

The Mission Everest Diary - May 2007

By Giles Cardozo

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The team arrived in Kathmandu on the 8th of May. We were soon on board a MI-17 Russian cargo helicopter and heading up into the Mountains with all our equipment. We had on board two Everest paramotors, 100 litres of special oxygenated fuel, a complete portable engineering workshop including spare engines and every other conceivable parajet component, 5 sets of spare propellers, our special 36sq metre Everest paragliders designed and made by Mike Campbell Jones, a complete weather balloon satellite tracking system and enough tents for all of us, the film crew of 7 and another 30 porters. We also had 3 generators and a further 150 litres of diesel. In all nearly 2500kg of equipment.

To me it seemed so ridiculous that we needed such a huge amount of equipment just to fly two of the smallest types of aircraft in the world over Everest, but somehow every box that I'd packed was filled with bits that were somehow necessary to make the expedition possible....it's amazing how much equipment one needs for these projects.

Day 1 9th May

We arrived at Syangboche a small airstrip around 10,000ft up in the Kumbu Valley 20 miles or so from Everest. This was as high as we could go by chopper, being dropped any higher meant risking altitude sickness so the plan was to walk from here up to our base camp. The helicopter then flew on with all the equipment further up into the mountains where it was to drop off all our equipment with our porters in the village of Pheriche. Although flying helicopters into this National park is normally forbidden, except in emergencies, we were given special permission by the Nepalese CAA to drop our equipment as near to our base camp site as possible.

Day 2 10th May

Trekking to Tamboche, the Monastery village 2000ft higher up the Valley towards Everest.

Day 3 11th May

We arrived at Dingboche at 14,000ft and recced the area for a take-off site. We had been advised by Terry Stubbs our team paragliding instructor who knew the Everest region well that there was an old disused airstrip further up the hill from this village and that it might make a perfect take-off site. We were amazed to find a perfect flat area, grassy and running directly into the prevailing southerly wind. It was ideal, although it had not been used as an airstrip for 15 years or more it was still in good condition, we spent this first day clearing all the rocks, small boulders and little bushes....it was better than any of us could have imagined possible, and it was only 5 miles from Everest. We were very lucky as our take-off site had been a big concern of mine for quite sometime. All our equipment was then carried by thirty or more porters 1000ft up the hill to our base camp from the village of Pheriche where it had been dropped by helicopter previously.

Day 4 12th May

We spent all day preparing our equipment. We had a large tent set up for each operation, an engineering tent, satellite communications tent, weather balloon/meteorology tent and our flying kit and preparations tent. I had my engineering tent set up first thing in the morning and assembled the two Everest Paramotors, I gave them a complete run through, plugged them into a special high altitude lap top computer and checked all the engine parameters. The supercharger boost pressure, all

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the temperatures, rpm, fuel pressure...I had a sensor for everything! Our base camp was at 14,500ft, here there is less than a third of sea level air pressure. My dial read that the supercharger was still creating over 2 bar pressure in the engine manifold. This was astonishing, as it meant that the engine was still receiving more than double sea level air pressure. I felt more confident than ever after having carried out the engine checks, I just knew we'd have the power to not only take-off which was a massive challenge in its self, but also fly to 30,000ft...this was so exciting, with lots of luck, perfect weather I just felt that we could do this. The weather though at this time was terrible, it was snowing and windy with appalling visibility, we just didn't expect this, it was freezing cold and we'd come prepared for warm sunny weather. The forecast wasn't much good either but we had spotted a break on Monday 14th, so we were preparing ourselves for our first attempt

Day 5 Sunday 13th May

I awoke at 4.30am to a still and cloudless sky, it was the first time I'd really seen all the mountains around us, it had been so cloudy everyday so far. We were in an incredible location with 23,000ft mountain peaks all around us, Amadablam, a beautiful mountain directly above us to the south was still over 6000ft lower than where we'd be flying, this just felt unbelievable, the thought that if we pulled this off, we'd be tiny specks in the sky more than a mile higher than all our surrounding peaks....this terrified me completely. I hadn't considered that we should try and make an attempt this day so I just carried on preparing our flying kit. It wasn't until Bear woke up and saw the fantastic conditions that a decision was made to make a first attempt. It was going to be a massive rush, it was already 6.30am and the winds would start to become anabatic by around 8.00am and then grow progressively stronger through the morning. We had a maximum of 2 hours to get everything in place, and we just weren't properly prepared. By 8.00am everything was in place on our airstrip, our wings were laid out ready and we were sat next to our machines with all our kit on....the only thing left to do was our cameras and radios....we messed around for more than an hour trying to get these working with wires everywhere stuffed inside our down suits and round our necks. It was just such a rush and I didn't feel confident, the wind was picking up and clouds were rolling up the valley....it just didn't feel right and our comms were totally unreliable. We made a decision by 10.00am that we'd missed our moment and that we'd have to make a second attempt....weather permitting the next morning.

