## Alone Across Greenland

Two men, without any outside support, spent 42 days crossing the second-largest ice mass in the world.

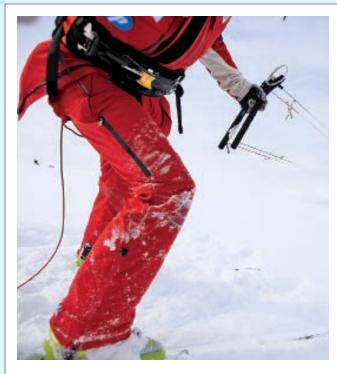
written and photographed by SEBASTIAN COPELAND

**PINNED DOWN** The author and his expedition partner were trapped in a tent for a week by 80-mph winds and whiteout snow flurries.



HEN I CLOSE MY EYES, I CAN STILL SEE THE PARCHED SUNLIGHT race across the ice, cutting through the moving clouds above, defining the hills and valleys of a white universe. I breathe the cold air that bites my left side, whisking by with the spindrift and snow flurries that gallop alongside me. I feel the razor-sharp edges of my skis slicing silently through the top layer of deep, fresh powder and the tug of the sledges bouncing obediently behind me. I can still hear the high-pitched whistle of my kite's taut lines pulling hard on my harness, taking me farther, faster into the great Arctic North. I relive the 42 days I spent crossing 1,400 miles of the Greenland ice sheet, using nothing but skis, kites, and the natural energy of the wind.

Too large to be an island and too small to be a continent, Greenland stretches almost 1,700 miles in its length — two-thirds of it within the Arctic Circle — and 600 miles at its widest point. Framed by mountain ranges along its coasts, Greenland primarily consists of a desolate ice sheet reaching nearly two miles in depth, with a high point of 10,623 feet, crushing the land below it. Greenland is administered by Denmark and populated by a small mix of Inuit fishing and mining communities along its coast; it has a timid if steady tourism industry. But the rest of the country is a virtual desert, void of life or features — except for sastrugi, the surface morphology left on the ice by Greenland's powerful winds. The interior can see wildly changing weather, especially at the southern tip, notorious for its violent storms. The ice sheet is scoured by the cold katabatic winds that pour from the land mass at its highest point in the middle and gain speed on their way down to the coast. The even terrain, combined with the prevalence of winds, makes the Greenland ice sheet ideal for kite-skiing expeditions. First crossed in 1888 by the Norwegian explorer Fridtjof Nansen in a famous do-or-die east-west mission, that 280-mile crossing has been favored by ski, dogsled, and kite-supported expeditions for years. Less traveled is the longer south-north route, which has seen only a handful of successful attempts since Niklas Norman and his team opened it in 2005.



**HARNESSING NATURE** 130 square feet of kite and 230 feet of line create a nasty tangle (left); when the wind dies, the only thing left to do is brew up a hot cup of tea.

That was the one I wanted – and the mission I would lead.

This adventure took seed over many years of gazing out through the porthole of the transatlantic flights that brought me back and forth from the U.S. to Europe. From 30,000 feet, I have found it hard not to be seduced by this white desert dividing the North Atlantic with its mass of ice. For most people, there is scant appeal in being immersed in frigid environments, where men have little business spending any amount of time. But it's a fascination for me, a thirst for exploration, a quest for the road less traveled.

In an age when Google Maps offers detailed, by-the-foot satellite imagery of our world, modern exploration has mostly to do with stretching the capabilities of the human spirit and challenging one's own limits. To me, the ice offers just that. The complete communion with nature in utter self-reliance has been with me since childhood, when I dreamed of following in the steps of the supermen who charted the maps of our world with their courage, determination, and natural connection with the land.

