What does it take to make a record-breaking skydive?



"Attitude is a little thing that makes a big difference"

Winston Churchill

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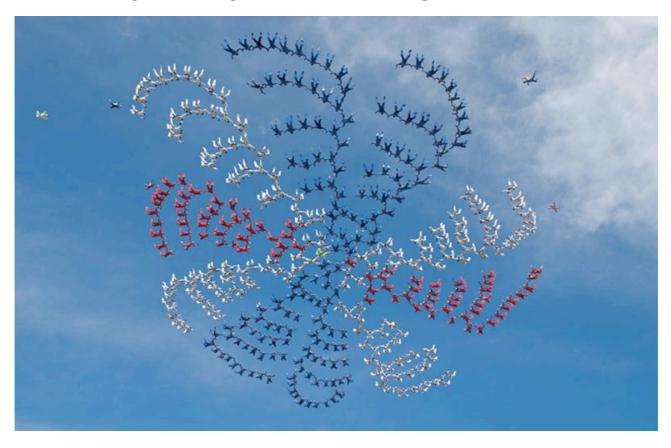
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C	ontents			Page
١.	Summary	of Fellowship		3
2.	Fellowship Goals and Achievements Skydiving Events			4
	1 2 3 4 5 6 7	March Madness First Flight Course & Over the Hills Texas State Record Florida State Record & Flight of the Phoenix Brit Chicks Training Camp Arizona Challenge Perris Power Play	Skydive Sebastian, FL Skydive City, FL Skydive City, FL Skydive Spaceland, TX Skydive Deland, FL Skydive Deland, FL Skydive Raeford, NC Skydive Arizona, AZ P3 Skydiving, CA	6 7 8 9 11 12 13 15
3.	Results and Conclusions			
	1 2 3	Organisation Skydiving and Coaching Video, Images and Technology	(19 21 23
4.	Road Trip			25
5.	Dissemination			
	1 2 3	Website Events Future UK Records		29 29 30
6.	Supporters			32

"The length of this document defends it well against the risk of its being read."

Winston Churchill

Fellowship Summary and Personal Background



The current World Record in Formation Skydiving is 400 skydivers linked in freefall. Surely this defies the bounds of possibility?! Four hundred people all performing their job perfectly, in freefall, within exactly the same 60 seconds as everyone else!

By taking part in thirteen National and World Records, I became fascinated by their magic. It amazes me that we can achieve the wildly improbable, the fantastically unlikely and the near-impossible – time and time again – and then push ourselves to even greater heights. This is a characteristic of human nature we see displayed in countless areas of activity – an almost obsessive desire to keep expanding our envelope of possibility.

I began to step into a leadership role and organise large formation skydives myself, using what I had learned. I have now masterminded four British Female Records, beginning in 2002 with a 40-way (40-person formation) and the most recent being a 68-way Red Cross formation in 2007. To go any larger would require complicated logistics, planning and technical aspects. I therefore wanted to go on a journey across the United States, the Mecca of skydiving, to collect the information I would need to put together further records for the UK.

So, the Fellowship idea was born; to travel to several of the most advanced skydiving events worldwide, all conveniently located on one continent within a four-month period. I also wanted to take the opportunity to make some personal advances in my skydiving, such as doing my first jump with wings. To join these together I would drive right across the States from one coast to another, thus also gaining personal insights into this country, its landscapes and cultures.

400-way World Record by Bruno Brokken

Goals of the Fellowship

- 1. To investigate first-hand the most advanced techniques of formation skydiving records
- 2. To interview leading figures in the sport for their secrets of success
- 3. To disseminate the new information via a multi-media, web-based resource
- 4. To expand my journalistic skills into new media
- 5. To reconnect with my energy and passion for skydiving
- 6. To drive across the States and see the different landscapes, cultures and customs
- 7. To return to the UK armed with new skydiving knowledge and disseminate it freely
- 8. To subsequently organise a new British Female Skydiving Record (more than 68 women)
- 9. A dream goal, ultimately to organise a new British Record (more than 100 men and women)

Achievements Against Goals

Goal I - Investigate first-hand advanced techniques of formation skydiving records

I attended seven major skydiving events, two of which resulted in new State Records, and three in building unique formations. I made 133 skydives, was a participant on all the 'special' jumps and gained inside experience as a Plane Captain, Sector Captain and sitting on the organisational team.

Goal 2 – Interview leading figures in the sport for their secrets of success

At each event I was able to interview the load organisers, drop zone management, photographers, pilots, judges, and everyone involved in the record-breaking team.

Goal 3 - Disseminate the new information in a multi-media, web-based resource

My website went live before I set out, explaining the aims of the project. Each day I was away, I uploaded a photo and a short description. Educational information could be found via the search facility, although I was delighted to see many people simply followed my blog daily. The site included a link to the Winston Churchill Memorial Trust website, www.wcmt.org and a rolling series of quotations from the great man himself. See: www.bigwayrecord.com

Goal 4 – Expand my journalistic skills into new media

I was the full-time Editor of The British Parachute Association (BPA) Magazine for fifteen years, transforming it from a community-style newsletter into an internationally-renowned, glossy magazine. During my Fellowship I thoroughly enjoyed the transition to a web-based resource, applying my same talents in a different arena. I especially relished the opportunity to interview people, gaining the best of their knowledge by asking the right questions. I am now working on a completely new project, an independent, online skydiving magazine. This would not have been possible before my Fellowship.