We spent the rest of the day fine tuning all our kit, the communications, satellite tracker, aerals and camera equipment was all just so much and we had to make it easy. In the end the film crew managed to tape all the wires neatly inside our down suits and make it all incredibly slick, we could now wear the suit and not even know we had all this electronic stuff going on around us. It was perfect and we were now fully prepared.

Our on board kit:

Pulse Oximeter: which attaches to the index finger tip and reads heart beat and blood oxygen levels. I had cut these right down with a saw so that they would fit underneath our silk liner gloves, the wires then came out of the glove and onto a special wristwatch which displayed the vital information.

Oxygen System: We wore a 2.5 litre cylinder strapped to our waist pressurized to 300bar which meant that even on maximum flow of 4 litres per minute we had enough for nearly 3 hours of breathing. The oxygen mask was a top-out system which fitted neatly behind our Flycom helmet visors.

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Communications System: We had an ear bone microphone taped into our ears, because our mouths were covered with an oxygen mask we needed a voice pick which picked up vibration in our skulls, not our voice.

Satellite Location system: We had attached to each Parajet a GPS antenna and remote tracker system which could relay information down to the ground station. The idea was to record the flight at base camp for future reference.

Cameras: We had a high resolution fish eye lens digital camera attached to our helmets. This ran right the way through the flight. We also had attached to the machines propeller guard a second fisheye lens camera which looked down onto the pilot and the mountains beneath. This had a microwave link down to our base station so that the film crew could see what we were seeing.

Flying Suits: We wore 4 layers of clothing, two silk liner suits, a Northface down mountaineering suit and an outer fire proof suit...just in case!

Day 6 Monday 14th May

Terry woke us all up at about 4.00 am on Monday morning as the weather was perfect...we rushed around and got all our kit on, everything was moved into place on our makeshift airstrip and once everything was in place we fired off a weather balloon. It rose to 28,000ft and registered no more 4pmh of wind all the way up. This was our lucky day, there was not a cloud in the sky, the conditions could not have been anymore perfect.

We were ready in good time, sitting with our machines and wings on the airstrip with umbrellas to shade us from the hot morning sun. We sat and waited for the catabatic winds to switch, we wanted to launch our machines away from the hills and down the valley, all we needed was 3-4 mph of wind and with the power we had on our backs I knew we could make a successful take-off. At around 8.20am the wind switched and within minutes Bear who was set to take-off first, he was in the air and circling above us waiting for me to take-off. Moments later I had my helmet on and the machine roaring away in my back, luckily I took off first time, the wing launched perfectly and with three steps I was in the sky and climbing at 600-700 ft per minute. I checked all my lines, speed bar, and oxygen system and reserve parachute, everything was perfect, I settled down and started really enjoying the flight. This was the dream coming true, I just could hardly believe it, the engine was working beautifully, I backed off the throttle a little and was climbing steadily at 400-500ft per minute and I still had plenty more throttle to go. I looked around for Bear eventually found him and aimed to try and join him. The air was glassy smooth, I circled up and up above our base camp, I could see Everest clearly now behind the 25,000ft Nuptse Wall, it had been hidden from us all week and now there it was still towering above me only a few miles away. Soon I was above the summit of Amadablam at 23,000ft, my Quest vario was working well, still showing a climb of 500ft per minute, I was just below Bear at this stage, and still catching up. I could now see a huge area of the Everests south face now, where it had been hidden behind the Nuptse wall, Everest was now clear to see and no longer towering above me. Our flight plan was to stay south of the Nuptse wall, the highest vertical wall on the planet. Originally we had planned to fly directly over the summit of Everest but for three reasons had made a difficult decision to change our flight plan.

- 1) We were not granted a permit by the Nepalese to fly over the Nuptse Wall
- 2) We risked being blown over Everest and into Tibet where we had been denied permits to fly
- 3) If we had an engine failure beyond the Nuptse Wall it meant serious trouble, between here and Everest there is no where to land below 20,000ft and we didn't want to take

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such a risk.

