



International BodyFlight Association

Competition Rules

2-Way Vertical Formation Indoor Skydiving

*2016 Edition
Effective 01 January 2016*

International BodyFlight Association
6034 West Courtyard Drive, Suite 135, Austin TX 78730, USA

Copyright ©2016

All rights reserved. Copyright in this document is owned by the International BodyFlight Association (IBA). Any person acting on behalf of the IBA or one of its Members is hereby authorized to copy, print, and distribute this document, subject to the following conditions:

- 1. The document may be used for information only and may not be exploited for commercial purposes.**
- 2. Any copy of this document or portion thereof must include this copyright notice.**

Note that any product, process or technology described in the document may be the subject of other Intellectual Property rights reserved by the International BodyFlight Association or other entities and is not licensed hereunder.

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

TABLE OF CONTENTS

QUICK GUIDE	4
1 INTRODUCTION	5
1.1 The IBA Authority	5
1.2 Objective of the Event	5
2 DEFINITIONS OF WORDS AND PHRASES	5
3 GENERAL RULES	8
3.1 Performance Requirements and Classes	8
3.2 Flight Order	9
3.3 The Draw	9
3.4 Use of Skydiving and Tunnel	9
3.5 Rounds	10
3.6 Working Time	10
3.7 Video Recording	11
4 JUDGING	11
4.1 Judge Requirements	11
4.2 Scoring	12
4.3 Evaluation	12
4.4 Re-flights	13
4.5 Ties	13
ADDENDUM A: Dive Pool Description	14

Quick Guide

Time on the clock is 1 minute and formations are scored within a working time window of 35 seconds. Working time begins based on class: For Rookie and Intermediate when both feet of a team member leave the net and for Advanced and Open when both feet of a team member leave the floor of the antechamber and enter the wind. [ref 3.6.1]

Grips consist of a handhold on an arm or leg or foot of another flyer while a dock does not require a handhold, for example “foot to foot” or “foot to shoulder.” Both grips and docks require stationary contact. [ref 2.2]

Description of classes [ref 3.1.5, 3.3]

- *Rookie* - All members must be signed off to back-fly and make IBA Level II transitions. Each round contains 3-4 possible points.
- *Intermediate* - All members must be signed off to sit-fly and make IBA Static Level III transitions. Each round contains 3-4 possible points.
- *Advanced* – At least one member must be signed off to fly head-down and make IBA Static Level IV transitions. The other member must be checked off to sit-fly and make IBA Static Level III transitions. Each round contains 4-5 possible points.
- *Open* - All members must be signed off to fly head-down and make IBA Static Level IV transitions. Each round contains 5-6 possible points.

No ‘fun’ or practice flights are allowed after the release of the official draw. [ref 3.4.1]

Every team receives an official practice round before the start of round 1 in order to determine their appropriate speed setting. Taking grips during the practice round is grounds for disqualification from the competition. [ref 3.5.2]

A minimum of one official judge is required. Judging can either be live or through video recording. [ref 4.1]

1 Introduction

1.1 The IBA Authority

The competition will be conducted under the authority granted by the IBA, according to 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.

2 Definitions of Words and Phrases Used in These Rules

2.1 Formation

A formation consists of flyers linked by grips in the correct orientation.

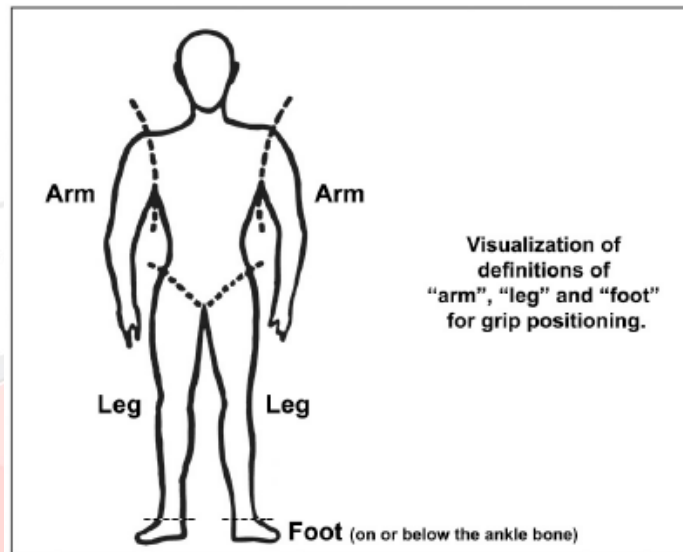
2.2 Grips and Docks

Grips consist of a handhold on an arm or leg or foot of another flyer while a dock does not require a handhold, for example “foot to foot” or “foot to shoulder.” Both grips and docks require stationary contact.

