# **White Paper** Japanese Balloons of World War Two

### By Captain Charles A. East

#11 E.S. & W. Coy R.C.E. Engineer, Service & Works Company Royal Canadian Engineers

## White Paper

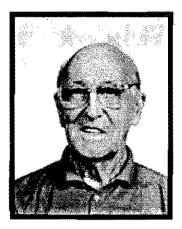
## Japanese Balloons of World War Two

By Captain Charles A. East

Formerly

**Bomb Disposal Officer** 

Canadian Army R.C.E., Pacific Command



College of New Caledonia Press 1993 © College of New Caledonia, 1993

#### ISBN 0-921087-07-1

Additional copies available from:

College of New Caledonia Press 3330 - 22nd Ave. Prince George, B.C. V2N 1P8 Phone: (604) 562-2131 Fax: (604) 561-5845

Cover and Layout by Stuart A. Berry Data entry by Jean Wilson Index by Katherine Plett

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Pictured on cover: Japanese balloon suspended from treetop, east of Fort Babine, B.C.

About the Author: Charles A. East was stationed with the Royal Canadian Engineers at Prince George during the second world war. After 1945, "Captain East," his wife Margaret, daughter Mary Lou and son Ron, returned to Prince George where "Charlie" was City Engineer for the next ten years. He is a past president of the Prince George Rotary Club which, at that time, was intrumental in the establishment of the first "Senior Citizens" home. Mr. East retired to Vernon, B.C.

### Introduction

The College of New Caledonia is pleased to publish this record of Captain East's experiences during the latter stages of World War II. As a Bomb Disposal Officer, East had the unusual assignment of searching out and disarming Japanese "balloon bombs" which appeared in the skies over north-central British Columbia in early 1945.

While there were close to 300 confirmed sightings of Japanese balloons over North America, relatively few were recovered — adding significance to those that were found in the local area. East describes the recovery of balloons near Takla Landing, Fort Babine, Cedarvale, the Rauch Valley and Chilko Lake, as well as evidence found in other locations (a bomb, paper fragments) and a variety of other investigations.

In addition to providing us with first-hand information about the balloons — their size, construction, armament and apparent purpose — East also gives us a wonderful account of the trips he made and the men who served with him. Readers will enjoy the story and come away with a better appreciation for this period in our history.

Other Sources of Information on This Topic

Adachi, Ken. <u>The enemy that never was</u>. Toronto: McClelland and Stewart, 1976. The author briefly mentions the "bomb-carrying balloons" on page 208 in the context of other war efforts.

Mikesh, Robert C. Japan's World War II balloon bomb attacks on North America. Washington, D.C.: Smithsonian Institution Press, 1973. 85 p.

Morris, Henry. Japanese paper balloon bombs: the first ICBM. North Hills, Pa.: Bird & Bull Press, 1982. [27] p.

Katherine Plett CNC Library Director Blue Paper was the code term for Japanese halloons that were sighted in flight. They were 35 feet in diameter, with a total height of 75 feet. The term Paper was used because they were made of rice paper. They were coded Blue while in flight and White when they were known to be grounded. The term White was applied because of the vast white terrain of North America in early 1945, when they were first discovered as an ingenious type of air invasion of our continent.

I recently found a long envelope in the bottom of an old trunk, containing an army file marked "Top Secret." While it was on the secret list, I had kept it apart from engineering and orderly room documents, but when operations came to an end, I kept it as a souvenir.

The material and reports were interesting to me because I was there. They covered seven balloon recoveries, a number of air searches and two long bush trips, only to find American weather balloons, one single bomb recovery and three extensive ground searches in mountain terrain hardly fit for a goat.

The reports were in typical army terms covering a lot of material of little interest to the average reader, so I am using the file only to refresh my memory. A number of pictures and negatives that it contained make good illustrations of what we had to contend with and I have had them blown up to provide better detail. They indicate the type of terrain and conditions under which these halloons were usually found, and also the type of bombs and their rather crude but highly intricate ballast control and homb dropping gear. They also show the location of potentially dangerous explosive devices.