Though I was raised a city boy, I got the exploring bug from my grandfather, a surgeon who often conducted safaris in West Bengal, India, and then Botswana and Tanzania in the 1940s and '50s. By midlife he'd traded his gun for a camera. I spent many childhood sum-

mer afternoons gazing at his slide shows of lions and elephants; I took my own first shots of wildlife in Africa when I was 12. Over the years my interest in reaching hard-to-get-to places has grown in concert with a commitment to bringing back photographs that cel-

## When the lines tighten and the nylon sail fills with air and lifts off, it feels like flying and flying feels like freedom.

ebrate the exotic and otherworldly aspects of our planet. With images, I would help people fall in love with their world. A growing interest in climate change had me shift my focus from the mountains, oceans, and deserts to the poles, and since 2005, Antarctica and the Arctic have



been my backyard: Nothing communicates global warming better than melting ice. After reaching the North Pole last year, covering 400 miles on foot to commemorate the 1909 Peary/Henson centennial, and in preparation for my South Pole Amundsen/Scott centennial mission next winter, I set my sights on Greenland, often considered the third pole by explorers. But unlike its siblings to the north and south, it is bereft of a marquee nodal point that declares: You have conquered!

As the Earth's second-largest ice mass, Greenland holds many world-class challenges. But it also stands at the geopolitical center of the climate crisis. Were its ice mass to melt entirely, ocean levels would rise by more than 20 feet. As it is, water discharge, which pours into the ocean at rates of 72 cubic miles per year, could have a direct slowdown effect on the Gulf Stream. The violent display of the ice's raw power, commensurate with its size, can unnerve the most committed adventurer, as my expedition partner, Eric, and I were soon to find out.

T'S SLOW GOING," I GROANED AS I STRUGGLED TO keep the kite powered up in the air with the light winds. "If we wanted to go fast, we could have taken the plane," Eric reminded me. At 26, Eric McNair-Landry is experienced beyond his years. His mother, my friend Matty McNair, led the first all-woman team to the North Pole in 1997, and Eric is an avid kiter who grew up near the Arctic Circle, in the Canadian outpost of Iqaluit. In choosing a teammate for this trip, I knew that his skills would elevate mine and provide a good counterpoint to my

46 years.

We were six days in from our boat drop at the base of the glacier near the small southern town of Narsarsuaq, and the winds were light. Lighter winds, though, mean larger kites and longer lines, and a large kite can be tempera-

mental — the slightest handling error will leave the sail folding in the air like a limp jimmy hat, and getting it back up can be both painstaking and backbreaking as you run backward to generate lift. The wet snow added drag to our heavy sledges behind us, each of



**LIFE ON THE ICE** Keeping the expedition blog up-todate using a satellite phone (left); a spooky Cold War relic looms above camp.

which packed 230 pounds of survival necessities for 45 days of unsupported travel on the ice: tent, kites, stoves, fuel, sleeping bags, and safety gear. Dehydrated food, nuts, chocolate, and PowerBars. Communication technology, solar panels, personal locator beacon, film and photo gear. And two pairs of underwear — cargo weight on these expeditions quickly adds up, and the first thing to go is the luxury of clean clothes.

Slow though this was, it still beat pulling. Pulling is what we had done for the past five days: affixing skins to the bottoms of our skis so they would stick as we dragged the sledges up in elevation to reach a favorable wind line. From sea level, we had scaled the glacier, crossed the snow line, and reached 5,900 feet, giving us about another thousand feet or so to go. In deep, wet snow, it's about as much fun as pushing a car uphill.

But today we were finally kiting. And while the wind took a pass on glory, we were still moving up the ice sheet. Every foot felt like a victory. As the uphill miles glided under our skis, the last of the mountains slowly vanished behind us under the curve of the ice

sheet, committing us farther into the Great North. We would not see land again for over a month.

The wind soon picked up, and so did our speed. The wide-open space that stretched unlimited in all directions was like a frozen ocean, its hills and valleys

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like giant swells. And with very little sastrugi, the 68 miles we would post that day were surprisingly — and uncharacteristically — easy on the knees. The cold wind was firming up the ice, now racing below us with speeds reaching 25 miles an hour. The sun was out, and the weather, 23°F, outside of wind chill, was remarkably pleasant. Our spirits were high, and with the wind in our sails, we chipped away at the miles, cautiously upbeat about putting distance between us and the potentially hazardous weather of Greenland's southern tip. Little did we know that conditions would soon dramatically turn: Hurricane-strength winds were headed our way and would be on us in less than 12 hours.