Grips can be taken and docks can be placed on specified body parts, as follows:

- Head: the part of the body above the neck.
- Shoulder: the upper part of the body between the neck the upper arm. The shoulder blade is excluded.
- Torso: the body, including the shoulder, but excluding arms, legs, head and neck.
- Arm: the whole arm, including the upper arm, lower arm, wrist and hand. The shoulder is excluded.
- Upper arm: the part of the arm between the shoulder and the elbow
- Lower arm: the part of the arm between the elbow and the wrist. The elbow is excluded.
- Hand: from the wrist to the fingers tips.
- Leg: the whole leg, including the upper leg, knee, lower leg and foot.
- Upper leg: the part of the leg between the hip and the knee.
- Lower leg: the part of the leg between the knee and the ankle.

- Foot: from the ankle to the toes. The ankle is excluded.
- Sole: that part of the foot on which a person stands.



Orientations

- “Relative wind” is defined as the direction from which the air appears to be coming due to the relative speed of the competitors in flight.
- “Head-down” orientation consists of the competitor’s head having advanced further into the relative wind than the competitor’s feet by a significant amount, i.e., the length of the competitor’s torso. All distances and lengths are in terms of what is shown on the judging screen.
- “Upright” orientation consists of the competitor’s head trailing behind the average position of the competitor’s feet by more than the length of the competitor’s torso. All distances and lengths are in terms of what is shown on the judging screen.
- “Belly-flying” or “Belly-to-Earth” orientation consists of the competitor’s chest region facing the relative wind and the competitor’s head being neither above nor below the average position of the competitor’s feet by more than the length of the competitor’s torso. All distances and lengths are in terms of what is shown on the judging screen.
- “Back-flying” orientation consists of the competitor’s back region facing the relative wind and the competitor’s head being neither above nor below the average position of the competitor’s feet by more than the length of the competitor’s torso. All distances and lengths are in terms of what is shown on the judging screen.

2.3 Grip Line

This is the line linking the torsos of two competitors via their arms or legs and the grip that joins them.

2.4 Body

The body refers to the entire competitor and his or her equipment.

2.5 Dive Pool

The dive pool consists of the random formations and block sequences depicted in the addenda to these rules.

2.6 Total Separation

Total separation is achieved when all competitors show at one point in time they have released all their grips and no part of their body has contact with another body.

2.7 Sequence

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

2.8 Scoring Formation

A scoring formation that 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 or inter, as appropriate.

2.9 Infringement

An 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 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.

3 General Rules

3.1 Performance Requirements and Classes

- 3.1.1 Each round consists of a sequence of formations depicted in the dive pools of the appropriate addendum, as determined by the draw.
- 3.1.2 It is the responsibility of the team to clearly present the start of working 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.
- 3.1.3 Scoring formations need not be presented perfectly symmetrically, but they must be presented in a controlled manner. A hand slap is not a controlled grip and will result in a non scorable formation.
- 3.1.4 Mirror images of random formations and whole block sequences are permitted.
- 3.1.5 Requirements for flying ability are as follows:
 - 3.1.5.1 *Rookie* - All members must be signed off to back-fly and make IBA Level II transitions.
 - 3.1.5.2 *Intermediate* - All members must be signed off to sit-fly and make IBA Static Level III transitions.
 - 3.1.5.3 *Advanced* – At least one member must be signed off to fly head-down and make IBA Static Level IV transitions. The other member must be checked off to sit-fly and make IBA Static Level III transitions.
 - 3.1.5.4 *Open* - All members must be signed off to fly head-down and make IBA Static Level IV transitions.
- 3.1.6 IBA Transitions, as defined by the IBA Flight Chart, are:
 - 3.1.6.1 *Static Level II*: Belly to Back Barrell Roll, Back to Belly Barrell Roll, Full Barrell Roll, Belly to Back Back Flip, and Back to Belly Front Flip.
 - 3.1.6.2 *Static Level III*: Back to Sit Transition
 - 3.1.6.3 *Static Level IV*: Head to Sit Front Flip, Sit to Head Front Flip, Sit to Head Back Flip, Head to Sit Back Flip
- 3.1.7 Minimum time between rounds shall be no less than five minutes.

3.2 Flight Order

- 3.2.1 The flight order for the competition will be determined by a draw during the competition brief.

3.3 The Draw

- 3.3.1 The draw of the sequence will be done via the IBA Draw Generator on tunnelflight.com and announced publicly to all participants.
- 3.3.2 Teams will be given not less than 30 minutes knowledge of the results of the draw before the competition starts.