I read an article about these balloons some time ago. It was obviously written by someone who was not acquainted with the actual recovery work. The article stated that the balloons were a futile effort and never did one cent worth of damage. I do not agree, even though we never had occasion to prove that a number of fires of undetermined origin were the result of balloon bombs. One forestry report cited 16 spot fires in a string over several miles, far removed from any habitation. Heavy rains over the following few days evidently extinguished them. These raised the possibility of the use of incendiary leaflets hut such was never confirmed. One odd type of bomb was discovered, a hasket type which carried about two dozen "china eggs." These, dropped from high altitute, could deliver a fatal impact if anyone was hit. They were helieved to be intended to demoralize, rather than be effectively dangerous. We were informed of one incident in Oregon, which was kept secret for security reasons, in which a member of a Sundayschool picnic party found a bomb. The group was examining it when it exploded. We were told that five people had been killed and others injured. It was directly following this incident that secrecy was relaxed and the balloon raids were made public in order to avoid a recurrence of such tragic possibilities.

Although the effort may have been futile, the idea was, to say the least, ingenious. The balloons were released from Japan, apparently in great numbers. There were close to 300 confirmed sightings over North America, although relatively few actual recoveries were completed. One was recoved as far east as Michigan.

The balloon envelopes were made of five ply laminations of very fine rice paper, pieced together in more than a hundred tapered segments, specially lapped and glued, giving the impression in flight that they were striped. Shroud lines, amounting to about 1500 feet of rope, were attached to a skirt band just below center and at the bottom there was a large pressure relief valve. The shroud lines carried a chandelier type of rack from which 32 sandbags of ballast and four incendiary bombs were suspended, while under the center an anti-personnel type of bomb was attached.

The complicated control mechanism is too intricate to attempt to describe in detail. Basically, it was a series of electrically exploded ballast release charges, combined with a series of slow burning safety fuses, ignited by the explosives and in turn re-setting the next ballast dropping circuit after the fuse burn had allowed the balloon to again rise to its intended altitute. Three aneriods and a wet storage battery activated the electrical detonation charges. The initial arming was performed by ignition of a long coil of safety fuse at the launching, which burned for two hours, in which time the balloon bad reached its maximum altitude of about 40,000 feet. A loss in height of about 6,000 feet caused an aneriod contact to close firing an explosive set of blow-out plugs, dropping a bag of ballast. The re-arming and ballast dropping process was intended to continue until all ballast was gone and then the bombs were dropped. At the end, a low level aneroid was to activate the demolition circuit, causing self destruction. The total weight carried at the launch, including the mechanism, was about 240 pounds.

There were a total of 74 potentially dangerous explosive charges on each balloon at the time of launching, plus the bombs and demolition charge. It was presumed that many functioned as was intended and were never seen, because of their altitude. A few large pieces of balloon envelope were found which verified this. All of the ones we found had become grounded because of some malfunction where the dropping sequence had been interrupted for some unexplained reason. In this state they were particularly dangerous, expecially where the battery remained active. Three of those we found were suspended high in trees and had to be got down before they could be rendered safe to handle.

With all of the explosive charges involved, we could never understand why we never encountered booby traps, which could have been so easily devised by even an amateur in electronics and explosives.

Economically, they cost little to produce, from by-products from wartime factories. Transportation cost nothing except for the hydrogen gas for inflation. The jet stream of the upper strata of the northwest trade winds did the rest. Had one out of twenty struck a populated area, they would have been classified as a success, but in our vast and sparsely populated land mass, the gamble was enormous. During the first three months of their operation, there was no forest fire hazard. A late spring and relatively wet summer in our area probably checked the start of many fires that may have been set. Wind directions and velocities at the high altitude obviously had their effect on their flight of more than 5,000 miles, spreading them all the way from Hawaii to the Arctic. Wind velocities during February, March and April that year were far more favourable to them than during the summer.

