



# Competition Rules Speed Skydiving



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# Competition Rules for Speed Skydiving

**FEDERATION AERONAUTIQUE INTERNATIONALE  
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- 1 FAI Statutes, ..... Chapter 1, .....para 1.6
  - 2 FAI Sporting Code, Gen. Section, ..... Chapter 4, .....para 4.1.2
  - 3 FAI Statutes, ..... Chapter 1, .....para 1.8.1
  - 4 FAI Statutes, ..... Chapter 2, .....para 2.1.1; 2.4.2; 2.5.2 and 2.7.2
  - 5 FAI By-Laws, ..... Chapter 1, .....para 1.2.1
  - 6 FAI Statutes, ..... Chapter 2, .....para 2.4.2.2.5
  - 7 FAI By-Laws, ..... Chapter 1, .....paras 1.2.2 to 1.2.5
  - 8 FAI Statutes, ..... Chapter 5, .....paras 5.1.1, 5.2, 5.2.3 and 5.2.3.3
  - 9 FAI Sporting Code, Gen. Section, ..... Chapter 4, .....para 4.1.5
  - 10 FAI Sporting Code, Gen. Section, ..... Chapter 2, .....para 2.2
  - 11 FAI Statutes, ..... Chapter 5, .....para 5.2.3.3.7
  - 12 FAI Statutes, ..... Chapter 6, .....para 6.1.2.1.3

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## 1 FAI AUTHORITY

The competition will be conducted under the authority granted by the FAI, according to the regulations of the Sporting Code of the FAI, General Section, and Section 5 as approved by the IPC and validated by the FAI, and these rules. All participants accept these rules and the FAI regulations as binding by registering in the competition.

## 2 DEFINITIONS OF WORDS AND PHRASES USED IN THESE RULES

### 2.1 SPEED MEASURING DEVICE (SMD)

A device used to determine the vertical speed of the skydiver, which is mounted on the skydiver's body or equipment.

### 2.2 BREAKOFF ALTITUDE

Breakoff altitude is set at 1700 metres AGL. Below the breakoff altitude no speed measurements are taken into account.

### 2.3 TECHNICAL SCORING DIRECTOR (TSD)

Appointed by the IPC Speed Skydiving Committee and approved by the organiser for that position. The Technical Scoring Director is responsible for the planning, setup and maintenance of the downloading and analysing software before and during a World Championship/FCE.

## 3 THE EVENT

### 3.1 EVENT DESCRIPTION

3.1.1 The discipline will be comprised of the following event:

Speed Skydiving Open

3.1.2 Within the Speed Skydiving Open event, separate classifications will be made for:

Speed Skydiving Male

Speed Skydiving Female

Speed Skydiving Junior Male

Speed Skydiving Junior Female

Speed Skydiving National Team

3.1.3 The competition in the classifications takes place during the rounds, and no separate jumps are made. The scores achieved in the rounds are used to determine the placings in the classifications.

3.1.4 The final scores in the open classification are also carried across to the female, junior male, junior female and national team classifications.

### 3.2 PROGRAMME OF EVENTS

- 3.2.1 The event consists of 8 rounds.
- 3.2.2 The minimum number of rounds for a valid event is one.
- 3.2.3 Competitors make 8 rounds in the Open event. The final results for the classifications are those obtained in the Open event.

### 3.3 OBJECTIVE OF THE EVENT

The objective of the event is for the competitors to fly their body as fast as possible to achieve the highest average vertical speed through a 3 second window (see 5.5.1).

### 3.4 PERFORMANCE REQUIREMENTS

The accumulated total of the competition jumps is used to determine the final placings. The standings will also have a column showing the average speed based on number of rounds completed.