Before long I was looking down on the Nuptse wall at 25,000ft, by this time I had my variometer freeze up, the screen was no longer displaying anything and my GPS E-trex then packed up as well, (which incidently was useless and never found any satellites anyway) I flew right up near to the Nuptse wall trying to get as close to Everest as possible, the closest I got must have been a couple of miles, it was so huge and it looked so close, the air was so still up there I was so tempted to blow our flight plan and just fly right up to the summit and skim over it. As I kept on climbing I looked across at the peak and it seemed almost level with me now, though Bear was climbing faster than me for some reason and was now a good 1000ft above me. I checked my oxygen saturation on the wrist monitor and realized the connector had come unclipped, the screen was blank and there was no way with my massive gloves on that I could re-connect this fiddly little connector. Instead I looked at my reservoir oxygen bottle to check the bag was still inflating inside..it was perfect and while my hands were getting very cold, I felt great, both physically and mentally. The flight was going brilliantly, I was now high above the Nuptse wall, and although my altimeter had frozen and I couldn't see how high I was or how fast I was still climbing I knew I wasn't far off now. I so wanted to catch up with Bear and just fly level with but we never got close enough. My engine which was the second that I had built and finished only a few days before shipping, it had never been flown before and the computer program that ran the first engine had simply been copied into the second engine. I'd not had time to test it the hyperbaric chamber and the performance at altitude was just not up to scratch. I could feel the engine begin to struggle on my back, it just need the fuel injection timing increased slightly and it would have made it, just a millisecond more fuel per revolution would have been enough, I knew it but there was nothing I could do. I just wasn't going any higher and Bear was still going higher and higher above me, he became a speck after another 5 minutes or so and as I was clearly not climbing any higher now I made the difficult decision to switch off my engine, once switched off there was no way to re-start so that was Mission over me. I looked up again at Bear and then heard him on the radio saying he had done it, he was looking down on the Summit from a couple of miles to the south, the video microwave link came through clearly to our base station screens and I heard a crowd of people cheering as they saw what Bear was seeing, with no mountains left above him he decided to fly one round once 15,000ft above our base camp and fly down to safety. Judging from my position in the mountains, I was looking down on the 25,000ft Nuptse Wall, and yet up at Bear flying above me, the maximum altitude I reached was between 27,000ft and 28,000ft. For me it was the being there that counted, if Bear had not been above me so far I would have guessed I was level with the Summit...it was so close. The fact the engine I'd designed had done it and stayed mechanically sound was the most important thing to me. The fact that I'd already had suspicions about the second engine, it had never even been flown before...frankly I think I was lucky to have got as high as I did.

It took about 40 mins to get down, I was warm but my hands were still freezing, I landed on the helipad in Pheriche, I line up with the centre of it, a man was walking along it and was directly in my flight path, as I flew nearer on my final approach he just stopped and stood there looking at me...he was exactly where I planned to land, and had been given permission to land on the Heli landing area. In the end I had to change my approach last minute to avoid him. I landed 5 metres or so away from him and my wing fell to one side landing on this man who just refused to move. He then took a photo of me from under my canopy and later claimed that it was Bear who had landed on top off him!!!

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Bear was still 5000ft or so above me and the wind was picking up in the valley, his engine had switched itself off on his final lap so he was gliding down. He landed just near me 15 minutes or so later and the whole GKN team, all our porters and trekkers came down the hill to celebrate, there were 100 people or more, it was a truly fantastic moment to be back safely on the ground, I had longed for this moment for so long and now finally we were there and with a great success behind us. Soon after we landed the wind picked up to 20 mph or more, clouds came rolling up the valley and we realized quite how lucky we were, we'd taken our 2 hour window and that was all we were going to get, the next day was windy and cloudy and the days after that even worse. This was probably the one day in the year where this was possible and by pure luck we'd found it without even waiting one day. It was the most spectacular paramotor flight I have ever had, to see massive glaciers and mountain peaks everywhere beneath you suspended in a little harness is truly awesome but I know I'll not go back there again...I feel I've completed that mission.

It was a massive amount of work to pack into 7 months, and the project had so many risks, if our oxygen systems failed we were likely to die, we had no room for reserve anything so we just had to hope for the best. All in all, I feel we were just enormously lucky out there!!