

# Paramotor Regulations, Law, and Public Relations



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# Bottom Line Up Front

1. **Rule #1: DBAD:** The regulations we enjoy are a monument to common sense and freedom.
2. Our regs exist to protect *nonparticipants*, and the future of our sport is dependent on maintaining the goodwill of the non-participating public.\*\*
3. There are going to be many people out there that are introduced to this sport for the first time **because of you.**
4. Flying paramotors is a *privilege*: What's legally *permissible* may not be *beneficial*...just because you can, doesn't mean you should.
5. Reality vs Perception: Terms like “**hazardous**” and “**congested**” are often left to the *eye of the enforcer* to define.
6. Increased legislation is *inevitable*.



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# Minimally Regulated

- Minimal regulations based on the acceptance of personal risk.
- Limited regulations make our sport so available to so many people but are also the basis of our operating limitations.
- Your privileges end where the safety and well-being of non-participants and their property begins.
- As an UL operator, **you alone are responsible for your personal safety and development.**







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# Part 103 Historical Context

- Became law in 1982, primarily to address hang gliding
- FAA left diverse UL community fundamental responsibility to “self-regulate”
- *Preamble to FAR Part 103*
- *103-6 - Ultralight Vehicle Operations*
- *AC 103-7, The Ultralight Vehicle*







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# Modern Part 103 Innovations







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# 14 CFR Part 103 aka “FAR 103”

- *Minimally regulated* by Part 103
- Applies to **single-placed, non-certificated** ultralight vehicles that may be **unpowered** or **powered** by design.
- Must fall within standards of **weight, fuel capacity, and speed.**
- Limited to **recreational** or **sport purposes** only.



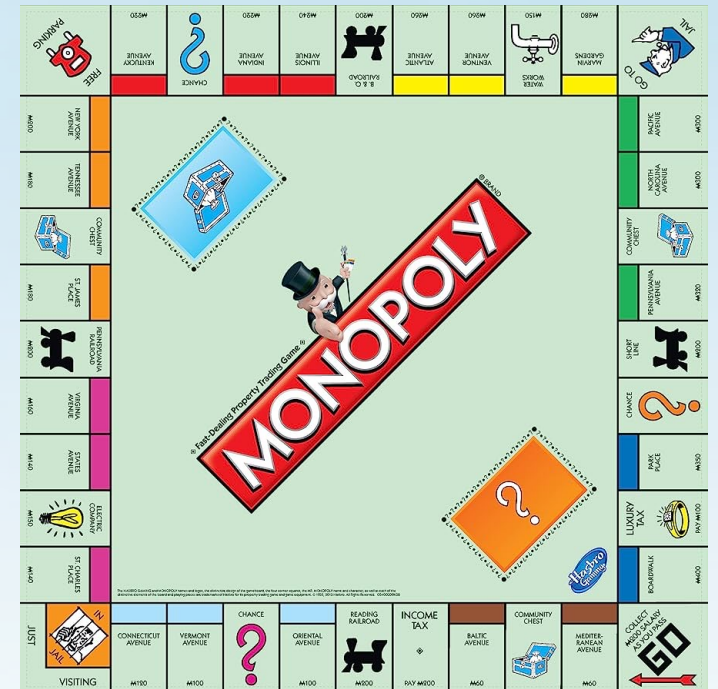
*A student fulfilling his legal obligation to have fun.*



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# The Ten “Cannots”

1. Create a “**hazard**” to people or property
2. Carry **passengers**
3. Fly over “**congested areas**” or **people**
4. Fly at **night**
5. Fly in the **clouds**
6. Fly without **visual reference** to the **surface**
7. Fly within an area designated by a **TFR**
8. Create a **hazard to aircraft**
9. Receive **compensation** to fly
10. **Deviate** from any rule within Part 103







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# Subpart A – General

# Subpart B – Operating Rules



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# Subpart A – General

- **Applicability**
- **Inspection Requirements**
- **Waivers**
- **Certification and Registration**



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# The Ultralight Vehicle

- Part 103 applies **only** to single-placed, non-certificated UVs
- **If powered:**
  - Must weigh less than **254 pounds** empty
  - Fuel capacity not exceeding **5 U.S. gallons**
  - Not capable of more than **55 knots at full power in level flight**
  - **Power-off stall speed** which does not exceed **24 knots**
- If a vehicle were to exceed any standard of applicability (without an exemption or waiver), it would not be considered an “ultralight vehicle” and would be disqualified from the operating rules prescribed to ultralights in Subpart B