> OME AGAIN?" SCREAMED ERIC, NOT FIVE FEET from me. "The spindrift is entombing the tent!" I shouted back. The winds had been hurling buckets of drift at the sidewalls of the tent, pinning us down for a sixth consecutive day. The tent had been violently

shaking, day in and day out, with an onslaught of winds reaching 80 miles an hour; the resulting decibels offered a taste of what camping inside a roaring jet engine might feel like. With the accumulating walls of snowdrift hardening into ice, it would be extremely difficult to excavate the tent without damaging it, even once the storm passed. And a damaged tent is all you need to compromise an expedition — to save weight, we brought no backup. It was times like these when I admired the design ingenuity of the sum of nylon cloth, four poles, and a few guidelines to anchor them, which together amount to an oasis of relative tranquility amid such utter external chaos. Under

siege from the wind and ice relentlessly coming at us from all directions, inside that little red dot of a Hilleberg tent, you can still enjoy a mean cup of tea.

In the midst of a powerful windstorm on the ice, it's easy to be awed by this grand natural theater.

There is undeniable poetry in the violent and chaotic expression of nature's forces. The drift galloping over the ice resonates of Valkyries from a wild avant-garde ballet. Backlit by the sun's low rays, the sheet of liquid smoke glows like a cloudscape time-lapse photograph. And



**ADVENTURE ACTIVIST** The author with his fiancée (left); with Leonardo DiCaprio at Global Green's annual pre-Oscar party in L.A. in 2009.

what could be seen as a frigid and threatening environment turns into an ethereal dance: delicate, evocative, and graceful.

But we'd been stuck for 144 consecutive hours, and short on reading material, we itched to move on. Our chance finally came

on the morning of the seventh day. It had started in the manner to which we had grown accustomed - howling winds, tent flapping, and some measure of discouragement - but conditions had suddenly pulled back. When we stepped out of the tent, the spindrift was gone, the sun was shining, and the wind had softened enough to allow for standing straight and walking without pantomime. After four hours of excavating the tent from the icy clasp, we set off on foot, determined to regain control of the narrative.

Within an hour, we were even able to set our small kites. Only by the time we pulled them out, the wind had dropped so much that it was time to rig bigger. And in the time it took to set the larger kites, the wind shut off entirely. Not a breath. We saw no better option but to set up camp again, less than a mile from where we'd slept the previous night. No sooner had we made a new, comfortable home than the tent's fabric started gently flapping, and yet again we found ourselves packing up camp, laying out the lines of our 46foot Yakuza kites, stepping into our bindings, and clipping the sledges' carabiners into our harnesses.

There is a feeling you get when the lines tighten and the nylon sail fills with air and lifts off. The ice begins to glide below your skis and the tug on the harness propels you forward. It feels like flying - and flying feels like freedom.

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THE ROUTE 1,400 miles in 42 days, with top speeds of about 40 mph

Greenland had beaten us into submission before playing nice.



HE DEW LINE - as in distant early-warning line - was a string of remote

satellite outposts set up by the U.S. and Canada to monitor Soviet airborne military activities during the Cold War. Roughly following the 69th parallel across Alaska, Canada, and Greenland, the line consisted of 58 radar stations spread over nearly 6,000 miles. The Greenland ice sheet is host to two such stations: DYE-2 and DYE-3. With the advent of satellite monitoring,

however, the stations quickly became antiquated. In the mid-'80s, they were briefly recycled for scientific purposes, but the prohibitive maintenance and operational costs, together with limited scientific applications, made these structures obsolete. They were permanently retired by 1991.

It was close to midnight, 16 hours into a long riding day, when the distant monolithic silhouette of DYE-2 appeared on the horizon, jutting from the ice some 20 clicks ahead. After days of nothing but sky and ice, the sight of a structure breaking from the elemental har-

mony felt like a stain on a canvas. We were 17 days into our trip and had covered 144 miles that day - our personal best thus far. Riding over rough ice can rattle your fillings and give your knees the taste of old age. Moving at speed over the windswept ridges of sastrugi that can reach a foot in thickness is like strapping a jackhammer on your back while figure skating. As I stepped out of my bindings, my walk felt more like a wobble.

