62nd FAI / IPC PLENARY MEETING, BAR, MONTENEGRO – 29TH – 30TH JANUARY 2011

Subject:	PROPOSALS TO AMEND VFS & AE COMPETITION RULES	Annex nos. -	43
Author(s):	Andy Newell, per Ronald Overdijk, Chair, AE Committee	Agenda ref. -	14.5, 16.6
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Dear IPC Artistic Committee Members,

Following on from the competitors meeting held at the end of the 2010 world meet (Menzelinsk), I would like to make some suggestions in regards to the continuing development of the freefly compulsories and the possible addition of a new 2 way vertical formation event.

Through the development of wind tunnel technology and the wider dissemination of technical information regarding to body flying we have seen the evolution of competitive freeflying move at a accelerated pace; as it stands the guidelines for freeflying (Difficulty table) is out of date and the compulsory round algorithm fails to represent a teams efforts in a true sense, in relation to the scoring of free rounds.

Please allow me to submit these ideas for your careful consideration.

2 way VFS:

Firstly I'd like to suggest that a brand new discipline be created to cater for skydivers who would like to compete in '2 way VFS'/freefly speed rounds. I believe this would be great for both VFS 4 way and the sport in general for the following reasons: At a national level we would see a greater turnout in the number of teams who could and would compete in this discipline in comparison to 4 way VFS. Most freeflyers initially train with one partner in order to develop their skills and overall discipline; a 2 way VFS competition would exploit this natural occurrence and would help to give aspiring competitive free flyers some form of template and basic structure to their own personal progression. In addition to this positive aspect, the creation of a 2 way VFS event would make the 4way event more accessible to a wider array of flyers and result in a greater turn out at the 4 way VFS events.

As a starting point it might be an idea that the new discipline should follow the existing Artistic compulsory rounds and the Gauntlet (Eloy tunnel comp) dive pools, in order that there is some familiarity with the various points.

Artistic compulsories:

As suggested by Selwyn, from the US 2nd team; the creation of two artistic compulsory rounds where teams can effectively fit pre selected moves within their own free round and join the moves together in anyway they see fit to enhance the artistic element is a fantastic idea. This would create more variety and would also be testing for the teams.

By having a dive pool of basic manoeuvres that can be made more complex, means that these rounds are only limited by the individual team's skill sets and their imagination. It is therefore my suggestion that 6 manoeuvres be submitted that are of a basic level but where there is opportunity to add varying levels of complexity. A further 2 manoeuvres (entrance and exit) should be at the choice of the team in order to enhance the variety that these rounds are designed to show.

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In order to make the rounds more testing, it is also suggested that the 6 compulsory manoeuvres are randomly drawn. I.e. Three randomly drawn manoeuvres from the basic dive pool per compulsory round. This would result in a compulsory round that shows an entrance and exit of the team's choice and three randomly drawn compulsory manoeuvres totalling five distinct portions of the round.

The entrance and exit should not be the same as either the free round or the other compulsory round in order to create more variety.

Extra presentation points can be earned for continuous movement to and from the set manoeuvres. I.e. continuous movement from both performers and camera without obvious set ups. Continual flow and creativity should be rewarded.

Freestyle:

It is also my strong belief that this same compulsory format change should apply to the freestyle discipline in order that the soloist events keep up with the changing pace of the sport. A similar grouping of compulsory manoeuvres and a new difficulty table would be required for freestyle…….

My list of compulsory manoeuvres for the freefly event are as follows:

- Performer Carve
- Performer rotations (vertical axis)
- Carve with camera
- Eagle with camera
- Synchronised trick
- Tracking / Angled flight

- Entrance own choice
- Exit own choice

Compulsory difficulty table (freefly):

The table only acts as a guide in terms of showcased technical skill; in no way does this help measure presentation. This table merely shows how layers of complexity can be added to the standard compulsory manoeuvres.

