EVERYTHING EXPLAINED for the Professional Pilot

**Class E**

- FL 600
- No VFR
- DME required at and above FL 240 [91.205(e)]

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**Class A**

- N/A in Hawaii (but they sure do have great dancers)

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- One-third of all Americans believe in aliens and UFOs. (Apparently, there are more than 100 million mentally challenged individuals living amongst us!)

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**Class B**

- Individually tailored. 250 kts below 10,000' MSL (200 kts below the floor or in VFR corridor).

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**Class C**

- Radar. Individually tailored but usually 5 nm core from surface to 4,000 AGL, 10 nm shelf from 1,200 to 4,000 AGL. Outer area 20 nm radius.

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**Class D**

- Tower no radar.

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**Class E**

- 1,200' AGL when no instrument approach.

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**Class G**

- Uncontrolled. Surface to 14,500 MSL. Shaded on enroute charts (mostly western US).

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**VFR operations to, from, or in the traffic pattern of an airport having any type of Surface-Based Controlled Airspace (i.e., Class B, C, D or E) requires at least a 1,000 ft ceiling and 3 sm visibility.**
Chap 1 — Airspace & Airport

CLASS A Airspace: (71.1, 71.31, 71.33, 71.75, 71.133, 91.135, 91.155, AIM 3-2-1, 3-2-2, FAA-H-8083-25)
1. All airspace from **18,000 ft MSL** (FL 180) up to and including **FL 600** within the 48 contiguous States, District of Columbia, most of Alaska, and the airspace within 12 NM offshore. There is no Class A airspace over Hawaii and the Victor airways have no upper limit in Hawaii.
2. All aircraft MUST be IFR unless otherwise authorized. No VFR (unless for purposes of lost communications).
3. No minimum flight visibility or distance from clouds is specified.
4. Altimeter setting for all aircraft operating in US controlled Class A airspace — **29.92**.

CLASS B Airspace: (71.41, 91.117, 91.126, 91.127, 91.129, 91.130, 91.131, 91.155, 91.215, AIM 3-2-1, 3-2-3, 8083-25)
1. **Surface to 7,000’ (Miami) or up to as high as 12,500’ MSL (Atlanta)** surrounding the busiest airports.
2. Individually tailored sideline-up or runway-side wedding cakes — contain all instrument approaches.
3. **Clearance into Class B required.** (91.131, Chief Counsel interp Jan 10, 2010)
4. **VFR operations** — Ceiling: **1,000 ft** — Visibility: **3 sm** — **Clear of Clouds** (or Special VFR).
5. **IFR operations** — An operable **VOR** or TACAN receiver is required. (91.131)
6. Unless otherwise authorized by ATC, a **LARGE TURBINE-POWERED** airplane operating to or from a primary airport in Class B airspace **MUST operate AT** or **ABOVE** the **Floors** of the Class B airspace while within the lateral limits of that area **even when operating on a visual approach**.
7. A **LARGE** (more than 12,500 lbs) **or TURBINE-POWERED** airplane shall, unless otherwise required by distance from cloud criteria, enter the **TRAFFIC PATTERN** at an altitude of at least **1,500’ AGL** and maintain **1,500’ AGL until further descent is required** for a safe **landing**. [Noise abatement]
8. A **large or turbine-powered** airplane approaching to land on a runway served by an **ILS** shall fly **at or above** the **glide slope** between the **outer marker** and the **middle marker**.
9. Any airplane approaching to land on a runway served by a **VASI** shall maintain **at or above** the **glide slope** (aka glide path) **until a lower altitude is necessary** for a safe **landing**.
10. **Mode C veil** — All aircraft operating within **30 nm** of a Class B airport, from the surface to 10,000’ MSL must have Mode C (unless the aircraft was originally certified without an electrical system and still does not have one).
11. **SPEED LIMIT** — **250 KIAS** below **10,000 ft** (200 **KIAS below the floor** or in VFR corridor).
   a. **250 KIAS MUST NOT BE EXCEEDED** even if you are told to “**MAINTAIN BEST FORWARD SPEED**.”
   b. “**Maintain best** (or maximum) **forward speed**” — means — “maximum or best forward **LEGAL** speed.” ATC does not have the authority to lift the 250 below 10,000 ft speed restriction [91.117(a)]. **You cannot be cleared to violate a regulation**, and you cannot accept such a clearance.
   c. If a controller assigns you 300 kts or greater inbound (10,000 ft or above), and he later descends you to 8,000 ft, it is **UNDERSTOOD** that you must **slow to 250 KIAS before** descending below 10,000.

**Do you have to hear the words “Cleared into Class B” when VFR?**
1. The short answer is yes. You must hear the magic word “**cleared**” at least **somewhere** in the instructions given to you by the approach control officer. Radar identification and instructions to maintain a specific altitude and heading that will put you in their airspace can no longer be considered an implicit, implied, or understood clearance into Class B (although it happens all the time). A Letter of Interpretation addressed to my good friend Bridgette Doremire from the Office of Chief Counsel dated January 10, 2010 serves to rescind previous policy.
2. So... if you can get a word in edgewise, always ask for confirmation, just to get it on the tape.
3. That being said... if you've been **radar identified** by the **approach control** having jurisdiction (e.g., Charlotte **Approach**: NOTE: “flight following” from “center” cannot clear you into Class B); the terms "cleared as requested" or even "proceed as requested," or a clearance to a specific point inside the Class B will also suffice. Example: “Citation 5CM, radar contact, remain VFR, cleared direct Charlotte, climb and maintain four thousand, expect 36R.”
4. **91.131 Operations in Class B airspace** (a)(1) “The operator **must receive** an **ATC clearance** from the ATC facility having jurisdiction for that area **before operating** an **aircraft** in **that area**.” It **does NOT say** — “The operator must specifically hear the magic words “Cleared into Class B” in that precise order...” If the frequency is totally saturated and you’re truly paranoid about the magic words, then turn around and run away. Now **that** will get their attention! :o)