Goal 5 - Reconnect with my energy and passion for skydiving

As the BPA Magazine Editor, I was suffering from a certain amount of burnout. The Fellowship allowed me to step back completely from the work side, and remember why I started skydiving in the first place. I returned relaxed, refreshed and firing on all cylinders; I now have replenished energy and an exciting new career path.

Goal 6 – To cross the States and appreciate the different landscapes, cultures and customs

I drove over 9,000 miles across twelve different States, from the east to the west coast of the USA, visiting over twenty National Monuments, State Parks and sights of interest along the way (see page 25). I realised that each different state is like its own country, with its own laws, attitudes and flavour.

Goal 7 - To return to the UK armed with skydiving knowledge and disseminate it freely

I returned with bucketloads of the latest information, and put this to good use. I've attended six major skydiving events since, including the BPA Fiftieth Anniversary Boogie, where I was proud to be a volunteer coach giving a very professional service.

Goal 8 - To organise a new British Female Record

I am making plans to break our own female British Record (68-way pictured below), with a date set for the event, 7-15 September 2013 at British Parachute Schools, Langar Airfield, Nottinghamshire.



Dream Goal 9 – Ultimately, to organise a new British Record (more than 100 men & women)

This record is on the drawing board, I am in discussions with a number of parties. If we can gain sponsorship a new British Skydiving Record is definitely there for the taking!

Itinerary - Skydiving Events



Event I - March Madness

Drop Zone: Sebastian, Florida www.skydivesebastian.com

Dates: 15-16 March 2011

Aircraft: Twin Otter

Goal: Refresh my skydiving currency

Winter in England is not very skydiver-friendly, so I arrived in Florida having not jumped for five months. After a week sorting out my transport it was finally time to get back in the air. I went to the beautiful drop zone of Skydive Sebastian, in the picturesque Treasure Coast, and made some relaxed, fun-filled jumps to start the season gently. Back in freefall, it felt like meeting an old friend; clearing the winter cobwebs and reminding me how good skydiving is for my mental health. After a good day's jumping, I feel both more relaxed and more stimulated.





Event 2a - First Flight Course

Drop Zone: Zephryhills, Florida

www.skydivecity.com

Dates: 18-21 March 2011

Aircraft: Caravan

Goal: Make my first wingsuit jump

See: http://raisethesky.org

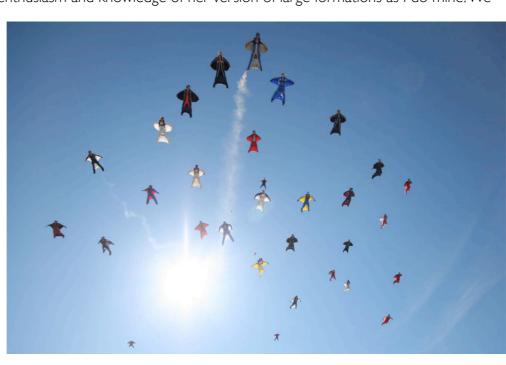
A day was spent in the classroom with instructor Scotty Burns, learning all the theory I would need, and a lot more that hopefully I wouldn't – malfunction drills! I geared up and practised opening, cutaway and reserve procedures. Eventually waddling to the aircraft, we climbed to 13,000 feet, and I made my first wingsuit jump. What an amazing feeling! Since the dawn of time, humans have wanted to fly, so the feeling of being in freefall, with wings, able to fly in any



direction I wished, felt truly special. In all I made four wingsuit jumps; some solo, some with others, paving the way for future 'flocks' of several wingsuiters. It was wonderful to find my skydiving skills were so transferable. The suit felt strange on the ground – I felt like a penguin – but once in freefall I was very comfortable and found it easy to fly in close proximity to others.

I listened for hours to Scotty talking about bigger formations, followed by Taya Weiss, organiser of the world's largest flock (68 wingsuits). It was like meeting my equivalent in a different discipline; she has the same energy, enthusiasm and knowledge of her version of large formations as I do mine. We

found a great many parallels and I learned a lot about the differences. I'm keen to try out this year, as Taya is running a record event – though I'll need more than my five winguit jumps!



Flock by Mark Harris

Event 2b - Over The Hills

Drop Zone: Zephryhills, Florida

www.skydivecity.com

Dates: 25-28 March

Aircraft: Two Twin Otters

Goal: Multiple point 20-ways and 40-ways as preparation for the larger formations coming up

Organisers: Dave Ruffell and Louis Tommaso



My goal was to warm up for the season ahead and I knew Dave's relaxed style was just what I needed. We made a few I8-ways from one Otter, then quickly moved to 36-ways from two, which for me is where the fun really starts. Climbing to altitude in a small aircraft full of your friends, looking at another plane right next to you, never loses its magic. As I wave at my buddies in the other aircraft that I'm soon going to join in freefall, I always think how privileged I am to have that opportunity.



Over the next few days, we made 15 complicated skydives, turning big pieces in freefall, and building many different formations each jump. I had a tremendous time and felt very 'on form' to go to my next event, where I would be a chief rather than an indian. However good a skydiver you are, it's important to be current to be at the top of your game, and of course this also is the safest place.

Photos by Scotty Pratt & Henny Wiggers

Event 3 - Texas State Record

Drop Zone: Skydive Spaceland, Texas www.skydivespaceland.com

Dates: 6-10 April 2011

Goal: Set a new Texas State Record

Dream Goal: World Record Sequential

Aircraft: One Skyvan, Seven Twin Otters

Team Captains: Tom Jenkins, Kate Cooper-Jensen, Tony Domenico, Milko, Josh Hall, Doug Forth, Mandy Schaeffer, Larry Henderson, Scott Latinis – and Me!



