WHICH AIR TRAFFIC CONTROLLER TO CONTACT

1. Introduction

This article is written in order to explain to all beginners in the IVAO network the basics for any pilot to contact the correct air traffic controller.

1.1. Abbreviation list

ATC = Air Traffic Controller.
DEL = Clearance Delivery ATC position
GND = Ground ATC position
TWR = Tower ATC position
DEP = Departure ATC position
APP = Approach ATC position
CTR = Control ATC position (other name can be ‘radar’ or ‘centre’ depends of the country regulation)
IFR = Instrument Flight Rules
VFR = Visual Flight Rules

1.2. Organization

In this article we try to explain the basics of aeronautical airspace and the controlled ATC positions.

There will be two main chapters depending on the flight rules you use as a pilot on the network:

- **Visual Flight Rules or VFR**: the pilot operates his aircraft with visual reference to the ground, and by visually avoiding obstructions and other aircraft under Visual Meteorological Condition (VMC).
- **Instrument Flight Rules or IFR**: the pilot operates his aircraft using instrument navigation and he can fly on Instrument Meteorological Condition (IMC).

**Advice for beginner pilots:**

If you do not know the basic instrument navigation (IFR, SID/STAR, IAF, VOR, ILS …), try the visual navigation (VFR) first, with a small aircraft and away from big airports.

All commercial aircraft (A320, B737, A380, B777…) are flying using instrument navigation in Instrument Flight Rules (IFR). You must know the basic of instrument navigation and IFR rules in order to handle this type of aircraft in IVAO.

The majority of small single engine aircraft is flying using visual navigation in Visual Flight Rules. These types of flight are sometimes called general aviation flights.
2. Airspace Class Basics

The airspaces, where aircraft fly, are classified with parameters like flight rules, radio contact, clearances. In order to have more information about airspaces classification, please read documentation that explains this subject in detail in the IVAO Training Department Web Site.

2.1. Mandatory contact zone

A pilot must contact an active air traffic controller in order to obtain a clearance before he enters in:

- an aerodrome circuit
- a class A, B, C, D, and E airspace if the flight rule performed is IFR
- a class (A), B, C and D if the flight rule performed is VFR
- a prohibited zone as a special operation aircraft
- a restricted zone activated by NOTAM or by Current Special Operation Activities

2.2. Facultative contact zone

A pilot can contact an active air traffic controller in order to obtain traffic information before he enters in:

- a class E airspace if the flight rule performed is VFR
- a class F and G airspace for all flight

In accordance with local regulations, or number of traffic, an air traffic controller may not give you any service.

3. While performing an IFR flight

3.1. You are on the ground (IFR)

When connected to IVAO as a pilot, you have the following possibilities:

- Park at a gate or on an apron
- Park close to any taxiway if there is no apron
- Park close to any runway if there is no taxiway

We remind you that to connect on runways and taxiways is forbidden
Please always consult the charts before any IFR flight plan.

Then before moving on the airfield, you must check if any ATC is in service in your area.

You must check and contact the active ATC using IvAp in the following order:

- DEL
- GND
- TWR
- APP
- CTR
Please note the position usage information:

- **DEL, GND and TWR positions** have the same ICAO code which is the airfield’s one.
- **APP positions** can have the same ICAO code as the airfield’s one, but in some airports, the APP position controls several airfields. In consequence, the APP position can also have a different ICAO code.
- **CTR positions** usually have different call signs. You must be aware of the local FIR call sign.
- **DEL position** will deliver only IFR clearance and shall be contacted first as an IFR flight.

Be aware that sometimes the en-route controller (CTR position) will not control you but, he will give a clearance and/or a contact point if you cross his airspace. The contact with this position is mandatory.

If there is no active ATC controlling your airfield and the airspace above, you must set your radio COM active frequency to UNICOM 122.800MHz:

- You shall make self-announcements on this frequency
- You can start your flight in conjunction with traffic around which announces their intentions on the same frequency.

The priorities are given by the rules of the air and these rules are mandatory.

Be aware that engine start up is the responsibility of the pilot in command and not the ATC.

### 3.2. You fly (IFR)

If you perform an IFR flight, you must know that you are potentially in controlled airspace for the duration of your flight.

As a pilot in the IVAO network, you should check for air traffic control on a regular basis and contact the appropriate air traffic control station when requested to do so.

#### 3.2.1. You fly in high altitude airspace

If you are in high altitude airspace, you need to check for active ATC CTR positions (or FSS for special areas).

The altitude, at which you can consider that you are at high altitude, is usually FL245. This limit can change between FL195 to FL295 depending on your country regulations.

You must check and contact the active ATC using IvAp:

- When ATC requests so, with receiving a message via IvAp
- Two minutes before entering his controlled area

IVAO approved software which monitors the network activity can be used for checking ATC online.
3.2.2. You fly in low altitude airspace and final approach not intercepted

If you fly in low altitude airspace (in transit, climbing or descending), you should check if there is an active ATC in CTR or APP position available.

