



Proposal for CIVL Plenary February 1-7 2021

The FPVL proposes updating the Sporting Code Section 7D to differentiate launch type for PG and HG Record flights in the category Free distance (that used to be called straight). Straight distance to declared goal. Here-in-after we will call these 2 records types as "Straight distance +"

Background

In 1.4.1. of Section 7 Common "Definitions of Hang Gliders, as per General Section." our aircraft are defined as "A glider capable of being carried, foot launched and landed solely by the use of the pilot's legs".

The current problem originated from the fact that currently no free (straight) distance World record in Paragliding can be broken by means of foot launch.

"Straight distance+" records occupy more than 35% of all FAI records broken in HG and PG. (122 "Free (straight) distance", 118 "Straight distance to a declared goal" and 50 "Free distance with 3 TP" out of 791 ever broken FAI records in XC). And they are all with machine-assisted launch now.

If CIVL Plenary is OK with fact that in straight distance+ records foot launch becomes extinct and all pilots intending to break most popular records should invest in several winches then this proposal is not worth discussing.

If CIVL (as the followers of Icaro spirit) decides that foot launch shall be preserved in straight distance+ records, those records shall be separated for the principle of fairness. It should also boost distance+ record breaking in other parts of the world except Sertao in Brazil, Australian flats and Texas in USA.

According to the interviews of the pilots who have done record flying using both launch types (on foot and with winch), winch gives potential record breaker an incomparable advantage over foot launch in strong wind conditions when the distance records attempts are usually done:

- 1) Winch allows launching with much stronger wind
- 2) Winch allows launching at any place and any time just select the wind, no need to study the aerology of the take-off etc.
- 3) Winch saves pilot's energy - it saves from great stress of fighting against strong wind at full speed bar struggling not to get blown to the lee. Also winched paraglider is safer from collapses while lifting, compared to the once foot launched (see videos below)
- 4) Winch can bring the pilot above "top of lift", so reduces the number of failed attempts, and can put a pilot above an inversion layer. Winch release can happen 700 m higher than take off altitude.
- 5) Winch gives a pilot substantially more flight time (about 1 hour), there is no need to climb a first thermal, there is no need to soar on the ridge waiting for the wind to get stronger. Pilots go from the ground directly on course. Pilots can launch before lower layer thermal activity starts.

Evidence

Strong conditions foot launch:

<https://www.facebook.com/groups/1514564812169628/permalink/1780445332248240/>

Strong conditions winch launch:

https://www.facebook.com/permalink.php?story_fbid=1165923893797235&id=100011389051306

Veso Ovcharov and Ondrej Prochazka (Red bull pilots and Acromax pilots) speak about their experience in foot launching to break the record:

<https://youtu.be/VgpOhrZ21Fw?t=257>

We also have a testimonial of Rafael Saladini - 4 (almost 5) times World record breaker who thinks that for the sake of fairness the records shall be separated.

See added to this document a copy of his speech in CIVL PG HG committee while discussing this record.

We are Ok to interview any pilot potential, former or current record breaker on this subject but only those who tried both launch types. For example: Joanna Di Grigoli, Honorin Hamard, Charles Cazaus, Seiko Fukuoka, Veso Ovcharov and Ondrej Prochazka, Julien Iliri, Seb Ospina.

Pilots who never tried to break a record with foot launch in Brazil cannot speak objectively on the subject.

We speak of Brazil as 40% of all FAI straight distance+ records have been done in this country and also since 2016 all World records in Paragliding were done only there.

Proposal

Therefore we recommend adding 2 new record types where “Foot Launch” is specified, existing records need not be modified, and will remain as unspecified launch method. We propose adding such 2 additional types to the FAI Sporting Code Section 7D:

3.2.1.1 Launch type distinction for

“Straight distance Foot launch”

“Straight distance to a declared goal Foot launch”

Response to critics

Objection 1 - There are too many records.

Straight+ record types are the most popular and most sound in our community. 35% of all ever made HG and PG records!

Currently there are 20 record types ever broken according to Section 7 D list among which are:

- 1 gain of height record - 48 records
- 9 distance records - 545 records
- 10 speed records - 198 records

More over these 10 speed records can grow to at least 14 - Current wording "Speed over ... and all multiples of 100 km " allows also to set new records just because nobody flew them for speed before.