Camera: Henny Wiggers, George Katsoulis, Willy Boeykens, Brett Thomas, Andrey Veselov and Eric Boyd

This 5-day event was a testament to efficient planning and thorough organisation. Everything had been meticulously prepared down to the last detail. All participants had been expertly slotted in advance by Tom. Every participant was given a colour booklet with crystal-clear instructions for building, breaking and tracking, to ensure everyone followed the plan.

As 'H Plane Captain', I was to run the 'H' plane; ie, the eighth aircraft in the-V formation, on the furthest right in the above picture. The aircraft, a Twin Otter, was the responsibility of the pilot, whereas my duty was to safeguard and coach the skydivers in that plane. In freefall, as a Sector Captain, I ran a segment of the formation – like one Dairylea cheese triangle. By delegating sectors to captains, the difficult job of organising 200 people is reduced to manageable sections of 30. Each of us worked within our area, moving people around to make the best line-up using the talents we had. Large formations are like a giant jigsaw puzzle, with many varied pieces. It's about finding the right place for each person (piece); then it will all fall into place.



On the first day everyone made five jumps with their groups of 30-40 from two planes. Skydive Spaceland ran like a well-oiled machine – aircraft were taking off every ten minutes! My sector joined Josh's, so we worked together for briefing and debriefing. I learned a great deal, and felt confident. By the end of the day we had a successfully building sector and a fine team spirit. We were ready to join with all the other groups to attempt the record.

The second day was pretty weathered out, meaning we did hours of dirt-diving (preparing the jump on the ground). This gave me the opportunity to pick the brains of the other organisers there, and for much talk about future projects. The skies cleared at the end of the day and we went up for one 168-way attempt. It built to 137, exceptionally good for a first go.

The third day was also hampered by wind but we made two more jumps, each one growing larger, finishing the day on 164. The next day we smashed the record straight away, making a new Texas State Record in just four attempts — outstanding!

The weather only allowed us one more jump, where we tried for a second point, a potential World Record. This was close but no cigar. We felt the sequential record was there for the taking but had to stay on the ground as the winds were strong and gusty. In skydiving, you have to respect the weather, and err on the side of caution, most especially with large loads. The saying goes, "It's better to be down here wishing you were up there, than up there wishing you were down here!"

In all this was a fantastic event, superbly organised, as demonstrated by the successful conclusion of a new State Record (below) in a fraction of the jumps we could have expected.



Photos by Henny Wiggers

Event 4 - Flight of the Phoenix

Drop Zone: Skydive Deland, Florida

www.skydivedeland.com

Dates: 14-18 April 2011

Team Captains: BJ Worth, Mike Johnston, Louis Tommaso, Alia Veselova, Pal Bergan, Herman Landsman, Victor Kravitz, Tom Claeys, Patrick Passe, Pal Bergan, and Me.

Camera: Henny Wiggers, Gustavo Cabana, Luciano Bacque, Andrey Veselov, George Katsoulis

Goal: Florida State Record

Dream Goal: Build the World's Largest Picture Formation

Aircraft: Sherpa, Skyvan, PAC XL and six Twin Otters

This was the brainchild of BJ Worth, Director of World Team, the organisation of the last two World Records. Sector and plane captains were from seven different countries, and the 200 participants were from 15 nations. We wanted a State Record and were captivated by the iconic picture on the World Team website of the dream formation of the event – a giant Phoenix.

Record-breaking formations are designed to be as easy as possible, so that the shape will help it to fly well, through spines and symmetry. Picture formations, on the other hand, are notoriously difficult to fly. The largest so far were made for the Honda adverts – 'Difficult is Worth Doing' – where

40 skydivers built car parts in the sky, such as a 'shock absorber', 'steering wheel' and 'camera'. Our planned Phoenix was four times the size – and at least ten times as hard!

On the first two days we attempted a relatively simple formation of 190, building eventually to 172, with the other skydivers close. At first we went to 16,000 feet, with everyone on oxygen until we had the exit signal. When the limiting factor, became time not performance, we climbed to 18,000 feet for extra freefall time. Clouds eventually grounded us; we must be able to see all aircraft for obvious safety reasons.





We decided to abandon the 'easy' formation and go on to what we were all there for – to build a freefalling Phoenix. Either would break the Florida State Record but the bird jump was in theory much harder. It was an all-or-nothing call, based on our collective desire and belief. The third and fourth days, we climbed to 20,000 feet to try for the big bird. The skydives gradually improved, getting slightly larger each time.

It was all down to the wire, the last and fifth jump on the last day of the event – we knew it was 'now or never' ... everyone did their absolute utmost ... the build was smooth and steady ... suddenly we could feel it, in freefall, a giant 185-way Phoenix that looked exactly like the picture! We had succeeded in our dream goal, and set a Florida State Record to boot!

We landed to happy faces, kisses, hugs, screams, tears and joy; everyone embracing each other as we had truly achieved something special together. It is these moments that I love the most about record-breaking skydives, that feeling of being a small part of a huge team, that will only accomplish its goal if every individual plays his or her part perfectly.

Photos by Henny Wiggers & Gustavo Cabana

Event 5 - Training Camp

Drop Zone: Skydive Raeford

http://jumpraeford.com

Wind Tunnel: Paraclete XP

www.paracletexp.com

State: South Carolina

Dates: 22 April - 1 May 2011

Coach: Kirk Verner, Multiple

World Champion



Goal: Improve our skydiving performance in preparation for the World Cup and UK Nationals.

