The secret to conquering the toughest climb in the Himalayas may lie in a shed in Tasmania

Peter Farquhar Feb 20, 2017, 6:11 PM

BUSINESS INSIDER AUSTRALIA

John Middendorf knows this is a completely safe, even comfortable, way to sleep:

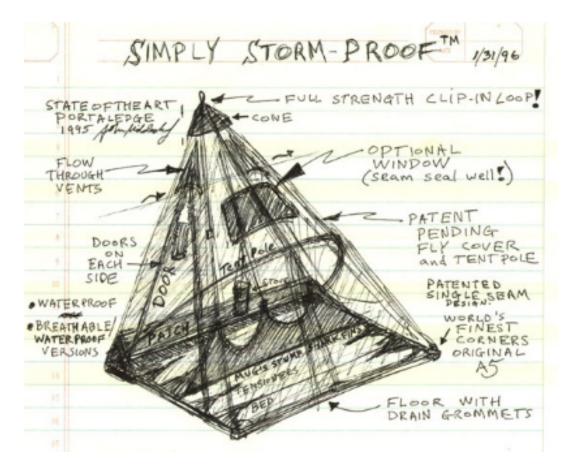


Picture: Charlie Fowler

He knows, because he's spent "at least a year and half" pinned to a cliffside somewhere snoozing in a portaledge.

He also knows because he invented the modern day portaledge, after nearly dying when the model he was using collapsed in 1986 during a snowstorm, five days into an eight-day climb up the classic white granite south face of Half Dome in Yosemite National Park.

Following his helicopter rescue, Middendorf, then a 25-year-old Stanford-trained mechanical engineer, founded A5 Adventures.



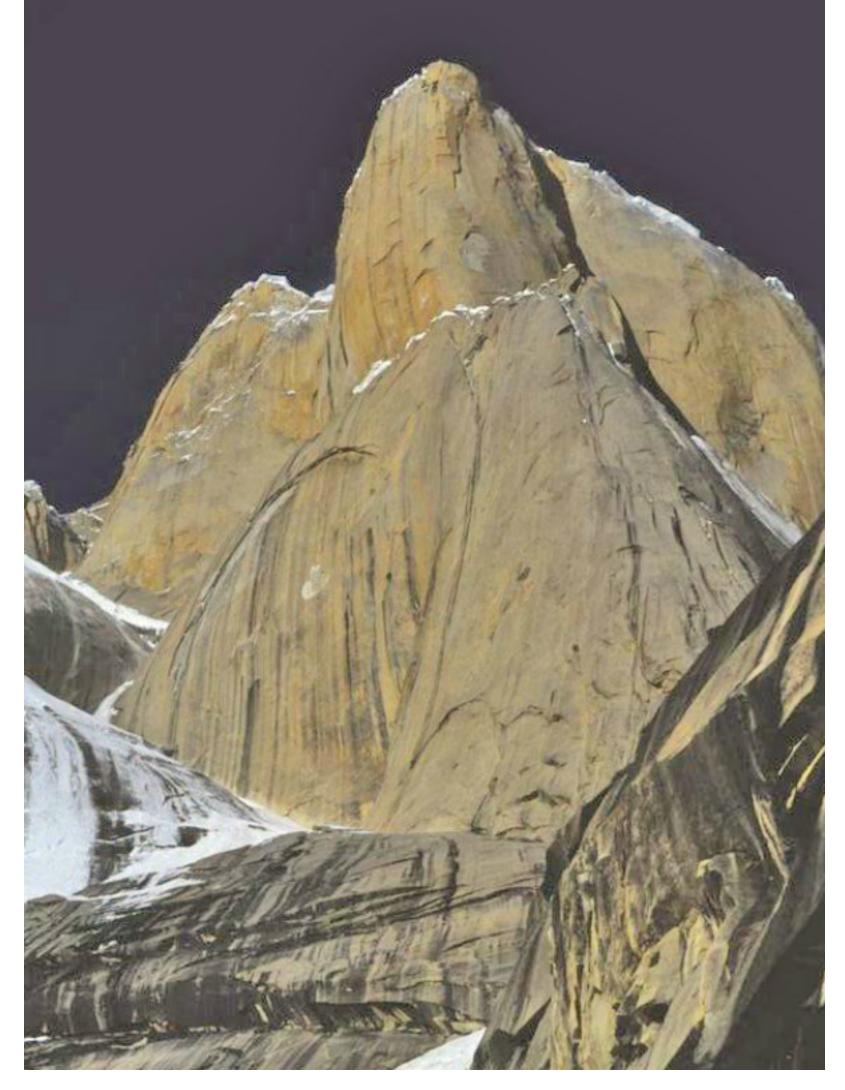
Picture: John Middendorf

It wasn't the first ledge invented that a climber could clip to a cliff-face, but Middendorf's A5 quickly became the industry standard.