My first operation involving a balloon came in February 1945. I had received "Top Secret" information concerning the only known incidents up to that time. The first was a single bomb found in a field in Saskatchewan. Licutenant Commander Borradaile, R.C.N.V.R. (Royal Canadian Navy Volunteer Reserve), who was O.C. of the Bomb Disposal Center in Ottawa, bad gone to the scene and defused it for recovery. The other was a complete balloon found by a trapper near Fort Smith in the Northwest Territories. Its demolition charge had evidently fired when it landed, leaving the remains in an extensive blast area. Enough had been recovered to provide details of its size and control apparatus. The finding of a plastic box that had contained some form of liquid raised the prospect of possible germ warfare, which had been reported by our intelligence as being in enemy plans at that time. This was to be of prime concern in the collecting of possible contaminated materials which could confirm any such evidence. The Center in Ottawa had shipped me a huge insulated box of equipment and containers in which we were to ship any samples collected for laboratory examinations. I was also informed that an officer was to arrive soon to give me first hand instructions that, for security reasons, could not be put in writing.

I had attended a four-week crash course at the Bomb Disposal school in Ottawa about a year earlier. The school had been established to train officer personnel in the defusing, demolition and disposal of all types of enemy bombs known at that time, including ones used by the Germans on British cities and by the Japanese in the Pacific operations.

The German air raids consisted of massive saturation bombing with incendiaries, combined with about 50% each of impact explosive types and deep penetration time bomhs. The latter varied in size from about 50 K.G. armour piercing types up to 500 K.G. hlock busters. These were intended to be dropped from high altitude on factory areas, where they would pierce any building and become buried to a depth of up to 30 feet below its floor. Timing for their detonation could be pre-set in a range anywhere from one to eight days. One dropped on a factory meant complete closure of the plant until either the bomb exploded or it had been defused and removed by bomb disposal units. Such bombs had to be dug down to by sapper crews working around the clock. When it was located, the bomb disposal officer had to go down and de-activate the timing device and remove the fuses. The bomb could then be removed by a crane and taken away to a disposal area.

We had all expected to be shipped overseas immediately after the course, as the need for trained personnel at that time was evidently urgent. To our surprise, we were returned to our own units and I continued in my role as engineer officer at the Prince George Brigade camp.

This new form of Japanese attack was unknown to us and had not been expected, although obviously our intelligence knew something was being planned. I think we all considered it to be a ridiculous type of warfare. The prospect of spreading bacteria along with bombs, together with the possible long range effects, made the situation much more serous. It was for this reason that the operations were kept under a complete blanket of secrecy. The risk of incendiary and anti-personnel bombs were of only secondary consideration. Lieutenant Jim Nichols arrived in mid February and we had one day together in which we went over all of the known details and codes of communication concerning operations. The very next day, I received a coded telegram from Headquarters, to the effect that a grounded balloon had been found some distance north of Takla Landing. I was to proceed by air at once to make the recovery. That evening, the weather socked in with a snow storm and our prospect looked bleak; however, we made full preparations for an early start the next morning.

There was no way we could get that big box for sample collections into the aircraft, so we had to make up packs of only essentials. We took off in a ski-equipped Norseman aircraft with Squadron Leader Gus Hobbs at the controls, after a stinging cold wind had piled us up in a snow-bank as the pilot attempted to turn at the end of the runway. We were finally pulled clear and eventually took off. The air that morning was full of a sequence of small sleet storms, with winds that tossed the aircraft about like a rowboat in a rip tide. Jim Nichols and I shared the freight compartment where we could walk about, pushing up the ceiling one moment and being crushed to our knees the next, as the turbulence of the storms tossed us about. There was a constant reminder of breakfast that you wished you had never had. Just as quickly, we passed from the storms into clear skies and beautiful sunshine.

We flew up over Stuart Lake and on over Trembleur, then up the Middle River toward Takla. The pilot flew low because of the snowstorms that shrouded the mountain tops. Below us, we saw two men with a dog team and they waved as we passed above them. As we followed a bend in the river around a mountain, we ran into a solid white wall of a snowstorm. Instantly we were in a complete white-out. Gus Hobbs shouted to us to hang on as he went into a tight turn that drove me to my knees. Just off the wing tip, a blurr of treetops whisked by. Gus let out a low whistle and his copilot shook his head as we levelled out over the river and back into sunshine. "Who in hell put those trees up here?" Gus quipped. "This is no place for us."

