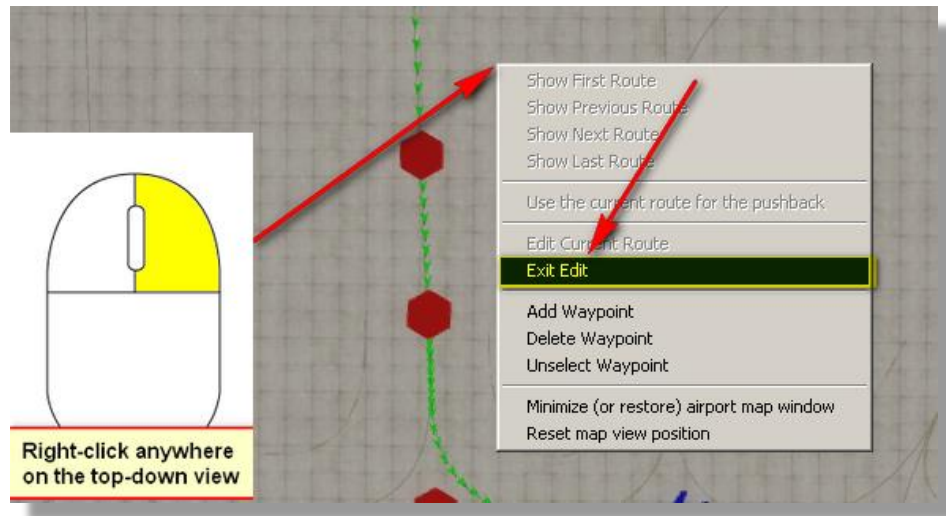
Optional: As an alternative, you could configure the “MinRestMapWindow” hot key in the initialization’s file, for **minimize/restore** the airport’s map window. For more information, check out "UGCX Manual Part 4 - Optional Key Assignments" manual, at **page #7**.





14. When done, in order to exit from the editing mode, follow these steps:

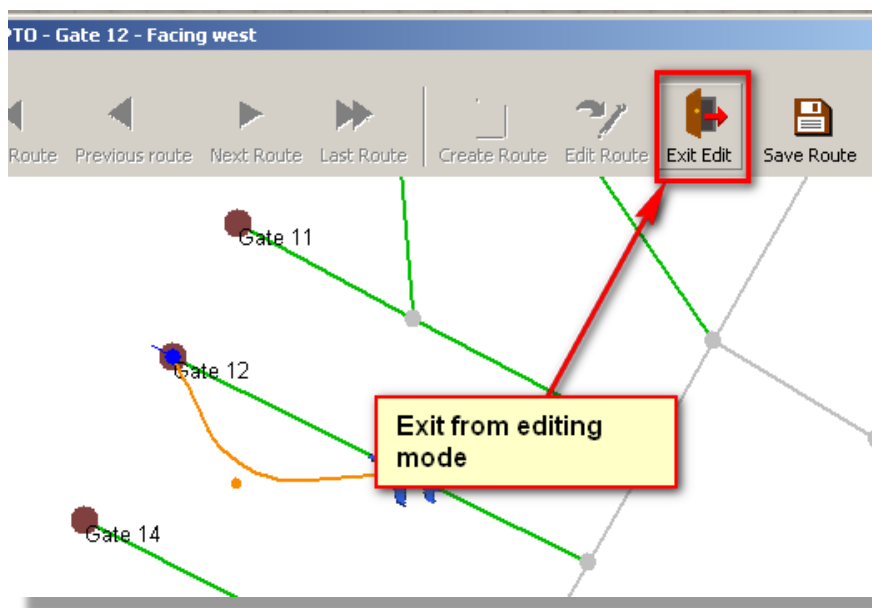
- Right-click anywhere on the top-down view
- A pop-up menu will appear on screen.
- Select the **"Exit Edit"** menu option, as shown below:



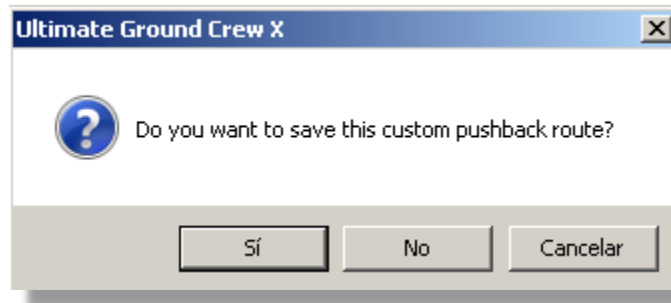
Optional: As an alternative, you can use a UGCX's hot key, configured in the initialization file. If you haven't configured it, then you can check out the "**UGCX Manual Part 4 - Optional Key Assignments**" manual, at **page #5**. The initialization file's entry that needs to be configured is:

- **ExitEditModeKey:** Exit from the edit custom pushback mode. This only works when editing the custom pushback route directly in the simulation (top-down view).

