

**FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE
PARACHUTING COMMISSION**

**COMPETITION RULES
FOR ARTISTIC EVENTS
FREESTYLE SKYDIVING & FREEFLYING
2010**

Effective March 1st, 2010

1. FAI AUTHORITY

- 1.1. 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. Team: a Freestyle Skydiving is composed of a Performer and a Videographer. A Freeflying Team is composed of two (2) Performers and a Videographer.
- 2.2. Heading: the direction in which the front of the torso of the Performer faces.
- 2.3. Move: a change in body position, and/or a rotation around one or more of the three body axes, or a static pose. See Addendum-B.
- 2.4. Grips and Docks**
- 2.4.1. Grip: a recognisable stationary contact of the hand(s) of one Performer on a specified part of the body of the other Performer, performed in a controlled manner.
- 2.4.2. Dock: a recognisable stationary contact of the foot (feet) of one Performer on a specified part of the body of the other Performer, performed in a controlled manner.
- 2.5. Total Separation: is when all competitors show at one point in time they have released all their grips and docks, and no part of their arms and legs have contact with another body.
- 2.6. Routine: a sequence of moves performed during the working time.
- 2.6.1. Compulsory Routine: a routine in which the Team is required to demonstrate pre-determined skill.
- 2.6.2. Free Routine: a routine in which the moves are chosen entirely at the discretion of the Team.
- 2.7. Working time: the period of time during which Teams may perform a routine during a jump. Working time starts the instant any Team Member separates from the aircraft, as determined by the judges, and terminates a fixed length of time later, as specified in para. 3.1.

3. THE EVENTS

- 3.1. Discipline: the discipline will comprise the following events:
- Freestyle Skydiving, exit altitude 13.000 feet (3960 m.) AGL, working time is 45 seconds.
 - Freeflying, exit altitude 13.000 feet (3960 m.) AGL, working time is 45 seconds. For rounds 2 and 5 (speed Compulsory Routines), working time is 35 seconds.
- 3.1.1. Gender: there is no gender separation for Freestyle Skydiving and Freeflying.

3.2. Objective of the Events

3.2.1. The objective for the Team is to record a sequence of moves in freefall with the highest possible merit.

4. ROUTINES

4.1. The discipline is comprised of Compulsory Routines and Free Routines.

4.2. Number of rounds

4.2.1. Full competition:

Compulsory Routines:	2 rounds
Free Routines:	5 rounds

4.2.2. Minimum competition: 1 round

4.3. Jump order of routines. Jump order of the routines must be: F – C – F – F – C – F – F
(C = Compulsory Routine, F = Free Routine)

4.4. Finals

4.4.1. The first five (5) rounds will be the selection rounds for the final rounds. If the selection rounds are not completed at the stated starting time for the final rounds, they will start regardless of the number of completed rounds. For the final rounds, only the standings from the completed rounds are considered.

4.4.2. The 6th and 7th round of each event shall be the final rounds, consisting of the top eight (8) Teams per event. This cut does not affect the jump order of routines as stated in para. 4.3.

4.4.3. If two (2) or more teams have equal scores for entry into the final rounds the following procedure for selection into the finals will be applied:

- i) the best score, then the second best score, and then third best score, of any completed free rounds.
- ii) the best score, then the second best score, of any completed compulsory rounds.

4.5. Teams

4.5.1. Teams may consist of members of either or both sexes.

4.5.2. Team members are allowed to change their position in the Team.

4.5.3. A Team may only represent one NAC.

4.5.4. Each Team Member may compete in maximum two (2) Teams per 1st Category Event, in different events only (Freestyle Skydiving and Freeflying), as Performer and as Videographer.

4.6. World Champions

4.6.1. After all completed rounds, World Champions in Freestyle Skydiving and in Freeflying, will be declared.

4.6.2. The Freestyle Skydiving World Champions and the Freeflying World Champions are the Teams with the highest total score for all completed rounds. If two (2) or more Teams have equal scores, then if time permits, the first three (3) places will be determined by a tie-break Free Rounds. If a tie still exists, the procedure as in para. 4.4.3. will apply (including all completed free rounds) until a clear placing is determined.

4.6.3. Prizes and awards. Prizes and medals are awarded as follows:

- All Team Members in the events will be awarded medals if placed First, Second or Third.
- The flags of the countries of the Teams in the events placed First, Second and Third shall be flown and the national anthems of the countries of the Teams placed First shall be played.
- Diplomas are awarded to all Competitors that are placed First to Tenth.

5. GENERAL RULES

5.1. Exit Procedure: There are no limitations on the exit other than those imposed by the Chief Pilot for safety reasons.

