

The Wind Games 2019

Dynamic 2 Way Open

Information, Rules and Technical Conditions

1. Venue:

Windoor Realfly, Sector Aeroclub s/n, Empuriabrava, Spain 17487.

2. Category:

Dynamic Team Event (Two Performers).

The competition will consist of preliminary rounds to determine the classification of teams, followed by knock-outs comprising free and speed routines.

One Category: All entrants will compete in one open category

3. Competition Dates:

31 January, 1st and 2nd February 2019.

4. Schedule:

The competition will run concurrently with the FS Open, FS Female, VFS, Dynamic and Freestyle competitions, over three days with the awards ceremony and party taking place on the Saturday evening. Registration options include 10 minutes of training time for an additional payment, that can be used from 28th January to 31st January 2019.

5. Competition Prizes:

Details coming soon!

6. Definition of words and phrases used in the rules

6.1 A Dynamic 2-way (D2W) Team is composed of two (2) Performers. A Dynamic 4-way (D4W) Team is composed of four (4) Performers plus one (1) Alternate.

6.2 Body: a body consists of the entire Performer and his/her equipment.

6.3 Heading: the compass direction in which the front of the torso of the Performer faces.

6.4 Move: a change in body position, and/or a rotation around one or more of the three (3) body axes, or a static pose. See Addendum B.

6.5 Pattern: a movement sequence during which the Performers' bodies follow pathways, often with embedded moves or intermixing. 2.5.1 Compulsory Pattern: a Pattern with specific performance requirements. See Addenda A.

6.6 Sidelines (for Speed Routines): two (2) vertical lighted lines positioned on the transparent tunnel walls 180° opposite each other to describe a vertical plane that spans across the flight chamber. The Start Sideline is clockwise from the doorway (with respect to top view.)

6.7 Centreline: a vertical plane that spans across the centre of the flight chamber extending from one (1) vertical line positioned on the transparent tunnel wall 90° offset from the two (2) vertical lighted lines.

6.8 Ring (for Speed Routines): a horizontal line that crosses the centre of the flight chamber, two (2) metres above the cable floor, between the two (2) Sidelines.

6.8.1 Ring Plane (for Speed Routines): the plane parallel to the cable floor that spans across the entire flight chamber at the level of the Ring.

6.9 Anti-Chamber: area used by Teams as a waiting area for entrance into the flight chamber. This area is separated from public viewing areas and is the exclusive use for Teams on call.

6.10 Diffuser: that vertical part of the flight chamber above the transparent viewing section.

6.11 Flight: a Team's performance in the flight chamber.

6.12 Routine: a sequence of Moves or Patterns performed during the working time.

6.12.1 Speed Routine: a routine composed of three (3) randomly drawn Compulsory Patterns (one from each group, Snakes, Verticals and Mixers, in that order), repeated three (3) times, in the fastest time possible. The Speed Routine starts with a compulsory entrance and ends with a compulsory exit sequence.

6.12.2 Free Routine: a routine composed of Moves and/or Patterns chosen entirely by the Team.

6.13 Battle: two (2) Teams compete against each other performing either a Free Routine or a Speed Routine. One (1) Team wins each Battle. (Battles may consist of more than two Teams, as shown in Addenda E.)

6.14 Working Time: the period of time during which a Team may perform a routine during a flight. Performers will wait for a visual signal before entering the flight chamber.

6.14.1 Speed Routine Working Time starts when the first Performer crosses through the door's sensor beam and ends when the last Performer crosses through the door's sensor beam, completely exiting through the doorway of the flight chamber.

6.14.2 Sensor beam technology must be used to detect the start and end of Speed Routine Working Time.

6.14.3 Free Routine Working Time starts when both feet of any Performer leave either the antichamber floor, the cable floor, or any other pre-determined place in the flight chamber. • D2W Free Routine: Working Time is 60 seconds. • D4W Free Routine: Working Time is 90 seconds. At the end of the Free Routine working time,

a visual signal will be given and the Team will have 15 seconds to exit the flight chamber, if they have not already exited.

7. Eligibility

7.1 All members of teams should be experienced tunnel flyers.

7.2 All members of teams who are new to Windoor Realfly must have been fully briefed, signed a waiver and have flown in the Windoor Realfly tunnel before the start of the competition.

7.3 Team members may be of any nationality.

7.4 Team members may be of any gender.

7.5 One alternate per team may be nominated before the competition starts.

7.6 An individual may be a member of only one team per category, even if this is as an alternate.

7. How to Apply

7.1 Due to health and safety requirements (in terms of maximum building capacity), numbers of teams are limited. Attendance at the competition is therefore by application and invitation only.

7.2 The maximum number of teams is 80. (Divided amongst all categories and disciplines including FS, Dynamic, VFS and Freestyle).

7.3 Application forms should be completed by the team captain and sent to Windoor Realfly as part of the payment inscription process.

8. Fees

8.1 Entry fees must be paid at the time of application via the online payment form. Payment can be taken on a Credit or debit card. An application form that does not include the payment is not a recognized registration.

8.2 The early bird discounted entry fee is €495 (or 595€ with 10 mins official training time) per team before the 29th December 2018. The 10 mins training time must be used from 28th January to 31st January 2019. Lunch on the 31st Jan, 1st and 2rd of February is included as well as the end of competition prize giving and party. Breakfast and dinner is not included, but can be purchased separately.

8.3 From the 30th December 2018, the early bird discount will no longer apply and the price per team entry will be 595€ (or 695€ including 10 mins official training time) per team entry.

8.4 For individuals participating in more than one event, the first entry will be paid in full, and subsequent registrations in other categories will be subject to a discount of 20%. This discount will only be applied to individuals and will not be applied to the team as a whole, unless all team members are participating in more than one event.

8.6 The entry fee is not refundable unless the competition is cancelled by Windoor Realfly.

8.7 In the event of the competition being cancelled by Windoor Realfly the entry fee is the only refund that will be available. No compensation will be awarded to cover travel and/or accommodation expenses incurred by teams

9. Training Flights/Practice Time

9.1 Training flights may only take place prior to the start of the competition.

9.2 Official training sessions can take place from 28th January to 31st January 2019.

9.3 Additional Training time is available prior to the competition weekend at the discounted training rate of 595€ ph on a first come first served basis, extended opening hours will be in operation to allow teams the maximum opportunity to train. Special training rates will apply from 1st November 2018 to 31st January 2019.

10. Equipment

10.1 Each individual is responsible for supplying their own clothing and footwear.

10.2 Flight suits, helmets, goggles, elbow & knee pads and ear plugs may be supplied upon request on arrival, subject to availability.

10.3 Various items of kit may be available to buy from the Windoor Realfly shop.

10.4 Elbow and knee pads are not essential although advisable.

10.5 If your Weight Belts is deemed to be unsuitable you may be asked to wear it inside your flight suit.

11. Competition Officials

11.1 The competitors will be notified of the attending officials during the Competitors' Briefing.

12. Catering

12.1 Lunch will be provided on site at Windoor or Windoor Wave Club for all registered participants from 31 January to 2 February 2019 and is included in the registration fee. Breakfast and dinner are available on site for an additional cost. Lunch on additional days is also available at an additional cost.

