

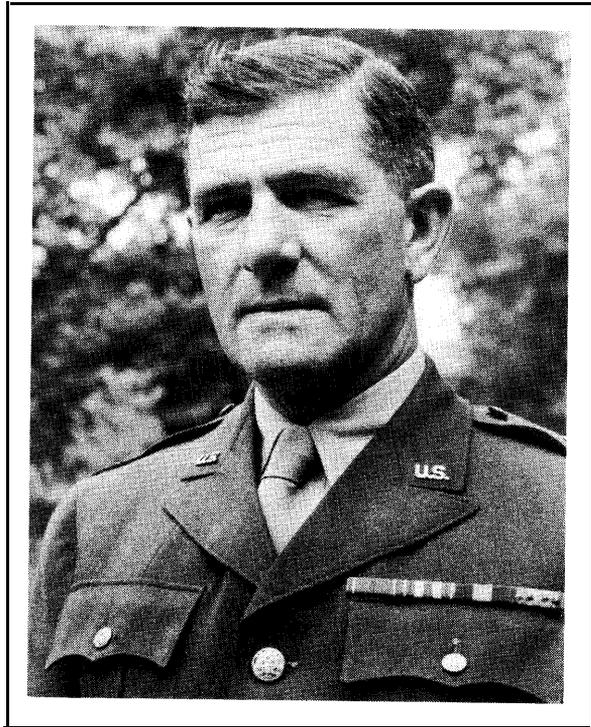
Q: It's too bad we can't do that type of thing today.

A: Well, we did. Nobody paid too much attention.

The Alaska Highway

Q: You left Belvoir to go to Alaska then in November of 1942?

A: No. I went up to Alaska first on New Year's Day of 1942. No, not New Year's Day. It was Valentine's Day. I remember I was in northern Canada on Valentine's Day of 1942. I took my first reconnaissance up there and then I came back and got my troops, some of them, ready. First I only had the—what was it? The 38th Engineers? I think it was the 38th. I'm not sure. Anyway that was the first regular regiment [35th Engineer Regiment (Combat)]. Then I got—I had some of those 400s.



Brigadier General William M. Hoge as commanding general of the Alaska Highway Project, 1942.

They were draftees entirely. Then I got a couple of Negro regiments. I had six regiments that finally came up there.

Q: About how many men in each regiment did you have?

A: There were about 2,000 men, I guess.

Q: Per regiment?

A: Yes.

Q: Well, that was quite a feat.

A: When we went up there first with that first regiment, the trouble was getting anyplace into this road. You could start on both ends. You could start on the south end and you start up around in Alaska coming south. But that would be a hell of a long way. How long is that road? I've forgotten. I used to know. It seems to me about 1,000 miles or maybe 2,000 miles. Anyway it would take a long time to build from end to end. So, we had to find some ways of breaking it into segments. The first idea was to take this first regiment we got there—and we had to get up there while the ice was in because you couldn't get across those rivers—and get one regiment inside up around Fort Nelson [British Columbia], which was about 250 miles inland, before the ice thawed. We had to get supplies up there for them until we could work in from the southern end and get supplies to them. So, we put one regiment; I think it was the 38th Engineers [35th]. Took them in over—got them up there about the 1st of March, sometime early in March, put them up the railroad as far as we could go, to Dawson Creek; and then we took them off and put them on overland—headed for Fort Nelson, which is about 250-300 miles away just across the prairie and through the woods. It was nothing but Indian trails or something like that.

Q: All virgin land?

A: We didn't know where we were going actually at that time, but I knew we had to go to Fort Nelson. We only had a few points in there we had to go. I don't know whether there's better routes or not. If you wanted a better route, I think I would come up from Vancouver and go up the Rocky Mountain trench, which is due north and is a very peculiar trench in there that doesn't go very high. I think probably the highest elevation is maybe 1,000 feet and that would have gone straight up to wherever we were headed for, which was Whitehorse. But we had to go to the airfields that were selected. They hadn't been built yet. There's one at Fort Nelson. There's one at where we're started down there off the mainline near Dawson Creek. What the hell's the name of that? Fort St. John [British

Columbia]. That's where we started. There was an airfield there already built, but then they were going to build one at Fort Nelson. Another at—up on the—what the hell is the name of that? My memory is getting so bad. Knew it so well.

Q: Up on the north end?

A: It's where the Liard River turns east, comes down from the north and turns there and heads east. Then we had to go over to Whitehorse, then up to a place called North Field. Gee, it's awful when your memory's gone. Anyway, it's halfway up towards the Yukon.

Q: Let's talk some more about the particular engineering problems that you had.

A: Well, there were no plans on that except we had to go to these points where airfields were to be built. Somebody had made a partial air survey of this route. They didn't know where they were going. They had this laid out purely from air photos. There were a lot of places where no one had been. I later got up in there and I couldn't even find an Indian who'd been over parts of it, Indian guides or anybody else. So, part of it was to head out and to start this. We had several ways we wanted to enter to get on to this road. One was to come up the Stikine River and cross over the mountains near the coast in that way. Well, that didn't prove very satisfactory, but we could come in at Whitehorse [Yukon Territory] and head north and south from there. We got in there up on the route we wanted to come. You could deploy two regiments that way, and you could bring this one regiment we had in at Fort Nelson. We only worked that one west. We didn't turn back. They had to be joined up by regiments from Fort St. John. We had a regiment coming in from that way. Everybody had about 250-300 miles to go to hook up with the next, but everybody was going in one direction, every regiment.

We came in at Valdez in Alaska, where they are talking about bringing the oil line from the North Slope. We brought a regiment in there [the 97th Engineer Regiment (General Service)-a black unit]. It's hard to remember now. I know I had—it seems to me I had six regiments. I brought three regiments in at Skagway and brought them up to Whitehorse in that way [the 18th Engineer Regiment (Combat), the 93d Engineer

Regiment (General Service), and the 340th Engineer Regiment (General Service)]. There were two white ones [18th and 340th] and a black one [93d]. I think we started up going north only, north and west [18th]. Everybody was hooked up so that you had about 250-300 miles to go. We did eventually make 14 miles a day with all of them. We had to organize. We had a number of ways of doing it. We leapfrogged. We tried different systems. I think the most successful was putting a company in front. They would build as fast as they could, but when the one caught up behind, the first one was just sort of a pioneer.