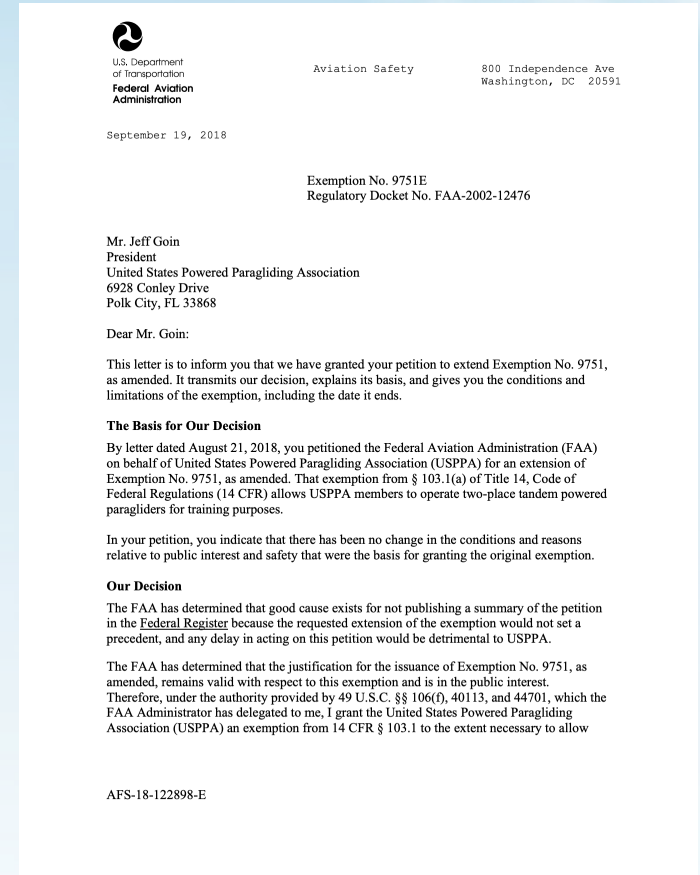




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# ...But What About Tandems?

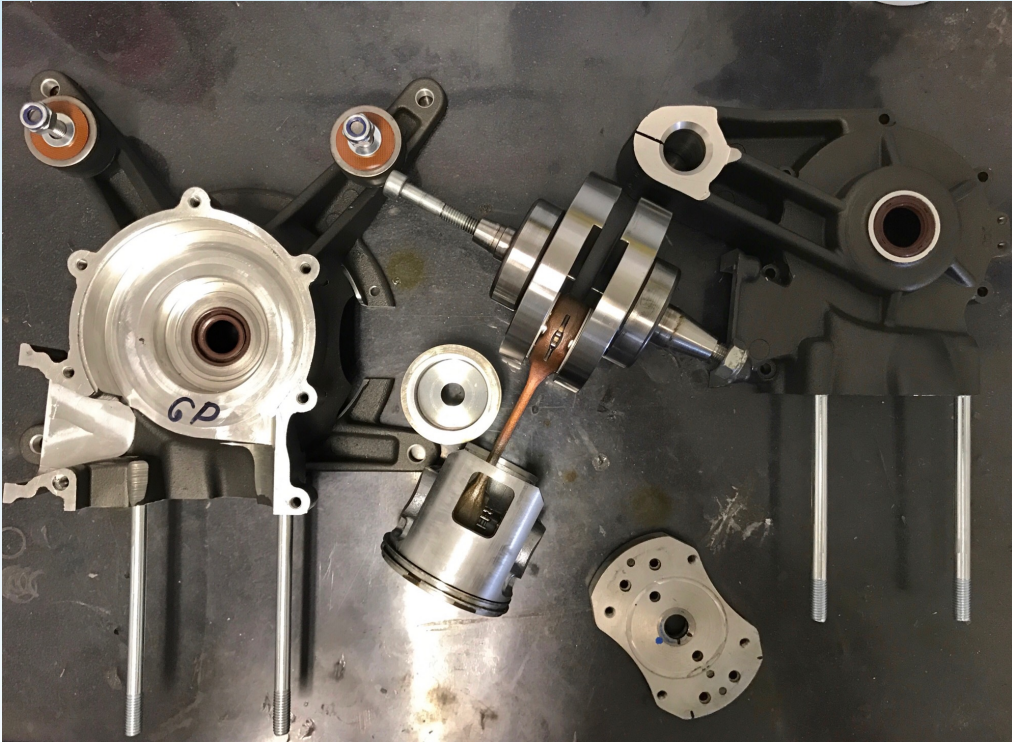
- **FAA exemption only**
- **USPPA and ASC exemptions**
- **Subject to conditions and limitations**
- **Instructional purposes only (i.e. cannot be operated for recreational, sport, or commercial purposes)**
- **Not an immediate/reasonable expectation for beginners**





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# Certification



- Part 103 doesn't require any **certification** of ultralights, **equipment, components, or operators**
- No **knowledge, age, or experience, or medical** requirements
- No standards of **airworthiness, registration, maintenance, or inspection** requirements





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# Seek Quality Training

- Although this sport can be exceedingly safe, it can become dangerous if given the opportunity
- The trial-and-error process of self-training is *not* an efficient or reliable way to safely gain the precise skills, coordination, and specific knowledge our sport requires
- The costs of overestimating your ability to teach yourself or *learning through poor instruction* can be significantly more expensive/frustrating/painful/debilitating in the long run
- **You are a product of your experience and you should view quality training as an investment in your future**
- Not all schools or instructors are created equally, so do your research

**EXPERIMENTER**  
ULTRALIGHT WORLD

**THE VALUE OF GOOD TRAINING**

Don't be too proud to learn  
BY JON ESSELLE

"Mistakes are inevitable in aviation, especially when one is still learning new things. The trick is to not make the mistake that will kill you."  
— Stephen Coonts, *The Carnival Queen: A Flight Into the Heart of America*

**THE SPORT OF POWERED PARAGLIDING**, also known as PPG or "paramotoring," is enjoying a golden age of unprecedented exposure, increasing popularity, and rapid growth in the United States. Many topics inevitably thrive in various debates whenever paramotor pilots come together. However, every paramotor pilot has to start their journey somewhere, and the question of whether to seek professional training or embark upon "self-training" is arguably the most discussed, divisive, relevant, and important topic at the moment. This subject is fiercely defended by strong opinions and strong emotions from both sides of the aisle within the community. I, too, hold a strong opinion on this topic.

