



K2 AGAINST ALL ODDS

Short Version

On 31st July 2008, a total of 32 climbers from seven expeditions commenced their final ascent of one of the most dangerous mountains - K2. The 'Savage Mountain' would claim the lives of 11. The story of these fateful days is told here.

A Journey Into Oblivion

The following pages summarise the timelines and actions leading up to the disaster and are interspersed with the accounts of some of those who climbed the 'Savage Mountain' during these fateful days in August 2008.

More information can be found on www.K2againstallodds.com

On 2nd August, 2008, a sombre mood fell over Base Camp at the bottom of one of the most majestic mountains in the world – K2. Only two days earlier, 32 climbers commenced their summit bid from Camp IV; 11 would not return. One might be tempted to blame the mountain, known for its unpredictable weather and treacherous environment, for these fatalities. Yet, with the benefit of hindsight, we must consider the human contribution – climbers ignoring warning signs and ultimately pushing beyond the manageable limits of their climb. Although an extreme case, we find parallels with managerial actions in more benign conditions.

K2

K2 is known as the 'Savage Mountain' due to its unpredictable weather, technical difficulty and extreme conditions of snow, rock, and ice. This mountain is located in the Karakoram mountain range, on the Pakistani-Chinese border. As a testament to the difficulty of climbing K2 the first ascent attempt took place in 1902, followed by legendary attempts in the 1930s and for the next 20 years (for comparison, the first attempt on Everest was in 1922). The first time anyone stood atop K2 was in 1954 (the first successful ascent of Everest was in 1953). After the first ascent it was 23 years before the next successful attempt (Everest took just three years). As of 2012 there have been 306 ascents of K2 compared with 6,208 for Everest. A roughly 5% death/summit ratio for Everest, mostly caused by cerebral oedema from spending time at high altitude, can be compared to 27% for K2, with common causes being avalanches and falling rocks. As a rule of thumb, climbers should minimise risk by spending as little time in the 45 degree gradient danger zone which is just below the Serac, a massive towering icefall that endangers any climber that passes through the Bottleneck – a narrow 90 metre vertical passage – and the Traverse – a 100 metre section that runs horizontally alongside the foot of the Serac.

K2 is most often attempted in the style of climbing known as siege-style mountaineering. This involves setting up a fixed line of stocked camps along the mountain route. These can be accessed at the climbers' convenience. This is in contrast to Alpine style climbing where climbers carry all their food, shelter equipment etc. with them. Siege style is also characterised by the use of fixed ropes, and climbers (along with the porters they frequently employ) will travel up and down the route several times in order to fix ropes and to set up camps. Alpine style disregards the use of porters and camps, with climbers usually climbing the route only once in an intense, continuous push.

In June 2008, at the foot of K2, around 120 climbers prepare the route up to Camp IV and ready themselves for a summit bid. The weather, however, does not allow a final push to the summit for weeks to come.





Figure 1: The danger zone

An Unfolding Disaster

The weather clears up at the end of July. The early morning of 1st August 2008 sees a total of 32 climbers (seven expedition teams from different nations plus one solo-climber) preparing themselves to attempt K2's infamous Bottleneck and Traverse in their quest to conquer the mountain. This is taking place after a long period of bad weather that has prevented any summit attempt. As is the norm, a small trail-breaking team leaves Camp IV a few hours earlier to set up the route for the climbers following them.

Out Of Rope

The sun is rising and the Serac shimmers in the morning light. The trail-breaking party is busy fixing a single rope lifeline through the narrow Bottleneck. The other climbers are close on their heels and time is against them if they want to be able to summit and then descend with the benefit of daylight. They

"People were talking about their fear of the Bottleneck. It has a reputation that it deserves. It is indeed a Russian Roulette. The dangers of the Bottleneck can be triggered by small, small forces that make the huge, overhanging 80m serac collapse. People have died before in the Bottleneck and it's probably the key to the entire route. Once overcoming and passing the Bottleneck the road to the summit is open but there's no way you can bypass these routes, this tricky section, you have to climb through the Bottleneck."

*Frederik Sträng
(2008 American K2 Expedition)*



gradually catch up with the advance team as they reach the upper end of the Bottleneck, when, at about 5.30 am, to their utter surprise they find that they have run out of rope. Some of the ascending climbers go back to remove the fixed rope further down and bring it back up. This all takes valuable time, and the possibility of descending in daylight is slipping away.