Q: Pioneer trail company?

A: Well, it was all pioneer then, but when the one behind finished their work, they would leapfrog ahead of the lead company and take over, and they would push as fast as they could.

Q: I see-and finish up a section.

A: They would finish a section; but when you finished your section and hooked up to the one ahead, then you'd leap-frog over the ones that were ahead of you. That way you kept continuously working. You put your kitchens-the kitchens were on sleds and they dragged along. They moved all the time. It was quite an experience, and I never saw the type of men that we had because they were nothing but ribbon clerks. They didn't know anything about it. Didn't know where in the hell they were. Didn't know how to run a bulldozer or anything else. Well, some of them that landed up there had landed at Skagway [Alaska], had to be trained down in Skagway to operate bulldozers before they went up on the road.

Q: Did you have pretty good equipment then?

A: Oh, we had good equipment. We had trouble getting it because after we got started-when we got started, everything was fine. We were number one, but as soon as we got started, we became way back down the line. We became number six or eight [in priority]. I had to go back to Washington once or twice to get something up there, to get additional equipment and so on. But they would supply somebody else who had

started. They started that Canada oil [CANOL] project—the oil line from over on the Mackenzie River to come into Whitehorse—and that took priority for a while. They would get all of our equipment. We were already up there. We would starve to death if we didn't keep going. But the specifications for our road were that you had to supply the troops, and you had to have a decent road to get food, gasoline, and equipment up to the troops that were working. I tested the turns, the radius on curves and what not, till I was sure that I could get our trucks and so on around them. That was the limit.

Q: That was the criteria. You had no design specs [specifications] or anything?

A: Our grades were limited to 10 percent. That was the maximum grade we had. But it was quite a project. We worked like hell and we trained a lot of men. But those men turned out—we were working 24 hours a day, seven days a week. Our only rests were these shifts. We were working, I think, eight-hour shifts. No, let's see—I know we had maintenance time in there about four hours every day, but we worked 24 hours a day, seven days a week.

Q: You ran three eight-hour shifts?

A: Three eight-hour shifts.

Q: And the shifts were by companies, I imagine.

A: I don't remember. I guess they were.

Q: I guess they were, because on the same section the company would have to shift also. Well, you stayed in Alaska until September 1942. Did you finish that fast? Was the road finished when you came out in September?

A: No. We had gotten—I stayed up until—when was it? [10 September] About the 1st of November? Anyway we had gotten through. We had gotten trucks through when I left. We didn't have the road finished. Actually, I'm not sure if the road's finished today.

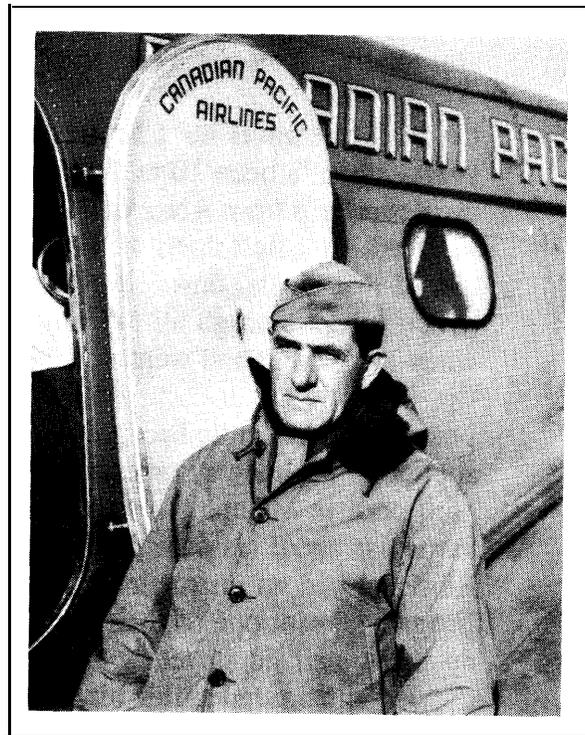
Q: Not totally. You can travel it.

A: Oh, you can travel it. I have been over it since then. It's been several years—oh, it's been 10 to 15 years ago that I came back down from an inspection trip from Alaska. But it's dirt. The Canadian part hasn't been surfaced. It hadn't then. It was still dirt and the dust was terrific because it's all that glacial dust. It's very light. But when I came out, we had gotten trucks through all the way up, but we didn't have traffic. That's when I came out and went down to the Armored Center.

I can give you a little background on this. Don't know whether it means anything. I'd known Somervell, and I'd told you I relieved him [replaced him] once in Memphis—but he was a vindictive person and he was very particular about his own reputation and so on. But when we were up in Alaska, I had no instructions on civilians who came up there. But *Time* [magazine] sent one of their principal reporters [Arthur Northwood, Jr.] up there, and he stayed with me. He had a perfect right to do it. I showed him around a little bit, what was going on, talked to him. I didn't give him any secrets or anything else. *Time* published quite an article on that at that time [31 August 1942], and I think Somervell after a fashion was jealous of that publicity. I didn't seek it and I know the War Department called me up. They wanted to stop this business. It was supposed to be a secret mission, but I had no ability to keep people out of that territory. They came into Canadian territory, and they had a passport and they had a perfect right to be there.

All I did was talk to him and show him around a little bit. I didn't give him any state secrets of any kind. But I remember they called me up at one time from Washington about some information that had gotten out into the newspapers back home. Actually that information came from my G-4 [Lieutenant Colonel E. C. Mueller, Quartermaster Corps]. He was the one that did the talking. I sent him off on the first run up there separately to locate supplies and railroads and the facilities to get in that place. He talked with the newspaper people. He didn't come through meat all, but he told them a whole lot that maybe wasn't right. But I didn't know anything about it. I was off looking at the place up at Fort Nelson to move this regiment, went out reconnoitering the country trying to find out where to go, flying all over the place.