126 SportAviation August 2019

This EAA SportAviation article is available at [www.paramerica.us/resources](http://www.paramerica.us/resources)



# Inspections



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- Ultralight vehicles are *not required* to be inspected on an annual or periodic basis
- Operator *must* allow an authorized FAA representative to inspect the ultralight to ensure its applicability to Part 103



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# Deviations & Waivers

- Operators *cannot* deviate from Part 103 *unless* the FAA has issued a **written waiver**
- In-flight emergencies *do not* permit the operators to deviate from Part 103



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# Compensation

- Ultralights are limited to **purposes of recreation or sport**
- Operators cannot receive any form of **compensation** tied to the performance of an **act or task** while operating the ultralight itself





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# Hazardous Operations

- The primary purpose of Part 103 is to protect and limit risks to the **non-participant**
- Ultralight operators cannot create a **hazard** to other **persons** or **property**
- *Perception vs reality* — appearances matter!



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# Operations Over Congested Areas

- Cannot fly *over* **congested areas** of a city, town, or settlement, or any open air **assembly of persons**, at *any* altitude
- The presence of the non-participating public (or their property) is the most important determining factor



Courtesy Austin Joffe, Lift Paramotor





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# Vaguely Congested Areas

- “Questionably congested”
- FAA will determine what is considered “congested” or “hazardous” on a case-by-case basis
- There’s no right way to fly over a congested area, however, there’s s a wrong way to fly over/near a questionably congested area
- *When in doubt, fly further away from the area in question than is obviously required, at an altitude where nobody can see or hear you, in a manner that they wouldn’t even care if they did.*



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# Daylight Operations

- Operations limited to the hours between official **sunrise** and **sunset**
- 30 minutes before sunrise or after sunset in **uncontrolled airspace** (Class G) *if* equipped with an **anti-collision light**



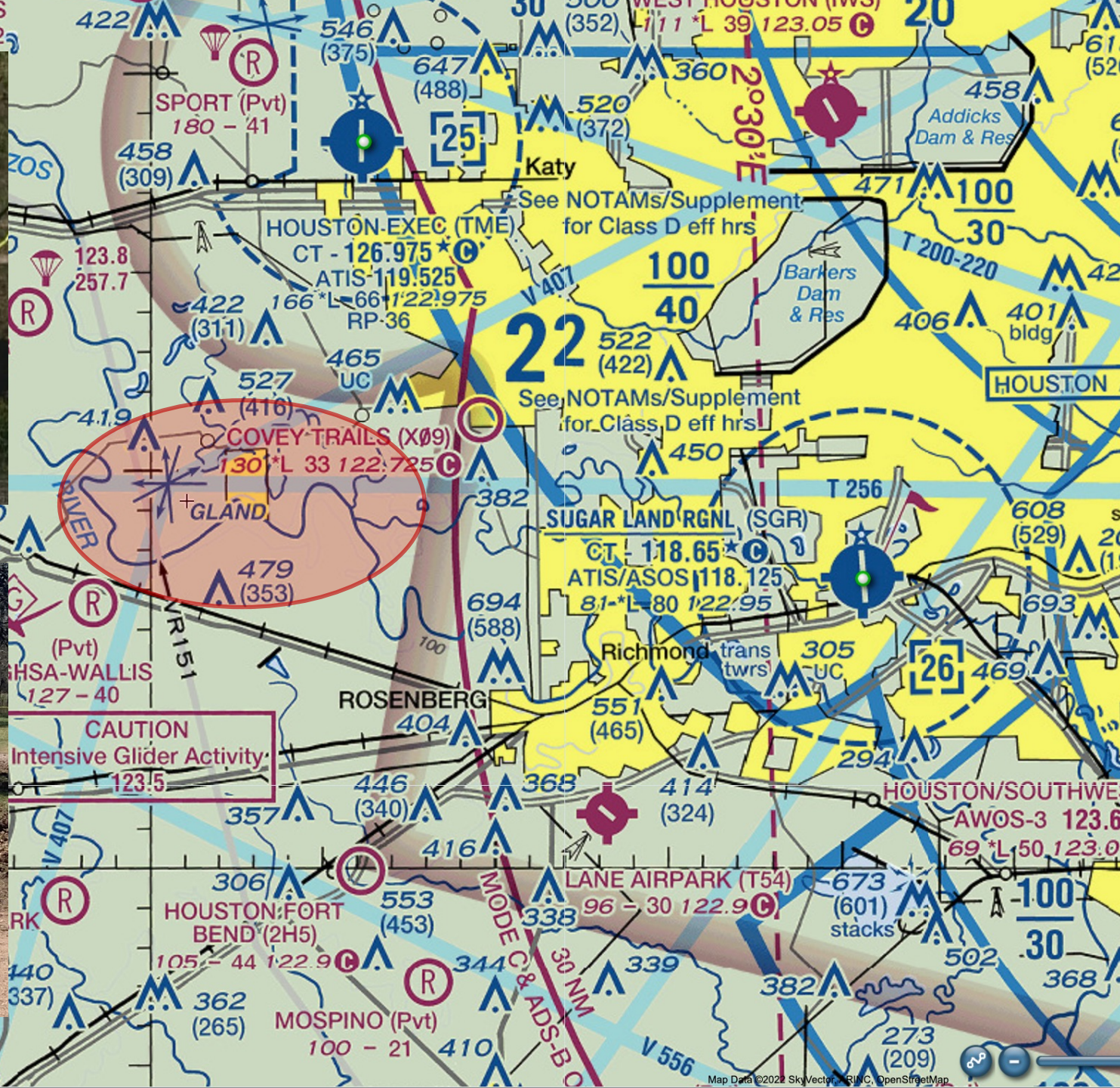
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# Right-of-Way

