

# FEDERATION AERONAUTIQUE INTERNATIONALE

## INTERNATIONAL PARACHUTE COMMISSION

### COMPETITION RULES FOR FREEFALL STYLE AND ACCURACY LANDING

**Effective March 01, 2008**

#### **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, Section 5, as approved by the IPC and validated by the FAI, and these Rules.

#### **2. DEFINITIONS of words and phrases used in these Rules**

- 2.1. Manoeuvre: a turn or loop starting and finishing in the horizontal face down position with the head toward the target. The shoulders must at all times remain in a horizontal plane.
- 2.2. Turn: a manoeuvre of a 360-degree rotation in the horizontal plane.
- 2.3. Loop: a manoeuvre of a 360-degree rotation in a vertical plane.
- 2.4. Drift: lateral movement of the jumper away from the target heading after the jumper has started the first manoeuvre.
- 2.5. Tuffet: landing area on which the AMD is placed.

#### **3. THE EVENTS**

- 3.1 The events will comprise the following disciplines:
- Team accuracy landing
  - Individual accuracy landing
  - Freefall Style
- A separate classification for men and women is made in all events.

#### **3.2 Objective of the events**

- 3.2.1. Accuracy landing: competitors aim to land on, or as close as possible to the centre of a target.
- 3.2.2. Freefall Style: to perform a prescribed sequence of manoeuvres in freefall as correctly and as quickly as possible.

#### **3.3 Performance requirement**

- 3.3.1. The accumulated total of all rounds is used to determine the final placing's of teams or individuals. A minimum number of rounds (specified in chapter 7 of these Competition Rules) must be completed to determine a team's and individual's placing and declare winners in any one event.

#### **4. GENERAL RULES**

##### **4.1 Training jumps**

The training jumps made on the last day before the competition starts may be evaluated by the judges and the scores published.

##### **4.2 Order of jumping**

The order of jumping in the first accuracy round and in the first, second and third round of the style event will be determined by reverse order of placing, separately for men and women, based on final results of team accuracy during the last World Championship. Teams, not covered by this procedure will jump at the beginning or end of the first round, with order determined by draw, at the discretion of the Meet Director. In all other rounds, the jump order will be the reversed rank order after the last completed round.

##### **4.3 Determination of the Winner**

###### **4.3.1. Accuracy event**

- (1) At the end of all completed rounds, the team or competitor with the lowest cumulative score is the winner.
- (2) If all rounds cannot be completed, the team or competitor ranked first in the last completed round is the winner. See 7.2.3 for tie-breaks.

#### **4.3.2. Style event**

- (1) At the end of all completed rounds, the competitor with the lowest total score in the style event is the winner. See 7.2.5 for tie-breaks.

#### **4.4 Overall winner**

- (1) The final ranking of all competitors is calculated by adding the total placing of each competitor in the style and individual accuracy events after all completed rounds including tie-breaking rounds and excluding the competitors taking part in only one individual event. Only those competitors in both events will qualify for the overall event and they must have performed at least one competition jump in both style and accuracy in that competition and must be re-ranked accordingly.
- (2) The winner is the man or woman with the lowest total points. If two competitors share equal totals, the title will be awarded to the competitor achieving the highest ranking in either event. Should a tie still exist co-champions will be declared. The same tie-breaking procedures will be followed for all places.

### **5. RULES SPECIFIC TO THE EVENTS**

#### **5.1 Team and Individual Accuracy Landing Events**

##### **5.1.1 Wind Drift Indicator**

- (1) Prior to starting the event, or if jumping has been interrupted for more than sixty (60) minutes, at least one wind drift indicator must be dropped from an altitude 100 m below the exit altitude and above the target by a judge or an experienced parachutist appointed by the Chief or Event Judge.
- (2) The wind drift indicator must have approximately the same rate of descent as the parachutes used by most of the competitors. Its landing point must be marked on an aerial photo or plan of the drop zone.
- (3) Continuity of the event and the opportunity for competitors to observe canopies in the air is considered sufficient for all competitors to evaluate the opening point.

##### **5.1.2 Exit Point**

Each team selects their own exit point.