I had a bush pilot [Les Cook], who was a civilian. This Canadian bush pilot was just a crackerjack. He's the one that showed me the route to follow because when I first went up there I didn't have any plane. You were just helpless because there were no roads and there was no transportation. Well, the railroad [from Edmonton, Alberta] ended at Dawson Creek [British Columbia] and it only ran twice a week. It came up there on a single track line. So, I had no way of getting around. I hired this bush pilot who knew the country and had flown all over it. The first time I was up there, I had to ride on oil barrels. He was delivering



Hoge relied heavily on local airlines as commander of the Alaska Highway effort.

oil to one of these construction outfits back in the woods by airplane. So, I had to ride on top of an oil drum, gas drum, to go. On the way back he would take me by different routes, and he showed me a pass over the mountains. They were the Rocky Mountains-down to the Yukon River from back on the Liard River. That was the bad part and he showed me where to go. Well, I got over to the pass and by following creeks-I think the top elevation I remember was 3,000 feet-the place that they had mapped out for me to go was up above the timber line and was in the snow country. It would have been one hell of a job to get up there and then get down, and it wasn't as nearly direct as the other.

They just picked it [the route] off of a map someplace, an airplane map or something. They had no information. They had a few photographs that they'd taken by air, but that was all that they knew about it. So, it was through this Les Cook, who was the civilian and I hired him, that I learned more about that country. He would go anyplace. He would land

on water. I finally got a couple of planes of my own. The Air Corps let me have one of those Canadian planes. I've forgotten the name of it now. Beaver or something like that [de Haviland [Canada] Beaver; US designation was U-6A]. And I also had a number-five Beechcraft. It was an American plane and I got a pilot with that, an American pilot. He was a good boy. He was a youngster, but he had been a pilot for Eastern Airlines. He'd been commissioned. But Les Cook was the great one. Les took me everywhere. He went between the mountains. We went down at elevations. We got lost, but I got to know the country pretty well and the streams by this flying back and forth.

It was through that that I learned much about the country and whereto go. I also learned from air that I could distinguish the type soil from the type of timber on it. I could identify—for instance, cedar always grew on gravelly soil, wherever you saw cedar. When you saw spruce that was usually mucky, and it was soft soil. You had to have something besides some gravel and you couldn't haul gravel very far. We used no gravel at all practically in the beginning. And then there was another-poplar and birch always grew on sandy soil. But you could fly over that and identify the type of soil you were going to run into down below.

Q: By the trees on it?

A: By the trees that were growing, and by that way I would fly back and forth over this country and identify the type of soil and also learn the passes and soon in and out of that country. I didn't have any advice until I got to Whitehorse. There was an old chap there. He was chairman of the board of White Pass and Yukon Railroad, a Canadian. He was an Irishman named Herb Wheeler. He was a great help to me and told me more about that country—he had built the airport at Skagway and also built one at Whitehorse. So he knew something about construction, and he also had built roads. He had a stagecoach line at one time that went up to Dawson along the Yukon River, but that had gone out completely. He gave me more good information on the type of country and the way of construction than anybody I ran into. He was very helpful.

Q: That and your experience with the cofferdams really support the old rule. Some of the best engineering advice you can get is from the people who

grew up around the area where you're doing the work. So, you think it was partly through the *Time* magazine article that General—

- A: Approximately that. Anyway I had gotten through, and they had promised me they were going to take all [of the] men out and take them back to the States for the winter and then bring them back in the spring to work again. But they reneged on that, and those men—many of them—those regiments stayed on all through the winter up there. And many of them stayed in Alaska, and Somervell wanted me to build a road from Fairbanks out to Nome. He didn't know that country. He didn't know about permafrost, and that is the worst type of soil that you could run into because you can't uncover it. I heard a lot about muskeg before I went up there, and I heard a lot from the Canadians. The first permafrost I ran into was on my own road when I was building it up north of Whitehorse. I remember there was a spot where I had the road and everything was all right, and I went back over it and it was all full of water and muddy. I couldn't understand it because it had been dry before. I discovered that there was an ice lens underneath. The ice lens was quite large, but it was just isolated. I didn't run into any more of that until I got over beyond Lake Kluane heading north again, and then I got into country after I crossed the Slim River. It came off the mountains and ran off all sorts of ways. There were three different ways. Part of it emptied into the Columbia, part of it emptied into the Yukon, and part of it went on down I think into the Mississippi. But that would depend on when the snow would melt. You had big floods.

Well, anyway, I got across this place and built some bridges. I'd gotten over on the other side heading north along the Kluane Lake on the west side—going just to beat hell. I was making more mileage than I'd ever made—we got up to about 25-30 miles. When we came back, there was water in the road, and that's when I really ran into it. The only thing you could do—gravel wasn't available in many places—you had to corduroy the road to get it through. That was the start, but I first tried to uncover this. My way of going through was to cut a swath through the woods 100 feet wide for the right of way. My road was only 25 feet wide, but I had that much and I let the sun in there. Well, that was all right until we got into this ice problem. That was what you needed on muskeg and places like that, but when you got into this frozen ground, permafrost, that was the wrong thing to do. I had discovered that the hard way. The only thing to do with that was to cut the timber and then throw it back on top, make a mat of timber and the branches and everything else to protect it,

and then put dirt around that and anything else. But I had to put a blanket over the permafrost.

Q: To keep the sun from getting to it and thawing.

A: Yes. That finally worked, but it was considerable work. It slowed things up a lot.

Q: How did you handle just the roadbed itself?

A: The whole thing wherever we went over. I didn't use the bulldozer to scrape off the soil. I'd started that, and that was my way before I got into permafrost. I cleared all the timber out and the roots and everything else and took them out of there and pushed them off to the side. I let the sun in to let it dry out. That was absolutely wrong with permafrost, and you had to do exactly the reverse. You had to save all this and put it right back on and cover it over with dirt. I didn't have gravel, but that made a blanket that protected it, and it would work.

Q: That's interesting. The problem was not quite that severe in Vietnam, trying to get across the paddies where they had this very thick layer of muck and organic-type soil.