Dream Goals 2011: Win Nationals. Set a 12-point average (12 formations in 50 seconds)

Aircraft: Caravan, PAC XL, Twin Otter

Back in 2009, I had put together a scratch 8-way team, *Brit Chicks*, to compete at the UK Nationals. As an all-female team in a mixed gender event, we had a lot of fun and did exceptionally well, therefore deciding to stay together as a team to train and compete all through 2010.

Our goal at this 2011 training camp was to improve our average by two points. In one week we

made 56 skydives, doing 8-12 a day, mostly 'back-tobacks', where you jump, land, grab your second rig, get back into the same aircraft and go straight back up. Every skydive is videoed by our cameraman, jumping with us to record the action. Kirk debriefed every skydive, using slow motion to explain his points. He's a terrific coach and we saw progress daily.



Brit Chicks 8-way by Jim Stevenson



The weather didn't hold us back – any problems and we took our skydiving indoors to the Paraclete XP wind tunnel, just 15 minutes away. We did a total of three hours tunnel time – that's the equivalent of 180 jumps! In all we were delighted with our progression, especially as we had three new team members; always a risk but they fitted in brilliantly.

Addendum: After I returned to Europe we had a second training camp in England, then Brit Chicks represented the UK at the World Cup in Germany (pictured), where we were delighted to place fifth, scoring an II.2 average. Subsequently, at the UK Nationals, we increased our average to II.9 – so close to our dream goal of I2!

We were selected to be the British Team at the 2012 World Championships, for which we are now training. We have three one-week camps, seven hours tunnel time and four competitions



lined up. We are entirely self-funded, with only limited – but very much appreciated – support from the skydiving industry to help us achieve our goals.

Event 6 – Arizona Challenge

Drop Zone: Skydive Arizona

www.skydivearizona.com

State: Arizona

Dates: 27-30 May 2011

Coaches: World Champions Arizona Airspeed – Mark Kirkby, Thomas Hughes, Josh

Hall and Niklas Hemlin

Camera: Juan 'Melon' Mayer, George Katsoulis, Bill Schmitz

Goal: An incredibly hard 75-way skydive, this being the 'Arizona Challenge' – could we build it?

Aircraft: Four Twin Otters – plus a DC3 for nostalgia

The Arizona Challenge began with three days of jumping in groups of 16, out of two aircraft,

making a fast build, and lots of fun! High winds stopped us by lunchtime most days but by meeting at 6.30am, we made the most of the mornings' possibilities. The excitement level started to build when the Challenge formation picture was posted, with a name in every slot, we dirt-dived it fervently.

There was no external incentive here, no State Record in the offing – just the aim of building something cool and unique. An official State, National or International Record will be quantifiable, ie, defined by the number of persons on it, and requires judges to approve

it. The Arizona Challenge is a personal challenge, a formation so outlandish that no-one has built it

before. It doesn't require anyone else to verify, knowing you did it is enough.

Climbing higher to 16,000 feet using oxygen, we built the Challenge on the second jump! Outstanding! Some years they try for six jumps and don't build the formation—that's why it's called 'The Challenge'!

The organisers gave us an even harder version with the same building blocks,







and we banged that one out for good measure (above). It was a truly blessed day. Even the wind gods were finally on our side, giving us a full day of delight.

The cherry on the icing on the cake was to split into two groups of 38, for an impromptu speed competition, out of the grandaddy of skydiving aeroplanes, the DC3. These giant, impressive beasts have deep-throated, oily engines that stutter and wheeze for the 45 minutes it takes to climb to altitude. It's a trip back through time into the seventies and eighties of sport parachuting. The difficulty with the DC3 is its tiny door, which you can only exit in single file. It takes about ten seconds for 38 people to leave, so the skydivers have more than a mile of vertical separation.



Just to prove the day's perfection my team beat the other, winning nothing more than the right to brag in the bar. A keg of beer sealed the Arizona Challenge sociably, before the friends I'd made over the last few days headed back to their various corners of the world.

Event 7 - Power Play

Drop Zone: Skydive Perris, California

www.skydiveperris.com www.P3skydiving.com

Dates: 1-4 July

Organisers: Dan Brodsky-Chenfeld, Tony Domenico, Doug Forth, Chris Farina

Camera: Terry Weatherford, George Katsoulis, Craig O'Brien, Steve Barker

www.bigwayphotography.com

Goal: A stupidly complex 66-way skydive

Aircraft: Four Twin Otters



This was the last event in my Fellowship and the culmination of a long-time ambition to attend Power Play. It was even better than my wildest dreams! The first two days we made seven jumps in I6-way groups, mine coached by skydiving legends Dan BC and Doug Forth. The third day we joined some groups together, now adding a Skyvan to the Twin Otter we were jumping, and making 22-ways.



On the final day the P3 organisers put up large diagrams of the planned 'Power Play' formation, it looked crazy! Out of 66 people, only 12 were facing the centre, everyone else was facing out or sideways, making it very difficult to fly and maintain a good shape. The first few jumps were really messy, with the formation washing around, and all manner of problems.

It didn't really seem to be getting better but then suddenly on the fourth jump, there was an oasis of calm in the centre, and the rest of the formation built smoothly but rapidly outwards, like crystallisation. Although incomplete the skydive felt so different that the mood of the group completely changed. We went from thinking the plan was virtually impossible to believing that we could build it. Dan is an accomplished speaker, and he made the most of this with a rousing motivational speech that had us running to our aeroplanes in excitement.



Again down to the wire, this was our last jump but far from being dispiriting, this solidified our belief. This was the time for the skydive to complete. We all felt it – spine-tingly, arm-shivery, sparkly magic. This is what you strive for as an organiser – to create that added energy that unifies the group to achieve what shouldn't really be possible.