- *Powered* ultralights are at the bottom of the totem pole
- Burden of responsibility to “**see-and-avoid**”, and **yield the right-of-way** to *all* aircraft is placed on *ultralight operators*
- Cannot create a collision hazard to aircraft
- It's easier to avoid areas you expect to find aircraft than expect to see or be seen







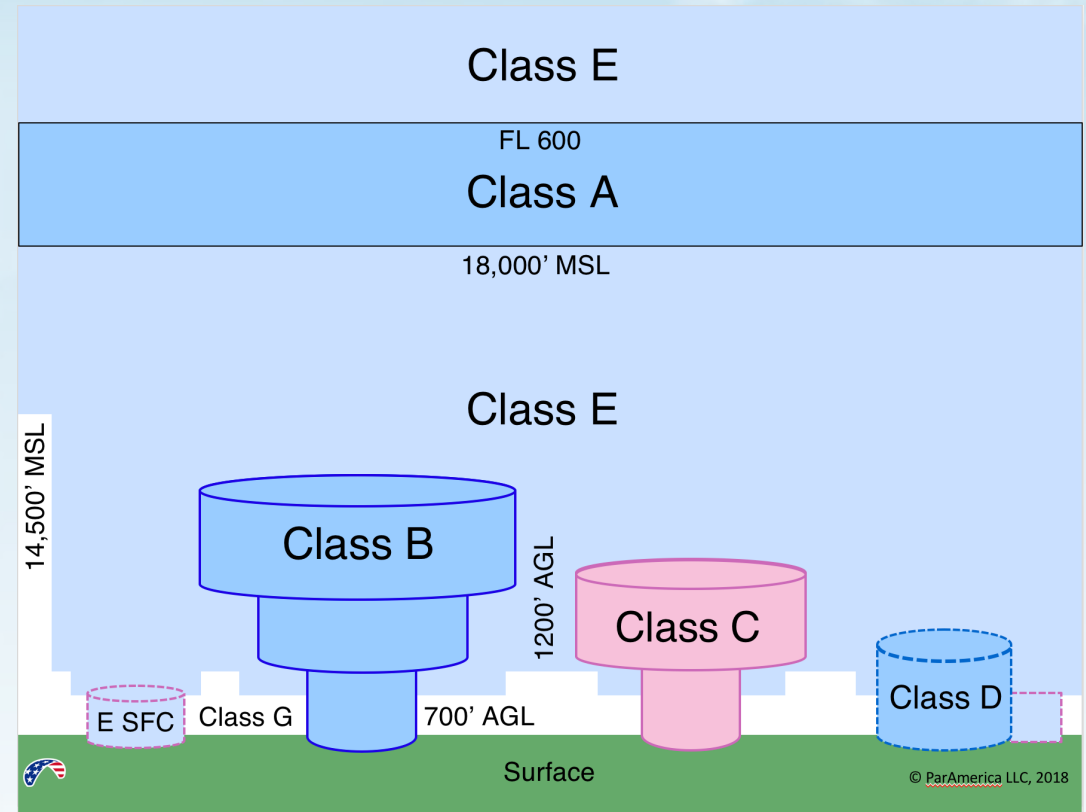




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# Airspace

- For the purposes of this forum, we're only going to discuss the basics of how airspace specifically applies to Part 103
- Unless the operator has received **prior authorization** from ATC, operations are *prohibited* within:
  - Class A, B, C, D airspace
  - The *lateral boundaries* of a Class E surface area **designated for an airport**





Class E

FL 600

Class A

18,000' MSL

Class E

Class B

Class C

Class D

E SFC

700' AGL

1200' AGL

Class G

Surface

14,500'  
MSL





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**CAUTION:** Be prepared for loss of horizontal reference at low altitude over lake during hazy conditions and at night.

**EXAMPLES OF CLASS B ALTITUDES**  
 --- Ceiling in hundreds of feet MSL  
 --- Floor in hundreds of feet MSL

**CTC CHICAGO MIDWAY APP**  
 WITHIN 15 NM ON 119.45 269.125  
 SERVICE AVAILABLE IN CHARTED CLASS C AIRSPACE ONLY

**EXAMPLES OF CLASS C ALTITUDES**  
 --- Ceiling is to but not including floor of Class B  
 --- Floor in hundreds of feet MSL

