PARACHUTIST

INFORMATION

MANUAL

PART 4B

COMPETITION RULES

Formation Skydiving, Vertical Formation Skydiving, and 10-Way Speed

MAY 2019

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ACKNOWLEDGEMENTS

The CSPA Judging Committee has prepared the Competition Rules under the authority granted to it by the CSPA Board of Directors.

Prior to 2016, this manual was developed and prepared by the CSPA Competition and National Teams Committee.

LIST OF REVISIONS / CHANGES

Date	Section
May 2019	Revisions: sections 2.18., 3.1.5., Appendixes I, II, III, IV (all diagrams)
May 2018	Revisions: sections 3.2.2.1., 4.2.4., and 6.4.1.
June 2017	Revisions: sections 4.2.2., 4.2.3., 4.2.4., 4.2.5., 4.2.6., 4.2.7.
March 2017	Revisions: sections 2.3.1., 2.17.1., 2.17.2., 5.4., 6.4.1., 7.2., Appendixes (all diagrams)
December 2016	Minor revisions
October 2016	Formatting
July 2016	Full Revision
June 2013	
June 2011	

CHAPTER 1 – CSPA AUTHORITY

1.1 The Event will be conducted in accordance with PIM4B - Competition Rules – General Section and Formation Skydiving (FS), Vertical Formation Skydiving (VFS) and 10-Way Speed plus PIM 4A - Canadian National Parachuting Championships Hosting Manual. All participants accept and agree to abide by PIM 4B, PIM 4A and all other relevant CSPA regulations upon registration for the CNPC.

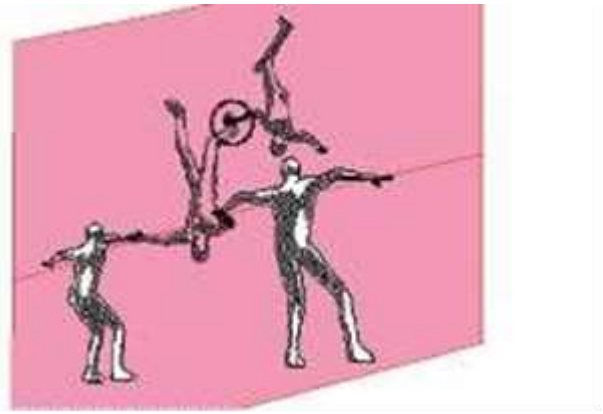
CHAPTER 2 – DEFINITIONS OF WORDS AND PHRASES USED IN THESE RULES

2.1. FORMATION: consists of competitors linked by grips and, for VFS, with each competitor in the correct orientation.

2.2. GRIP: consists of a handhold on an arm, leg or foot of another competitor as shown in 7.2. As a minimum, a grip requires stationary contact. For VFS, a foot grip consists of a handhold on a foot or ankle

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

2.3.1. For VFS, Clarification regarding random M) and O) – There is an imaginary vertical plane passing through the handgrips, with outside competitors having hand grips on one side of the vertical plane and the competitor taking the leg grip on the other side of the vertical plane. No grip line may cross the vertical plane within the formation.



2.4. BODY: consists of the entire competitor and their equipment.

2.5. DIVE POOL: consists of the Random Formations and Block Sequences depicted in the appendix to these rules.

2.6. SUBGROUP: is the individual jumper, or competitors linked by grips, required to complete a designated manoeuvre during the inter of a block sequence. See 2.1 & 2.2

2.7. A SUBGROUP'S CENTREPOINT: is one of the following:
(1) The defined grip or the geometric centre of the defined grips within a subgroup of "linked" competitors See 2.1 & 2.2
(2) The geometric centre of an individual's torso.

2.8. TOTAL SEPARATION: is when all competitors show at one point in time that they have released all their grips and no part of their arms have any contact with another body.

2.9. INTER: is an intermediate requirement within a block sequence which must be performed as depicted in the dive pools.

2.10. SEQUENCE: is a series of random formations and block sequences which are designated to be performed on a jump.

2.11. SCORING FORMATION: is a formation which is correctly completed and clearly presented either as a random formation or within a block sequence as depicted in the dive pool, and which for FS/VFS, apart from the first formation after exit, must be preceded by a correctly completed and clearly presented total separation or inter, as appropriate.

2.12. 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.

2.13. 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.

2.14. WORKING TIME: For FS/VFS working time is the period of time during which teams are scored on a jump which starts the first moment any competitor (other than the Videographer) separates from the aircraft, as determined by the Judges, and terminates a number of seconds later as specified in 3.1.

For 10-way Speed working time starts when the first competitor crosses the starting line and stops when the formation is properly completed. Refer to rule 8.6 for the complete details.

2.15. NV: Formations, inters, or total separations not visible on screen due to meteorological conditions, or factors relating to the Videographer's freefall video equipment that cannot be controlled.

2.16. JUDGEMENT CALL: An assessment by the judges of a formation, infringement or omission that is not unanimous.

2.17. ORIENTATION:

2.17.1. "Head Down" orientation requires that the competitor's torso is approximately vertical with the head down, towards the ground.

2.17.2. "Head Up" orientation requires that the competitor's torso is approximately vertical with the head up, towards the sky.

2.17.3. "Bellyflying" or "Belly to Earth" orientation requires that the competitor's torso is in a horizontal (prone) position, with the front of the torso toward the earth. ("Bellyflying" is not currently used in VFS formations)

2.17.4. "Backflying" orientation requires that the competitor's torso is in a horizontal (prone) position, with the back of the torso toward the earth. ("Backflying" is not currently used in VFS formations).

2.18. ZENITH: Point of the celestial sphere located vertically above the head of an observer.

CHAPTER 3 – THE FS/VFS EVENTS

3.1. Event Descriptions

The discipline will be comprised of the following events:

3.1.1. 4-Way FS Events (Open, Female, Senior, Intermediate and Junior):
- Exit altitude is 3,050 meters /10,000 feet AGL.
- Working Time is 35 seconds.

3.1.2. 4-Way VFS Event:
- Exit altitude is 3,960 meters / 13,000 feet AGL.
- Working Time is 35 seconds.

3.1.3. 8-Way Event:
- Exit altitude is 3,960 meters / 13,000 feet AGL.
- Working Time is 50 seconds.

3.1.4. For meteorological reasons only, and with the consent of the Chief Judge, the Meet Director may change the exit altitude and/or working time and continue the competition. In this case the following conditions will apply:

(1) The working time will be:
- 20 or 35 seconds for the 4-Way FS and VFS events, and
- 30 or 50 seconds for the 8-Way event

The reduced working time must be used if the exit altitude is lowered (ref 3.1.1 and 3.1.2). The next round must commence if the working time is changed.

(2) The minimum exit altitude will be:
- 2150 meters / 7000 feet AGL for the 4-Way FS events,
- 2750 meters / 9000 feet AGL for the 4-Way VFS event and the 8-Way event.

The maximum exit altitude will be 3960 meters / 13000 feet AGL for all events.

3.1.5. Where possible the Meet Director will attempt to schedule VFS rounds at times when the sun is not within 20 degrees of the zenith to allow the team videographer to clearly video their team.

3.2. Objective of the Events

3.2.1. The objective of the events is for the team to complete as many scoring formations as possible within the working time, while correctly following the sequence for the round.

3.2.2. The accumulated total of all rounds completed is used to determine the placing of teams.
- 4-Way: Three (3) rounds will constitute a valid event.
- 8-Way: Two (2) rounds will constitute a valid event.
- VFS: Two (2) rounds will constitute a valid event.

3.2.2.1 If two or more teams have equal scores, the following order of procedures will be applied for determination of the final placings:

(1) one tie break round, if possible (for the first three placings only). The tie break round will be the next drawn round of the competition,
(2) the highest score in any completed round,
(3) the highest score starting with the last completed round and continuing in reverse order round by round, until the tie is broken,
(4) the fastest time (measured to hundredths of a second) to the last common scoring formation in the last completed round.

3.3. Performance Requirements

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

3.3.2. 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.

3.3.3. Scoring formations need not be perfectly symmetrical, but they must be performed in a controlled manner. Mirror images of random formations and whole block sequences are permitted. For VFS mirror images are only permitted when set in a vertical plane.

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

3.3.5. Where degrees are shown, (180°, 270°, 360°, 540°), this indicates the approximate degrees and direction of turn required to complete the inter as intended. The degrees shown are approximately that amount of the circumference of the subgroup's centrepoint to be presented to the centrepoint(s) of the other subgroup(s).

For judging purposes, the approximate degrees and direction of turn of subgroups centrepoints will be assessed using only the two-dimensional video evidence as presented.

3.3.6. Contact is allowed between different subgroups during the inter of a block sequence.

3.3.7. Where subgroups are shown, they must remain intact as a subgroup with only the depicted grips on other jumpers in that subgroup.

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

3.3.9. Handholds by the jumper on their own body within a subgroup or a scoring formation are permitted.

3.3.10. For VFS no grip line (ref. 2.3) may cross another grip line within a formation.

CHAPTER 4 – GENERAL RULES

4.1. Composition of Teams

Teams may consist of competitors of either or both sexes, except in the female event where (except for the videographer) all competitors must be female (see 6.3.5)

4.2. The Draw

4.2.1. The draw of the sequences will be done publicly and supervised by the Chief Judge. Teams will be given not less than two hours knowledge of the results of the draw before the competition starts.

4.2.2. Event Draws: The Random Formations (alphabetically marked and Block Sequences (numerically numbered) as shown in the appropriate Appendix and designated as required in 4.2.4, 4.2.5, 4.2.6 and 4.2.7 below (Dive Pool) will be singularly placed in one container. Individual withdrawal from the container, (without replacement) will determine the sequence and number of scoring formations (4.2.4, 4.2.5, 4.2.6 and 4.2.7) to be jumped in each round, subject to 4.2.3.

4.2.3. Use of Dive Pool: Each Block Sequence and Random Formation will initially be drawn only once until all scheduled rounds are complete or the designated Sequences and Formations all have been used. In the event that additional rounds are still to be drawn, the designated Blocks and Formations will be replaced in the container and the draw will continue as before.

In the event of a tie-breaking round, the Dive Pool to be used will consist of the Blocks and Formations which were not drawn for the scheduled rounds and remain in the container. In the event that these remaining Blocks and Formations do not complete the tie breaking round, the draw will continue from the entire original Dive Pool in that event, excluding any Blocks or Formations which have already been drawn for that tie-breaking round.

4.2.4. Open 4-Way, Female 4-way, 8-way, and VFS Event Draw:
All Random Formations and Block Sequences. Each round will be drawn so as to consist of five or six scoring formations, whichever number is reached first.

4.2.5. Senior 4-Way Event Draw:
All Random Formations plus the following Block Sequences: 1, 2, 4, 6, 7, 8, 9, 11, 13, 14, 15, 18, 19, 20, 21, and 22. Each round will be drawn so as to consist of five or six scoring formations, whichever number is reached first.