He flew back to Trembleur Lake and circled over it several times, climbing all the time. My stomach started to rebel again when Gus called back, "I'm going to try going over the ridge to Babine and see if we can fly north around the storm. How are you guys feeling back there?" "Lousy" was the only word I could get out. "That's the trouble with you army types," Gus shot back. "No stomach for a bit of a storm." As he swung over the ridge, the whole country to the north was socked in solid, so he wheeled around and headed back. "Okay, fellows," he said. "Let's go back to Vanderhoof for lunch. It may clear up by then." Right then going back anywhere sounded wonderful, but as we travelled along near the mountains of Stuart Lake, the turbullence tossed us about again. The butterflies in my insides wanted out in a hurry. I headed for the door and got it open enough to put my head out. I lay on the floor and let go. I never knew a breakfast could go so far. I felt better afterwards. From the Vanderhoof airstrip we took an R.C.A.F. jeep into town. To my own surprise, I ate a good lunch, as did the others, and when we returned to the aircraft, the weather was beautiful and we had a good trip all the way to Takla Landing.

A long row of spruce trees had been spaced out on the lake for landing markers. As we dropped toward the gleaming white surface of the lake, there was no indication of height until we neared the line of trees. They were just as effective as runway markings.

We were met by an N.C.O. and two men from the U.S. weather station that was located there, and our aircraft took off for home. The sergeant told us they had seen the balloon drifting low over the hills, not knowing what it was. An Indian coming from Bear Lake up north had found it hanging in trees about twelve miles north of the Landing. He had gone somewhere and would not be back until the next day. Lieutenant Nichols and I still had a long way to go and we were told we could get a dog team at the Indian village.

The Indian people were very co-operative and offered us food and shelter for the night, but I was anxious to get as far along the trail as possible while we had daylight. Olaf Bjorinsen showed up and said he had a dog team and could be ready to go in ten minutes. I had to admire a big beautiful dog standing by the doorway of an Indian house. His owner said be was his best sleigh dog and was a full-blooded timber wolf raised from a pup. I had never seen one close up before and he was a magnificent animal.

We loaded all our gear onto Olaf's toboggan and he laid out harness for three dogs, and then let them out of their pen. They bounded to their positions and stood whining with anticipation as he harnessed them into line. He turned to me. "Okay, Captain. I'll go ahead. If you get tired, you can take turns riding on the back of the

toboggan." We had a good six miles to go before dark and it was already 3:30 in the afternoon. The dogs barked excitedly as he yelled "Mush" and struck out ahead of the team on the hard packed trail at a dead run. The way he travelled, I could have sworn his legs were hinged at his shoulders. Jim and I were left behind before he had gone a hundred feet and had to run hard to catch up.

Olaf ran ahead of the dogs in a long easy trot that they could just keep up to. He never slacked his pace for four miles — checked later by map. Jim and I took turns at riding on the back of the tohoggan, because about 200 yards of that pace was about all either of us could stand. At last the snow condition changed as we came into an area of one of the recent storms. Nearly a foot of snow had drifted onto the trail and we all had to put on snowshoes.

The sun had set and it would soon be dark, so I asked Olaf to take us into a belt of heavy spruce timber where it was evident from the growth of brush on the shoreline that there was a creek inlet to the lake. Jim wanted to make camp in a burned off area, but I told him we would be much warmer in the timber and have access to fresh water and a fuel supply and Olaf agreed with me. It was still a good mile further on, so we kept moving. There was just enough daylight left for us to locate a large spruce tree with no snow under it and to collect firewood for the night. Olaf agreed to come back for us on the morning after tomorrow, then he stepped onto the back of his toboggan, shouted to the dogs as they yelped and barked, and headed for home. They were soon only a shadow in the darkness.

The trees had no snow on them, so we were able to build our fire close, using a big upturned stump as a backstop. With a windbreak of spruce boughs behind us and a good fire in front, we were quite comfortable. We had supper from standard army K rations. It was no gourmet dish, but filling. After stirring up the frozen spruce needles, we spread out our big arctic eiderdown sleeping bags and climbed in, taking everything we wore with us including snowshoe rubbers. For a while we were too warm, but as the fire died down, we stopped talking and were nearly asleep.

