

**Subject:** ISC Wingsuit Flying Committee Annual Report – 2022  
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**Annex #: 19**

**Pages: 12**



# ISC WINGSUIT FLYING COMMITTEE 2023 ISC PLENARY MEETING REPORT

## **ISC Wingsuit Flying Committee Members**

Chair: Steve Hubbard (USA)

Deputy Chair: Michael Cooper (CAN)

Vera Asquith (CAN)

Sandro Bohme (GER)

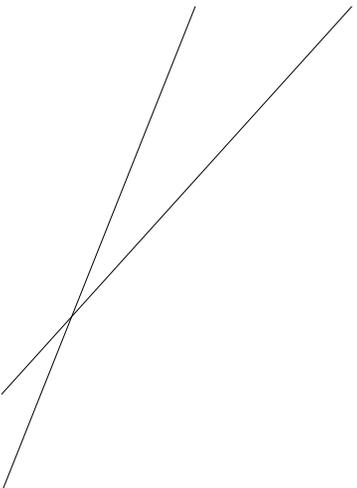
Scott Callantine (USA)

Arvid Endler (GER)

Bert Ham (NED)

Sudeep Kodavati (IND)

Mike Pennock (NED)



## **2022 Summary**

Following the successful post-COVID 2021 season, we are pleased to see that things seem mostly back to normal in 2022, both nationally and internationally.

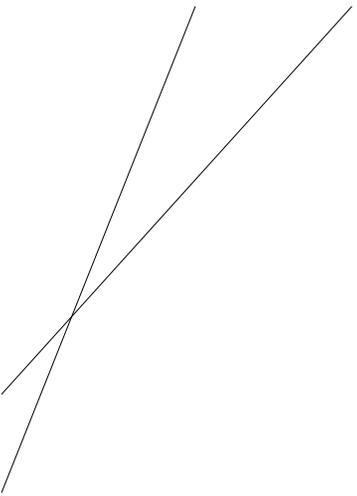
Skydive Arizona hosted the 4th FAI World Wingsuit Flying Championships from 10-17 October 2022.

The WS Performance event had 40 competitors who represented a total of 15 NACs and ultimately was very successful, with 2 World Records and 4 Continental Records being set.

The WS Acrobatic event was unfortunately cancelled due to lack of NAC participation. The main contributing factors to this was that we had one team that was expected to attend decide not to, we had a second team who registered but ultimately needed to withdraw from the competition, and lastly, the inability for the Russian Federation teams to attend.

Following the competition, a competitors' meeting was held, with several of the WS committee members in attendance, where the current state of the discipline was passionately and thoroughly discussed by all in attendance.

The WS Committee met several times throughout the year, continuing the communication and teamwork we have established over the last few years, and based largely on the feedback gathered during the competitors' meeting, we are proposing a number of rule changes that guide the discipline in the direction that the competitors are requesting. I would like to thank all of my committee members for their efforts over the year and I look forward to more of the same in 2023.



## General Rules

### SC5, Section 1.1.2 – Definitions

(15) WINGSUIT: A garment of flexible material forming wings between a parachutist's arms, legs and torso, creating an aerodynamic planform designed to generate forward movement through the air using only the force of gravity. The parachutist's limbs and extremities must serve as the primary frame for the wings. Secondary structural/aerodynamic components (e.g. non-flexible grippers, fins for directional stabilization) may be used. The span of any structural/aerodynamic components must not extend past the knuckle at the base of the index finger.

At the 2022 FAI World Championships, several competitors competed using wingsuits that had rigid wing tip extensions that provided a significant performance advantage. Following the competition, during the competitors meeting, banning the use of such wing tip extensions was met with nearly unanimous support.

