



**Back Up Everest:**  
Brothers make their second bid for the world's highest peak - with the world's best backup



The motto for HP storage media is “Tested to Extremes” because its big differentiator is that every single batch undergoes extensive testing to assure reliability. What better way to prove our media’s toughness than to send it to one of the most extreme environments on earth?

In 2004, HP’s storage media business sponsored Tom and Ben Clowes in their bid to become the first pair of brothers from the United Kingdom to stand atop Mount Everest. Everything went to plan on the expedition until a huge storm erupted during their summit bid. For two days they huddled in a tent on a tiny ice shelf at 7,800 meters, while outside, temperatures plummeted to -40° and winds of up to 100mph tried to blow them off the mountain’s face. With the weather worsening, they decided to retreat...but not surrender.

## HP StorageWorks tape drives accompany the expedition

Earlier this year, HP sponsored Tom and Ben in another bid for the summit of the world’s highest mountain, Sagarmatha, as it’s called in Nepal. This time the brothers were accompanied by a pair of intrepid HP StorageWorks Ultrium 448 and DAT 160 tape drives, as well as hardy HP data cartridges. During the long journey from Kathmandu to the top of Everest, Tom Clowes protected his precious digital photographs by backing up on the HP drives and media. Tom, who makes his living on the speaking circuit, knows that these pictures are his stock-in-trade. Losing them would truly be a disaster.

In early April, the duo sets off for Nepal to join the expedition, flying first to Kathmandu and then taking a small plane to Lukla, which boasts the nearest airstrip to Everest. At 2,850 meters (over 9,300 feet) elevation, even Lukla can take one’s breath away, but the group sets off the next morning on the steep and dusty trail to Namche

Bazaar, an ancient trading town at 3,400m. After spending a day in Namche to begin acclimatizing to the altitude, the expedition heads up on the 10-day trek to Everest Base Camp, gaining elevation each day. The brothers travel through villages with exotic names – Chukung Ri, Lobuche, Dingboche, and Kala Pathar – and meet the fascinating, friendly people who live here. Ben’s digital video camera enthralled the village children.

At the lower elevations, the expedition’s gear is carried by porters, but as the air gets cooler and the air thinner, the yaks take over. Would the HP tape drives be up to the challenge of travelling on yakback? It’s definitely not in the specs. Apart from the jarring ride, the equipment also has to contend with dust and extremely low humidity. The HP engineers in Bristol, England, keep their fingers crossed.

Life at Everest Base Camp is all about acclimatizing and preparing for the big event. The brothers hone their skills on the Khumbu Icefall, walking across deep crevasses on ladders – or sometimes several tied together – rigged by the “icefall doctors” (Sherpas whose specialty is keeping a route open across the icefall), and forays up to higher elevations help their bodies adjust to less and less oxygen. On days marked by poor weather, however, the Monopoly board comes out instead of the crampons.

## HP tape drives rise to the challenge at lofty levels

At an elevation of 5,340 meters (17,520 feet), Base Camp presents challenges even for everyday activities like cooking and bathing. Because most electricity there is generated by solar panels, firing up the computer equipment and doing a backup at Base Camp requires sunshine. Fortunately for Tom and Ben, spring 2006, unlike spring 2004, brings fantastic weather. Tom is able



to download his photographs to his HP notebook PC and back them up to both the HP tape drives. The drives seem to work flawlessly even though Base Camp conditions are way outside the drives' operating specifications, but will they survive the journey back? Will the media stand up to such extremes of temperature, dust, and low humidity?

When their bodies have adjusted sufficiently to the altitude, the team makes longer trips to the camps higher up the mountain, returning to the relative comforts of Base Camp after each sojourn. It's much colder at Camp 2 (6,400 meters – 21,000 feet), but the views down Everest's Western Cwm are stunning. At 7,300 meters (24,000 feet), Camp 3 is merely a collection of flat spots hacked out of a steep and exposed ice face. While the distance between Camps 2 and 3 is not very far, the steep climb and the lack of oxygen – less than half of what they would have at sea level – makes for slow going. The climbers arrive exhausted and just want to retreat into a tent and sleep. Any time not spent sleeping at Camp 3 is spent melting snow and making drinks because keeping up fluid intake is crucial. In their small crowded tents, they strap on the clumsy oxygen masks that they will need from here on up.