12.2 Competitors are welcome to bring their own food, but only food purchased in the restaurant may be consumed on the top floor of the tunnel.

12.3 Alcohol is not permitted to those who are flying until the end of each flying day.

12.4 Competitors are not permitted to bring their own alcohol into the tunnel facility.

13. Entertainment

13.1 After the awards ceremony on Saturday February 2nd, there will be a party from 21.00.

14. Video

14.1 All flight sessions will be recorded using the scoring system. This will be backed up by a DVD recording

14.2 Rounds are recorded and judged from the overhead propeller camera.

14.3 Copies of flight sessions may be available at an extra cost after the competition has ended.

14.4 No camera or video equipment is allowed in the flight chamber or flight chamber waiting area unless Windoor Realfly has given written consent.

14.5 All entrants will, by entering the competition, be deemed to have agreed to be filmed and the resultant images shall be owned exclusively by Windoor Realfly; its agents or assigns.

15. General Rules

15.1 All participants accept these rules as binding by registering for the Windoor Realfly Wind Games 2019. No departure from these rules is permitted. For anything not specified in these rules competitors should refer to FAI rules.

15.2 Where an unforeseen change is felt necessary to ensure the smooth running of the competition, a meeting will be held between Chief Judge, Meet Director and competitors.

15.3 The team shall consist of 2 competitors including the team captain. One alternate may be nominated.

15.4 Competitors may only be members of one team per discipline including alternates.

15.5 Windoor Realfly reserves the right to amend or cancel the competition, rules and/or the prizes at their discretion. In the event of the competition being cancelled Windoor Realfly will not be liable for competitors travel costs.

15.6 There is only one doorway leading into the flight chamber. This is used for both entries and exits.

15.7 This information was correct at the time of going to print but may be subject to change.

16. Music

16.1. The content of the routine is chosen entirely by the Performer and executed with a musical track.

16.2 Working time starts when the competitor begins flying and terminates after 60 seconds. A competitor may start the music without a compulsory entrance to the tunnel, however, the routine will not be scored until the competitor is flying in the tunnel.

16.3 Throughout the entire routine, the wind tunnel speed must never be lower than 10% of the tunnel's output capacity.

16.4 Routine will be scored on technical difficulty, presentation and artistic interpretation.

16.5.1 Competitors will send a copy of their free routine **without music** at least 7 days prior to the start of the competition. This video must be sent in mp4 H264 format. It must be accompanied by a written version of the moves to be performed, a copy of this form can be found in **Addendum C This is known as the drama sheet.**

16.5.2 It is the responsibility of the performer to ensure that the video of the routine is of sufficient quality to show the judges the entire performance.

16.5.3 Judges will watch the routines prior to the start of the competition and award each competitor with a score for technical difficulty between 1 and 10.

16.5.4 Judges will award penalties if the routine performed in the actual competition does not include the same movements as those on the video provided.

16.6 During the competition, the judges will calculate scores for presentation and artistic merit and the Judges' scores will be input into the computer scoring system. These scores will then be combined with the technical score to achieve an overall score for the round for every competitor.

16.7.1 Every performer must provide the official version of their musical choice in MP3 format a minimum of 7 days prior to the start of the competition.

16.7.2 The final volume and quality of recorded music is the responsibility of the performer, the recording cut must be of sufficient quality and volume to be clearly heard. Windoor Realty recommends qualities above 192 kbps.

16.8 Competitors should be aware that the teams who devise different routines for each of the Free rounds may score higher than those who perform the same routine for each round.

17. The Draw

17.1 The draw of the Randoms on the morning of the start of the competition will be supervised by the Meet Director and Chief Judge.

17.2 The Randoms, will be placed into three containers. One container for Lines moves, one container for Mixer moves and so on. One Random will be drawn from each container, one at a time, without replacement.

17.3 The sequence for the compulsory draw will be 1 x Line , 1 x Mixer, 1 x Vertical.

17.4 Practice jumps or Wind tunnel time 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.

18. Video Recording

18.1 The competition will be recorded using the Windoor Realty tunnel cameras.

19. Judging

19 Judging and Scoring

19.1 General: Once any Performer has entered the flight chamber, the flight shall be evaluated and scored.

19.2 Scoring Free Routines:

19.2.1 Criteria for scoring Free Routines:

Technical Difficulty:

- New original Moves/Patterns are performed.
- Moves/Patterns performed require precision, e.g., head touching to head with no other grips.
- Technicality/complexity of Moves/Patterns performed, e.g., complex intermixing and/or embedded moves.
- Wind loading (tunnel speed setting used).
- Difficulty of moves and Patterns.
- See Addendum C. Execution:
- Full use of working time.
- Moves/Patterns are performed without crashing or loss of balance.
- Use of space in the tunnel. Variety:
- A variety of orientations is shown.
- A variety of Moves/Patterns are performed.
- Original Moves/Patterns and choreography.
- A variety of transitions between sequences is shown. Flow:
- Display of balance.
- Uniformity of body position: Efficient, clean positioning for appropriate power from the wind.
- Synchronisation.
- Rhythm.
- Body Form, visually appealing body position(s) are shown. Entertainment:
- Use of visual effect(s).
- Choreography; Story telling.
- Creativity.
- Excitement/Energy.

19.2.2 The Free Round of the Qualification Rounds will be evaluated as follows:

19.2.2.1 After watching all the free routines, the judges, by conference, taking into account the above criteria, will score the teams individually based on the technical and artistic scoring criteria.

19.2.2.2 The score determined for each team will be according to the rank of the group; and averaging all speed routine scores of the group with the same number of Teams in that rank, according to the ranking order of the Teams after the completion of the Qualification Rounds.

19.2.3 During the Tournament, at the completion of each Free Routine Battle of two (2) Teams, the Judges, taking into account the above criteria, determine the winning Team of the Battle.

19.3 Scoring Speed Routines: The score is based on the time, measured in thousandths of a second that the Team takes to perform the three (3) Compulsory Patterns, repeated three (3) times, as well as the Compulsory Entrance and the Compulsory Exit Sequence; plus penalty times for infringements and omitted Compulsory Patterns.

19.3.1 Infringements: Each incorrect, incomplete or non judgable Compulsory Pattern or compulsory exit sequence will lead to adding a penalty of five (5) seconds to the total time for the Speed Routine. See the Addenda A for performance and scoring requirements for the Compulsory Patterns and compulsory exit sequence.

19.3.2 The Performers become designated as P#1, P#2, P#3 and P#4 (P#1 and P#2 for D2W) according to the order in which they enter the flight chamber at the start of the Speed Routine

19.3.3 A five (5) second penalty will apply to a Compulsory Entrance, each Compulsory Pattern, Compulsory Transition to any Vertical from an Snake, or Exit Sequence if:

- any part of the first Performer's body crosses the doorway entering the flight chamber before the visual signal is given to start the working time.
- any Performer does not maintain their designated slot. If the same positioning error is carried into the following Patterns to the end of the Speed Routine, this will be considered as one infringement only, provided that the intent of following the performance requirements in the following Patterns and compulsory exit sequence is clearly presented and no other infringement occurs. (After the positioning error, the new order of the Performers must be maintained.)
- the Team does not stay in view and clearly present the performance requirements to the Judges. E.g., if any Performer flies so high in the Diffuser that the Judges can not determine that the Pattern has been performed correctly, (e.g., properly crossed a Sideline, rotation away from the Start Sideline, etc.).
- the leading Performer completely crosses the next Sideline before the following Performer completely crosses the previous Sideline, i.e., lack of synchronisation. (D2W only)

19.3.4 The Compulsory Entrance, certain listed Transitions (para 19.3.3), each Pattern, or Exit can receive a maximum of only one (1) five (5) second time penalty.