##### **5.1.3 Wind Speed**

The maximum allowable wind speed at ground level in the accuracy events is set by the Chief Judge, FAI Controller and Meet Director within the range of between 6 m/s and 8 m/s. This limit will be given to the competitors at the initial briefing and will remain for the duration of the competition.

A competitor who lands during the period 10 seconds before the wind speed exceeds the limit, while the wind speed is over the limit and 30 seconds after the wind speed has returned below the limit, and does not score a dead centre, may accept a re-jump. The competitor must make an immediate decision within 15 seconds of landing and before the next competitor lands and must inform the Event or Chief Judge of their decision, otherwise that competitor must do a re-jump.

The event will be automatically interrupted for a minimum of 5 minutes, if the ground wind speed exceeds 9 m/s.

##### **5.1.4 Wind Direction on the Ground**

- (1) The windsock must be capable of responding to winds of at least 2 m/s and be acceptable to the Chief Judge. The judges will determine its location, which is at a fixed place, approximately 50 m from the target centre. This decision is not subject to any protest.
- (2) A wind direction indicator (streamer) mounted on a pole, which is capable of responding to winds of less than 2 m/s will be placed by the Event Judge within the 20 m circle. The Event Judge will decide the position. Its position is not grounds for protest.

##### **5.1.5 Target**

- (1) The centre of the target must be an Automatic Measuring Device (AMD) with a Dead Centre Disc of 2 cm diameter in a contrasting colour, preferably yellow on a black background. The device must be kept as flat as possible, and capable of measuring to a minimum distance of 16 cm in increment of not more than 1 cm.
- (2) The AMD is mounted centrally on an underlying pad of at least 1.2 m diameter which when struck scores 16 cm at all points. Chief Judge and/or Event Judge may decide to discontinue the use of this underlying pad for any pertinent reason.

- (3) The AMD and the underlying pad are placed centrally on a tuffet, which has to be acceptable to the FAI Controller and should have the following approximate specifications:
  - Diameter: app. 5 m
  - Thickness: a minimum of 30 cm
  - Colour: any colour
- (4) The target must have a clearly marked circle of 20 m radius centred around the dead centre disc.
- (5) The AMD must be repositioned immediately after the landing of any competitor who moves or covers its location, except during team jumps when there is insufficient time between the landing of team members.
- (6) In order not to damage the AMD, suitable footwear must be worn.

#### **5.1.6 Presence on the Target**

- (1) The only persons allowed within the 20 m circle during jumping are members of the Panel of Judges, members of the Jury and necessary members of the organising staff.
- (2) Team Managers and guests of the Organisers are allowed in a reserved area of the 20 m circle designated by the Event Judge and not closer than 15 m to the Automatic Measuring Device. Accredited press, radio and TV officials are allowed at a position within 20 m circle but not closer than 5 m, decided by the Event Judge.
- (3) During the final approach of a competitor, only members of the Panel of Judges are allowed within 5 metres. Exceptions to this rule are the responsibility of the Chief Judge and/or Event Judge and require no previous agreement by the competing teams and individuals.
- (4) After landing, competitors must leave the target area immediately.