Pilots are encouraged to use the Terminal Area Chart





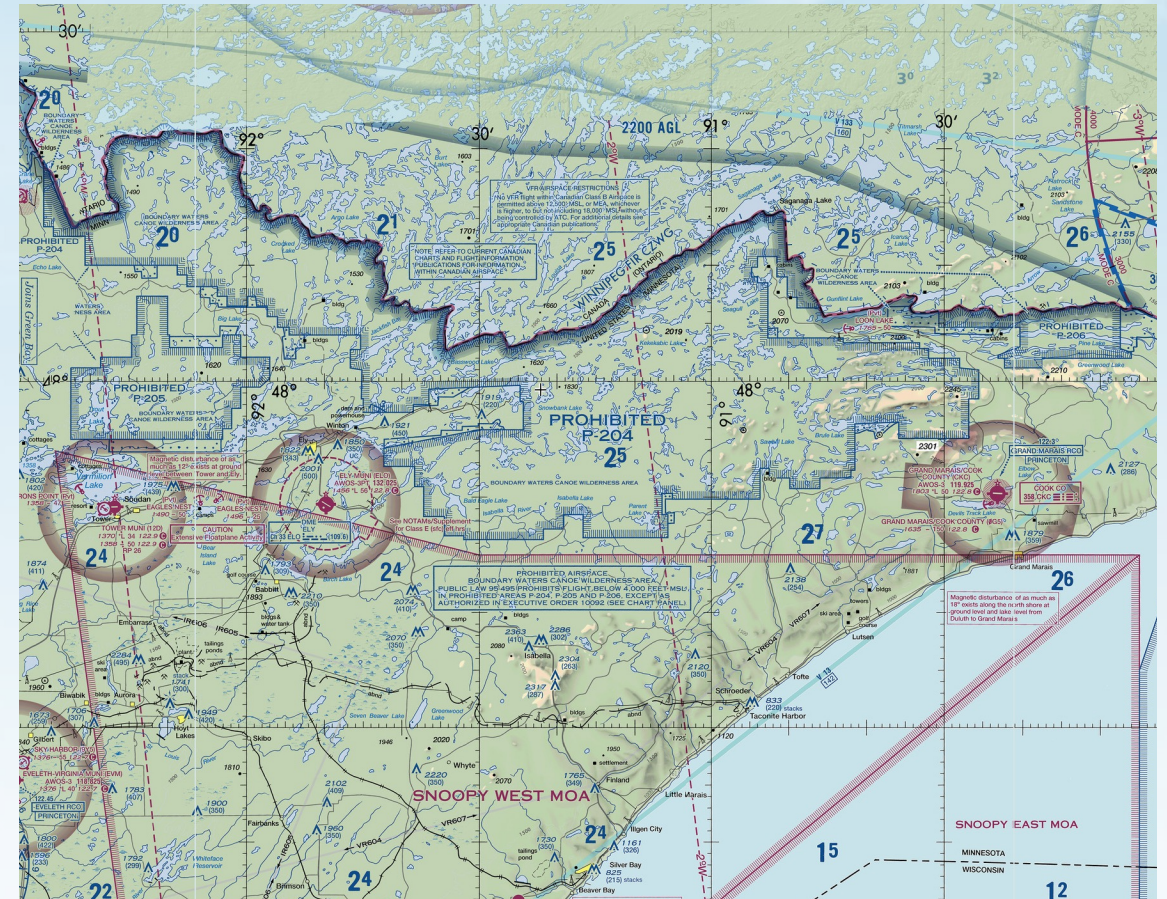




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# Prohibited and Restricted Areas

- Ultralights are *forbidden* from operating in **Prohibited** or **Restricted** Areas unless the operator has received *prior permission* from the controlling agency





# Restricted Area

- Not entirely *prohibited*, but subject to restrictions
- Unusual or invisible hazards to aircraft
- May be active or inactive
- VFR flights require prior authorization when active





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# Military Operations Areas (MOAs)

- Established for the purpose of separating military training activities from nonparticipating IFR traffic
- Military pilots in MOAs are exempt from FARs prohibiting aerobatic flight and speed restrictions
- May be active or inactive







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# Military Operations Areas (MOAs)

- VFR flights do not need permission to enter an MOA, regardless of whether or not it is active
  - Exercise *extreme* caution in doing so
  - *Should* avoid when active
  - Realize that military aircraft are not *confined* to MOAs







See NOTAMs/Supplement for Class E (sf) eff hrs  
ELLIS (OAJ) AWOS-3 124.475  
93 °L 71 123.0

ELLAS  
261 OA

WILMINGTON TRSA  
SEE TWR FREQ TAB

R-5303A EXCLUDES AIRSPACE 1500' AGL & BELOW

See NOTAMs/Supplement for Class D/E (sf) eff hrs

R-5304A EXCLUDES AIRSPACE 1500' AGL & BELOW

DIXON  
198 DIW  
DME Ch 107 (116.0)

