A micro second is all it takes to cross the line. You look up ...disbelieving, and then, once the impact, destruction and chaos stops, everything is different, forever.

Written by John Bassi, as published in the SAFlyer magazine, November 2006

You've most likely heard "it could happen to you" so many times by now that it most probably sounds boring, and I too used to sort of think that this did not really apply to me. Well, I was wrong. It's right there waiting, an ugly little hole in the sky that's invisible to all, with somebody's name is written on it.

This is my story about the day when I flew into one of those holes, the one with my name on it, and my opinion of all the events, thoughts and facts as far as I can recall them..... those things that have changed many lives forever. It is important to stress here that all this is only *my opinion*. I may be wrong and it is possible that I have missed something. If so, it does not matter, because the sole purpose of this story is written in the hope that my words, somehow, may someday stop another accident. All it takes is a simple NO whenever there is doubt.

What happened on Monday the 14th of August started with a chain of events that could have been stopped many weeks before, if only I had listened to my gut and taken action? Game capture flying is a high risk occupation, as any game pilot will agree, and flying a R22 is always dangerous in the typical conditions of darting game. The accident rate and high insurances can attest to that.



Although I love what I do, there have been many occasions during my flying career when I have developed a particular feeling, resulting from excessive exposure to unnecessary risk, a feeling many a Commercial Pilot may even be familiar with. When you wake up in the morning with dread, and with a heavy reluctant plod you drag yourself out and strap into the aircraft, wondering, there must be more point? Is this the day? What am I doing this for? Why am I letting the boss/client push me? It's a feeling that hangs in your belly and locks itself in your throat making you an ugly person to be with, because the stress of this is consuming you and is all that occupies your soul. Stupidly, you are seeking to please your client/employer, not putting yourself first. It is a knowing that you do not want to be there, doing what you are doing anymore.

That's when you need to stop and take control.

This feeling became familiar to me first, years ago, when I was instructing on micro lights and it must have taken its toll on those around me until I woke up and stopped. The feeling returned a few years later when I had done enough time chasing animals around during game capture while flying a Robinson 22. I stopped and changed to flying a H30, still with game capture, but in a new environment, which helped for a couple of years.

The demands from a commercial and competitive industry coupled with the desire to really go for it and make my own destiny got me back into the seat of a R22. This was alright because I had had a break and my goals were new. My focus was to be the one person that clients would call first, to never fail at any task and to not say no to any work opportunity. All too soon those same familiar feelings returned and were compounded by a few accidents and a couple of fatalities involving friends. My fear of the relentless exposure to high risk on a daily bases had caught up again.

Then in 2002 I lost my first R22 in a game capture related crash, and luckily the pilot was unharmed. Flying as much as we do, the odds mount up against us and I personally have got myself out of many, many close shaves, as have the rest of us. An engine failure, v-belt failures, bearing failures, wire strikes, losing a tail rotor, loss of engine power from magneto failures, stuck valves, ruptured oil coolers, pieces falling off where they shouldn't..... and so many other small things that could have been bad. My list of near accidents or close shaves is even scarier, it's called "statistics", and it does not take a mathematician to calculate how often you are likely to be in the danger area while flying two up, low level with maximum power on a typical South African day, every day of the game season, year after year. I know and have always known that virtually every flight that is made two up in a Robinson 22 for the purpose of darting or shooting or getting close to an animal during game work operations IS exceeding the safe limitations of the aircraft. All those who have already crashed agree with me and the list is pretty impressive. That's game capture for you. The fact is that this is what we do and this is who we are, and it's in our blood. We only get paid if we perform and if we don't the client does not hesitate to say things like, "well the last pilot that flew managed and didn't have any problem", or, "well, if you can't then we will get someone else." How many times have I heard that?

The wildlife industry has taken a turn for the worse with a loss of work affecting all but a few, most operators have had to cut back drastically in order to stay in business and the quality of work available has been reduced to crumbs of the former past. Animal numbers have bred up well, there are an unknown number of capture teams operating and land claims are taking their toll on game farmers. The ridiculous, out of control number of illegal PPL helicopter pilots operating and cut throat prices have reduced the little remaining work that was available by more than half. I know of at least 2500 commercial hours a year being flown between some well-known illegal pilots, with zero interest from the SACAA who just look the other way.