19.3.5 An omitted Compulsory Pattern will lead to adding a penalty of twenty (20) seconds to the total time for the Speed Routine. An omission is one of the following:

- A Compulsory Pattern is missing from the drawn sequence.
- No clear intent to finish the Compulsory Pattern (e.g., after an infringement) and there is a resulting time advantage to the Team.
- No clear intent to perform the correct Compulsory Pattern is seen and another Pattern is presented and there is a time advantage to the Team resulting from the substitution.

19.3.6 If a Team crashes and becomes disorganised during a Compulsory Pattern, the Team may continue to the next Compulsory Pattern accruing only a five (5) time penalty provided that the Judges see the Team losing time in the process of getting organised and there is no time advantage to the Team.

19.3.7 One or more Judges may make an evaluation of any infringements and of an omission.

19.3.8 During the Tournament, the Team with the fastest time, after all time penalties are applied, wins the Battle

19.3.9 A Team may challenge an infringement or omission given by the Judges. No Team can challenge any infringement or omission given by the Judges to another Team.

19.3.9.1 During the Qualification Rounds, the Team must make their challenge before the start of the next round.

19.3.9.2 During the Tournament, the Team must make their challenge before the start of the next Battle.

19.3.9.3 The Judges will watch the video of the flight, according to para 19.6.2 and 19.6.3, and determine whether or not the infringement or omission occurred.

19.3.9.4 If the Judges determine that the infringement or omission occurred, the Team may not again challenge another infringement or omission given by the Judges.

19.4 Scores and Results:

19.4.1 The final time for each Speed Routine will be published, including the raw speed routine completion time, time penalties, infringement types and any omissions.

19.4.2 For the free round in the Qualification Rounds. The final score for each Free Routine will be published.

19.4.3 For each Free Routine during the Tournament the decision for each Judge will be published.

19.4.4 Final Team placings will be determined by a series of Battles in the Tournament.

19.4.5 For all Teams, the individual Battles with their winners will be published on the Tournament Bracket diagram.

19.5 Judging rules:

19.5.1 Viewing the Flights:

19.5.1.1 The Judges will watch each Team's flight live.

19.5.1.2 No Performer will approach or talk to the Judges during any Team's flight. Non-compliance may result in the application of FAI Sporting Code, Section 5, Chapter 5.4

PENALTIES.

19.5.2 Speed Routine Judging:

19.5.2.1 A panel of a minimum of five (5) Judges, three (3) Judges for D2W, must evaluate each Team's Speed Routine.

19.5.2.2 Each Judge will watch each Team's flight from an assigned physical location or by viewing the video monitor of a camera set in that same assigned physical location.

19.5.2.2.1 The Judges may use video monitors and these cameras must record video. The cameras for the video monitors must be positioned in compliance with the below assigned judging positions.

19.5.2.3 Judges' Assigned Physical Locations:

19.5.2.3.1 In D2W, one Judge, positioned at a Sideline, will evaluate for complete crossings of the Sidelines. In D2W, the one Sideline Judge will, also, evaluate Synchronisation. In D4W, two (2) Judges, positioned at either or both Sideline(s), will evaluate for complete crossings of the Sidelines. The Sideline Judge(s) must be positioned such that the Sideline on the far wall is obscured from view by the Sideline on the near wall.

19.5.2.3.2 A Ring Judge will evaluate that no part of any Performer's body is visible in the Ring hole (Vertical Patterns only). The Ring Judge must be positioned with the Judge's eye level with the Ring and the outer rim (but no view beyond the outer rim) of the far Ring visible through the five (5) cm hole of the near Ring.

19.5.2.3.3 A Judge, positioned at the Centreline, will evaluate the Team's correctness in following the performance description of each Compulsory Pattern (e.g., Performers flying in the correct order, pirouettes in correct direction, etc.) This judge will, also, evaluate for complete crossings of the Centreline.

19.5.2.3.4 In D4W, a Judge may be positioned between the Centreline and a Sideline Judge. This Judge will evaluate the Team's correctness in following the performance description of each Compulsory Pattern (e.g., Performers flying in the correct order, pirouettes in correct direction, etc.)

19.5.2.4 Judges' Video Review Process for Speed Routines:

19.5.2.4.1 At the request of any member of the judging panel made within fifteen (15) seconds after the end of the flight, the Chief Judge or the Event Judge will allow a video review, from a particular camera view, of the part of the flight in question. A video from a particular camera view may be subject to several different requests as long as the same part of the flight is not reviewed.

19.5.2.4.2 For each request, a maximum of three (3) viewings per camera view is permitted. Two (2) viewings may be done at a different speed.

19.5.2.4.3 Three (3) or more judges, overseen by the Chief Judge or the Event Judge, will make an assessment of the part(s) of the flight in question by a majority decision.

19.5.3 Free Routine Judging:

19.5.3.1 A panel of a minimum of three (3) Judges must evaluate each Team's Free Routine, each Judge will evaluate all criteria (para 19.2).

19.5.3.2 The Free Routine Judges will be positioned in an arc spread throughout the entire viewing gallery, not including the Anti-Chamber and controller booth. The Event Judge will sit at the centre of the Judges.

19.5.3.3 The chronometer will be operated by the Judges or by (a) person(s) appointed by the Chief Judge or by sensor beam technology, and will be started at the beginning of working time.

19.5.3.4 At the end of working time, a signal will be given. Without discussion with other Judges, each Judge will record their evaluation of the performance executed within the working time and submit it to the Event Judge.

19.5.3.5 For the Free Routines in the Qualification Rounds, the Judges may review video of any or all of the Teams.

19.5.3.6 During the Tournament, in consideration of the five (5) criteria (para 19.2), each Judge will select the best Team in the Battle.

19.5.4 The Judges may use an electronic scoring system to record their evaluations.

20. Determination of the Champion Team

20.1 The title of The Wind Games 2019 2-Way Dynamic Champion Team will be awarded to the team who has emerged as victor from the final round.

ADDENDUM – A1 SPEED ROUTINE COMPULSORY PATTERNS - SNAKES PERFORMANCE REQUIREMENTS & JUDGEMENT CRITERIA

Performance Requirements for Snakes:

- The Sidelines and Centreline apply.
- Each Performer's entire body must completely cross each Sideline and Centreline.
- Each Performer must be in the orientation of the Snake before crossing the Start Sideline after the Compulsory Entrance.
- For the Compulsory Entrance and before reaching the Start Sideline:
 - **In D2W**, P#1 must be closer to the Start Sideline than P#2 before starting the first Snake.
 - **In D4W**: P#1 must be closer to the Start Sideline than P#2, P#3 and P#4 before starting the first Snake. P#2 must be closer to the Start Sideline than P#3 and P#4 before starting the first Snake. P#3 must be closer to the Start Sideline than P#4 before starting the first Snake.
- The following Performer(s) follow the leader throughout the illustrated pathway, with respect to top view. (Mirror image is not permitted.)