CAMP DAVIS MCOLF (14NC)  
60-50 253.3

HOLLY RIDGE/  
TOPSAIL IS (N21)  
40 L 36 122.9

WILMINGTON  
117.0 Ch 117 ILM  
RALEIGH

WARNING  
W-122





**SPECIAL USE AIRSPACE ON CHARLOTTE SECTIONAL CHART**

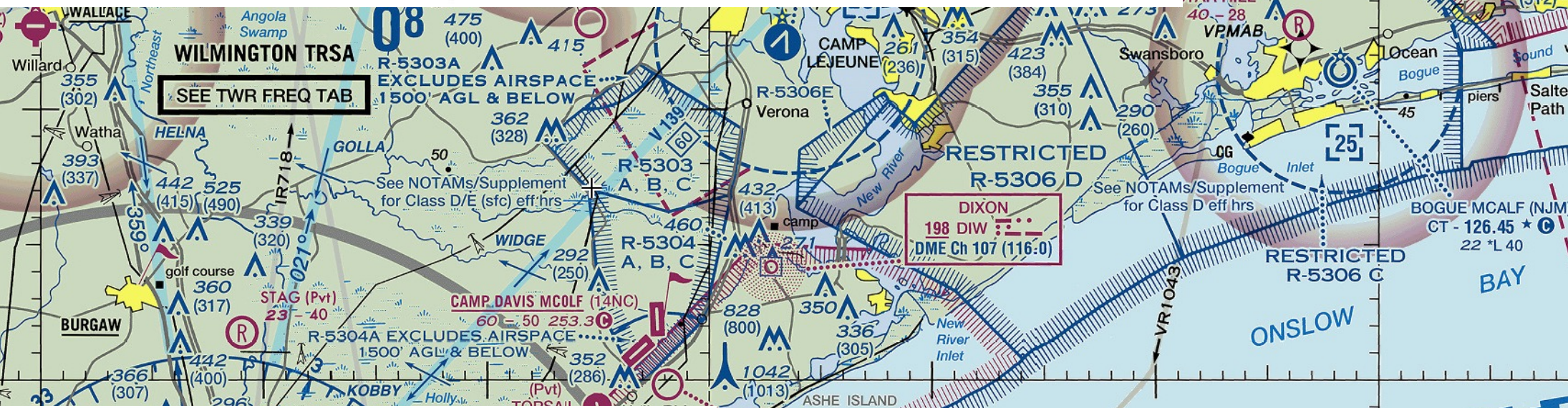
Unless otherwise noted altitudes are MSL and in feet. Time is local.  
 \*TO\* on altitude means "to and including."  
 FL - Flight Level  
 NO A/G - No air to ground communications.  
 Contact Flight Service for information.

† Other times by NOTAM.  
 NOTAM - Use of this term in Restricted Areas indicates FAA and DoD NOTAM systems. Use of this term in all other Special Use areas indicates the DoD NOTAM system.

**U.S. P-PROHIBITED, R-RESTRICTED, W-WARNING, A-ALERT, MOA-MILITARY OPERATIONS AREA**

NUMBER	ALTITUDE	TIME OF USE	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
R-3005 A, B, D	TO 29,000	0600-2400 ‡24 HRS IN ADVANCE	JACKSONVILLE CNTR	
R-3005 C	TO 29,000	0600-0300 ‡24 HRS IN ADVANCE	JACKSONVILLE CNTR	
R-5301	TO 14,000	CONTINUOUS	GIANT KILLER	118.125 233.7
R-5302 A	TO 14,000	BY NOTAM 24 HRS IN ADVANCE	CHERRY POINT APP	119.75 360.775
R-5302 B	100 AGL TO 14,000	BY NOTAM 24 HRS IN ADVANCE	CHERRY POINT APP	119.75 360.775
R-5302 C	100 AGL TO 3000	BY NOTAM 24 HRS IN ADVANCE	CHERRY POINT APP	119.75 360.775
R-5303 A	TO BUT NOT INCL 7000	0600-1800 MON-FRI ‡24 HRS IN ADVANCE	CHERRY POINT APP	
R-5303 B	7000 TO BUT NOT INCL 10,000	BY NOTAM 24 HRS IN ADVANCE	CHERRY POINT APP	
R-5303 C	10,000 TO BUT NOT INCL FL 180	BY NOTAM 24 HRS IN ADVANCE	WASHINGTON CNTR	135.5 272.75

R-5304 A	TO BUT NOT INCL 7000	0600-1800 MON-FRI ‡24 HRS IN ADVANCE	CHERRY POINT APP	
R-5304 B	7000 TO BUT NOT INCL 10,000	BY NOTAM 24 HRS IN ADVANCE	CHERRY POINT APP	
R-5304 C	10,000 TO BUT NOT INCL FL 180	BY NOTAM 24 HRS IN ADVANCE	WASHINGTON CNTR	135.5 272.75
R-5306 A	TO BUT NOT INCL FL 180	CONTINUOUS	CHERRY POINT	124.1 268.7
R-5306 C	1200 TO BUT NOT INCL FL 180	CONTINUOUS	CHERRY POINT	124.1 268.7
R-5306 D, E	TO BUT NOT INCL FL 180	CONTINUOUS	CHERRY POINT	124.1 268.7
R-5311 A	TO BUT NOT INCL 7000	CONTINUOUS	WASHINGTON CNTR	135.2 348.65
R-5311 B	7000 TO BUT NOT INCL 12,000	CONTINUOUS	WASHINGTON CNTR	135.2 348.65
R-5311 C	12,000 TO BUT NOT INCL FL 290	CONTINUOUS	WASHINGTON CNTR	135.2 348.65
R-5313 A	TO 18,000	0800-2300 MON-FRI ‡24 HRS IN ADVANCE	CHERRY POINT APP	119.75 360.775
R-5313 B, C	100 AGL TO 13,000	BY NOTAM 24 HRS IN ADVANCE	CHERRY POINT APP	119.75 360.775
R-5313 D	500 AGL TO 13,000	BY NOTAM 24 HRS IN ADVANCE	CHERRY POINT APP	119.75 360.775
R-5314 A, D	TO FL 205	0600-2400 MON-FRI ‡6 HRS IN ADVANCE	CHERRY POINT APP	119.75 360.775
R-5314 B, E	500 AGL TO FL 205	0600-2400 MON-FRI ‡6 HRS IN ADVANCE	CHERRY POINT APP	119.75 360.775