I again made a choice to stop in 2004 - at huge risk to my livelihood and business. All those feelings were back and I remember the despair that came with getting calls for R22 work, the dilemma of needing to fly to pay the bills but not wanting to get in the helicopter for fear of the inevitable. That choice meant losing 90% of my clients and work and walking away from everything that I had become. I focused on a jet ranger and an R44 and looked for specialized work within an industry that was itself going through many negative changes. Needless to say I went through my share of stress through the transition. Paying the bills

and trying to please select clients, and the need to keep out and about flying, led me back into a 22 occasionally.

One day, about 6 or 7 weeks before the accident, I received a call to book a R22 for some darting work. I said yes we will book the dates and tried to convince him to use the R44. He insisted that he wanted to keep the cost down and wanted the R22 and if I couldn't make it then he would get someone else. Then, a few weeks before the job, we were flying in the area and passed over the property where we would be doing the capture. There were large trees at the base of an escarpment, but I had flown in worse places. The client asked me if I thought I could do the job in the R22 and I said I would rather not but that it was possible to which he replied, "Carlos will do the darting so you won't be too heavy", and we left it at that. I had that sick feeling but figured I had done this a thousand times and if I bailed out I would also be losing a few days of other work which were part of the same job.

Monday the 14th of August arrived, a normal beautiful late winter morning, I took off from Wonderboom in my faithful RFV and headed north into a headwind and remember contemplating the day ahead and worrying a little that it may turn into one of those blustery horrible flying days. Eventually I landed on a small track that ran in an east/west direction since it was the only place close to the crew and the fuel, and clear of long grass that could catch fire. As I landed I remember having to use caution to not run out of left pedal and noticed the loss of full tail rotor authority due to the crosswind from the north. I was feeling unsociable that morning and busied myself at the helicopter, removing doors and having some tea and rusks while waiting. I relaxed reading my book. Eventually Carlos walked towards me, dart gun in hand and as we greeted he eyed me out, shaking his head confused and irritated, saying, "what the hell are you doing here in the 22, I thought you were coming in the 44?" I looked at him slightly annoyed and said, "Carlos the 22 was booked weeks ago to cut cost, I don't want to be here in a 22". Carlos replied, "no man, I can't believe you are here in this, I thought you were coming in the 44". Carlos climbed in and fastened his monkey harness, shaking his head with a frown.

We lifted off, climbing north into the cool morning air with around 1.3 hours fuel and started to search for waterbuck, realizing fairly quickly that there was not much game left on the farm, but managed to dart a young bull soon after. It was clear that we would not have the performance to be able to guide the animal in any way and we could only hover OGE with nose into wind. But the wind kept changing direction. This made flying really tricky since the antelope very seldom ran into the wind. I had to keep my speed up and kept aborting the darting runs to turn back into whatever wind I could find. About 40 minutes later we took off again, finding a female, I battled from every position and angle to get her to run and to get near her, finding it impossible to establish any constant wind direction. We eventually darted and loaded her, then took off again, but now struggled even more with difficult, airless, conditions, taking 45 minutes just to get a dart into another female. Carlos and I were both fed up and we talked about the cost of extra flying and the false economy, that it would have been cheaper, safer and more efficient in the long run to use a 44. By now I was really not happy, I called my office and told them that this was the last time I would ever use a 22, that the wind was gusting and the job was dangerous. I was fed up with myself, always submitting to the commercial pressure and all I needed to do was say NO MORE. Carlos returned and said to me, "Ok let's go, the client wants us to look one more time, look for a kudu bull, do a couple of turns and then we will call it a day". I said, OK, let's go but we are wasting our time. But I still took off.

Ten minutes later I was hanging upside down, bleeding, confused and semi- conscious, while Carlos was lying dying outside.

We had located a large kudu bull and decided to go for him, and I positioned to do a descending turn into what seemed to be the prevailing wind blowing mostly from the north, north-west and north-east, to flush the animals out of bush. The bull moved northward, in the direction I wanted so I climbed out to re-position for my darting run, Carlos telling me he was ready.

My standard procedure is to approach the animal keeping my speed up above transition and a manifold pressure below the yellow line, avoiding passing through 22 inches. The objective is to get the animal running since a moving target is easier to hit and a moving animal keeps the helicopter moving, which is good. The goal is to do a flattish fly past, low enough to allow darting but high enough to miss all obstacles, slow enough to allow the darter an opportunity but fast enough to keep flying without exceeding 22 inches or demanding full power. We came in and Carlos was ready, I told him to wait as I knew there was a small clearing coming between the trees soon, then said, "ok, going in now", at which moment I placed the animal on his side and held everything as still as possible, glancing to see when he fired so that I could pull away. At that precise moment, as the dart hit, I looked up and ahead to continue my flight path climbing away as I had done so many thousands of times.