- During any Snake, each Performer crosses a Sideline six (6) times and crosses the Centreline three (3) times.

Infringements Applicable to Snakes:

- If the Compulsory Entrance is not performed correctly, a five (5) second penalty will apply.
- If any Performer flies any Snake differently than described, (e.g., failure to switch to outface during a Switching Snake, etc.) a five (5) second penalty applies.
- Apart from the Compulsory Entrance, if any Performer's body is not in the correct orientation, (e.g., it is horizontal,) before crossing the Start Sideline, a five (5) second penalty applies.
- If a Sideline or Centreline is not completely crossed, (e.g., a hand does not pass the line, even though the rest of the body does,) a five (5) second penalty applies.
- If the Performers change their order of following one another, or a different Performer becomes the leader during any Snake, a five (5) second penalty applies (para 19.3.3).

Compulsory Entrance (D4W & D2W)

P#1, followed by P#2 through P#4, must completely cross the vertical plane comprised by the Sidelines. The Performers may cross this vertical plane in any orientation. Maintaining sequential order, the Performers must flow counterclockwise (with respect to the top view) into the first Snake.

S-1 Head-down Inface Snake (D4W & D2W)

Performers cross the Start Sideline in a head-down inface orientation and remain in head-down inface carving during the entire Pattern. Performers begin by carving towards the Performers' left in the first and third Snake (right in the second Snake). When passing through the centre the first time, each Performer changes to carving towards his/her right in the first and third Snake (left in the second Snake). When passing through the centre the second time, each Performer changes to carving towards his/her left in the first and third Snake (right in the second Snake).

S-2 Head-down Switching Snake (D4W & D2W)

Performers cross the Start Sideline in a head-down inface orientation and remain head-down during the entire Pattern. Performers begin by inface carving towards the Performers' left in the first and third Snake (right in the second Snake). When passing through the centre the first time, each Performer changes to outface carving towards his/her left in the first and third Snake (right in the second Snake). When passing through the centre the second time, each Performer returns

to inface carving towards his/her left in the first and third Snake (right in the second Snake).

S-3 Head-up Inface Snake (D4W & D2W)

Performers cross the Start Sideline in a head-up inface orientation and remain in head-up inface carving during the entire Pattern. Performers begin by carving towards the Performers' right in the first and third Snake (left in the second Snake). When passing through the centre the first time, each Performer changes to carving towards his/her left in the first and third Snake (right in the second Snake). When passing through the centre the second time, each Performer changes to carving towards his/her right in the first and third Snake (left in the second Snake).

S-4 Head-up Switching Snake (D4W & D2W)

Performers cross the Start Sideline in a head-up inface orientation and remain head-up during the entire Pattern. Performers begin by inface carving towards the Performers' right in the first and third Snake (left in the second Snake). When passing through the centre the first time, each Performer changes to outface carving towards his/her right in the first and third Snake (left in the second Snake). When passing through the centre the second time, each Performer returns to inface carving towards his/her right in the first and third Snake (left in the second Snake).

S-5 Head-down Mixed Snake (D4W & D2W)

Performers cross the Start Sideline in a head-down inface orientation and begin by head-down inface carving towards the Performers' left in the first and third Snake (right in the second Snake). When passing through the centre the first time, each Performer transitions through the back down orientation to head-up inface carving towards his/her left in the first and third Snake (right in the second Snake). When passing through the centre the second time, each Performer transitions through the back-down orientation to head-down inface carving towards his/her left in the first and third Snake (right in the second Snake).

S-6 Head-up Mixed Snake (D4W & D2W)

Performers cross the Start Sideline in a head-up inface orientation and begin by head-up inface carving towards the Performers' right in the first and third Snake (left in the second Snake). When passing through the centre the first time, each Performer transitions through the back down orientation to headdown inface carving towards his/her right in the first and third Snake (left in the second Snake). When passing through the centre the second time, each Performer transitions through the back-down orientation to head-up inface carving towards his/her right in the first and third Snake (left in the second Snake).

ADDENDUM - A2 SPEED ROUTINE COMPULSORY PATTERNS - VERTICALS PERFORMANCE REQUIREMENTS & JUDGEMENT CRITERIA

Performance Requirements for Verticals:

- The Sidelines and Ring apply.
- During each Vertical (not including the Compulsory Transition), each Performer will cross a Sideline four (4) times.
- Any Vertical starts and ends in a head-down orientation with each Performer on their side of the Centreline. During a Vertical, the Performers may partially cross the Centreline, but must finish completely on the correct side of the Centreline.
- Apart from the Compulsory Transition to any Vertical, Performers must fly around the Ring, completely clear of the Ring. The Performers must completely cross a Sideline on each half of the Vertical.
- All 180° and 360°, head-up and head-down pirouettes, and all half barrel rolls must rotate away from the Start Sideline.
- All 180° and 360°, head-up and head-down pirouettes must be performed with all parts of the body completely above the Ring Plane.
- All half barrel rolls must be performed with all parts of the body completely under the Ring Plane and initiated when the torso is between the Sidelines.

Infringments Applicable to Verticals:

- If the Compulsory Transition to the Vertical from the Snake is not performed correctly, a five (5) second penalty will apply.
- At the beginning and the end of the Vertical, if each Performer is not on their side of the Centreline, a five (5) second penalty applies.
- If any Performer flies any Vertical Pattern differently than described, (e.g., Performers not pirouetting in the correct direction, etc.) a five (5) second penalty applies.
- If a Sideline is not completely crossed, a five (5) second penalty applies.
- Apart from the Compulsory Transition to any Vertical, no part of any Performer's body may be visible through the Ring. If any part of a Performer's body is visible through the Ring, a five (5) second penalty applies. Performance Requirements and Infringments Applicable to V-2 Butterfly: The Centreline applies.
- During the Butterfly, each Performer must strictly be on his/her side of the Centreline during the whole time when performing the half back loops and will only cross the Centreline two (2) times when flying over the Ring. Any infringement will lead to a five (5) second penalty.

D4W VERTICALS

Compulsory Transition from Any Head-down Snake to Any Vertical

While remaining head-down throughout the Compulsory Transition, P#1, followed by P#2 through P#4, must cross the Centreline and, then, the Start Sideline before starting any Vertical. P#1 and P#3 must continue across the Centreline again before starting any Vertical.

Compulsory Transition from Any Head-up Snake to Any Vertical

While remaining head-up throughout the Compulsory Transition, P#1 and P#3 must cross the Centreline. When crossing through the Sidelines, each Performer transitions to head-down in a half inface Reverse Eagle before starting any Vertical.

