Introduction

7D rules about Free distance around a triangle and Free out and return distance are ambiguous.

Many things are not clarified in 7D, they are just assumed by the most popular scoring softwares.

Summary of proposal

Clarify and change the rules related to these free distance flights.

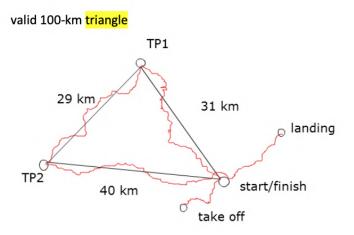
Current status of the rules

The current rules are very ambiguous. They are mixing cylinders and free distance flights. The distance calculation is not stated for free distances.

1.5.5.8: Current definitions

- Free distance around a triangle:
- a closed course flight via 3 position checkpoints, independent of the position of the start/finish
 point. The official distance is given by the sum of the legs of the triangle formed by the position
 checkpoints.
- a flight around 2 position checkpoint with return to the start/finish point
- the start/finish point is not position checkpoint unless specifically declared as such.

3.4.1: Current illustrations showing cylinders



5.2.5: Current distance calculations using cylinders

5.2.5. Validation Using Start, Turn or Finish Cylinders

The record or badge distance shall be calculated as the minimum distance it is possible to fly by entering the cylinder observation zones. See 1.5.13.3.1. The minimum distance is defined as the straight-line distance between each pair of turn points, decreased by 800 meters for each **turn point** and 400 meters for each **Start/Finish point**.

Moreover from our testing, the current scoring softwares are actually not following the "cylinder" based calculations, but are already working as in this proposal.

Motivation for change

We would like to develop an open source-scoring software for CIVL records and it is currently not possible to do the calculations exactly without clarifying the rules. We'd need to clarify and/or change the rules to make this an exact calculation.

Proposed changes in the rules

- 1. Remove "cylinder" altogether from all free distance flights. None of the following:
 - definitions
 - calculations
 - illustrations

should mention cylinders for free distance flights.

- 2. The closing distance shouldn't be based on **cylinders**, it should be max. 800 meters between two **points** of the tracklog.
- 3. Clarify / change the calculations: it should be the **total sum of the sides** minus **closing distance.**
- 4. Add illustrations for both **Free distance around a triangle** and **Free out and return distance**: showing exactly what points they have, what is the criteria, and how are the calculations done exactly.

Introduction and Summary of proposal

Make **Declared Triangular Course** records have **3 turnpoints**, just like Free distance around a triangle.

Current status of the rules

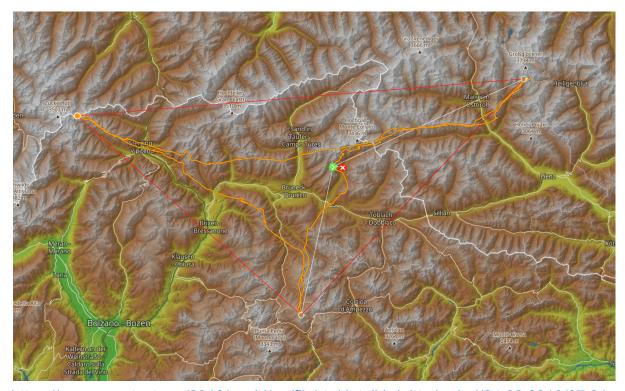
1.5.6.2 states:

Triangular Course: a flight around 2 turn points with return to the start/finish point

Motivation for change

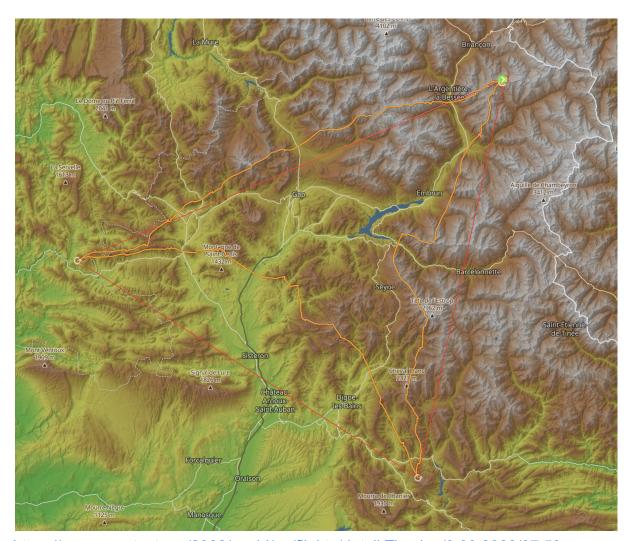
Some countries have mountain geography allowing triangular records which start in a turnpoint, while other countries do not. This is not a problem for free distance flights, where 3 TPs are allowed, but it is a big problem for declared distance flights, where only 2 TPs are allowed.

