



CATALOG OF EVIDENCE

CHAMPIONSHIP BRAZILIAN PARAMOTOR And paratrayk - VERSION 2019

2nd STEP

LINHARES - HOLY SPIRIT

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COVERAGE

This document is to be used in conjunction with the Local Regulation. The Test Catalog and scoring criteria described for this championship were selected and published from standards *Annex 4 of Section 10 of the FAI Code, 2019*. This catalog describes tests normally carried out in the world and continental championships of the FAI, with some adjustments.

Because it is a national competition, the items discussed in this document shall prevail over the rules and evidence codes suggested by the FAI. However, in cases of omissions or ambiguities of the regulation, the FAI Sporting Code in its original version Edition 2019 can be used.

CATEGORIES

<i>RPF1Tm - paraglider Control / Foot-launched / Flown soil / Male</i>	PF1	Paramotor Solo Open
<i>RPF1Tf - paraglider Control / Foot-launched / Flown soil / Female</i>	PF1f	Paramotor Solo Female
<i>RPL1T - paraglider Control / landplane / soil Flown</i>	PL1	paratrayk soil
<i>RPL2T - paraglider Control / landplane / Flown with two persons</i>	PL2	paratrayk double

Standard tests will be carried out **Navigation, Precision and Economy**

The evidence in each category shall be considered valid provided that it has application by three competitors. The women's race will take place along with the category "Open", using the scores for the two categories.

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1. PRINCIPLES

The principles of this championship are based on the same set for the 2017 competition held in União da Vitória. The purpose of the tasks defined in the Competition Classic is to simulate driving situations in the real world, testing the skills of the drivers against each other in a way that can be measured simply and fairly, without bringing excessive danger to the pilots. Flying such tasks should be an enjoyable experience. Thus, the basic principles of the 2019 Championship can be characterized by four key words:

INSURANCE - FUN - SIMPLE - FAIR**SAFE**

Security must of course be the main point of the event. We see an increasing number of accidents on evidence *slalom* with wings faster and faster. For those riders who accept take such risks, there is a series dedicated to competitions *slalom* FAI will not be the case this competition. However, this is a classic competition that should provide an alternative to the extreme sport events, while remaining true to the spirit of cooperation and integration of pilots for which they were designed, providing a mix of "navigation tasks, economy and precision. We must go home walking on our feet !!!

FUNNY

We flew paramotors because brings us pleasure and it's fun. It follows that the more tests are flown in a competition, much more enjoyable it becomes for all riders, and give them more opportunity to fully demonstrate their skills and get good results. The Director of Competition will face a difficult challenge in defining evidence that is adequately complex to test the best riders without slowing down the competition. Evidence for different classes can be performed independently in order to use the airspace more effectively and maximize flight opportunities. These tests will be sufficiently bold to give the pilot's skills have to fly on a new and different terrain.

SIMPLE

competition tests must be simple, without being easy. There is much evidence listed in Annex 4 of the FAI, many of which were never used in classical competitions FAI for many years. In order to simplify the competition, only a few navigation tasks, accuracy and economy were selected and building on world last two and indications of 2019. This will allow shorter briefings and reduce the risk of confusion (especially when it's the first time pilots have contact with these tests), in addition to planning problems and long delays for the release of scores.

FAIR

Being fair is another central principle of competition. The tests must be designed primarily to measure the pilot's skill and to minimize the chance of random elements that affect the score. The classic competitions should reward the pilots to have a balanced set of skills and a balanced equipment. This directs the development of equipment, since the classic competitions encourage the development and use of paramotors increasingly well designed.

2. TYPES OF PROOF

The competition will be divided into three categories:

N	Navigation:	flight plan, estimated times, and speed. Without limiting fuel.
AND	Economy:	Autonomy, speed and duration of fuel. With fuel limitation.
P	Precision:	Flights by gates, pylons, kicking bats, knock cones and landings on the fly.

- For the championship is valid will have to occur at least 3 distinct evidence with declared score of the categories. It should be performed at least one declared proof navigation, an economy and precision. If necessary the Race Director can put more than one category in the same flight, but only worth proof declared for consideration of valid competition.
- The tests defined by the Contest Director may have only one category or combine with other categories of evidence, provided that the flight is declared valid for a category, which is the most relevant and having a score above 50% of the race.
- The proportion of evidence accumulated in the championship will be approximately 1/3 for each category. (S10 4.29.3).
- The pilot's score will be set by adopting the arithmetic sum of the results of navigation tests, Economics, and accuracy, and the final result of the competition calculated as the simple arithmetic average, rounded to two decimal places.
- Each race will have a maximum score of 1000 points, and the results are normalized by higher performance pilot who receive full marks, and the other competitors will have notes in proportion to the improved performance.
- Any proof established more than once may be identical or vary.
- Distances and times to be flown can be as long as possible with regard to the autonomy of aircraft that will compete.
- In any event that requires pre-declaration of speed or allotted time, the Director of Competition will organize Gates undeclared and control (*Hidden Gates*) along the flight path to ensure that the pilot is following the predetermined path. No information will be given at the briefing about the existence or location of these control points (*Hidden Gates*) and the method by which they are controlled.
- The concept of "back" (*backtracking*) It will be applied in order to ensure flight safety.
- The Competition Director shall prescribe a period of time before the test is completed taking into account the last landing period during the day (Sunset).

3. GENERAL CRITERIA SCORE

The maximum value of each piece will be 1000 points.

The results of the tests will be generally normalized for the best performance according to the following formula:

$$P = (Q / Q_{max}) \cdot 1000$$

Where: Q = Pilot score, Q_{max} = Best proof of the score, P = Final Score Pilot Scores Q and Q_{max} are considered after the penalties applied, applied when Q_{max} > Q with increasing score.

In the specific case of minimum time control, the results are usually normalized by the better performance (less time) according to the following formula:

$$P = (T_{min} / T) \cdot 1000$$

Where: T_{min} = min (best) time of test; T = pilot time; Final Score = P pilot's scores T and T_{min} are considered after the penalties applied.

Depending on the evidence, some pilot performance evaluations can be measured with absolute scores functioning as bonus. When the combination of tasks is used, performance bonus must not exceed 50% of the total points available on the test, ie 500 points.

$$Ex.: P = Q / Q_{max} \cdot x + y \cdot 750 \text{ (eg, where the maximum value of this item is 250 points)}$$

In this case, Q = Pilot score, Q_{max} = Best score of the race, y = a bonus for performance in some other category; P = Final Score Pilot

Evidence may have only one category or combine with other categories of evidence, provided that the test is valid declared to the most relevant category (> 50%), and its result tied specifically to this category (Navigation, Economy and Precision).

As a criterion for moderation, if less than 50% of the class drivers who are in a position to initiate such proof, the score in this case will be reduced **proportionally "pro rata"** And according to the formulation below.

$$Final\ Score\ Pilot\ test\ on\ P_s = @MINIMO (1 (T_s / T_c) * 2)$$

At where:

P_s = Pilot score after all penalties

T_s = Total riders who started the race (after Rule 5 Minutes); T_c = Total pilots in the subclass.

The final score of the pilot will be defined as the arithmetic mean of all the evidence $(N + E + P) / n$, and values of N, E and Q are obtained by simply summing the results of the tests of the same category. "N" being the total number of valid evidence.

- | | |
|------------------|--|
| • N (navigation) | Score from navigation tests (N1, N2, N3, etc.) |
| • E (economy) | Score from evidence the economy (E1, E2, E3, etc.) |
| • P (precise) | Score from precision tests (P1, P2, P3, etc.) |

A score given to a competitor for a test must be expressed to the nearest whole number, 0.5 being rounded value for more. (Ex.: 600 = 600.25, 892.50 = 893; 784 = 783.68). This criterion applies to score each test. The final result is expressed in arithmetic average rounded to 2 decimal place after the decimal point.

It will be considered **Competition Winner** each subclass that the pilot had the highest average (highest score), limited to 1000 points after the balance, and according to the following formula:

$$S = \frac{(N) + (E) + (AND)}{\text{Total number of tests}} \leq 1000.00$$

You can also awarded the **State Winner (UF)** to get the most points, considering for scoring each state your athlete who has obtained the highest score in each subclass. It will only be considered an athlete by subclass of each state, and disqualified athletes will be disregarded score overall computation of this award. There is no provision award for this category.

