# Actuaries at Play

# Skydiving

he plane is on jump run, my mouth is dry, adrenaline is surging through my body giving me hot flushes and I'm breathing slowly and deeply to try and keep my nerves under control and to maintain focus on the jump amongst mental chaos (of fears surrounding funnelling the exit, brain malfunctions, making the right moves, not letting my team mates down, not letting my family down, all the time and money that's been invested and so on. And no, this is not my first jump – its Round 1 of the 2012 Australian Nationals competition!

Although I've been here before, there's nothing like the fear and exhilaration of Round 1. The challenge is managing that fear to maximise performance. As a team we were about to put our training, both physical and mental to the test.

As our cameraman, Patrick, slides his helmet on, I know we're a couple of miles out from the 'spot'. I take a couple of deep breaths, slide my helmet on, my mind empties of all distractions and I am now visualising the round a few more times. The door opens, Patrick climbs out, then Craig and Steph, then Gary and I stack up. There is lots of movement as we get into position and take up our grips, then, all of a sudden, a calm quiet - Steph commences the count and we are about to catch the wave .... we're off. All the training and visualisation is paying off as we start to reach terminal velocity. The pace is accelerating and the team is moving together with cold aggression - really positive, confident but calm moves (if only all the competition rounds were the same). A couple of minutes later we land and we know we're

off to a good start.

We are going up against formidable teams such as Team H, which consisted of former Aussie, Swedish and US champions. This didn't help with nerves. The pressure was really on.

As the competition unfolded, our team, *Rotor Out* managed to maintain a narrow lead, but come round 10, the pressure was still on to perform. We had funnelled a few exits in training and I guess we all knew that could be the difference, so it was back to visualising the positive after a relatively safe round 10. We knew on landing that we had done enough. It was all absolutely worth it. The congratulations hugs and kisses and of course the beer didn't hurt either.

## WHAT IS FORMATION SKYDIVING?

The objective of the formation skydiving event is for the team to complete as many scoring formations as possible within the working time, while correctly following the sequence for the round. The sanctioned competition disciplines are: 4-Way, 8-Way, 16-way – the number represents the number of team members.

Competition teams perform up to six rounds per day at the competition. After exiting the jump plane, all teams have a certain amount of time available (4-way: 35 seconds; 8-way and 16way: 50 seconds) to perform the same pre-determined sequence of formations and manoeuvres. The team with the most accumulated points wins the round. At a competition, all teams must

#### WORLD CHAMPIONSHIPS

Our team *Rotor Out*, won the 2012 Australian National Championships in 4-way Formation Skydiving and earned the privilege of representing Australia at the World Skydiving Championships in Dubai in November 2012 where over 800 competitors were involved across numerous disciplines (see www. wpcuae.ae). The 4-way event is the elite event akin to the 100m at the Olympics. At the World Championships we beat three Aussie records:

- Highest score in 4-way Aussie national record 28 points (formations) in 35 seconds.
- 2. Highest average over a competition of an Aussie 4-way of 19.3 seconds.
- 3. Top 10 finish, ninth place overall.

perform between six and 10 rounds. Each competition round has a different sequence of formations and manoeuvres. Free-fall videographers are filming the performance and deliver the footage to the judges for evaluation. The major events have live broadcast of the free-fall and live judging.

The difficulty and engineering involved in a particular sequence of formations will impact the score for that round – the world record is currently 56 points.

The Formation Skydiving competitions are recognised by the IOC (International Olympic Committee) and sanctioned by the FAI (Federation Aeronautique Internationale) and by the IPC (International Parachuting Committee). Our team was made up of an Accountant, an IT Consultant, a member of the Victorian Police Bomb Squad and an Actuary! In addition, our cameraperson is a full time skydiver. I'm based in Singapore; three are in Melbourne and one in Sydney. Some stats on the team:

#### Almost 90 years of skydiving experience

 My first jump was in 1994 in Lake Clifton in WA and thinking back to my first jump, probably the scariest thing I have ever done. However, the excitement on landing outweighed the fear just before exiting the plane and off I went for number 2 which was even scarier. There is a 1% retention rate in the sport. Why did I get into it? I met a girl once...

#### Almost 30,000 jumps

In the 5,000 plus skydives I have completed. There have been10 malfunctions of my main canopy. – the malfunction rate is approx. one in every 500 jumps, so I am hitting the average, although a number of mine involved test jumping experimental canopies. You may be curious about the malfunction rate on reserve parachutes – it is almost non-existent as they are designed purely as a life saving device, whereas you can select from a number of canopy designs for the main parachute which exhibit a



range of performance characteristics depending on your preferences. They are slightly more susceptible to malfunctions.

 You may also be interested in the fatality rate – it is one in every 100,000 jumps, which makes it safer than some other more common activities such as driving, while still being a dangerous sport. Each individual is responsible for their own safety and those around them on each and every jump. There is no room for complacency – I have witnessed a number of fatalities and serious injuries in my time in the sport.

#### Numerous competitions at World Championships and World Cups in each discipline

 I have competed at seven world championship competitions in three disciplines – 4-way, 8-way and canopy piloting or 'swooping' What did it take on the road to Gold in 4-way skydiving?

Time, money and experience are givens, but patience, compromise, ability to take on board criticism for the best of the team and working as a team to find our own rhythm and dynamic were key. This is pretty much like any relationship!

# WHAT'S NEXT

2014 Australian National Championships and if successful there, onto the World Championships in the Czech Republic...

#### How can I try skydiving?

For those interested in a life changing experience, you can find more detail at the Australian Parachute Federation website www.apf.asn.au

Also feel free to contact me directly at george.attard@aonbenfield.com

### **ABOUT THE AUTHOR**

George joined Aon in July 2008 and is based in Singapore. George is a qualified actuary and has over 23 years of experience in financial services including property and casualty (re) insurance, banking and finance, life (re)insurance and pensions in various roles including consulting, pricing and product actuarial, management and underwriting.

As Head of Aon Benfield Analytics, Asia Pacific, George is responsible for the coordination and provision of Aon Benfield's analytical capabilities to meet his client's strategic risk and capital objectives. This includes the Catastrophe Management, Actuarial, Rating Agency Advisory, Economic Analysis teams in addition to the Impact Forecasting catastrophe model development teams.