A waning moon now sent shafts of light through the big spruce trees of the shoreline, as it illuminated shimmering frost crystals that fell with the rapidly falling temperature of the clear February night. Jim spoke, startled "Hey, d'you hear that? There's a dog barking. Someone must be camped near us." I was about to answer

when it barked again, trailing off into a long, low howl that made my spine creep because it was so close. Then, from far across the lake, came another howl followed by still another of higher pitch that trailed off into a low moan. Jim's head pushed up out of his sleeping bag. "My God, wolves." I moved my own automatic to within easy reach. "Sounds as though you're right Jim, but you can go to sleep, they'll never come near us. But if you're going to start shooting, just don't turn my way." The howling was repeated several times and it was answered by another from far away that echoed around the hills. Then all was quiet, except for the occasional crack like a rifle shot, as a tree snapped from the closing cold. Finally, we went to sleep.

The early morning light was cold and clear and a greyish mist fringed the shoreline. I broke open the frost-lined hole in front of my face and pushed my head out. A glow of embers and smoke still showed in our fireplace. I pulled on my shoes and fed the fire some pre-cut kindling wood and went back to bed until the glow of fire could be felt.

With breakfast over, we packed what gear we thought we would need on our packs and started out through the timber to find the lone snowshoe trail, which was already pretty well obliterated by snow that had blown from the trees. We soon found it and were able to follow it without trouble. It was cold, and it stung your nose and face and we soon found that our gloves were anything but adequate, but as we started climbing we soon warmed up.

The trail emerged from the spruce timber into an old burn, where half grown jackpine trees speared up through a tangled maze of fallen timber, with a few tall dead snags still standing. Through part of this, the trail was on top of logs often less than a foot tbick and at times ten feet in the air. The Indian must have had perfect balance. His tracks were evenly spaced and he never broke the snow from the logs. On one such log, I heard a crash behind me and a yell. I looked back to see Jim fighting his way out of the snow helow, with his snowshoes waving about above him. I had loosened the snow ahead of him as he followed and he didn't have a chance. He scrambled hack onto the log and gamely kept going.

The trail led through a series of long swamps and beaver dams and finally, there it was, shimmering in the sunlight. The deflated balloon hung from the top of a dead tree, some twenty feet above the tops of the second growth jackpine trees. No one could have missed seeing that greyish-white spire formed by the paper mass as it trailed

#### North of Takla Landing Bear Lake Winter Trail



The author near the Takla balloon site February 1945 from the top of that snag, contrasted against the background of dark green from the hill behind.

There had been suspicions that a light weight soldier could be transported in an insulated gondola under these balloons and we were warned to be on the alert. A hidden machine gunner could make things pretty hot, but the idea of sending such a man with the chance of his landing in such isolated places made no sense. He would be almost certain to die of exposure. However, we stopped behind cover and looked over all of the area possible with binoculars. There was no sign of any tracks or disturbance in the snow anywhere near the site, so we moved in to where we could examine the balloon. The Indian's track showed that he had not gone near to investigate, so we moved in to about 50 feet from it.

From our observations, it was soon evident that an explosion had demolished the electrical control system and parts of the chandelier that carried the ballast and bombs. The four inches of fresh snow that had fallen here since it had grounded had covered all evidence of any possible contamination. Our instructions were that we were to wear coveralls, anti-gas boots, rubber gloves and surgical masks during recovery operations. I got dressed up in my outfit and attempted to wallow through the waist-deep snow. Downed trees and buried brush ripped off one of my boots before I got twenty feet. I said, "To hell with this! Bring me my snowshoes, Jim. This is my responsibility, so you wait until I look things over."

As I moved in close, I carefully brushed away the new snow and there was evidence of a yellow staining, evidently from the explosion. We knew from our bomb disposal training that the Japanese used picric acid extensively in their explosives. This was obviously the cause of the staining. The chandelier or undercarriage was hung in a tree about 15 feet above the snow surface among a tangle of ropes. The mass of the balloon was draped over the top of sixteen trees. The upper part hung from the dead snag about 80 feet from the ground. Shattered pieces of bakelite, with numerous wires attached, hung from the chandelier and a smashed plastic box still remained in the frame above.