A5 Portaledges were the first to be able to withstand Himalayan conditions. They were light, strong and to this day have played a key role in helping the sport explode in both popularity and levels of daring.

It gave climbers access to unprecedented challenges offered by "Alpine style" climbing, which involves carrying all your equipment, food and crucially, shelter if you're planning on staying overnight. Or in some cases, a month or two.

Middendorf himself gave it the ultimate test in 1992, when he and Xavier Bonnard become the first climbers to conquer and return from the east summit of the Great Trango Tower in Pakistan.



Picture: John Middendorf

It's not for the faint-hearted, if any climb ever is. At 1350m, the Great Trango Tower also happens to be the world's longest vertical drop.

It took Middendorf and Bonnard 15 days to make the

summit:



Picture: John Middendorf

Back in the 80s, Middendorf was a pioneer. He became widely acknowledged as a genuine climbing legend, one of the first to actually get sponsored to climb, and at one stage spent four years camped in Yosemite National Park getting to know and claiming several records on its iconic rock, El Capitan.

For most of the past decade, his greatest challenge has been facing down schoolchildren in his day job as a high school teacher in southern Tasmania.

Middendorf, now 57, moved to Australia's island state in 2007. It's unlikely most of the children he's taught since are aware of how much of a rebel Mr Middendorf was, and to some extent, still is.

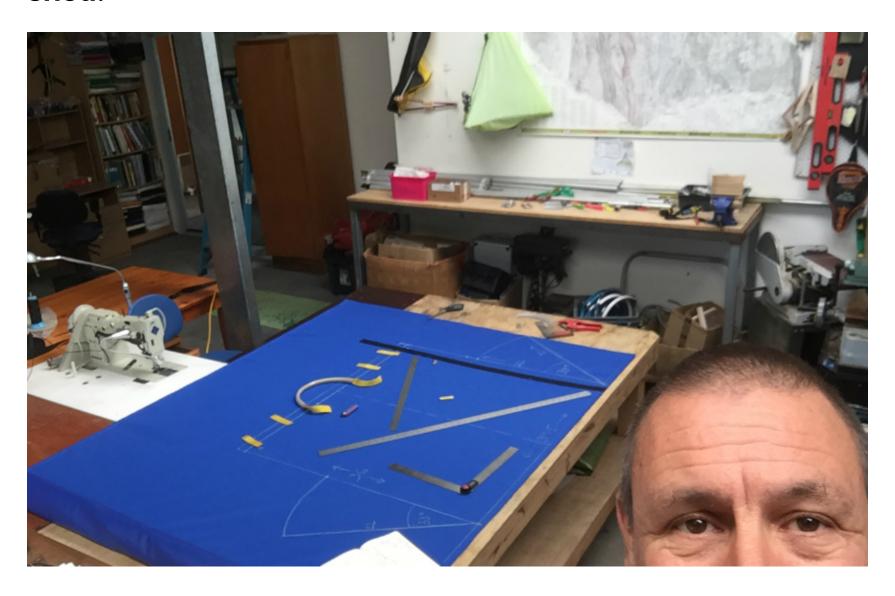
He dropped teaching six months ago, after a climbing trip in Arapiles, Victoria with his family last year. A climber old enough to remember had asked Middendorf why "no one made the nice, strong, stormproof, and lightweight ledges like A5 used to make" any more.

Middendorf sold A5 Adventures and the A5 Portaledge to The North Face in 1998, and the design still lives on as a Black Diamond product.

In the 30 years since he unveiled a 6kg version of the A5, the overall design has barely changed. Except with all the new features that have been added, it now weighs around 14kg.

Middendorf accepted the challenge to bring back the lightweight version.

A concept was born, and Middendorf went to work in his shed.



He doesn't want to give away too many secrets, but...



Six months later, result:



Middendorf says his new design, which he calls the D4 portaledge, is "lighter, stronger, more rigid, easier to set up, and just as roomy and 'bomber' (weatherproof) as the ones available today".

It fits into a daypack, and most importantly, it weighs 6kg complete with fly cover and haulsack. That's 8kg less than the current version of his old A5.

In a nutshell, it's all down to lighter, stronger materials and doing away with a lot of "unnecessary" gimmicks which have been tacked on to the A5 over time.