## 4 GENERAL RULES

### 4.1 EQUIPMENT

- 4.1.1 Competitors may not wear additional weight on their body, in any of their equipment, or on any of their equipment.
- 4.1.2 Parachutes and equipment will be inspected by the Chief Judge or Meet Director to confirm that they conform to normal weights for that equipment. Chief Judge and Meet Director may delegate this task to a qualified person, such as a Rigger, Senior Rigger or Master Rigger. If, in the opinion of the Chief Judge and Meet Director, the equipment does not conform to normal weights for that equipment, the competitor may be required to demonstrate that the equipment does not contain extra weight. This decision is not grounds for protest.
- 4.1.3 Parachutes and equipment will be inspected by the Chief Judge, Meet Director or FAI Controller to confirm that they are safe for the event. Chief Judge, Meet Director or FAI Controller may delegate this task to a qualified person, such as a Rigger, Senior Rigger or Master Rigger. If, in the opinion of the Chief Judge, Meet Director and FAI Controller, the parachute and/or equipment are not safe for the event, the competitor will not be permitted to use it. Inspections that do not interfere with a competitor's performance may be made at any time during the competition, as determined by the Chief Judge. If any equipment does not meet the requirements as determined by the Chief Judge, Meet Director or FAI Controller, this equipment will be deemed to be unusable for the competition. This decision is not grounds for protest.
- 4.1.4 Each competitor must wear a suitable audible altitude warning device on every jump. Two suitable audible altitude warning devices, with visual indications in the goggles/visor, are recommended.
- 4.1.5 Each competitor will wear one SMD provided by the organiser and issued by the Chief Judge. The devices will be attached on the helmet to the satisfaction of the Chief Judge.
- 4.1.6 If a competitor changes his rig or helmet during competition, the new rig or helmet must be inspected by the Chief Judge or Meet Director according to 4.1.1, 4.1.2, 4.1.3 and 4.1.5 before the competitor is allowed to jump with the rig or helmet.
- 4.1.7 The SMD will be attached on the competitors helmet by a member of the judging staff, the device will be attached with the antenna having a clear view of the sky, located and

positioned to the satisfaction of the Judge. The device will be attached prior to the start of the competition.

- 4.1.8 A competitor shall not wear any other electronic device or wires closer than 2,54 cm from the official SMD as measured by the judging staff. However, a second identical SMD unit may be worn without regard to this separation requirement. If any such electronic device affects the SMD system, and the source of the interference is not obvious and beyond the reasonable control of the jumper, a rejump may be granted by the Chief Judge.
- 4.1.9 The SMD will be turned on before the jump and off after the jump by a Judge or by the competitor if instructed to do so by any Judge.
- 4.1.10 Immediately after the jump, the competitor must return the SMD to the judging staff. The competitor is not allowed to read the data directly from the SMDs before it is registered by the judges.
- 4.1.11 If the SMD is found to have been tampered with and if in the opinion of the Chief Judge this was not caused by circumstances beyond the control of the competitor, then no re-jump will be awarded and the competitor will receive a score of zero for that jump. This decision shall not be grounds for a protest.
- 4.1.12 If the SMD malfunctions and, in the opinion of the Chief Judge, the malfunction was not caused by action or interference by the competitor, then the competitor will be given the option of making a re-jump or receiving a score of zero for that jump.

## 4.2 TRAINING JUMPS

- 4.2.1 All competitors must have the opportunity on the official practice day to make at least one official training jump, weather permitting.
- 4.2.2 The SMDs in use in the competition, and all competition rules and procedures, will be used for these jumps.
- 4.2.3 The official training jumps shall be judged by the Official Panel of Judges, or Judges in Training under direct supervision of the Chief of Judge Training, and the scores may be published.

## 4.3 ORDER OF JUMPING

- 4.3.1 The order of jumping in the first round will be determined by reverse order of placing during the last World Championship.
- 4.3.2 Individuals not covered by this procedure will jump at the beginning or end of the first round, with order determined at the discretion of the Meet Director and Chief Judge.
- 4.3.3 Time permitting, and at the discretion of the Meet Director, reverse order of ranking may be used for all other rounds.



## 5 RULES SPECIFIC TO THE EVENT

### 5.1 JUMPING PROCEDURE

- 5.1.1 The exit point is determined by the pilot in conjunction with the Meet Director. The aircraft pilot will signal the competitors when they are clear to exit. All the competitors will be briefed on the specific exit signals at the pre-event competitors' meeting.
- 5.1.2 The exit delay between competitors must be such so as to ensure safe separation, and be at least 5 seconds.
- 5.1.3 The first person to exit on a pass turns 90 degrees to the right of the aircraft line of flight, the second turns 90 degrees left, and so on. All Competitors must turn to the appropriate direction immediately after their freefall trajectory is no longer affected by the forward throw/momentum of the aircraft. This is to prevent horizontal movement in the line of flight of the jump run. See 7.1.

### 5.2 EXIT ORDER

- 5.2.1 For safety reasons, the exit order in a jump run is determined by the personal best of the competitors. The exit order in a jump run is personal best descending.
- 5.2.2 There will be a maximum of six (6) competitors per exit pass, but this may be reduced by the Meet Director taking into consideration the aircraft size and the dropzone area.