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Manoeuvres	Very easy	easy	moderate	difficult	Very difficult
Performer Carving head up / head down	Facing towards each other	Taking grips	In face out face In face with direction change or spins	Outface	Outface with direction change, inclusion of spins/ tricks
Performer rotations (vertical axis)	Facing towards each other no grip	Single grips	Double grips No grip with spins	Grips broken and caught Single grip with spins Hand grip to non hand grip In face out face	Non hand grips, flown contact throughout Outface
Carve with camera (3 way)	In faced	In faced linked	In faced with direction change or spins/ tricks In faced slot swapping	Outface	Outface with direction change / multiple spins/ tricks Outfaced slot swapping
Eagle with camera (3 way)	In faced side by side	In faced reversed (feet first) side by side	Half of rotation outfaced	Full outfaced Performers in file, in face	Full Outfaced with inclusion of spins/tricks/ slot swapping performers outfaced in file
Syncro trick	trick uses one axis only	Turns on belly and back	trick with half twists / loops	Trick with one twist / loops	Trick multiple twists / loops combined
Tracking/ angled flight	Side by side on belly Background is still	Side by side back fly background still	Side by side belly or back Background is moving	Slot swapping/ rolls while Background is moving	Cork screwing in sync with camera including tricks/ rolls/spins Feet first
Camera flying	Camera static Camera has obvious set up	Static spins (cartwheels)	Camera has continuous motion	camera has non linear set ups and continuous motion (move from one axis to another in carving motion) direction switches	Camera shows elliptical orbits as well as circular orbits to showcase speed. Camera spins whilst maintaining directional movement

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Further to the compulsory difficulty table I would also like to introduce two calculations that I have previously used to place free rounds in terms of both difficulty and presentation. Because we are now considering judging all rounds of the freefly competition by artistic merit, I would like to humbly submit the following calculations in order to make the judging process less subjective. I hope that their inclusion will help to alleviate certain concerns that a lot of competitors have over the subjective nature of competitive freeflying and in doing so attract a larger number of skydivers to the discipline.

Calculations for both Difficulty and presentation are as follows:

$$\text{Difficulty} = \text{Speed} + \text{Synchronicity} + \text{Complexity}$$

$$\text{Presentation} = \text{Form} + \text{Arrangement} + \text{Delivery}$$

Each of the variables (judgeable criteria) comes with an explanation as to why I think they are important and why they fit within their specific calculations. I have also added a list of examples that might act as a guide to judging. I hope that the examples listed might potentially be used to aid the judging process for both artistic free rounds and the new proposed compulsory rounds.

My intention is not to compartmentalise freeflying as a competitive discipline and have tried hard to keep the examples as broad as possible with modern flying styles in mind; many of the examples listed are very similar to the current examples found in the rules: Addendum –C, 'difficulty factors' and are just common sense.

I am also very keen that innovative flying (specific manoeuvres) and the show casing of a teams own individual style be rewarded through the use of these examples as a potential scoring guide. The last thing we want is every team to read this and start flying the same manoeuvres and in the same style. I hope that the following gives the competitors an idea on how to structure free rounds to their advantage whilst making the scoring process less subjective.

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Break down of the variables used to calculate difficulty:

Speed:

Essentially flying is about movement and I think it is important that this particular element is taken into consideration. The ability of freeflyers to move at speed with integrated videography is one of the things that make the discipline look visually impressive. In addition to the importance of showcasing the speed, or the 'flight element', it is universally recognised that carrying out technical manoeuvres at speed is difficult. This is something that everyone can appreciate. Everybody understands that driving a car for example, at high speed is more difficult than driving slowly.

Examples:

Not Favourable	Favourable
Manoeuvres or group flying that is Static or lethargic	Manoeuvres or group flying carried out at speed or showcased in a fast or explosive manner
The Round is low tempo (slow succession of tricks)	The Round is high tempo (action packed)
Long periods of static or documentary style videography	Integrated videography that showcases speed, movement and at time explosiveness.

Synchronicity:

Synchronicity or perfect timing requires a high level of skill to achieve and showcases precision. Whether it is three way group flying or trick mirroring (flip and twist e.g.) synchronised flying displays technical skill and falls in line with other difficult aerobatic sports or demonstrations, such as fast jet demonstrations. The difficulty aspect of flying in a synchronised manner might not be that apparent and many might say that this variable could just as well fall within the calculation for presentation. Despite this I feel that many of the competitors would agree that this element should be judgeable under difficulty rather than presentation as it is the mechanics of flying in this way that is hard and not necessarily the enhancement of the aethstetic.

Examples:

Not favourable	Favourable
Performers move independently and are out of sync	Performers move in sync as a single unit
Obvious timing difference between performers carrying out individual synchronised movement or mirrored manoeuvres	Performers are perfectly in time carrying out in individual synchronised movement or mirrored manoeuvres
Videographer falls behind the pace and fails to showcase a specific manoeuvre from the most advantageous position (I.e. wrong angle, parallax issues, the manoeuvre in hidden)	Videographer is in right place at right time to showcase a specific manoeuvre.

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Complexity:

The higher the degree of complexity, the greater the degree of difficulty. This applies to specific manoeuvres ;(Head to head rotation of exit EG) and the structure of the round it self. Scores should reflect levels of complexity within a round and in particular, innovative manoeuvres and flying styles in order that teams continue to work hard and break new ground.