Data from FAI Records DB - HG/PG XC records types with number of broken records

ex	Distance over a triangular course	72
ex	Distance using up to 3 turn points	7
ex	Distance via a single turn point	14
1	Free Distance around a triangle course	32
2	Free distance using up to 3 turn points	50
3	Free out-and-return distance	34
4	Gain of height	48
5	Out-and-return distance	96
6	Speed over an out-and-return course of 100 km	33
7	Speed over an out-and-return course of 200 km	18
8	Speed over an out-and-return course of 300 km	6
9	Speed over a triangular course of 25 km	40
10	Speed over a triangular course of 50 km	33
11	Speed over a triangular course of 100 km	33
12	Speed over a triangular course of 150 km	12
13	Speed over a triangular course of 200 km	19
14	Speed over a triangular course of 300 km	3
15	Speed over a triangular course of 400 km	1
16	Straight distance	122
17	Straight distance to a declared goal	118
18	Declared distance around a triangular course	0
19	Declared distance using up to 3 turn points	0
20	Declared out-and-return distance	0
		791

Speed over a triangular course of 400 km - was made only once by HG Class 5 in 2013
Speed over a triangular course of 300 km was made in 2008 by Hg Class 5 and Class 2 and in 2000 by HG Class 1.

No paraglider ever tried to beat these records. So we can consider we have some HG specific records. No one says we have too many record for HG. And there are no unequal conditions for Hang gliders trying to beat speed record for 300 and 400 km. We do not have any reports of them.

Moreover there are still not a single but possible speed records type for 400 km and 500 km. Thus growing the number of speed records up to 13-14. Isn't that too much? Considering that they are not possible for all wings types? Who can tell why we have so many speed records and who claimed their necessity and what unfairness issue they solve?

Last year 2 records were replaced and 1 more added - "declared distance+" record types. There was no objections of too many records but the Plenary considered "declaring the distance" as a valid pressure on a pilot to make it a separate record type.
A year passed no one has ever tried to beat them. Maybe Declared distances will not be doable at all?

Here we have testimonials of unequal conditions that basically means unfairness. Testimonials of those who made both types of launches. Isn't it enough to make a separation?
We do not need to separate other distance record because strong wind during the launch is not crucial for them to be broken. Also there have been no report of any advantage based on launch method for these record types.

Objection 2 - With winch you can also fail to set a record and lose the day and it is difficult to wait after being winched.

Sure, you can fail with winch. But it is more the guilt of the preparation stage and planning - e.g. decision to launch at wrong hour or selecting an unsuitable place to put a winch.
But still you use the machine assistance to get you in the air easier.
The mountain gives everyone the same conditions. It cannot be moved.
Winch is flexible. If the wind is bad, you change place. Thermals are doubtful - you put it near a mountain, or on a mountain, etc.
Strong wind on mountain top creates venturi effect which is very difficult to combat on just launched paraglider using only speed bar. It drains your force your energy it scares you.
When the wind reaches the speed necessary to go on a record flight it is already too late to foot launch - wind speed prohibits. But still winch launch possible.
You can read the details in the testimonial by Rafael Saladini below. He has set both world records - on foot in 2007 and 2016 and on winch in 2019.
We do not want to devaluate winch records. They are great and pilots flying them deserve all the fame.
But by no means foot launched pilot can beat those on winches. So we either rule on the fairness or forget about seeing anyone fly straight distance+ record being foot launched. Maybe we will need to change Section 7 to remove this "solely by the use of the pilot's legs" and become machine assisted.

Comments of Brazilian pilot. Rafael Saladini

4 ratified world records (5th under review) made both by foot and Winch launch.

1) First, I would like to mention an obvious difference between them that changes the whole identity of the sport. Foot launching is not only the natural traditional way of practicing our sport, but it is also the basic identity of it.

We are not planes or helicopters. We are not sailplanes to be self-powered or towed up. We are not powered aircrafts. We are paragliders. We CLIMB the atmosphere, only using nature.

We cannot let that tradition to get extinguished. Winch is an artificial engine to bring flexibility and turn the whole process predictable. We can perfectly compare with surfing - paddle in x tow in. It is exactly the same situation: tradition x safety. The surfing community embraced completely the tow in system, which is easier, flexible and predictable, however they never let the paddle in tradition to be extinguished, as both world records are considered two completely different things. Paddle in world records are much harder and dangerous to be broken - surfers put them in another level.

I believe FAI should do the same.

2) One of the main reasons to split them in two different world records is the winch unlimited flexibility to change the launch spot and chase conditions. Foot launching world records will be forever restricted to mountain ranges and its launching spots. We cannot move the mountain. With winch, we can easily fabricate as many runaways as we want, wherever we want and chase the best conditions. Airports are good options, but with winch we don't depend on them. In 2019, we first operated from Araruna airport. As we didn't like the route and the line of humidity that crosses everyday above the airport bringing cloud base to lower levels than in the surroundings, we abandoned the airport and just fabricated our own runaway, our "aeropasto" ("aircattlefield"), in front of Tacima's take-off.