4. ROAD SIGNS AND PROOF

Flag on Main Mast will show:

No flag on display	The championship window is closed.
Green flag	open flight window. Authorized entering quarantine and flight to attend the race.
Red flag	Window closed temporarily. Pilots can not take off. However, those who are in the air should continue the race.
Green and Red Flag	Window closed flight. Pilots must land immediately and can not take off. Applies to all riders.

Flags in the handle (flags) with Tax Track and adjudicator:

Fiscal Track and adjudicators have flags (flags) in hands that will be used to authorize the take off or stop, depending on the traffic of aircraft or poor weather conditions. In some precision tests the flags (flags) may be used to signal for opening the gate or landing site, in addition to indicating the validity or penalty to the pilot shortly after his execution.

picket	ON DECK	THE TEST SITE
Green flag	authorized takeoff	Signals that the Gate, landing site, and the relaunch is authorized and the pilot should continue in the race. Started the race by the competitor, the green flag raised by the adjudicator indicates that the competitor meets the test and is being properly judged.
Red flag	Unauthorized takeoff, and the pilot must wait.	Signals that the Gate, landing site, or relaunch is prevented / closed and the driver must wait in flight (or authorization to relaunch). Started the race by the competitor, the red flag raised by the adjudicator indicates that the competitor committed any offense / penalty, time has run out, or a problem in the circuit was detected. The pilot must leave the race course and wait.
Pennant Green / Red	The window was closed. The pilot should abandon the launch area.	Signals that the gate or landing site is closed and the pilot must land immediately.

5. EVIDENCES

5.1. NAVIGATION

N1. PURE NAVIGATION - Collection " waypoints "Weight

goal

This is a test of limited time in which the pilot must fly a path of your choice from a given set of *waypoints*, in order to collect as many points as possible within the time limit set for the test. The pilot must traverse a starting gate (SP) and an end gate (PF) which can be defined as a way of *points*, and it may also be necessary to move individual intermediate gates during the task as specified in the briefing. There are no pre-declaration elements. Unless otherwise indicated, the pilots will perform free takeoff from your deck and designated prior fiscal permit designated and within the time frame of the race.

Special rules

If the *waypoint* is collected two or more times during the test period will be excluded from counting points within the limited period of time for the test (T) for 5 min tolerance passage FP are counted in all *waypoints* collected by the pilot. At the end of T + 5min time will no longer be accounted the *waypoints*

Subsequent to this time . If the pilot reach the FP within the time T with 5 min of tolerance, 100% of the waypoints will be counted. If you arrive between 5 and 10 min will **5 points** discounted in its general calculation of waypoints, and 10 to 15 min will have a discount **10 waypoints**. From 15 min the score will be "zero" for proof.

most distant waypoints can have different weight .

Punctuation

.....çã• •• • = (••• / •••••) • ••••

At where

NBP = Number of turnpoints x WEIGHT collected by the pilot in the race, less penalties.

NBmax = Increased number of turnpoints x WEIGHT, collected by a rider in the race, discounted penalties.

penalties

"Zero" in the race:

- Passing out of the PF test time with $t > 15$ min;
- Not cross the SP or FP or crossing over into the wrong set;
- Cross the SP or FP outside the test window;
- Take off or land outside the test window;
- Fly in prohibited place;
- Land outside the airfield;
- Other foreseen in the Regulation, including disqualification.

Passing the test FP off time between $5 < T \leq 10$ min; any less **5 waypoints**

Passing through the FP outside the testing time between $10 < T \leq 15$ min, less **10 waypoints**;

Example:

Takeoff time window:	3 pm
Maximum Time of proof between SP and FP (T):	1:30 pm (tolerance +5 min)
Time held between SP and FP (T):	1: 33 pm (ok)
Total waypoints and turnpoints the test =	30 locations
x rider collected by the weight points (SP and FP) =	15 points
Most points collected in the test by a pilot =	20 points
Pilot Score = $1000 \times 15/20 =$	750 points

precautions

Maintain eye contact with other drivers who may be in separate traffic of your. Do not focus only on the map and on the ground because there are other pilots in navigation. Give preference to those who are lower. As it is free to prioritize circuit turns the left and at most 90 degrees. Fly predictably. Overtaking free system should be made by the pilot's right to be exceeded.

landing

After crossing the finishing point (FP = *Finish Point*) the pilot should start your landing procedure. Unless otherwise briefed, pilots should make a close circuit with pre-set at the designated location and other visual security pilots. Immediately after landing and have their paramotors in a safe place riders must take their tracking devices (GPS) properly sealed to the Head of Verification and / or Fiscal Proof.

N2. PRECISION NAVIGATION - DECLARED TIME / SPEED / ACCURACY

goal

This is a test in which the pilot must fly a path defined by an arbitrary line on the map, providing time estimates and a time limit of the race.

Planning

A flight circuit will be set through the starting point (SP) and final (FP) and a line drawn on a map with a small number of "gates timing" for taking the time (TG). TG All points will be known before takeoff.

Pilots will fill a declaration sheet indicating the estimated arrival times for each TG in the circuit, including the point of arrival. The estimated time will be given in seconds starting from the SP, but it is recommended that the pilot has the same time in HH: MM: SS to use your timer for the test. Planning can be done in quarantine or not, according to the briefing. The pilots will deliver his statement to a lane tax / judge immediately prior to takeoff.

Take-off

Unless otherwise stated in the briefing, the pilots will perform a free take-off within the test window time.

Flight

The time will begin counting when the Paramotor cross the SP (starting point). Pilots must remain precisely on the circuit trying to go through the time making Gates the defined order and the estimated times. Navigation and the end of time taking place in the FP (finishing point).

To ensure that the pilot does not get out of the route to save time there will be any number of hidden gates (*Hidden Gates*) to validate the path. The gates must necessarily be crossed in order and proper direction.

The time in this test will be measured at five crossing points (TG) and checked against pilot returns. If a time gate is crossed more than once, the time will be taken from the first intersection. There will be a small bonus for speed throughout the course, which may include planning time informed.

SP	→	B	→	W	→	D	→	AND	→	FP
t = 0	HG	T1	HG	T2	HG	T3	HG	T4	HG	T

landing

After crossing the finishing point (FP = *Finish Point*) the pilot should start your landing procedure. Unless otherwise briefed, pilots should make a close circuit with pre-set at the designated location and other visual security pilots. Immediately after landing and have their paramotors in a safe place riders must take their tracking devices (GPS) properly sealed to the head of calculation and / or Fiscal Proof.

Punctuation

5 will be defined TG known, and various HD not known.

$$Q_h \text{ (HD - Hidden Gates)} = H / N_H \times 1500$$

Nh = Number of Gates checking the test H =
 Number of Gates correctly crossed by the pilot

$$Q_t \text{ (TG - Gates Timing)} = \sum H_i \text{ (Sum of points for each gate, zero to 1500, 5 x 300 Pts TG).}$$

Hi = 300 - Ei (value from 0 to 300)
 Ei = the absolute error in each gate in seconds with 5 seconds and a maximum tolerance of 300 sec (5 min). Difference between the stated time (ETA) and the one considered in the crossover point. Gates not crossed the score is zero at the gate.

$$Q_v \text{ (speed)} = T_{min} / T \times 750$$

T = TFIN - Tstart (Race time)

TFIN = FP T intersection Time start = SP T intersection
 Time min = Less evidence of a pilot time

• = •• + + •••• (Maximum 3750)

At where:

Qh It ranges from 0 to 1500 (40% proof)

Qt It ranges from 0 to 1500 (40% proof)

qv ranges from 0 to 750 (20% proof)

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Example:

Hidden Gates

N_{HG} = 10 Locations in the total test

H = 7 crossed locations within the cone of R = 150 m

Q_h = 7/10 x 1500 = 1050

Gates timing

N_{TG} = 5 Sites

GATES TIMING	DECLARED TIME (ETA)	EI = measured time DIFFERENCE	TIME (MON)	PUNCTUATION (HI = 300 - EI)
SP	T = 0	T = 0		
P1	T1 = 600 sec	540 sec	60	240
P2	T2 = 950 seconds	1050 sec	100	200
P3	T3 = 1500 sec	1900 sec	400	0
P4	T4 = 2200 sec	2205 sec ¹	0	300
FP	PFF = 2800 sec	3000 sec	200	100
Proof	2800 sec	3000 sec	Qt =	840

velocity

T = TFIN - Tstart = 3000 sec

Tmin = 2000 sec (best measured race time)

qv = 2000/3000 x 750 = 500

Final Score Pilot

Q = Qh + Qv = QT + 1050 + 840 + 500 = 2380 3300

Qmax = (sum of the best proof) P = 2380/3300 x 722 = 1000 = 721.21

therefore **P = 722 points**

penalties

"Zero" in the race:

- Fly in the opposite direction to the defined circuit;
- Rewind (back tracking)
- Not cross the SP or FP or crossing over into the wrong set;
- Cross the SP or FP outside the test window;
- Take off or land outside the test window;
- Fly in prohibited place;
- Land outside the airfield;
- Other foreseen in the Regulation, including disqualification.