### 5.3 EXIT ALTITUDE

- 5.3.1 Exit Altitude: 13000 ft (3962 metres).
- 5.3.2 For meteorological reasons or air traffic circumstances only, and with the consent of the FAI Controller and the Chief Judge, the Meet Director may lower the exit altitude to 12000 ft (3658 metres) and continue the competition. However the breakoff altitude still remains 1700 metres.
- 5.3.3 Maximum Exit Altitude: The maximum exit altitude for a valid jump is 13500 ft (4115 metres). A competitor is not allowed to exit the aircraft at a higher altitude than the maximum exit altitude. If the SMD register a higher exit altitude than the maximum exit altitude the jump will be considered as not valid and the score for this jump is zero.

### 5.4 SPEED MEASURING DEVICE (SMD)

- 5.4.1 The SMD must be capable of gathering data, and/or transmitting real-time data to a ground station or stations, which allows the competitor's vertical freefall speed to be displayed in kilometres per hour to an accuracy of less than 10,8 km/h (3m/s), The SMD must also be capable of recording the exit altitude to an accuracy of 33 feet (10 metres).
- 5.4.2 The data from an SMD may or may not be required to be downloaded to computer in order to determine the competitors speed.
- 5.4.3 If the SMD transmits its data to the ground station during the jump, then that data must be recorded and saved when it is received.
- 5.4.4 If the data from the SMD is downloaded for analysis to a computer after landing, then that data must be recorded and saved when it is downloaded.
- 5.4.5 If the speed result is to be read directly from the SMD after landing, then the result needs to be retained on the SMD for the duration of the competition and recorded on the score sheets.



- 5.4.6 The SMD must record real-time three-dimensional (3D) data with a resolution of at least 5Hz and a speed accuracy of less than 3m/s
- 5.4.7 The SMD must not require any action by the competitor in order for it to function.
- 5.4.8 Once attached to the competitor's helmet, it should not be possible for the competitor to alter settings or data from the device without this being evident to the judges. Tampering with the device will result in a score of zero for the jump. This decision is not grounds for protest.

## 5.5 SCORING SPEED SKYDIVING

- 5.5.1 The score for a Speed Skydiving jump is the average vertical speed in kilometres per hour, to the nearest hundredth of a km/h, of the fastest 3 seconds, which the competitor achieves between exit altitude (as defined in 5.3) and the breakoff altitude (as defined in 2.2).

## 6 WORK OF THE JUDGES IN THE DISCIPLINE

### 6.1 SCORING THE JUMP

- 6.1.1 Each performance shall be assessed by at least 2 Judges. All Judges must be FAI Speed Skydiving Judges. FAI Speed Skydiving 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.
- 6.1.2 One judge conducts the analysis of the jump and determines the appropriate score. The second judge then checks the analysis and score before collation of the score sheet.
- 6.1.3 If a computer is used to analyse the data to obtain the speed, then the data must be downloaded as soon as possible after the competitor has handed in the device, and before the SMD is used again.
- 6.1.4 If the speed is read directly from the device, then the readings are to be taken when the competitor hands in the SMDs, the speeds are to be written directly on to the score sheets, and the competitor is to sign for the score. The SMDs may then be used again.
- 6.1.5 If the speed is obtained from data transmitted during the jump to a ground station or stations, the SMD may only be used again once it has been determined that valid data has been obtained.
- 6.1.6 The scores will not be final until the data have been reviewed. The Chief Judge is responsible for determining a competitor's final score and placing.

### 6.2 COLLATION OF THE SCORE SHEETS

The scores are collated immediately after the judges have assessed the jump. The results of the collation must be checked by the Chief Judge.

### 6.3 DETERMINING PLACING

- 6.3.1 At the end of a completed round, the accumulation of the competitor's single scores is used to determine the competitor's total result. The total result for the competitor determines the ranking. The competitors are ranked in descending order of their total results.

6.3.2 While a round is in progress, unofficial results may be published. However, if the round does not get completed, the scores from the incomplete round must be discarded and the results must be amended to reflect the scores from the number of completed rounds.

## 6.4 DETERMINATION OF THE WINNERS

6.4.1 The competitor with the highest score is the winner.

6.4.2 In the event of a tie in the first three places, the following rules apply:

- (i) Where possible tie-break jumps shall be made.
- (ii) If this does not break a tie, then the competitor with the best result in any one round obtains the higher place.
- (iii) If the tie cannot be broken, the competitors concerned shall be declared co-medallists.
- (iv) All other ties shall be ranked equal.