The picture I saw was all wrong; I was not where I was planning to be. I was trapped and in an instant I knew with certainty, disbelief, shock and regret that I was going to wipe out. Time stood still, my mind was as sharp and clear as crystal, everything was strangely suspended in time. I could look, see, feel and think with such clarity, even in that moment of pure disbelief, and yet all the following took only a split second to happen. The machine felt heavy, the engine sounded like it was laboring, the blades sounded as if they were no longer biting the air. Everything went into slow motion and I just could not believe that after all my years, my moment had come. I felt a sinking feeling, looked ahead and saw that we were below the tree line, I looked at my rotor RPM, it was in the middle of the green and I was afraid it was drooping. I was full throttle and we were moving forward fast. I had to make a decision. I looked for a way out and there was none, I could pull cyclic back and lift collective to get out of the hole, maybe avoid hitting the trees in front, that would certainly pull off all RRPM while increasing our height, stalling the blades and resulting in high impact. I could flare and put the helicopter into the upper branches of the trees in front, exposing us to an uncontrolled crash with a high speed while high above ground. I could turn right with torque, going down wind, but gain full power and fly the aircraft all the way, wings level, descend, flare, get as close to earth as possible while moving forward as slow as possible and try to keep control while flying through the trees. I shouted to Carlos, "Carlos we're going in", and focused completely on my 180 turn to the right choosing my impact point between two big trees. I managed a descending turn, I got wings level and started the flare. I had hoped to use the tail boom and skids to break some of the momentum, I never even saw the first impact coming, it was a bone jarring shockingly loud confusing bang as the main rotor impacted a tree, then there was just a confusing blackness with horrific crashing, banging, tumbling, turning and then all was still.

The helicopter was lying on its left, I was hanging in my harness, confused, trying to assess the situation, the engine was running, there was blood dripping from somewhere and there was a big empty space where Carlos was meant to be. But his legs were on my right? I turned off the engine, felt to discover a hole in my head, undid my harness and fell through the front window to look for Carlos and to try and figure out what to do and how to get help. Carlos was moaning, he was alive, avgas was dripping onto him but I was losing my vision to a grayness and had a feeling of intense weight taking over my body. I tried to get to the radio but I was being sucked down into a black hole that I could not fight. I tried to walk away in the general direction of help but the lead weight, the gray numbness in my head and the pinpricks of vision blasted with millions of speckles of light were swamping over me. I stopped and went back to the wreck, sat leaning half inside and used all my strength to

untangle the head set, turned on the master and then sat for ages staring at the TX button trying to focus. I managed a few calls on the radio, then I remembered the siren and lay pressing the button. The heavy feeling came back with the numbness and the gray stars started going black. I turned off the master as my world came crushing down all over me, I was scared, I was losing all control over life, I was moaning but the sound was no longer from me.

Distant shouting filtered through, familiar voices somewhere in the haze of darkness and weight, helping hands pulling me back from oblivion, an awareness of life slowly returning.

Lying there, concussed and waiting for help from the office to arrive in the form of two 44's that were dispatched within minutes of the accident, I knew that Carlos was in critical condition. Hooked up to various monitors by the American vets that were with us on the capture, he lay there fighting for his life, surrounded by highly qualified people that could do little more than make him comfortable, hold his hand and say silent prayers between the medical-sounding blip of the monitors.

Big helicopters with a specialist paramedic had been mobilized by people close to Carlos, and the very best help was on the way for him.



From what I can piece together, from blurred memory and having looked at the photographs of the wreck, is that flaring the tail through the trees to bleed off our speed had caused us to lose our tail rotor. With the loss of torque, RFV smashed left-side into the trees, putting Carlos in the direct path of the highest impact, throwing him out, and then underneath the helicopter while still suspended by his monkey harness.

The trauma, shock, emotional horrors and terrible events that take place after such an event are beyond

comprehension. It is impossible to describe the gratitude to everyone on the ground who found us. The way in which people care and the support from so many is unbelievable. My list is too long, but I will always remember and thank everyone for so much.

But, more than anything, I thank my friend Carlos for fighting so hard and for coming back against all odds, and I thank his family for their immeasurable strength and support.