V-1 Back Layout (D4W)

While head-down, the Performers separate into two (2) pairs. P#1 & P#2 will be the leading pair and P#3 & P#4 will be the following pair. Each pair, one after the other, flies forward over the Ring and then performs one-half outface Eagle passing under the Ring to head-up. Next, each pair, one after the other, flies backward over the Ring and performs one-half inface Reverse Eagle under the Ring to head-down.

V-2 Butterfly with Bottom Loops (D4W)

While head-down, the Performers separate into two (2) pairs: P#1 & P#2 will be the leading pair and P#3 & P#4 will be the following pair. Each pair, one after the other, flies forward, with the two (2) Performers in the pair crossing each other, over the Ring. Then, each pair, one after the other, performs one-half outface Eagle with one-half back loop passing under the Ring to head-down. When initiating the half back loop each Performer must be on their side of the Centreline. This sequence is performed twice.

V-3 Classic (D4W)

While head-down, the Performers separate into two (2) pairs. P#1 & P#2 will be the leading pair and P#3 & P#4 will be the following pair. While head-down and flying over the Ring, each Performer in the pair performs a 180° pirouette. Each pair then performs one-half inface Eagle under the Ring to head-up. While head-up and flying over the Ring, each Performer in the pair performs a 180° pirouette. And the pair performs one-half inface Reverse Eagle under the Ring to head-down.

V-4 Half Barrel Roll 180° (D4W)

While head-down, the Performers separate into two (2) pairs. P#1 & P#2 will be the leading pair and P#3 & P#4 will be the following pair. Each pair, one after the other, flies forward over the Ring and then performs one-half outface Eagle with one-half barrel roll, passing under the Ring to head-up. The half barrel roll must rotate away from the Start Sideline and be initiated when the torso is between the Sidelines. As they fly over the Ring, they perform a 180° pirouette. Each pair, one after the other, then, performs one-half inface Reverse Eagle under the Ring to head-down.

V-5 Head-down 360° (D4W)

While head-down, the Performers separate into two (2) pairs. P#1 & P#2 will be the leading pair and P#3 & P#4 will be the following pair. Each pair, one after the other, flies forward over the Ring and then performs one-half outface Eagle with

one-half back loop passing under the Ring to head-down. As they fly over the Ring, they perform a 360° pirouette and perform one-half outface Eagle with one-half back loop passing under the Ring to head-down. The 360° pirouette must rotate away from the Start Sideline.

V-6 Head-up 360° (D4W)

While head-down, the Performers separate into two (2) pairs. P#1 & P#2 will be the leading pair and P#3 & P#4 will be the following pair. Each pair, one after the other, flies forward over the Ring and, then, performs one-half outface Eagle passing under the Ring to head-up. Next, each pair flies backwards over the Ring and performs a 360° pirouette and, then, performs one-half inface Reverse Eagle under the Ring to head-down.

D2W VERTICALS

Compulsory Transition from Any Head-down Snake to Any Vertical

While remaining head-down throughout the Compulsory Transition, P#1, followed by P#2, must cross the Centreline and, then, the Start Sideline before starting any Vertical. P#1 must continue across the Centreline again before starting any Vertical.

Compulsory Transition from Any Head-up Snake to Any Vertical

While remaining head-up throughout the Compulsory Transition, P#1 must cross the Centreline. When crossing a Sideline, each Performer transitions to head-down in a half inface Reverse Eagle before starting any Vertical.

V-1 Back Layout (D2W)

While head-down, the two (2) Performers fly this Pattern as a pair. The pair flies forward over the Ring and then performs one-half outface Eagle passing under the Ring to head-up. Next, the pair flies backward over the Ring and performs one-half inface Reverse Eagle under the Ring to head-down.

V-2 Butterfly with Bottom Loops (D2W)

While head-down, the two (2) Performers fly this Pattern as a pair. The pair flies forward, with the two (2) Performers in the pair crossing each other, over the Ring. The pair, then, performs one-half outface Eagle with one-half back loop passing under the Ring to head-down. When initiating the half back loop each Performer must be on their side of the Centreline. This sequence is performed twice.

V-3 Classic (D2W)

While head-down, the two (2) Performers fly this Pattern as a pair. While head-down and flying over the Ring, each Performer in the pair performs a 180° pirouette. The pair, then, performs one-half inface Eagle under the Ring to head-up. While head-up and flying over the Ring, each Performer in the pair performs a 180° pirouette. And, the pair performs one-half inface Reverse Eagle under the Ring to head-down.

V-4 Half Barrel Roll 180° (D2W)

While head-down, the two (2) Performers fly this Pattern as a pair. The pair flies forward over the Ring and then performs one-half outface Eagle with one-half

barrel roll, passing under the Ring to head-up. The half barrel roll must rotate away from the Start Sideline and be initiated when the torso is between the Sidelines. As they fly over the Ring, they perform a 180° pirouette. The pair, then, performs one-half inface Reverse Eagle under the Ring to head-down.

V-5 Head-down 360° (D2W)

While head-down, the two (2) Performers fly this Pattern as a pair. The pair flies forward over the ring and then performs one-half outface Eagle with one-half back loop passing under the Ring to head-down. As they fly over the Ring, they perform a 360° pirouette and perform one-half outface Eagle with one-half back loop passing under the Ring to head-down.

V-6 Head-up 360° (D2W)

While head-down, the two (2) Performers fly this Pattern as a pair. The pair flies forward over the Ring and then performs one-half outface Eagle passing under the Ring to head-up. Next, the pair flies backward over the Ring and performs 360° pirouette and, then, perform one-half inface Reverse Eagle under the Ring to head-down.

ADDENDUM – A3 SPEED ROUTINE COMPULSORY PATTERNS - MIXERS PERFORMANCE REQUIREMENTS & JUDGEMENT CRITERIA

Performance Requirements for Mixers:

- The Sidelines apply during any Mixer. Each Performer must completely cross a Sideline during each part of a Mixer.
- The Centreline applies during any Shuffler.
- The Compulsory Transition to any Snake or Exit Sequence is considered to be a part of the Mixer.
- Mixers finish to a head-down orientation when all Performers have performed a bottom loop (one-half outface Eagle with one-half back loop) to head-down and, then, inface carve crossing a Sideline. When head-down (before the inface carve), the Performers must be on the correct side of the Centreline.
- Mixers finish to a head-up orientation when the Performers have performed one-half outface Eagle to the head-up orientation and, then, flown backwards through the Sidelines again. When head-up (before flying backwards), the Performers must be on the correct side of the Centreline.
- During a Mixer, the Performers may partially cross the Centreline, but must finish completely on the correct side. Infringements Applicable to Mixers:
 - If any Performer flies any Mixer differently than described, (e.g., failure to switch to outface during a Shuffler, etc.) a five (5) second penalty applies.
 - If any Performer crosses through the centre in the incorrect order during any Shuffler, (e.g., P#2 crosses the centre before P#1,) a five (5) second penalty applies.
 - If any Performer does not completely cross a Sideline during each part of a Mixer, (e.g., a Performer does not perform their circle sufficiently wide for their entire body to completely cross a Sideline on each half circle,) a five (5) second penalty

applies.