Of course it was a wonderful jump – it felt in slow motion. The build was smooth, calm, level and relentless – in seemingly no time we were flying an incredibly intricate 66-way formation 8,000 feet above the ground. The Power was Played.

My skydiving journey was complete. Every event had been successful. Most of them defied belief – but above all what I have learned in my Fellowship is the power of human thought. If you have the audacity to follow your dreams with full belief, you will more than likely make them happen.



Power Play by Terry Weatherford

Results and Conclusions

What did all these differing events, people and approaches teach me about big-way records? A great deal, by observing what worked well at each event, and what could have been improved. Each had its pros and cons, and I was able to pick the best of everything. A summary of my main conclusions follows. I also picked up many helpful practical tips.

Organisation

Prior Planning

Organising 200 people into a record formation is as much a logistics exercise as a test of coaching ability. Meticulous preparation is essential. Every separate aspect – aircraft, pilots, manifest, emplaning, coaches, video, stills, judges, packing, rigging – should have its own coordinator, who will each run a small team. Volunteers are needed for general admin and legwork tasks; these are normally easy to find if planned in advance, as non-skydivers will enjoy the atmosphere, the excitement and the visuals. Do not leave anything until the last minute because, with so many variables, your last minute will inevitably be filled with unforeseen activities.



Aircraft Operations Plan

It is essential to have a solid Operations Plan in place to manage the aircraft – start-up times, refuelling, manifest, loading of skydivers, oxygen management, DZ control, personnel checks. Usually the Chief Pilot will meet with the Skydiving Director, and Drop Zone Management to establish the criteria. Then each coordinates his/her own area with separate Pilot, Team Captain and DZ briefings to deliver what is needed. Extra aircraft may come from a variety of countries so it's important to establish some common language, or means of communication.

Skydiving Operations Plan

The Aircraft Ops Plan should be designed to meet the needs of the Skydiving Ops Plan. This begins with the desired numbers of jumps per day, and a precise schedule is made, of when and where each group will brief, gear up, check out, emplane, land, check in, debrief. It is better to have a detailed plan, which can subsequently be amended, than to make it up as you go along, which works for smaller loads but not when there are so many aircraft and personnel to coordinate.

Communication

Clear lines of communication are needed to ensure everyone is in the right place at the right time. Multiple methods are best, such as posting meeting times on a board, and also announcing them on the tannoy. It's important to reach the various nationalities; repeating announcements in other languages if needed, and allowing time for translations when dirt-diving. Speaking to more than 100 people usually requires a megaphone or voice projection to be universally heard. This sounds obvious but it's astonishing how many times it can be overlooked.

Visual material is important to ensure complete understanding for safety areas. Diagrams of the aircraft run-ins, the break-off procedure, and the opening altitudes should be clearly visible to all, with heights in metres and feet, as both are used around the world. Visual aids ideally include participant handouts but can be as simple as wall posters.

Safety

Safety is paramount. The Safety Plan is agreed by the Team Captains at their first meeting. It's important to have a detailed safety briefing for everyone at the start of the event, and this is the single most vital area to have translated. The essential safety points should be reinforced by the Plane Captains when in smaller groups.



Delegation

One person cannot manage more than a hundred people, so the groups must be split, with responsibility for different areas delegated to different captains. They must be given the advance information and the freedom they need to be able to manage their personnel to best capability. Equally, the captains must decide on their combined approach, who is running what. It works better if one person runs the dirt-dive, one talks about safety and another about logistics for example, rather than everyone chipping in randomly. Over the course of the event this aids clarity and will result in better management of these areas.

Briefing and Debriefing

There must be a plan so that every group has space to prep the dives, and to debrief afterwards. Creating separate debriefing areas, each with their own equipment is the most logical. Some drop zones try to accommodate this within their normal area of operations, but if there is a separate area such as a hangar that can be converted just for the big-way this will usually be better – though this has to be thoroughly prepared, with sufficient access to food, drink and washroom facilities. Other areas may be more limited, such as the aircraft mock-up (used to prepare exits) and areas with sufficient space to dirt-dive, so these must be effectively managed between groups.

Skydiving and Coaching



Formation Design

A well-designed formation helps but is not essential. The easiest will begin with a 6-way centre. This is large enough to allow air through, for speed and stability, but small enough to hold its symmetrical shape. Anything larger can become distorted if there is tension; this has a massive effect on the outside of the formation. Henny's photo above, one of the Texas State Record attempts, illustrates this; the centre has become oval instead of round, and has a broken grip due to tension. Yet an 8-way is still very workable – we built the formation two jumps later.

It helps to have a solid, symmetrical structure, with a framework. If this framework is kept in place then the whole formation will be smooth, level and symmetrical.

Slotting

It's important that the formation builds evenly and smoothly outwards from the centre, so that's where to place the talent. Putting the best skydivers centrally and into the framework will do a lot to keep the skydive on track, as these guys fly relative to each other, creating perfect-sized 'parking spaces' for their colleagues to fill.

Certain key areas of the build require mental aspects, such as good decision-makers or quick-thinkers. There are also bio-mechanical considerations, where you place the heavier people towards the centre, to keep the fall rate good, and the lighter people on the outside, as they will have more range of movement.