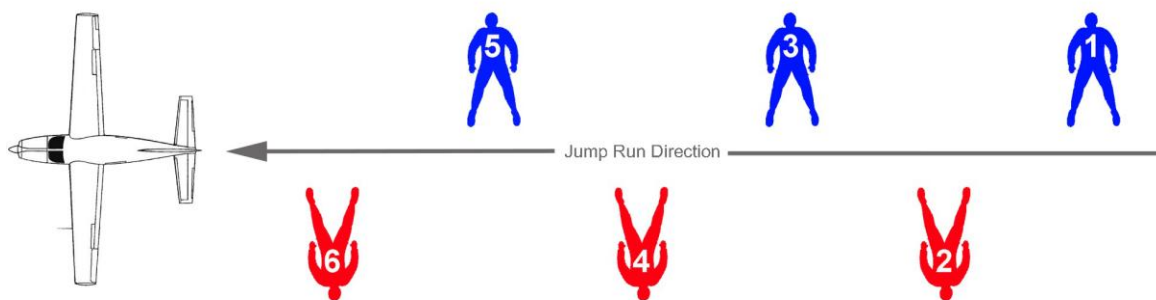
6.4.3 In the event of a tie in the first three places in any of the classifications, paragraphs 4.4.2 will be applied.

## 6.5 OTHER RESPONSIBILITIES

The Chief Judge may decide to interrupt the event if he considers that the meteorological conditions are not safe for the conduct of the event. This decision is not grounds for a protest.

## 7 DEFINITIONS

### 7.1 EXIT PROCEDURE



## 8 TITLE OF THE COMPETITION

"The --- FAI World Speed Skydiving Championship, (insert location), (insert year)", or

"The --- FAI (insert continent) Speed Skydiving Championship, (insert location), (insert year)",  
or

"The --- FAI World Cup of Speed Skydiving, (insert location), (insert year)"

### 8.1 AIMS OF THE COMPETITION

- 8.1.1 To determine the Champions of Speed Skydiving.
- 8.1.2 To promote and develop Speed Skydiving training and competition.
- 8.1.3 To establish new World and Continental Speed Skydiving competition records.
- 8.1.4 To exchange ideas and strengthen friendly relations between skydivers, judges and support personnel of all nations.
- 8.1.5 To allow participants to share and exchange experience, knowledge, and information.
- 8.1.6 To improve judging methods and practices.

## 9 DELEGATIONS

### 9.1 COMPOSITION OF DELEGATIONS

- One (1) Head of Delegation.
- One (1) Team Manager/Coach.
- A maximum of eight (8) places for a World Parachuting Championship – seven (7) places for male or female competitors and one (1) place exclusively for a female competitor.
- A maximum of twelve (12) places for a World Cup or a Continental Championship – ten (10) places for male or female competitors and two (2) places exclusively for female competitors.
- Accompanying persons at the discretion of the event organiser.

### 9.2 FORMING NATIONAL TEAMS

- 9.2.1 For delegations with 3 registered competitors, the competitors will automatically form the national SP team upon registration, unless the Head of Delegations or Team Manager disagrees.
- 9.2.2 For delegations with more than 3 registered competitors, the delegation may nominate 3 of its competitors to form the national SP team. This must be done before the starting order is finalized.

## 10 DETERMINATION OF CHAMPIONS

### 10.1 INDIVIDUAL CHAMPION

The title of World Champion is awarded to the first placed competitor in the Open event, and in each classification.

### 10.2 NATIONAL TEAM CHAMPION

The team which accumulates the highest aggregated score using each team members aggregated scores.

### 10.3 MEDALS AND AWARDS

10.3.1 Individual Medals – Overall Champion: 1<sup>st</sup> place, 2<sup>nd</sup> place, 3<sup>rd</sup> place

10.3.2 Individual Medals – Female Champion: 1<sup>st</sup> place, 2<sup>nd</sup> place, 3<sup>rd</sup> place

10.3.3 Individual Medals – Junior Champion: 1<sup>st</sup> place, 2<sup>nd</sup> place, 3<sup>rd</sup> place

10.3.4 National Team Medals : 1<sup>st</sup> place, 2<sup>nd</sup> place, 3<sup>rd</sup> place

10.3.5 Diplomas are awarded to all competitors that are ranked in first to tenth place in the Open event.

## 11 PROTEST FEES

A fee of 50 EUR must accompany each protest.



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