4.2.6. Intermediate 4-Way Event Draw:
All Random Formations plus the following Block Sequences: 2, 4, 6, 7, 8, 9, 19, and 21. Each round will be drawn so as to consist of four or five scoring formations, whichever number is reached first.

4.2.7. Junior 4-Way Event Draw:
Random Formations only. Each round will consist of three (3) scoring formations.

4.3. Use of Wind Tunnel

Competitors are not allowed to use a wind tunnel (freefall simulator) after the draw has been made.

4.4. Jump Order

4.4.1. The jump order for the first competition round of each event will be determined by the Meet Director, Chief Judge or Event Judge by a blind draw. The teams shall jump consecutively in manifest order.

4.5. Video Transmission and Recording

4.5.1. Each team shall provide the video evidence required to judge each round. Each freefall Videographer must use the video transmission system if provided by the Organiser.

4.5.2. For the purpose of these rules," freefall video equipment" shall consist of the complete video system(s) used to record the video evidence of the team`s freefall performance, including the camera(s), recording media, and battery(ies). All video equipment must deliver a High Definition 1080 type digital signal with a minimum frame rate of 25 frames per second, through a memory card (minimum class 10). The videographer is responsible for ensuring the compatibility of the freefall video equipment with the scoring system.

4.5.3. As soon as possible after each jump is completed, the freefall videographer must deliver the freefall video equipment (including the media used to record that jump) for dubbing at the designated dubbing station. The video evidence must remain available for viewing or download until all scores are posted as final, with express permission of the Chief Judge, or until after medal presentations.

4.5.4. Only one video recording will be dubbed and judged. Secondary video recordings may only be used in NV situations.

4.5.5. The dubbing station will be as close to the landing area as possible.

4.5.6. A Video Controller will be appointed by the Chief Judge prior to the start of the Judges' Conference. The Video Controller may inspect a team's freefall video equipment to verify that it meets the performance requirements as determined by him/her. Inspections may be made at any time during the competition which does not interfere with a team's performance, as determined by the Event Judge. If any freefall video equipment does not meet the performance requirements as determined by the Video Controller, this equipment will be deemed to be unusable for the competition.

4.5.7. A Video Review Panel will be established prior to the start of the official training jumps, consisting of the Chief Judge, the Meet Director, and the Video Controller. Decisions rendered by the Video Review Panel shall be final and shall not be subject to protest or review by the Jury.

4.5.8. If the Video Review Panel determines that the freefall video equipment has been deliberately tampered with, the team will receive no points for all competition rounds involved with this tampering.

4.5.9. The Organizer must provide the teams with a way of identification of the team showing the team number to be recorded by the Videographer just before exit. The recording should continue with the jump without a stop in recording.

4.6. Exit Procedure

4.6.1. There are no limitations on the exit other than those imposed by the Chief Pilot for safety reasons.

4.6.2. The exit will be controlled by radio and commands relayed to the team in the aircraft by the pilot or crew. Exit commands will be made using an appropriate signal system.

4.6.3. Exit Speed:

The speed of the jump aircraft at the time of exit will be as follows:

- Twin Otter, King Air and Cessna Caravan - 80 to 90 knots indicated airspeed
- Other aircraft - as determined by meet management.

4.7. Scoring

4.7.1. 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.

4.7.2. For each omission three 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.

4.7.3. If an infringement in the scoring formation of a block sequence is carried into the inter (ref. 2.9.), this will be considered as one infringement only, provided that the intent of the inter requirements for the next formation is clearly presented and no other infringement occurs in the inter.

4.7.4. The minimum score for any round is zero points.

4.8. Rejumps

4.8.1. In a NV situation, the video evidence will be considered insufficient for judging purposes, and the Video Review Panel will assess the conditions and circumstances surrounding that occurrence. In this case, a re-jump 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-jump will be granted and the team's score for that jump will be zero.

4.8.2. Contact or other means of interference between competitors in a team and/or their Videographer shall not be grounds for the team to request a re-jump.

4.8.3. Adverse weather conditions during a jump are no grounds for protest. However, a re-jump may be granted due to adverse weather conditions, at the discretion of the Chief Judge.

4.8.4. Problems with a competitor's equipment (excluding freefall video equipment) shall not be grounds for the team to request a re-jump.

4.9. Practice Jumps

Practice jumps may not be made after the draw has been made public. Refer to PIM4B Competition Rules – General Section, Chapter 5 – 5.2.1.

CHAPTER 5 – JUDGING

5.1. Judging Procedure

The competition jumps will be judged as the Videographer provides the video evidence. The Chief Judge may modify this procedure with the consent of the Meet Director.

5.2. Reverse Order of Placing

The judging will, as far as practical circumstances allow (landings out, re-jumps etc.), be judged in the reverse order of placing.

5.3. Number of Judges

Five Judges must evaluate each team's performance.

5.4. Viewings/Review of the Video Evidence

The Judges will watch the video evidence of each jump (1) one time at normal speed to determine points in time. The moment of freeze frame at the end of working time will be determined at the first viewing. If a judgement call occurs, a second viewing of the jump will be conducted at normal or reduced speed between 50-90 percent of normal speed. At the request of the Event Judge a (3rd) third view of part(s) of the jump can be conducted at normal or reduced speed. The speed of the second- and third viewings (normal or reduced) will be determined by the Event Judge. The Chief Judge will decide prior to the start of the Competition the percentage of reduced speed to be used for the different Events. The freeze frame from the first viewing will be applied on each viewing.

5.4.1. 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 jump in question be reviewed at reduced speed in accordance with 5.4. If the review results in a minimum four to one judge decision by the Judges on the part(s) of the performance in question, the score for the jump will be adjusted accordingly. Only one review is permitted for each jump.

5.5. Evaluation

The Judges will use the electronic scoring system to record their evaluation of the performance. The Judges may correct their evaluation record after the jump 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.

5.6. Majority

A majority of Judges must agree in the evaluation in order to;

- credit the scoring formation,
- or assign an omission,
- or determine an NV situation.

5.7. Start of the Working Time

The chronometer will be operated by the Judges or by a person(s) appointed by the Chief Judge, and will be started as determined in 2.14. If Judges cannot determine the start of the working time, the following procedure will be followed. Working time will start as the videographer separates from the aircraft and a penalty equal to 20% (rounded down) of the score for that jump will be deducted from the score for that jump.

CHAPTER 6 – RULES SPECIFIC TO THE COMPETITION

6.1. Title of the Competition

Title of the Competition: "___TH Canadian National Parachuting Championships.

6.2. Aims of the Competition

To determine the National Champions of Formation Skydiving in the:

- 4-Way FS Event (Open, Female, Senior, Intermediate and Junior)
- 4-Way VFS Event,
- 8-Way Event,
- 10-Way Event

6.3. Composition of Teams

- One (1) Team Captain and alternate captain (if desired). Each team, upon registration, will submit the name of the team captain and alternate captain (if desired), one of whom will be the only team spokesperson on matters pursuant to the CNPC, in regard to the actual competition.
- Alternate (s)
- Freefall videographers as in 6.3.5 and 6.3.6

6.3.1. At a CNPC:

- 4-Way FS teams consisting of up to: Five (5) 4-Way FS Competitors
- Female 4-Way FS teams consisting of up to: Five (5) female 4-Way FS Competitors
- 4-Way VFS teams consisting of up to: Five (5) 4-Way VFS Competitors
- 8-Way teams consisting of up to: Ten (10) 8-Way Competitors
- 10-Way Speed Teams consisting of up to Twelve (12) Competitors

6.3.2. 4-Way Teams:
The team will consist of four, 4-Way team members. The team may however, register five team members, no more than one of whom is registered with any other team, and any four of the five team members so registered may jump in any round of the competition, subject to 6.3.5 below. No other substitution is permitted. Any team that, for any reason, is permanently reduced to three or fewer team members will be eliminated from the event. In addition, the team will register a videographer and may register an alternate videographer. If any one of the team members wishes to change position with the team videographer, they may do so after consultation with the Chief Judge.

6.3.3. 8-Way Teams:
The team will consist of eight, 8-Way team members. The team may, however, register ten team members, no more than two of whom is registered with any other team, and any eight of the ten team members so registered may jump in any round of the competition, subject to 6.3.5 below. No other substitution is permitted. Any team that, for any reason, is permanently reduced to seven or fewer team members will be eliminated from the event. In addition, the team will register a videographer and may register an alternate videographer. If any one of the team members wishes to change position with the team videographer, they may do so after consultation with the Chief Judge.

6.3.4. 10-Way Teams:
The team will consist of ten, 10-Way team members. The team may register up to 12 members, including a videographer, but is eliminated from competition if, for any reason, it is reduced to nine or fewer members and a videographer.

6.3.5. No competitor may jump with more than one team during the same round. If any competitor is registered with more than one team in one event and has already jumped with one team and for any reason jumps with a second team during a subsequent round, that competitor must not jump again with the first team. In the event, a team is awarded a re-jump for a round and if a team member is injured and is unable to make the re-jump, then this provision will not apply to the re-jump, in that a registered member who has already jumped that round with another team may make the re-jump, in order to allow the team to complete the re-jump. The question of valid injury shall, be decided by the competition management - specifically, the Meet Director, Chief Judge, Meet Safety Officer and any medical doctor present.

6.3.6. Videographers:
Must be entered for each team as part of the team; and therefore, will be considered one of the team's competitors.

(1) 4-Way Open, Female, Senior, 8-Way, and VFS Event teams may register an alternate videographer at initial registration or during the competition. This competitor is to be considered as a team member for the purposes of awards and medals.
(2) 4-Way Intermediate and Junior Teams may replace their videographer once at any time after the start of the event after informing the Event Judge of the change.

6.3.7. Videographers shall only be registered with one team. Alternate videographers may register with more than one team; however, sections 6.3.4 A and B as appropriate, shall apply to alternate videographers.

6.4. Program of Events

6.4.1. The CNPC is comprised of Formation Skydiving Events:

- 4-Way: 10 rounds, all of which will be scored to determine the standings. Three (3) rounds will constitute a valid event.
- 8-Way: 6 rounds, all of which will be scored to determine the standings. Two (2) rounds will constitute a valid event.
- Vertical Formation Skydiving: 10 rounds, all of which will be scored to determine the standings. Three (3) rounds will constitute a valid event.
- 10-Way Speed: 4 rounds, all of which will be scored to determine the standings. Two (2) rounds will constitute a valid event.

6.4.2. Time must be reserved before the end of competition to allow for the completion of the tie break round.

6.4.3. Not Used

6.5. Declaration of Champions

6.5.1. Medals are awarded as follows: All team members in the events will be awarded medals if placed First, Second or Third.

6.5.2. The 4-Way Formation Team whose total score is the highest will be declared the National 4-Way Formation Skydiving Champions in the category for which they are registered.

(1) Open
(2) Senior
(3) Intermediate
(4) Junior
(5) Female

6.5.3. The 4-way Open category is the only category considered for becoming the Canadian National 4-way Open Team.

6.5.4. The Female Teams entered in the Open Event are eligible to be declared as Open Champions (6.5.2.1) as well as Female 4-way National Champions if there is not a separate Female category.

