ATC-SIM is a browser-based air traffic control simulator. No plug-ins or additional software are required to play.

Objective

Controllers must route arriving and departing aircraft both safely and accurately.

Safe Separation Standards

Your job is to ensure that aircraft are separated by either of the following criteria:
Laterally — 3 miles
Vertically — 1,000 feet

Commands

All commands are in the format:
FlightID + Command + [Command String].

Takeoff

FlightID C 5
FlightID T

** *Departing aircraft must first be assigned an altitude*.

Landing

FlightID L [runway]

** *Arrivals must be within 3,000 ft of ground level to accept a landing clearance*.

Clearances

FlightID C [command string]

Sample command strings:

3 digits = Set course to heading xxx.
1 or 2 digits = Cleared to altitude n x 1,000 ft.
OBK, DPA, ... = Set course to a VOR station.

Examples:

ANYID C 035 = Set course to 035 degrees
Will cause the airplane to turn to this heading.
Note that leading zeros are required.
ANYID C 3 = Cleared to 3,000 ft.
Will cause the airplane to climb or descend until the required altitude is reached.
ANYID C 12 = Cleared to 12,000 ft.
ANYID C OBK = Cleared to OBK (Northbrook) VOR station
Will cause the airplane to set course to OBK.
ANYID C OBK C 3 S 200 = Chained multiple commands
ANYID L 27R = Cleared to intercept and land on runway 27R
Will cause the airplane to maintain present heading until it intercepts the runway center line, then follow the approach path to land.

Left and Right

Whereas aircraft will normally turn in the most efficient manner to reach their destination, you can also say:

ANYID C OBK L
ANYID C 040 R

etc., and the aircraft will turn right / left (clockwise/counter-clockwise), regardless of the location of the beacon/fix or the compass direction.

Of course, the L/R suffix can always be omitted.

Expedite

Optionally, altitude clearances may be expedited by adding "X" or "EX" after the command string. This will cause the aircraft in question to climb or descend at twice its usual rate. (This does not apply to clearances given to aircraft that are still on the ground.) For example, ANYID C 14 EX will be understood to mean "climb/descend to 14,000 feet, expedite". It is considered poor form to overuse "expedite".

Limitations on landing clearances:

Landing clearances will only be accepted if the current heading of the airplane is within +/- 60 degrees of the runway centerline (for 27R / 27L, this is 270) and the current altitude is within 3,000 ft of ground level. Clearing an airplane for landing PASSED the runway center line (i.e. you cleared the airplane too late) may cause the pilot to fail to detect the approach glide-slope and continue on the interception heading. Clearing an airplane for landing from a heading which does not intercept the runway center line will cause the pilot to keep flying on this heading without ever detecting the approach glide-slope.

Speed

FlightID S [speed]

** *Arrivals will automatically slow for landing*.

Line Up and Wait

FlightID W

This command instructs departing planes to hold at the end of the runway and await further commands. Accordingly, you can issue a "T" command to one aircraft, and once it begins rolling you can have a second aircraft hold behind it, thus eliminating any delay for the second aircraft.

Note that it's not necessary to issue the "W" command before a "T" command; "W" exists only for your convenience in busy situations.

** *An identical LW command can also be used*.

Hold

FlightID H [nav fix]

Airborne aircraft will circle the given navaid or waypoint.

Abort takeoff/landing

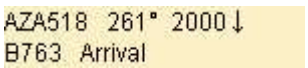
FlightID A

** *Landing aircraft will only "go around" if they are not already on the ground*.

Progress Strips

Flight information such as Flight ID, heading, altitude, aircraft type, and destination are printed on progress strips.

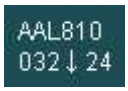
Light blue indicates a departure. In this example, SWA113 is Southwest Airlines flight 113. It is currently holding at runway 12R and is at the field elevation of 618 feet MSL. This aircraft is a Boeing 737-700 and has requested clearance to fix FONTI.



"Buff" (pale yellow / light tan) indicates an arrival. AZA518 is Alitalia flight 518. It has been cleared to a heading of 261° degrees and an altitude of 2,000 feet. However, the down arrow indicates that it is descending (that is, the aircraft is still above 2,000 feet). The aircraft is a Boeing 767-300, and "Arrival" means that it has requested clearance to land.

** *Clicking on progress strips will automatically enter the Flight ID into the command text box.*

Flight Data Displays



Each "blip" on the radar screen will have a corresponding Flight Data Display that shows you the aircraft's real time altitude and speed. In this example, American Airlines flight 810 is descending through 3,200 feet, and is cruising at 240 knots.

** *Clicking on flight data displays will automatically enter the Flight ID into the command text box.*

Sample Departure

SWA113 C 19
Cleared to 19,000 feet.

SWA113 C FONTI (*optional*)
Cleared to nav fix FONTI immediately after takeoff.

SWA113 T
Cleared for takeoff.

Combined Departure Command

SWA113 C 19 C FONTI T

Sample Arrival

SWA113 C 2
Cleared to 2,000 feet.

SWA113 C 080
Cleared to compass heading 80° degrees.

SWA113 L 12R
Cleared to land on runway 12R.

Handoff

When a departing aircraft is within 1 mile of its requested nav fix, and if it is at least 4,000 feet above the surface, then it will be handed off automatically to the nearest enroute control center.

Messages

Every time you issue a command, a brief confirmation message can appear in the lower left of your browser's window.

If you're using Firefox and can't see the messages, you can enable them by opening **about:config** in your browser (type **about:config** into the address bar) and search for **dom.disable_window_status_change.** Change it to false. Just click on the entry to toggle its state.

For older versions of Firefox, go to the **"Tools" => "Options ..."** menu. Press the **"Content"** (globe) icon on top. Next, press the **"Advanced ..."** button to the right of **"Enable JavaScript"**. Finally, put a check next to **"Change status bar text"** and click **"OK"**.

If you're using Internet Explorer 7/8/9 and can't see the messages, you can enable them by going to the **"Tools" => "Internet Options ..."** menu. Select the **"Security"** tab on top. Next, select **"Custom level"** for the Internet (or Restricted sites) zone. Find **"Allow status bar updates via script"** and change the setting to **"Enable"**.

Map Scale

To see scale mileage markers at the edge of the radar display, type **SCALE.** Type **SCALE** again to make the markers disappear.

** *Yes, the runways have been deliberately enlarged to facilitate ease of play.*

Performance Statistics

If at any time you want to see how well you're doing, type **STATS** to see a breakdown of your performance.

High Scores

When you are finished with the simulation, type **QUIT** or **EXIT** and your statistics will be entered into the high score table.

** *This feature is available to registered users only.*

Slowness in Windows 7 and Internet Explorer 9

If you are running a Windows 7 laptop on battery power and playing the sim using Internet Explorer 9, you may experience slowness. This can be fixed by adjusting the "JavaScript Timer Frequency" in the advanced Power Settings within the Windows Control Panel.