P3D Scenario Generator

Introduction

Using SimDirector to create scenarios requires an investment of time and energy to familiarise yourself with the tool. It's not for the feint hearted! This application hides that complexity at the expense of restricting you to a set of predefined scenario types. You choose the scenario type, a location, an aircraft and scenario specific parameters. The program creates equivalent output files to that which would be produced had you created the scenario using SimDirector. In Prepar3D you load the created scenario just as you would a saved flight and start flying.

To fly another instance of that scenario type, say at a different location or with different scenario specific parameters, return to this application and generate a new set of files with the modified parameters. Note that Prepar3D allows you to change the time, weather, or aircraft once you have loaded the scenario (that is you are actually in the plane on the runway) without “breaking” the scenario.

Runway

The list of runways corresponds to the default airports that ship with Prepar3D V5.1. It has been generated using the freeware "MakeRunways" program version 5.11 by Pete Dowson. The list is alphabetical showing airport ICAO and runway id in parentheses. If you choose a random runway the generated circuit may include gates embedded in terrain if the airport happens to be in a hilly location! The program doesn't display location information for the selected airport in order to preserve the element of surprise where a random strip is chosen.

The runway data is derived from a file produced by the “MakeRunways” program named “runways.xml”. To select add-on Prepar3D V5.1 airports download a copy of “MakeRunways” and generate a copy of “runways.xml” that reflects the airports installed on your PC. Place the “runways.xml” file in the same directory as the P3D Scenario Generator program files and it will be used in preference to the default “runways.xml” list.

Scenario

The following scenario type is implemented:

Circuit

The circuit is left-handed and consists of eight gates. Four pairs of gates mark the start and finish of four successive ninety degree turns from the initial runway heading. The gate positions for each turn are based on the nominated speed divided by 180. So a plane with a cruise speed of 90 knots is assigned a turn radius of 0.5 miles. The distance between gate pairs is set on the circuit tab. All the gates are placed at the same height relative to the ground. This scenario commences on the runway threshold and requires the pilot to take off, achieve the circuit height, and fly through the eight gates in sequence before landing on the same runway and coming to a complete stop to end the scenario. The circuit tab allows you to customise the location of the four turns, the height and

planned cruising speed. The default button resets the values based on the “[Reference Speeds] cruise_speed” value from the selected “aircraft.cfg” file.

Photos

This is planned to be a randomly generated flight based on an Internet website that displays geo-referenced photos. As you reach a gate location a panel would open showing the photo for that latitude and longitude.

Aircraft

Pressing the aircraft button allows you to navigate to the “aircraft.cfg” file for the aircraft you wish to fly. The program verifies the aircraft isn’t an artificial intelligence one by checking for the presence of one or more panel subfolders. A list of available textures for the selected aircraft is displayed. Both default and add-on aircraft can be selected by navigating to the appropriate “aircraft.cfg” file.