

MEET THE FLOCKERS

Wingsuit Formation Judging Grid

By Neil Fergie (Fergs)

How do we make wingsuit formations that can be recognised and judged?

What constitutes a record?

How is the formation planned?

How is it presented to judges?

How is its completion verified?

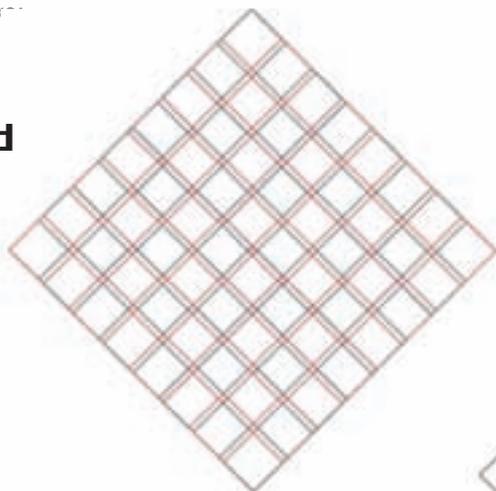
How is it recorded and verified?

Until recently there was no documented or recognised mechanism for the wingsuit and judging communities. Taya Weiss and Jeff Nebelkopf saw the need so they set about designing a solution – the Wingsuit Formation Judging Grid - and then presenting their proposal initially to two parachuting bodies, the UPSA and PASA. The 2009 Afterlife Boogie has enabled us to present the same system to the APF and we are confident that it will be adopted by most, if not all, country skydiving bodies around the world.

The system allows a scalable grid to be overlayed on an image of the formation and so verify whether or not the formation is per the plan, dimensionally correct and importantly able to be easily presented for judging.

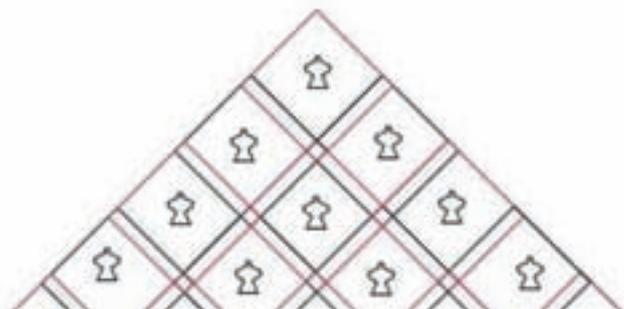
Here's how it looks...

The Grid



The grid characteristics allow for: diamonds approximate wingsuit shape; a digital file is easy to superimpose over images of the formation; the grid is scalable to fit over any size formation; the overlapping red and black lines allow for additional margins of movement for each wingsuit flyer; it's easy to implement; it's a simple judging criteria; it's a standard that is fair and easy to use.

How to Judge Using the Grid

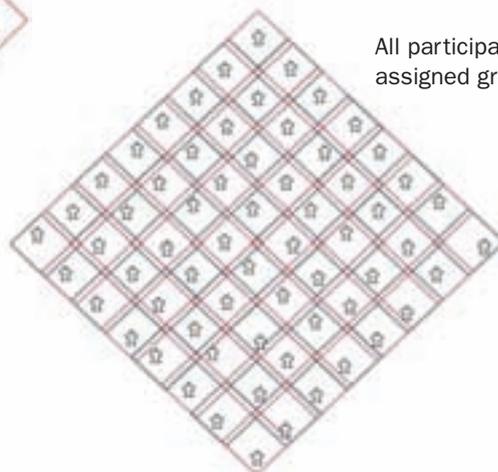


In Australia, we are required to submit a schematic to judges prior to the jump showing the intended formation along with a list of participants as well as other details (times, aircraft registration, pilot name, etc). After the jump, the grid is digitally placed over the formation's image using Photoshop or a similar program, using a "best fit" standard

Each participant must have, at minimum, some part of their body *visibly inside* their assigned grid space. The whole body does not have to be right in the center of their grid space – only a portion of the body.

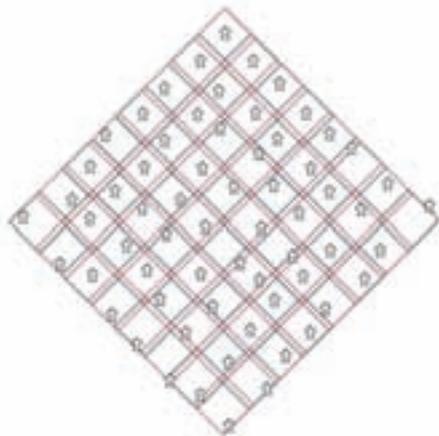
Here are some examples:

Example 1 : Symmetrical (Success)



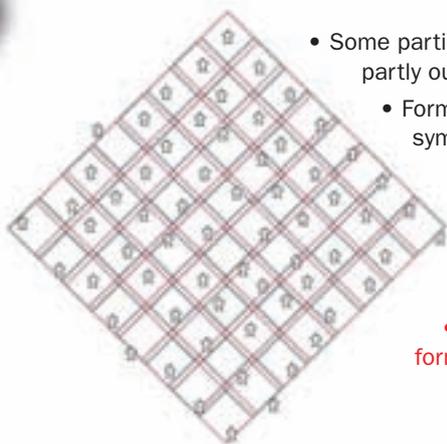
All participants clearly within their assigned grid space

Example 2: Asymmetrical (Success)



- Some participants close to the edges or partly outside their grid space
- Formation not perfectly symmetrical
- BUT - Each participant has part of their body visibly within their grid space.