6.5.5. The 8-Way Formation Team whose total score is the highest will be declared the National 8-Way Formation Skydiving Champions.

6.5.6. The Vertical Formation Team whose total score is the highest will be declared the National Vertical Formation Skydiving Champions.

6.5.7. Senior Teams are not eligible for the championships declared as per 6.5.3. However, if no open event is held, then the winning senior team would be eligible as per 5.1.

6.5.8. The 10-Way Team scoring the lowest total time, compiled through all complete rounds, will be declared the National 10-Way Speed Champions.

6.6. Medals

Gold, silver and bronze medals will be awarded to the first, second and third place winners (including properly registered alternate team member competitors) in all valid events subject to the citizenship restrictions in PIM4B Competition Rules – General Section 2.1 and with the following exceptions:

a) where there are only three teams registered in an event, only gold and silver medals shall be awarded

b) where there are only two teams registered in an event, only the gold medal will be awarded.
c) When there is only one female 4-way team competing at the Open category level, the female team will be awarded medals as co-placement with the all-male/mixed gender teams if they chose to compete in the Open category because there are not any other female 4-way FS teams.

6.7. Videographer Medals

In the Formation Skydiving events Videographers shall receive medals if they are the registered videographer of a medal winning team and film at least 70% of said team's jumps or are registered as an alternate competitor on a medal winning team subject to citizenship restrictions in PIM4B Competition Rules – General Section 4.4.1.

CHAPTER 7 – DEFINTION OF SYMBOLS

7.1. Coding in the Dive Pool Annexes

Coding in the Dive Pool annexes is as follows:

7.1.1 Indicates direction of turn by the subgroup	
7.1.2 Indicates turn by the subgroup in either direction	
7.1.3 Indicates turns by all subgroups	
7.1.4 a) Indicates clarification of intent VFS	
7.1.4 b) Indicates clarification of intent FS	

7.2. Visualization for Grip Positions

7.2 Visualization of Grip Positions ref. 2.2 ARM: LEG: For VFS – FOOT: Note: A Foot grip is on or below the ankle	

CHAPTER 8 – 10-WAY SPEED

The 10-way speed event will be conducted only after the 4-way and 8-way FS events and the VFS event are completed. The rules listed below shall govern the event. Where these rules are insufficient, reference shall be made to the FS rules.

8.1. Event Objective

The objective is for the team, after correctly following the exit procedures, to complete a single 10 Way formation drawn from the dive pool and hold that formation for 5 seconds.

8.2. The Team

Each team may consist of up to 12 members, including a videographer, but is eliminated from competition if, for any reason, it is reduced to nine or fewer members and a videographer.

8.3. Competition Draw

The rounds shall be drawn as follows:

(1) Representations of the lettered random formations (excluding the star) from the current dive pool are singularly placed in one container.
(2) Individual withdrawal from the container, without replacement, determines the formation to be built on the first, third and fourth rounds.
(3) The formation for the second round will be a star.

8.4. Number of Jumps

The minimum number of rounds to constitute a valid event is two and the maximum (scheduled) is four.

8.5. Altitude

Each jump will be made from 11,000 feet AGL

8.6. Working Altitude

Working time starts when the first competitor (other than the videographer) crosses the starting line and stops when the required formation is completed. The maximum working time allowed is 35.00 seconds.

8.7. Reduced Altitude

For meteorological reasons only and with the consent of the Chief Judge, the Meet Director may lower the exit altitude. If a round cannot be completed from the altitude specified in 3.5:

(1) The teams that have not jumped will finish the round from the lower altitude.
(2) The teams that have already jumped in this round will be re-scored using the reduced working time;
(3) In this case: the exit altitude is lowered to 8,000 feet and the maximum working time is 20.00 seconds.

8.8. Exit Procedures

(1) A starting line is marked on the floor of a side-door aircraft from the front edge of the door to the opposite fuselage wall aft of the rear edge of the door, and for tailgate aircraft, the line is drawn five feet forward of the tailgate edge and parallel to the edge of the tailgate.
(2) The team must line up behind the starting line, and no members of the team, except the videographer, may come in contact with any portion of the aircraft on the door side or tailgate side of the line prior to commencing exit. The videographer is the only person allowed on the door side of the line.
(3) The videographer must record an image, which includes the starting line on the floor and the instant of the first member or members of the team crossing the line at the commencement of the exit from the aircraft.
(4) The team may exit the plane as they choose but, after exit, two unlinked jumpers must initiate the formation after completely passing through the door with the remaining jumpers converging on those two jumpers.

(5) Any other team(s) in the aircraft must not interfere with the exiting team. Any interference by another team affecting the performance of the exiting team will result in a 5 second penalty.

8.9. Scoring

(1) Each team receives a score equal to the time (in seconds, expressed to one-hundredth of a second) taken to complete the required 10-Way formation determined in accordance with 8.9 (b).

(2) The Team's score for the round is determined as follows:
   a. If all three judges agree that the exit procedures and formation criteria have been met and that the 10-way completion time is 35.00 seconds or less, the score is the average of the three judges' time.
   b. If two judges agree that the exit procedures and formation criteria have been met and that the 10-way completion time is 35.00 seconds or less, the score is the average of the two judges' time.
   c. If at least two judges agree that the exit procedures and formation criteria have not been met (per 8.10), the team will receive the maximum score of 40.00 seconds

In each case the score determined in a), b) or c) is expressed to one-hundredth of a second (0.01)

It is the responsibility of the team to clearly present the correct scoring formation in order to receive a score.

8.10. Maximum Score

A team will receive the maximum score of 40.00 seconds (or 25 seconds if the exit altitude is reduced) if:
(1) It does not complete the correct 10-Way formation;
(2) It fails to clearly present the formation;
(3) The video image fails to record an image of the line so that the judges can see the exact moment of the first team member or members crossing the line;
(4) Two unlinked jumpers fail to initiate the formation;
(5) There is contact with any portion of the aircraft on the door side of the exit line prior to commencing exit;
(6) The completed formation is not held for 5.00 seconds or
(7) The formation is not completed within 35.00 seconds

8.11. Judging Procedures

The Event will be evaluated by three judges. The judges will watch each jump no more than three times at normal speed. The judges will watch the jump once to determine that the exit procedures have been met and confirm a 10-way formation has been completed. Following the first viewing, the judges may confer with each other to determine the instant of exit, to confirm that two unlinked jumpers initiate the formation and to determine the completion (or not) of a 10-way formation. The second and third viewings will be to determine the completion time for the 10-way formation; determine whether the 10-way formation is correct or not and confirm the formation was held for 5 seconds.

8.11.1 Manual Judging Procedure:

Three Judges will watch the jump on suitable video playback equipment and will record their evaluation on their own score sheets. The judges will watch each no more than three times at normal speed. The judges will watch the jump once to determine that the exit procedures have been met and confirm a 10-way formation has been completed. Following the first viewing, the judges may confer with each other to determine the instant of exit, to confirm that two unlinked jumpers initiate the formation and to determine the completion (or not) of a 10-way formation. The second and third viewings will be to determine the completion time for the 10-way formation; determine whether the 10-way formation is correct or not and confirm the formation was held for 5 seconds.

The watches used to determine working time will be started when any team member (other than the videographer) crosses the starting line with any part of their body and must be capable of reading to the nearest 1/100th of a second. The judges will record the time of completion of the 10-way formation and the time the first team member breaks from the formation in order to determine if the required holding time of 5.00 seconds has been achieved.

8.12. Practice Jumps

Practice jumps will be available at the site for some period of time during the week prior to the CNPC and prior to the close of registration. Practice jumps may not be made after the draw has been made public. Refer to PIM4B Competition Rules – General Section, Chapter 5 – 5.2.1

8.13. Determination of Winners

The winner is the team scoring the lowest total time, compiled through all complete rounds. In the event of a tie score in first, second or third place, the following order of procedures will be applied until the first three placings are determined:

(1) a jump-off round, however, no more than two such tie breaking jumps shall be made;
(2) fastest score in any completed round;
(3) fastest score starting with the last completed round and continuing in reverse order, round by round, until the tie is broken.

APPENDIX AA – FS/VFS MANUAL JUDGING AND SCORING

AA.1. Manual Judging and Scoring: If an electronic scoring system is not available:

AA.2. Five Judges will watch the jump on suitable video playback equipment and will record their evaluation on their own score sheets.

The judges will watch each jump to a maximum of three times. The first time will be at normal speed to determine the number of points in time. At the request of at least two judges, if a judgment call occurs, a second viewing of the jump will be conducted at normal or reduced speed between 70-90 percent of normal speed. A third (3rd) view of parts(s) of the jump can be conducted at normal or reduced speed. The speed of the second and third viewings (normal or reduced) will be determined by the Event Judge. The Event Judge will decide prior to the start of the Competition the percentage of reduced speed to be used for the different Events. The freeze frame from the first viewing will be applied on each viewing. The necessity for determining points in time will take precedence over reduced speed viewing.

AA.3. The Event Judge will appoint a person to call the last few seconds of working time, in order to assist the judges to determine working time expiry.

AA.4. If judges cannot determine the start of working time, the following procedure will be applied: Working time will start as the videographer separates from the aircraft and a penalty equal to 20% (rounded down) of the score for that jump will be deducted from the score for that jump.

AA.5. Infringement marks will be assigned to the respective formation, if it has been penalized by a majority of judges observing the jump.

AA.6. Evaluation review: If after the viewings are completed, and within fifteen seconds of the knowledge of the result, the Event Judge considers that an absolutely incorrect assessment has occurred, the Event Judge will direct that only that part(s) of the jump in question be reviewed. If the review results in a unanimous decision by the Judges on the part(s) in question, the score for the jump will be adjusted accordingly. A panel judge, convinced of an absolute infringement, should indicate discretely to the EJ that a review may be required. If a majority of judges have applied infringement marks to the formation no review will take place.

AA.7. The working time will be considered to have been properly recorded if the double vertical time line is drawn on the score sheet, even if no watch time or other remarks are written down.