5.1.1. Once any Team Member has left the aircraft, the jump shall be evaluated and scored.

5.2. Jump Order. The initial jump order will be by draw and will be maintained until the start of the final rounds. After round five (5) the final rounds will start. The final rounds will be executed by an updated reverse-order-of-jumping which shall be implemented after round five (5) and six (6). The relevant jump order will be maintained throughout the competition, except for any logistical changes deemed necessary by the Chief Judge and the Meet Director.

5.3. Jump Abortion

5.3.1. The Team may choose to abort a jump for any pertinent reason and may descend with the aircraft. If a jump-run is aborted and the Meet Director decides the reason is pertinent, the jump must then be made at the earliest opportunity. (Sporting Code, para 5.2.8.)

5.4. Compulsory Routine

5.4.1. The Compulsory Routines consist of a number of Compulsory Sequences, or Randoms drawn from a pool, as described in the relevant Addenda-A, as follows:

5.4.1.1. For Freestyle Skydiving, all Compulsory Routines consist of four (4) Compulsory Sequences. The order in which these Compulsory Routines must be performed is described in the relevant Addenda-A.

5.4.1.2. For Freeflying, each speed Compulsory Round consists of five (5) Randoms. The order in which the Teams must perform the Randoms, is as drawn.

5.5. The Draw.

5.5.1. The draw for the Randoms will be supervised by the Chief Judge, before the team captain's meeting. Teams will be given not less than one hour of the results of the draw before commencement of the competition.

5.5.2. The Randoms will be drawn as follows: all Randoms, as shown in Addendum-A Freeflying, will be placed in one container. Each Compulsory Round consists of five (5) Randoms, which will be drawn one at a time from this container, without replacement.

5.5.3. Competitors are not allowed to use a wind tunnel (freefall simulator) after the draw has been published.

5.6. Free Routine. The content of the Free Routine(s) is chosen entirely by the Team.

5.6.1. Teams are requested to deliver a description of their Free Routine(s) to the Chief Judge before the start of the competition. For this purpose, the Chief Judge should provide a standard form (see Addendum-D). Failure to provide such a free routine description has no influence on the scoring. Deviation from the free routine description will not influence the scoring.

5.7. Air-to-Air Video Recording

5.7.1. The Videographer shall provide the video evidence required to judge each jump and to show the Team's performance to third parties. It is the responsibility of the Videographer to show start of working time.

5.7.2. For the purpose of these rules, "freefall video equipment" shall consist of the complete video system used to record the video evidence of the Team's freefall performance, including only one camera, recording media and battery. The freefall video equipment must be able to deliver a PAL digital signal through a compatible video connection approved by the Video Controller. The camera must be fixed static to the helmet. No roll, pitch or yaw movements of the camera, mechanical and/or digital zoom adjustment, or any digital effects (excluding "steady shot" or other image stabilization feature) may be used during competition jumps. Failure to meet any of these requirements will lead to a score of zero (0) points.

5.7.3. A Video Controller will be appointed by the Chief Judge prior to the start of the Judges' Conference. The Video Controller will be responsible for ensuring that the tape transport speed of all freefall video equipment is operating accurately in real-time throughout the competition.

5.7.4. Prior to using any freefall video equipment for the official Training Jump or Competition Jumps, it must be presented to the Video Controller for inspection. If any freefall video equipment does not meet the performance requirements as determined by the Video Controller, this equipment will be deemed to be unsuitable for the competition. After the initial inspection, the Video Controller may re-inspect any freefall video equipment at a time which does not interfere with a Team's performance, as determined by the Event Judge or Chief Judge.

5.7.5. As soon as possible after each jump is completed, the Videographer must deliver the freefall video equipment (including the tape used to record that jump) for dubbing at the designated dubbing station. The video evidence must remain available for viewing or dubbing until all scores are posted as final.

5.8. Video Review Panel (VRP): a VRP will be established prior to the start of the official Training Jump, consisting of the Chief Judge, the President of the Jury, and the FAI Controller. The VRP may enlist the help of the Video Controller. Decisions rendered by the VRP shall be final and shall not be subject to protest or review by the Jury.

5.9. Rejumps

5.9.1. In a situation where the video evidence is considered insufficient for judging purposes by a majority of the Judging Panel, the freefall video equipment will be handed directly to the VRP for assessing the conditions and circumstances of that occurrence. In this case a rejump situation will be handled as follows:

5.9.1.1. In the case the VRP determines that there has been an intentional abuse of the rules by the Team, no rejump will be granted and the Team's score for that jump will be zero (0).

5.9.1.2. In the case the VRP determines that the video's evidence insufficiency is due to weather conditions or any other cause not controllable by the Team, a rejump will be given.

5.9.1.3. In the case the VRP determines that the video's evidence insufficiency is due to a factor that could be controlled by the Team, no rejump will be granted and the Team will receive a score based on the video evidence available.