¹ 5 sec tolerance will be considered the same amount of time reported by getting maximum gate score.

N3. NAVIGATION IN CURVE - DECLARED TIME / ACCURACY

goal

This is a test in which the pilot must fly a combined path of rectilinear and curved sections defined by an arbitrary line on the map, providing time estimates to fly specific stretches (rectilinear) and collect the largest number of checkpoints (*Hidden Gates*) arranged along the curved sections and arbitrary. The pilot will also have to demonstrate skill in departures

Planning

A flight circuit is defined through the starting point (SP) and final (PF) with a line drawn on a map, with rectilinear portions delimited by two waypoints (WPT) known for making time (TG) and a series of dots checking over the curved sections not known (HG). **R_{wpt} = 150 Me R_{hg} = 100 m**

Pilots will fill a declaration sheet indicating the estimated times for each of the defined rectilinear sections on the map. The estimated time will be given in seconds between WPT, but it is recommended that the pilot has the same time in HH: MM: SS to use your timer for the test . Planning can be done in quarantine or not, according to the briefing. The pilots will deliver his statement to a lane tax / judge immediately before takeoff or when the briefing indicate otherwise.

Take-off

Unless otherwise stated in the briefing, the pilots will perform a free take-off within the test window of time, but should be scored. A takeoff at the first attempt considered clean receive 150 points, the second points 100 and points 50 on the third attempt. Zero in subsequent attempts.

Flight

The flight should take place within the defined time window at the briefing. The test will be considered open after passage through the SP. Pilots must remain precisely on the circuit in the order defined on the map. The taking time to give us their points of opening and closing of each outlet passage of time (T1, T2 and T3). The proof will be finalized when the FP is crossed. The gates must necessarily be crossed in order and proper direction.

The time in this test will be measured in three distinct rectilinear portions (Tn) and checked against the pilot's statements. If a waypoint time is crossed more than once, the time will be taken from the first intersection. There will be no penalty for passing on a WPT or HG more than once.

landing

After crossing the finishing point (FP = *Finish Point*) the pilot should start your landing procedure. Unless otherwise briefed, pilots should make a close circuit with pre-set at the designated location and other visual security pilots. Immediately after landing and have their paramotors in a safe place riders must take their tracking devices (GPS) properly sealed to the head of calculation and / or Fiscal Proof.

Punctuation

They will be defined with 3 portions TG known, and several unknown HD over the curved sections. The HD collection worth a maximum of 400 points, the speed on stretches 450 points and 150 points off bonus.

$$NBP = NBmax - i + Bto$$

- NBP =** Number of HG collected by the pilot in the race, less penalties.
- NBmax =** Increased number of HG collected by a rider in the race, discounted penalties.
- i =** Sum of differences of the stated times and measured in 3 sections (maximum of 3 x 150 = 450).
- Bto =** takeoff bonus (maximum 150 points)

Ei Σ = Ei = the absolute error in each second portions 5 sec and a maximum tolerance of 150 sec (2 '30 "). Difference between the stated time (ETA) and the one determined by the intersection of the start and end points of each section. Gates not crossed the score is zero in that stretch. Ei = (declared time - measured time) in each section being 150 at the maximum.

Bto	Bonus takeoff =	
	150 points	1a. Attempt;
	100 points	2a. Attempt;
	50 points	3a attempted;
	Zero	> 3 attempts

N4. PURE NAVIGATION - Greater Distance Traveled

goal

This is a test of limited time in which the pilot must fly a path of your choice from a given set of *turnpoints*, in order to cover as much distance as possible within the time limit set for the test. The pilot must cross the starting gate (SP) and a final gate (FP) which can be set to one of

turnpoints, and it may also be necessary to move individual intermediate gates during the task as specified in the briefing. There are no pre-declaration elements. The linear distances between *turnpoints* It will not be informed in advance. Unless otherwise indicated, the pilots will perform free takeoff from your deck and within the designated time frame of the race.

Punctuation

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At where

NBP = Sum of linear distances between points collected by the pilot in the race
NBmax = Largest sum of linear distances between points collected by the test pilot

penalties

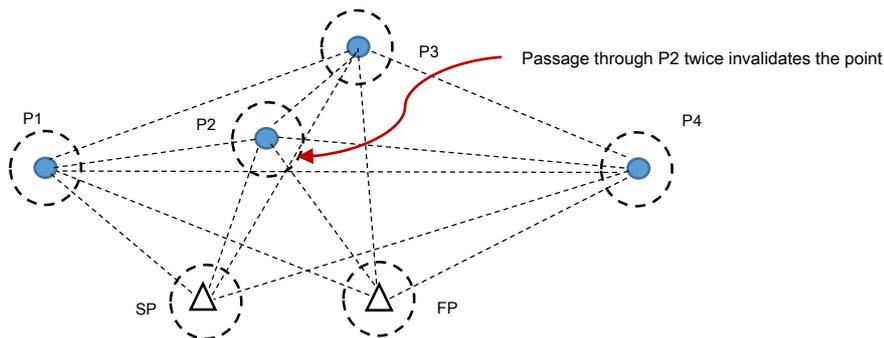
"Zero" in the race:

- Passing out of the PF test time with T> 5 min;
- Not cross the SP or FP or crossing over into the wrong set;
- Take off outside the test window;
- Fly in prohibited place;
- Land outside the airfield;
- Other foreseen in the Regulation, including disqualification.

Example:

Takeoff time window:	3 pm
Maximum Time of proof between SP and FP (T):	1:30 pm (tolerance +5 min)
Time held between SP and FP (T):	1: 32 pm (ok)
Total waypoints and turnpoints the test =	5 locations (SP, P1, P2, P3, P4, FP)
And path points collected (within the cone of R = 150 m) =	SP-P4-P2-P3-FP
distance traveled (D_{sp-4} + D₄₋₂ + D₂₋₃ + D_{3-FP}) =	3.800 m
Distance Traveled most of the trial by a pilot =	4.200 m
Pilot Score = 3800/4200 x 1000 = 904.76	905 points

Passing through a point that has already been collected invalidate this point. Ex .: SP-2-3-4-2-1-FP will result in SP-3-4-1-FP.



precautions

Maintain eye contact with other drivers who may be in separate traffic of your. Do not focus only on the map and on the ground because there are other pilots in navigation. Give preference to those who are lower. As it is free to prioritize circuit turns the left and at most 90 degrees. Fly predictably. Overtaking in free circuit must be made by the driver's right to be exceeded, and never underneath.

landing

After crossing the finishing point (FP = *Finish Point*) the pilot should start your landing procedure. Unless otherwise briefed, pilots should make a close circuit with pre-set at the designated location and other visual security pilots. Immediately after landing and have their paramotors in a safe place riders must take their tracking devices (GPS) properly sealed to the head of calculation and / or Fiscal Proof.

5.2. ECONOMY

E1. PURE ECONOMY

goal

Take off from the launch area with a limited amount of fuel (Ex.: 1.5 kg)² and fly close to the airfield as much time as you can and land on the landing area (deck) before the window ends. The takeoff and landing time will be noted by Lane tax at the time that pilots and passengers remove the last leg from the floor or the last wheel paratrayk on takeoff until the first contact with the ground. The accuracy of this test will be minutes, disregarding the seconds³.

description

The flight will take place around the airport. The driver will wait for their turn to take off in the launch area. You receive a green flag Fiscal indicating that it is allowed to take off. Your departure time will be noted (or the timer triggered). Groups will be made 4-5 pilots for Fiscal Track / adjudicator and takeoffs will be made in simultaneous batteries of the same number of pilots with time intervals to release the airspace. The pilot will be presented to the Audit in the schedule that best suit, waiting for the Fiscal insert it into a group of takeoff.