A: You always had in the bottom of the paddy, though, you had hard clay.

Q: If you went deep enough. You could either go down deep enough and fill it in with 4 or 5 feet of rock or put sand blankets under it and then raise up over that about 4 feet. That would distribute the load enough to carry it.

A: We didn't have time to—we had to make speed and all I was trying to do was to get this road behind me. My specifications, as I told you, were to supply the troops that were ahead. I always had about two regiments at the most up ahead, and I had to keep them supplied with food and fuel and all the repair parts and what not, which was a job in itself; but that made a road. I finally punched the thing through, got across the Smith River, and got down to the stream that goes by Fairbanks and joins the

Yukon on down the line beyond Fairbanks [Tanana River]. But I got through, and I got trucks through to Fairbanks before I was relieved.

Q: General Somervell, what was his position at that time?

A: He was G-4.

Q: So, he was on the Army staff. He pulled you out before the job was actually finished.

A: Well, as I say, the job isn't finished yet.

Q: There was someone to go up to take your place at that time?

A: Yes, they turned it over to another [Brigadier General James A. O'Connor]. You see, when I first went there I had charge of the entire thing. Well, I couldn't cover it all. It was impossible flying, and the weather would be so bad that for days you were stuck up there three or four days. You couldn't move on account of storms and clouds and so on. I remember one time we were up at Fort Nelson trying to get back. I had my own plane, and I asked one of these pilots if he'd fly me. I stayed up there at Fort Nelson for a couple of days, and I got so damned sick and tired of just doing nothing. I couldn't do anything. I had no communications with anybody, and I said, "By God, I'm going to get back to Fort St. John," then my headquarters, "some way or the other." So, I studied the map and I decided that if I followed—there was a river called the Prophet that came in just to the west of Fort Nelson and flows and runs into Fort Nelson River eventually and on north. But by going to that river, I figured out I could go up the—follow the Prophet, fly low enough, and when I got to the river called the Crutch, I could turn left and get out of that thing. I knew about how far to go. You couldn't see anything, and then I turned south and I could just fly over the tree tops and then get on back.

Well, we got up there. We missed the Crutch, the river, and the first thing I knew we were right in a canyon of the Rocky Mountains, and you could almost reach out and touch the mountains. This man that was with me—public roads man—he was along just advising. He didn't have any

people in there. They were going to take over later. We had to sit on barrack bags. We sat in column in these little planes with the pilot up in front. We sat behind him on barrack bags. There was a third one sitting behind me on a barrack bag. We suddenly came up to a blank wall. I don't think we were 200-300 feet from it when it suddenly loomed up. We turned quick enough, and we got back down and finally found the Crutch off the Prophet and turned and did what I was going to do. But we'd missed it the first time.

Q: Was that Cook flying you then, or one of your Air Force pilots?

A: I think it was Cook. But all the way back, if you could get your foot out of the door, you could touch the top of the trees. Those were hair-raising experiences. But it was interesting, and we worked like hell all the time. The mosquitoes were all over.

Q: In that cold weather, too?

A: The worst I ever saw. They'll run the caribou into the woods. And they'll run them into the Arctic Ocean up north of that. They get worse when you get up there. We didn't have any mosquito nets either. Nobody else knew the mosquitoes were there.

Q: You wouldn't think that.

A: They were not poisonous mosquitoes, but they were just—you had to eat with your head net on, and you would raise the head net and by the time you got food on the spoon up to your mouth it would be covered with mosquitoes. You were eating mosquitoes half the time, and then you had to pull it right down again.

Q: You know, we always think of that as being a problem in the tropics.

A: Oh, in the cold up there. But the only good part about it was they were not poisonous. They didn't carry malaria or anything else, but there were all kinds. They came right out of the snow. As the snow melted, you'd see them all over. Those were the big ones. They didn't sting so much

and weren't so bad. As the later ones got smaller, they were more vicious. I'd put my hand on my neck and [would] pull it back and it would be covered with blood from my neck.

Q: Let's go back and cover the Alaskan period.

A: First of all, my instructions for the construction of the ALCAN Highway came from the Chief of Engineers. The War Department, other than just what you would call a supervisory of the thing, had nothing directly to do. My instructions came from the Chief of Engineers. My instructions were to build a highway and pioneer road, as fast as we could, and that when winter came we would be brought to the United States until spring came when we would go back to work again. That was one of the reasons for it, the speed and so on. Also very few people knew what that country was like. Actually, I doubt that any American knew anything about it, until I discovered a great deal about the permafrost end of it. Everyone talked of muskeg and everybody talked of mountains and crossing lakes and rivers; but they had never heard of permafrost, which was the worst thing we had to contend with. Well, you didn't run into permafrost until you got up north of Whitehorse. That's when I first discovered it, and I had to work out how to cure it at that time. Prior to that we had always cleared a swath through the timber, which was about 200 feet wide; took all the trees out, cleared it down, and then built the road over that. But as soon as you got up north of Whitehorse and the sun got in on that, then you ran into this permafrost, and it melted. I don't know how deep it is. I know in places, as you get further north, it goes down 1,000 maybe 2,000 feet, 10,000 feet in depth; there's no limit to it. Now the Russians knew something about it. Later, after I got back to the States, I guess it was after the war, I was down at Fort Belvoir. I found some Russian pamphlets. They knew something about it. After that time, we did organize an Engineer force group up north to study that permafrost. The handling of it was after the war when everything was over. That was up at Fort Churchill. I visited them up there at one time.

Well, anyway, let me see now, General Somervell-now I'm not trying to deprecate him, but he was a great showman. He loved to front and show, but he didn't know anything about the country and he didn't know anything about my instructions; but he came up there all bluster, and he had two or three ideas. Number one was he wanted to go on north to Nome, across beyond the Yukon, and carry the road to Nome. General

[Simon B.] Buckner, who was commanding the [Alaska] Department, didn't want that at all; had no interest in that. Somervell had no idea what it would be going across there, because that would have been all permafrost, wherever you got up on the land.