Standing erect in front of us, and cut against the dark red sky, the ominous structure of DYE-2 lent a postapocalyptic vision to the white starkness. Six stories high and dominated by a huge plastic radar dome, the building perches 30 feet in the air, supported by eight columns designed to adjust with the shifting level of the ice on which it's built. Frozen in time, it feels like a relic of a lost civilization. In that moment, Eric and I could have been the last two humans on the planet.

Upon retiring its operations, DYE-2 was abandoned, as if in a rush, most of its contents along with it. The inside is coated with frost and has the creepy feeling of a haunted space. The kitchen is still stocked with soft drinks and beer, coffee cans, and trays of eggs. The bar is lined with old, half-empty bottles of booze. The ashtrays are littered with cigarette butts, and there are adult magazines in many of the private quarters. The paint is peeling off the walls in strange circular (continued on page 184)



## **GREENLAND** continued from page 138

patterns, probably due to the cold.

After a few hours of exploring, it was time to resume our journey. We were finally leaving Greenland's southern tip behind, pushing deeper into the heart of the ice sheet.

IT IS A MARK OF MOST ADVENTURERS TO activate their competitive streak and set records. While the rest of the world may find those records abstract and esoteric, polar explorers think they represent a notch left behind for the history books and a nod to the commitment it took to get there. Upon stepping onto the ice, I set my sights firmly on challenging the longest distance traveled in a 24-hour period, which stood at 322 miles. Having posted only 161 miles over 16 hours the previous day, the task felt daunting, but when we left at 9:30 PM on June 4, 2010 — day 22 of our expedition the conditions were promising.

Because the wind had held strong for the past day, I decided to strap myself into my big rig. With the wind about 45 degrees to your back, the pull is more forgiving when overpowered. The upside is greater speed of travel; the downside is crashing.

There isn't much room for error when moving at 40 miles an hour on the ice, flying among the drift flurries that run over the ground like a blanket of silk, and 200 pounds of gear bouncing erratically behind you. Things happen very quickly — you catch an edge, and the resulting wipeout can be spectacular and dangerous. The adrenaline rush is intense, as is the workout. When the wind really turns on, I actually prefer shutting the iPod off and staying focused. Within the first hour and a half we had covered almost 60 miles.

"Let's go for it," I said to Eric, urging him to also go bigger. We had talked about the record a bit, but his attitude had been lukewarm. He felt that silly and dangerous mistakes happen when you subject your body and mind to this type of duress in a highly dynamic environment. But he himself had had a go at the record a couple of years back, posting a 256-mile day, and I'd come to find him quite competitive. Tonight the conditions were there.

"OK," he agreed. "Let's give it a try."

The wind grew through the night, and by 4 AM, snowdrift covered the ice in all directions as we chased the nighttime sun. In the last few days we had passed the 600-mile mark, crossed the Arctic Circle, and were now solidly in 24 hours of sunlight. As we kept pushing north, however, we felt the temperature drop, particularly at night. Frost had built over our face masks, and the wind chill prohibited any exposed skin. But the snow was soft and the sastrugi easy under our skis, allowing us to hit speeds well over 40 miles an hour.

Eventually, the pull of the big kites was too great, so we downsized but still maintained reasonable speeds. In the dry cold, the ice had softened to a sandlike texture, which was remarkably kinder on the knees: We were gliding on silk. Ten hours in, we had covered 229 miles. At that rate, we would pulverize the record. But as the new day rose, the winds began to falter. From speeds of 40 mph, we were now struggling to do 10. Back on the large kites, and with fatigue setting in, we felt doubt begin to creep in too. By our next break, it was clear that the rising day would not work in our favor.

"If this keeps up, we won't make it," I said. "Are we up to subjecting ourselves to a 24-hour day if we're not going to break the record?"

"If we do it, it's to push the edge of our own limits," Eric replied. "But if we agree to do it, there's no turning back."

It was the response I had hoped for and an exact reflection of my own feelings. By then, the record mattered less than the commitment, and commitment doesn't exist outside of sacrifice.

The slow, monotonous speed began to wreak havoc on our minds, while skiing on the same tack for hours on end took its toll on our bodies. Our leg muscles were sore, as were the flats of our feet. Because the kites' handles often sit above the heart, hours of gripping meant that our hands would go cold, and our fingers would go numb. But we kept chipping at it, and by hour 15, we had actually covered 292 miles. If the winds kept up, even as light as they were, we realized we still had a shot at the record.

