# **User Manual**

Team GOA



- (1) The 'START GAME' option will advance the window to the level select screen.
- **(2)** The 'CREDITS' option will change the window to display the credits screen (containing the names of the game's creators).
- (3) Clicking 'EXIT' will quit Flighty. This can also be achieved in the system's default manner (e.g. clicking the top-left red button on Mac OS X and the red X button in the top-right on Windows).

# **Credits**



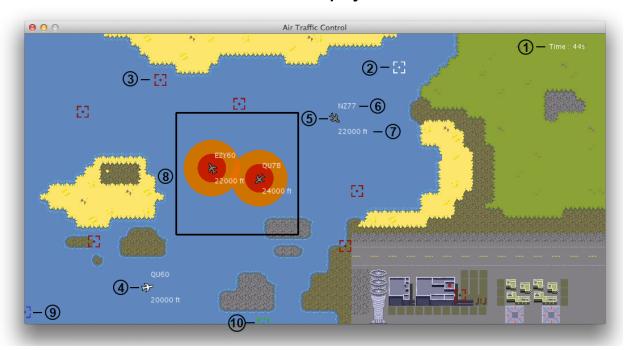
(1) - Clicking 'MAIN MENU' will return to the prior (main menu) screen.

# **Level Select**



- (1) The level preview will display a large 'PLAY' prompt when the mouse cursor moves over it. Clicking any space within the rectangular preview will begin that level.
- (2) The level preview when the cursor is not hovering over it. Moving the cursor to this level will cause it to appear and behave similarly to (1). Similarly, (1) appears similar to (2) when the cursor is not over the 'LEVEL 1' preview.
- (3) Clicking 'MAIN MENU' will return the display to the prior main menu display.

# **Game Display**



Above is the window that is displayed during gameplay. It contains a variety of elements and information within it:

- (1) Displays the **time** elapsed since the game was started.
- (2) The next waypoint in the flight plan for the currently selected plane (5).
- (3) A waypoint.
- (4) The currently active plane (this one is white to indicate it has been selected).
- (5) A plane.
- (6) The flight number of a plane.
- (7) The current altitude of a plane.
- **(8)** The **separation** (orange) and **collision** (red) boundary highlights of two planes that are approaching **collision**.
- (9) An exit waypoint.
- (10) The exit waypoint for the currently active plane (5) when it is also the next point in the flightplan (10 and 2 will never display simultaneously).

#### **Definitions**

**Airspace** - The visible area within the game window.

**Plane** - Entity to be directed through your airspace, planes will appear white when selected.

Flight Number - A plane's unique identifier.

**Flightplan** - The set of waypoints that a plane must pass through before it can leave the airspace.

**Altitude** - The current height of the plane. Planes within 2200 ft of each other are in violation of separation rules and will be considered to have collided. Planes can operate (and be set to fly between) 20000 ft and 26000 ft. When the plane is changing altitude, the display will update in real-time the current altitude. Note that this means collisions can still occur between discrete altitudes.



**Waypoint** - Locations within the airspace (window) that a plane must pass through before it is allowed to leave the airspace. A plane's next waypoint will appear white when the plane is selected.

**Exit Waypoint (Exit Point)** - The terminal waypoint in a plane's flightplan.

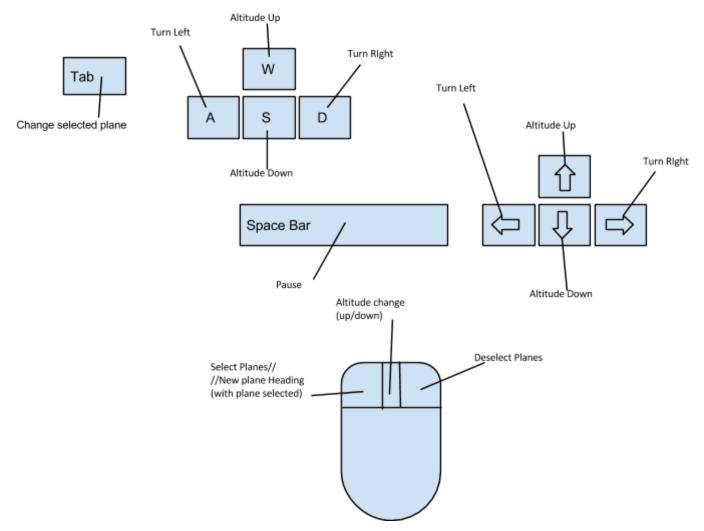
A plane will leave once it reaches its exit point. The plane's exit point (if no other waypoints remain) will appear green when the plane is selected.



**Collision and Separation Boundaries**: When planes within a certain distance to each other, the radial warnings will be displayed, highlighting the minimum distance two planes may operate between another (in orange). When planes pass into each other's orange highlights (or two red highlights meet) the planes are considered to have violated separation distance, and the game ends.

# **Controls**

# **Control Scheme/Key Bindings**



**Quitting a Level** - To exit a level / game in progress, simply close the window via your system's default method (e.g. click the top-right red X button on Windows, the top-left red button on Mac OS X etc.)

Pausing the Game - The game can be paused by pressing the space bar.

### **Controlling a Plane**

**Select a Plane** - (Left) click a plane to select it, or press the tab  $(\rightarrow|)$  key to cycle through the planes in the airspace. This plane is then considered the active plane (from (5)).

**Change Bearing** - Pressing either the  $\leftarrow$  or **A** keys will turn the active plane left (anti-clockwise), and pressing either the  $\rightarrow$  or **D** keys will turn the active plane right (clockwise). Alternatively, with a plane selected, (left) clicking anywhere on the map (besides another plane) will set that point as the plane's intended destination.

**Change Altitude** - The altitude of the active plane can be increased by scrolling up (with mouse/trackpad), or pressing the ↑ key. Altitude is decreased by scrolling down or pressing the ↓ key.

**Resume Autopilot** - To resume the active plane's default autopilot (whereby it flies as-the-crow-flies to the next waypoint, for each waypoint that remains in the flightplan until further notice), simply right-click anywhere on the window. Autopilot is enabled by default. **Note** that unless this method is used, when changing active planes, planes will **not** resume autopilot and will continue on the selected bearing until the user intervenes.

## **Launching The Game**

To launch the game, simply double click on the jar file or the appropriate file for your platform. Windows uses .exe files and linux .sh files.