Q: Was General Buckner chief of the department; was that Chief of Engineers?

A: No, General Buckner was the Department Commander at Anchorage. He commanded the Alaska Department. Anyway we went there. We went up to see Buckner. Buckner discouraged the whole business. He had no interest in going on beyond. Well, Anchorage would be far enough. He wanted to go as far as Fairbanks. That was enough, and then connect across from Fairbanks down to Anchorage; that was all he cared about. He just wanted that communication. Well, that was the number one thing.

The number two was that Somervell had always wanted to build up a big establishment. He wanted buildings put up and some quarters for the visiting people and make a big show of it. Well, the Bureau of Public Roads [Public Roads Administration (PRA)] was up there, following me with some contractors. They brought in building materials and built some permanent establishments, which were rather, well, they were just barracks; we didn't have that and we couldn't have used them because we were moving. We even had our kitchens on sleds and dragged them behind because we moved every day. They were always mobile. Housing or anything of that sort would have been in the way and a hindrance. Furthermore, we couldn't take the time for that. That was the number one consideration. The second one was [that] I had been there the winter before, or early that winter, that is, and had been with the Canadians and some of those contractors that were working for Canada up in that country. They were living in tents, and they lived there all winter. They put two tents, one on top of the other, and they'd bank up the side with snow. They had these oil drums that were made into stoves, and they kept perfectly warm, taking care of themselves. They lived there all winter long.

When I began to see it was getting to the end of the time, I was almost completely through with my pioneer road; it was just a question of pushing that and getting it on through before winter descended on us. However, as a partial preparation, I did get a sawmill for each of the

regiments. They were up there and put that in operation, and we did cut some timber and made planks and boards out of it so that we could build some form of shelter if we needed it. We had started that already because we knew that there'd be some maintenance crews left, and we didn't want to be entirely dependent on tents. However, we were getting near the end of the thing; but Somervell, he came up there and looked that place over. Furthermore, he did not know the congestion. We had one narrow-gauge railroad that came from Skagway up to Whitehorse; that was our only communication. All of our food, all of this stuff for the materials, and the equipment for these contractors had to come over that railroad, in addition to whatever supplies we were getting. They only made one run a day, so it was congested and was very difficult to get anything up there. so we were very limited on the supplies we could get in to build anything. But I didn't feel it was necessary; my mission was to get the thing through as fast as we could, and *only* the pioneer road. Then we could turn it over to the Bureau of Public Roads and the contractors.

Some of the enlisted men of the Army would be in there, but mainly we would get out and they would take over and finish the road. Well, that basically was the trouble. He [Somervell] was under the misconception that he wanted this big establishment built. Well, he came up there and we were living in tents. I had an old Mounted Police barracks in Whitehorse that I used as my headquarters. There were only a few old houses there, old barracks; it didn't accommodate much, but there was enough for my headquarters detachment. We did take over a building or so in the town of Whitehorse as supply buildings and so on; but otherwise everything went on the road. Well, that didn't suit Somervell; he wanted a big show, so he started out immediately to survey the whole thing. He wanted to extend it on beyond where we were, and he didn't know what my instructions were. Well, that's the reason he got sore about the whole thing. He got my relief, which was very fortunate as it turned out for me, because I would have been stuck there for maybe a year or two.

The war was on, and I got transferred to the Armored Force. When the Armored forces reorganized at one time, I had to go back to the Engineers, and I took that amphibious brigade over, two of them, during the landing in Normandy. Then, after that I went back to the Armored Force. But that was the history of that.

It was purely a misunderstanding and a misconception of our mission. Somervell didn't know what my instructions were, I don't think. He had

no idea, but he came up there. That little town of Whitehorse was crowded. They had only one hotel and people were sleeping in that—you had the same room being used by three people. They'd sleep eight hours then they'd get up and somebody else would get in the same beds and sleep. Well, I had this little house that the railroad had built for me. I put him and [Major General Eugene] Reybold up. Reybold was then Chief of Engineers. When they came up there, I put them up in my house. Well, their quarters were very skimpy and small, but it was so much better than anything that was available locally. If they'd gone over with the public roads, they could probably have gotten much better; but my people were all living in tents except for me. The railroad had built me that house because my wife was coming up. Prior to that time I had lived in a tent. That's the way the thing happened.

Then he decided that I wasn't making a big enough show and spread. It didn't suit him and he wanted to have—he always worked for the show—the big things and did not want to be connected with any smaller enterprise; it had to be the biggest, most expensive that anybody could have. He did that all through his life. His history in the Second World War was like that. Now, I'm not deprecating Somervell because in some respects he's a great person. He's one of the best, but he was just as flatsided on that side of show and making the biggest thing and spending money than anyone I've ever known. That was his worst feature. He called himself a “mean son-of-a-bitch,” and he was.

Q: Did the Chief of Engineers, General Reybold, go along with him up there?

A: Yes, Reybold was his man. Reybold had relieved me when I went to the Philippines and took over from the District Engineer in Memphis; but Reybold was just a puppet in Somervell's hands.

Q: From what I read, General Somervell was a strong individual, a very dynamic fellow.

A: Oh, tremendously strong, and very fixed and set in his own opinions. You were only right if you were on Somervell's side, only right if you could spend more money—the bigger you made your job look, that was the important thing. It wasn't what you were accomplishing. It was the

size of it and how much money you were spending. He was a perfect person to work for FDR because FDR had the same idea. Well, I just wanted to finish that up, and that goes back to the fundamentals of why I was relieved up there. I wasn't satisfying Somervell's conception of the show and bigness or making that thing a permanent establishment. Well, if I had built all the buildings he was thinking about, they wouldn't have done me any good to start with except a base camp, which would have been left several hundred miles behind in each case. But they couldn't have been lived in. We had to move.

Q: That same argument existed in Vietnam also, when the various divisions went in and built up a huge base camp; and many claimed that that was totally wrong, that we should have lived out of tents instead of building temporary wooden barracks.

A: I don't know anything about the conditions there, but you weren't moving as fast as we were, were you?

Q: No, sir, because we were tied to that base camp quite a bit.