Punctuation

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At where

t_p = pilot flight time
 T_{max} = Maximum time obtained in the test for a pilot

Example: Window

Proof:

Takeoff Time:	2 pm
Landing time:	13 hours 14 '50 "
pilot in flight time = 13 x 60 min + 14 '=	14 hours 05' 10 "
Maximum time of test = 14 x 60 min + 5 '=	794 min
Time Pilot = 845-794 =	845 min
Maximum time of test =	51 min
Pilot Score = 1000 x 51/85 =	85 min
	600 points

penalties

"Zero" in the race:

- Take off outside the test window or without notice of the Audit / Judge;
- Fly in prohibited place or out of view of tax and proof of judges;
- Land outside the airport area or without notice to the Fiscal their landing;
- Other foreseen in the Regulation, including disqualification.
-

"20% penalty":

- Land off the deck (landing and takeoff area, but within the airfield and visually Fiscal / Judge)

precautions

Maintain eye contact with other drivers who are on the same circuit around the runway. Give preference to those who are lower. As this brief circuit defined in performing maximum in the curves 90 degrees to the direction of the circuit. Fly predictably. Overtaking must be performed on the opposite side to the circuit.

landing

Unless otherwise briefed, pilots should make a close circuit with pre-set at the designated location and other visual security pilots.

² If the rule of the 5 min is used, the pilot can take off again but can not replenish starting from scratch.

³ If the time interval is obtained by direct timing or passing sensor, the second will be valid for score.

E2. ECONOMY WITH NAVIGATION

goal

Take off from the launch area with a limited amount of fuel (Ex.: 1.5 kg)⁴ and fly in one direction until the predetermined maximum distance judged possible, return and land in the landing area before the window ends.

description

The flight will be carried out on the right side of the reference line (departure hall) as far as the pilot deems safe, cross the reference line, and return to the airfield from the left of the reference line (return corridor). The point of the first pilot crossing the reference line will be considered for scoring. The distance between the intersection point and the starting point is multiplied by 2 (total distance traveled along the reference line). The distance d is rounded to 5 m each (ex.: = 625 m 620m; 612 m = 610 m; m = 12,358 m 12,360) and expressed in meters, and then multiplied by 2. The pilot can take off at any time within the flight window.

Punctuation

.....çã• •• • = (•• / ••••) • ••••

At where

- D* = Distance between the starting point and the closest point of pilot crossing in meters
- dp* = Distance traveled by the pilot in flight ($Dp = dx \cdot 2$) in meters
- Dmax* = Maximum distance obtained in the test for a pilot ($Dmax = dx \cdot 2$) in meters

penalties

"Zero" in the race:

- Take off outside the test window;
- Fly in prohibited place or out of view of tax and proof of judges when requested;
- Land outside the airport area or without notice to the Fiscal their landing;
- Other foreseen in the Regulation, including disqualification.

"20% penalty":

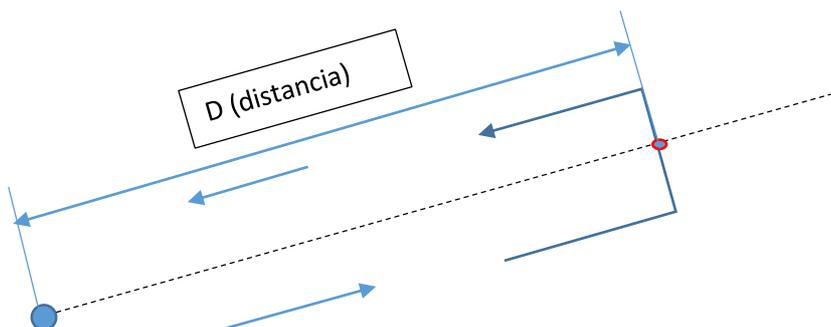
- Fly in the opposite direction of removal or return corridor **for more than 30 seconds**
- Land off the deck (landing and takeoff area, but within the airfield and visually Fiscal / Judge)

precautions

Maintain eye contact with other drivers who are on the same circuit around the reference line. Give preference to those who are lower. As this brief circuit defined in performing maximum in the curves 90 degrees to the direction of the circuit. Fly predictably. Overtaking must be performed on the opposite side to the circuit.

landing

Unless otherwise briefed, pilots should make a close circuit with pre-set at the designated location and other visual security pilots.



⁴ If the rule of the 5 min is used, the pilot can take off again but can not replenish starting from scratch.

E3. ECONOMY WITH DISTANCE

goal

Take off from the launch area with a limited amount of fuel⁵ (Ex .: 1.0 kg and 1.5 kg for Paramotor paratrayk) and fly the largest possible number of passages around the airfield and landing on one of the decks allowed.

description

Each section will have about 1 km and a landing area. no return lines will be marked to prevent any attempt to paramotor flying in the opposite direction of the circuit. The driver will wait for their turn to take off in the launch area. You receive a green flag Track Fiscal indicating that it is allowed to take off. In this race, the record of the passages will be performed by GPS. The flight height should be of the order of 200 m with a variation of + / 50 m, and can be changed by the director in the competition brief.

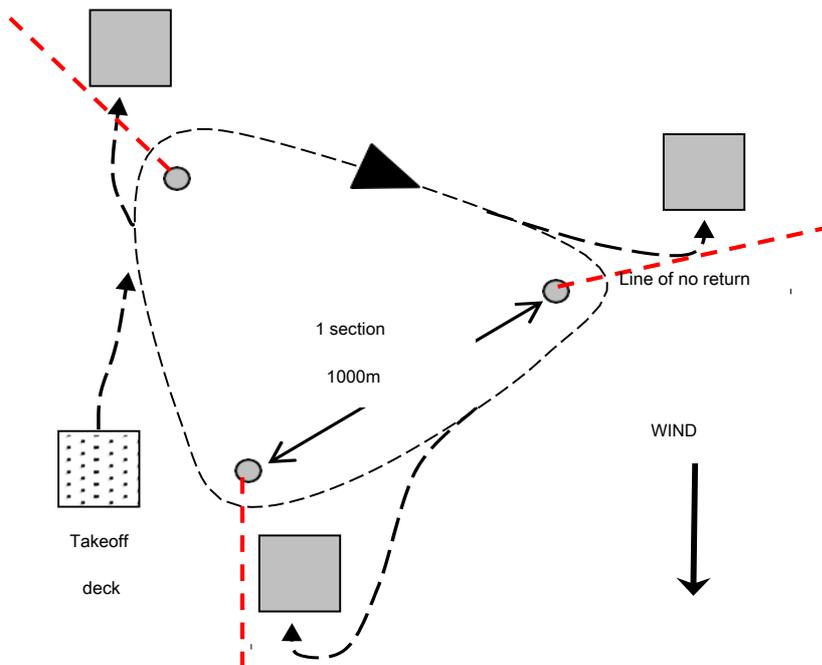
Punctuation

.....çã• = (••• / •••••) •

At where

NBP = Number of turnpoints collected by the pilot in the race

NBmax = Increased number of turnpoints collected by a driver in the race



Example:

points collected by the pilot = 15 pylons

Most points collected in the test by a pilot = 30 pylons

Pilot Score = 1000 x 15/30 = 500 points

⁵ If the rule of the 5 min is used, the pilot can take off again but can not replenish and lose the points made in these five minutes, starting from scratch.

penalties

"Zero" in the race:

- Take off without authorization of the Audit / Judge;
- Land outside the airport area or without notice to the Audit;
- Flying in a direction opposite to the circuit crossing the lines of non-return
- Flying aggressively around the markers or play them at any time
- If any part of your body or paramotor touches the ground or take off again
- Make dangerous overtaking and below the aircraft ahead.
- Other foreseen in the Regulation, including disqualification.

"20% penalty":

- Land off the deck (landing and takeoff area, but within the airfield and visually Fiscal / Judge)
- Flying height outside the established limits.

precautions

Maintain eye contact with other drivers who are on the same circuit around the runway. Give preference to those who are lower. As this brief circuit defined in performing maximum in the curves 90 degrees to the direction of the circuit. Fly predictably. Overtaking must be done on the opposite side to the circuit, and always level or above, never beneath another driver.

landing

Unless otherwise briefed, pilots must make approach to the preset circuit at designated locations and other visual security pilots.