### SC5, Section 3.3.7 – WS Performance Records

#### (2) WS Time of Fall Record individual

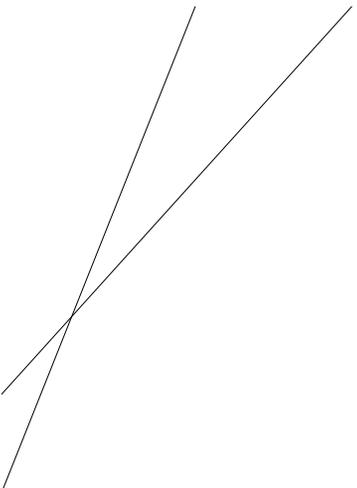
The record performance is the time of fall, measured in seconds, while wearing a wingsuit, from exit altitude to the altitude at which the fall is terminated, which must be above 610 metres (2000 feet) AGL, as measured by the required equipment as per paragraph (5) below. Additional or removable weight shall not be worn on the body or equipment.

#### (3) WS Distance of Flight Record individual

The record performance is the straight-line distance of flight, measured in metres, while wearing a wingsuit, from exit altitude to the altitude at which the fall is terminated, which must be above 610 metres (2000 feet) AGL, as measured by the required equipment as per paragraph (5) below. Additional or removable weight shall not be worn on the body or equipment.

The wingsuit committee would like to make sure that no additional weight is permitted when setting performance records, which is the same standard that currently applies to competition records. We request that no records be retired due to the acceptance and implementation of this rule.

We are also adding a “bottom” of the record window other than “the altitude at which the fall is terminated” to address any deployment below 2000’. The primary concern of this change is safety related, but it also provides similar conditions for any record attempt.



## General Rules

SC5, Section 4.1.4 Arrival Days, Travel and Living Expenses

(4) The arrival days for officials are

- EJ and WS Judge Panel – 1 day

The WS judge panel needs to have more time to have their judges' seminar so that they are available to provide competitors with the practice jumps and other judging responsibilities, as required by the competition rules.

SC5, Section 4.6.1 Attendance at FCEs

(2) The number of FAI Skydiving Judges, including the CJ, required at a WPC/WISC is:

WS: 8 7

With the separation of the Performance and Acrobatic tasks, the event judge of each can serve on the panel of the other, thereby allowing us to reduce the number of judges required.

WS Competition Rules, Section 2.1 – General Definitions

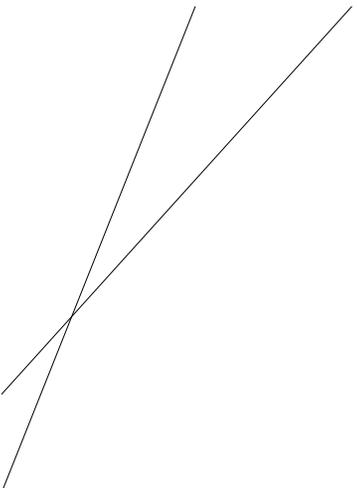
Spherical Error Probable (SEP): SEP is the radius of a sphere centered on the measured position which includes the true position with 95% confidence.

The definition of Spherical Error Probable needed to be updated to be more accurate for usage with the new rules regarding validation window.

WS Competition Rules, Section 3.2 – Equipment

3.2.1 - All competitors must wear a wingsuit for all competition jumps

It was pointed out to the committee that there was no formal requirement in the competition rules for competitors to compete while wearing wingsuits – this addition addresses that.



## General Rules

WS Competition Rules, Section 7.4.2

The Meet Director, or someone appointed by the Meet Director, must observe the competitors during their descent and on opening. This observer must check for any conditions or incidents that might constitute grounds for a rejump and/or disqualification for safety reasons.

It was pointed out to the committee that the Meet Director might be too busy to observe competitors during their descent, so we now allow them to appoint someone. Seeing as this is a safety-related rule, we believe it should still be the Meet Director's responsibility.

WS Competition Rules, Section 8.5.1.2, 8.5.1.3, 8.5.1.4, 8.5.1.5, and 8.5.1.5

Time Event ~~Champion:~~ Champion ~~1st~~, 2nd, and 3rd place.