I moved around the chandelier, now above me, being careful not to step on any pieces of debris scattered by the explosion. The snow was thin under the cover provided by the trees and the balloon so that a number of pieces were visible. The demolition charge had completely wrecked the control box and a maze of tangled, insulated wires hung with pieces still attached to terminals. A dozen explosive blowout plugs still remained in the frame, with one metal ring that had carried a bomb suspended below. Evidently something had failed and the bomb had been knocked from its hanger along with some bags of ballast as it dashed against treetops along its course. The weight thus lost, had allowed the balloon to rise again and travel a few more miles before finally crashing at its final location.

The blow-out plugs, still intact, were connected to the tangled maze of wiring and terminals. We learned later that each held a charge about equal to a shotgun load and could kill anyone if he got in the way when it fired. They functioned in the manner of electric blasting detonators. We had to avoid a possible electrical grounding where a static charge could cause detonation.

Among all the mixture of tangled wires, safety fuse and shattered wreckage, I could not detect anything suggesting a booby trap, so I called Jim.

After collecting samples and cleaning up everything we could find in the snow, we cautiously attempted to get the chandelier down, but finally had to chop the tree down that it was hung up in. We then took it out into the open where we could make a more thorough examination and take pictures. Taking the balloon down proved to be a different matter. The 1500 feet of shroud lines and the skirting was tangled through the treetops. We chopped four off their stumps, but they simply dropped and remained standing. Our attempts to climb the trees were just as ineffective, neither of us being able to get through the mass of small branches near the swaying tops. It was just then that our belated Indian guide arrived.

Contrary to orders, but in sheer desperation, I asked him if he could climb these trees. "Sure, I can climb any tree, but tell me first, what in hell is this thing anyway?" I tried to convince him that it was a special American weather balloon that had gone astray. He shrugged his shoulders and I could see that he didn't buy it. I later told him it was Japanese, but that all information had to be kept secret, in case his people should encounter another in the Bear Lake region, where he was going. William George was only 17, but he had a brother in the army. He had just graduated from the Indian School at Fraser Lake and he was well posted on wartime activities. I felt that it was safer for him to know the truth for his people, rather than have someone killed out of curiosity and incorrect information. William told us, as we stopped for a break for a few minutes, that his people were a separate band. It was a band tradition that they were brother to the wolf. If a wolf killed meat and his Indian brother was hungry, the wolf would let him take some. If the Indian killed meat, he would leave some for his brother the wolf. If ever a man killed a wolf, he could expect to be killed by one.

As a tree climber, this man was just like a cat and inside of an hour he had all the ropes freed and we were able to pull it down to the ground. We were particularly interested in the pressure relief valve, which had large numbers painted on it. Just above the valve was a tag with Japanese printing on it. I was about to pull it off when Jim shouted, "Don't, Chuck, that could be a booby trap." I was quick to reply. "You could be right, Jim, you don't think I would be that stupid, do you?" Jim grinned as I continued. "It would be easy, wouldn't it, to have an explosive charge inside and a pull type detonator on the outside." I checked inside through a tear in the balloon. "Wrong this time. There isn't one. Thanks for the reminder. That could have been my last mistake."

The George family, father, mother and two girls, all loaded with big backpacks, waited for William as I paid him for his help. Then they all headed north on the forty mile trek back to Bear Lake, where they would soon start the beaver trapping season.

We stacked the balloon and its equipment together and headed back to our base camp. There was a well-broken trail now down under the fallen logs instead of over them. We spent another night, cold but fairly comfortable. We had again turned in to the warmth of our sleeping bags as the fire died down and once again the moon sent shafts of light through the treetops above us. From across the lake, there was barking and again that long mournful howl. This time it was answered from the hillside to the east of us with a deep, low howl that increased in pitch and then trailed off to what sounded like a groan. "Hey, Jim," I called. "I think your brother out there is hungry." Jim pushed his head from his sleeping bag. "Remind me to leave a couple of those army biscuits for bim tomorrow." He pulled his head back in like a turtle. I laughed. "If he ever finds them, he'll never forgive you, Jim. Good night."

We had to wait for Olaf and were late with breakfast. He arrived before we were finished. From his pack sack he pulled out a can of peaches. "I figured it was about time you fellows had some dessert." He set it and a can opener down in front of us. Were those peaches ever good! After we had talked a bit, Olaf looked over at the sleeping bags we were just rolling up, and remarked, "Those must be real good sleeping bags you have there. Did you know it was twenty below last night? It was fifteen the night before."