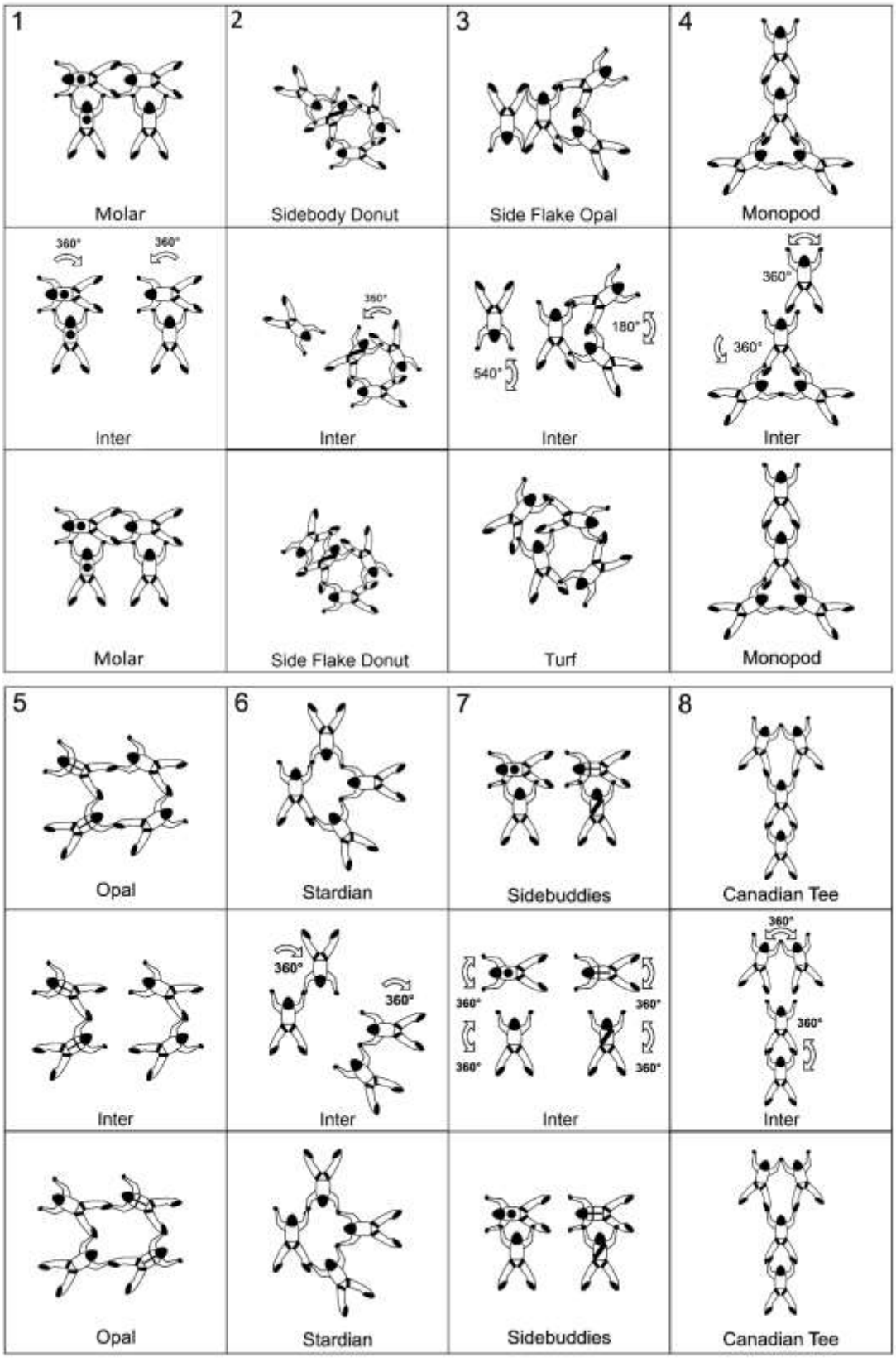
AA.8. The watch used to determine working time will be started on exit of the first jumper from the aircraft and must be capable of reading to the nearest 1/100th of a second.

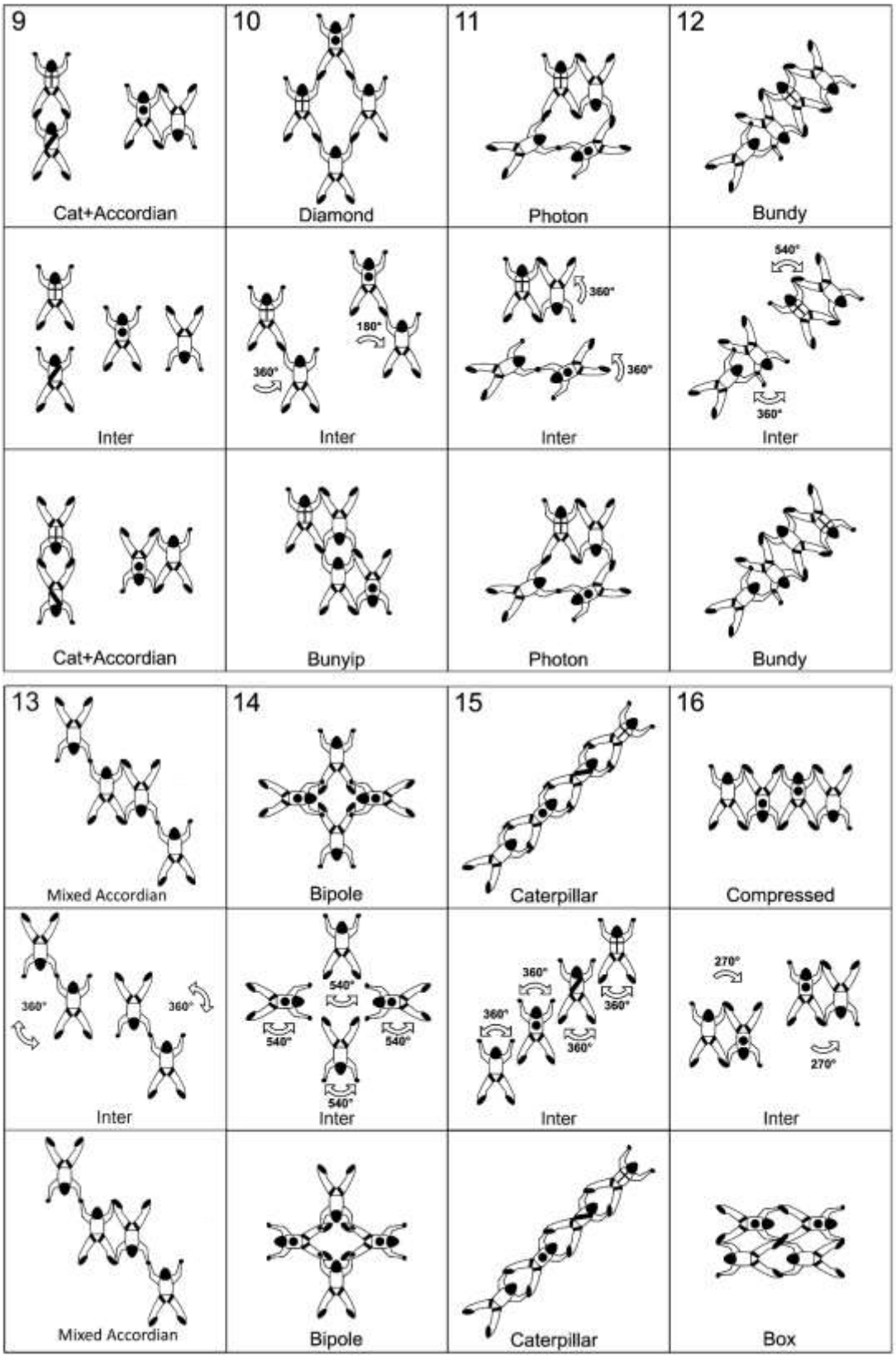
AA.9. A re-jump will be made at the earliest possible time, if either of the following occurs:
(1) less than four judges have evaluated the jump;
(2) less than three judges have recorded a working time.

AA.10. The signs to be used on the score sheet are:

- Correct Scoring Formation (Formation, intermediate OK): /
- Infringement; (Formation, intermediate NOT OK) O
- Omission X
- Formations, Inters or total separations not visible on screen due to meteorological conditions or factors relating to the videographer's equipment that cannot be controlled. NV
- No clear start or end to working time NT
- End of Working Time //