And just like the A5 enabled climbers to go further, longer than they'd ever done before, Middendorf believes the D4 will usher in a new wave of extreme challenges ahead.

The greatest challenge

This is Jannu:



Picture: Carsten.nebel/Wikimedia Commons

Climbers know the north face of Jannu as "The Wall of Shadows".

If you conquer The Wall of Shadows, you've overcome what many consider the greatest Himalayan challenge of all.

The final face alone is 3000m – three times higher than El Capitan, and rising to 7700m.

Nobody had made it up the centre line until 2004, when it took a team of 11 Russians 49 days to get from base camp to summit. At 7000m, they were moving at a torturous 100m a day.

"The Russians were there for the whole season, like three months, fixing ropes, this continual changing of a team," Middendorf says. "It's called 'siege tactics'.

There's no arguing it was still an incredible achievement. But Middendorf says it's possible to get to the top in less than half the time.

"There's no tool for a climber to go up to the base and just leave the ground and climb for 15-20 days," he says.

Keep it secret

A one-in-30-year update to a crucial, lifesaving piece of extreme sport equipment? Check. Designed and branded by an industry legend? Check.

Here's the real challenge immediately facing Middendorf – he's chosen Kickstarter as the platform for the D4 launch.

He'll start taking orders around the end of February. He expects his next 6 months will involve working on "28" products, in time for Yosemite's September wall season.

On one hand, that seems a little conservative. But that might be a good thing, because there are no factories involved, just Middendorf working with some aluminium tubing in his garage, and an accomplice in the US doing the stitching.

But has he <u>not heard of the FlowHive</u>? The Aussie beehive that set a \$75,000 goal but ended up with \$12 million in orders to fill? And then there's the problem of someone stealing his design.



They're welcome to it. Middendorf is a strong non-believer in patents.

"I got a couple of patents and frankly, I found patents to be a complete waste of time," he says. "The amount of time you spend on patents just took away from all the innovation."

It's remains one of the biggest problem with putting your radical new design on the internet for all to see. The Australian makers of the FlowHive, the honey on tap beehive that took the world by storm in 2014, were seeing examples of knock-off products on the market even before they'd reached the end of their campaign.

Of course, a beehive isn't going to save you from a 1000m drop. *Caveat emptor*.

Middendorf prefers to "out-innovate".

"Out-innovate the best because they're only going to copy the previous design and by the time they've produced that design, you're already on something more advanced," he says.

"I'm very confident this will change the whole game. All the other companies, once they see this new design, are going to switch into the way I'm making it now."

If it proves successful, Middendorf says he's already talking to an outdoor manufacturer in California who'll take over manufacturing. He'd just "get a royalty or something like that", but his ultimate goal "is to bring back a tool to help these new generation climbers see what's possible."

"That's my motivation, to make some new tools no one else is making that help push teams out there and help people achieve their dreams."

Keep it safe

The world's first D4 is on its way to a friend of Middendorf's in the Canadian Arctic, who has put their hand up to test it on Baffin island at the end of the month. The climber, a reknowned Polish soloist named Marek Raganowicz, will hitch it on some of the world's biggest walls in the most extreme winter conditions.

"I've probably made a couple of thousand back in the US," Middendorf says. "But this is the very first time I've sent out a Portaledge of my design that I hadn't personally tested myself first.

"I admit it makes me nervous, because there's lots of new features, new fabrics and he's going to go to a place where the conditions are quite severe."

"I'm pretty confident everything will work out, but..."

Middendorf says he's unaware of anyone dying due to a failed portaledge. A company in Wales <u>even rents them out for a night</u>:

"My dad asked me that too because he's worried. But no. The misconception often is that even though you're sleeping on these things, it's never the primary life support system for you

"First of all, they don't fail, but even if you fell out, you're still going to be

tied on with a rope."

He wants his Kickstarter campaign running before he tests it himself at Mt Buffalo, so he can show it off with "live updates of climbing the 300m wall in Australia".

"We're testing our portaledge and everything's looking," he says. "Maybe we can get a storm or something."

And yes, he sleeps just fine.

Middendorf has climbed El Capitan around 30 times, each climb longer than a week. And, he says, "maybe another 30 climbs" around the world, all the while sleeping in a portaledge.

That's more than 400 nights pinned to a wall hundreds or thousands of metres above the ground.

"It's sort of like sleeping on a trampoline," he says. "You actually have to make an effort to roll off the edge because you sag. It really cradles you."

"They're very comfortable."

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