3.3.3 *Rookie Class*

- 3.3.3.1 All rounds will be drawn from the Belly/Back dive pool.

3.3.4 *Intermediate Class*

- 3.3.4.1 The first two rounds will be drawn from the Belly/Back dive pool and the remaining rounds will be drawn from the Head-Up dive pool, excluding HU-03.

3.3.5 *Advanced Class*

- 3.3.5.1 Only one person will ever be head-down for Advanced.
- 3.3.5.2 The first two rounds will be drawn from the Belly/Back dive pool and the remaining rounds will be drawn from the Head-Up and Head-Down dive pools, excluding those marked only as Open.

3.3.6 *Open Class*

- 3.3.6.1 Both flyers are signed off as Level 4 flyers and can safely fly together in a head-down orientation.
 - 3.3.6.2 The first two rounds will be drawn from the Belly/Back dive pool and the remaining rounds will be drawn from the Head-Up and Head-Down dive pools, with no exclusions.
- 3.3.7 For each round, a standard number of formations are drawn, as determined by class:
 - 3.3.7.1 For *Rookie and Intermediate class*: 3 to 4 possible points
 - 3.3.7.2 For *Advanced class*: 4 to 5 possible points
 - 3.3.7.3 For *Open class*: 5 to 6 possible points

3.4 Use of Skydiving and Tunnel

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

3.5 Rounds

- 3.5.1 All rounds consist of a series of 2-way formations to be flown against the clock with flight time lasting no more than 1 minute and a working time of 35 seconds.
- 3.5.2 Each team will receive one official practice round prior to round one.
- 3.5.3 The competition wind tunnel and configuration will be used for the official training flight.
- 3.5.4 In the Practice round - 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.
 - 3.5.4.1 No grips of any kind are to be taken between team members during the practice round.
- 3.5.5 A minimum of 3 rounds constitutes a competition wherein a winner can be determined.

3.6 Working Time

- 3.6.1 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.
- 3.6.2 Working time of 35 seconds will commence based on class:
 - 3.6.2.1 For *Rookie and Intermediate*: Teams begin their round from within the flight chamber. The clock will start when both of a team member's feet leave the net.
 - 3.6.2.2 For *Advanced and Open*: Teams must perform door entrances. The working time will start 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 working time starting as long as one foot is still on the floor of the antechamber.
- 3.6.3 The chronometer will be operated by the person appointed by the chief judge and/or event organizer.
- 3.6.4 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.
- 3.6.5 It is the responsibility of the team to clearly present the start of working 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.

3.7 Video Recording

- 3.7.1 Video evidence is required to judge each flight and to show the team's performance to third parties.
- 3.7.2 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.
- 3.7.3 Video is to come from a net-mounted camera wherein the entirety of the flight chamber is in view.
 - 3.7.3.1 A top-down view camera is recommended as a primary back-up and a side-view camera as the secondary back-up.
- 3.7.4 Camera must record all video in high definition 1080 with 25 frames per second.
- 3.7.5 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.
- 3.7.6 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.
- 3.7.7 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.

4 Judging

4.1 Judge Requirements

- 4.1.1 A minimum of one (1) judge must evaluate each team's performance.
- 4.1.2 Judging shall be undertaken live or using video evidence. The event organizer will determine which method is to be used prior to the start of competition and all teams must be judged using the same method.
- 4.1.3 Live judging will be undertaken on the flight deck with full view of the flight chamber.
- 4.1.4 Judging from video recording must be undertaken using approved cameras from a net-mount camera view.
 - 4.1.4.1 Judges will watch the video evidence of each flight once at normal speed to determine points in time.
- 4.1.5 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.

4.1.6 Judges shall have previous experience competing and coaching VFS events.

4.2 Scoring

4.2.1 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.

4.2.2 Each random correctly performed within the allotted working time will receive one (1) point. Each block correctly performed within the allotted working time will receive two (2) points.

4.2.3 For each omission three (3) points 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.

4.2.4 Any incorrectly performed or non-judgeable Random will result in zero (0) points. Any random performed while either competitor is touching the net will result in zero (0) points.

4.2.5 Any incorrectly performed or non-judgeable Block will result in zero (0) points. If the top or bottom of a block is performed incorrectly, but the rest is performed correctly the team will receive one (1) point for the portion performed correctly. If the inter is performed incorrectly the team will not receive a point for the bottom of the block. Touching the net during any portion of the block will result in a zero (0) for that portion of the block.

4.2.6 Total separation is required between Blocks and Random formations. Failure to meet the requirement of total separation will result in an incorrectly performed formation. If the formation is a Random, the team will get a zero (0) for the formation. If the formation is a Block, the team will not get a point for the top of the block.