Optional: Another method is to restore the "**Airport's Chart Viewer**" window, as shown below:



15. Then, you will be prompted if you would like to save the route.



16. Once you have finished, close the airport's map window.

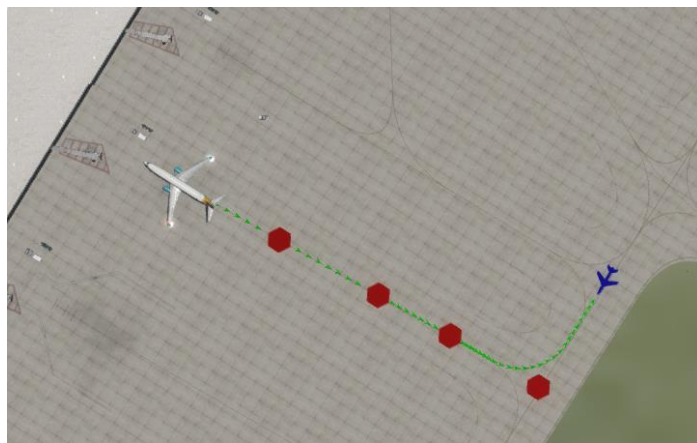
17. Start a pushback sequence.

18. If using **MENU CONTROL**, your saved routes will be listed on the menu and you can choose which one you want to use.

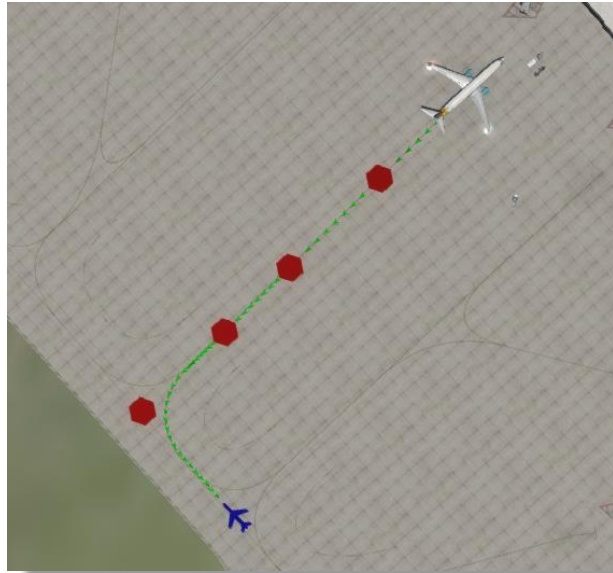
If using **VOICE CONTROL**, you would just speak the appropriate phrase as per the Voice Pushback Tutorial. Remember to pay attention to the cardinal heading!

RESET MAP VIEW POSITION:

If you have installed, any camera add-on, like **Ezdok** or **Chaseplane**, you may find yourself in a situation where the UGCX Map view's camera orientation angle has rotated like this:

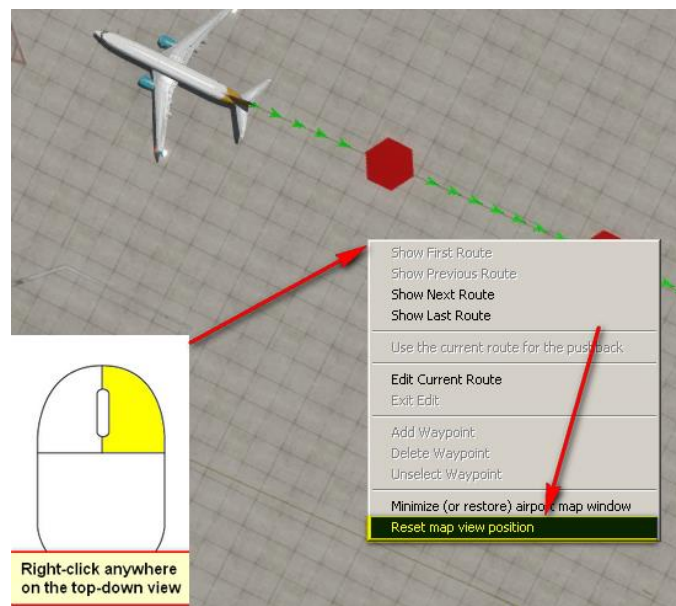


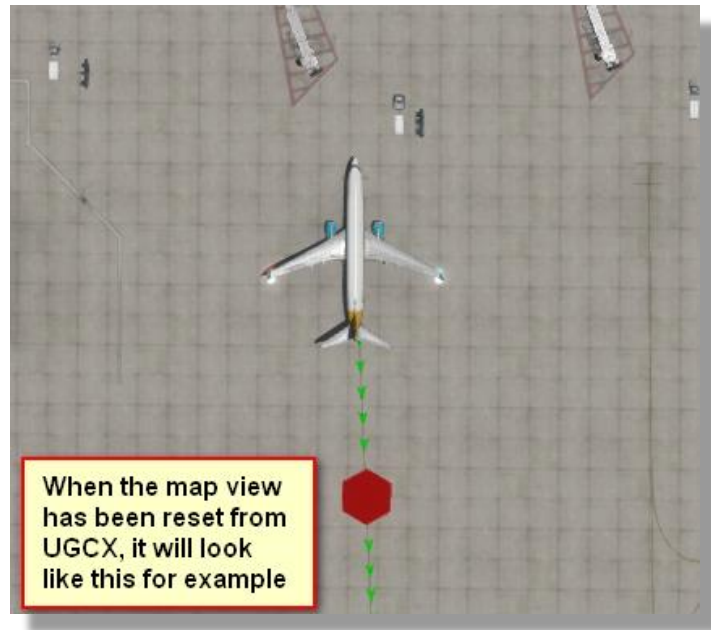
The camera's view angle has been rotated



When this happens, the UGCX Map view **will not work properly**, and when you click anywhere in the map it will not work as it should. So, when these things happen, you can reset the camera's view to its default position by following these steps:

- Right-click anywhere on the top-down view
- A pop-up menu will appear on screen.
- Select the **"Reset map view position"** menu option, as shown below:





END OF TUTORIAL