



**United States  
Powered Paragliding  
Association**

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# Task Rules & Scoring

## National USPPA Paramotor Competition

*As of Nov 07, 2004*

An event is a group of tasks flown by a field of competitors over a period of one or more days. The event must be completed within 7 days from the first day any competitor scores. The field must be open to all USPPA members who meet the minimum qualifications. Qualification can be done allowing the organizer to use the top percentage of competitors from a previous event.

### ***Rules for All Competitions:***

The same wing and motor must be used for all tasks. In the event of an equipment failure, identical gear may be substituted. For power units, that means the same make and model using the same power plant. For wings that means the same make, model and size.

Pilots must have radios capable of receiving on FRS channels 1 through 7 at least.

Pilots may not receive any assistance of any kind either physically or over the radio except in an emergency. Any such assistance zero's the pilots score for that task. For example, if I pilot needs assistance to get launched, then he earns no points for the launch.

Only members of the USPPA may compete in sanctioned events. Rankings will be maintained and published by based on the scoring rules below and the top three ranked pilots be published in various media for each qualified competition.

The USPPA will sanction any requested event where the competition committee believes the organizers have an adequate location and sufficient resources to run it safely and fairly. The request should be made by writing to [info@usppa.org](mailto:info@usppa.org) or by talking with any competition committee member at least 7 days before the event begins. USPPA will make available the competition kit which provides all the materials needed to run the event for a nominal charge to cover shipping, certificates, wear on gear, and replacement of batteries.

Pilots must pay any required entrance fee and sign the competition waiver before being allowed to compete.

### ***Scoring***

Pilots will receive points for each task based on formulas below. All qualifying task scores will be added together to determine the pilot's event total.

In order for a task to qualify, at least 50% of the competitors must have a non-zero score in that task. In order for an event to count towards national ranking, at least 50% of the pilots must score.

For national standing purposes, at the end of the event the pilot with the highest score is granted 1000 points. Each lower scoring pilot receives a percentage of 1000 points based in his final score as a percentage of the winner's final score. For example, if the first place pilot garners 2000 points and the second place pilot gets 1800 points during an event (which is 90 percent of the winner's) then for national tracking purposes the first place pilot get 1000 points and the second place pilot 900.

At least Five pilots must compete (have a non-zero score) for a competition to count towards national ranking. If only 5 pilots compete, the maximum score attainable is 500 points. If 15 or more pilots compete then the full 1000 points are attainable. Any number between those two gets the appropriate points.

So if 5 people compete, the winner gets 500 points to his score for winning. If 6 people compete the winner gets 550 points added to his score for winning and so on.

Over the course of a calendar year, the pilots highest 2 average event scores will be used to maintain his/her standing in the national rankings.

In the event of a tie for 1<sup>st</sup> 2<sup>nd</sup> or 3<sup>rd</sup> place in any event, the launch and spot landing tasks will be re-flown until those places are determined. Plaques or certificates (depending on the organizers) are given out to each pilot who places.

Any fall, injury or damage to equipment during a task results in that task's score being zeroed.

The Judge working a task has final say in all matters relating to his/her task but they are encouraged to use video, if available, to decide. In the event of two judges, one lead judge will be assigned and have the final say although the lead is encouraged to get agreement with the other judge.

No pilot may have a negative score on any task. If scoring would result in less than 0 then that task will be counted as 0.

Acknowledging that there is increased risk in competition, pilots must have at least 50 logged solo flights or a USPPA instructor sign-off to compete.

## **Target**

The standard target consists of three rings and a center. The outer ring is 6.5 meters radius, the middle ring is 4 meters radius and the inner ring is 2 meters radius. The lines do not necessarily have to be drawn on these radiuses but these values will be used for competitions.

A center marker no bigger than 25 centimeters should be used to mark the "bullseye".

## **Tasks**

### **Foot Drag (See Graphic)**

The pilot flies through the first gate dragging at least one foot and continues through as many gates as possible until passing the last one. At least one foot must remain on the ground and points are scored each time a gate is passed. It is timed and greater speed is beneficial. The gates must be passed in order.

Scoring:

1. 100 points per gate passed between the cones. If a cone is touched, then no score is earned for that gate.
2. 20 points are subtracted each time or each second (if it lasts more than a second) that both feet leave the ground. In the event a pilot runs, each footstep is counted as having both feet leave the ground so 10 steps would mean 200 points are deducted.
3. Time Points: FT=Flown Time, ST=Shortest Time completed, LT=Longest Time completed, TR=Time Range (LT-ST), time points awarded =  $100 \times (LT-FT) / TR$ .
4. A zero score is assigned if the pilot falls, his wing touches the ground or the gates are passed in the wrong order.

### **Cloverleaf (see Graphic)**

The kicks the center stick then rounds the upper left one and flies according to the diagram. It is timed and greater speed is beneficial. The pilot is only allowed one try to kick any stick. Time runs from passing the first stick to the last stick. The sticks must be kicked and rounded in order.

