

# FAA Airspace Categorization

The Federal Aviation Administration (FAA) categorizes airspace in the United States into six main classes (A, B, C, D, E, and G) based on the density of traffic, complexity of operations, and the required level of safety. These are divided into controlled (A, B, C, D, E) and uncontrolled (G) airspace, plus special use areas.

Note: Class F is not used in the United States.

## 1. Controlled Airspace (Classes A, B, C, D, E)

Controlled airspace is defined as airspace where air traffic control (ATC) provides services to IFR (Instrument Flight Rules) flights and some VFR (Visual Flight Rules) flights.

- **Class A** (18,000 ft MSL to FL600): High-altitude, top-tier airspace spanning the contiguous U.S. and Alaska. All flights must operate under IFR and require ATC clearance.
- **Class B** (Surface to 10,000 ft MSL): Surrounds the nation's busiest airports (e.g., LAX, ORD). It is structured like an "upside-down wedding cake" for safety, requiring explicit ATC clearance to enter.
- **Class C** (Surface to 4,000 ft AGL): Surrounds moderate-traffic airports with an operational tower and radar approach. It typically has a 5 NM radius core (surface to 4,000 ft) and a 10 NM radius shelf (1,200 to 4,000 ft).
- **Class D** (Surface to 2,500 ft AGL): Surrounds smaller towered airports. It is generally a cylinder of airspace; two-way radio communication is required before entry.
- **Class E** (Controlled, Non-Towered): General controlled airspace that is not A, B, C, or D. It usually starts at 1,200 ft AGL but may start at the surface or 700 ft AGL to protect instrument procedures.

## 2. Uncontrolled Airspace (Class G)

- **Class G** (Surface to 1,200 ft AGL or up to 14,500 ft MSL): Uncontrolled airspace where ATC does not provide traffic separation services. It is generally the space below the floor of Class E airspace, often found in rural areas, and is used for VFR flight, though VFR weather minimums still apply.

### 3. Special Use and Other Airspace

These areas are designated to separate non-participating aircraft from hazardous activities or to restrict access:

- **Prohibited Areas** (P-####): Airspace where flight is prohibited for national security (e.g., White House).
  - **Restricted Areas** (R-####): Airspace with invisible, hazardous, or unusual activity (e.g., missile testing).
  - **Military Operations Areas** (MOA): Designated areas to separate military training from IFR traffic.
  - **Warning Areas** (W-####): Like restricted areas, but over international waters.
  - **Alert Areas** (A-####): Areas with high volumes of training or unusual aerial activity.
- Temporary Flight Restrictions (TFR): Short-term restrictions on events like wildfire fighting, presidential movement, or airshows.

**Note:** In the U.S., airspace designations can overlap, with the more restrictive class taking precedence.

### Summary Table of Airspace Classes

Class 	Type	ATC Required?	Description
A	Controlled	Yes	18,000' MSL up to FL600. IFR only.
B	Controlled	Yes	Busiest airports. "Upside-down cake."
C	Controlled	Yes (2-way)	Moderate traffic. 5 NM core/10 NM shelf.
D	Controlled	Yes (2-way)	Small towered airports. Cylindrical.
E	Controlled	No (for VFR)	Everywhere else, fills the gaps.
G	Uncontrolled	No	Surface up to 1,200' AGL (mostly).