



**Svenska Fallskärmsförbundets**

# Competition Rules

For  
Indoor Wingsuit Flying

Acrobatic

# 1. Definitions of words and phrases

## 1.1 Routine

- 1.1.1 Routine: A routine is comprised of two (2) sequences, which may be repeated until the end of working time and which are chosen in accordance with 2.3.8.
- 1.1.2 Sequence: a sequence is comprised of manoeuvres as described in Addendum A

## 1.2 Grips:

- 1.2.1 A hand grip consists of a controlled stationary contact with the front of the hand. The contact must be on or below the wrist. Stationary contact with the finger tips only will not be considered to be a hand grip.
- 1.2.2 A foot grip consists of a controlled stationary contact with the front of the hand on the foot of the other competitor. Contact must be on or below the ankle. Stationary contact with the finger tips only will not be considered to be a foot grip.
- 1.2.3 A grip on the surface of any part of a wingsuit without also achieving a controlled stationary contact with the hand on a specified part of the body as defined in 1.2.1 and 1.2.2 above is specifically excluded from the definition of a grip.

## 1.3 Manoeuvre

a change in body position or a rotation around one or more of the three (3) body axes or a static pose.

## 1.4 Normal Flight

The performer is in a belly-to-earth stable position.

## 1.5 Omission:

- (1) A manoeuvre is missing from the drawn sequence, or
- (2) There is no attempt to take a grip or
- (3) There is no clear intent to perform the required manoeuvre

## 1.6 Team

an Acrobatic Wingsuit Flying Team is composed of two (2) Performers.

## 1.7 Working time

the period of time during which Teams may perform a routine. The working time is determined by the glide ratio chosen by the team, as per 2.3.8.

Working time starts the instant any Team Member breaks contact with the designated floor area, as determined by the judges and terminates after the working time specified by the chosen glide ratio, as per 2.3.8.

## 1.8 Glide ratio

The angle of the flight chamber relative to the horizontal plane is expressed in terms of the corresponding outdoor flight glide ratio, i.e. the horizontal distance flown divided by the change in altitude.

## **1.9 Flight Operator**

the person designated to operate the wind tunnel.

## **2. The Event**

### **2.1 Objective of the Events**

- 2.1.1 The objective of the event is for the team to complete as many sequences as possible within the working time, while correctly following the sequence for the round.
- 2.1.2 There is no distinction as to gender.
- 2.1.3 The aggregate grip total of all rounds completed, as determined in 3.4.1, is used to determine the placing of teams. Only one completed round is required to declare champions.
- 2.1.4 If two or more teams have equal scores the following order of procedures will be applied to determine the final placings:
  - (i) one tie break round, if possible (for the first three placings only). The tie break round will be the next drawn round of the competition,
  - (ii) the highest score in any completed round,
  - (iii) the highest score starting with the last completed round and continuing in reverse order, round by round until the tie is broken,
  - (iv) the fastest time (measured to hundredths of a second) to the last formation scored without infringement by both teams in the last completed round. Starting time must be that used for original evaluation of the jump

### **2.2 Program**

The competition shall consist of seven (7) rounds.

### **2.3 General Rules**

- 2.3.1 Competitors may change their role in the team from routine to routine; however, they may only perform one role (Performer A, Performer B) during a routine.
- 2.3.2 The performer (defined as Performer A, Performer B) who executes the first manoeuvre in each compulsory routine is defined as Performer A; this establishes the performer's role in the sequences (described in Addendum A) for the remainder of the routine.
- 2.3.3 The teams will be grouped by chosen glide ratio.
  - 2.3.3.1 The starting order of the glide ratio groups shall be determined by random draw made by the Meet Director, supervised by the Chief Judge.
  - 2.3.3.2 The starting order of the teams within the glide ratio groups shall be determined by random draw made by the Meet Director, supervised by the Chief Judge.
- 2.3.4 Representation:
  - 2.3.4.1 A team may represent only one nation.
  - 2.3.4.2 Each participant may be a member of only one team.

- 2.3.5 Unintentionally touching any part of the tunnel is acceptable.
- 2.3.6 The desired speed setting for the tunnel shall be provided to the Flight Operator by the teams before the competition starts. The speed may be different for each routine, but may not be changed during a routine.
- 2.3.7 The desired glide ratio setting for the tunnel shall be provided to the Flight Operator by the teams before the competition starts. The glide ratio must be the same for each routine.  
The glide ratio must be either 1.6, 1.8, 2.0 or 2.2.
- 2.3.8 The working time for the different glide ratios is as follows:
  - 2.3.8.1 Open.
    - Glide ratio 1.6: Working time 60 seconds.
    - Glide ratio 1.8: Working time 66 seconds.
    - Glide ratio 2.0: Working time 71 seconds.
    - Glide ratio 2.2: Working time 77 sseconds
  - 2.3.8.2 Intermediate
    - Working time 90 seconds for all glide ratio.