Scoring:

1. 50 points per kicked center stick.
2. -50 points for missing/inside a corner stick.
3. Time Points: FT=Flown Time, ST=Shortest Time completed, LT=Longest Time completed, TR=Time Range (LT-ST), time points awarded =  $100 \times (LT-FT) / TR$ .
4. A zero score is assigned if any part of the pilot or his/her equipment touches the ground except the sticks.
5. A zero score is assigned if the sticks are kicked/rounded out of order or in a turn done in the wrong direction.

## Slow/Fast

The pilot flies straight through the gates as slow as possible then goes around flies straight through the gates as fast as possible. Each run is timed from gate to gate and the greater the difference, the higher the score. Time runs from passing the first stick to the last stick. The pilot must complete both the slow and the fast portion to get any points.

Scoring:

1.  $PilotRatio = LongTime / ShortTime$ ,  $MinRatio = \text{minimum achieved PilotRatio}$ ,  $MaxRatio = \text{highest achieved PilotRatio}$  of all competitors that flew both halves,  $DiffRatio = \text{difference between the highest and the lowest ratios}$ .
2.  $Points = 200 * (PilotRatio - MinRatio) / DiffRatio$
2. A zero score is assigned if any part of the pilot or his/her equipment touches the ground OR the sticks.

## Takeoff

The pilot makes a clean takeoff in the fewest attempts. The wing cannot touch the ground after initial inflation.

Scoring:

1. 300 points are awarded for making the first attempt, 200 points from making the second and 100 points for making the 3<sup>rd</sup>.
2. After a pilot is cleared to launch, 20 points will be deducted each time the wing is brought up off the ground and no launch is made.
3. A launch is considered begun if the pilot starts running in a forward inflation or gets at least halfway around while turning to run forward after a reverse inflation.
4. A zero score is assigned if the pilot falls after being cleared to launch.

## Power Off Landing

The pilot flies over the landing spot at least 300 feet above ground level (AGL) and shuts off the motor. He then lands as close as possible to the “bulls eye” with minimal energy (traveled distance) and stops. The point of first foot contact is the touchdown and is the most important element of scoring. A small part of the score comes from having minimal distance traveled.

Traveled distance is from initial contact to standing still and is measured to the touched point farthest away from initial touchdoen. For example, it is permissible to just touch the center and have that count as a bull’s-eye, but if two pilots touch the center, the least traveled does better.

1. A zero score is assigned if any part of the pilot’s body or equipment touches the ground, other than his/her feet until after the wing first touches down. It is permissible that the pilot may kite the wing out of the circle after body motion has stopped if approved to do so by the judge.
2. Initial contact scoring is based on the first point of contact:
  - a. 250 points for touching the center. If one foot touches visibly before the other than the distance to the heel of the first touchdown will be used. If the landing is on both feet simultaneously and either foot touches the center marker, it will be counted as a center touch.
  - b. 175 points for touching on or inside the inner ring.
  - c. 100 points for touching on or inside the center ring.
  - d. 50 points for touching on or inside the outer ring.
5. Distance Traveled scoring:  $DT = \text{Distance Traveled}$ ,  $SD = \text{Shortest Distance Traveled}$ ,  $LD = \text{Longest Distance Traveled}$ ,  $DR = \text{Distance traveled Range } (LD - SD)$ , points awarded =  $100 \times (LD - DT) / DR$ .
6. Pilot score is Initial Contact Score + Distance Traveled Score.

## Power On Touch & Go Landing

The pilot flies the directed pattern and lands on or near the “bulls eye” then runs/walks exactly 10 steps followed by a takeoff. The point of first foot contact is the touchdown and is the most important element of scoring. A small part of the score comes from having as close to 10 steps as possible. The 10 steps must be made within 10 seconds. The walk/run portion is only counted within 50 meters of the center point to get points for the steps portion.

Scoring:

1. A zero score is assigned if any part of the pilot's body or equipment touches the ground, other than his/her feet, from touchdown through liftoff. The task is completed when the pilot has climbed at least 50 feet.
2. Ring Points are awarded for initial contact the same as for a spot landing.
3. 100 step points are awarded for traveling exactly 10 steps. 20 points are deducted for each step over or under 10. The first touchdown is step 1 and each foot fall is another step.
4. Step points are zeroed if the pilot steps beyond 50 meters from the center point.

## Kite War

All competitors kite their wing up when the judge starts the event. Pilots attempt to keep their wing from touching the ground as long as possible: last one up wins.

The wing used must be one the pilot has flown or be within the recommended weight range (body weight only). This is to prevent the use of an abnormally small wing which could proffer an advantage. A box will be outlined (marked by cones) and pilots must remain in the box. The box should be sized so as to allow all pilots a reasonable layout area. Pilots location in the box will be determined by experience. Those with the most experience must be placed in the rearmost (downwind) location.

