MetroAir Virtual Airlines

ATC CONTROLLER POSITIONS V 1.0

Photo by Andrew Berry

NOT FOR REAL WORLD AVIATION

GETTING STARTED

In this document you will learn about the different types of ATC position and what each position is responsible for. One thing to remember as your read this document is that with the exceptions of events on VATSIM, rarely are all positions staffed at an airport. This document is structured to present the ATC positions in ascending order of responsibility, and each position can perform the responsibilities of all lower positions that are not staffed. For example, if MCI Tower is being staffed, they would also perform the Ground and Clearance Delivery positions if they were not actively being staffed.

Whenever you find yourself in an area without ATC coverage, you should always be tuned into the UNICOM frequency (122.80). You should always state intentions in a professional manner using text over UNICOM without ATC coverage so that other pilots in the area are aware of where you are and where you are heading. Remember that you are not only representing yourself but your virtual airline as well.

ATC POSITIONS

CLEARANCE DELIVERY (DEL)

Clearance Delivery is your first point of contact once you have signed onto VATSIM and assuming the airport you are at currently has a controller signed on to that position. The purpose of Clearance Delivery is to review your filed flight plan and for the controller to then issue this once you have verbally requested it. If the controller is happy with what you have filed he will then relay this to you which you should then repeat back to show the controller you have understood. If there is no Clearance Delivery controller on, you should then move up the chain to the next available position. For example the Ground Controller (GND) and failing that you would move further up the chain and so on.

GROUND CONTROLLER (GND)

The responsibility of the Ground Controller is to issue you with your taxi instructions. They will give you the best route to the active runway. The Ground Controller is responsible for all aircraft on the airport which would usually include taxiways and inactive runways. However it does not necessarily include the aprons and ramps. If the airport you are at doesn't have a Clearance Delivery controller online then the Ground Controller will take on that role as well. As with Clearance Delivery if there isn't an active Ground Controller at your airport then you should move to the next available controller position.

TOWER (TWR)

Once you have reached the active runway the Ground Controller will then hand you over to the Tower Controller. The Tower Controller is responsible for separating departing and arriving traffic to ensure planes do not collide on the runway. It will be up to the Tower Controller to issue you with your take off clearance once it is safe to do so. If neither the Clearance Delivery controller nor Ground Controller is online then the tower will also take up those two responsibilities. And like before if all three positions are offline you will move up to the next available position.

APPROACH AND DEPARTURE (APP/DEP)

On VATSIM these two positions will usually be controlled as one rather than with two separate controllers. The Approach controller will be responsible for vectoring you into the airport for your approach or giving you further departure instructions as you depart the airport. Usually the approach controllers will cover around 40nm around the airport from 10,000 ft AGL and down. The area covered by the approach controller however can vary from airport to airport. The Approach Controller will also act as all previously mentioned positions if they are not online. Also if there is no Approach Controller online as you approach your destination but there is a Center (CTR) online then the Center will provide all you arrival instructions.

Approach / Departure controllers are the first controllers to use radar services to provide coverage, so your transponder must be on (also known as squawking mode Charlie) so that controllers can see where you are on their radar scopes. Due to the additional work required during takeoff and landing, you should turn your transponder on as you enter the active runway prior to takeoff, and after exiting the active runway after landing. Sometimes when a center controller is the only controller on and they are handling a busy airport, they might request transponders to remain on until you park at the gate.

CENTER (CTR)

Center controllers provide radar coverage over a large region, as well as services for any lower controller positions not currently staffed. On VATSIM, there is typically only 1 center controller per ARTCC (Air Route Traffic Control Center), but during high volume events, there may be additional controllers that split the ARTCC's airspace up.

OCEANIC CENTER (FSS)

The basic principal of Oceanic center is similar to the normal center but with a twist. It is slightly more complicated because controllers don't actually have a visual reference of you on a radar screen. Oceanic center controls all the airspace across the Atlantic or Pacific Oceans. When you approach the airspace you have to request clearance to cross the ocean. By requesting clearance the controllers then know you have entered your Oceanic flight phase. The pilots then have to provide a position update every time you reach a waypoint and tell the controller what time you expect to reach the next point, this is so that the controller can track your position and may issue you requests for maintaining a specific mach speed to provide appropriate separation of aircraft.

DECLARING EMERGENCIES

The VATSIM network does allow pilots to simulate an emergency should they come into any difficulties. However the ATC controller has the right to deny your request to declare an emergency at which point you must then withdraw your 'Mayday' and resume normal flight. If you are unable to maintain normal controlled flight then you *must* sign off VATSIM immediately and fly as normal at your own discretion. The following Squawk codes are used during emergencies:

7500: The code for a Hijack: **This code should <u>NEVER</u> be used on VATSIM**.

7600: The code used if you lose your radio and voice capabilities.

7700: The code used for all general emergencies.