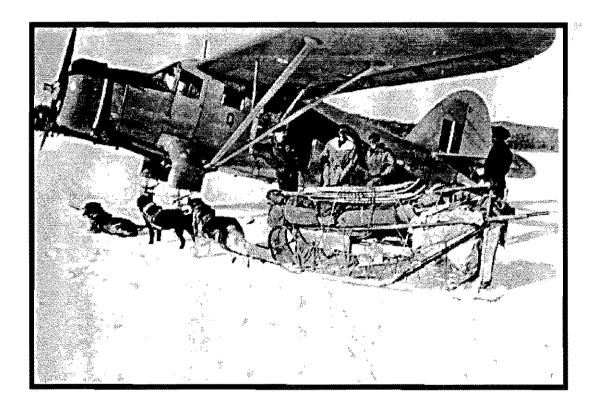
As we hit the trail back to the balloon, Olaf's weather report didn't make things feel any warmer; however, when we got out into the sunshine, it warmed things up. Back at the site, we found it was not possible to load that bulky balloon onto the toboggan, so we took what rope and all the parts we could salvage and built a fire under the frozen balloon and burned what we could. We used part of it to wrap the chandelier and its shattered parts. Jim and I broke trail around the burned timber area to provide a better trail for the dogs back to our campsite. Here we loaded the rest of our gear and headed out onto the lake. We had gone about a mile when we heard our aircraft coming. They spotted us and landed near us. The ice crackled and rumbled as they first touched down but it was quite safe.

We soon loaded up and said goodbye to Olaf and were on our way back to Prince George. Another aircraft was waiting when we arrived, with an army photographer. They had instructions to take me with them to Ottawa, so I phoned Headquarters in Vancouver and was relieved when our Colonel suggested that I had better stay at my base until he was able to provide someone to relieve me.

The next day Lieutenant Nichols moved on, to provide information to other areas. I was promised a senior N.C.O. who was then on a special course in Ottawa, and who was to be my assistant. We were well into March and he still had not arrived when I had another alert. This time it was from Fort Bahine, about thirty miles west of our Takla Lake incident. I had a Corporal Smith, a mechanic and driver in my transport section, who I knew to be experienced in the use of explosives and a good man in the bush. After warning him that he could expect some tough trail work and possibly a sleep-out in the bush, I asked him to volunteer. He was thrilled with the idea and assured me he could take anything I could, so I assigned him the job of helping to prepare for the trip.

The flight to Fort Babine could not have been better and after landing for a discussion with the manager of the Hudsons Bay post, who had radioed the information, and with the chief of the Indian band, we took off again. Within half an hour we

### Pick-up from Takla Lake



R.C.A.F. Norseman Aircraft and Dog-team Transport Left to Right: Author, Pilot, Lt. Jim Nichols and Olaf Bjornsen had located the balloon. Later the same afternoon, Corporal Smith (Smitty) and I set out on snowshoes and went directly to it, following landmarks I had located from the air.

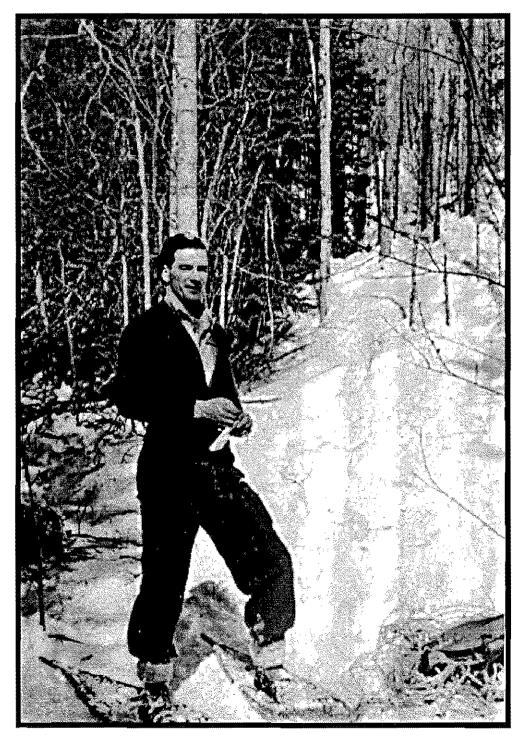
The balloon was hung in a group of tall poplar trees, with the relief valve and a maze of rope trailing in the snow below. The chandelier and control gear were missing and had evidently been torn away in treetops somewhere along its course. The Indians later confirmed that when they saw it coming toward the village, there seemed to be only a coil of rope below, although one said he could see a "Jap" steering it.