APPENDIX I – 4-WAY FS BLOCK POOL

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Cat+Accordian
10
Diamond
11
Photon
12
Bundy
Inter
180°
360°
Inter
360°
360°
Inter
540°
360°
Inter
Cat+Accordian
Bunyip
Photon
Bundy
13
Mixed Accordian
14
Bipole
15
Caterpillar
16
Compressed
360°
360°
Inter
540°
540°
540°
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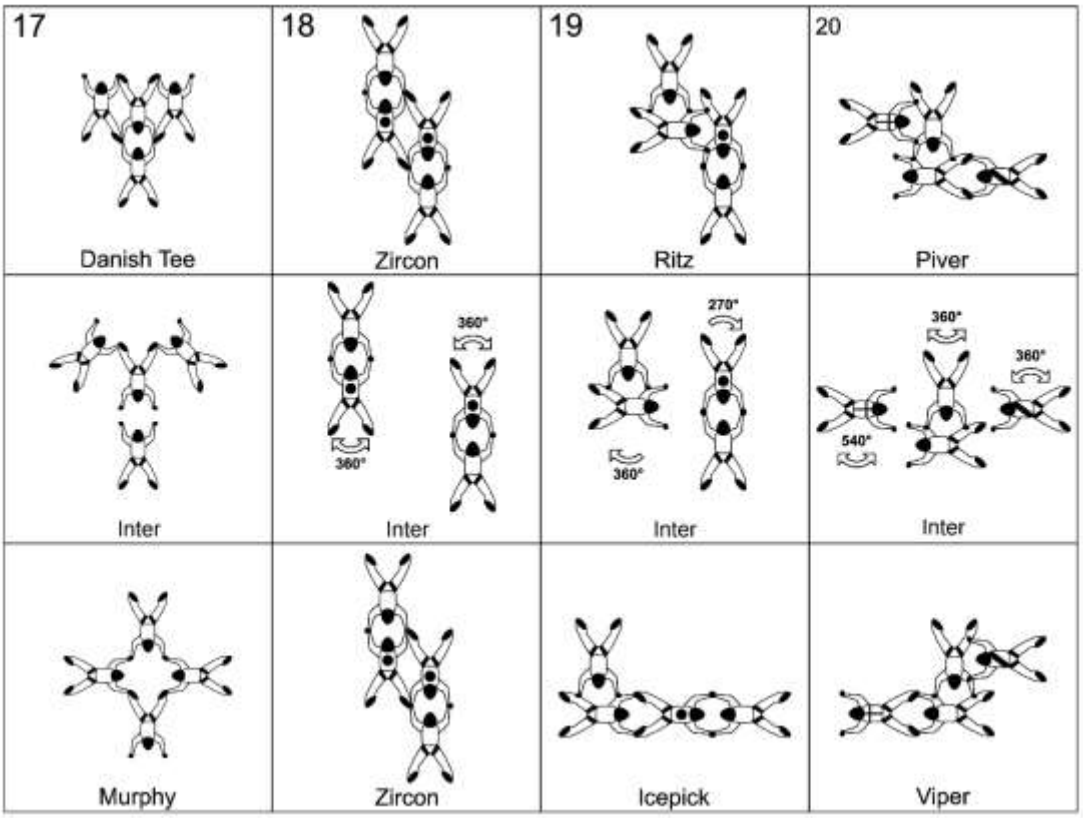
Caterpillar
Box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Danish Tee
18
Zircon
19
Ritz
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Piver
Inter
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360°
Inter
270°
360°
Inter
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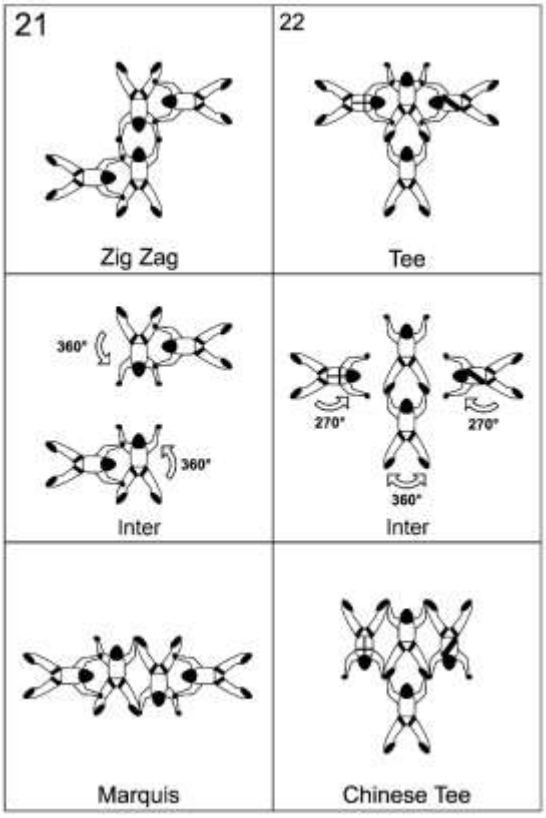
Zircon
Icepick
Viper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Zig Zag
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Inter
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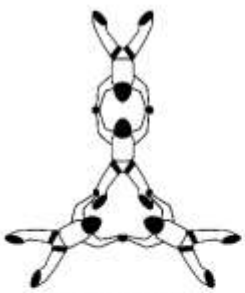
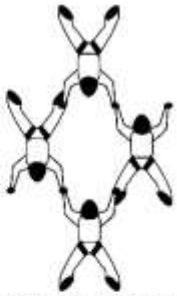
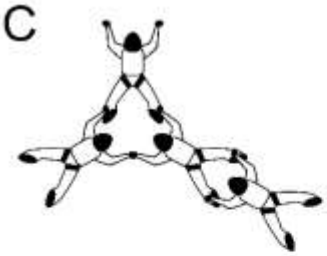
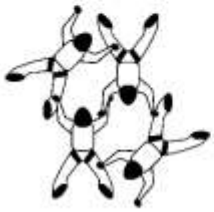
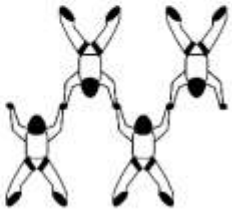
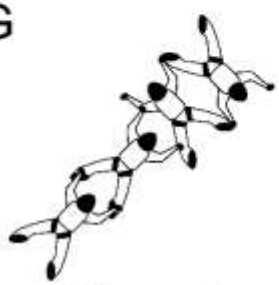
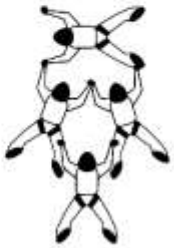
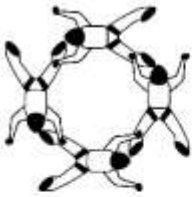
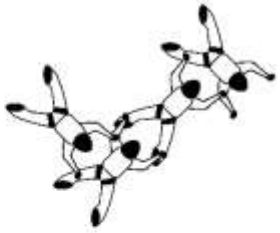
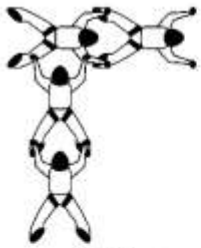
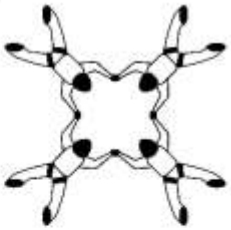
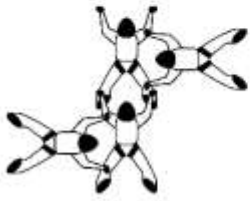
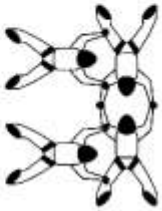
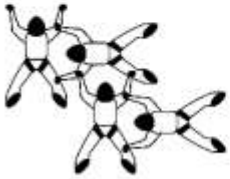
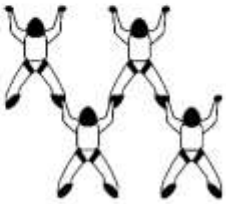
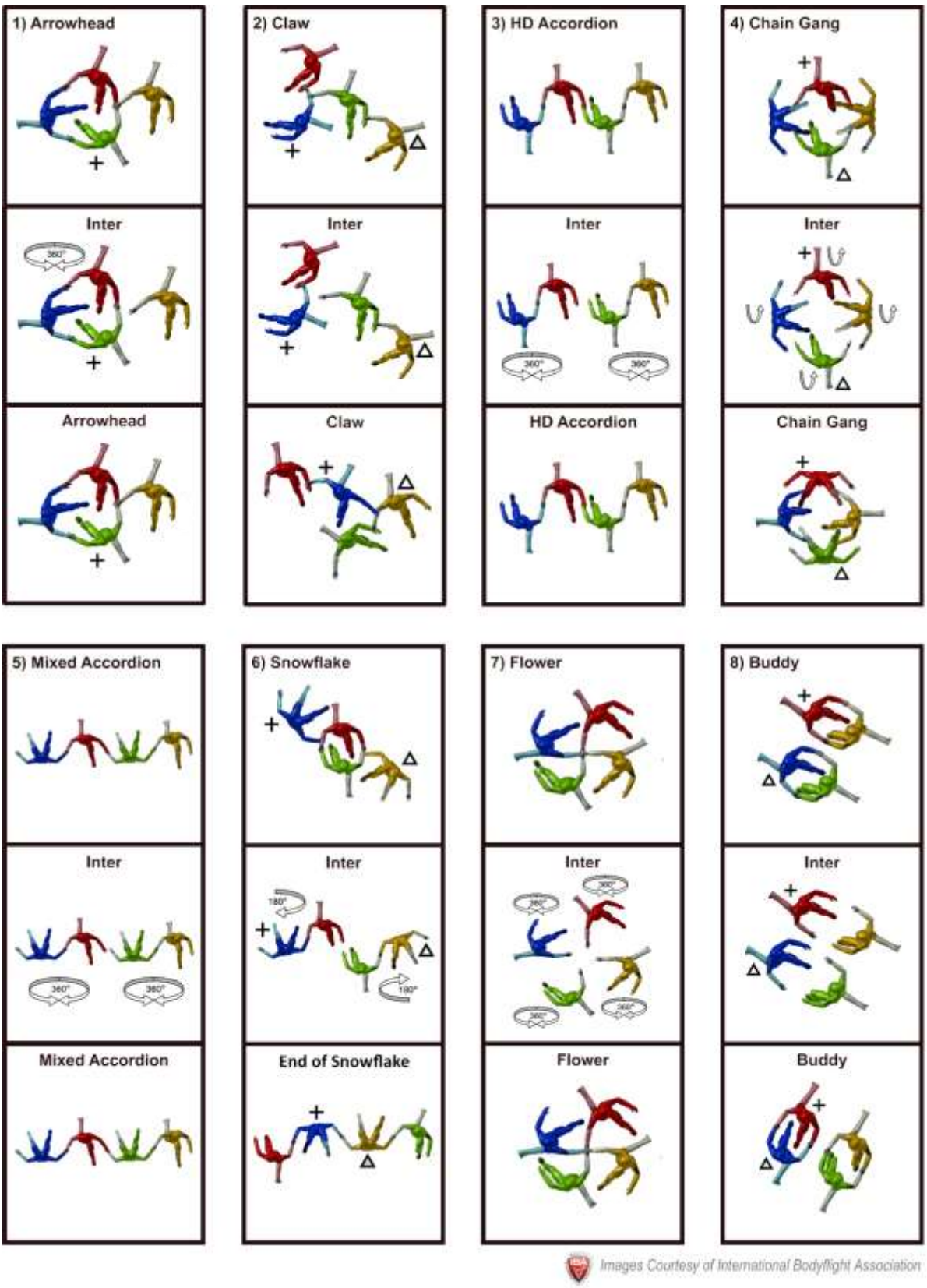
Marquis
Chinese Tee

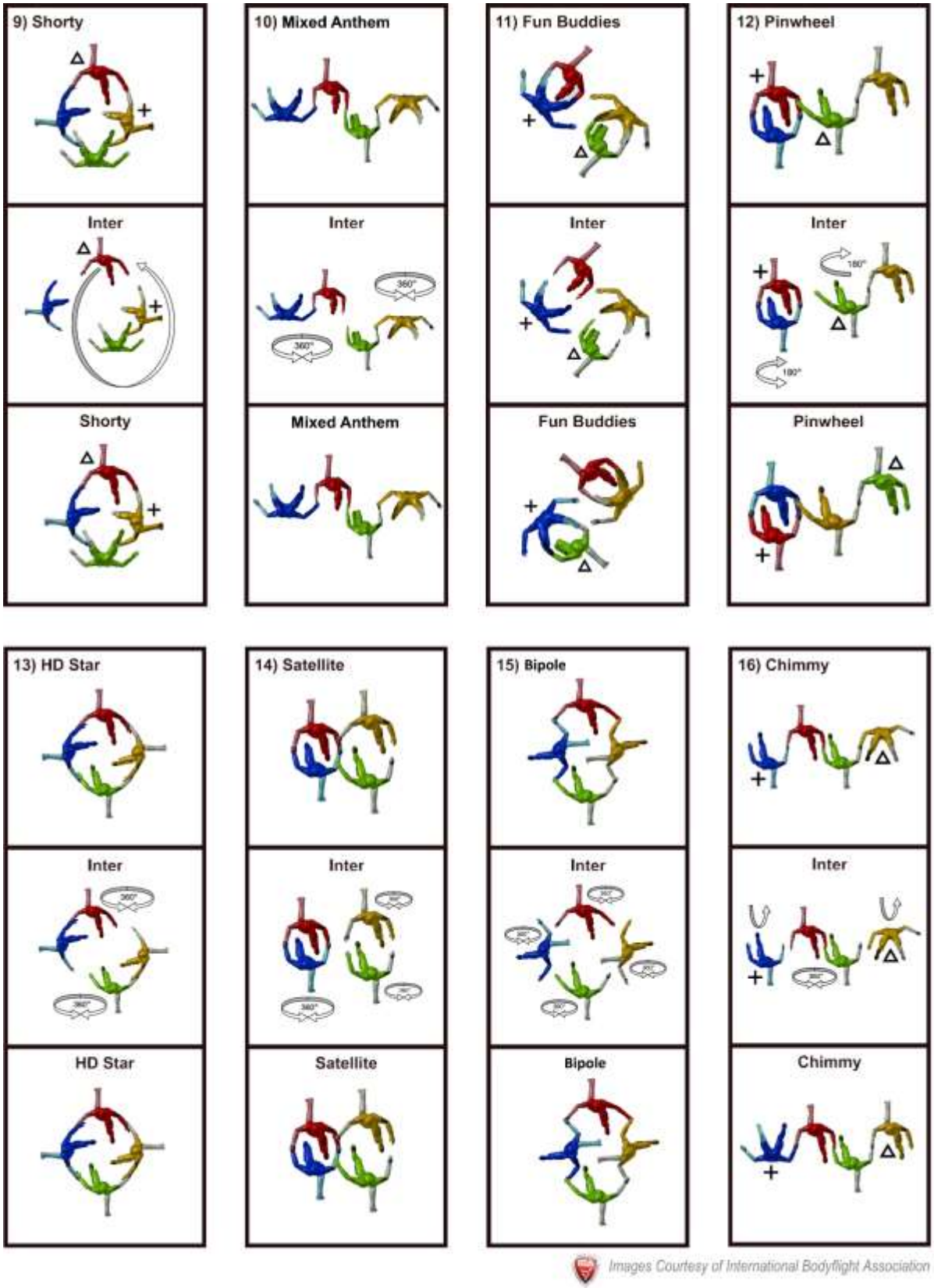
APPENDIX II –4-WAY FS RANDOM POOL

A  Unipod	B  Stairstep Diamond	C  Murphy Flake	D Yuan
E  Meeker	F  Open Acordian	G  Cataccord	H  Bow
J  Donut	K  Hook	L  Adder	M  Star
N  Crank	O  Satellite	P  Sidebody	Q  Phalanx