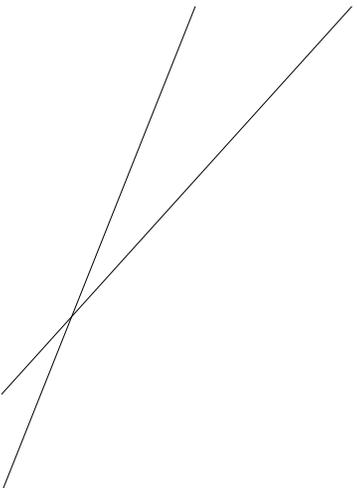
Distance Event ~~Champion:~~ Champion ~~1st~~, 2nd, and 3rd place.

Speed Event ~~Champion:~~ Champion ~~1st~~, 2nd, and 3rd place.

Overall ~~Champion:~~ Champion ~~1st~~, 2nd, and 3rd place.

National WS Performance Flying Team ~~Champion:~~ Champion ~~1st~~, 2nd, and 3rd place, including alternate competitors.

Clarifying the titles of each task and overall awards in response to the 2023 World Championships confusion.



## Performance Rules

WS Competition Rules, Section 2.2 – Performance Event

**Validation Window:** The validation window is the part of the jump which is used to determine the accuracy of the PLD data. The validation window begins 66ft (20m) above the competition window and ends 66ft (20m) below the competition window.

Adding a validation window to be used to confirm the accuracy of the PLD data.

WS Competition Rules, Section 2.2 – Performance Event

**Ground Reference Point:** The ground reference points will be determined by the Meet Director and will be published no later than the official arrival date using a detailed map or aerial photograph of the area no more than 30 days old.

Adding a publish date for reference points so that they are readily available for competitors prior to their official practice jumps.

WS Competition Rules, Section 5.3.5 and 5.3.6

**Maximum Exit Altitude:** The maximum exit altitude for a valid jump is 11,000 ft. (3353 metres) as measured by the approved competition PLD. A competitor should not exit the aircraft at a higher altitude than the maximum exit altitude. If the PLD registers an exit that is higher than the maximum exit altitude, the jump will be considered invalid and a rejump will be granted.

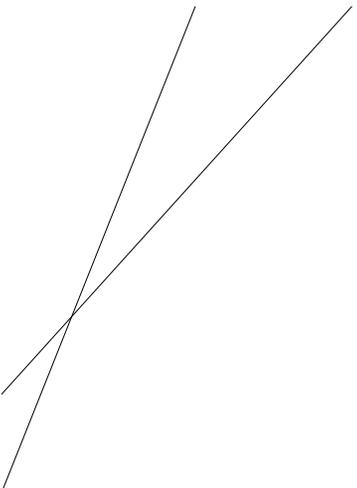
**Minimum Exit Altitude:** The minimum exit altitude for a valid jump is 10,500 ft. (3200 metres) as measured by the approved competition PLD. A competitor should not exit the aircraft at a lower altitude than the minimum altitude. If the PLD registers an exit that is lower than the minimum exit altitude, the competitor may choose to accept the score for the jump. The competitor must make an immediate decision and inform the Chief judge of their decision; otherwise a rejump will be granted automatically.

Adding rules to control what happens in the event that exit altitude is above maximum exit altitude or below minimum exit altitude.

WS Competition Rules, Section 5.3.8

The order of tasks will be determined by a random draw conducted by the ~~Meet Director~~ Chief Judge during the competitor briefing. This order may be changed by the Meet Director for meteorological or air traffic control reasons.

Changing who is responsible for conducting the draw from the Meet Director to Chief Judge to be more in line with the other disciplines who require draws.



## Performance Rules

WS Competition Rules, Section 5.4.3

Reverse order of standing shall be recalculated at the completion of the first round and may be recalculated again at the completion of the second round at the discretion of the Meet Director. This order will determine the exit order for the following tasks.