HATTERAS F	3000 TO 13,000	0700-2200 MON-FRI	WASHINGTON CNTR	
PAMLICO A	8000	INTERMITTENT SR-2300 MON-FRI	CHERRY POINT APP	119.75 360.775
PAMLICO B	8000	INTERMITTENT 0700-2200 MON-FRI	CHERRY POINT APP	119.75 360.775
PHELPS A	6000	INTERMITTENT 0600-2400 MON-FRI; 0700-1800 SAT-SUN ‡6 HRS IN ADVANCE	CHERRY POINT APP	119.75 360.775
PHELPS B	10,000	INTERMITTENT 0600-2400 MON-FRI; 0700-1800 SAT-SUN ‡6 HRS IN ADVANCE	CHERRY POINT APP	119.75 360.775
PHELPS C	15,000	INTERMITTENT 0600-2400 MON-FRI; 0700-1800 SAT-SUN ‡6 HRS IN ADVANCE	CHERRY POINT APP	119.75 360.775
POINSETT	300 AGL TO 2500	0600-2400 MON-FRI 0800-1600 SAT ‡8 HRS IN ADVANCE	SHAW APP	
SEYMOUR JOHNSON ECHO	7000	0600-2000 MON-FRI	WASHINGTON CNTR	
STUMPY POINT	TO BUT NOT INCL 8000	INTERMITTENT SR-2300 MON-FRI	CHERRY POINT APP	119.75 360.775

\*Altitudes indicate floor of MOA. All MOAs extend to but do not include FL 180 unless otherwise indicated in tabulation or on chart.  
 †Other times by DoD NOTAM.







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# NOTAMs

- Notices to Air Missions
- Potential hazards, restrictions, or situations that could potentially affect the safety of flight
- Cannot operate ultralight vehicles in certain areas designated by NOTAMs unless authorized



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# Flight Visibility

- Must maintain:
  - **Visual reference** with the surface
  - Horizontal **flight visibility requirements**
  - Three-dimensional **cloud clearance requirements**
- Arguably the most frequently/flagrantly violated regulation for social media clout
- Just because you saw someone else do it on IG doesn't make it safe, legal, or acceptable

Punching through the clouds with my paramotor!

81 views

Published on Dec 24, 2017

I've got my head in the clouds.... Surreal flight.

Category Entertainment

License Standard YouTube License

SUBSCRIBE 114





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<b>Airspace</b>	<b>Flight Visibility</b>	<b>Distance From Clouds</b>
Class A	Not applicable	Not applicable
Class B	3 statute miles	Clear of Clouds.
Class C	3 statute miles	500 feet below.1,000 feet above.2,000 feet horizontal.
Class D	3 statute miles	500 feet below.1,000 feet above.2,000 feet horizontal.
Class E – Less than 10,000 feet MSL	3 statute miles	500 feet below.1,000 feet above.2,000 feet horizontal.
Class E – At or above 10,000 feet MSL	5 statute miles	1,000 feet below.1,000 feet above.1 statute mile horizontal.
Class G – 1,200 feet or less above the surface (regardless of MSL altitude)	1 statute mile	Clear of clouds.
Class G – More than 1,200 feet above the surface but less than 10,000 feet MSL	1 statute mile	500 feet below.1,000 feet above.2,000 feet horizontal.
Class G – More than 1,200 feet above the surface and at or above 10,000 feet MSL	5 statute miles	1,000 feet below.1,000 feet above.1 statute mile horizontal.

# Legal Advice





# Best Defenses

- Don't break the law, a\*\*hole
- Action Cameras & GPS devices
- FAA Aviation Safety Reporting System, aka "NASA report"
- AC 00-46F





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12/22/2018

ASRS - General Report Form



## NASA AVIATION SAFETY REPORTING SYSTEM

Thank you for submitting your report on **2018-12-22 11:22:33**

Your receipt code is: **7F2768FE957481407B6EFF590E8A891DC19784C5**

---

Your report has been securely submitted to the NASA Aviation Safety Reporting System (ASRS). No identifying information will be kept in our system after our review. Your Identification Strip (ID Strip) will be printed, date stamped, and mailed back to you at the address you have provided. When this ID Strip is removed, your name has been removed from our system and your report is being processed.

Your receipt code is simply a number that indicates that we have received your report electronically. This number is not linked to your report. ASRS recommends you record and/or print your receipt code, if you may do so securely.

*Thank you for your contribution to aviation safety!*







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# State and Local Law

- Local/State governments do not have jurisdiction of Federal airspace
- Codes and ordinances may affect operations on the surface
- Police officers do have broad authority to investigate potential criminal matters\*
- Familiarize yourself with the local laws on the ground, as well as in the air
- [www.municode.com](http://www.municode.com)



VERSION: MAY 30, 2017 (CURRENT)

- > Chapter 4 - ANIMALS
- > Chapter 6 - BUILDINGS AND BUILDING REGULATIONS
- > Chapter 8 - EMERGENCY MANAGEMENT
- ▼ Chapter 10 - ENVIRONMENT
  - > ARTICLE I. - IN GENERAL
  - ▼ ARTICLE II. - NOISE CONTROL

Sec. 10-19. - Unreasonably loud noises prohibited.

Sec. 10-20. - Definitions.

Sec. 10-21. - Prohibitions regarding specific activities.

Sec. 10-22. - Commercial entertainment.

Sec. 10-23. - Permits required for certain activities.

Sec. 10-24. - Exceptions.