4.2.7 The minimum number of points for any round is zero (0) points.

4.3 Evaluation

4.3.1 If required by the event organizer, the judges will use an electronic scoring system to record their evaluation of the performance. At the end of the scoring time, freeze-frame will be applied on each viewing, based on the timing taken from the first viewing only. The judges may correct their evaluation record after the flight has been judged. Corrections to the evaluation record can only be made before the chief judge signs the score sheet. All individual judge's evaluations will be published.

4.4 Re-flights

- 4.4.1 In a situation where the video evidence will be considered insufficient for judging purposes, the video review panel will assess the conditions and circumstances surrounding the 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).
- 4.4.2 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.
- 4.4.3 Problems with a competitor's equipment shall not be grounds for the team to request a re-flight.

4.5 Ties

- 4.5.1 If two or more teams have equal scores, the following order of procedures will be applied until the first three placings are determined:
 - 4.5.1.1 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.
 - 4.5.1.2 The highest score in any completed round.
 - 4.5.1.3 The fastest time (measured to hundredths of a second) to the last common scoring formation in the last completed round.

ADDENDUM A

2-Way Vertical Formation Indoor Skydiving Dive Pool

NOTE: When docking (facing each other and in the same orientation), a cross grip is actually the same side of the body, and a mirror image grip is the opposite.

- Same: The same docking side on both performers (right-to-right / left-to-left).
- Opposite: The opposite docking side on both performers (right-to-left / left-to-right).

Belly/Back Orientation

Randoms – As Annotated by Letters

BB-A Belly Star (formerly BB-01)

Both performers are on their bellies. The performers have a grip on both of the other's opposite arm.

BB-B Back Star (formerly BB-02)

Both performers are on their backs. The performers have a grip on both of the other's opposite arm.

BB-C Belly Closed Accordion (formerly BB-03)

Both performers are on their bellies. Each performer has a single-handed grip on the other's same leg.

BB-D Mixed Closed Accordion (formerly BB-04)

One performer is on his or her belly, the other on his or her back. Each performer has a single-handed grip on the other's opposite leg.

BB-E Back Open Accordion (formerly BB-05)

Both performers are on their backs. A grip is taken on the other's same arm.

BB-F Mixed Open Accordion (formerly BB-06)

One performer is on his or her belly, the other on his or her back. A grip is taken on the other's opposite arm.

BB-G Back Side Body (formerly BB-07)

Both performers are on their backs. One performer has a double-handed grip on the other's arm and leg (arm and leg must be on the same side of the body).

BB-H Mixed Side Body (formerly BB-08)

One performer is on his or her belly, the other on his or her back. One performer has a double-handed grip on the other's arm and leg (arm and leg must be on the same side of the body).

BB-J Back Cat (formerly BB-09)

Both performers are on their backs. One performer has a double-handed grip on the other's same leg.

BB-K Mixed Cat (formerly BB-10)

One performer is on his or her belly, the other on his or her back. One performer has a double-handed grip on the other's opposite leg.

BB-L Back Stair Step (formerly BB-11)

Both performers are on their backs. One performer has a single-handed grip on the other's opposite leg (right-to-left or left-to-right).

Blocks – As Annotated by Numbers

BB-01 Back Grip 360 Grip (formerly BB-12)

A Back Open Accordion (BB-E) is performed and released. Each performer then performs a 360° turn relative to the other performer followed by a repeat of the original Back Open Accordion (BB-E).

BB-02 Back Grip Over/Under Grip (formerly BB-13)

A Back Open Accordion (BB-E) is performed and released. Performer A's body goes over performer B's body, then performer B's body goes over performer A's body followed by a repeat of the original Back Open Accordion.

Head-Up Orientation

Randoms – As Annotated by Letters

HU-A Single Grip (formerly HU-01)

A grip is taken on the other's opposite arm

HU-B In-Facing Double Grip (formerly HU-02)

Performers have a grip on each of the other's opposite arms

HU-C Out-Facing Double Grip (formerly HU-03)

Performers have a grip on each of the other's opposite arm.

HU-D Hand-to-Foot (formerly HU-04)

One performer has a single-handed grip on the other's opposite foot.

HU-E Hands-to-Feet (formerly HU-05)

One performer has a double-handed grip on each of the other's opposite feet.

HU-F Feet-to-Knees (formerly HU-06)

One performer has a double-footed dock on each of the other's opposite upper legs.

HU-G Totem (formerly HU-07)

Both performers face the same direction. One performer has a double-footed dock on each of the other's same shoulders.