For the task to count towards any pilots score there must be at least 5 competitors and at least one wing that remains up for 2 minutes or more.

The wing fabric must not touch the ground or another pilot. Once this happens the pilot must ball up the wing and exit expeditiously without touching or interfering with other competitors or their gear. The task starts on "Go" when the judge shouts "Ready, Set, Go". The task ends at the point where only one wing remains up or in the box. From start to finish is the task's time.

Scoring:

1. 100 points for being the last one up or in the box
2. 50 points for the second to last one up or in the box.
3. 25 points for the third to last one up or in the box.
4. 10 points for keeping the wing up at least 2 minutes (is additive for the placers)

## Bomb Drop

Light weight, approved and marked "bombs" will be dropped from any height while flying. Where the "bomb" stops is the scored position.

ORD=Outer Ring Distance, FDD=Farthest Drop Distance where the worst scoring bomb stopped as a distance from the center.

Scoring:

1. 100 points for hitting the center.
2. 50 points for hitting on or inside the inner ring.
3. 30 points for hitting on or inside the middle ring.
4. 15 points for hitting on or inside the outer ring.
5.  $100 \times (FDD - DD) / FDD$ .

## Ball Scoop & Drop – Advanced Only

The pilot either picks up or dribble kicks (runs) a soccer-sized ball with his/her feet and drops it into a circle or barrel 50 meters feet away in the least amount of time possible. Additionally, points can be scored getting the ball to simply hit the barrel.

1. No part of the pilot's body or equipment can touch the ground, other than his/her feet, until after the ball has hit the barrel.
2. No part of the pilot's body or equipment can touch the circle (or barrel).
3. Once the pilot crosses the starting point he must always be moving towards the target. Stops are permitted.

Scoring:

1. 100 points for first touching the ball.
2. 100 points for carrying the ball airborne for more than 10 meters.

3. 100 points for the ball dropping into the circle or barrel.
4. 100 points if the ball touches the barrel (note: this is additive to the dropping points).
5. Time Points: FT=Flown Time, ST=Shortest Time completed, LT=Longest Time completed, TR=Time Range (LT-ST), points awarded =  $100 \times (LT-FT) / TR$ .

## Beam Walk

The pilot lands on beam, walks in one direction then takes off. The pilot makes as many steps as possible in the shortest time. The time starts at first touchdown.

The beam may be from 2 to 4 meters long and between 0.1 and 0.5 meters wide. No part of the pilot's body or equipment can touch the beam or ground except his/her feet. Additionally:

1. The pilot must be airborne for at least 10 seconds before and after landing on the beam.
2. Each step must have the foot completely in front of the preceding step.
3. The task (and time) ends when:
  - a. Both feet first leave the beam.
  - b. A foot touches the ground.
  - c. A foot lands in the wrong direction of travel.

Scoring:

1. 20 points for each forward footfall (the first touchdown and then each subsequent forward-moving footfall counts).
2. Time Points: FT=Flown Time, ST=Shortest Time completed, LT=Longest Time completed, TR=Time Range (LT-ST), time points awarded =  $100 \times (LT-FT) / TR$ .

## Platform Stand

This can be done with or without the motor. The pilot must stand in place or within a 1/2 meter square meter platform while kiting the wing for as long as possible. The competition director will declare whether or not stationary placement is used instead of platform placement. Stationary placement means the pilots feet must not move at all (vertically or horizontally) from the point he declares the start.

The pilot must start within one minute of stepping onto the platform and will call "start" for the judge to start the task's time.

1. No part of the pilot or his equipment, except the feet, can touch the ground or platform.
2. The task ends when any part of the pilot or his equipment touches the ground beyond the platform or, if stationary placement is being used, any foot moves.

Scoring:

1. 200 points for having the longest time.
2. Each pilot will earn a number of points as a percentage of the longest time.

## Efficiency

Each pilot starts with an empty gas tank and fuels exactly 2 liters of fuel (including oil as appropriate). He launches and tries to stay up as long as possible, up to 60 minutes. Pilots must have the approval of the launch judge prior to taking off so their time can be recorded. They should announce their landing on the radio. Pilots are required to note their launch time and landing time which will be used in the case judge's time is not available.

Scoring:

1. Most points are awarded for having the longest time.
2. Pilots must land within the 60 minute window or be assigned a zero score.
3. Each pilot will earn a number of points as a percentage of the longest time.
4. Task Score is:  $\text{EfficiencyPointsAvail} \times (\text{Time Up}) / \text{EffTimeRange} \times \text{Multiplier}$
5. Multiplier is:  $\text{MotFactor} + (\text{CC's} - \text{MinMotor}) / (\text{MaxMotor} - \text{MinMotor})$
6. Motor Factor (MotFactor) is 0.4.