APPENDIX III – 4-WAY VFS BLOCK POOL



Images Courtesy of International Bodyflight Association



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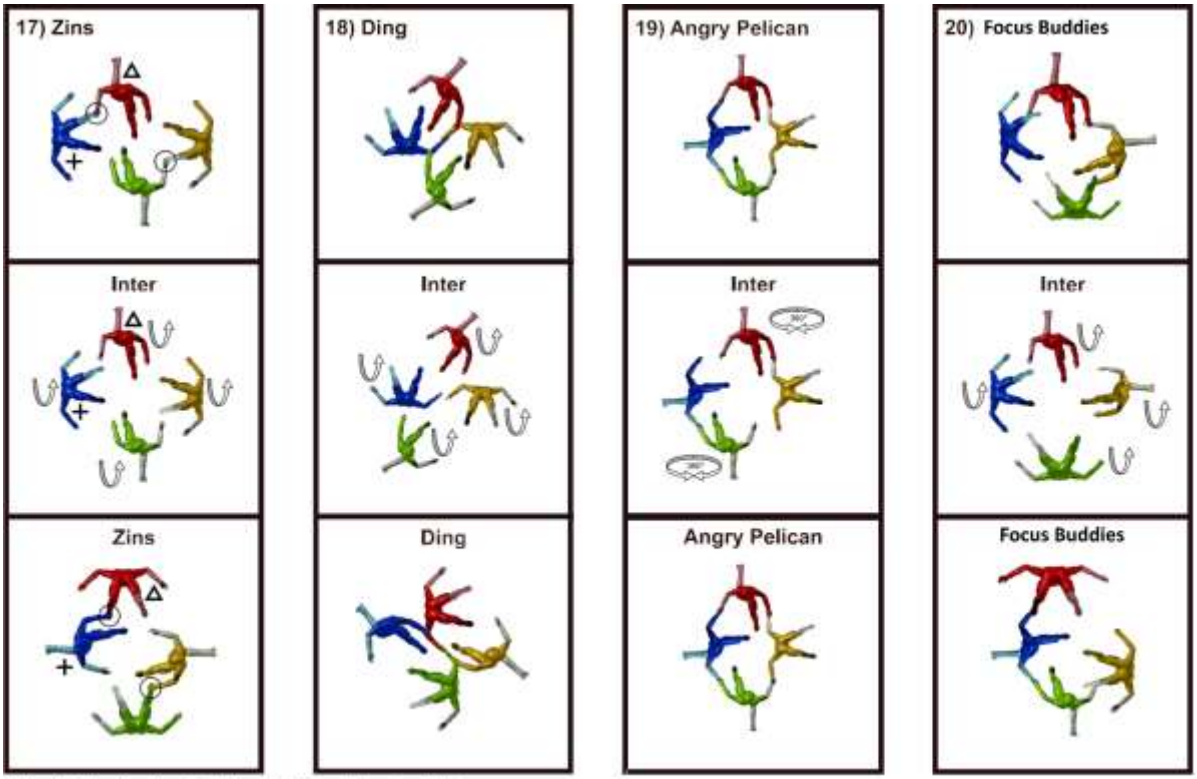
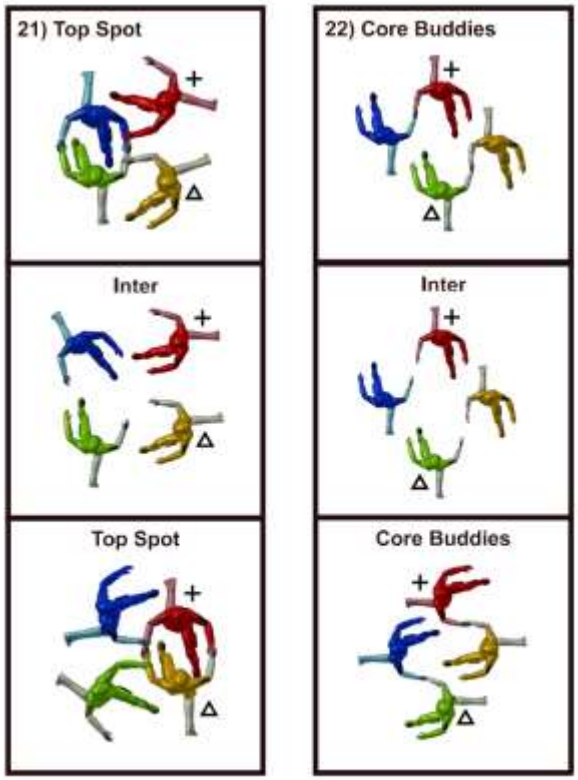
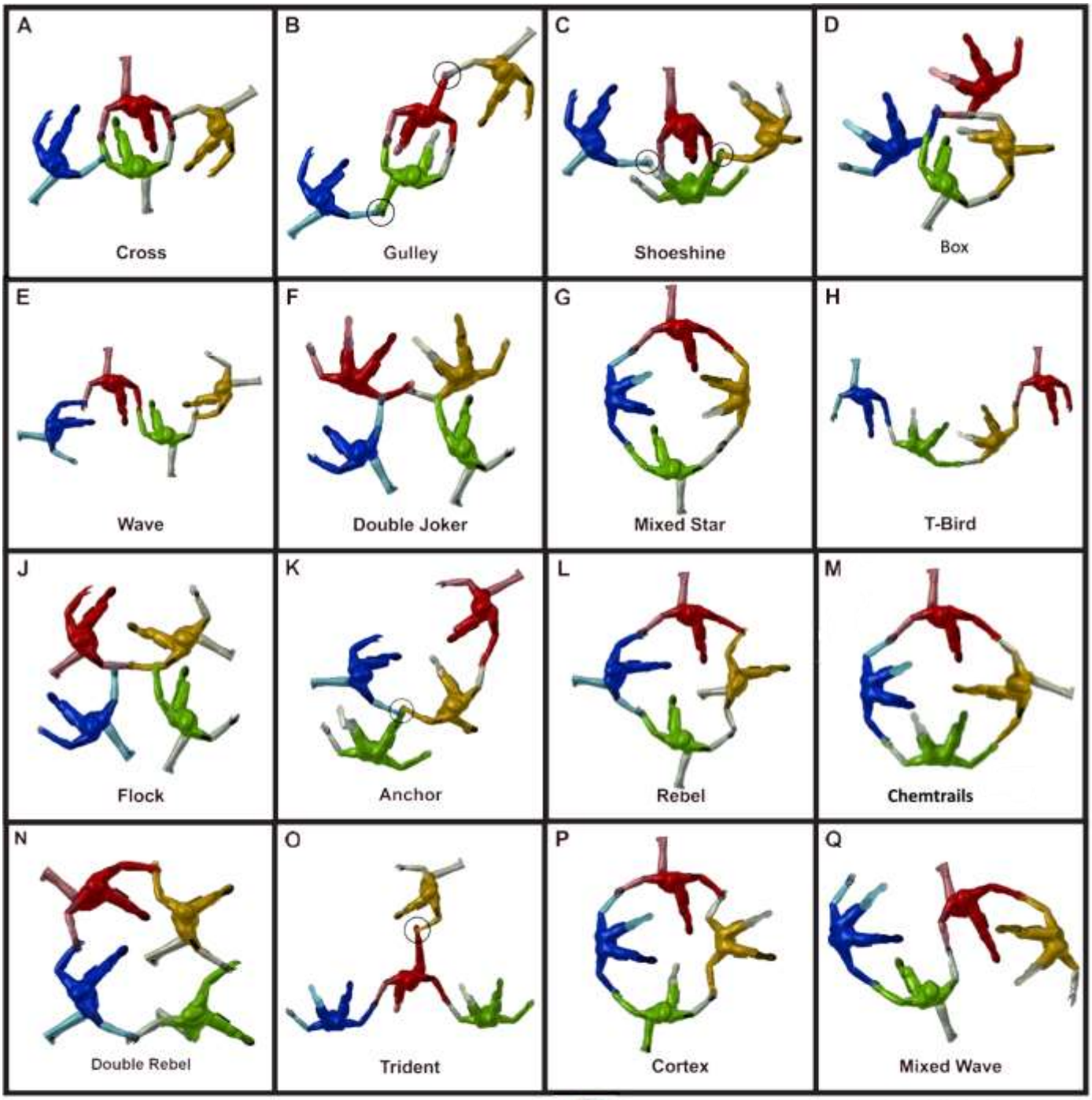


Note: A circle denotes a foot grip (ref. Competition rules 2.2)