E4. ECONOMY, DISTANCE AND ACCURACY OF TAKE-OFF

goal

Take off properly take-off area with a limited amount of fuel (Ex .: 1.5 kg) ⁶ and fly the longest distance you can and land on the landing area (deck) before the window ends. The takeoff and landing time will be noted by Lane tax at the time that pilots and passengers remove the last leg from the floor or the last wheel paratrayk on takeoff until the first contact with the ground. The distance is measured in number of pylons collected (**E3**) or maximum distance (**E2**) obtained at an azimuth, and the accuracy of takeoff is measured in bonuses. The end result will be normalized. The rules of evidence E2 and E3 remain valid for this race.

description

The flight will take place around the airport or at a predetermined azimuth. The pilot will choose the best time to take off. You receive a green flag Track Fiscal indicating that it is allowed to take off. Before landing the pilot should speak to your tax warning of his landing to time record.

Special rules

- **Clean off at the first attempt ⁷: 250 points; Clean takeoff at the second attempt: 200 points; Clean off at the third attempt: 100 points; Other attempts 0 points**

Punctuation

$$(\bullet\bullet) - \dots\dots\dots\tilde{c}\tilde{a} \bullet \bullet \dots\dots\dots = (\bullet\bullet / \dots\dots) + \bullet \dots\dots$$

At where

- D* = Distance between the starting point and the closest point of pilot crossing in meters
- dp* = Distance traveled by the pilot in flight (Dp = dx 2) in meters
- Dmax* = Maximum distance obtained in the test for a pilot (Dmax = dx 2) in meters
- Bto* = takeoff bonus (maximum 150 points)

OR

$$(\bullet\bullet) - \dots\dots\dots\tilde{c}\tilde{a} \bullet \bullet \dots\dots\dots = (\dots\dots / \dots\dots) + \bullet \dots\dots$$

At where

- NBP* = Number of turnpoints collected by the pilot in the race
- NBmax* = Increased number of turnpoints collected by a driver in the race
- Bto* = takeoff bonus (maximum 250 points)

$$\dots\dots\dots\tilde{c}\tilde{a} \bullet \bullet \dots\dots\dots = (\bullet / \dots\dots) \bullet \dots\dots$$

At where

- Q* = Pilot score as above item
- Q max* = Highest score obtained by a rider in this race

Example (E2):

Distance Pilot =	5.570 m	
Maximum distance obtained in test =	12,500 m	
Takeoff bonus (2nd try) =	200 points	
Pilot Score = 5570/12500 = 200 x 750 + 534.20 =		534.20 points
High Score of a Pilot	=	952.40 points

Pilot Final Score P = 534.20 / 952.40 x 560.89 = 1000 = 561 points

⁶ If the rule of the 5 min is used, the pilot can take off again but can not refuel and will feature the first takeoff bonus.

⁷ Liftoff evaluation occurs from the time that the pilot intends to fly and carries out inflation.

penalties

"Zero" in the race:

- Take off outside the test window or without notice of the Audit / Judge;
- Fly in prohibited place or out of view of tax and proof of judges when requested;
- Land outside the airport area or without notice to the Audit;
- Flying in a direction opposite to the circuit crossing the lines of non-return (E3)
- Flying aggressively around the markers or play them at any time (E3)
- If any part of your body or paramotor touches the ground or take off again (E3)
- Make dangerous overtaking and below the aircraft ahead;
- Other foreseen in the Regulation, including disqualification.

"20% penalty":

- Land off the deck (landing and takeoff area, but within the airfield and visually Fiscal / Judge)
- Fly in the opposite direction of removal or return corridor **for more than 30 seconds (E2)**.
- Flying height outside the established limits.

precautions

Maintain eye contact with other drivers who are on the same circuit. Give preference to those who are lower. As this brief circuit defined in performing maximum in the curves 90 degrees to the direction of the circuit. Fly predictably. Overtaking must be performed on the opposite side to the circuit and always at the same height or above. They are not allowed overtaking under another aircraft;

landing

Unless otherwise briefed, pilots must make approach to the preset circuit at designated locations and other visual security pilots.

5.3. PRECISION

P1. ACCURACY ON TARGET

goal

Land with the engine off as close as possible to the target.

description

The pilot will enter the circuit designated as soon as authorized by the Fiscal track or adjudicator reaching at least 150 m in height. A green flag will indicate that the target is released to the test.

In about 60 seconds after the green flag the engine must be turned off and the pilot goes to perform his first touch in the center of the target.

The point of touch will be considered the foot of the pilot or the first wheel. Two wheels or legs are at the same time will be considered the closest in favor of the pilot.

The pilot must quickly leave the target area to a safe place. If so briefed the pilot is already aware of your brand and signs the score sheet of the adjudicator.

If during the pilot's navigation red flag is raised the pilot should abandon the procedure and wait for flight to new instructions. If the pilot is approaching with engine off must land off target, leaving accuracy.

penalties

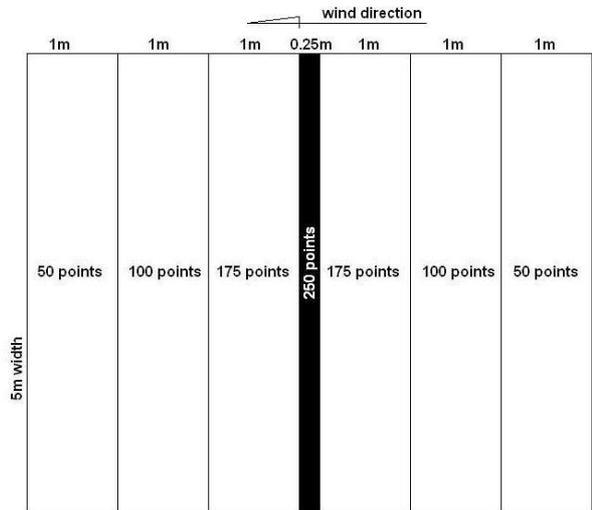
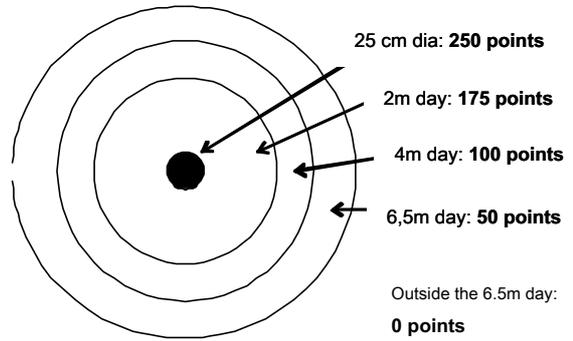
- Engine off in less than a minute before the first ring clears the test;
- First touch off target results in 0 points;
- Fall during landing or two knees on the floor (PF) or roll over (PL) clears the test;
- There is no penalty if any part of the paramotor touches the ground before the first valid touch, since the landing is considered " GOOD "

Punctuation

$$\dots\dots\checkmark\dots\dots = (\dots / \dots\dots) \dots\dots$$

At where

np = Pilot Rating
 $Npmax$ = Highest score obtained by a pilot



Outside rectangle; zero landing score

P2. SLOW AND FAST SPEED

goal

Flying a stretch as fast as possible and then fly as slow as possible, or vice versa to be set at the briefing.

description

The circuit will be formed by 4 apart rods 50 m from one another and two distant gates 25m of the last rod on each side forming an outlet and an inlet with electronic ticket sensors, or timing of the test judges by kicks bats.

The pilot must make a slow passage, return to the entrance gate and perform a quick pass in the same direction. At the discretion of the race director, the entry gate and the type of ticket may be free to the two passages from it to be so for all riders.

Special rules

- A valid shot is considered when the pilot's body or any part of your aircraft clearly touches the bat.
- The pilot will have three chances to pass the entrance gate or kicking the first stick that gives the beginning of the timing.
- **The maximum time allowed to perform the test will be 3 min after the first pass through the SP.**
- The race will be started by the slow passage, unless defined otherwise in the briefing.

penalties

"Zero" in the race:

- Enter the circuit out of order when an order stipulated;
- Losing the input and / or output test in one of the two compulsory passages;
- Touch the ground at any point between the gate input and output;
- Any anomaly in the candle caused by aggressive driving as collapse, stall, and partial closure.