We switched to one-hour shifts of skiing with 15-minute breaks. The wind teased us, up and down, but overall we managed to increase our pace. We had now traveled more than 300 miles with eight hours still left on the clock, and we had to clear only 22 more. I remained alert to the slightest variation in wind speed — the tension ran high. If the wind died then, it would have been devastating with the record so close. I gripped the handles and felt each yard glide below my skis. An objective is purpose, and this one justified the pains that grew stronger in my limbs.

We passed the record sometime during hour 18 but pushed on to make our mark and set a new one. With five more hours to go, we switched to 45 minutes on and 15 minutes off. The last three hours were agony. My calf had seized up, both my feet were numb, my knees were sore, and I was so exhausted that I could neither walk nor eat the food I so badly needed. I had finished the tea in my thermos, and a half-empty water bottle had frozen: There would be no liquid until the end. Eric and I agreed not to look at the GPS for distance until we were comfortably in the tent.

The final hour was pure mind over matter in virtual delirium, each minute dragging on endlessly as I accidentally listened to the same electronica song on my iPod over and over. Because of the breaks, the final push fell on 9:15 PM, and we agreed that this would be our quitting time — 15 minutes shy of the 24-hour mark. No finish line. No cheering crowd. No fanfare.

When we landed our kites for the last time that day, I crawled on my hands and knees to fold it, and the 80 yards of line took 10 minutes to wrap. I had been up for 31 hours and truly exerting for 24. We wobbled into the tent, made some food, and then checked our distance: 370 miles. We had beaten the record by 48 miles and were officially the world-title holders for longest distance traveled by kite on skis over a 24-hour period. And in just one day we had covered a full quarter of our entire 42-day distance.

The next day we rewarded ourselves with a day off. Not surprisingly, we slept for most of it. The sun was at the losing end of a power struggle with high and low clouds that lasted all morning. By midday, after alternating light snowfall with bright piercing rays, the sun's parched light bid its final adieu for the day. But not before running one last salutation across the frozen plain, playing catch-up with itself amid the clouds' broken shadows.

GREENLAND IS A COUNTRY OF IMPRES-SIONS. Sparse. Profound. And pure. To the casual observer, the ice may look monotonous, a tediously repetitive blanket of white that stretches agonizingly in all directions. In reality, this frozen land reveals itself in its multitude of subtle details, forever changing with the light and the dynamics of the day. I can honestly say that over the course of a month and a half, I do not recall seeing the same vista twice. The shift in colors, in shadows, in terrain gives each hour its own visual identity, its own glorious splendor.

Like all deserts, it celebrates details and challenges the mind to fill its proverbial void. A desert is the landscape of the imaginary and the sacred. It is where you go to have conversations with God; the serene feeling of being deeply immersed in this magnificent frozen world, riding for hours, relying only on the wind's power, leaves much room for contemplation.

Excluding the glitch of six days and seven nights spent praying that our tent would not disappear in the storm, the conditions we experienced in Greenland were forgiving and mild. The sastrugi were virtually nonexistent for most of the trip, replaced by soft and often powdery snow. Though this boded well for my knees, it is a bad sign for the rest of the planet. At 10,000 feet of elevation and in these latitudes, it is supposed to be cold. And soft snow at the top means greater melt at the bottom.

With this year's record temperatures, the increased water displacement into the ocean will precipitate Greenland's influence on global climate and wreak further havoc on crop cycles and global economies. Though the focus of the trip was adventure, it is hard not to be sensitive to Greenland's plight when covering its length on foot — not to ponder its consequences. After all, anyone who walks the land will gravitate toward becoming an advocate in its defense.

We had covered just over 1,500 miles. When the helicopter lifted us from our pick-up location, I saw the rocky slopes we had just negotiated on our way down, the patches of snow we slid down, our campsite by the glacier, and in the distance, beyond the multitude of crevasses we had crossed, I saw the ice sheet we were leaving — alluring, gigantic, and for lorn. And what I heard beyond the chopper's rotors was an ice world's plea for help.