Examples:

Not Favourable	Favorable
Manoeuvres that show one layer of complexity	Manoeuvres that are multi layered (tricks within tricks, multi axis e.g.)
Conventional / repetitive manoeuvres	Highly innovative manoeuvres and free round structure
Manoeuvres that are grip switched	Manoeuvres that are caught or landed (In the Gymnastic sense)

*In regards to multi layering please look at the compulsory difficulty table as an example.

Break down of the variables used to calculate presentation:

Form:

Good form equates to flying in such a manner as to show 'clean lines' i.e. strong posture and deliberate movement. Any unnecessary movement or obvious positional correction detracts from the overall aethstetic giving an unwanted scrappy or unpolished feel to the routine.

Not favourable	Favourable
Loss of control during a manoeuvre or group flying	Controlled movement throughout
Weak posture	Strong posture
Erratic or unnecessary movement	Deliberate movement
Performers unintentionally fly wide	Performers maintain good proximity
Lack of precision (missed grips e.g.)	Perfect precision
Scrappy videography (camera shake, bad framing, videographer unintentionally in frame, (hands, feet, ring sight, nose…))	Videography that is smooth and precise

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Arrangement:

As with any piece of performance art its structure or arrangement is a key element in maintaining the attentiveness of the audience. The arrangement of a free round should effectively take the observer or audience on a journey with the intention of provoking an emotional response. Careful arrangement / placement of specific manoeuvres with carefully choreographed flying incorporating the Videographer, allow teams to showcase their own style and individuality. This is something that should be reflected in the scoring otherwise we run the risk of stylalised plagiarism and the eventual stagnation of the discipline.

Examples:

Not favourable	Favourable
Round looks two dimensional and static	Round looks three dimensional and shows depth
Intermittent action that stops and starts	Continuous action that flows from one portion to another seamlessly
Lack of synchronisation with videographer	Synchronised with Videographer
Has a flat and repetitive arrangement	Arrangement that rises and falls throughout (rollercoaster or crescendo effect e.g.)
Starts late from exit and doesn't end in time, or ending is not obvious.	Has a positive start from exit and definite ending

Delivery:

With most performance art its all in the delivery and it is important that this is taken into account during the scoring process. Many competitors would agree that expectation leads to bias; certain teams have a reputation for creating great freeflying and it is only natural to assume that there is some form of pecking order in regards to where teams should place before anyone has even boarded an aircraft. This is why it's important that the delivery of a team's free round is taken into account as it reflects how the team work together under competition pressure. This variable makes the scoring free rounds more performance based increasing objectivity and fairness.

Examples:

Not favourable	favourable
A trick or manoeuvre does not go to plan (they crash, or miss time a manoeuvre)	All trick and manoeuvres work and are well timed.
Round lacks individuality and is conventional	Round showcases particular individual style or flare.
Out of time	Completed in allocated time
Free round fails to engage audience or observer at any level	Free round engages audience or observer at an emotional level provoking a response.

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The calculations can be applied in a real sense to both the rounds themselves which is my intent but can also be applied to specific manoeuvres within the rounds if need be. I.e if there was a disagreement over a particular portion of a free round.

If the calculations were applied specifically to measure every aspect of a free round, the judging process runs the risk of being too drawn out and time consuming. With a lack of judges at national level competition this could become a real issue. Therefore it's my intent that the calculations are there to act merely as a guide to determine a fair score for both difficulty and presentation using the submitted variables as a basic structure.

Example:
'Did the routine showcase speed? Was it synchronised? What was its level of complexity?' Using points based system from 1 to 10, each variable can be scored and the calculation is applied to give an accurate score for both presentation and difficulty.

Difficulty = Speed + Synchronicity + Complexity
                      4   9   8

The variables are added together and an average is worked out.

4 + 9 + 8 = 21   21 / 3 = 7.0

Presentation = Form + Arrangement + Delivery
                         7   4   5

The variables are added together and an average is worked out.

7 + 4 + 5 = 16   16 / 3 = 5.3

The two figures are again added together and averaged giving a final score for the round:

7.0 + 5.3 =   12.3 / 2 = 6.15

Final score for the round to one decimal place (rounded up) = 6.2

Obviously this scoring system and the guide lines (Examples and difficulty table) are totally unproven. I hope to circulate these ideas throughout the wider community and gain some feedback on these ideas. It is important to me that both the calculations and the new ideas regarding the compulsories are well received by the freefly community before being actioned by the commities.

I hope that you might consider these changes to the competitive artistic events in order that VFS becomes more accessible to the masses and that the Freefly and Freestyle retain its cutting edge as the sports most developmental disciplines.

Yours sincerely,

Andy Newell
Artistics competitor