- At the beginning of the Mixer, if each Performer is not on their side of the Centreline, a five (5) second penalty applies to the previous Vertical.
- At the end of the Mixer, if each Performer is not on their side of the Centreline, a five (5) second penalty applies.
- At the end of the Mixer, if each Performer is not in their side of the Centreline when head-up just before moving backward during the transition to a head-up Snake, a five (5) second penalty applies.
- If the transition from the Mixer to the Snake is not performed correctly, a five (5) second penalty will apply to the Mixer.
- If the Compulsory Exit Sequence from any Mixer is not performed correctly, a five (5) second penalty applies to the the Compulsory Exit Sequence.

Performance Requirements and Infringements Applicable to Specific Mixers:

- After the half back loop to head-up, at the beginning of each head-up Mixer (M-2 and M-6), a five (5) second penalty applies if any Performer, when proceeding into inface carving, is not in a head-up orientation before reaching the Sideline.
- In D4W, during any Circling Mixer (M-1, M-2, M-3 and M-4), a five (5) second penalty applies if any pair of Performers (P#1 & P#3 and P#2 & P#4) does not fly the circles in a circular orbit in an horizontal plane.

D4W MIXERS

M-1 Head-down Inface Circles (D4W)

While head-down, each pair of Performers separates into inface carving in opposite directions, with P#1 followed by P#3, crossing a Sideline, and P#2 followed by P#4, crossing the other Sideline. While headdown, P#1 & P#3, facing one another, and P#2 & P#4, facing one another, perform an additional 360° of inface carving, crossing a Sideline two (2) additional times, once for each half circle. Then, P#1 & P#2 become the leading pair and fly forward, crossing through the Sidelines, followed by P#3 & P#4. Thence...

M-2 Head-up Inface Circles (D4W)

While head-down, each pair of Performers flies forward, crossing through the Sidelines, performing one-half back loop to head-up. While head-up, each pair of Performers separates into inface carving in opposite directions, with P#1 followed by P#3, crossing a Sideline and P#2 followed by P#4, crossing the other Sideline. While head-up, P#1 & P#3, facing one another, and P#2 & P#4, facing one another, perform an additional 360° of inface carving, crossing a Sideline two (2) additional times, once for each half circle. P#1 & P#2 become the leading pair and perform one-half inface Reverse Eagle, crossing through the Sidelines, to head-down, followed by P#3 & P#4. And P#1 & P#2 fly forward, crossing through the Sidelines, followed by P#3 & P#4. Thence...

M-3 Mixed Circles (D4W)

While head-down, each pair of Performers flies directly through the Sidelines,

presenting their backs to each other into 180° of inface carving in opposite directions, with P#1 followed by P#3, crossing a Sideline, and P#2 followed by P#4, crossing the other Sideline. Each pair, one after the other, flies forward, crossing through the Sidelines, and then performs one-half outface Eagle, passing through the Sidelines again, to head-up, into 180° of outface carving in opposite directions, with P#1 followed by P#3, crossing a Sideline and P#2 followed by P#4, crossing the other Sideline. Then, P#1 & P#2 become the leading pair and fly backward, crossing through the Sidelines, followed by P#3 & P#4. Each pair, one after the other, then performs one-half inface Reverse Eagle, crossing through the Sidelines, to head-down. And P#1 & P#2 fly forward, crossing through the Sidelines, followed by P#3 & P#4. Thence...

M-4 Reverse Mixed Circles (D4W)

While head-down, each pair flies forward, crossing through the Sidelines, and then performs one-half outface Eagle, crossing through the Sidelines, into 180° of head-up outface carving in opposite directions, with P#1 followed by P#3, crossing a Sideline and P#2 followed by P#4, crossing the other Sideline. Then, while head-up, P#1 & P#2 become the leading pair and fly backward, crossing through the Sidelines, followed by P#3 & P#4. Each pair, one after the other, then performs one-half inface Reverse Eagle, crossing through the Sidelines again, to head-down. Then, each pair flies directly through the Sidelines, presenting their backs to each other into 180° of inface carving in opposite directions, with P#1 followed by P#3, crossing a Sideline and P#2 followed by P#4, crossing the other Sideline. Then, P#1 & P#2 become the leading pair and fly forward through the Sidelines, followed by P#3 & P#4. Thence...

M-5 Head-down Shuffler (D4W)

While head-down, each pair of Performers separates into inface carving in opposite directions, with P#1 followed by P#3, crossing a Sideline and P#2 followed by P#4, crossing the other Sideline. Next, P#1, then P#2, then P#3 and then P#4, pass through the centre into 180° of outface carving, with P#1, then P#3, crossing a Sideline and P#2, then P#4, crossing the other Sideline. Continuing the Shuffler, P#1, then P#2, then P#3 and then P#4, pass through the centre into 180° of inface carving, with P#1, then P#3, crossing a Sideline and P#2, then P#4, crossing the other Sideline. Then, P#1 & P#2 become the leading pair and fly forward through the Sidelines, followed by P#3 & P#4. Thence

M-6 Head-up Shuffler (D4W)

While head-down, each pair flies forward, crossing through the Sidelines, performing one-half back loop to head-up. While head-up, each pair of Performers separates into inface carving in opposite directions, with P#1 followed by P#3, crossing a Sideline and P#2 followed by P#4, crossing the other Sideline. Next, P#1, then P#2, then P#3 and then P#4, pass through the centre into 180° of outface carving, with P#1, then P#3, crossing a Sideline and P#2, then P#4, crossing the other Sideline. Continuing the Shuffler, P#1, then P#2, then P#3 and then P#4, pass through the centre into 180° of inface carving, with P#1, then P#3, crossing a

Sideline and P#2, then P#4, crossing the other Sideline. Then, P#1 & P#2 become the leading pair and perform one-half inface Reverse Eagle, crossing through the Sidelines, to head-down, followed by P#3 & P#4. Each pair, then, flies forward, crossing through the Sidelines. Thence...

M-7 Mixed Shuffler (D4W)

While head-down, each pair of Performers separates into inface carving in opposite directions, with P#1 followed by P#3, crossing a Sideline and P#2 followed by P#4, crossing the other Sideline. Next, P#1, then P#2, then P#3 and then P#4, pass through the centre, while performing one-half inface Eagle to head-up and then perform 180° of inface carving, with P#1, then P#3, crossing a Sideline and P#2, then P#4, crossing the other Sideline. Continuing the Shuffler, while head-up, P#1, then P#2, then P#3 and then P#4, pass through the centre and perform 180° of outface carving, with P#1, then P#3, crossing a Sideline and P#2, then P#4, crossing the other Sideline. Then, P#1 & P#2 become the leading pair and fly backward through the Sidelines, followed by P#3 & P#4. Each pair, one after the other, then performs one-half inface Reverse Eagle, crossing through the Sidelines, to head-down. And P#1 & P#2 fly forward, crossing through the Sidelines, followed by P#3 & P#4. Thence...

Compulsory Transition to any Snake or Compulsory Exit Sequence (D4W): ...

To transition to a Head-down Snake or Head-down Compulsory Exit Sequence (D4W): Each pair, one after the other, then performs one-half outface Eagle with one-half back loop, crossing through the Sidelines, to head-down, ending with each Performer head-down completely on their side of the Centreline, right after his half back loop. Then, while head-down, each pair inface carves, crossing a Sideline, before starting any Head-down Snake or Head-down Compulsory Exit Sequence.

