

A Report On The Alaska Highway

(By Murdock Whitcomb)

Editor's Note: This is not necessarily the prize winning technical paper. Of all the papers entered in the Technical Paper Contest; this one was thought to have the widest interest range and has been published for this reason.

I have travelled the fifteen hundred miles of the Alaska Highway northwest from Dawson Creek, British Columbia to Fairbanks, Alaska. It is more than just fifteen hundred miles of road; fifteen hundred miles of great engineering achievement, the gateway to Alaska, the lifeline of the north, and the nucleus of a rapidly growing Canadian Northwest. With these ideas in mind, let us look more closely at this Alaska Highway. Let us see what it is, where it is, and what it means to Canada, and to us as Canadians.

The Alaska Highway was first built during 1942 by United States Army Engineers as an overland lifeline to relieve Alaska from the war time hazards of shipping. The highway followed a line which enabled it to link up the chain of airfields in the Northwest Staging Route at Fort Saint John, Fort Nelson, Watson Lake, and Whitehorse. These airfields had been built by the Canadian Government in 1941.

On November 20th, 1942, some 250 soldiers, civilians and Royal Canadian Mounted Police watched officials from Alaska and Canada cut the ribbon stretched across the frozen road at "Soldier's Summit". On this windswept hill opposite milepost 1061, Klauke Lake, the ceremony of the opening of the Alcan Highway, as it was then called, brought to a climax an epic of roadbuilding achievement begun only eight months before. The actual breaking through the first connecting of the various sections of the road took place at milepost 588, where a tiny bridge crosses Contact Creek, and where a faded and disintegrating sign is the only memorial.

During 1943, the then primitive highway was turned over to civilian contractors to make a sturdy military highway for heavy traffic. This meant widening, graveling, replacing of primitive log bridges with structures of steel, and rerouting and straightening the road at many points. In all, some 15,000 men, in addition to those of the U. S. Army, were employed, using heavy modern road building equipment. The cost has been estimated at \$138,000,000. It was, almost certainly, much more.

In April, 1946, the section of the Alaska Highway in the Yukon, and in British Columbia was turned over to the Canadian Government and, although traffic over it had to be restricted at first, owing to the lack of facilities and accommodation for tourists, it is now open to all.

Contrary to public opinion, the Alaska Highway does not start at Edmonton, but at Dawson Creek five hundred miles to the north west of it in British Columbia. Dawson Creek is mile "O", and at each mile on the highway there is a milepost indicating the mileage. Whitehorse is mile 918, and Fairbanks, Alaska, the northern terminus is mile 1523. The names of many places on the highway are merely milepost numbers. This may be a bit confusing at first, but with familiarity the practice becomes quite commonplace, and greatly simplifies the calculations of distance.

The first hundred miles of the highway lie mainly in a region of

still stand.

Leaving Fort Nelson, the highway veers to the west, entering an extremely wild section of the north Canadian Rockies, through which it winds for the next two hundred miles. At milepost 340 begins a steep, fourteen mile climb over Steamboat Mountain, and at milepost 392 is the highest point on the highway with an elevation of 4,250 feet (only one hundred miles beyond the Muskwa River, 1000 feet above sea level).

From milepost 455, the highway winds for nine miles along the shore of Muncho Lake. Here is one of the most beautiful mountain lakes in the world. The side of the lake along which the highway was to run consisted of a perpendicular mountain, which was blasted away to make room for the highway. This is quite a dangerous section of the road, and it is not uncommon to find two and three foot boulders from somewhere high in the mountains lying on the roadway.

At mile 496 is the Liard River and a suspension bridge. This bridge is the second longest on the highway, a \$2,800,000, 1143 foot span similar to that of the Peace River Bridge at mile 35.

The first crossing into the Yukon Territory is at mile 627, and for the next fifty or sixty miles the highway winds along the border continually crossing it. This is again rolling country, but it is quite different from the terrain around Dawson Creek. The growth is very scrubby, and the country seems to be more desolate than along any other part of the highway. Here one can go for miles without seeing even so much as a trapper's cabin. Every once in a while there is a deserted construction camp which seems only to add to the solitude.

At mile 837 is an abandoned cut-off, the Canal Road, to Norman Wells — the wartime oilfield on the McKenzie River. This cut-off paralleled the pipeline constructed during the wartime emergency to convey crude oil to the refinery at Whitehorse. The road is now closed to traffic, and it is said that when construction and maintenance crews left at the end of the war they abandoned almost everything.

Milepost 918 is at Whitehorse; once a frontier town with a pre-war population of three hundred, it has greatly benefited by the advent of the Alaska Highway, and the activity of wartime construction. As the major supply point for the construction of the highway and the movement of war material, Whitehorse experienced an unprecedented boom during 1942, which has since levelled off to leave Whitehorse a typical northern town.

