# A WALK ON THE HIGH SIDE

Glacier Skywalk.

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Alberta's Jasper National Park.

HE CANADIAN ROCKIES are home to many wonders. However, Alberta's Jasper National Park has a new sight, which will make you do a double take. High up on Tangle Ridge, it juts out over the valley as if an alien spacecraft has crashed into the mountainside with its observation deck dangling over the precipice. It's not a hoax. It's a heart-stopping reality called the Glacier Skywalk.

> Imagine yourself seemingly suspended 280 meters in mid-air. The bracing wind stirs your hair as you look down at the deep valley far below. Your cheeks are flushed with excitement and your stomach lunges. The blood thumps in your ears, keeping pace with your racing heart as your heightened senses take in the dizzying view. The

magnificence of the surrounding mountains fills you with awe.

That's what it's like on the Discovery Vista's glassfloored observation deck that offers a spectacular 180° unobstructed view of Sunwapta Canyon. The platform allows visitors to walk out into space and look down into the deep valley. You need nerves of steel to venture out, but it's worth it because the panorama that unfolds under your feet is sensational.

The walkway was commissioned by Brewster Travel, one of Canada's leading tourist organizations. The company has been organizing tours for more than 120 years. Back then, the Brewster



brothers only had horse drawn carts, but now the company has a vast organization catering to millions of tourists.

# We talked to Interim President David McKenna about Brewster Travel Canada and the Glacier Skywalk. Can you tell us about Brewster Travel Canada?

"Brewster is a tour and travel company that provides a wide variety of services such as; packaged tours, sightseeing trips, hotels and major attractions in and around Jasper National Parks. We are a seasonal business so the number of employees fluctuates between about 500 people in winter and 900 during our summer peak. One of the things that really distinguishes us is that most of our people live and operate in the region. We are truly the local experts and real ambassadors of the Canadian Rockies. Some of our guides have been doing this for 20–25 years and they have fantastic stories to tell about the old days."

# Talking of the old days, how did Brewster start out?

"We have a long and colorful history in the region. Our founders, Jimmy and Bill Brewster, were just two local kids back in the 1890s who used to deliver dairy to the Banff Springs Hotel. A hotel guest wanted to go fishing, but he didn't have anyone to take him. The boys volunteered and that set them on their path to becoming tour operators. They trained with local First Nations guides and helped chart some of the first routes through the Jasper region, along with other colorful characters

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# **High Expectations**

The steel superstructure of the Glacier Skywalk, which is fully integrated with the natural environment, is 30 meters long and weighs 22.6 metric tons. Lifting the walkway was a crowning achievement and maneuvering it into place was no easy task because it required a long reach (43m), but the Mammoet team pulled it off, using a crawler crane.

# Wildlife

Ron Woud (50) was the crane supervisor on the project, responsible for overseeing the work, consulting with the engineers, inspecting the work site, deciding on the best method and making sure the crew had the necessary equipment. The crane was transported from Alberta in 20 truckloads and erected in two days. Ron's Canadian/ Dutch crew consisted of five people; himself, a crane operator, a support crane operator and two riggers.

Ron talks about the operation: "The weather conditions and local wildlife complicated things. The project was originally planned for late 2012, but it was postponed until July 2013 because of wintery conditions and the mountain goats' breeding season. During the operation, we had to be extra careful with the local wildlife. This slowed us down a bit because the transportation had to be carefully coordinated with the park warden. The trucks were not allowed to drive through the area before 9 am because of the wildlife and every-thing had to be cleared away by 6 pm."

#### A tight squeeze

There were also other challenges: "Mammoet was the only one with a crane that had the right size and capacity to do this job. The crane was poised about one meter from the mountain edge on a two-lane road on a narrow rocky ledge. There wasn't much room to maneuver because the crane had to fit into the designated area and still leave the north bound traffic open. It was a tight squeeze, but we managed. Our engineer, Raeleen Lischynski, had made all the necessary drawings and calculations to make sure the crane would fit.

Keeping the road open was tough: "It's a popular tourist attraction and there was quite a bit of traffic. Only one lane was open so we had to direct traffic, ensuring the safety of the motorists and trying to avoid delays. There were one or two times we had to stop traffic for about half an hour, but that was all. We kept disruptions for the wildlife and tourists to a minimum."