HU-H Foot-to-Foot (formerly HU-08)

Each performer has a single-footed dock with the other's same foot.

HU-J Double Spock (formerly HU-09)

Each performer has a single-handed grip on the top of the other's head.

Blocks – As Annotated by Numbers

HU-01 Grip 360 Grip (formerly HU-10)

A grip is taken on the other's same arm. Each performer then performs a 360° turn relative to the other performer followed by a repeat of the original grip.

HU-02 Grip Carve Grip (formerly HU-11)

A grip is taken on the other's same arm. Performer A maintains heading (within 10° relative to the tunnel), while Performer B does a 360° carve around Performer A, followed by a repeat of the original grip.

HU-03 Grip Flip Grip (formerly HU-12)

A grip is taken on the other's same arm. Each performer does a front flip or back flip, followed by a repeat of the original grip.

HU-04 Grip Over/Under Grip (formerly HU-13)

A grip is taken on the other's same arm. Performer A's body goes over Performer B's body, then Performer B's body goes over Performer A's body while both performers maintain the same heading (within 30° relative to the tunnel), followed by a repeat of the original grip.

Mixed Head-Up and Head-Down Orientation

Randoms – As Annotated by Letters

HD-A Joker (ADV / OPEN) (formerly HD-01)

One performer is head-up, the other head-down. A grip is taken on the other's opposite arm.

HD-B In-Facing Double Grip (OPEN) (formerly HD-01)

Both performers are head-down. While facing each other, a grip is taken on each of the other's opposite arm.

HD-C Mixed In-Facing Double Grip (ADV / OPEN) (formerly HD-03)

One performer is head-up, the other head-down. While facing each other, a grip is taken on each of the other's same arm.

HD-D Out-Facing Double Grip (OPEN) (formerly HD-04)

Both performers are head-down. While facing away from each other, a grip is taken on each of the other's opposite arm.

HD-E Mind Warp (ADV / OPEN) (formerly HD-05)

One performer is head-up, the other head-down. The head-up performer has a double-handed grip on the head-down performer's head.

HD-F Double Spock (ADV / OPEN) (formerly HD-06)

One performer is head-up, the other is head-down. Each performer has a single-handed grip on the other's head.

HD-G Sole-to-Sole (ADV / OPEN) (formerly HD-07)

One performer is head-up, the other head-down. Each performer has a single-footed dock with a sole on the other's same sole.

HD-H Stair Step (OPEN) (formerly HD-08)

Both performers are head-down. One performer performs a single-handed grip on the other's opposite leg.

HD-J Vertical Closed Accordion (ADV / OPEN) (formerly HD-09)

One performer is head-up, the other head-down. Each performer has a single-handed grip on the other's same leg.

HD-K Sixty-Nine (ADV / OPEN) (formerly HD-10)

One performer is head-up, the other head-down. The head-down performer has a double-handed grip on each of the other's same feet.

Blocks – As Annotated by Numbers

HD-01 Double Sixty-Nine (OPEN) (formerly HD-11)

A Sixty-Nine is performed (HD-K) and then the grips are released. The head-up performer transitions to head-down and the head-down performer transitions to head-up. Another Sixty-Nine is performed with both performers in the new orientation.

HD-02 Grip 360 Grip (OPEN) (formerly HD-12)

Both performers are head-down. A grip is taken on the other's same arm and then released. Each performer then performs a 360° turn relative to the other performer followed by a repeat of the original grip

HD-03 Grip Carve Grip (OPEN) (formerly HD-13)

Both performers are head-down. A grip is taken on the other's same arm. Performer A maintains heading (within 10° relative to the tunnel), while Performer B does a 360° carve around Performer A, followed by a repeat of the original grip.

HD-04 Grip Flip Grip (ADV / OPEN) (formerly HD-14)

One performer is head-up, the other head-down. A grip is taken on the other's same arm and then released. Each performer does a front flip or back flip, followed by a repeat of the original grip.

HD-05 Grip Half-Eagle Grip (OPEN) (formerly HD-15)

One performer is head-up, the other head-down. A grip is taken on the other's same arm and then released. The head-down performer goes under the head-up performer and does a half front-loop transition to head-up while the head-up performer goes over the head-down performer and does a half front-loop transition to head-down. The original grip is retaken with both performers in their new orientations.

HD-06 Grip Half-Cradle Grip (OPEN) (formerly HD-16)

One performer is head-up, the other head-down. A grip is taken on the other's same arm and then released. The head-up performer goes under the head-down performer and does a half back-loop transition to head-down while the head-down performer goes over the head-up performer and does a half back-loop transition to head-up. The original grip is retaken with both performers in their new orientations.