5.9.2. Contact or other means of inference between (a) Performer(s) and/or the Videographer in a Team shall not be grounds for a rejump.

5.9.3. Problems with a competitor's equipment (excluding freefall video equipment) shall not be grounds for a rejump.

5.9.4. Adverse weather conditions during a jump are no grounds for protest. However, a rejump may be granted due to adverse weather conditions, at the discretion of the Chief Judge.

6. SCORING

- 6.1. Free Routine Freestyle Skydiving and Freeflying. Judges give the following judging criteria a score, between 0 and 10 expressed as a number up to one decimal point, taking into account the following guidelines:

Technical:

- *Difficulty:* The degree of difficulty of all moves and transitions of the jump.
- *Movement Skills:* Ability to move vertical, horizontal and multiple rotations in an flat, back-down, sideways, and/or head-up attitude or any other possible orientation.
- *Precision, control:* Ability of the Performers to demonstrate body control skill or series of skills.
- *Team Work:* The ability to combine technical skills of the Performers to stay within close proximity of each other throughout the routine and/or create complex effects of movement.

Examples for Technical:

- The Performers maintain proper proximity throughout moves.
- All flying surfaces are used (i.e. flat, back-down, head-up, head-down, sideways, diagonal).
- A constant interaction and teamwork is displayed.
- The routine shows a wide variety of skills.
- The total amount of difficulty, and the moves are performed in a controlled manner.

Presentation:

- *Visual Excitement:* Routine should hold the viewers attention throughout, dynamic variety, entertaining without being unnecessary.
- *Originality:* Creative choreography in variety.
- *Composition:* A balanced, well-composed, dynamic, smooth, interactive video image that uses a variety of photographic techniques that makes the routine interesting to view.
- *Team Work:* Routines that demonstrate combined skills of all Team Members.

Examples for Presentation:

- A good use of available landmarks, clouds and/or lighting to enhance video.
- The routine has a definite beginning, a definite ending and full use of working time.
- The routine has a nice flow. There is a high level of creativity in the way of new moves, original choreography and new twists on old moves.
- The routine is enjoyable and aesthetically pleasing to watch.

- 6.2. Compulsory Routine Freestyle Skydiving.

- 6.2.1 Judges give a score for the Performer and Videographer between 0 and 10, up to one decimal point, for each of the four (4) Compulsory Sequences, using the following guidelines:

10 points	Move is performed and filmed flawlessly with no noticeable mistakes.
8 points	Move is performed or filmed with some small mistakes.
5 points	Move is performed and filmed with several medium mistakes.
3 points	Move is performed and filmed with several major mistakes.
0 points	Move not performed or identifiable or unjudgeable camera image.

Small mistake examples

- Move: toes not pointed, knees bent, finish slightly off heading, slight wobble, minor infringement on static start/stop requirement, etc..
- Camera: momentary loss of framing or focus, occasional minor distance errors, etc.

Medium mistake examples

- Move: significantly off heading, wobble, not enough rotation, serious infringement on static start/stop requirement, etc.
- Camera: momentary loss of image, framing, focus, or distance errors for about 20 % or more of the Compulsory Sequence, etc.

Major mistake examples

- Move: completely missing required elements of performed so poorly that move is barely recognizable.
- Camera: unjudgeable picture for about 50% or more of the Compulsory Sequence, etc.

6.2.2 Any move performed, not included in the drawn order for that particular Compulsory Round, will not receive a score. The Judges will only score the Compulsory Sequences they recognise in the drawn order. If an attempt is made for a Compulsory Sequence and the Judges recognise this as such, scoring for that move will commence. A second attempt will not receive a score.

6.2.3. After viewing, each Judge will give preliminary scores for the jump for each compulsory sequence or judging criteria.

6.3 Speed Compulsory Routine Freeflying

6.3.1 Speed Compulsory Rounds (round 2 & 5): Judges give a score for the Team as follows:

6.3.2. Scoring Random: is a random which is correctly performed in the drawn order and which, apart from the first Random after exit, must be preceded by a correctly performed total separation. All Randoms and total separations must be clearly shown on video.

6.3.3 Each correctly performed Random will receive one (1) point within the allotted working time. Teams may continue scoring by continually repeating the drawn Randoms.

6.3.4. Any incorrectly performed or non judge-able Random will lead to a score of zero (0) points.

6.3.5. Failure to meet the requirement of total separation will lead to a deduction of one (1) point.

6.3.6. An omitted Random will lead to a deduction of two (2) points. An omission is one of the following:

- A Random is missing from the drawn sequence.
- No clear intent to build the correct Random is seen and another formation is presented and there is an advantage to the Team resulting from the substitution.

6.3.7. The minimum number of points for this Compulsory Round is zero (0) points.

6.3.8. A majority of the Judges must agree on the evaluation of correct, incorrect or non-judgeable Randoms, of the total separation requirement and of an omission.

