THE INTERNATIONAL BODYFLIGHT ASSOCIATION

Competition Rules

Formation

Indoor Skydiving

2-way
International Bodyflight Association
6200 Bridgepoint Parkway, Bldg 4 Suite 400, Austin TX 78730, USA

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The IBA would like to thank the International Parachuting Commission (IPC) for granting permission to adapt the IPC competition rules.

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**QUICK GUIDE**

It is the team’s responsibility to present start of working time, scoring formations, and total separations in order to be properly scored. [ref 4.1.2]

The Draw will be done via the IBA Draw Generator or approved judging software and announced at least 30 minutes before the start of competition. [ref 4.4]

Competitions consist of 6 rounds. Each round will consist of exactly 2-3 possible formations for Intermediate and 3-4 possible formations for Advanced. [ref 4.4.3]

No ‘fun’ or practice flights are allowed after the release of the official draw. [ref 4.5]

For each round, time on the clock is 1 minute and formations are scored within a working time window of 35 seconds. Working time begins when first grip is broken. [ref 4.6.1]

Every team receives an official practice flight before the start of round 1 in order to determine their appropriate speed setting. Taking grips during the practice flight is grounds for disqualification from the competition. [ref 4.6.3]

A minimum of one (1), but recommendation of three (3), official judge(s) is required. Judging can either be live or through video recording. [ref 5.1]

1 **INTRODUCTION**

1.1 **THE IBA AUTHORITY**

The competition will be conducted under the authority granted by the IBA, per the regulations of the IBA and these rules. All participants accept these rules and the IBA regulations as binding by registering in the competition.

1.2 **OBJECTIVE OF THE EVENT**

The objective of the event is for each team to complete as many scoring formations as possible within the scoring time, while correctly following the sequence for the round. The accumulated total of all rounds completed is used to determine the placing of the teams. The team with the highest number of points will be declared the champions.

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

2.1 **FORMATION**

A formation consists of flyers linked by grips.
2.2 **Grip**
A grip consists of a handhold on an arm or leg of another flyer. At a minimum, a grip requires stationary contact.

2.3 **Body**
The body consists of the entire competitor and his or her equipment.

2.4 **Dive Pool**
The dive pool consists of the random formations and block sequences depicted in the addenda of these rules.

2.5 **Total Separation**
Total separation occurs when all competitors show at one point in time they have released all their grips and no part of their arms has contact with another body. Total separation is required between whole blocks, between random formations, and between whole blocks and random formations.

2.6 **Inter**
An inter is an intermediate requirement within a block sequence which must be performed as depicted in the dive pools.

2.7 **Sequence**
The sequence is the series of random formations and block sequences which are designated to be performed in a flight.

2.8 **Scoring Formation**
A scoring formation is one which is correctly completed and clearly presented either as a random formation or within a block sequence as depicted in the dive pool, and which, apart from the first formation after entry, must be preceded by a correctly completed and clearly presented total separation as appropriate.

2.9 **Infringement**
Infringement is one of the following:
1. An incorrect or incomplete formation which is followed within working time by either
   • A total separation or,
   • An inter, whether correct or not.
2. A correctly completed formation preceded by an incorrect inter or incorrect total separation.
3. A formation, inter, or total separation not clearly presented.
2.10 OMISSION

An omission is one of the following:
1. A formation or inter missing from the drawn sequence.
2. No clear intent to build the correct formation or inter is seen and another formation or inter is presented and there is an advantage to the team resulting from the substitution.

2.11 FLIGHT TIME

Flight time is the period of time, as specified in 4.7, during which a team performs one round.

2.12 WORKING TIME

Working time is the period of time within the flight time during which a team is scored and terminates a number of seconds later, as specified in 4.7.

3 SAFETY

All competitors must, at minimum, be signed off as a Flyer Level 1 and be able to participate safely in 2-way tunnel flying (previous experience of flying 2-way formations is advised prior to competition).

Minimum flying ability would require each individual to be able to show control when moving forwards and backwards, slow and fast fall, side sliding and turning, remembering that they are sharing the tunnel space with two other people.

For safety reasons, if an individual flyer demonstrates unsafe or less than the minimum flying skills expected, he or she might be disqualified during the event.

Questions regarding your suitability for this competition contact the event organizer or communicate with your wind tunnel coach.
4 GENERAL RULES

4.1 PERFORMANCE REQUIREMENTS

4.1.1 Each round consists of a sequence of formations depicted in the dive pools of the appropriate addendum, as determined by the draw.

4.1.2 It is the responsibility of the team to clearly present the start of working time, correct scoring formations and total separations to the judges. Judges are asked to do their best to look for points but it is ultimately the competitors’ responsibility to show the points to the judges.

4.1.3 Scoring formations need not be perfectly symmetrical, but they must be performed in a controlled manner.

4.1.4 Mirror images of random formations and whole block sequences are permitted.

4.1.5 In sequences, total separation is required between block sequences, between random formations, and between block sequences and random formations.