#### **5.1.7 Re-jumps**

- (1) Any malfunction of the main parachute canopy, which creates a control problem for a competitor, may merit a re-jump. In this case the competitor must indicate immediately that he has such a problem by signalling with his arms or legs outstretched, or other suitable signal, throughout most of the descent and must make no attempt to land in the target area.  
Following a malfunction, the inspection of the equipment immediately after the competitor has landed must indicate that the competitor did suffer a malfunction that was not created by the competitor himself.
- (2) A control problem is a condition in the deployment of the parachute such that it is virtually impossible to attempt a precision target approach, or that the main canopy configuration is such as to prevent the competitor from demonstrating his skill.
- (3) If there is a sudden change in ground wind direction of more than 90 degrees when the wind speed is more than 3 m/s and automatically recorded by an electronic device, a competitor landing within 30 seconds after the change must be offered a re-jump. The competitors' decision must be made immediately.
- (4) If, during the accuracy events, two or more competitors approach and/or land on the target simultaneously or close together, and in the process interfere with each other, a re-jump for one, or both, or neither may be awarded by the Event judge. If such interference occurs between members of the same team during team accuracy jumps, no re-jump will be granted.
- (5) If an AMD is found to be defective or not reset and the first point of contact has been on it, and (4) above does not apply, the affected competitor(s) must be offered a re-jump.
- (6) Only the affected competitor(s) will make a re-jump and get a new score, the re-jump counting for both the individual and team accuracy events. The exit altitude for re-jumps will be decided by the Meet Director and be between 700 and 1000m.
- (7) If the AMD registers a score and in the opinion of the judges at the target the first point of contact was not on the AMD, the competitor will not be granted a re-jump, and must receive a score of 16 cm.
- (8) In the event of interference from a cameraman or other official allowed in-air or within the 5m circle during the approach of a team and/or individual competitor, a re-jump may be granted by the Chief Judge or Event Judge to the affected competitor(s) only. This decision is not grounds for protest.

#### **5.1.8 Scoring Accuracy Landing**

- (1) The landing point is the first point of body contact with the surface or the AMD.
- (2) The AMD must register the distance between the landing point and the edge of the dead centre disc when the landing point is on the AMD.
- (3) Any landing point off the AMD must be given a score of 16 cm.
- (4) Teams jumping with less than 4 members must receive a score of 16 cm for each missing member.
- (5) The best four scores of each round shall be the score for the team for that round, unless one or more members of the team were disqualified for that round.
- (6) If, because of insufficient separation between team members, a competitor lands on the AMD which has not been reset, the score given is 15 cm. Competitors landing off the AMD receive a score of 16 cm.

#### **5.1.9 Team Accuracy Landing Event**

- (1) A team consists of a maximum of 5 members. The best four scores will count in the team event.

- (2) Any national 'team' with less than four competitors will jump in mixed teams at the beginning or end of each round at the discretion of the Meet Director. Members of mixed teams from different countries will be scored as individual contestants only.
- (3) The exit altitude is 1000 metres. The team must jump from the same aircraft, during the same passage of the aircraft over the target (re-jumps are treated as individual jumps). If meteorological conditions do not allow jumping from 1000 metres, the altitude may be lowered to 900 metres.
- (4) In the team accuracy event, the jump order, determined in para. 4.2. will be used for the first round only. Thereafter the jump order shall be in reverse order of placing after each round. In the case of tie-breaking jumps, the initial jumping order will apply.
- (5) The jump order may only be changed to allow for re-packing, to accommodate re-jumps and to avoid competition delays resulting from substantial changes in the order of jumping.

#### **5.1.10 Individual Accuracy Landing Event**

- (1) Scores for all rounds, except the semi-final and final rounds, are the scores obtained in the team accuracy jumps.
- (2) The exit altitude for the semi-final and final rounds is 800 metres and will be two competitors per pass. If meteorological conditions do not allow jumping from 800 metres the altitude may be lowered to 700 metres (one competitor per pass).

## **5.2 Freefall Style event**

### **5.2.1 Style series selection**

- (1) First four rounds consists of a series of individual freefall manoeuvres drawn from the following pool

<b>1st series</b>	<b>2<sup>nd</sup> series</b>	<b>3rd series</b>	<b>4th series</b>
Left turn	Right turn	Left turn	Right turn
Right turn	Left turn	Right turn	Left turn
Back loop	Back loop	Back loop	Back loop
Left turn	Right turn	Right turn	Left turn
Right turn	Left turn	Left turn	Right turn
Back loop	Back loop	Back loop	Back loop
- (2) Fifth round consist of a series of individual freefall manoeuvres, selected by the competitor, from the pool in 5.2.1 (1).

### **5.2.2 Jumping procedure**

- (1) The jump must be made from an altitude of 2200 metres.
- (2) The target heading must be directly downwind or directly upwind. That choice will be made by the cameraman in close co-operation with the observing judge. Competitors are to be made aware of any change at the earliest opportunity. Those airborne must be notified before the aircraft begins a run in on the new heading.
- (3) The target must be clearly visible from the air and of approximately 200 sq m in size. The shape and colour agreed by the Event Judge.