6.3.9. Calculation of the scores: all the scores for the speed Compulsory Rounds will be recalculated by means of the following formula: The total of scoring Randoms plus one (1) will be taken. This result will be raised to the power of four (4); of this result the natural logarithm will be taken and deducted by two (2). The mathematical formula is: $\text{MAX}(\text{LN}(\text{Number of points turned} + 1) ^ 3,68) - 2,0$ The formula means to take the maximum value, the result of the equation or the value 0. The result of this will be rounded to the first decimal place, as stated in para 5.10.7.

Freely compulsory (speed) round score chart

Points	1	2	3	4	5	6	7	8	9	10	11	12	13
Score	0,55	2,04	3,10	3,92	4,59	5,16	5,65	6,09	6,47	6,82	7,14	7,44	7,71

Points	14	15	16	17	18	19	20	21	22	23	24	25	26
Score	7,97	8,20	8,43	8,64	8,84	9,02	9,20	9,38	9,54	9,70	9,85	9,99	10,13

- 6.4. For all events the score for each round (except the speed Compulsory Rounds Freelying) is calculated as follows:
- Compulsory Rounds Freestyle Skydiving: the highest and lowest Judges' scores of each Compulsory Sequence will be discarded, and then the remaining three (3) scores will be averaged with no rounding applied. The average scores will be added, and the result will be divided by four (4), then rounded to the first decimal place.
 - Free Rounds Freestyle Skydiving and Freelying: the scores for the technical criterion will be added, and the result will be divided by two (2) with no rounding applied. The scores for the presentation criterion will be added, and the result will be divided by three (3) with no rounding applied. These two results will be added, divided by two (2), then rounded to the first decimal place.
- 6.4.1. Rounding must be done as follows: intermediate values must be converted from two decimal places to one, by rounding to the nearest tenth, except where the second decimal digit is exactly halfway between the two values, where it must be rounded to the higher of the two.
- 6.4.2. Total scores for the events are calculated by adding Team's official scores of all completed rounds.
- 6.4.3. The scores of all Judges must be collated immediately after the Judges have scored the jump for evaluation by the scoring section. The results of the collation will be checked by at least one Judge.
- 6.4.4. All scores for each Judge will be published.
- 6.5. Judging rules
- 6.5.1. The jumps shall be judged using the air-to-air video recording.
- 6.5.2. A panel consisting of five (5) Judges must evaluate each Team's Performance. Where possible a complete round shall be judged by the same panel.
- 6.5.2.1. Compulsory Routines: all five (5) Judges will evaluate the routines.
- 6.5.2.2. Free Routines: two (2) Judges will evaluate the technical criterion. Three (3) Judges will evaluate the presentation criterion.
- 6.5.3. The Judges will watch each jump one (1) time at normal speed. A second viewing is optional if requested by a Judge, at the discretion of the Event Judge.
- 6.5.4. The chronometer will be operated by the Judges or by (a) person(s) appointed by the Chief Judge, and will be started when a Team Member leaves the aircraft. At the end of working time, freeze frame of the image will be applied on each viewing, based on the timing taken from the first viewing only. If Judges cannot determine the start of the working time, the following procedure will be followed. Working time will start as the Videographer separates from the aircraft and a penalty equal to 20 % (rounded down) of the score for that jump will be deducted from the score for that jump.
- 6.6. Training Jump
- 6.6.1. Each Team in each event will be given the option of one (1) official training jump prior to the draw. The aircraft type and configuration plus the judging and scoring systems to be used in the competition will be used for the official training jump.
- 6.6.2. For the training jump, if the Team performs four (4) Compulsory Sequences (for Freelying, five (5) Randoms only may be used) as chosen by the Team, the jump will be evaluated by the Judges and the score will be displayed before the Team makes its first competition jump. (This is to allow the Team to assess the Judges' evaluation.)
- 6.6.3. For the training jump, if the Team performs a Free Routine, the jump will be evaluated and scored; for the technical criterion only. This score will be made available to the Team only.
- 6.7. Jury: An independent Jury as stated in the Sporting Code (para 4.7.), will be formed.

7. RULES SPECIFIC TO THE COMPETITION

7.1. Composition of Delegations. Each Delegation may be comprised of:

- One (1) Head of Delegation
- One (1) Team Manager
- A maximum of two (2) Teams for each event for a WPC or Continental Championship.
- The number of Teams for a World Cup will be up to the organiser.

7.2. Competition schedule.

7.2.1. The competition will be organised in accordance with a maximum time frame of five (5) consecutive competition days.

7.2.2. Time must be reserved before the end of the competition to allow for the completion of the final rounds.

(SEE ADDENDA A, B, C and D)