INTERNATIONAL PARACHUTING COMMISSION
FORMATION SKYDIVING COMMITTEE REPORT
MOSCOW, 2020

Competitions in 2019

Two First Category Events were held in FS disciplines during 2019.

3rd FAI World Championships of Indoor Skydiving in Lille, France

22nd FAI World Cup of FS skydiving held in Eloy, USA.

The indoor competition was well attended with 21 nations represented but numbers were down for the world cup in Eloy with only 12 nations present. Team numbers were boosted by the home nation which was very well represented with 14 of the 35 competing teams.

Comparisons of participation rates for previous years are shown in the tables below

<table>
<thead>
<tr>
<th>Year</th>
<th>Location</th>
<th>4-way FS</th>
<th>4-way FS Female</th>
<th>4-way VFS</th>
<th>8-way FS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>Eloy</td>
<td>13</td>
<td>7</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>2017</td>
<td>Saarlouis</td>
<td>17</td>
<td>11</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>2015</td>
<td>Teuge</td>
<td>20</td>
<td>9</td>
<td>8</td>
<td>8</td>
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</tbody>
</table>

The competitions both ran well, with positive comments from competitors at the events. For once there was no hint of rain at the outdoor event, the first time for many years and there were only a few brief holds due to wind. This allowed the competition to actually complete early and an impromptu international 10 way speed competition was held on the final day.

Competitors’ meetings were held at both events, with Kirk Virner as chair at the WISC at Lille and Mark Szulmayer chairing the meeting at the World Cup in Eloy. At the indoor meet, discussions revolved mainly around live judging and whether this is something to be considered. There are various issues involved and I believe the judges committee is considering the possibilities. Items raised at the outdoor meeting have been included in the FS agenda including raising the exit altitude for 4-way FS and reducing the time for calls for competitors in multiple FS events.
### Future Competitions:

- **4th FAI World Cup of Indoor Skydiving** – Charleroi Belgium 9-12 April 2020
- **2020 FAI World Parachuting Championships Mondial** – Tanay, Russia 11-21 August 2020
- **4th FAI World Indoor Skydiving Championships** - Liptovsky Mikulas, Slovakia 8-11 April 2021
- **23rd World Cup of Formation Skydiving** – Voss, Norway 30 Aug – 4 Sept 2021

Bids are sought for events in 2022 and beyond, notably FAI World Championships of Formation Skydiving, as the Host of the World Air Games in 2022 has chosen not to include Formation Skydiving.

My thanks go to all the members of the FS Committee:

- Deputy Chair, Kirk Verner (USA)
- Karla Cole (Germany),
- Randy Connell (USA)
- David Grauwels (BEL)
- Egor Gusev (Russia),
- Martin Lemay (Canada),
- Yasar Mohsen (Bahrain),
- Trude Sviggum (Norway)

Mark Szulmayer  
IPC FS Committee Chair  
7th November 2019
Formation Skydiving Open Meeting Agenda 2020

1. Suggestion to raise exit altitude for 4-way from 10,000 to 10,500 and minimum altitude from 7,000 to 7,500

With the advent of high performance canopies, many parachuting bodies have been raising recommended deployment altitudes to increase safety and in line with this it may be time to raise the minimum exit altitude for 4-way FS. At many competitions this has already been done for quite a while.

2. Suggestion to reduce minimum time for calls for entrants in 2 events from 45min to 30mins until they receive the 15min call.

3. Add 8-way to the Indoor Competition rules. Dive pool to be that used in the demonstration event in Lille. Also define how often 8-way competitions may be held (every 4 years perhaps)

The 8-way demonstration event was well received in Lille and it is time to add 8-way to the indoor competition. This is not something that can be included every year simply because there are not that many 16+ foot tunnels so perhaps allow for 8 way at the indoor world meet every 4 years at every second World Championships with the option to have 8-way at indoor world cups if tunnel and demand permit.

4. VFS grip-flips to be prevented...

When the VFS blocks were introduced that included orientation changes, the intent was to have these changes performed without assist grips

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

Proposed
3.3.6 Contact is allowed between different subgroups during the inter of a block sequence.
If an inter requires an orientation change by a subgroup, no grip may be taken between that subgroup and any other subgroup during the orientation change.