To transition to a Head-up Snake or Head-up Compulsory Exit Sequence (D4W):

Each pair, one after the other, then performs one-half outface Eagle, crossing through the Sidelines, to head-up, ending with each Performer completely on their side of the Centreline. Then, while head-up, each pair flies backward through the Sidelines, before starting any Head-up Snake or Head-up Compulsory Exit Sequence.

Head-down Compulsory Exit Sequence (D4W)

While head-down, P#1, followed by P#2 through P#4, will inface carve towards the Performers' right, completely crossing the Centreline, then the Start Sideline before exiting the flight chamber from the far side, while maintaining sequential order.

Head-up Compulsory Exit Sequence (D4W)

While head-up, P#1, followed by P#2 through P#4, will inface carve towards the

Performers' left, completely crossing the Centreline, then the Start Sideline before exiting the flight chamber from the far side, while maintaining sequential order.

D2W MIXERS

M-1 Head-down Inface Circles (D2W)

While head-down, the two (2) Performers separate into inface carving in opposite directions, with P#1 crossing a Sideline and P#2 crossing the other Sideline. While head-down, they perform 360° of inface carving, crossing a Sideline two (2) additional times, once for each half circle. Joining as a pair, the Performers then fly forward, crossing through the Sidelines. Thence...

M-2 Head-up Inface Circles (D2W)

While head-down, the two (2) Performers, as a pair, fly forward, crossing through the Sidelines, performing one-half back loop to head-up. While head-up, the two (2) Performers separate into inface carving in opposite directions, with P#1 crossing a Sideline and P#2 crossing the other Sideline. They perform an additional 360° of inface carving, crossing a Sideline two (2) additional times, once for each half circle. Joining as a pair, the Performers perform one-half inface Reverse Eagle, crossing through the Sidelines, to head-down and then fly forward, crossing through the Sidelines. Thence...

M-3 Mixed Circles (D2W)

While head-down, the two (2) Performers, as a pair, fly directly through the Sidelines, presenting their backs to each other into 180° of inface carving in opposite directions, with P#1 crossing a Sideline and P#2 crossing the other Sideline. As a pair, the Performers fly forward, crossing through the Sidelines, and then performs one-half outface Eagle, passing through the Sidelines again, to head-up, into 180° of outface carving in opposite directions, with P#1 crossing a Sideline and P#2 crossing the other Sideline. Joining as a pair, the Performers fly backward, crossing through the Sidelines. The pair, then performs one-half inface Reverse Eagle, crossing through the Sidelines, to head-down. And the pair flies forward, crossing through the Sidelines. Thence...

M-4 Reverse Mixed Circles (D2W)

While head-down, the pair flies forward, crossing through the Sidelines, and then performs one-half outface Eagle, crossing through the Sidelines, into 180° of head-up outface carving in opposite directions, with P#1 crossing a Sideline and P#2 crossing the other Sideline. While head-up, both Performers, as a pair, fly backward, crossing through the Sidelines, and then perform one-half inface Reverse Eagle, crossing through the Sidelines again, to head-down. The pair then flies directly through the Sidelines, presenting their backs to each other into 180° of inface carving in opposite directions, with P#1 crossing a Sideline and P#2 crossing the other Sideline. Joining as a pair, the Performers fly forward, crossing through the Sidelines. Thence...

M-5 Head-down Shuffler (D2W)

While head-down, the two (2) Performers separate into inface carving in opposite directions, with P#1 crossing a Sideline and P#2 crossing the other Sideline. Next, P#1, then P#2, passes through the centre (completely crossing the Centreline) into 180° of outface carving, with P#1 crossing a Sideline and P#2 crossing the other Sideline. Continuing the Shuffler, P#1, then P#2, passes through the centre (completely crossing the Centreline) into 180° of inface carving, with P#1 crossing a Sideline and P#2 crossing the other Sideline. Joining as a pair, the Performers fly forward through the Sidelines. Thence...

M-6 Head-up Shuffler (D2W)

While head-down, the two (2) Performers, as a pair, fly forward, crossing through the Sidelines, performing one-half back loop to head-up. While head-up, the two (2) Performers separate into inface carving in opposite directions, with P#1 crossing a Sideline and P#2 crossing the other Sideline. Next, P#1, then P#2, passes through the centre (completely crossing the Centreline) into 180° of outface carving, with P#1 crossing a Sideline and P#2 crossing the other Sideline. Continuing the Shuffler, P#1, then P#2, passes through the centre (completely crossing the Centreline) into 180° of inface carving, with P#1 crossing a Sideline and P#2 crossing the other Sideline. Joining as a pair, the Performers perform one-half inface Reverse Eagle, crossing through the Sidelines, to head-down. The Performers then fly forward, crossing through the Sidelines. Thence...

M-7 Mixed Shuffler (D2W)

While head-down, the two (2) Performers separate into inface carving in opposite directions, with P#1, crossing a Sideline and P#2, crossing the other Sideline. Next, P#1 then P#2, pass through the centre, while performing one-half inface Eagle to head-up and then perform 180° of inface carving, with P#1 crossing a Sideline and P#2 crossing the other Sideline. Continuing the Shuffler, while head-up, P#1, then P#2, pass through the centre and then perform 180° of outface carving, with P#1, crossing a Sideline and P#2 crossing the other Sideline. Joining as a pair, the Performers fly backward through the Sidelines. The Performers, then, perform one-half inface Reverse Eagle, crossing through the Sidelines, to head-down and then fly forward, crossing through the Sidelines. Thence...

Compulsory Transition to any Snake or Compulsory Exit Sequence (D2W): ...

To transition to a Head-down Snake or Head-down Compulsory Exit Sequence (D2W): The pair, then, performs one-half outface Eagle with one-half back loop, crossing through the Sidelines, to head-down, ending with each Performer head-down completely on their side of the Centreline. They, then, inface carve, crossing a Sideline, before starting any Head-down Snake or Head-down Compulsory Exit Sequence. ...

To transition to a Head-up Snake or Head-up Compulsory Exit Sequence

(D2W): The pair, then, performs one-half outface Eagle, crossing through the Sidelines, to head-up, ending with each Performer completely on their side of the Centreline. Then, while head-up, the pair flies backward through the Sidelines,

before starting any Head-up Snake or Head-up Compulsory Exit Sequence.

Head-down Compulsory Exit Sequence (D2W)

While head-down, P#1, followed by P#2, will inface carve towards the Performers' right, completely crossing the Centreline and then the Start Sideline before exiting the flight chamber from the far side, while maintaining sequential order.

Head-up Compulsory Exit Sequence (D2W)

While head-up, P#1, followed by P#2, will inface carve towards the Performers' left, completely crossing the Centreline then the Start Sideline before exiting the flight chamber from the far side, while maintaining sequential order.

ADDENDUM B BASIC ORIENTATIONS, ROTATIONS AND PATHWAYS A. ORIENTATIONS

There are six (6) basic orientations (not including diagonal orientations) which a body can have to the wind (or cable floor). These define which way the torso is oriented.