4.1.6 Where degrees are shown (180°, 360° etc.) this indicates the approximate degrees and direction of turn required to complete the block as intended. The degrees shown are approximately that amount of the circumference of the subgroup’s centerpoint to be presented to the centerpoint(s) of the other subgroup(s). For judging purposes, the approximate degrees and direction of turn of subgroups centerpoints will be assessed using only the two-dimensional video evidence as presented.

4.1.7 Assisting handholds on other bodies in a scoring formation are not permitted.

4.1.8 Coaches and Instructors are to never touch the competitors inside the wind tunnel other than to spot a potentially dangerous situation.

4.1.9 Minimum time between rounds shall be no less than ten (10) minutes.

4.2 COMPOSITION OF TEAMS

4.2.1 Teams competing in a 2-way event can be determined either by the team members Pre-registering together or via a Scrambles method.

4.2.1.1 Competitions can be composed of teams of one or both types.

4.2.1.2 For a Scrambles event, the event organizer will pair up participants during the competition briefing, based on fall rate and skill level of flyers.

4.2.1.3 For a Pre-registered event, a pre-determined team consisting of two (2) flyers will register and participate. Changes to the team member line-up are allowed prior to the start of competition round one (1).

4.2.2 No judge bias or handicap will exist between teams of either category.
4.3 **FLIGHT ORDER**

4.3.1 The flight order for the competition will be determined by a draw prior to the start of the competition.

4.4 **THE DRAW**

4.4.1 The draw of the sequences will be done via the IBA Draw Generator on tunneelflight.com, or by use of an approved judging software, and announced publicly to all participants.

4.4.2 Teams will be given no less than 30 minutes' knowledge of the results of the draw before the start of competition round one (1).

4.4.3 For each round, a standard number of formations are drawn, as determined by class:

4.4.3.1 For Intermediate class: 2 to 3 possible points

4.4.3.2 For Advanced class: 3 to 4 possible points

4.5 **USE OF SKYDIVING AND TUNNEL**

4.5.1 Competitors are not allowed to skydive (freefall from an aircraft) nor use the wind tunnel for training after the draw has been made.

4.6 **ROUNDS**

4.6.1 All competition rounds consist of a series of 2-way formations to be flown against the clock with flight time lasting no more than one (1) minute and a working time of 35 seconds.

4.6.2 Each team will receive one (1) official practice flight prior to competition round one.

4.6.3 In the official practice flight - the nominated team captain shall communicate with the tunnel instructor to request the speed to be increased, reduced or to confirm that it is ok. The speed reached will be used as the default speed for the team. The tunnel driver shall select the default speed for each team prior to that team entering the tunnel. If no signals are given, then the default speed is assumed by the tunnel driver to be satisfactory.

4.6.3.1 No grips of any kind are to be taken between team members during the official practice flight.

4.6.4 A minimum of three (3) rounds constitutes a competition wherein a winner can be determined.

4.6.5 Total number of rounds is determined by event organizer and released no less than sixty (60) days prior to the competition.
4.7 Working Time

4.7.1 The driver will apply the proper speed setting for each team. When set, the driver will signal the instructor that the airspeed is correct for that team. The driver will then place flight time of 1 minute on the clock and the instructor will allow the team to enter.

4.7.2 Working time of 35 seconds will commence based on class:

4.7.2.1 For Intermediate: The team is to build a 2-way Star formation prior to beginning the planned sequence for that round. If the draw calls for the first point of a round to be a Star, the Star formation will be moved from the beginning to the end of the sequence. Working time will commence once the first grip is broken.

4.7.2.2 For Advanced: Teams must perform door entrances. Working time will commence when both of a team member’s feet leave the antechamber floor and enter the wind. Competitors can be leaning into the wind with one foot inside the tunnel without the clock starting as long as one foot is still on the floor of the antechamber.

4.7.3 The chronometer will be operated by the person appointed by the chief judge and/or event organizer.

4.7.4 If any team does not complete their working time within the allocated 60 seconds, the score will be restricted to the points achieved in the remaining time.

4.7.5 It is the responsibility of the team to clearly present the start of scoring time, correct scoring formations, inters and total separations to the judges. Judges are asked to do their best to look for points but it is ultimately the competitors’ responsibility to show the points to the judges.

4.8 Video Recording

4.8.1 Video evidence is required for each flight.

4.8.2 For the purpose of these rules, "video equipment" refers to the equipment installed by the hosting wind tunnel or by the event organizer specifically for the competition. No other video is allowed for judging.

4.8.3 Video is to come from either a top-down or net-mounted camera wherein the entirety of the flight chamber is in view.