Build Up Gradually

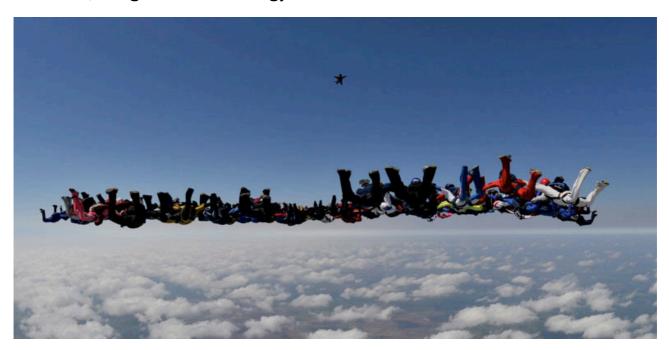
Rather than throwing more than a hundred people together on the first skydive, it is better to spend the first day working on the building blocks, ie, in sections. The drawback with the first method is that the chances of having a poor skydive are relatively high, putting so many unknowns together. If working in smaller groups, most will have good skydives that the coach is able to make even better through the day. If a group has a poor jump it doesn't mess up everyone else's, and there is time in the day to fix it. Spending the first day in smaller sections builds everyone's awareness and confidence, thus making the chances of big-way success so much greater. It makes it easier to make small changes in line-up that can make a big difference when the formation size increases.

Mental Aspects

It is easy for people to feel a little lost in the crowd in such a large group. This can lead to demotivation from feeling that they are not noticed or do not matter. Therefore it's important to get to know everyone's names as quickly as possible, identifying them by name on the video. Nothing works a group into shape so fast as feeling they are being personally watched. The quicker a coach identifies everyone, the easier it is to make switches in line-up and generally manage their personnel.

There comes a point where the hard work on technique, slotting and preparation has mostly been done, and now it's a question of making that magic jump happen, where it all falls into place. You can throw ten skydives at a possible completion without success, or it might happen on the next jump. As an organiser it's vital to try to tap into the vibe, and create an energy level where everyone is totally concentrated. Sometimes the 'last jump' mentality will do this, as everyone knows that they must do it now or they will go home with nothing. The challenge as a coach is to make this happen much earlier. It's difficult when dealing with a range of cultures, because what inspires one nationality may be a turn-off to others. Seeing truly great organisers such as Dan BC and Kate Cooper-Jensen motivate a large group is inspirational. They tap into the vibe of the participants, link with their desires, and focus the group's energy on the essential areas for success.

Video, Images and Technology



Camera Team

There should be a separate camera team, with a designated leader, who attends meetings with the captains, and ensures they get the debriefing footage they need whilst also building in the 'eye candy' angle for publicity shots. The Camera Team Captain decides the plan of action for exit, freefall and break-off, to ensure safety and to not get in the way of each other's footage. Ideally there will be one videographer per sector, one for the overhead shot, one underneath, and a 'roamer', who goes for the artistic viewpoint.

Technology

Did you know that camera technology has actually been driven forward by skydiving?! When cameras with memory cards were released, World Team Camera Captain Henny Wiggers wrote to a number of companies about possibilities he envisaged. He received a very positive response from one of these, AC Ryan. Henny showed them the 2006 World Record camera footage, and described desirable features that would be invaluable for future records. The company could see that what Henny was asking for would have applications in virtually every other sport. They worked together for two years to develop the AC Ryan media player and hard drive, now promoted as 'defining digital entertainment'. The company's willingness to listen to the skydiving industry actually gave it a competitive advantage; it is now the market leader.

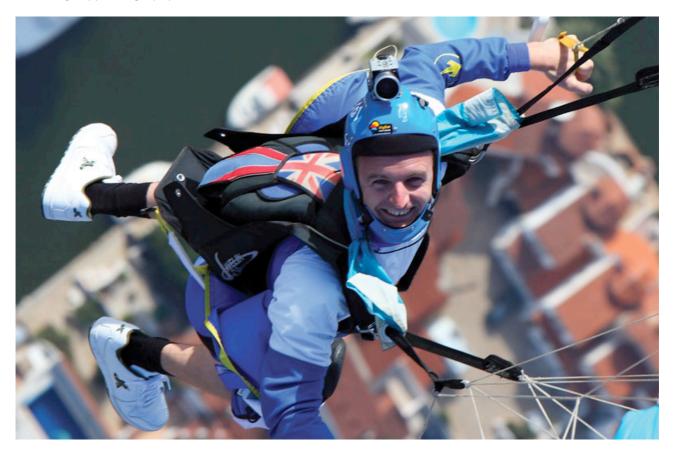
I had the pleasure of working with the system on my Fellowship. As a Sector Captain it made my job so much easier. You can pause the video footage at any time, and zoom right into a specific area. The screen that was showing 200 people is now giving you a close-up of ten people, so you can really work out what is happening. You can then play that selected area, frame by frame, in clear definition. The days of coming down from a skydive and not being able to work out what went wrong are over! Everyone can be identified, improvements more easily suggested and, crucially, the persons' involved in a problem can understand their own mistakes.

The system also saves a lot of time. Previously there was an inevitable time lag to copy all the videos in analogue after each jump, for debriefing. This could be the limiting factor in the turnaround time. At the Texas State Record, I would walk back into the hangar from landing to be immediately handed a memory stick with all the camera views of the jump I'd just made. I could watch this while my group were packing, so I was always ahead of the game with debriefing.