A: But we had to move. That was the reason we were there, and as I told you, I think our average daily mileage on building that road was 14 miles a day.

Q: And you had to stay right with it.

A: And you had to go every day. We made up our columns and leapfrogged constantly. We had a task force ahead which was clearing with big bulldozers and small manpower. Then they were followed by the first company who cleared up, cleared the timber away and got something prepared. Then they put in some culverts, and they were followed by other companies. When one of them had completed its section, it would then leapfrog forward, so that when you finished a section, that company picked up and went to the head of the column and passed on ahead.

Q: Sounds like an excellent technique for a road that length.

A: Well, you couldn't do anything else, and it was different from anybody else's. Somervell knew nothing about the country, absolutely nothing. He didn't know what permafrost was. He had no conception of the difficulties of supply or anything else, but he had a preconceived notion. He wanted to make the big show, as he always did with everything. Well, I just wanted to settle that part of it because that was the reason he was dissatisfied with me; there was no question about that. But I think it was a misconception; and I was doing what the Chief of Engineers had sent me up there to do, and those were my instructions. Somervell didn't even know what they were. He had never seen those instructions from the Chief's office. Sturdevant was the Chief of [Troop] Operations at that time. General Sturdevant in the Chief's office was really my liaison man back in the Chief's office.

Q: But speaking of your mission order, were you given a rather sketchy mission order or was it a detailed type thing?

A: No, there were no details about it. They had a few. The airplane maps were about the best we had. They were on a scale of—I think a lot of them came out of the *National Geographic Magazine*—they were scaled about 50 miles to the inch or something like that. So, you know what was on them. All I knew was my points. I started at the end of the railroad [that] would take me [from Edmonton, Alberta]. That was Dawson Creek. From there I had to make a road into Fort Nelson. Well, first it was—

Q: Let's see. I've got some maps out in the car. Would you like to look at those?

A: Well, it might refresh my memory a little bit, but I know exactly—

Q: You had six regiments later on, and you had them dispersed?

A: At first we had six, but in the beginning I think I only had—I had the 36th Engineers, or was it the 38th [18th]? They were a white regiment, and I had another white regiment up there, the 440th [340th] I think it was. Those two regiments plus—as I remember it, there was a Negro regiment [93d] which came in at Skagway and came up to Carcross, near

Whitehorse. See, we had to get into the road from as many places as we could. You couldn't make speed if you were always working one behind the other. You'd be slowed up, and you were always held up by the one that was ahead of you, and you couldn't go any faster. But we split that road into about six pieces by getting regiments in. Well, that first one [35th] we took up there went in over the ice to Fort Nelson; there were no supplies there. They took their supplies with them and went in over the ice, and that was the first regiment that went in. They were isolated until contact was made with them by one coming up from the south [341st]. What in the hell was that fort in there? I started out to try to find that fort, and I don't see it now.

Q: Let's see, I've got it on this map. I had Fort Nelson marked on here.

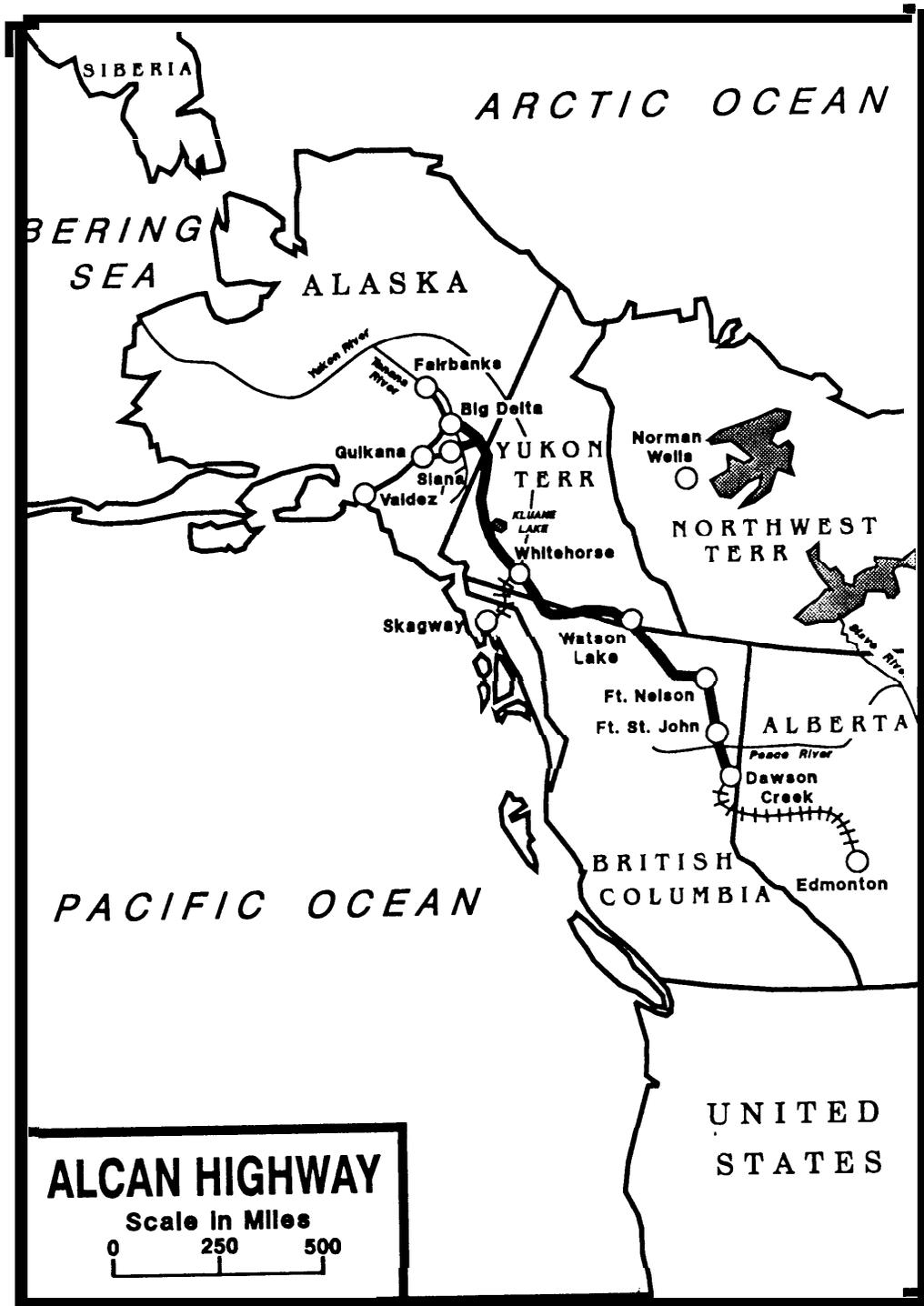
A: No, that's south of Fort Nelson. There's a fort in there, an old Hudson Bay post. Fort St. John was the one. See, I put a regiment, rather two regiments in Fort St. John, in addition to taking one in over the ice. A black regiment [95th Engineer Regiment (General Service)] and a white one [34 1st] went in there. They had to connect up with the one that was at Fort Nelson, which never turned around to come south; it was always working west and north. They were using the supplies that they carried with them. They lived on C-rations for about three months; that was all they had. They only had three things: vegetable hash, meat hash, and chili con carne. Sometimes they had chili con carne for breakfast and sometimes they had it for dinner, but they always had three choices.