For example, Antholz / Grente - the site of the current free distance female world record - in Italy does not allow any declared triangle records to be flown from there, as the flights start in the mid-point of a side.



https://www.xcontest.org/2019/world/en/flights/detail:brigitte.kurbel/24.06.2019/07:01

In France, multiple sites happen to be such that they start on a TP, so these records are possible. For example, the current declared World Record.



https://www.xcontest.org/2022/world/en/flights/detail:Timoleo/9.08.2022/07:53

I think we can all agree that there is **no sportive advantage** on starting at the middle of a side, so these sites should not be discriminated against compared to the ones which allow you to start on a turnpoint.

Proposed changes in the rules

Modify the rules to allow Declared Triangular Course records to have 3 turnpoints.

Introduction and Motivation for change

The **barometric sensors** we are using in paragliding are uncalibrated, which means that in absolute precision there can be as much as 200 meters out of calibration.

It gives us a false sense of precision, thinking they are as precise as on airplanes, while in practice even today's GPS sensors are better.

In relative precision they are extremely good (~10cm), but we are not using them this way.

Summary of proposal

We should not use QNH for paragliding competitions. A working group should discuss the best solutions.

Current status of the rules

We are using QNH for competitions and are requiring pilots to have certified instruments with built-in barometric sensors.

Proposed changes in the rules

Set up a working group involving manufacturers and competition pilots to discuss the best practical solutions.

Our ideas:

- 1. Either just use GPS and abandon barometric sensors from comps altogether.
- 2. Develop a system which uses "altitude at briefing" for setting relative precision
- + auto calibrate at scoring by launch altitude.

Introduction and motivation for change

The current 7D has the following two sections regarding record flights.

3.3.1. Advance notice

Advance notice is required for all record attempts, except at the competitions where FAI officials are present and proper arrangements have been made to control the attempt. The pilot must make the record attempt declaration to his NAC prior to taking off via email or electronic means.

Only a single declaration may be made for a record attempt, except that free distance and distance to a declared goal may be declared together. Where a declaration for a distance record has been made and the existing associated speed and/or free-distance record is bettered in that flight no separate declaration is required.

3.3.4. Task Declaration

For records, an official observer is required. When a record flight is to be validated by use of a GPS or flight data recorder, the task declaration must state the type of start, turn and finish points to be used e.g. FAI Sector or cylinder. If a GPS is being used to validate the flight, a copy of the task declaration must be filled out and presented to the official observer prior to the start of the flight; additionally, the pilot shall enter the course into the GPS' route table. If an IGC flight data recorder is being used, the declaration needs to be made solely in the instrument itself.

Taken word-by-word, these regulations would be against the very nature of our sport. For every single record attempt from a mountain launch, it is basically impossible to have an observer climb up the mountain with a pilot.

Such a thing never was and never will be a possibility in practice.

Also, declaring free distance flights in advance makes no sense. Technically speaking if a pilot would like to obey the rules word-by-word, they'd send an automatic email every morning saying "I'll be attempting a free distance record flight".

It has no value, other than overburdening the NAC with many emails.

Summary of proposal

Change the rules such that it reflects the nature of our sport.

For **Declared** records:

- The official way of declaring a record is an email to the NAC, prior to takeoff.
- No observer is needed before flight.
- IGC's built-in task declaration is optional, it doesn't substitute the email.

For **Free distance** records:

- It doesn't need to be declared in advance.
- NAC has to be notified within 48 hours of landing.