On the 17th of May, the Clowes brothers and their team make the final push to Camp 4 (7,950 meters – 26,000 feet) on the barren, windswept South Col. If the notoriously changeable weather holds, their summit attempt will take place that night. They will need all their strength in the hours ahead. The team tries to get a few hours rest before the last leg of their journey to the top of the world, but nerves and altitude make sleep elusive. Do they have what it takes to make it to the top?

It takes hours for the climbers to put on all the layers of clothing, and then struggle into their down suits – a feat

complicated by having four people in the two-man tent and not much oxygen in the air. Next there are the socks and inner boots, and the outer boots and laces, which have been in their sleeping bags to keep them from freezing, then hats, several layers of gloves and mittens, and the headlamps... eventually they emerge from the tent to put on their crampons and finally the oxygen equipment. They depart from Camp 4 at 9:00 pm with their headlamps lighting the way. It's a clear night with millions of stars and, best of all, no wind.

An experienced Sherpa accompanies each climber from here to the top. Two hours into the climb, Tom's oxygen mask freezes solid. He removes his glove and tries unsuccessfully to get it working again. Topchen, Tom's Sherpa, gives Tom his mask and tells Tom to continue on without him. Determined to reach the top, Tom catches up with Ben and his Sherpa Pasang Dawa, who have stopped to wait for him.

## Tested at extreme conditions, HP storage solutions survive Mount Everest

There's nothing in the world like climbing that last stretch to the top – exhilaration and exhaustion in equal measures. At 7:50 am on the 18th of May, Tom and Ben reach the summit – the first British brothers to stand together on top of Everest (8,850 meters – 29,035 feet). At the top of the world, the boys laugh and cry, the flags unfurl, and even the HP data cartridges take advantage of the photo opportunity. Surely, this is another record achievement: the first Ultrium and DAT media to conquer Everest!

Six members of the expedition make it to the summit this day. As they make their way back down to Camp 4, the magnitude of what they've achieved keeps them going. After a night on the South Col, the brothers return to

Base Camp, where they telephone their loved ones – and their sponsors – then get some much needed rest. On Tom's call to HP, there are no gung-ho cries of "We did it!" and no whooping, just a very thankful tone, as if he is pleased to be alive. "It was much harder than I imagined," says Tom. "It just went on and on and on and on. I can honestly say that I wouldn't ever contemplate doing an 8,000-meter peak again! But I've fulfilled a dream. It was fantastic! We could see for miles and miles. It was bloody, bloody cold – but it was also pretty cool to stand on the top. I'm now just looking forward to coming home and enjoying the English summer."

Both brothers suffer from frostbite, Tom with some minor damage to his fingers and Ben with a more serious case on his toes. In fact, Ben is in bad enough shape to claim a seat on the helicopter back to Kathmandu. Tom walks back under his own steam, arriving safely in Kathmandu a few days later.

The tape drives, too, make it back safely. Not only did the tapes written at Base Camp and taken to the summit of Everest restore the data faultlessly, but the drives were in perfect condition as well. The HP engineers in Bristol have now analyzed both the hardware and the media, and they survived the hostile conditions with margin to spare. Testing to extremes, it seems, does pay off in ways one would not imagine.

For more information about the Clowes brothers' 2006 Everest expedition, view Tom's website at: [www.tomclowes.com](http://www.tomclowes.com).

## Back Up Everest featured the following HP products:

- HP Pavilion zd8398EA Notebook PC
- HP StorageWorks Ultrium 448 Tape Drive
- HP Ultrium 2 Data Cartridges
- HP StorageWorks DAT 160 Tape Drive (prototype)
- HP DAT 160 Data Cartridges
- HP StorageWorks Data Protector Express software

To learn more, visit [www.hp.com](http://www.hp.com)

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