Images Courtesy of International Bodyflight Association

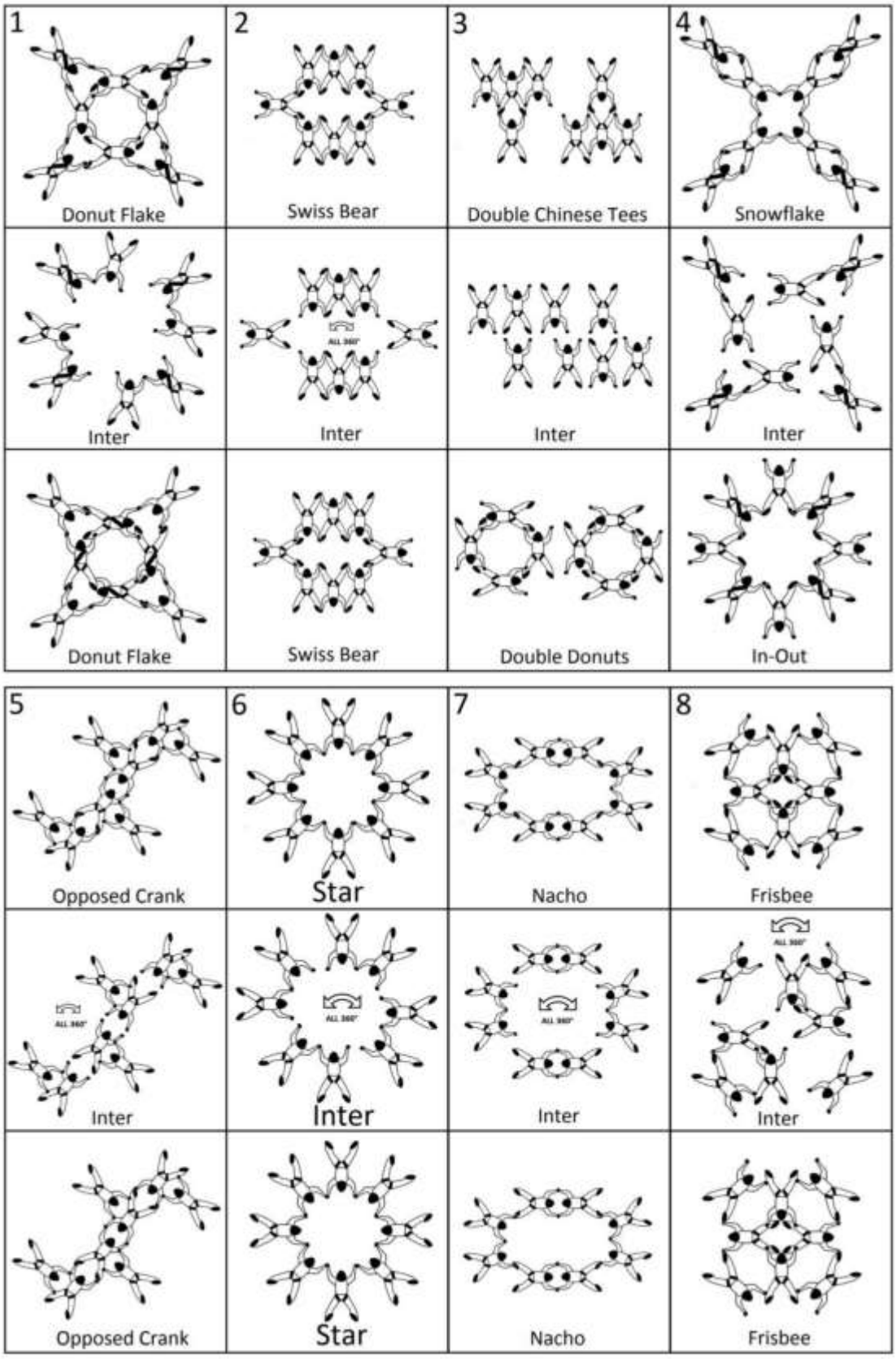
APPENDIX IV – 4-WAY VFS RANDOM POOL

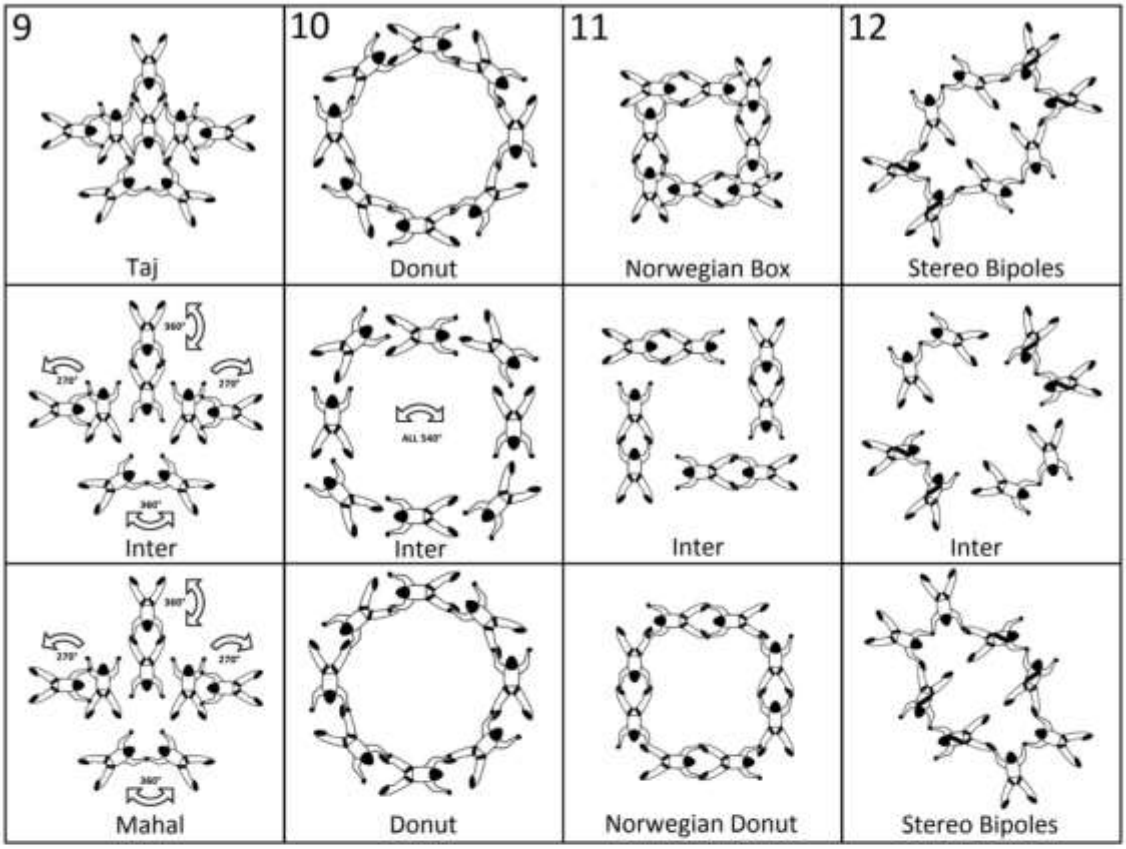


Note: A circle denotes a foot grip (ref. Competition rules 2.2)