Adding clarification as to when the Meet Director is allowed to recalculate reverse order of standing.

WS Competition Rules, Section 5.5.2

~~The Designated Flight Path of each competitor using a ground reference point will be determined by the Meet Director and will be given to that competitor using a detailed map or aerial photograph of the area no more than 30 days old.~~

Removed due to duplication in definitions.

WS Competition Rules, Section 5.4.3

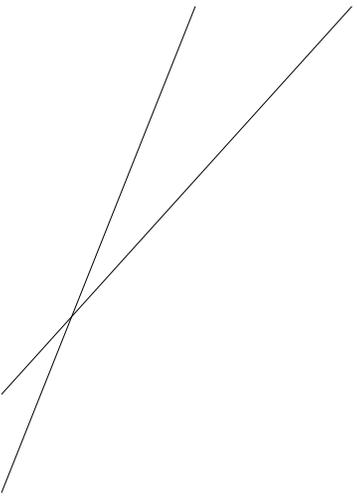
Within the validation window every PLD data sample must satisfy precision criteria. Every data sample must have a Spherical Error Probable value of less than 10 metres. If the accuracy requirement of the PLD data is not met then a rejump will be awarded.

Adding requirements to confirm PLD accuracy within the newly established validation window.

WS Competition Rules, Section 5.4.3

Competitors shall not carry additional or removable weight on their body or equipment. They must be weighed by the ~~FAI Controller~~ Chief Judge, or a person appointed by the ~~FAI Controller~~ Chief Judge at for the purpose, at the start of the competition wearing all their normal jump equipment to establish a baseline weight. The Chief Judge ~~FAI Controller~~ ~~Controller~~, or a person appointed by the Chief Judge ~~FAI Controller~~ for the purpose, must conduct subsequent random weight checks, which may fluctuate from the baseline weight by no more than +/- 2kg before requiring an inspection. If the addition or removal of weight is detected, the result for that jump will be zero. This decision shall not be grounds for protest.

Changing the official required to perform the competitors' weighing from the FAI Controller to the Chief Judge.



## **Performance Rules**

WS Competition Rules, Section 7.1.1, 7.1.1.1, 7.1.2, and 7.1.3

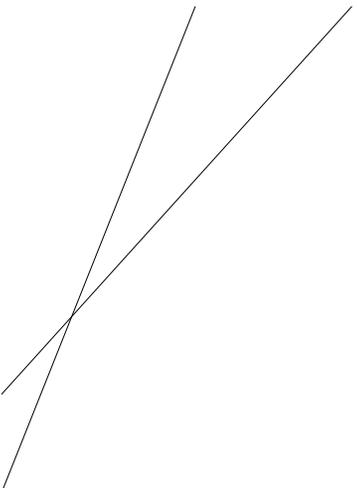
Each jump shall be imported into the official scoring system by a Judge. This Judge must be an FAI Wingsuit Flying Judge.

The Technical Scoring Director may assist with the importing of performance data.

Each jump shall be assessed by at least 2 Judges. All Judges must be FAI Wingsuit Flying Judges.

FAI Wingsuit Flying Judges in Training, provided they are under the direct supervision of the Chief of Judge Training or his designee, having attended the Judge's Conference, may be used in addition to the Official Panel of Judges.

Revised the official procedure for importing and judging WS Performance



## WS Acrobatic

WS Competition Rules, Section 2.3 – Acrobatic Event

Omission

1) A manoeuvre ~~or grip~~ is missing from the drawn sequence, or

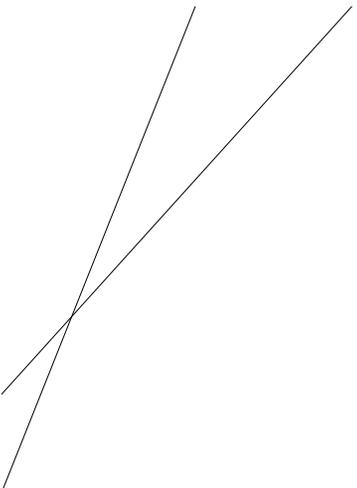
Removing the “or grip” from the omission rule, since the grip omission is already handled in a separate rule.