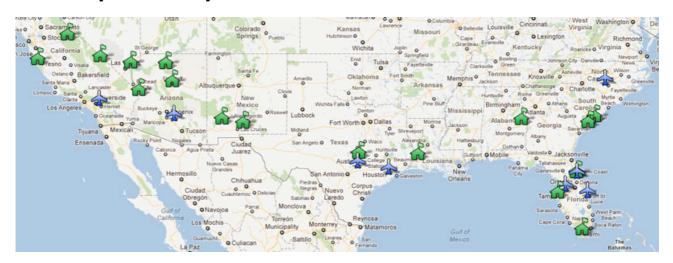
At one event, cameraman George Katsoulis networked all the debriefing stations together, making the system incredibly efficient. Every coach had an AC Ryan connected to our own video screen, but we were all instantly accessing the video files on one central hard drive — with each of us able to watch and manipulate the same footage without interfering. By the way, I am not sponsored or connected in any way with AC Ryan — although I had to buy myself one when I got home! www.acryan.com

Big-way Photography Website

I learnt a lot about preparing images for the web by working with and talking to the camera teams. George and friends have made an online website to instantly provide participants with videos and stills of their jumps. If you bear in mind that nothing is more attractive to a skydiver than watching themselves on screen, you will realise how exciting this is! In the 'old days' (just two years ago), participants had to wait weeks or sometimes months after the events to receive a DVD of their skydives in the post. Now, each evening, the day's excitement is uploaded to the website. Coaches and participants can watch their jumps again in the comfort of their own hotel room, for their entertainment and education. Their families and friends can watch them at home, for free. The website has video and stills images of the events on my travels, readers may be interested: www.bigwayphotography.com



Road Trip – Itinerary and Activities



Road Trip

Inbetween the skydiving events I wanted to see as much of the vast landscape as possible. Altogether, I crossed through twelve States and drove more than 8,000 miles, many of which were through the most spectacular scenery I had ever seen. Photos and video cannot prepare you for the sheer size of America's mountains, waterfalls, rivers, canyons and valleys

National and State Parks

The United States has a tremendous system of National and State Parks; places where the natural habitat is preserved as closely as possible, for the enjoyment of this and future generations. There are limited inexpensive facilities for campers, in order that the areas can be appreciated, but there are also countless square miles with no humans and nothing man-made, so all creatures and plant life can be protected. I bought an annual pass, which made a significant cost saving for me on camping, and also felt good to be supporting such a positive initiative. I visited or stayed at a great many parks, listed below and shown on the map above in green (drop zones marked in blue).

Hillsborough River State Park	Florida
Everglades National Park	Florida
DeLeon Springs State Park	Florida
Hunting Island State Park	Georgia
James Island State Park	Carolina
Chewacla State Park	Alabama
Lake Charles State Park	Louisiana
Barton Springs State Park	Texas
White Sands National Monument	New Mexico
City of Rocks State Park	New Mexico
Slide Rocks State Park	Arizona
Sunset Crater National Monument	Arizona
Wupatki National Monument	Arizona
Grand Canyon National Park	Arizona
Lake Havasu State Park	Arizona
Lake Mead National Recreation Area	Nevada
Death Valley National Park	Nevada



Yosemite National Park

California

Making the whole experience a giant road trip enabled me to appreciate the many different

landscapes, and how each slowly merged into the next ecosystem. Florida has miles of lush, swampy bright green vegetation, flourishing crazily in the Everglades. You can get very personal with alligators!

Much of Arizona is wild west countryside; dry, brown desert, with massive ancient cacti and a feeling that men on horses might suddenly come galloping into view. (Possibly because most of the classic westerns were filmed there!)



Halfway inbetween, the atmospheric fantasy-world of the City of Rocks in New Mexico, is a natural wonder of giant stones that looks like another film set. You can even camp between the stones if you fancy being seriously spooked!



Lava flow and the scarcity of any living thing at the utterly barren Sunset Crater National Monument are chilling reminders of the fragility of life.





At Yosemite National Park the rugged, unspoilt power of the cliffs, waterfalls and forests brought tears to my eyes. It's almost a spiritual experience to gaze on such majestic beauty. I felt blessed, refreshed, re-energised and humbled.

Nothing can prepare you for seeing the Grand Canyon for the first time. Layer upon coloured layer of different soils, salts and rocks; two billion million years to build up these layers... and another four million for the Colorado River to erode channels a mile deep and ten miles across. The utter insignificance of anything you ever do in your life is clear at that moment — a marvellous stress-buster!



Transport of Delight

As the project would last four months, with the intention to travel from one side of the US to the other, the cost of transport and accommodation was looking horrendous. I decided on a risky strategy that paid off perfectly in the end. I bought a small RV in Florida, drove across the States, cooking, eating and sleeping in it, and eventually sold the RV in California, for almost what I paid for it. Including insurance and maintenance, the total vehicle cost was less than \$1,000 and saved a small fortune in vehicle hire, restaurant and hotel bills.

This only worked because of prior preparation — before I left, I made thorough investigations into buying, registering and insuring a vehicle in the US, without which this would have been a nightmare. In fact, finding and preparing a vehicle went very smoothly, all in the first week. I planned my itinerary beforehand; giving me a solid plan that I was free to alter. I talked to the locals along the way, and adapted to take in what there was to offer. It was the trip of a lifetime.



Dissemination

Website

www.bigwayrecord.com

I began a website presence before leaving the UK, initially mostly as The Trust had indicated this was their preferred method of disseminating the activities, events and findings of the Fellowship. What started as a bit of a duty soon became an addictive daily activity that I thoroughly enjoyed. Somehow, there seemed to be



more point to what I was doing if I was sharing it with others. I loved the immediacy of the web, and the freedom to explore the possibilities of this new medium. I kept to my tried and tested principles of design – large quality photographs and short, informative text keep the readers engaged.

The website had five different sections:

Educational – Technical aspects of personal skydiving on a big-way

Daily Blog – 1-3 pages per day covered my activities, and reported on the skydiving

Winston Churchill Quotations – A rolling series of quotations from the great statesman

Interviews – Interesting skydivers, cameraflyers and pilots

Comments – Space each day for readers to leave a comment.