The situation the climbers find themselves in is obviously bad, and escalating risks are evident according to one of the climbers, Frederik Sträng:

1. They might not be able to meet the anticipated turnaround time at the summit of 2 pm. This would leave them tired and cold while climbing technically difficult parts of the mountain on their way down.
2. There is insufficient rope available. Some has simply been forgotten, some has been brought down with climbers who returned early or were too sick to commence their summit bid in the first place. Too much rope has been fixed in a section close to Camp IV that is considered safe.
3. The bamboo stick markers are missing. These are linked with fishing line and used in order to make it easier to orient down to Camp IV in case of bad weather.
4. The serac shows signs of potential surface breakdown, with water and cracks evident from being exposed to the sun.
5. The planned two hour exposure in the dangerous Bottleneck section might be exceeded significantly.

As a consequence, a few climbers decide to abandon their summit attempt and return to Camp IV. As events unfold, a Serbian climber and a high-altitude porter fall and die. However, the mass of climbers still choose to continue, motivated by their desire to summit, despite the precarious situation. This raises the first question:

1. Why do experienced climbers press on in pursuit of their set goal, disregarding warning signals?

The 'danger zone', the Bottleneck and the Traverse should be passable in around two hours, yet it takes the climbers five hours to reach the end of the Traverse. The pace along the single line of fixed rope is excruciatingly slow. At this point the delays mean that they are significantly behind schedule, with the groups dispersed. However, now only a snowfield lies between the climbers and the summit.

The Summit

The first of the climbers – a solo climber – reaches the summit around 3 pm. He cherishes the moment, having conquered the 'Savage Mountain', but turns around quickly to make his way back in daylight. On his way down – at around 4:40 pm – he encounters others, still making their way up but at a very slow pace "Did I tell the people to turn around? No, you can't. There are a lot of people, and they are all going up together.

"There was some talking in the top of the Bottleneck if we should go on or not, especially between Pemba and Gerard. It was a little bit like a couple. Marco was saying, for example, 'No, let us go it is a beautiful day.' Like we said, it was everyone's own decision – if you want to go on, you go on."

The difficulty of 8,000 metre peaks, the technical difficulty most of the time is less in those kind of high mountains, but the view... and when you are seeing you are going to be above all the mountains, all the other mountains are going to be lower than the one you are on... It is very beautiful as you are going to a higher, higher point and that is very attractive to people – to keep them going.

So we keep on going. Also it was afternoon and it was late, but let us say also it is not the first time that people are arriving on the summit in the evening time. There is nothing special to that. So we were going on, we were coming closer to the summit. Some people, I remember, were already returning because we were among the last ones."

*Cas van de Gevel
(Norit K2 Dutch International Expedition 2008)*

"You think about one thing, and one thing only. Everything except for immediate apparent danger to life is blurred. You sort of become blunt and indifferent. It is a sort of tunnel vision that develops that is further accentuated by hypoxia."

*Frederic Sträng
(2008 American K2 Expedition)*

"If we looked at the horizon we could see the bending of the earth, so it was really a magic moment and we were crying and it was most brilliant weather, without gloves. We could phone home with the satellite phone and the news was going around and it was one successful story after 3 months of hard working."

*Wilco van Roijen
(Norit K2 Dutch International Expedition 2008)*



It's the majority against you."

The slow pace eventually leads to climbers reaching the summit as late as 8 pm, a dangerous situation on a peak where 2 pm is considered relatively safe. Nonetheless, 18 out of 32 reach their goal, the result of so much training and effort. Celebratory pictures are taken, and the radio communications fill with celebrations. A Pyrrhic success?

As the light fades, the last of the summiteers make their way back. A peculiar picture emerges, though. Individual climbers wander down the snowfield towards the fixed line of ropes without any apparent team cohesion. The leaders of the South Korean expedition rush ahead, leaving some of their somewhat despondent team members behind. The Nepalese climbers point out that now, with darkness enveloping them, it is ever more important to stay together. Nevertheless, their concerns and attempts to keep everyone together fall on deaf ears. Soon, only head lamps can be seen.

The first group reaches the entrance to the Traverse and they discover the fixed ropes, grateful for the relative safety they offer since the section under the Serac is perilously slippery with gradients of up to 45 degrees.