### **5.2.3 Jump Order**

The jump order for the first round is by team and is that determined by para 4.2. for the first round of the accuracy event. For this round, the team manager must inform the organiser (manifest) of the exit order within the team before their first call. The jump order after cuts is by individuals in reverse order of placing.

### **5.2.4 Exit Procedure**

The exit point is specified and controlled by the judges. The exit command must be given so that the camera angle of the optics is between 60 and 80 degrees at the start of the first turn. In order to ensure that all competitors are judged at approximately the same angle, the competitors must leave the aircraft on the exit command. Competitors who disregard this command cannot protest their score and will not be granted a re-jump.

### **5.2.5 Drift Angle**

Any competitor who experiences drift of 10 degrees or more during their style series or who starts their first turn out of the given range (60 – 80 degrees) must be offered a re-jump. On the re-jump, if the competitor exits at approximately the same exit point as all other competitors and still has drift of 10 degrees or more or starts their first turn outside the given range of 60 – 80 degrees they shall not receive a further re-jump and must accept their score.

### 5.2.6 Malfunctions

A malfunction is not grounds for a re-jump.

### 5.2.7 Scoring Freefall Style

- (1) The score for a style jump is the time in seconds and hundredths of a second to complete the series plus penalty times awarded for incorrect performance of the manoeuvres.
- (2) The time to complete the series is measured only to 16.00 seconds. Any time, including penalties, in excess of this is recorded as 16.00 seconds.
- (3) The working time starts when the Competitor starts the first manoeuvre, whether or not it is the correct manoeuvre.

### 5.2.8 Freefall Style penalties

- (1) Undershoots, and arrow penalties at the beginning of the first and third turns.

- 1 - 5 deg 0.1 sec
- 10 deg 0.2 sec
- 15 deg 0.3 sec
- 20 deg 0.4 sec
- 25 deg 0.5 sec

And similarly to

- 75 deg 1.5 sec
- 80 deg 1.6 sec
- 85 deg 1.7 sec
- 90 deg 1.8 sec
- >90 deg 16.0 sec

- (2) Overshoots

- 1 - 180 deg No penalty
- >180 deg 16.0 sec

- (3) Deviations, or

- (4) Last back loop off heading

- (5) Completion of first loop before reaching the horizontal level (-), or

- (6) Continuation of first loop after passing the horizontal level (+)

- (7) Completion of last loop before reaching the horizontal level (-), or

- (8) Continuation of last loop after passing the horizontal level (+)

- 1 - 30 deg No penalty
- 40 deg 0.4 sec
- 50 deg 0.5 sec
- 60 deg 0.6 sec
- 90 deg 2.0 sec
- >90 deg 16.0 sec

- (9) Omission of a figure 16.0 sec
- Added figure 16.0 sec
- Incorrect Series 16.0 sec

## 6. WORK OF THE JUDGES IN THE DISCIPLINES

### 6.1 Accuracy Landing

#### 6.1.1 Decision on landing point

6.1.1.1 Three judges at or near the target will indicate and determine by simple majority if the first point of landing is on the AMD.

6.1.1.2 Trainee judges may work with the judges in the target area, but their opinion or assessment will not be considered

#### 6.1.2 Other Responsibilities

6.1.2.1 Two separate sets of score sheets will be completed. The Event Judge and team captain/individual signs both copies, one copy goes to the Scoring section. The Event Judge retains the other copy. At least one judge will check the results of the scoring section.

6.1.2.2 The wind speed and direction at the anemometer will be observed by an official appointed by the Meet Director and approved by the Event Judge.