## **2.4 Draw**

- 2.4.1 The draw of all round sequences will be done publicly and supervised by the Chief Judge. Teams will be given not less than one hours' knowledge of the results of the draw before the competition starts.
- 2.4.2 Sequences shown in Addendum A will be individually placed in one container. Individual withdrawal from the container, (without replacement), will determine the sequences to be flown in each round. A sequence, once drawn, will be put aside and may not be used again. However, if all available sequences have been used and the draw is not complete, the process will be re-started until the draw is complete.
- 2.4.3 The order of the sequences is determined by the order in which they are drawn.
- 2.4.4 Competitors are not allowed to make a parachute jump of any kind nor use a wind tunnel for practice after the draw has been made.

## **2.5 Re-performances**

- 2.5.1 Where the video evidence is considered insufficient for judging purposes, a re-performance will be given unless the Chief Judge and Meet Director determines that there has been an intentional abuse of the rules by the team, in which case no re-performance will be granted and the team will receive the minimum score for that performance. The team may decline the re-performance and accept whatever score had been achieved.
- 2.5.2 Where there is a unforeseen technical issue with the wind tunnel that the Chief Judge determines had a negative impact of the performance, a re-performance will be given. The team may decline the re-performance and accept whatever score had been achieved.
- 2.5.3 Contact or other means of interference between team members and between team members and the floor screen or the tunnel walls shall not be grounds for the team to request a re-performance.
- 2.5.4 Problems with a competitor's equipment shall not be grounds for the team to

request a re-performance. A team that flies out of the range of the camera will not be granted a re-performance.

### 3 Judging and scoring

#### 3.1 Start of Working Time

- 3.1.1 The chronometer will be operated by the Judges or by a person(s) appointed by the Chief Judge, and will be started as determined in 1.7. If Judges cannot determine the start of the working time, a penalty equal to 20% (rounded down) of the score for that jump will be deducted from the score for that jump.
- 3.1.2 Once any team member has left the designated starting area, the performance shall be evaluated and scored.
- 3.1.3 The evaluation of each sequence will take place during the full working time but may cease before the end of working time if the team abandons the performance requirements for the required routine.
- 3.1.4 Teams may continue scoring by continually repeating the sequences in the required order.

#### 3.2 Judging procedures:

- 3.2.1 The performances will be judged live during the performance.
- 3.2.2 A minimum of three (3) judges must evaluate each team's performance. If five (5) judges are present, the highest and lowest scores will be subtracted.
- 3.2.3 Video may be used to evaluate a specific point in the performance at the discretion of the Chief Judge.

#### 3.3 Scoring:

- 3.3.1 One point will be assigned for each grip correctly performed in the routine within the working time of each round, as determined by a majority of the judges. The score given for grips shall be in whole integers only. A grip that cannot be seen or does not meet the definition in 1.2 is not correctly performed.
- 3.3.2 For each omission (defined in 1.5) one (1) point will be deducted from the total determined in 3.3.1.
- 3.3.3 If a team member touches the wall, floor or roof of the tunnel in between releasing a grip and taking the next grip and the judges deem the touch to be intentional, that next grip will be considered not to have been correctly performed.
- 3.3.4 The minimum score is zero points.

#### 3.4 Score Calculation:

- 3.4.1 The team's final score for the event is the sum of the total scores from all completed rounds as calculated in 3.3.
- 3.4.2 All scores for each judge will be made public.

#### 3.5 Training performances:

- 3.5.1 Each team in each event will be given the option of one official training performance before the draw is made to determine appropriate speed settings.

3.5.2 The wind tunnel configuration used for the competition will also be used for the official training performance.

## 4 Other Judging responsibilities

4.1 One or more individuals, supervised by the Chief Judge (or trainees under the supervision of the Chief of Judge Training) may support the judges in equipment, device and data management.

## 5 Competiton class

5.1 Open: The sequences included for open clas are all sequences from Addendum A, except figure E. Routines consist of three (3) Sequences.

5.2 Intermediate: The sequences included in intermediate class are: A, C, G, L from Addendum A

## Addendum A

**The link to animated Dive Pool:**

[Animation Dive Pool](#)

### **Indoor Acrobatic Wingsuit Flying Sequences**

- The last position of each sequence leads into the beginning position of the next sequence, and is counted as one grip.
- Performers are defined as Performer A and B.
- Other than for the first grip of the jump, a valid grip must be preceded by clear total separation, which is when the performers show at one point in time that they have released the grip and no part of their arms have contact with the other performer;

#### **Sequence A: Up and Over**

- Performers are in normal flight with a hand grip.
- Performers show total separation and then Performer A transitions over Performer B to the other side.
- Performers take a hand grip in normal flight.
- Performers show total separation and then Performer B transitions over Performer A to the other side.
- Performers take a hand grip in normal flight.