Proceeding down the snowfield, another group of three South Koreans and a Nepalese climber make their way into the Traverse. Suddenly, one of the South Koreans – hooked to the fixed rope – slips, tearing the ice screw from its socket. The climber disappears down the face of K2, becoming the third fatality. There is a risk that the remaining three may follow into the abyss, but their fall is arrested by the remaining fixed ropes. They now become entangled in their only lifeline, hanging on but unable to move.

The summit is emptying and darkness cloaks K2. The remainder of the climbers from different expeditions make their way down the snowfield. They wander back and forth, to no avail, as the start of the fixed-rope section remains elusive. The ropes, their means of safe return, have been partially torn down by the fall of the South Korean group. The stranded climbers have a short discussion and decide to stay huddled together on the snowfield to wait for better conditions. They have no sleeping bags, spare oxygen or food with them.

At Camp IV, some climbers who summited have made their way back and they are greeted by the few who chose to return early. They are all concerned as, by now, most should have reached the shelter of the camp. Radio communication has died. The unfolding situation is unclear since nobody has a comprehensive picture of the status or location of those still on the mountain, and the climbers arriving at the camp are unable to provide much information. There is confusion, exacerbated by the fact that some climbers do not have radios with them and others have switched to a different, unknown, frequency, or have reverted to communicating in their own language with their fellow nationals. This renders the messages incomprehensible to those at Camp IV and Base Camp who are frantically trying to establish what is happening.

"So we thought, okay going down is just a routine thing. It was late, the sun was going down but we were thinking even in the night we can go down. We have our head lamp to see by and always in the Winter time in to the Alps, in the darkness you go to the last line, you connect to the line and you follow the line back to Camp IV. So we had contact with our weather master and he warned us be careful – you are on the way down; most of the accidents happen on the way down. We said yes we know, we will be careful, don't worry."

*Wilco van Rooijen
(Norit K2 Dutch International Expedition 2008)*

"Other teams didn't have quite as regular radio communications with their team. There was no common frequency really being used, like we talked about. The cohesiveness that we had discussed in terms of teamwork and all that, unravelled pretty quickly on the descent."

I think it's interesting how some of the teams really split up, really fractured."

*Eric Meyer
(2008 American K2 Expedition)*

2. What may explain the lack of group cohesion and the subsequent confusion after summiting, given that a dangerous descent in darkness should demand the opposite?



The Serac Collapses

The Norwegian team enters the Traverse at around 8 pm. About an hour later, the Serac reinforces its fearsome reputation as a massive icefall shatters the eerie silence. It instantly kills one of the climbers. In shock, two climbers in the direct vicinity try to come to terms with what has happened. They realise that the icefall has not only swept away their friend but has also cut the anchored rope – their only lifeline. They have some thinner emergency rope with them. They do not hesitate to anchor it in the icy and rocky ground just below the towering Serac. Risks are escalating further. Most of the climbers are suffering with the effects of exhaustion, dehydration and the first symptoms of high altitude sickness. Darkness and the severed rope leave them with only a few options:

1. Try to find the emergency rope. In darkness and with only the support of head lamps, it is not easy to locate.
2. Descend without the support of fixed ropes. This is a very difficult and technical descent, necessitating free-climbing with the help of axes and ice-crampons.
3. Head for the Chinese side of the mountain to try and effect a descent.
4. Bivouac overnight and then descend in daylight.

Some of the teams start descending without the aid of the fixed ropes, as they are oblivious of or simply cannot locate the emergency rope. They free-climb their way through the Traverse. Any false move will cause them to fall to their deaths. This happens to a climber from the French expedition and he is the fourth fatality.

From the options available, arguably the best is bivouacking overnight on the snowfield, just next to the mouth of the Traverse. That offers the relative safety of morning daylight to descend through the treacherous sections of the Traverse and Bottleneck. However, the climbers will be exposed to the relentless wind and cold. Unfortunately, there has been no planning or preparation for this; no one brought sleeping bags or bivouac sacs, or any spare oxygen, food or water. The climbers huddle together in a make-shift shelter of snow, trying to stay awake and preserve as much warmth as possible. This raises the question of:

3. Why were these very experienced climbers unprepared to deal with situations other than those they had expected and thus planned for?