images courtesy of International Bodyflight Association

APPENDIX V – 8-WAY FS BLOCK POOL

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Donut
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Norwegian Box
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Stereo Bipoles
Inter
Inter
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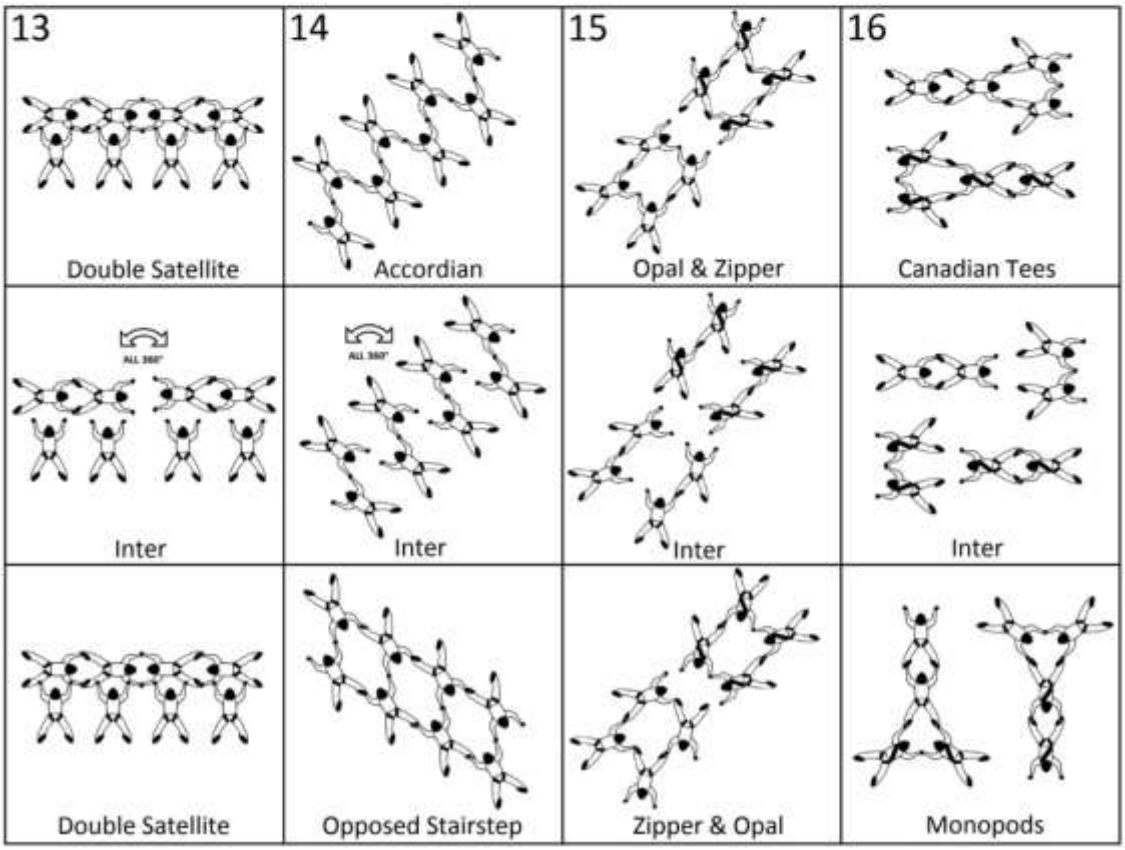
Inter
Mahal
Donut
Norwegian Donut
Stereo Bipoles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Double Satellite
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Accordian
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Opal & Zipper
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Canadian Tees
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Inter
Inter
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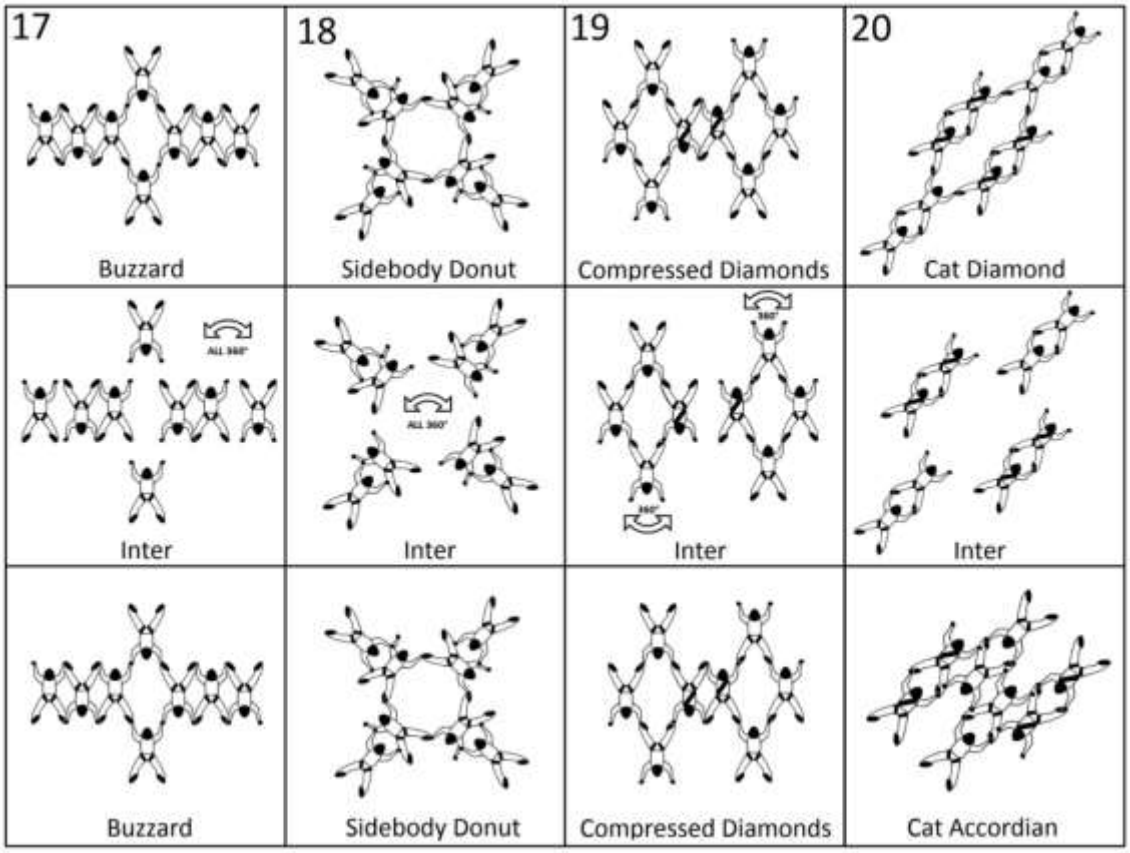
Double Satellite
Opposed Stairstep
Zipper & Opal
Monopods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Sidebody Donut
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Compressed Diamonds
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Cat Diamond
Inter
Inter
Inter
Inter
Buzzard
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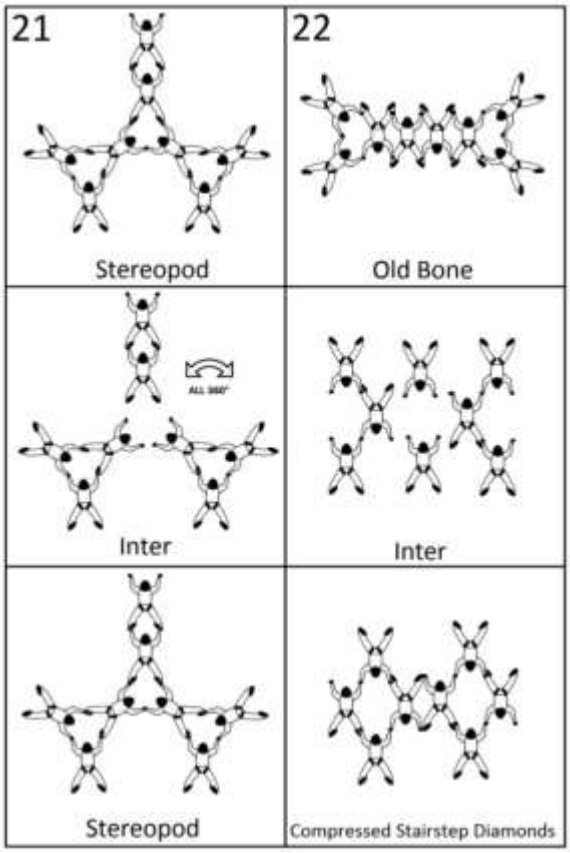
Compressed Diamonds
Cat Accordian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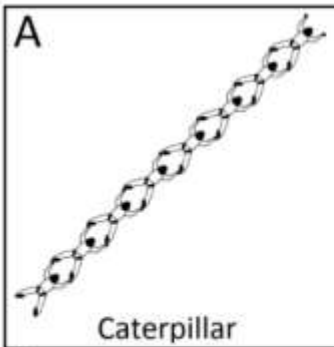
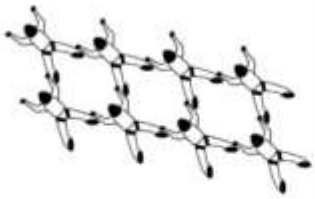
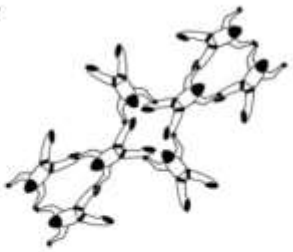
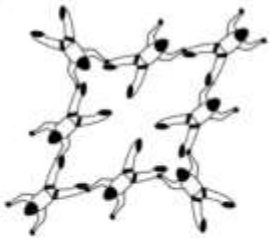
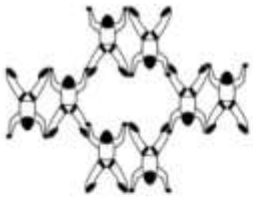
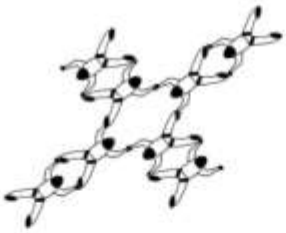
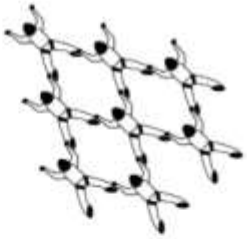
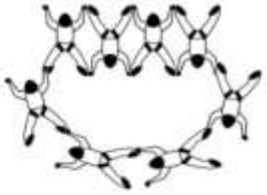
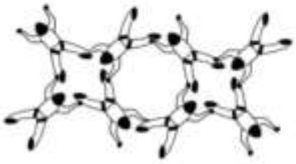
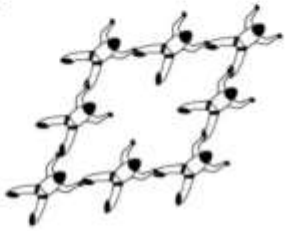
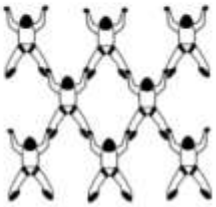
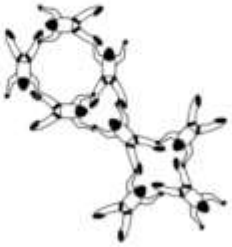
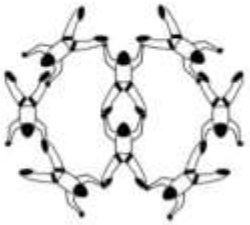
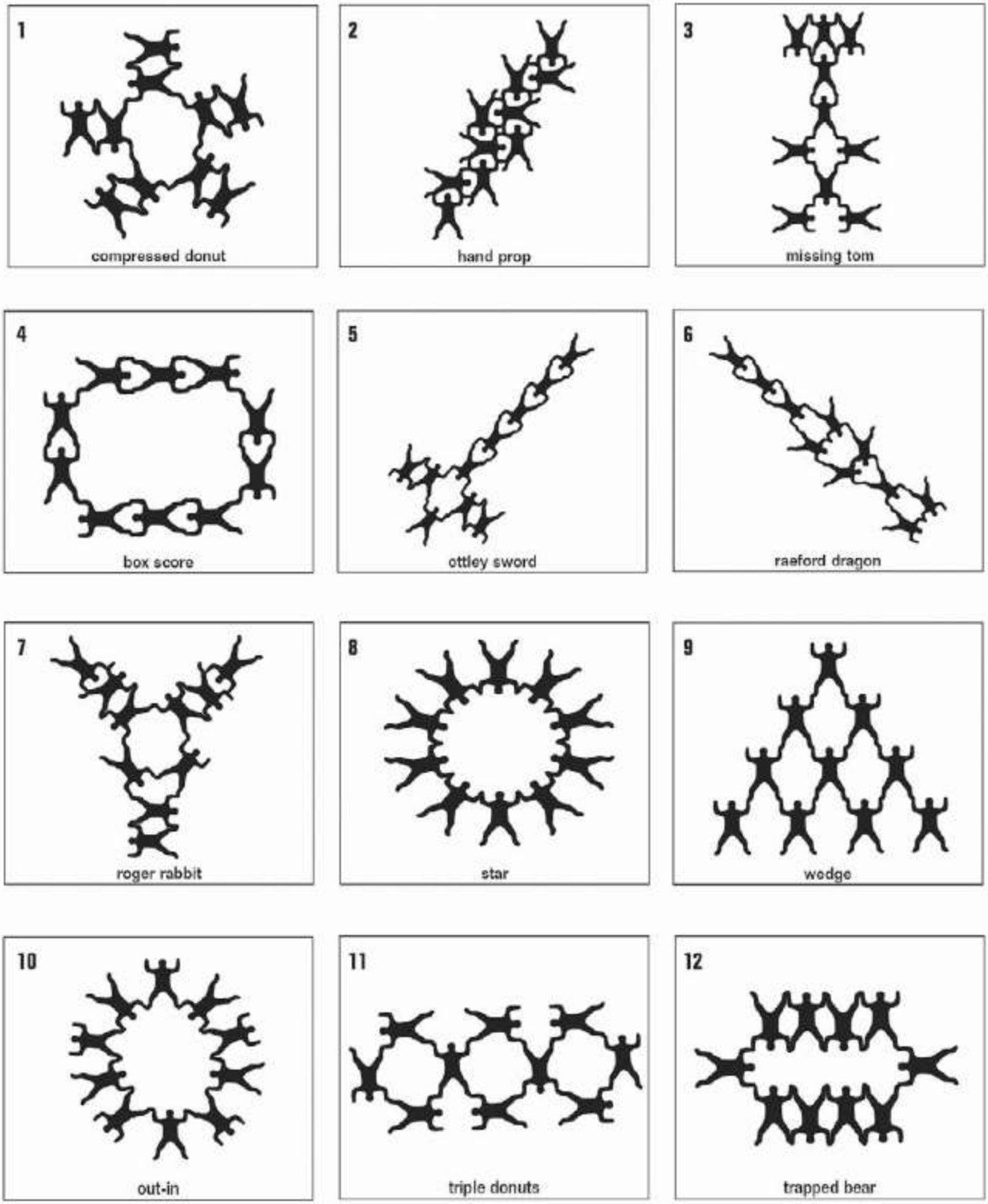
Compressed Stairstep Diamonds

APPENDIX VI – 8-WAY FS RANDOM POOL

A  Caterpillar	B  Stairstep	C  Hourglass	D  Hope Diamond
E  Rubik	F  Diamond Flake	G  Arrowhead	H  Iriquois
J  Springbok	K Crossbow	L  Open Facing Diamond	M  Double Spiders
N Zipper Flake	O Compressed Accordian	P  Venus	Q  Compass

APPENDIX VII – 10-WAY SPEED FORMATIONS