5. Improvements to wording for definition of HU & HD.

Current
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.
Proposed

2.17. VFS Orientation:

2.17.1 “The Vertical”: An imaginary line running parallel to the relative wind (see diagram)

2.17.2 “The Horizontal”: An imaginary line running perpendicular to the relative wind (see diagram)

2.17.3 “The flyer's Line”: An imaginary, straight line of infinite length, roughly following the flyer's spine, from the center of the flyer's hips through the center of the flyer's head and beyond.

2.17.4 “The Hourglass”: The acceptable range of deviation from The Vertical that a flyer's Line may take when meeting an orientation requirement (head up or head down). A flyer's orientation shall be judged with The Vertical and The Horizontal intersecting at the flyer's hips.

2.17.5 “Head up”: The flyer's Line must fall within, and remain within, the upper portion of the Hourglass

2.17.6 “Head down”: The flyer's Line must fall within, and remain within, the lower portion of the Hourglass

2.17.7. “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)

2.17.8. “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).

6. Changes to the rules surrounding sequential records. Recommendations are based on opinions received from the major organizers of large FS formations.

Remove the old partial break sequential record category and modify wording as shown below
3.3.3.2 FS Records

Large Formation Sequential and Full Break Large Formation Sequential

The record performance for the Large Formation Sequential record and Full Break Large Formation Sequential is the number of persons (not less than 25% (rounded up) of the size of the Largest Formation Record (World or Continental Regional, General or Female, as appropriate) at the time the sequential record is performed) to complete perform a sequence of two or more formations, giving a separate record performance for each number of formations completed.

A written plan of the record performance(s) describing the formations and the transitions to be attempted and the persons involved must be submitted in advance to the Judges. The formations and the transitions must be completed performed as described in the plan. Only a single written plan may be submitted for each attempt.

All persons in the completed formations must be connected by at least one grip either taken by the person or taken on the person. A grip is a handhold on an arm or leg (both as defined in the relevant Competition Rules) of another person.

(2) Full Break Large Formation Sequential

In the transition from one formation to the next, all persons in the completed formation must release all of their grips, all grips must be released on every person, and every person must be separated of all grips at one point in time. Simultaneous separation between persons (?) during the transition is not required.

None of the depicted grips from any previous formation may be retaken in any of the subsequent formation in the sequence for up to three formations.

After the team has completed three different formations, the team may elect to return to the first formation and continue the sequence (allowing the first set of grips to be retaken), or, continue the sequence of formations with a new, different formations.

(1) Large Formation Sequential  DELETED

An alternative suggestion for rule changes was received just prior to this agenda being submitted which consists of alternating piece moves and full break sequences. This is currently being looked at by big way organizers and will be presented at the plenary if agreement can be reached amongst interested parties.

Housekeeping:

1. Add wording that degree of turn must be in a single direction for FS and VFS...

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 centerpoint to be presented to the centerpoint(s) of the other subgroup(s). For judging purposes, the approximate degrees and direction of turn of subgroups centerpoints will be assessed using only the two-dimensional video evidence as presented. Degrees of turn performed must be in a single direction.
2. **Random M to be removed** from existing VFS clarification 2.3.1. as it is no longer relevant since random M was changed.

3. **For indoor in Addendum C**, remove details of which blocks & randoms are to be used in 16+ foot tunnels as it is now the same as 14 foot tunnels.

### 14 Foot Tunnel or Larger

<table>
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<tr>
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<th>Sequence</th>
<th>Random Formations</th>
<th>Blocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>5 to 6</td>
<td>A - Q</td>
<td>All 22 Blocks</td>
</tr>
<tr>
<td>Junior</td>
<td>4 to 5</td>
<td>A - Q</td>
<td>1,2,4,6,7,8,9,11,13,14,15,18,19,20,21,22</td>
</tr>
</tbody>
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### 16 Foot Tunnel or bigger

<table>
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4. **Change diagram of FS random E** to ensure no misinterpretation that might require a double grip by the centre pair.

**Old**

![Old Diagram](image1.png)

**New**

![New Diagram](image2.png)