

Alien21

Airspaces Classification

Premise

This document is the first book released for the Alien21 community pilots that would try to fly online. Inside these documents will be possible find several informations, from aviation theory to general supports for the network clients. We would advise our pilots that any specific argument will be treated inside a specific book, and also that these documents are valid only for flight simulation purposes and sharing these documents is possible only with these conditions: you must report in any case me as original author, share without profite these documents and do the same also in case you will partially copy and you need a written approvation for doing this. If you have found any error, report it where, and your external sources for any new information to Alien21 Discord community staff.

Airspaces

An airspace, is defined from ICAO, inside Annex 2-Rules of Air, as "A defined three dimensional region of space relevant to air traffic".

From 12th March 1990, the ICAO has adopted the actual system of airspaces classification. Any classification is defined, in base of flight rules adopted and regarding the interaction between aircraft and air traffic control. The actual system has uniformed the classification of all airspace around the world, with several benefits for any pilot or controller from any country.

If we want make an example, before 1990 in United States, it was present more than 20 different airspace classifications.

All airspaces are classified with a letter, and are available 5 different controlled airspaces, and 2 different uncontrolled airspaces.

Inside any airspace class, with the exception for any class A (alpha) airspace, IFR (instrumental) and VFR (visual flight) are allowed, if aren't indicated special restrictions, such it could happen for any aerodrome chart.. For any controlled and uncontrolled airspace, will be always provided the Flight informations service (such it could be weather informations) and Alerting service (provide support in case of emergency, and the rescue in case of aircraft dispersed).

Class A (Alpha)

For any airspace, is available a description which explain, in consideration for the rule of flight which we're follow during our flight, the separation provided for us with any other traffic inside the same airspace in consideration of which type of flight it follow, how are made radio communications, and if will be required an ATC clearance for joining that airspace.

Let's look now this table:

TYPE OF FLIGHT	SEPARATION PROVIDED	SERVICE PROVIDED	SPEED LIMIT	RADIO COM	ATC CLEARANCE
IFR	YES, WITH ANY TRAFFIC	AIR TRAFFIC CONTROL	NO	CONTINUOUS , TWO WAYS	REQUIRED
VFR	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED

IN SOME COUNTRIES, VFR ARE ALLOWED INSIDE CLASS A AIRSPACE WITH SPECIFIC CONDITIONS AND/OR REQUIREMENTS. EXCEPTIONS ARE PUBLISHED INSIDE ANY NATIONAL AIP CHART.

As we can see, this table show clearly which services, separations, speed limits are provided for any IFR flight and if it's necessary an ATC clearance (usually assigned not explicit from ATC) to join this airspace. VFR flights aren't allowed inside this airspace, except in the case are published inside national AIP (Aeronautical Information Publication)

Class B (Bravo)

TYPE OF FLIGHT	SEPARATION PROVIDED	SERVICE PROVIDED	SPEED LIMIT	RADIO COMMUNICATIONS	ATC CLEARANCE
IFR	ALL FLIGHTS	AIR TRAFFIC CONTROL SERVICE	NO	CONTINUOUS , TWO WAYS	REQUIRED
VFR	ALL FLIGHTS	AIR TRAFFIC CONTROL SERVICE	NO	CONTINUOUS , TWO WAYS	REQUIRED

Class C (Charlie)

TYPE OF FLIGHT	SEPARATION PROVIDED	SERVICE PROVIDED	SPEED LIMIT	RADIO COMMUNICATIONS	ATC CLEARANCE
IFR	IFR FROM IFR'S, IFR FROM VFR'S	AIR TRAFFIC CONTROL SERVICE	NO	CONTINUOUS , TWO WAYS	REQUIRED
VFR	VFR FROM IFR'S	ATCS FOR SEPARATION WITH IFR, VFR/VFR'S INFORMATION SERVICE AND TRAFFIC AVOIDANCE ADVICE ON REQUEST	250 KT IAS FL100 AND BELOW	CONTINUOUS , TWO WAYS	REQUIRED

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Class D (Delta)

TYPE OF FLIGHT	SEPARATION PROVIDED	SERVICE PROVIDED	SPEED LIMIT	RADIO COMMUNICATIONS	ATC CLEARANCE
IFR	IFR FROM IFR'S	ATCS, TRAFFIC INFORMATION ABOUT VFR FLIGHTS (AND TRAFFIC AVOIDANCE ADVICE ON REQUEST)	250 KT IAS FL100 AND BELOW	CONTINUOUS , TWO WAYS	REQUIRED
VFR	NIL	IFR/VFR AND VFR/VFR TRAFFIC INFORMATION (AND TRAFFIC AVOIDANCE ADVICE ON REQUEST)	250 KT IAS FL100 AND BELOW	CONTINUOUS , TWO WAYS	REQUIRED

Class E (Echo)

TYPE OF FLIGHT	SEPARATION PROVIDED	SERVICE PROVIDED	SPEED LIMIT	RADIO COMMUNICATIONS	ATC CLEARANCE
IFR	IFR FROM IFR	ATCS, AND AS FAR AS PRACTICAL TRAFFIC INFO ABOUT VFR	250KT IAS FL100 OR BELOW	CONTINUOUS TWO WAYS	YES
VFR	NIL	TRAFFIC INFORMATION AS FAR AS PRACTICAL	250KT IAS FL100 OR BELOW	NO	NO

Class F (Foxtrot)

After the previous airspaces, the Class F airspace, and also the Class G airspace, are the only uncontrolled airspaces available. This means that for any type of flight rules (IFR or VFR) which we have planned for our flight, isn't mandatory the radio contact and any ATC clearance if we want to join these airspaces. It's highly recommended to monitor the radio frequency inside them, because if we listen to the communications, we could understand the current position for any other traffic in the area.

Except any Radio Mandatory Zone published inside any national AIP, it's possible that inside these airspaces we can find some traffic near our positions that hasn't reported their intentions on frequency.

TYPE OF FLIGHT	SEPARATION PROVIDED	SERVICE PROVIDED	SPEED LIMIT	RADIO COMMUNICATIONS	ATC CLEARANCE
IFR	NIL	AIR TRAFFIC ADVISORY SERVICE IFR AND VFR FLIGHT INFORMATION SERVICE	250KT IAS FL100 OR BELOW	CONTINUOUS TWO WAY	NO
VFR	NIL	FLIGHT INFORMATION SERVICE	250KT IAS FL100 OR BELOW	NO	NO

Class G (Golf)

TYPE OF FLIGHT	SEPARATION PROVIDED	SERVICE PROVIDED	SPEED LIMIT	RADIO COMMUNICATIONS	ATC CLEARANCE
IFR	NIL	FLIGHT INFORMATION SERVICE	250KT IAS FL100 OR BELOW	CONTINUOUS TWO WAY	NO
VFR	NIL	FLIGHT INFORMATION SERVICE	250KT IAS FL100 OR BELOW	NO	NO

Important Notes

In Class D airspace, both IFR and VFR traffic are required to follow ATC clearances; however, ATC are only responsible for IFR against IFR separation. Regarding Class E airspace, ATC does not provide separation between IFR and VFR traffic; IFR traffic shares responsibility for separation from uncontrolled VFR traffic with that traffic. For the Italian national airspace, all airspaces classes are accepted, but B and F classes aren't implemented.

Sources

ICAO Annex 11: Air Traffic Services, Chapter 2, Appendix 4

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