Q: Let's see. Was that the 18th Regiment?

A: No, that was the 38th; wasn't it the 38th or 36th?

Q: You had the 35th ER [Engineer Regiment], the 340th, 341st, 18th, 97th, 93d, and 95th.

A: 36th [35th] was the one that went first. That was the one that went in over the ice to Fort Nelson. They were later connected up by a white regiment and a Negro one which came up from Fort St. John.



ALCAN Highway

Q: I see. The 97th Regiment started down at Valdez.

A: Yes, that was following the 440th [340th], I guess it was. Was that 400th Rusty Lyons's regiment? Your present Chief of Engineers [Lieutenant General William C. Gribble, Jr., USMA 1941] was a lieutenant. He was the only other regular officer, I think, with that outfit, except for Captain [Colonel] Lyons.

Q: General Gribble, sir.

A: Yes.

Q: Well, I'll be darned.

A: He was just a youngster in those days. He was a fine youngster, too. He has done very well since then. But Rusty Lyons was a great regimental commander.

Q: It was the 341st Regiment that went from Fort St. John to Fort Nelson.

A: From Fort St. John—

Q: —to Fort Nelson.

A: That was one of the backup regiments.

Q: They completed it.

A: Yes, they backed up and made the connection. But the one I was thinking of was the other one that came in down at, you get so mixed up in these old names. Well, anyway, we came in up here. I don't see Juneau. I see Juneau all right. Oh, Skagway is there all right. See, we brought the two of them. I've forgotten that regiment's number. It was the one that Rusty Lyons had [340th]. It was a white regiment, backed up by this Negro regiment [93d], which I've forgotten which one that was. It was the 90-something.

Q: 97th maybe?

A: No, the 97th came in up at Valdez; I'm almost positive. They [93d] backed up the one [340th] that came in there [Skagway].

Q: I have one more question on the ALCAN Highway. I went back through my questions, and about July 1942, Secretary [Harold] Ickes [Secretary of the Interior] prior to that time had told you that the road must be through in one year.

A: Ickes said it would be. Ickes didn't have anything to do with it. He had no conception of what it was. He had announced that it would be in one year. He knew nothing about it. He didn't know whether it was possible, and furthermore the Secretary of the Interior had nothing to do with it, just a busybody; and his mouth was running all the time, shooting off, telling stuff he had no business talking about. He didn't know anything about it.

Q: He was the same Secretary who made the memorandum of understanding with the Corps of Engineers on the Corps work versus Bureau of Reclamation work.

A: He may have done that. He had something to do with the Bureau of Reclamation, but he had nothing to do with the Army. He was Secretary of the Interior. Now that was pure shooting off his mouth about something he had nothing to do with.

Q: That might have been his—

A: He knew nothing about it. He didn't know whether it was possible. He had never seen the country. He didn't know what it was like. And I don't think he ever did see the country. He's never been up there, as far as I know.

Q: I couldn't find anything in research that he had gone there.

A: He was irresponsible and had nothing to do with it.

Q: Well, was the Public Roads Administration under the Interior at that time?

A: I think they were. They did send us some help, but that was afterwards; they were only back-ups. We only turned over to them. Their idea was that when we finished the pioneer road, they would back us up and improve it and finish it up. And they did do that, and they were good people.

Q: In one of the references it said that in July [1942], when it was obvious it was going to be very tough to get the pioneer road through before the cold weather got too bad, there were about 6,000 civilians belonging to the Public Roads Administration [PRA] who moved in with the Engineer troops and worked on the pioneer road.

A: They were not with us. They were always behind us, always.

Q: So they never did go up and work on the pioneer road.

A: Never worked on the pioneer road. The only time I did use some public works people was after we came through the Tanana River at Tanacross; and then we had to start south [to] hook up with the 18th Engineers, which was coming north, and we were concentrating in military. And then we had to make the tie-in. We did have a tie-in by the diverse route, by the old Richardson Highway, back to Fairbanks. There was a road, you see, the old Richardson Highway, and we had crossed the Richardson Highway back behind it, so we did have a connection with Fairbanks. It wasn't a good one, but it was a connection. But when we got to Tanacross and we started south with the military people, then I got in contractors that were with the public works to start north from Tanacross and to go up the Tanana River to Fairbanks and make connection up at Big Delta. That's the only time I ever knew of their being on what was the pioneer road. I don't know what was going on then in the Southern Sector because we had had to separate [in May 1942]. As I told you, when I first went up there I was in charge of the whole business from Dawson Creek all the way to Fairbanks. And the communications between the parts of it were at times cut off for as much as two weeks at

a time; they were just isolated. There I had these airplanes. I had two airplanes at my disposal, and I had two in the Southern Sector. I had a Beaver and an A-5, or something like that. I had a civilian pilot and a military pilot for both of them. But we couldn't do it on account of the fog, and there were times you couldn't fly at all.