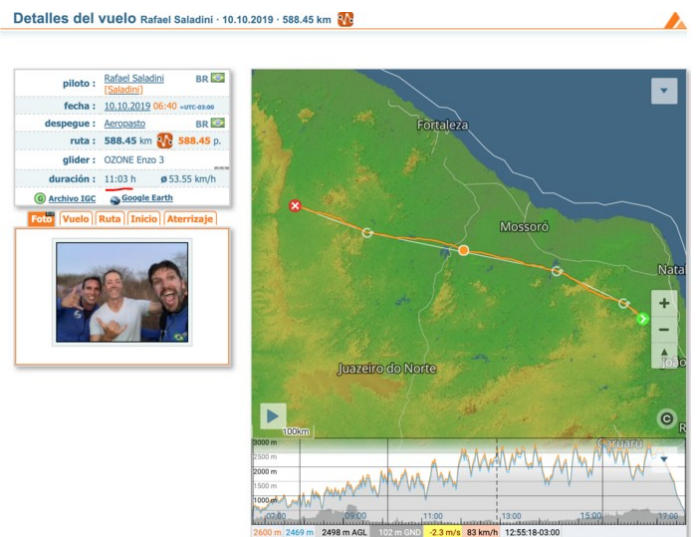
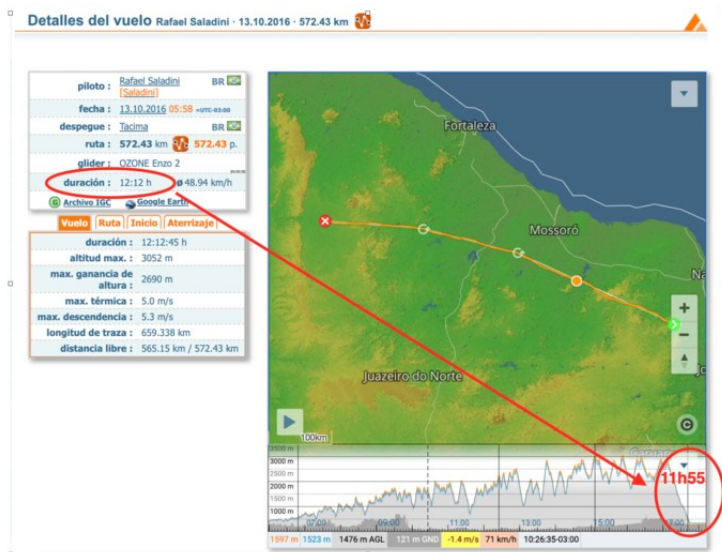
3) Foot launching can be completely unpredictable, chaotic and dangerous.

We try to observe and understand the gusts and the lows, however when we pull our gliders to launch we can NEVER predict and be sure whether or not a gust will catch us and blow us towards the lee side.

As a team, we try to launch as close as we can, however with strong gusts and the wind building up, sometimes some of us lose the day grounded at take off. With a winch, it works like a production line. It is only a matter of investing in several winches and put them to work. We are operating three winches simultaneously with 30 seconds intervals between them. In Caicó, Fly by Andy uses four winches. And of course, as we launch from a flat ground, the operation is much safer as the wind is much weaker than in take-offs.

4) An operation based on foot launching starts much earlier. To keep ourselves within a certain safety margin we have to launch always before the wind builds up, which means get airborne just before the prediction of strong wind, that sometimes means as early as 5h15 am. On the other hand, an operation based on winch launching can tolerate much stronger winds (+10km/h), and we can launch whenever conditions are better. That increase of duration can reach 60min (+9%). To illustrate the difference, please compare *Example of the longest (11h55) foot launch straight distance world record from 2016:*

Example of the last winch launch straight distance world record from 2019 - with a duration of "only" 11 hours: (winch launch)



The rest of my arguments, from the slide I sent before, are below:

5) If we analyse and compare foot launch and winch launch world records, we can see a pattern: foot launches world records last 60 minutes more, and that is almost a 10% increase - there is a big difference in their duration.

Foot launches are stressful and much more energy demanding. The fear involved affects our nights of sleep, our behaviour, our morning routine, and we relax only when we get airborne.

Winch launches are comfortable and energy-efficient. We launch whenever we want and don't get our energy drained by that overwhelming sensation of imminent danger.

6) We have record days with wind above 35km/h. When foot launching, we don't have a chance and the day is gone. When winch launching we can still operate and go with the flow.

7) When foot launching, we have to soar the ridge for 10min to 40 min to get to cloud base.

When winch launching, in "3 to 5" minutes we disconnect with 1000m above the ground, which is higher than a typical morning cloud base of 700/800m.

In my opinion, this argument is enough to separate them and bring fairness and fair play to the subject.

8) When foot launching we only have one attempt and there is no time to relaunch.

When winch launching we can adopt conservative procedures, like getting first climb near the airport or even a fast retrieve, to allow relaunch if needed.