- 6.1.2.3 One or more observers, supervised by the Event Judge, must watch each jump made and observe the competitors on opening and during their descent. The observer must check for any conditions or incidents that might constitute grounds for a re-jump and/or disqualification for safety reasons. A written record must be made of any unusual observations or incidents.
- 6.1.2.4 If any judge observes a change in winds aloft, which prevents one or more competitors from making a reasonable accuracy approach on the target, though having exited at the correct point, they must immediately inform the Event Judge and/or the Chief Judge of their observations. If the event is interrupted a new wind drift indicator must be dropped before the event may continue.
- 6.1.2.5 If there is a serious or sudden change in the meteorological conditions, the Chief Judge and/or the Event Judge, may decide to interrupt an event. This decision is not grounds for a protest. The interruption must be made in a way which clearly shows it to the jumpers concerned who must be granted re-jumps, and also to the judges at the target. A new wind drift indicator must be dropped before the event may continue.
- 6.1.2.6 The Event Judge and/or Chief Judge will advise the Meet Director when meteorological conditions allow the resumption of jumping.

## **6.2 Freefall Style**

### **6.2.1 Observing the Freefall Style Series**

- 6.2.1.1 Five judges evaluate the performance of the competitor.
- 6.2.1.2 The jumps are judged with a video system, the optics of which must be placed on the axis of the flight direction. If the video system is changed, the Panel of Judges may determine that this change may only be made for complete rounds, so that all jumps in one round are judged using the same video system. If the Panel of Judges determines that this is not necessary, no special action need be taken.
- 6.2.1.3 The judges start their chronometers when the competitor starts the first manoeuvre, whether or not it is the correct manoeuvre. The manoeuvre starts when there is a change in heading of the torso. They stop their chronometers when the competitor stops the second back loop or passes through the horizontal level, regardless of heading. The time for the series is taken from the video showing at normal speed.
- 6.2.1.4 The judges watch the jump twice, once at normal speed and once in slow motion, the speed of which is acceptable to the Chief Judge. In the event a judge has not been able to take a time, further replays at normal speed may be made for that judge only. Thereafter the scores are collated.
- 6.2.1.5 After the performance, if the time is not recorded by computer, the judge records the time of the series to the nearest 1/100 sec, the penalties they have observed and the total score (sum of the time of the series and penalties).

### **6.2.2 Collation of the Score Sheets**

- 6.2.2.1 If the assessment is not computerised, the judges' scores are collated immediately after the judges have assessed the jump. The results of the collation must be checked by at least one Judge.
- 6.2.2.2 Penalties are assigned to the respective manoeuvre, by each judge.
- 6.2.2.3 The score of the series is the mean score (arithmetic average) of the middle three total scores to the nearest hundredth of a second, the highest and the lowest of the five having been discarded.
- 6.2.2.4 The name and the nation of the competitor will be written on the screen or individual judge score board at the time of collation. The judges assessing the jump will not be informed of the name and country of the competitor before the assessment of the jump is finished.

## **6.3 Other Responsibilities**

At least one observing judge will be positioned at the video camera(s) in order to monitor the aircraft run in and exit commands and ensure that approximately the same angle is used for the whole round. The judge will also watch each jump and must check for any conditions or incidents that might constitute grounds for a re-jump and/or disqualification for safety reasons. The judge must keep a record of all their observations. The Event Judge must be informed if the angle of drift indicated by the camera is 10 degrees or more.

## **7. TITLE OF THE COMPETITION**

### **"The 30<sup>TH</sup> FAI World Freefall Style and Accuracy Landing Parachuting Championship"**

#### **7.1 Aims of the World Championships**

- 7.1.1 To determine the World Champions (Male and Female)
  - World Accuracy Landing Champion
  - World Freefall Style Champion
  - Overall World Champion
  - World Champions in Team Accuracy Landing
  - Overall World Champion Nation
- 7.1.2 To determine the world standing of the competing teams.
- 7.1.3 To establish new Freefall Style and Accuracy Landing records.

- 7.1.4 To promote and develop Freefall Style and Accuracy Landing parachuting.
- 7.1.5 To exchange experience and strengthen friendly relations between the sport parachutists of all nations.
- 7.1.6 To allow participants to share and exchange experience, knowledge and information.
- 7.1.7 To improve judging methods and practices.