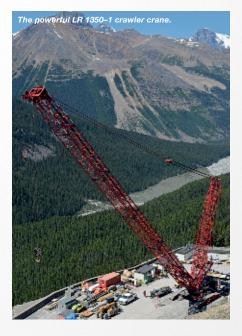
Driving instead of crawling "Once the glass bottom for the skywalk was ready, we needed to move it from its manufacturing area to the skywalk construction area. Our client suggested moving it there with the crawler crane, however I had grave concerns about the road being uneven and about the unpredictable winds. Therefore, to ensure the safety of the structure, we transported it on a trailer. It was a narrow road, but a safer alternative to lifting and we got the structure there unscathed.

#### Leaving a mark

Despite the challenges involved, it was all in a day's work for Ron, a seasoned professional with years of experience. He doesn't faze easily, but there were some surprises even for him: "The park is swarming with mountain goats, but they didn't seem bothered by us. They stood perched on the mountainside, looking at us inquisitively and chewing away. And there was even a black bear or two to greet us in the mornings as we headed to the site. I took my mountain bike with me and rode around a bit. In Jasper there are 300 elks, which was breathtaking."

The burly crane supervisor is a no-nonsense man of few words, but it was more than just a routine job for him: "We usually work at refineries and oil platforms, and it was nice to work on something that is beautiful and fits in with the scenery. I can imagine that the glass skywalk is pretty thrilling for visitors."

Ron looks back with a sense of contentment on the project: "It's quite unique. I'm proud of the job and so is everyone else involved. It's a permanent fixture that a lot of people are going to visit and enjoy. I've got two grown-up sons and they think what the old man did is pretty cool. I like the idea of them visiting it and even later with their own kids. I feel like I've left my mark."





like 'Wild' Bill Peyto and Jimmy Simpson. It's exciting to know that's part of our history."

# How did the Glacier Skywalk come about?

"A few years back, the national park put together a working group to look at the overall guest experience. One of the things they identified was the growing need for a more high-quality interpretative experience. From that we worked closely with Parks Canada to develop the vision of providing visitors a way to experience the canyon from on high. First we thought of a suspension bridge, but that eventually evolved into the Glacier Skywalk. The overall guest experience has to be balanced between a sense of adventure, education and maintaining ecological integrity and we feel this is what we achieved with the Glacier Skywalk. When we unveiled the design in 2011, it won an award at the World Architecture Festival. The judges described it as "a simple, elegant yet highly emotional project."

# How did Mammoet get involved?

"First we enlisted the help of Sturgess Architecture and Read Jones Christofferson Engineering (RJC) and they proposed Mammoet. Once we looked into the company and saw their area of expertise, the sophistication of their equipment and their ability to perform in tough environments, there were really no other candidates in our mind. It was crucial to us that they had the proper equipment to be able to get to the remote site quickly and also capable of lifting the heavy tonnage involved."

# What were the main challenges for you?

"We started this project wanting to provide a unique opportunity for visitors to experience the Skywalk module lifted into place.

"The region is famous all over the world and we didn't take the responsibility lightly." Columbia Icefield. The region is famous all over the world and we didn't take the responsibility lightly. Developing a structure that would allow visitors to completely immerse themselves in the surrounding environment without endangering the local wildlife was an absolute priority. We challenged ourselves to do this properly, or not do it at all. The design and engineering of the project were key to this commitment. Mammoet fully understood our drive and dedication and signed on completely."

# How important was safety?

"Safety was paramount because the operation took place on a narrow road at extreme heights with traffic going by. Everything had to go absolutely perfect because there was no recovering from an accident. The engineering supervisors told me that they were very comfortable with not only Mammoet's equipment, but also with the operators and the way they dealt with the tough situation. There is no doubt in my mind we could not have done it as quickly and safely with any other company. Everything went off almost exactly as planned."

# How do you look back on the whole operation?

"I am incredibly proud of the teams that pulled together to make this project a success. Developing such a unique experience in a remote area was no small feat. What seemed a nearly impossible idea became a vision, and then a plan, and now a new way to connect visitors from all over the world with the immense powers of glaciology. We have high expectations about the number of visitors in the first year. We're hoping to welcome some 250-thousand people and we can't wait to open our doors!"