



PIVOTAL

UNDERSTANDING AIRSPACE

FOR PIVOTAL PILOTS

HOW AIRSPACE RELATES TO PIVOTAL AIRCRAFT

Pivotal designs and sells all electric, ultralight aircraft. Unlike heavier aircraft, ultralights operate under 14 CFR Part 103, which gives pilots great freedom—but also places strict limitations on where and how they may fly. To safely share the sky, an ultralight pilot must understand how airspace is organized and what that structure means in practice.

CONTROLLED VS. UNCONTROLLED AIRSPACE

Understanding where controlled airspace begins and ends—especially near airports—is essential before every flight. At its most basic level, U.S. airspace is divided into controlled and uncontrolled airspace.

Controlled airspace is any airspace where Air Traffic Control (ATC) actively manages aircraft movement. This management exists primarily to protect larger, faster, and instrument-equipped aircraft operating around busy airports or along airways. Ultralight aircraft are not excluded from controlled airspace, but they may only operate there with specific authorization from ATC. Without that permission, entry is prohibited.

Uncontrolled airspace, by contrast, is not actively managed by ATC. There may still be airplanes operating there, but pilots are responsible for seeing and avoiding each other. Most ultralight activity occurs in uncontrolled airspace because it is simpler, quieter, and aligns well with the legal limits of ultralight aircraft. For Pivotal pilots, Class G is home base. Most other airspace is either restricted or requires a brief call to ATC by phone or radio.



Class B



Class C



Class D



Class E



CONTROLLED AIRSPACE

CLASS B



Solid Blue

MAJOR AIRPORTS SOLID BLUE (JFK, LAX, etc...)

The key rule is simple: you may not enter Class B airspace without prior ATC authorization.

CLASS C



Solid Magenta

MODERATELY BUSY AIRPORTS

Must have ATC authorization before entering Class C airspace.

CLASS D

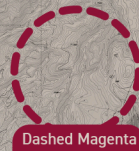


Dashed Blue

SMALLER TOWER-CONTROLLED AIRPORTS

Ultralight operations in Class D airspace require prior ATC authorization.

CLASS E



Dashed Magenta

USED TO CONTROL IFR ROUTES

You must have prior ATC authorization to enter. This is typically handled by making a phone call to the responsible facility ahead of time.

UNCONTROLLED AIRSPACE

CLASS G



Most ultralight flying occurs in Class G airspace, which is uncontrolled and not depicted with strong boundary lines on sectionals. Class G typically exists near the surface in rural areas, away from controlled airports.

Can I fly an ultralight eVTOL into airports with a control tower?

Four types of controlled airspace are especially relevant to ultralight pilots: Class B, Class C, Class D, and Class E. These airspace types are always associated with airports and are depicted clearly on FAA sectional charts using specific line styles and colors.

Ultralights may freely operate in **uncontrolled airspace** or most airports that don't have a control tower. This is provided they follow standard safety practices, remain clear of congested areas, and communicate with other air traffic.

WHAT DO STACKED NUMBERS MEAN ON AN AERONAUTICAL CHART?

Airspace classes may consist of vertical zones (shelves). The closer pilots are to the center of controlled airspace, the lower its base altitude.

100
30

----- Top of airspace is 10,000 ft.

----- Bottom of airspace (base altitude) is 3,000 ft.



IS THIS RELEVANT TO HELIX PILOTS?

Helix pilots must remain below the base altitude unless otherwise cleared by ATC.



CAN I FLY MY HELIX IN A BUSY CITY?

One of the most important—and often misunderstood—rules for ultralight pilots concerns congested areas.

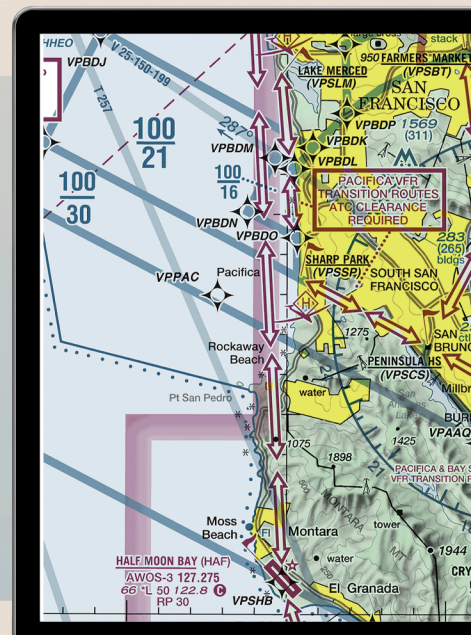
Part 103 explicitly prohibits ultralight aircraft from operating over any congested area of a city, town, or settlement, or over any open-air assembly of people.

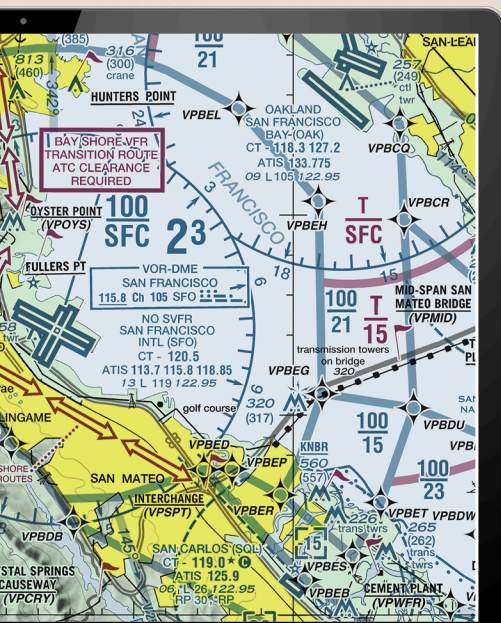
ULTRALIGHT PILOTS MUST AVOID FLYING OVER:

- Residential neighborhoods
- Commercial or industrial building clusters
- Schools, parks, stadiums, or beaches where people are gathered
- Outdoor events, crowds, or organized gatherings

This means flying over open fields, agricultural land, dry lakebeds, sparsely populated desert, waterways, or uncrowded rural terrain is okay. It is important to note that “congested” is not defined by property lines alone.

A single isolated house in an otherwise open area may be acceptable to fly near, while a tightly packed neighborhood—regardless of legal city limits—should be strictly avoided.





FINAL THOUGHTS FOR ULTRALIGHT PILOTS

Airspace awareness is not about restriction—it is about responsibility. Ultralight pilots are granted exceptional freedom, but that freedom comes with the expectation of conservative judgment and constant situational awareness.

By understanding the difference between controlled and uncontrolled airspace, recognizing Class B, C, and D boundaries on sectional charts, and respecting the prohibition against flying over congested areas, an ultralight pilot protects not only themselves—but the future of ultralight aviation as a whole.



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