#### **Sequence B: Rock and Roll**

- Performers are in normal flight with a hand grip.
- Performers show total separation and then Performer A performs a barrel roll.
- Performers take a hand grip in normal flight.
- Performers show total separation and then Performer B performs a barrel roll.
- Performers take a hand grip in normal flight.

#### **Sequence C: Revolutions**

- Performers are in normal flight with a hand grip.
- Performers show total separation and then Performer A transitions over Performer B to the other side and then transitions back under Performer B to the original starting position.
- Performers take a hand grip in normal flight.
- Performers show total separation and then Performer B transitions over Performer A to the other side and then transitions back under Performer A to the original starting position.

- Performers take a hand grip in normal flight.

#### **Sequence D: Roll Over**

- Performers are in normal flight with a hand grip.
- Performers show total separation and then Performer A performs a barrel rollover Performer B to the other side.
- Performers take a hand grip in normal flight.
- Performers show total separation and then Performer B performs a barrel roll over Performer A to the other side.
- Performers take a hand grip in normal flight.

#### **Sequence E: Fruity Loops**

- Performers are in normal flight with a hand grip.
- Performers show total separation and then Performer A performs a front loop.
- Performers take a hand grip in normal flight.
- Performers show total separation and then Performer B performs a front loop.
- Performers take a hand grip in normal flight.

#### **Sequence F: Duck and Roll**

- Performers are in normal flight with a hand grip.
- Performers show total separation and then Performer A performs a barrel roll under Performer B to the other side.
- Performers take a hand grip in normal flight.
- Performers show total separation and then Performer B performs a barrel roll under Performer A to the other side.
- Performers take a hand grip in normal flight.

#### **Sequence G: Déjà vu**

- Performers are in normal flight with a hand grip.
- Performers show total separation and then Performer A transitions over Performer B to the other side.
- Performers take a hand grip in normal flight.
- Performers show total separation and then Performer A transitions over Performer B back to the other side.
- Performers take a hand grip in normal flight.
- Performers show total separation and then Performer B transitions over Performer A to the other side.
- Performers take a hand grip in normal flight.
- Performers show total separation and then Performer B transitions over Performer A back to the other side.
- Performers take a hand grip in normal flight.



### **Sequence H: Yin Yang**

- Performers are in normal flight with a hand grip.
- Performers show total separation and then Performer A transitions to inverted flight.
- Performers take a hand grip in mixed orientation.
- Performers show total separation and then Performer A transitions to normal flight.
- Performers take a hand grip in normal flight.
- Performers show total separation and then Performer B transitions to inverted flight.
- Performers take a hand grip in mixed orientation.
- Performers show total separation and then Performer B transitions to normal flight.
- Performers take a hand grip in normal flight.

### **Sequence I: Back to Back**

- Performers are in normal flight with a hand grip.
- Performers show total separation and then both transition to inverted flight.
- Performers take a hand grip in inverted flight.
- Performers show total separation and then both transition to normal flight.
- Performers take a hand grip in normal flight.

### **Sequence J: Pancakes**

- Performers are in normal flight with a hand grip.
- Performers show total separation and then Performer A transitions to inverted flight over Performer B to the other side.
- Performers take a hand grip in mixed orientation.
- Performers show total separation and then Performer A transitions to normal flight over Performer B to the other side.
- Performers take a hand grip in normal flight.
- Performers show total separation and then Performer B transitions to inverted flight over Performer A to the other side.
- Performers take a hand grip in mixed orientation.
- Performers show total separation and then Performer B transitions to normal flight over Performer A to the other side.
- Performers take a hand grip in normal flight

### **Sequence K: Reversed Pancakes**

- Performers are in normal flight with a hand grip.
- Performers show total separation and then Performer A transitions to inverted flight under Performer B to the other side.
- Performers take a hand grip in mixed orientation.
- Performers show total separation and then Performer A transitions to normal flight under Performer B to the other side.
- Performers take a hand grip in normal flight.

- Performers show total separation and then Performer B transitions to inverted flight under Performer A to the other side.
- Performers take a hand grip in mixed orientation.
- Performers show total separation and then Performer B transitions to normal flight under Performer A to the other side.
- Performers take a hand grip in normal flight.

**Sequence L: Hand 2 foot**

- Performers are in normal flight with a hand grip.
- Performers show total separation and then Performer A takes a foot grip on Performer B in normal flight.
- Performers show total separation and take a hand grip in normal flight.
- Performers show total separation and then Performer B takes a foot grip on Performer A in normal flight.
- Performers show total separation and take a hand grip in normal flight

**Sequence M: Reversed Hand 2 Foot**

- Performers are in normal flight with a hand grip
- Performers show total separation and then Performer A takes a foot grip on Performer B in backfly
- Performers show total separation and take a hand grip in normal flight
- Performers show total separation and then Performer B takes a foot grip on Performer A in backfly