Example 3: Asymmetrical (Failure)



- Some participants close to the edges or partly outside their grid space
- Formation not perfectly symmetrical
- At least two participants touching the line of their grid space, but no body part visibly inside the space
- This is not a successful formation.

Here's the grid overlay for the submission of the initial Australian 10-way Wingsuit Formation Record. As you can see, it clearly indicates a completed formation, per the Wingsuit Formation Judging Grid system.



For all the Record jumps at the recent Afterlife Boogie we were able to use the grid system immediately after landing. Critical in the process are clear images and in the case of these records we were fortunate with our pool of legendary wingsuit photographers – Hayden Galvin, Mark (Throbba) Throsby and Brett Newmann.

I am completely satisfied that the Wingsuit Formation Judging Grid system now solves the needs that wingsuit formation records have always had, but until now did not have a solution. Most importantly, the system allows the APF judging system to have a method to judge record attempts and confirm the records to those that indicate the completed formation. A special congratulations and thanks should go to Taya Weiss and Jeff Nebelkopf for designing and presenting the system to the wingsuit and judging communities around the world.

First Wingsuiting Experience

By Winston Taylor

Wow man what a day! Arrived at Picton early Sat and met Greg and Elaine Cox. Talk about two of the nicest people you will ever meet. You could tell that they really had a passion for wingsuiting and loved sharing it with others. There ended up being four students who I think all had around the 200-300 jumps each - myself, Will and big John from Picton and another guy named Tom. They talked us through the basic principals like:

- Attaching suit to rig.
- Getting in the suit and ensuring that you had your leg straps on.
- Boarding the plane and how to sit for the climb to height.
- Informing the pilot that you were on board and what sort of pattern you were planning on flying.
- Exiting procedures for different planes. Being mainly Skyvan and XL jumpers, they ensured we understood to have all wings closed when exiting the XL to avoid a tail strike.
- Flying pattern details and how to ensure that you make it back to the DZ and don't invade other jumper's air space.
- Body positioning, where to have your arms and legs etc.
- Emergency procedures and what to do in case of a flat spin.
- Waving off with your feet as you obviously can't get your hands above your head.
- Closing leg wing down before deployment.
- Keeping body symmetrical when reaching to deploy, and
- Unzipping yourself after canopy opening.

This took a few hours and we did quite a few drills on the entire jump and what we were to do.

We were jumping from the Skyvan (life's tough hey...) That was good news to me as we didn't have to worry about the tail strike thing. Also it meant we only had a 10 minute ride to height so less time to sit in the plane and worry about the jump!

We were going to shuffle to the back of the plane and while facing the pilot, open the wings and just hop back into the unknown. Then turn 90 degrees left and do two practice pulls making sure we closed the leg wing first and brought both arms symmetrically down and touch fingers underneath the BOC, then feel the hacky sack. Then open up all wings at once.

After this, another 90 degree turn towards the drop zone and then play with body position and get a feel for the suit and body position. At 5,500ft when Dytter goes off, wave off, tap of the legs, then close legs again and lock them together. Reach both hands behind back and deploy as normal making



sure that the left hand mirrors what the right is doing. Then quickly bring hands to the front and cross arms or take up the praying motion if you prefer. After you get a good canopy, unzip arms and legs. Normal procedures in case of malfunction. In case of line twists you will obviously need to unzip your arms quickly in order to reach your risers to sort it out.

So after a lot of drills we are on a load and on the plane in no time.

Will and myself were first up and I was jumping with Greg.

Fairly nervous on the ride to height, I was trying to run through the jump in my head. What I have to do and what to do if it all goes pear shaped. By the time I got to the door I noticed that we were a long way from the drop zone. I wasn't sure just how much distance you can cover in these suits so I wasn't really sure if I should be worried or not. Greg mentions that we are pretty deep. Back up to the door and up, down and hop back. The propellor wash off the back of the door is pretty severe with the wings out and for the first maybe 10 seconds I feel pretty unstable and get that rocking motion happening. I wasn't really sure what I was doing wrong but I tried to get my arms and legs in the positions that I had been taught and hoped that when I got some speed up I would feel more stable. The stability comes fairly quickly and I turn 90 degrees left. Two practice pulls go okay and I'm feeling good. Another 90 degree turn left and try to aim a bit right of the DZ to run parallel to jump run. I notice that we are really deep and I try to straighten my knees and get my arms in the right position and can feel that we are covering some good distance. I'm feeling good that I am relatively stable and holding a heading okay. I wonder if Greg is close by as he did mention that if we get the direction wrong he is not going to follow me into the blue yonder. I see him close beside me which is cool and figure that I am on the right track.

It felt awesome at this stage and like I was flying like a bird. I was cheering and enjoying the feeling of the forward speed. I was hoping that this would last forever. I was a bit bummed when the party pooper goes off at 5,500ft. We are still deep and I didn't cover as much ground as I thought I should have. Close leg wing and reach for the hacky and find it okay and throw. I was a bit surprised by the swing I got from the canopy opening but all opens okay. Unzip myself and head for home. We only just made it back and Will and Elaine landed off. I was pretty pumped on the ground and Greg said that I did alright.



After viewing the video which was excellent thanks to Greg, I saw a few things to work on in the next few jumps. My legs were too narrow which was probably why we didn't cover as much ground as I thought I should have. I panicked a bit when I saw how far away we were and forgot to wave off.

I did three more jumps that day and tried to concentrate on getting my legs wider and knees straight and felt more forward movement.

I can't thank the Cox's enough for their time and expertise. They were happy to answer all of our questions no matter how silly they may have been.

Will and myself did a 2-way for our last jump and the Cox's ran an 8-way flock.