If the pilot loses some bat between SP and FP will receive 50% penalty on your score.

Punctuation

$$Q = (T \text{ Slow} / \text{Fast } T) \times 1000$$

$$QPen \text{ Penalty} = Q \times (100\%, 50\% \text{ or zero})$$

$$\dots\dots\hat{c}\hat{a} \cdot \dots\dots = (\dots / \dots) \cdot \dots$$

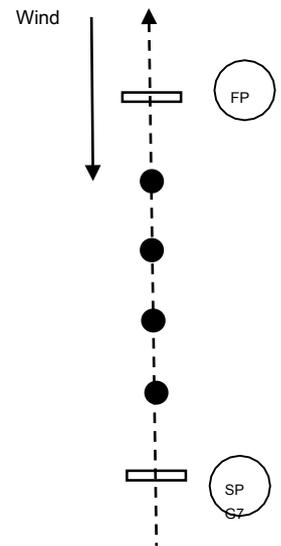
At where:

- T = slow* Pilot measured time in slow circuit (seconds)
- Fast T =* measured time pilot in the fast circuit (seconds)
- Q =* Pilot's score on the test
- QPen =* Pilot's score on the test after applying the penalty
- Qmax =* Highest score of a pilot after applying penalties

Example:

- Tslow = 45 sec
- T fast = 28 sec
- Q x 1000 = = 45/28 1607.14
- QPen = 1607.14 x 50% = 803.57 (not kick one of the rods)
- Qmax = 2200.35

P = 803.57 / 365.20 = 2200.35 x 1000 = 365 then,



P = 365 points

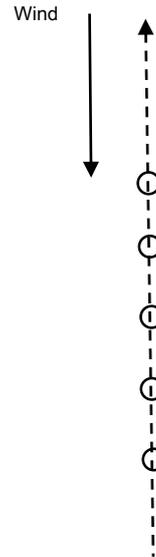
P3. TAKEOFF AND LANDING PRECISION IN BOWLING

goal

Perform a clean take-off and landing perform with the engine off, reaching as many cones as possible.

description

5 cones are arranged along a line in the wind direction at equal intervals 1 to 2 m. The pilot will enter the circuit designated as soon as authorized by the Fiscal track or adjudicator reaching at least 150 m in height. A green flag will indicate that the target is released to the test. In about 60 seconds after the green flag the engine must be turned off and the pilot goes to perform his touch over the cones. The cones are simply placed on the ground and will be considered valid when they are overthrow. The pilot should remain in flight with the engine turned off at least 60 seconds before reaching any cone. Only cones overturned before the driver touches the ground will be considered valid cones to score.



The pilot must quickly leave the target area to a safe place. If so briefed the pilot is already aware of your brand and signs the score sheet of the adjudicator.

If during the pilot's navigation red flag is raised the pilot should abandon the procedure and wait for flight to new instructions. If the pilot is approaching with engine off must land outside the cones, leaving accuracy.

penalties

"Zero" in the race:

- Engine off in less than a minute before the first ring;
- Falling during landing or on both knees (PF), or roll over (PL);
- Touch the ground before the first cone and not score in the first cone.

There is no penalty if any part of the paramotor touches the ground before the first valid cone, since the landing is considered "GOOD"

Special rules

- **Clean off at the first attempt** : 250 points; **clean takeoff at the second attempt**: 200 points;
- Clean off at the third attempt: 100 points; Other attempts 0 points
- Each cone is properly knocked down 50 points, totaling 250 points.

Punctuation

$$np \cdot \frac{Bto}{Npmax} = (np / Npmax) + Bto$$

At where

- np* = Pilot score tapers
- Npmax* = Highest score obtained by a pilot tapers
- Bto* = *Takeoff bonus*

$$Q = \frac{np}{Npmax} \cdot 1000$$

At where

- Q* = Pilot score as above item
- Q max* = Highest score obtained by a rider in this race

Example:

np =	200	(4 cones)		
Np = max	250	(5 cones)		
BTO =	100	(3a tentative)		
Q =	200/250 x 750 = 700 + 100		therefore,	Q = 700 points
Q max =	950 points			
P =	700/950 x 1000 = 736.84			P = 737 points

§ Liftoff evaluation occurs from the time that the pilot intends to fly and makes the inflation candle.

P4. PRECISION CONTROL CANDLE - LANDING AND relaunch**goal**

Land and demonstrate precise control candle before taking off again

description

This task is usually focused on appropriate wind conditions. A linear path comprises two rods aligned with the wind direction (considered appropriate maximum variation of 30 degrees to each side) is arranged with a minimum distance of 100 m from each other.

The driver must enter the circuit with nose wind. Must pass through the entrance gate (SP) to open your time and kicking the first stick. The time can also be opened at this touch the bat if manual timing. Then the pilot must land between the sticks, leaving the wing touching the ground, so that the trailing edge is seen clearly playing completely the ground. When tax / judge confirmed that the wing touched the ground, a green flag will be waved indicating that the pilot can take off again. Then must kick the second bat and go through the exit gate (FP) closing your time.

Special Rules and Penalties

- A valid shot is considered when the pilot's body or any part of your aircraft clearly touches the bat;
- Time will be open at the time that the pilot bat and play the first closed when playing the other stick, or by passing the SP and FP;
- The pilot will have three chances to pass the entrance gate and kick any of the canes;
- If the pilot starts Candle inflation before receiving the green flag of the Audit / Judge he will have a penalty of 100%, resulting in score "zero";
- If inflation and takeoff misses the pilot may have as many attempts as necessary since it is within the maximum race time;
- **The maximum time allowed to perform the test will be 3 min (PF1) and 5 min (PL1 and PL2) after the first pass through the SP.**

Punctuation

$$\text{.....çã} \bullet \bullet \text{} = (\text{.....} / \text{.....}) \bullet \text{}$$

At where:

T_{pil} = measured time pilot (seconds)

T_{best} = shorter a pilot in the race after increases in penalties.

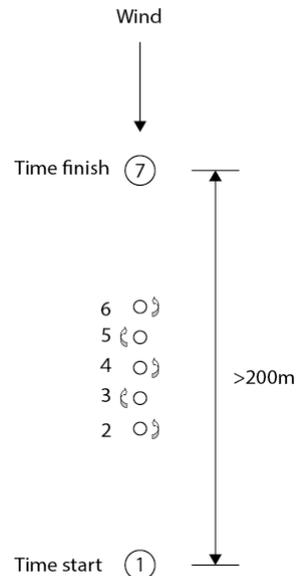
P5. PRECISION CONTROL CANDLE - SOLO

goal

Land and demonstrate precise control candle before taking off again.

description

This task is usually focused on wind conditions in which a reverse take-off is possible. A linear path composed of two aligned rods or gates with the wind direction is arranged with a minimum distance of 200 m from each other. The central point between the poles or gates, a minimum five pin is placed aligned to the rods / gates. The pins are small plastic cones of the type used in sports training. The task manager will specify the distance between each pin in briefing. Pilot must enter the circuit with nose wind. Must pass through the entrance gate (SP) or kick the first bat to open your time. They should then land before the first pin, keeping **the wing flying in the air above them. While controlling the wing, zigzag "** Like a slalom race. The pilot's body, feet or wheels, should clearly be seen going out of the pin line to make every turn, and they should not touch any of the pins. After the riders pass by the end pin, they take off again as soon as possible to kick the second stick or pass through the exit gate, then when the time ends.



Special rules

- A valid kick in case of bat is considered when the pilot's body or any part of your aircraft clearly touches the bat;
- Time will be open at the time that the pilot bat and play the first closed when playing the other stick, or by passing the SP and FP;
- The pilot will have three chances to pass the gate in / out or kick any of the canes;
- The pilot can turn to the left or right to get the first pins, since switch the direction of rotation in each subsequent pin.
- If the wing fall to the ground while the pilot is traveling the route, it can reinlfar sail as often as he needs within the specified time limit.
- The maximum time allowed to perform the test will be 3 min after the first pass through the SP and / or tap the first bat.
- Each pin touched by the pilot's body or the equipment is considered an invalid pin.
- Every wrong path the pilot is not going on with your body / wheel on the outside of the pins line and not performing the outline in the right direction will be considered as an invalid pin.

penalties

"Zero" in the race:

- Enter the circuit out of order;
- Failed to kick the first and last bat (for rods);

15 seconds penalty (Vpen) It will be added to the pilot:

- It takes longer than 60 seconds between communication or green flag and the entry gate;
- For each invalid pin;
- Play with the body, sailing or equipment pins will be considered invalid pin;

Punctuation

$$TPen = T_{pil} + M \cdot Vpen$$

TPen Tpil = x + M Vpen

At where:

- Tpil* = measured time pilot (seconds)
- M* = number of invalid pin
- Vpen* = penalty for each invalid pin (15 seconds)
- TPen* = pilot time after addition of penalties
- Tbest* = shorter a pilot in the race after increases in penalties.