Q: Was there another brigadier general in the Southern Sector later on, General Sturdevant?

A: No, Sturdevant was Chief of [Troop] Operations in the Engineer Office. O'Connor [James A. O'Connor, USMA 1907] came in [May 1942] and took command of the Southern Sector. He later was made a brigadier general, but at that time, he was a colonel. He had been an instructor of mine—he was an Engineer-at Leavenworth, and he came up there to command the Southern Sector. And later he was the one who relieved me after, when I was relieved. Well, he didn't immediately relieve me, but he eventually took over the road.

Q: You went down to the Armored Center before you went with the 9th Armored Division?

A: No, I was assigned to the Armored Center for briefing and some training. I was there—I was attached to the 8th Armored at that time. But it was just a training division, and I stayed there—as I remember I went out to Leavenworth, from there I got to [Fort] Riley on Armistice Day, I think, 1942, the 11th of November.

Q: That was down at Fort Knox?

A: Well, I was at Fort Knox with the Armored Center, and I stayed there after I came back from Alaska. I was there about a month, and then I stayed there and was briefed. I went through a training cycle for armored operations. I didn't learn a hell of a lot there. Then I was assigned to the 9th Armored at Fort Riley, and I went out there. As I remember, I got there—it sure seemed to me around Armistice Day, but the 9th Armored then was just being organized. It was all recruit training. We were just getting our troops together.

Q: That was organized at Fort Riley?

A: Yes, it was organized from the Cavalry division. We had the 14th Cavalry and the 2d Cavalry. They were the basis, and then we had the 3d Field Artillery, which was with the old Cavalry division. It was the 2d Cavalry Division, which had been broken up. The units were kept there at Riley and formed into the 9th Armored. Everybody was new. The nice thing about Armored was everybody was working together. Nobody knew anything about it. It was just Indian country, and you were wide open to try and do anything. It was all good. The people who didn't do as well in armor were those who had had training in armor before. Because all they knew was—they had been with the armor—was how to fix tanks and how to run tanks. The mechanics, they knew all of that. They'd been schooled. They knew all the theory of engines; but as far as the operation of units and tank warfare, they didn't know anything and they didn't care particularly about it. That was my feeling about the old-timers, the tankers, the ones that had been with the tanks since they'd started. I knew several of them; as far as I know, they were not particularly good tank commanders.

Q: So, you were developing your own tank doctrine?

A: Everything was being developed. We were learning together.

Q: Were most of the officers there Cavalry officers or were the branches pretty well split out?

A: They were split out. There was an Engineer battalion which had come from the old 2d Cavalry Division, but the rest of them were from all branches—Infantry, Artillery, and Cavalry. Cavalry should have grabbed it. They missed out on a lot of it. Cavalry was a natural to become armored troops by their tactics and their training, but they didn't take it. They wanted to stay with horses. I know a lot of them felt that way.

Q: You were assigned initially to Fort Knox to begin your [armored] training. You implied that a number of officers, not Cavalry officers and not former Armored officers, were brought in to be trained in armor operations?

- A: There were Engineers. I know [Lunsford E.] Oliver commanded the 5th Armored later, at one time was Engineer for the Armored Force, and designed the pontoon bridges [treadway bridge] that were later used when he got over into the command. Bob Crawford [Robert W. Crawford, USMA 1914] was down there. He didn't stay. He went back to the staff as G-4 or G-3, I think, of War Department staff [G-4, Supreme Headquarters Allied Expeditionary Forces, SHAEF, 1944-45]. He was down there at the same time. But that was like—that was just Indian warfare. Everything was new and anything you did was worthwhile and you could get away with it. You could try it because nobody had all this knowledge. There were old Armored people—I told you this before—there were old Armored people who had been in the Armored Force long before. But they had been technicians more than anything else. They knew all about how to repair tanks and engines and efficiency, but they didn't know anything about the tactics. We were absolutely free to develop our own doctrine.
- Q: Did you use any other sources for your tactics development, such as some of the German generals' writings?
- A: No, I didn't know what that was. I hadn't heard about it until after the war and came in contact with it.
- Q: So, you developed it from scratch?
- A: Well, mostly everything was from scratch in those days.
- Q: Was the training you received there primarily officer training, senior officer training?
- A: It was just observing. There was a training division. It was the 8th [Armored Division], which was not operative. It was a training division entirely at that time. It later became an operating division. We were assigned to that. I had a cavalryman in command and we just went around and watched the training more than anything else. Just reconnaissance around Fort Knox and fiddled around and didn't do much. I was only there about a month when I was assigned to the 9th Armored [Division] which was then being formed and went out to Riley.

Q: Did you seek this assignment, knowing that you would then participate in World War II as an Armored officer rather than an Engineer?

A: No, I didn't.

Q: So, actually your initial contact with armor was when you were moved out of Alaska. Well, General Somervell actually pulled you out then. Was that tantamount to a relief of the job?

A: Yes, it was. He asked General Devers [Jacob L. Devers, USMA 1909], who was then head of the Armored Force, if he'd take me. He said yes. Devers and I became great friends. He was an instructor when I was a cadet, but I didn't know him then particularly. But later he became a great friend and he was a great man. He's still alive [died 15 October 1979]. He really was the father of the Armored Force. They talk about Chaffee [Adna R. Chaffee, Jr., USMA 1906] and the rest of them, but they were more theorists. Chaffee was a cavalryman heart and soul. He came out and gave us a lecture on armor, but he talked more about horses than he did about armor.

Fort Riley

Q: So, again, this was another one of those chance happenings that turned out for the best. So, when you left Alaska and went down to Knox, it was with the distinct intent to go into armor.

A: Yes, I think so.

Q: It seemed to turn out quite well.

A: Eventually it did.

Q: Then when you went to Fort Riley, you went there and joined the 9th Division and it was just being formed at that time?

A: It was being formed out of the 2d and 14th Cavalries plus this 3d Artillery. We had the 9th Engineers. They were all part of the old 2d