A-1. Belly-down Orientation The torso is horizontal, on its front, facing down towards the wind (or the cable floor).

A-2. Back-down Orientation The torso is horizontal, on its back, facing up, away from the wind (towards the ceiling).

A-3. Sideways Orientation The torso is horizontal, on its side, with either side facing towards the wind (or cable floor). The chest is facing the tunnel wall.

A-4. Head-up Orientation (HU) The torso is vertical with the head up, directly away from the wind (towards the ceiling). For the Compulsory Patterns, the Performers may lean, but the feet must be below the knees, the knees below the hips and the hips below the shoulders.

A-5. Head-down Orientation (HD) The torso is vertical with the head down, pointing directly down into the wind (towards the cable floor). For the Compulsory Patterns, the Performers may lean, but the shoulders must be below the hips, the hips below the knees and the knees below the feet.

B. ROTATION AXES Most moves involve a form of rotational motion of the body. A total of five (5) axes are used to describe the six (6) possible basic rotational motions.

B-1. Wind Axes There are two inertial axes which stay fixed with respect to the wind (or cable floor). Vertical Axis The vertical axis remains parallel to the wind, (pointing from the ceiling to the cable floor). Spins are rotations about the Vertical Axis. Horizontal Axis The horizontal axis is any axis perpendicular (90°) to the wind, (pointing to the tunnel wall). It may have any heading (pointing towards any wall).

B-2. Body Axes There are three (3) body axes which stay fixed with respect to each Performer's body.

Body Head-Tail Axis The body head-tail axis is oriented lengthwise, pointing from head to tail-bone, normally through the Performer's torso. (In a layout position, the head and feet are in the same line. When the body is bent at the hips, this axis is aligned with the spine and does not include the legs.)

Body Front-Back Axis The body front-back axis is oriented forwards and backwards, pointing from front to back, normally through the Performer's belly.

Body Left-Right Axis The body left-right axis is oriented sideways, pointing from left to right, normally through the Performer's hips.

C. BASIC ROTATIONAL ACTIONS There are six (6) basic rotational actions.

Twisting combines rotational actions by adding a rotation about the body head-tail axis during a rotation about the body left-right or front-back axis.

C-1. Flat Turns Flat turns involve a rotation about the body front-back axis when that axis is aligned with the vertical axis. The Performer's heading is changing. The body can be belly-down or back-down while performing a flat turn.

C-2 Pirouettes Pirouettes involve a rotation about the body head-tail axis when that axis is aligned with the vertical axis. The Performer's heading is changing. The body can be head-up or head-down while performing a pirouette.

C-3 Barrel Rolls A barrel roll is a rotation about the body head-tail axis when that axis is aligned with the horizontal axis. A barrel roll may begin and end in a belly-down, back-down or sideways orientation.

C-4 Cartwheels A cartwheel is a head-over-heels rotation about the body front-back axis when that axis is aligned with the horizontal axis. The body passes through a head-up, sideways and/or head-down orientations during the course of a cartwheel. A cartwheel needs not start nor finish in an exact head-up, sideways or head-down orientation. A cartwheel is considered to be a full cartwheel when the head has travelled 360° around the horizontal axis from the point at which it started. A cartwheel may be performed to the right or left.

C-5. Loops A loop is a head-over-heels rotation about the body left-right axis when that axis is aligned with the horizontal axis. The body passes through a head-up, belly-down, head-down and/or back-down orientation during the course of the loop. A loop may begin and end in a head-up, belly-down, head-down and/or back-down orientation. A loop needs not start nor finish in an exact head-up, belly-down, head-down and/or back-down orientation. A loop is considered to be a full loop when the head has travelled 360° around the horizontal axis from the point at which is started.

There are two (2) kinds of loops. (Loops are referred to by the direction in which the loop is initiated, since in the case of twisting loops, the direction in which the loop completes may be different from the direction at the start.)

Back Loop A back loop is a loop rotation initiated with the torso rotating backwards.

Front Loop A front loop is a loop rotation initiated with the torso rotating forwards.

C-6. Side Loops (Loops on the Side) A loop in the sideways orientation is a rotation about the body left-right axis when that axis is aligned with the vertical axis. For example, a Spinning Egg is a true loop on the side.

C-7. Twists Twisting combines rotational actions by adding a rotation about the body head-tail axis during a rotation about the body left-right or front-back axis, aligned with either the horizontal or vertical axis. There are two (2) basic categories of twists. **Vertical Twists** A vertical twist is a head-over-heels rotation about the horizontal axis (loop or cartwheel) combined with a rotation about the

body head-tail axis. A single or full twist is defined to be a 360° rotation about the body head-tail axis over the course of a 360° loop or cartwheel. The amount of twist contained within a loop or cartwheel is the amount of twisting rotation completed after a 360° looping or cartwheeling rotation has been performed, when measured from the point in the loop or cartwheel at which the twist was first initiated. Twists may be initiated at any position in the loop or cartwheel and in any direction.

Horizontal Twists

A horizontal twist is a rotation about the vertical axis (flat turn or side loop) combined with a rotation about the body head-tail axis. A single or full twist is defined to be a 360° rotation about the body head-tail axis over the course of a 360° flat turn or side loop. For example, a Flip Through is a horizontal twist.

D. CIRCULAR PATHWAYS There are two (2) basic types of circular pathways a Performer may follow, which can be performed either infacing or outfacing. Circular pathways may have embedded moves (e.g. Bottom Loop) or intermixing of Performers.

Infacing The front of the torso faces inward towards the concave side of the pathway, usually, but not always, towards the centre of the flight chamber.

Outfacing The front of the torso faces outward, away from the concave side of the pathway, usually, but not always, towards the wall of the flight chamber.

D-1. Carving The Performer(s) body(ies) trace(s) a circular path in approximately a horizontal plane. Carving is performed while head-down, head-up or in other orientations.

D-2. Vertical Orbits The Performer(s) body(ies) trace(s) a circular path in a vertical plane. Eagles and Reverse Eagles are two (2) common forms of Vertical Orbits that involve also rotating about the Body Left-Right Axis.

Eagle The Performer(s) travel(s) in a Vertical Orbit while continuously leading with the head, passing through the back-down, head-up, belly-down and/or head-down orientation (in that order, if infacing). An Eagle may begin from any orientation in this progression.

A Half Eagle is when the Performer has travelled head first through 180° of vertical orbiting. A Full Eagle is when the Performer has travelled head first through 360° of vertical orbiting.

Reverse Eagle The Performer(s) travel(s) in a Vertical Orbit while continuously leading with the feet (or tail-bone), passing through the back-down, head-down, belly-down and/or head-up orientation (in that order, if infacing). A Reverse Eagle may begin from any orientation in this progression.

A Half Reverse Eagle is when the Performer has travelled feet (or tail-bone) first through 180° of vertical orbiting. A Full Reverse Eagle is when the Performer has travelled feet (or tail-bone) first through 360° of vertical orbiting.

Information and Contacts

For any questions relating to the rules, technical information or administration please contact:

proflyer@windoor-realfly.com

Addendum C

Free Routine Worksheet

Performer Name and Country
Category:

Name of move/sequence	Description if appropriate