The road over the next one hundred miles is very good, and its condition is similar to that of any other unpaved road in Canada. At mile 1016 is Haines Junction, and from here the Haines cut-off stretches 158 miles to the southwest to Haines, ocean terminus of the Haines Highway. At one point on this road, the highway runs along a high plateau, and in winter, the wind blows the snow here

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Electricals inspecting transformer banks and switchboard at the Fraser Paper Mill in Newcastle, N. B., during the engineer's first field trip last fall. Left to right: Jack White, Maurice Cyr, Ross Wetmore, Don Prendergast, and Doug Stewart.

The Story of JOE KAISER

On July 27th last, friends and fellow students throughout the province were shocked and saddened to hear of the tragic death of Joe Kaiser. Joe had just completed his third year in Civil Engineering at U.N.B.

This is his story. It is assembled from the newspaper reports and from the memories of those who knew him and worked with him during his short but eventful life. Above all it is a true story. Joe was born in Saint John, N. B. on June 21st, 1923, the younger of two sons. His father was a seafaring man and Joe knew little of the so-called "happy normal family life" from the beginning. His father's work did not permit him much time at home with his family.

Times were hard during the depression years in Saint John, as elsewhere. Joe began early to earn his way in the world by selling newspapers on the street corners. Perhaps it was here, too, that Joe began to acquire his determination and courage in the face of great odds. He often found it necessary to battle with older and tougher newsboys to prevent them from forcing him out of his own territory.

While Joe was still a small boy his father was lost at sea. His mother sent him to the St. Patrick's Industrial School near Saint John until she too died a few years later. Joe's older brother continued to support him for a time. Then the brother was killed while working in a stone quarry. Joe, now about thirteen, and starting in the seventh grade, was faced with the choice of accepting charity or being "forced out" working for a farmer for his board and clothing.

Joe elected to go to work and was sent to a farmer in a small community far up the Saint John River valley. Here he was ill-treated and neglected, and finally wrote his priest in Saint John of his difficulties. He was given permission to go to another farm in a different part of the province. This was a happier home and Joe remained there for some time before returning to Saint John to work at the dry docks. In Saint John, he renewed his acquaintance with two lads, brothers whom he had first met at the Industrial School. The boys and their mother made him one of the family, and for the rest of his life this was home to Joe.

Then came World War II and, in 1940, Joe felt it was time to get in uniform and began haunting recruiting offices only to be turned down over and over again because he was underweight. But Joe was never easily turned aside from the chosen path. The recruiting officers' resistance was finally worn down and Joe was accepted by the army though he was warned that his chances of getting overseas were non-existent.

In 1943, however, Joe went overseas with the R.C.A.M.C. as a medical orderly. He landed in Normandy on D-Day with the invasion forces. Here he helped to care for the wounded on the beaches, through France, Belgium, Holland

and in Germany where he remained for a time with a hospital unit.

After his repatriation to Canada, Joe learned of the rehabilitation plan for the veterans, whereby they might complete and further their education. He determined to go to university to study for a degree in engineering.

D.V.A. officials, on learning of his meager education, tried to discourage this ambition and offered instead courses in manual training or mechanics. Once again, Joe was adamant and in the fall of '46 he arrived at C. V. T., Millidgeville to study for the junior matriculation examinations.

Less than a year later Joe registered at U.N.B. and began his first year in Civil Engineering.

In July, 1950, with three years of university in the past and only two more between his goal, that coveted degree, he was working as an instrument man on a road building project near Moncton when his amazing progress was halted by a crushing blow from the bucket on a power shovel.

This is the end of Joe's story; but there will never be an end to the qualities that made him what he was. For Joe was an embodiment of determination and pluck. He was small only in stature. Throughout his life he met with and rose above adverse circumstances. He was a great guy.

Mother (entering room unexpectedly): "Well, I never..."
Daughter: "But mother, you must have."

ENGINEERS,
so they say, work
in an inscrutable
way!
But go, whichever
way they can.
Each has to be "A
well dressed man"

and, for that really
excellent "Topper"

be a
**Gaiety
Men's Shop**
shopper!

"For Those Who Prefer
Quality"

Student Engineer

On the bridge at midnight,
The Pratt truss span,
Was held fixed ended,
Clasp of my dear love,
There surveyed her
(at my love was fair)
Al wind load suddenly
Tensile stress in her hair.
Vilt thou measure with me
Part of Life's unknown
Heart by reciprocation
An impact load.
Art the illumination of my
Thee do not dim it"
When she softly whispered
My elastic limit.
Adapted from the Minnesota
Technology.