Situational Awareness Game Alpha Test

Overview

In this game, you earn points for correctly determining the position of aircraft in an airport traffic pattern. The only way to determine the position of other aircraft in this game is by listening to the position reports of other pilots on your aircraft radio. All flying occurs at a fictitious airport called Atlanta Town and Country (KATC). Some pilots use “Town and Country traffic” in their radio calls, and some simply called it “ATC traffic.” In some rounds of play, the airport will be uncontrolled. In other rounds it will be controlled by a control tower. In a future version, it will also have an terminal radar control (TRACON) for approaches and departures.

Game Operation

1. This is a Flash-based game. Ensure you are using a web browser compatible with Flash, and with the latest version of Flash Player installed.

2. Open your browser and in the top menu, choose File-->Open-->click the file you saved for each round that ends with .swf .

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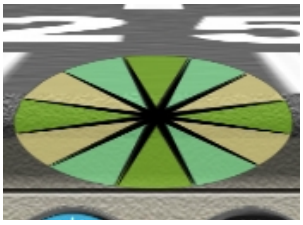
3. To start the game, click the “Affirmative” button that appears over your aircraft's control panel.

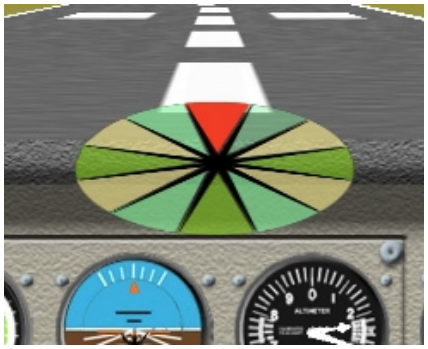
4. An autopilot will direct your aircraft through takeoff and fly it all the way around the traffic pattern to a short final position. Flying is completely automatic and locked in. You cannot override the autopilot.

5. As your aircraft flies around the airport traffic pattern, you will hear position reports from other aircraft in the traffic pattern.

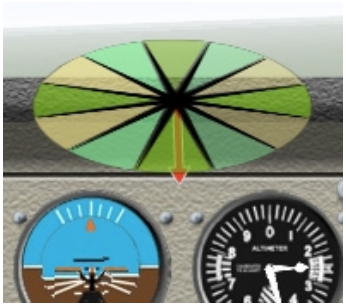
6. When a radio call begins, a countdown indicator will appear on screen that counts down from 10 seconds. By the time the pilot states his position on the radio, there will be 5 seconds left on the clock for you to determine his position in the traffic pattern.



7. You will see a blue-, green-, and tan-colored indicator on top of the glareshield of your aircraft. The indicator is like the face of a clock, divided by shape and color into 12 segments. Each segment represents a clock position. For example, top-center is 12 o'clock. To the right of that is 1 o'clock. To the right of that is 2 o'clock and so on.



8. When you hear a position report on the radio, think about which direction you would look to spot the aircraft that made the radio call. If you think you would have to look at 12 o'clock to see the other aircraft, for example, click the 12 o'clock segment on the indicator. If you think the aircraft is at your 9 o'clock position, for example, click the 9 o'clock segment on the indicator.



9. The game will show you where the aircraft actually was at the time you clicked by displaying a red arrow pointing to the other aircraft. The red arrow does not update as your aircraft moves. It only shows where the other aircraft was at the exact instant you clicked the indicator.

10. A correct choice increases your score. An incorrect choice reduces your score.

11. Letting the timer run out before making a choice reduces your score. The red arrow will not appear to indicate the other aircraft's position if the timer runs out before your choose.

12. The highest score possible for each round is 15,000. The lowest possible is 0 for each round.

Hints:

Do not wait for the entire radio call to finish before clicking the indicator. Time runs out at or before the end of each radio call. Make your choice as soon as possible after hearing the other pilot state his or her position. This is especially true for the tower-controlled round of the game where the radio exchange between the aircraft and the tower controller may continue for many seconds after the position report.

There is an non-directional beacon (NDB) located at the center of the airport. Your aircraft has an automatic direction finder (ADF) with a needle that points continuously at the NDB. Use the ADF to

help you determine where you are in the airport traffic pattern. Example: When the ADF needle falls through 3 o'clock on the ADF dial, you are exactly abeam the NDB at midfield while flying on your downwind leg.

In the tower-controlled round, you will hear aircraft report over RADON. This is the outer marker beacon (OM,) located 5 miles from the threshold for Runway 25 on the straight-in final approach for the runway.

Keep track of the number of the turns your aircraft makes in the traffic pattern. Your aircraft will fly a standard rectangular pattern. The first turn is to crosswind. The second turn is to downwind. The third turn is to base. The fourth turn is to final.

The alignment for Runway 25 is not oriented exactly east and west. It is oriented toward 250 degrees, or west-southwest. Think about that when other aircraft report east, west, north, or south of the airport. Your click on the indicator for each radio call only has to be accurate within plus or minus 45 degrees of the other aircraft's actual bearing in these “easy to moderate” rounds. In future, more difficult rounds, accuracy requirements will be greater.

Have fun and be sure to tell me about your results. I'm especially interested in how the game performed for you, including whether there were any bugs in the programming.