### Sec. 10-24. - Exceptions.



The following are exceptions from the application of this article:

- (1) Construction activity performed by an agency of government, provided that all equipment is operated in accordance with manufacturer's specifications and is equipped with all noise-reducing equipment in proper condition;
- (2) Sound or noise emanating from street fairs, festivals, or celebrations conducted by or with the town;
- (3) Sound or noise emanating from film and video production activities for which permits have been issued by the town, provided all equipment such as generators are properly muffled;
- (4) Sound or noise emanating from properly equipped aircraft operated in accordance with applicable federal rules and regulations;
- (5) Sound or noise from lawful fireworks;
- (6) Lawnmowers and agricultural equipment operated between the hours of 7:00 a.m. and 9:00 p.m. when operated in accordance with manufacturer's specifications and with all standard noise-reducing equipment in place and in proper condition;
- (7) Musical accompaniment to parades or military ceremonies;
- (8) Sound emanating from regularly scheduled athletic events at town parks and school athletic facilities;
- (9) Emergency vehicles in the course of performing their official duties;
- (10) Railroad operations;
- (11) Noncommercial speeches made from a fixed location; and





# National and State Parks

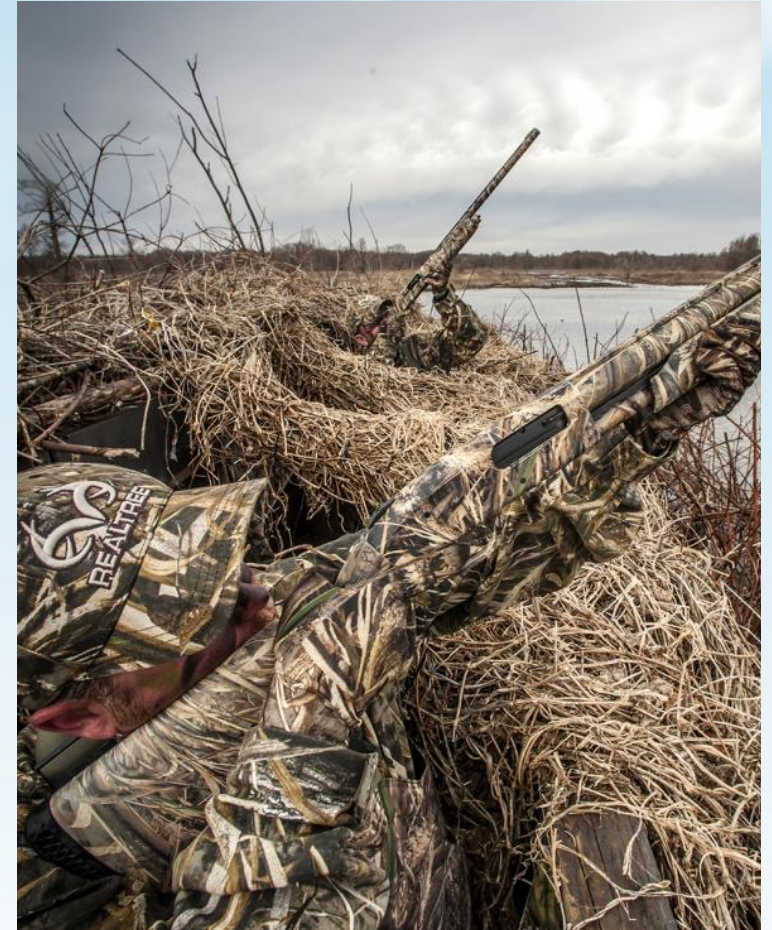
- Many state and national parks have rules which prohibit the takeoff or landing of any aerial vehicle
- Stiff penalties including civil fines and/or jail
- Always check the park's website or rules



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# Hunters & Landowners

- Be a good neighbor
- Avoid cattle & livestock, be courteous of golf courses, etc.
- Familiarize yourself with local hunting seasons
- Don't let your hobby interfere with the hobbies or livelihoods of others (re: Rule No. 1)





# Social Media



- The driving force in our sport
- The road to regulatory change will be paved with YouTube videos
- Eyes, cameras, and opinions everywhere
- What you're willing to post and make public represents and affects the entire community





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# Social Media Tips

- Share your journey! But don't do this for views, likes, clicks, followers, or subscribers.
- Don't put the cart before the horse: You don't have to be a YouTube star or Instagram celebrity to enjoy this sport.
- Don't assume some random "influencer" or self-proclaimed "expert" on Facebook or YouTube to be a legitimate source of information.





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# Social Media Tips

- **Think before you post:** Think about how what you post will be *perceived*. Don't share self-incriminating content or content that will poorly represent the community.
- Don't chase clout, don't be a showoff, and don't copy and/or inspire others to do stupid stuff.
- Don't operate at the expense of the community.
- Focus on the long-term well-being of the sport rather than trying to make a name for yourself.



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# Best Practices

- ***Be discreet, aim to keep a low profile***
- **Assume that you're a nuisance to someone**
- **Consider calling local non-emergency line prior**
- **Avoid noise pollution**
- **Never put yourself in a position where you're at the mercy of someone else's perception**



# In Closing



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- Don't use paramotors for evil!
- Protect what you love!
- Treat others with **respect**
- **Be a good first example**
- **Always remember Rule No. 1**



**For more info:**

**[www.paramerica.us](http://www.paramerica.us)**

**info@paramerica.us**

**1-833-PMERICA (1-833-763-7422)**



**@paramerica\_actual**



**@ParAmericaLLC**