P6. PARABALL

goal

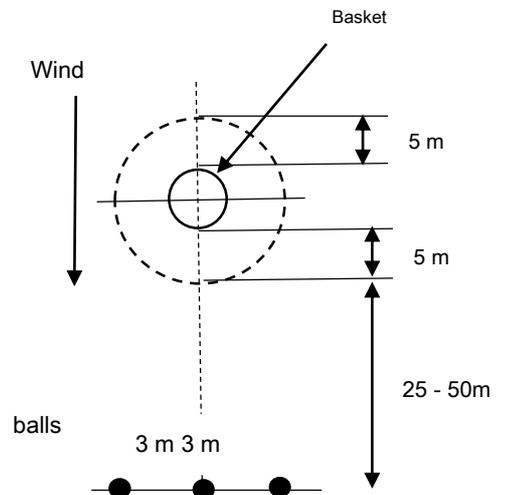
Deposit balls in a basket, is carrying or kicking with their feet, as soon as possible.

description

The target is a basket between 1-2m diameter and 0.5 to 1.0 m in height. A distance of 5m circle is marked on the ground around the target. 3 soft balls are placed in a line 25-50 m downstream of the target in marked initial positions, spaced 3 m from each other.

The pilot flies to the circuit designated area and waits to start the task as reported. A green flag will be waved to indicate that the pilot must start the task. A good start is when the when the line where the balls are is crossed within 30 seconds of the first green flag being waved.

The time starts when the line on which the balls are aligned and cross (if the ball has been touched or not). The pilot approaches a ball, collect them with their feet and takes her to the target or kick the ball to the target. This is repeated until all the balls are on target or time limit **3 minutes is reached**.



The score is based on the time spent since the task until all balls are on target and the number of balls in the basket. If the maximum time limit is reached, the number of balls at the target is counted and the distance of the target remaining balls are checked. The balls must stay on target. The balls in the basket worth 200 points, and those inside diameter of 5 m from the basket rim 50 points. The balls out of 5m diameter has no validity to score.

There are no limitations on the number, angle, speed or height of the approaches to the balls, the number of times a ball may touch or technique to beat or carry the balls. The pilot can touch and move on the ground, but the wing must not touch the ground during the task. If the wing touching the ground the score is zero for the test

If a pilot is carrying a ball in the air when the time limit is reached, it will take extra time to complete the delivery of the ball to the target. This extra time ends when the ball touches the ground or after 30 seconds, whichever occurs first. A red flag is waved when the time runs out. The results are **then measured in this state, but the portion of time is disregarded score** .

penalties

"Zero" in the race:

- Enter the circuit out of order;
- Wing touches the ground during the race

15 seconds penalty will be added to the pilot:

- It takes longer than 60 seconds between the green flag and the entry gate;

Punctuation

$$P_{total} = (P_{balls} / P_{area}) \cdot T_{pilot} + (P_{area} \cdot T_{pilot})$$

At where:

T_{pilot} = measured time pilot after penalties increments (seconds) (≤ 180 seconds) ¹⁰

T_{best} = shorter a pilot in the race after penalties of additions (seconds)

B_n = Pilot Points with the balls in the basket or 5m area

$Max = B_N$ maximum score of a pilot in the race with the balls in the basket or 5m area (max 600)

⁹ The portion of time is only counted if the three balls have been scored in the basket or in the adjacent area at the end of 180 seconds.

¹⁰ If the sum of the pilot time exceeds 180 seconds after the penalties applied, the portion of time will be discarded from the score.

Specific rules

- Balls into the basket 200 points / Ball
- Balls the basket, but within the area of 5 m from the basket rim 50 points / ball
- Balls will stand up to a total of 600 points (in the basket balls 3 x 200 points) - 60% proof
- Time will be worth a maximum of 400 points - 40%. The time will be counted only in if the score 3 balls have been scored (in the basket or within the 5 m), and the final time of the pilot, plus penalties, is less than or equal to 180 seconds (3 minutes). Otherwise this portion will be eliminated from the pilot's score, with your valid proof up to 600 points.
- maximum test score 1000 points.

Example:

(1) made in Pilot 150 seconds, the basket two balls and a ball 5m area. Best pilot made circuit 100/2
3 and put the balls in the basket.

$$\text{Pilot T} = 150 \text{ sec}$$

$$\text{Best T} = 100 \text{ sec}$$

$$\text{Bn} = 2 \times 200 + 1 \times 50 = 450$$

$$= 600 \text{ Bnmax}$$

$$P = (100/150) \times 400 + (450/600) \times 600 = 450 + 266.67 = 716.67 \quad \mathbf{= 717 \text{ points.}}$$

(2) Pilot one ball placed in the basket and in the area of 5 m. Best pilot made circuit 100 seconds and put the 3
balls in the basket.

$$\text{T best} / \text{T} \times 400 = \text{pilot "zero"} \text{ (not scored 3 balls)}$$

$$\text{Bn} = 1 \times 200 + 1 \times 50 = 250$$

$$\text{Max} = 600 \text{ Bn}$$

$$P = \text{"zero"} + (250/600) \times 600 = \mathbf{250 \text{ points}}$$

(3) Pilot 3 balls placed in the basket in 200 sec (the rule used for the last 30 sec ball). Best pilot made circuit
for 100 seconds and put the balls 3 in the basket.

$$\text{T best} / \text{T} \times 400 = \text{pilot "zero"} \quad \text{(Exceeded 180 seconds)}$$

$$\text{Bn} = 3 \times 200 = 600$$

$$\text{Max} = 600 \text{ Bn}$$

$$P = \text{"zero"} + (600/600) \times 600 = \mathbf{600 \text{ points}}$$

P7. SHORT TAKE-OFF**goal**

Take off in the shortest possible distance.

description

The takeoff permission is granted after the pilot indicated that he is ready to take off. The maximum distance on the ground, where the feet of the driver or the wheels of the aircraft are at the starting signal, as far as the feet of the pilot or the aircraft wheels leave the ground permanently, will be measured and scored. (Permanently is defined as the aircraft is in the air for more than 10 sec).

Special rules

There will be limits on time and distance established in brief according to the weather conditions. If not otherwise stated, the time limit for this task is 1 min. No restriction on the number of attempts takeoff within the time limit is applied. There are no penalties for the wing touching the ground on each trial. If not otherwise stated, the distance limit is 50 m. Beyond the limits of time or distance will be indicated with the red flag and results in zero score.

Punctuation

Pilot Score = $1000 \times (S_{min} / S_p)$

At where

S_p = pilot's takeoff distance.

S_{min} = The shortest distance in meters for a takeoff.

Grades

Mark steps or pilot wheels on the ground can be a complicated task for the tax. The use of rods or ground marks 2-3 m in length (or similar slats) has proven effective to help secure the results of visual observation on the ground before being measured.

Alternative methods can be developed and used for more accurate measurements, but distances will be rounded up every 2 m, ie the pilot to leave before 3 m receive 3m, 6m receive before 6 m, and so on.