Be aware that at lower altitudes (Example: FL<195), you may cross some areas controlled by another approach controller different from your departure or arrival airport. You must contact this ATC in order to obtain a transit clearance through his airspace.

You must check and contact the active ATC using IvAp:
- When ATC requests so, with receiving a message via IvAp
- Two minutes before entering his controlled area

An Approach APP controller has a controlled area named TMA. This controlled zone is around the airport, the upper limit of which is generally below FL195.

The TMA form represented in some software displaying the network activity is a circle. Be aware that the majority of these TMA’s are not depicted as circles and their dimensions are not limited by the circle. Consult where possible the appropriate charts in order to verify the entry point in each TMA.

3.2.3. You intercept the final approach

If you are intercepting the final approach and you are not controlled, it means the approach is not controlled by any ATC. In this situation you should check if there is a TWR position available at your destination airport.

You must check and contact the active ATC using IvAp:
- When ATC requests so, with receiving a message via IvAp
- Just before intercepting the IFR final approach or when established on IFR final approach at the latest

The TWR controller does not control the approach zone.

If there is traffic in the vicinity of your aircraft, a pilot can request traffic information during initial approach in order to coordinate with ATC a safe arrival to the final approach.

If there is no TWR controller at your destination airport but there is an active GND controller, you can continue your flight until the runway is vacated, then contact the GND controller without moving after leaving the active runway. You must wait for a clearance from the GND controller in order to taxi to the assigned gate.
4. While performing a VFR flight

4.1. You are on the ground (VFR)

When connected to IVAO as a pilot, you have the following possibilities:
- Park at the general aviation apron or on the main apron if it does not exist
- Park close to any taxiway if there is no apron
- Park close to any runway if there is no taxiway

We remind you that to connect on runways and taxiways is forbidden.

Before moving on the airfield, you must check if any control is provided for your airfield. Sometimes, small airfields are in class G airspace and no ATC can open the position. In that case, you can start your flight on UNICOM frequency 122.800 MHz using self-announcement about your intentions and ground movements.

If the airfield you are departing from has ATC service, you must check and contact the active ATC using IvAp in the following order:
- GND
- TWR
- APP
- (CTR)

Please note the position usage information:
- **DEL, GND and TWR positions** have the same ICAO code which is the airfield’s one.
- **APP positions** can have the same ICAO code as the airfield’s one, but in some airports, APP position controls several airfields. In consequence, the APP position can also have a different ICAO code.
- **CTR positions** usually have different call signs. You must be aware of the local FIR call sign.

Be aware that sometimes the en-route controller (CTR position) will not control VFR flights in controlled areas. Some can only provide traffic information and movement advisories.

If there is no active ATC controlling your airfield and the airspace above, you must set your radio COM active frequency to UNICOM 122.800MHz:
- You shall make self-announcements on this frequency
- You can start your flight in conjunction with all traffic around which announces their intentions on the same frequency.

The priorities are given by the rules of the air and these rules are mandatory.

As a VFR pilot, you can start the engine prior to contact the ATC. Usually on first contact, the VFR pilot is ready to taxi.
4.2. You fly (VFR)

When you perform a VFR flight, you must know that you are potentially in controlled airspace in some areas or all along your flight depending on the route chosen.

As a pilot in the IVAO network, you should check for air traffic control on a regular basis and contact the appropriate air traffic control station when requested to do so.

4.2.1. You fly and you do not enter any aerodrome circuit or aerodrome controlled area (CTR)

If you fly outside any control zone (CTR) or outside any aerodrome traffic circuit (in transit, climbing or descending), you should check if ATC is active in CTR or APP position.

Be aware, you may cross some areas controlled by another approach controller different from your departure or arrival airport. You must contact this ATC in order to obtain a transit clearance through his airspace. Contact with a CTR will depend on your local regulations.

You must contact this active ATC:
- When ATC requests so, with receiving a message via IvAp
- Two minutes before entering his controlled area

An Approach APP controller has a controlled area named TMA. This controlled zone is around the airport and the upper limit is generally below FL195.

The TMA form represented in some software displaying the network activity is a circle. Be aware that the majority of these TMA’s are not depicted as circles and their dimensions are not limited by the circle. Consult where possible the appropriate charts in order to verify the entry point in each TMA.

Note that in some countries there is a FSS position (flight service station). The contact with this station is optional but helpful in order to gain information.
4.2.2. You are going to enter an aerodrome circuit or an aerodrome controlled area (CTR)

If you are going to enter an aerodrome circuit or an aerodrome controlled area (CTR), you should check if there is a TWR position available and open for this airfield.

Be aware that this ATC can control the airspace even if you only wish to transit the airspace, not only the departure and arrival airfield.

You must contact this active ATC:
- When ATC requests so, with receiving a message via IvAp
- 2 minute before entering the aerodrome circuit or an aerodrome controlled area (CTR)

The TWR controller does not control the approach zone.

If there is no TWR controller at your destination airport but there is an active GND controller, you can continue your flight until the runway is vacated, then contact the GND controller without moving after leaving the active runway. **You must wait for a clearance from the GND controller in order to taxi to the assigned gate.**