## **7.2 Programme of events**

The World Championships will comprise the following events:

- (1) **Team Accuracy Landing:** The event consists of 8 rounds. The minimum number of rounds for a valid event is 5.
- (2) **Individual Accuracy Landing:** The event consists of 8 rounds plus a semi-final and final round. The scores for the first 8 rounds are those obtained in the Team Accuracy Landing event. The minimum number of rounds for a valid event is 5.
  - (a) The top 25% (minimum 10) male and female competitors after round 8 continue into the semi-final.
  - (b) The top 50% male and female competitors, placed in order of aggregate score after round 9 (semi-final) (minimum 5 but where there are less than 5, all go forward), qualify for the final round.
- (3) In the event of a tie for the **first three places** in the Team or Individual Accuracy Landing the following rules apply:
  - (a) Where possible, tie-break jumps shall be made.
  - (b) If this is not possible then the competitor or team with the greater number of low scores (i.e. dead centres, 1cm, etc...) obtains the higher place.
  - (c) If the tie remains, the competitor or team with the lowest score, starting with the last completed round and continuing in reverse order, round by round until the tie is broken, obtains the higher place.
  - (d) If the tie cannot be broken, the competitors or teams concerned shall be declared co-medallists.
  - (e) All other ties will be ranked equal.
- (4) **Freefall Style:** 5 rounds (the minimum number of rounds for a valid event is 1). A competitor who scores 9 seconds or more in men category and 10 seconds or more in women category including penalties in the first round does not qualify for the 2<sup>nd</sup> round. After completion of the 2<sup>nd</sup> round, competitors with an aggregate score of 16 seconds or less (men) and 18 seconds or less (women) qualify for the 3<sup>rd</sup> round.

After completion of the 3<sup>rd</sup> round, there will be a cut and 50 % of competitors (minimum 10), placed in aggregate score after the 3<sup>rd</sup> round qualify for the 4<sup>th</sup> round.

After completion of the 4<sup>th</sup> round, there will be a cut and 50 % of competitors (minimum 10 and maximum 20), placed in aggregate score after the 4<sup>th</sup> round qualify for the final 5<sup>th</sup> round.

- (5) In the event of a tie for the **first three places** in the Style event, the following rules apply:
  - (a) Where possible tie-break jumps shall be made.
  - (b) If this is not possible the competitor with the lowest score in any one round obtains the higher place.
  - (c) The competitor with the lowest score, starting with the last completed round and continuing in reverse order, round by round until the tie is broken, obtains the higher place.
  - (d) If the tie cannot be broken, the competitors concerned shall be declared co-medallists.
  - (e) All other ties will be ranked equal.

## **7.3 Composition of Delegations**

Each delegation may be comprised of:

- 1 Head of Delegation
- 1 Team Manager
- 1 Team Coach
- 1 Interpreter
- 1 Men's Team
- 1 Women's Team

Each Nation may send judges and trainee judges as decided by the IPC  
Accompanying persons

#### **7.4 Protest fees**

A fee of 50 EUR shall accompany each protest.

#### **7.5 World Champions**

- (1) For the determination of the World Champions see CR 4.3. and 4.4. For the determination of the Overall World Champion Nation see (3).
- (2) In the male and female category there are the following World Champions:
  - World Champion in Accuracy Landing after all completed rounds inclusive of tie-breaking jump(s).
  - World Champion in Freefall Style inclusive of tie-breaking jump(s).
  - World Champions in Team Accuracy Landing after all completed rounds inclusive of tie-breaking jump(s).
  - Overall World Champion.
- (3) The Overall World Champion Nation, separate for men and women is the nation with the lowest total, calculated as the sum of the four best numerical placing in the individual overall ranking. If two nations share equal totals, the title of Overall World Champion Nation will be awarded to the nation achieving the highest placing in the team accuracy event. The same tie-breaking procedures will be followed for the second and third place.

#### **7.6 Prizes and awards**

- (1) Medals are awarded to the three competitors who have the highest placing in the individual Accuracy Landing and Freefall Style events and to the three teams who have the highest placing in Team Accuracy Landing. Cups will be awarded to first placed competitors.
- (2) Medals are awarded to the three first competitors and teams who have the highest overall placing. Cups will be awarded to the first placed individuals and teams who have the highest overall placing.
- (3) Diplomas are awarded to all competitors and teams that are ranked in first to tenth place.