Rescue Efforts

It becomes ever clearer to those at Camp IV that they are witnessing an unfolding disaster. They realise that most of the climbers who set out for the summit a day before are still stranded, and their state will be deteriorating. One climber, hampered by high altitude sickness, is zigzagging on the Serac, then is seen no more. He has been taken by the mountain. The group of climbers near the entrance to the Traverse, entangled in their ropes, are not moving and those climbers who pass them can do little to help, given their own precarious condition.

"But when we were there [mouth of the Traverse] we couldn't recognise actually anything and we were looking at finding our ropes and I couldn't find our ropes, but I saw this edge dropping, that the terrain is falling down. So I was looking and looking and I suddenly saw two other torches in the snow. So I went over there and it seems to be Gerard and Marco, I said, "What are you doing here, we have to keep on going down." But they said "Yeah, we can't find the ropes, we have decided to make a bivouac over here."

And I tried to energise them and I said, "Listen, come on, stand up we have to find them", and Marco has some energy so he stood up and together we tried to find somewhere to climb down but then finally Marco was screaming to me, "Don't go down any further because it is too steep, you will fall", etcetera.

So I climbed up again I looked somewhere else, I started screaming to other climbers because the stupid thing was, a few hundred metres down, we still saw these head torches. So we were there thinking "It is just a matter of connecting, communication and they will scream to us go to the left or to the right," but finally they didn't give any reaction because they were too far away.

So finally, they convinced me we have to make a bivouac because tomorrow the sun will be rising and then we will find the way. And I thought, maybe this is the best solution..."

*Wilco van Rooijen
(Norit K2 Dutch International Expedition 2008)*



At around, 1:30 am some of the Nepalese climbers who had come up from Camp III meet at Camp IV to provide assistance for any rescue attempt. The leader of the South Korean team, who left his four teammates with their own allocated Nepalese guide behind, orders them to move into the Bottleneck to see whether they can be of any help to the stricken climbers. One of them describes the situation as “Everybody went crazy!” The situation is far from clear, and the rescuers have little knowledge of the other climbers’ situation, location or state. It is close to impossible to bring down the climbers who had to endure the night and harsh conditions on K2.

Coherent action is difficult for those concerned for the fate of their fellow climbers. The Nepalese climbers, following the orders of those who paid them, reluctantly make their way up into the danger zone. Endangering their own lives, and with limited likelihood of being able to offer much help at this altitude, they do indeed come across climbers staggering down to Camp IV. They assist them as much as they can but another icefall comes roaring down the Bottleneck. It sweeps away two rescuers as well as three of the ones to be rescued. Five more climbers thus fall prey to K2. With the benefit of hindsight, we can ask:

“There were too many human errors. The ideal thing is that when you are at K2, you can manage, you know what you have to do and everything is fine. In this case I think there were too many human errors... they were too long in a place where they should not have been. Many people were lucky, I mean being a survivor, there are many survivors and there are eleven people who died...”

Alberto Zerain (Solo climber)

4. Why were further people sent into a danger zone although their chances of successfully rescuing stricken climbers were close to nil?

Human Errors

It gradually dawns on everybody that 11 climbers have lost their lives, and three more are severely injured. The world wakes up to news of one of the worst-ever mountaineering disasters. As journalists speculate on the causes of the catastrophe, climbers reaching Camp IV fuel speculations about what happened and who or what was to blame for this disaster.

The events – and associated behaviours – resulting in the death of 11 highly experienced climbers, occurred in an environment characterised by extreme cold and lack of oxygen. That said, although their sense of rationality was surely influenced, it was not impaired. Hence, managers in less hazardous environments may equally be influenced – although not to that extent – by the type of questions raised in this case study:

- **Why do managers continue to pursue their agreed goals, disregarding clear warning signals?**
- **What may explain potential lack of cohesion after managers have reached their initially set goals?**
- **Why do managers struggle to deal with the unexpected?**
- **Why do managers continue to throw resources at a crisis, even when they recognise it is a lost cause?**

If we can establish the underlying conditions in which these phenomena prevail, we may be able to establish an organisational environment that prevents or diminishes the likelihood of such issues occurring. There may be context-specific criteria for each organisation, and a ‘one-size-fits-all’ approach is unlikely to be effective. This case is less a question of what ‘they’ did but more of an opportunity to reflect on your own behaviours and ask ‘What would you do?’