Example:

$S_p = 24 \text{ m}$

$S_{min} = 12 \text{ m}$

$P = 12/24 \times 1000 = 500 \text{ points}$

Points P = 500

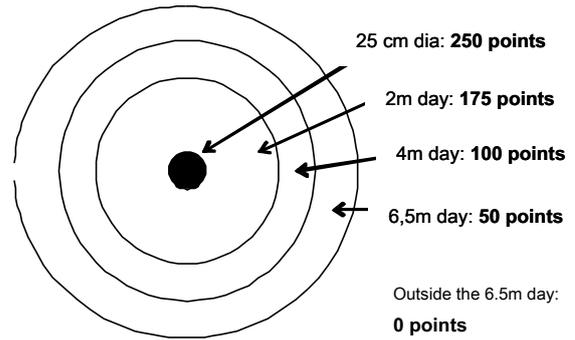
P8. TAKEOFF AND LANDING PRECISION IN TARGET

goal

Properly take off and land with the engine off as close as possible to the target.

description

The pilot will be evaluated for its takeoff and flight then will enter the circuit designated as soon as authorized by the Fiscal track or adjudicator reaching at least 150 m in height. A green flag will indicate that the target is released to the test.

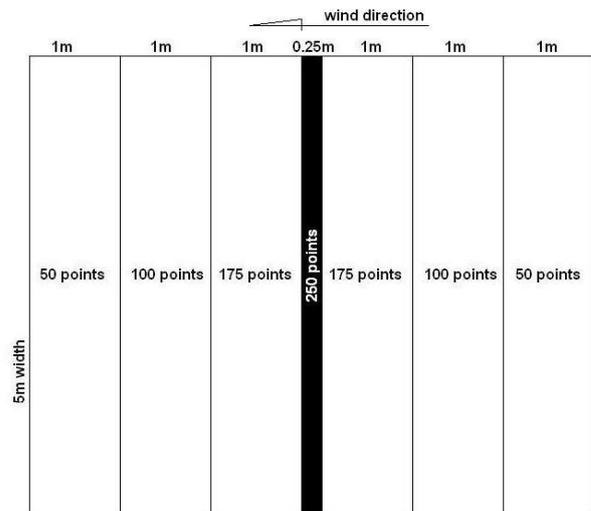


In about 60 seconds after the green flag the engine must be turned off and the pilot goes to perform his first touch in the center of the target.

The point of touch will be considered the foot of the pilot or the first wheel. Two wheels or legs are at the same time will be considered the closest in favor of the pilot.

The pilot must quickly leave the target area to a safe place. If so briefed the pilot is already aware of your brand and signs the score sheet of the adjudicator.

If during the pilot's navigation red flag is raised the pilot should abandon the procedure and wait for flight to new instructions. If the pilot is approaching with engine off must land off target, leaving accuracy.



Outside rectangle; zero landing score

penalties

- Engine off in less than a minute before the first ring clears the test;
- First touch off target results in 0 points;
- Fall during landing or two knees on the floor (PF) or roll over (PL) clears the test;
- There is no penalty if any part of the paramotor touches the ground **before** the first valid touch, since the landing is considered " *GOOD* "

Special rules

- **Clean off at the first attempt** ¹¹: 250 points; **Clean takeoff at the second attempt**: 200 points; **Clean off at the third attempt**: 100 points; Other attempts 0 points

Punctuation

$$\dots\dots\checkmark\checkmark\dots\dots = (\dots / \dots) + \dots\dots$$

At where

- np = Pilot score tapers
- $Npmax$ = Highest score obtained by a pilot tapers
- Bto = Takeoff bonus

$$\dots\dots\checkmark\checkmark\dots\dots = (\dots / \dots) \dots\dots$$

At where

- Q = Pilot score as above item
- $Qmax$ = Highest score obtained by a rider in this race

¹¹ Liftoff evaluation occurs from the time that the pilot intends to fly and makes the inflation candle.

Example:

np = 100 (4m diameter)

Np = max 250 (target)

BTO = 100 (Third attempt)

Q = $100/250 \times 750 = 400 + 100$ therefore, Q = 400 points

Q max = 1000 points

P = $400/1000 \times 1000 = 400$ **P = 400 points**

P9. TAKEOFF AND SHORT PASS SLOW / FAST**goal**

Take off in the shortest possible distance and fly a stretch as fast as possible and then fly as slow as possible, or vice versa to be set at the briefing.

Short takeoff**description**

The takeoff permission is granted after the pilot indicated that he is ready to take off. The maximum distance on the ground, where the feet of the driver or the wheels of the aircraft are at the starting signal, as far as the feet of the pilot or the aircraft wheels leave the ground permanently, will be measured and scored. (Permanently is defined as the aircraft is in the air for more than 10 sec).

Special rules

There will be limits on time and distance established in brief according to the weather conditions. If not otherwise stated, the time limit for this task is 1 min. No restriction on the number of attempts takeoff within the time limit is applied. There are no penalties for the wing touching the ground on each trial. If not otherwise stated, the distance limit is 50 m. Beyond the limits of time or distance will be indicated with the red flag and results in zero score.

Mark steps or pilot wheels on the ground can be a complicated task for the tax. The use of rods or ground marks 2-3 m in length (or similar slats) has proven effective to help secure the results of visual observation on the ground before being measured.

Alternative methods may be developed and used for more accurate measurements, but distances are rounded for each 3 m upwards, ie the pilot to leave before 3m receive 3m, before 6m (4, 5 or 6 m) receive 6m, and so on.

Pass Slow and Quick**description**

The circuit will be formed by 4 apart rods 50 m from one another and two distant gates 25m 50m of the last bat on each side forming an outlet and an inlet with electronic ticket sensors, or timing of judging proof through kicks bats.

The pilot must make a slow passage, return to the entrance gate and perform a quick pass in the same direction. At the discretion of the race director, the entry gate and the type of ticket may be free to the two passages from it to be so for all riders.

Special rules

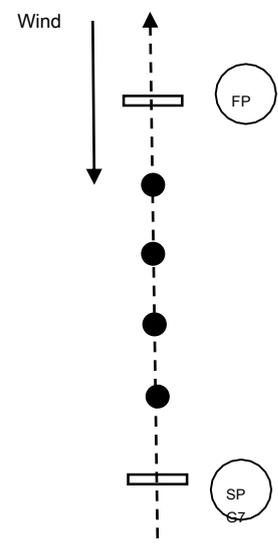
- A valid shot is considered when the pilot's body or any part of your aircraft clearly touches the bat.
- The pilot will have three chances to pass the entrance gate or kicking the first stick that gives the beginning of the timing.
- **The maximum time allowed to perform the test will be 3 min after the first pass through the SP.**
- The race will be started by the slow passage, unless defined otherwise in the briefing.

penalties

"Zero" in the race:

- Enter the circuit out of order when an order stipulated;
- Losing the input and / or output test in one of the two compulsory passages;
- Touch the ground at any point between the gate input and output;
- Any anomaly in the candle caused by aggressive driving as collapse, stall, and partial closure.
- Take off without authorization from the track tax.

If the pilot loses some bat between SP and FP will receive 50% penalty on your score.



Punctuation

$$Q_{12} = Qv + Qd$$

At where:

Qv = Score on slow and fast test Qd = Score on short takeoff test

Q = final sum of the two tests, rounded to the second decimal place

$$(*) \dots\dots\dots = (\dots / \dots) + \dots$$

$$Q = (T \text{ Slow} / \text{Fast } T) \times 1000$$

$$QVP \text{ Penalty} = Q \times (100\%, 50\% \text{ or zero})^{12}$$

At where:

T = slow Pilot measured time in slow circuit (seconds)
 Fast T = measured time pilot in the fast circuit (seconds)
 Q = Pilot's score on the test
 QVP = Pilot's score on the test after applying the penalty
 Qvmax = Highest score of a pilot after applying penalties

$$(*) \dots\dots\dots = (\dots / \dots) + \dots^{12}$$

At where:

S min = Minimum distance achieved by a pilot in the race
 sp = Distance obtained by the pilot, rounded every 3 m up

$$\dots\dots\dots = (\dots / \dots) + \dots^{13}$$

At where

Q = Pilot score as above item
 Q max = Highest score obtained by a rider in this race

Example:

Tslow =	45 sec	
T fast =	28 sec	
Q x 1000 = = 45/28	1607.14	
QPen =	1607.14 x 50% = 803.57	(Not of the fired rods)
Qmax =	2200.25	
qv =	803.57 / 2200.25 x 750	= 273.91
Smin =	6.0 m	
sp =	21.0 m	
qd =	6/21 x 250	= 71.42
Q =	273.91 + 71.42	= 345.33
Q max =		= 853.25
P =	345.33 / 853.25 x 404.72 = 1000 = 405	P = 405 points

¹² Rounding to the second decimal place after the comma.

¹³ Rounding nearest whole number.