4.8.4 Camera must record all video in high definition 1080 with 25 frames per second.

4.8.5 A video controller will be appointed by the chief judge prior to the start of the judges’ conference. The video controller is responsible for the functionality of the video equipment to ensure it is usable for the competition.
4.8.6 A video review panel will be established prior to the start of the official training flights, consisting of the chief judge and the IBA controller. Decisions rendered by the video review panel shall be final and shall not be subject to protest or review by the jury.

4.8.7 If the video review panel determines that the video equipment has been deliberately tampered with, the team will receive no points for all competition rounds involved with this tampering.

5 JUDGING

5.1 JUDGE REQUIREMENTS

5.1.1 A judging panel of three (3) judges is recommended, with a minimum of one (1) judge to evaluate each team's performance.

5.1.2 Judging shall be undertaken either live or through video recording. The video review panel will determine which method is to be used prior to the start of competition and all teams must be judged using the same method.

5.1.3 Live judging will be undertaken on the flight deck with full view of the flight chamber.

5.1.4 Judging from video recording must be undertaken using approved cameras as established in 4.8.3. Judging from video recording can occur in real time.

5.1.4.1 Judges will watch the video evidence of each flight once at normal speed to determine points in time.

5.1.5 If a video review is needed by a team being judged either live or from video recording, there is a maximum of three viewings with slow motion review allowed. If, after the viewings are completed, and within fifteen seconds of the knowledge of the result, the chief judge, event judge or any judge on the panel considers that an absolutely incorrect assessment has occurred, the chief judge or event judge will direct that only that part(s) of the flight in question be reviewed. If the review results in a unanimous decision by the judges on the part(s) of the performance in question, the score for the flight will be adjusted accordingly. Only one review is permitted for each flight.

5.1.6 Judges shall have previous experience in competing and coaching FS events, or be currently certified to judge at the FAI level or National in VFS events, and who are acceptable to the meet director.

5.2 SCORING

5.2.1 A team will score one point for each scoring formation performed in the sequence within the allotted working time of each round. Teams may continue scoring by continually repeating the sequence.
5.2.2 For each omission one point will be deducted. If both the inter and the second formation in a block sequence are omitted, this will be considered as only one omission.

5.2.3 If an infringement in the scoring formation of a block sequence is carried into the inter, this will be considered as one infringement only, provided that the intent of the inter requirements for the next formation is clearly presented and no other infringement occurs in the inter.

5.2.4 The minimum score for any round is zero (0) points.

5.3 RE-FLIGHTS

5.3.1 In a situation where the video evidence will be considered insufficient for judging purposes, and the video review panel will assess the conditions and circumstances surrounding that occurrence. In this case a re-flight will be given unless the video review panel determines that there has been an intentional abuse of the rules by the team, in which case no re-flight will be granted and the team’s score for that flight will be zero (0).

5.3.2 Contact or other means of interference between competitors in a team and the flight-chamber shall not be grounds for the team to request a re-flight.

5.3.3 Problems with a competitor’s equipment shall not be grounds for the team to request a re-flight.

5.4 TIES

5.4.1 If two or more teams have equal total scores, the following order of procedures will be applied until the first three placings are determined:

5.4.1.1 One tie-break round: The tie-break round will be the next drawn round of the competition, or if all scheduled rounds are complete, one additional round drawn by the Chief Judge.

5.4.1.2 The highest score in any given completed round.

5.4.1.3 The fastest time (measured to hundredths of a second) to the last common scoring formation in the last completed round.
ADDENDUM A - Definition of Symbols

- Indicates direction of turn by a sub-group.

- Indicates turn by sub-group in either direction.

- Any side body link-up requires an arm grip and a leg grip on the same person.

- Colors indicate clarification of intent for blocks 3, 6, 7, 8, 9, 10, 11, 12, 14, 15 only.

- Indicates approximate degrees of turn to show intent of the transition maneuver.

Visualization of definitions of “Arm”, “Leg” and “Foot” for grip positioning.

Foot (on or below the ankle bone)
ADDENDUM B - 2-Way FS Random Formations Dive Pool

A. Caterpillar
B. Star
C. Compressed Accordion
D. Side Body
ADDENDUM C - 2-Way FS Block Sequences Dive Pool

1. Compressed Accordion
   - 180°
   - 180°
   - Inter

2. Compressed Accordion
   - 360°
   - Inter

3. Caterpillar
   - Inter

4. Opposed Stairstep
   - 360°
   - Inter

5. Compressed Accordion
   - Inter

6. Stairstep
   - Inter

7. Sidebody
   - 90°
   - 270°
   - Inter

8. Star
   - 180°
   - Inter

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ADDENDUM C - 2-Way FS Block Sequences Dive Pool

9
Sidebody

10
Caterpillar

11
Opposed Stairstep

12
Stairstep

9

10

11

12

Sidebody

Star

Stairstep

Skew

13

14

15

13

14

15

Line

Skew

Caterpillar

Line

Stairstep

Sidebody