WS Competition Rules, Section 6.3.1.1 and 6.3.1.2

If the PLD registers a lower exit altitude than the minimum exit altitude the team may choose to accept the score for the jump. The team must make an immediate decision and inform the Chief judge of their decision; otherwise, a rejump will be granted automatically.

For a free round, if the PLD registers a higher exit altitude than the maximum exit altitude, the team may choose to accept the score for the jump. The team must make an immediate decision and inform the Chief judge of their decision; otherwise, a rejump will be granted automatically.

Adding rules to control what happens in the event that exit altitude is above maximum exit altitude or below minimum exit altitude.



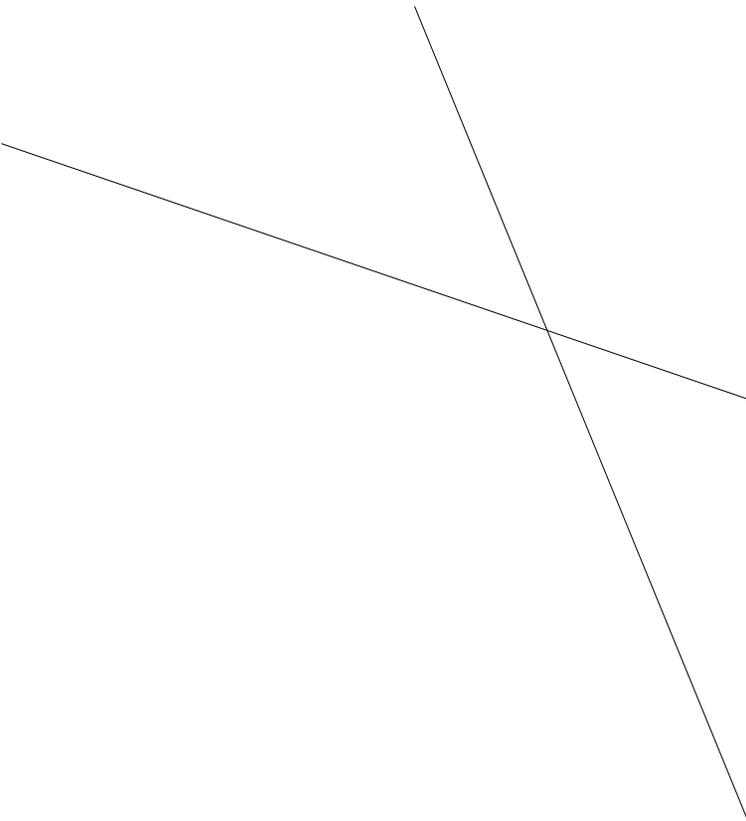
## **Approved Scoring Systems**

At the 2022 USPA National Championships, we had the opportunity to evaluate InTime Scoring in the hopes that we would be able to add it to the Approved Scoring System list.

As expected, InTime Scoring proved more than adequate to handle both the WS Performance and WS Acrobatic events, and when there were small issues that came up, Claire and Dirk were on-site throughout the entire competition and worked hand in hand with the judging panel.

In light of this, the WS Committee would like to request that InTime Scoring be added to the approved scoring system list for both WS Acrobatic and WS Performance events.

Additionally, and similar to the Speed Skydiving committee's request, we would like to add FlySight Viewer as an approved reference system.



### **Future Competitions**

2023 – 4<sup>th</sup> FAI World Cup of Wingsuit Flying (Czech Republic)

2024 – 5<sup>th</sup> FAI World Championship of Wingsuit Flying (Israel)