Website Statistics

	Unique visitors	Pages	Hits
March	843	36,462	61,236
April	1,666	56,418	93,099
May	731	34,499	53,552
June	613	26,417	42,402
Total	3,853	153,796	250,289
Average	963	38, 44 98	62,572

Over 200 different pages were created, and 188 comments were made. The website proved popular, with a monthly average of 960 unique visitors and 62,000 hits. The peak in April is probably due to the Texas State Record and Flight of the Phoenix, the two biggest events.

Skydiving Events

After returning to Europe, in July 2011, I have shared my knowledge at a large number of skydiving events, including the BPA 50th Anniversary Boogie in September, and Kaleidoscope 100-ways, in November. This year, 2012, I have been invited to coach at the Florida State Record in March, a 200-way event in May, a Big-way Camp in June, and Euro Big-ways in July, where I will use my skills to good effect.

Future UK Records

Will my Fellowship achieve the ultimate result – to pave the way for me to organise further British Records? I believe it will.

Female Record

We have set a date for the next British Female Record, 7-15 September 2013, at Langar, Nottinghamshire, and started down the long road of meticulous preparation. There will be a number of coaching events building up the knowledge and the skills for the record attempt. Britain's leading lady skydivers, including multiple World Champions will coach the up-and-comings.



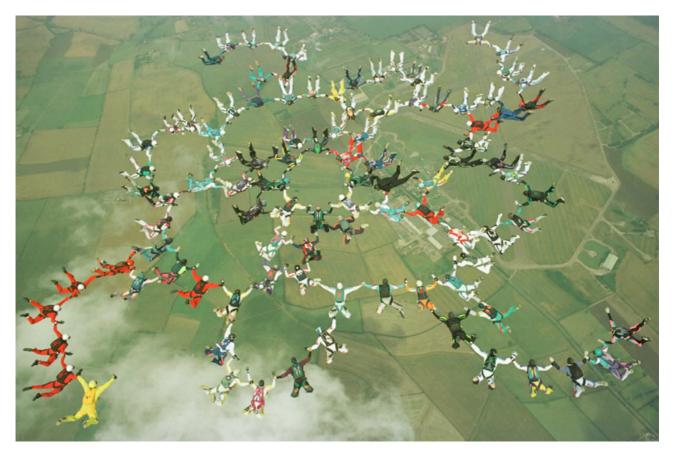
This will be the sixth Brit Chicks event, and by far the biggest. Brit Chicks is a non-profit-making group that formed in 2002, to combine the talents of UK skydiving women, for the benefit of all. Our goal was to increase the proportion of women in the sport, through positive role models, direct coaching, and the motivating experience of being on a British Record. From the beginning it's been inspiring; everyone involved has always inputted so much energy that Brit Chicks took on a life of its own.

We have grown the percentage of female skydivers from 12% to 17%. Result! More importantly we have improved the standard of female skydiving in the UK, which now boasts many supersuccessful female skydivers. In fact, Britain's only World Champions are female, and we have eleven. We have won 50% of the female 4-way World Championships and international events in the last decade. The women's World Record 181-way was 10% British. The quality of UK skydiving ladies is unquestionably superb.

The last Brit Chicks record was a 68-way Red Cross – we now hope to make 84. I'll keep in touch with the Trust to let you know of our progress.

British Record

The current British Record is 100-way set in 1999, pictured below. At the time, it was the largest national skydiving record and we were duly proud. Since then, other nations have gone much bigger; the current largest is a 200-way. Do these nations have more talent than us? No, just more aeroplanes! Countries with better weather can finance greater numbers of larger aircraft. Not a single attempt has been made to set a new British Record since 1999, and the reason is purely financial,



We have the knowledge, we have the organisation, and we have the skydiving talent. To make this from a dream goal to a reality, we just need a fleet of aircraft. Only a limited number are approved for parachuting, and most of these are full to capacity, so we will need to bring them in from overseas. We only need the sponsorship, ie, funding for the aircraft positioning fees. I have the tools to do the meticulous preparation, assemble a highly qualified team, and coordinate a new British Skydiving Record. My Fellowship has got me off to the best possible start.

British 100-way Record, by Simon Ward

"Continuous effort – not strength or intelligence – is the key to unlocking our potential"

Winston Churchill

Thank You!

Supporters

Huge thanks for supporting my Fellowship:

Winston Churchill Memorial Trust

www.wcmt.org.uk

Diana and Stan Cowey

The Taz Causer Foundation

Skydive Perris www.skydiveperris.com

Sunpath <u>www.sunpath.com</u>

Airtec Gmbh www.cypres.cc

Performance Designs <u>www.performancedesigns.com</u>

Larsen & Brusgaard www.l-and-b.dk

Symbiosis Suits www.symbiosissuits.co.uk

Harry Swinnen www.pgasus.be



Photographers

Thank you to so many photographers for their help and the use of their images in this report, most are credited in the relevant section. Extra credits and their beautiful websites are listed below:

Andrey Veselov <u>www.skyphoto.ru</u>

Bruno Brokken www.brunobrokken.com

George Katsoulis <u>www.bigwayphotography.com</u>

Gustavo Cabana www.guscabana.com

Henny Wiggers www.parashoot.nl

Jim Stevenson <u>www.pbase.com/jamesstevenson</u>

Juan 'Melon' Mayer www.juanmayer.com

Norman Kent www.normankent.com

Terry Weatherford www.fallingcamera.com