The balloon envelope was saturated with wet snow, so we took the valve and what rope we could salvage, and then hurned what we could of the remains. The rope we gave to the Indians. We took samples of snow and debris, and we were back at the Fort by early evening.

The Bay manager, Bob Cunningham, invited us to dinner and to stay the night. Considering that the payload and controls of the balloon were missing, I could not see that we could be contaminated, so we accepted. Their home had all the best the Company could provide in such a remote area. We each had separate rooms with carpeted floors and we shared a bathroom. I was in bed and about to go to sleep when Smitty pushed his head in my door. "Captain, a fellow's sure got to be tough to go on a trip with you."

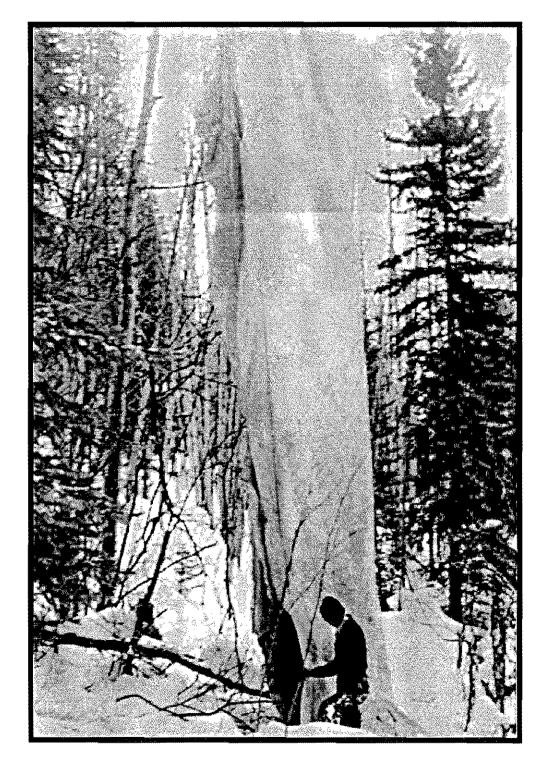
Our trip back turned out to be jinxed. On our first evening, at Fort Babine, the small diesel power plant for the Company home and store broke down and their batteries were low. They had an old type radio transmitter with a range of about 100 miles, and they were scheduled to call Takla Lake each evening at 9:00 p.m., so we hoped to get a message througb to be relayed to the R.C.A.F. to come and pick us up. Between low battery power and poor weather conditions, Bob Cunningham was not able to make his contact. There were no spare parts for their power plant and a mechanic would have to be flown in. They faced the prospect of gas and coal oil lamps and no radio contact for some time. Mrs. Cunningham was very pregnant and they needed that radio.

In the morning, I went with Smitty to look at the power plant and it was soon evident that a valve was not functioning. There were some tools there, so I belped him strip down the engine and we found that a valve spring was broken. Corporal Smith



#### At Fort Babine Balloon Site

Sergeant W.V.L. Smith ("Smitty") on Snowshoes at the Babine Site



#### **Balloon at Fort Babine**

Sergeant Smith and Balloon suspended from a treetop. Located east of Fort Babine.

had a nose for finding parts. There was a box of junk in their storeroom that contained parts of an old washing machine. In it, he found a spring. Its size and compression matched that of the engine almost exactly. By noon it was all re-assembled and it ran perfectly. Smitty's admittance to heaven was assured from that moment on. I had a letter from the Cunninghams a few months later — it was a boy, and the engine was still running.

The Airforce plane arrived the following afternoon, after a long and arduous trip. They were supposed to have gone to Takla Lake and over the ridge to Babine, but their instructions were fouled up and they were sent to "Tatla" Lake, which was 300 miles to the south and was on the Force Polarbear Scheme, then in progress. They were instructed to re-fuel there, but no fuel was available and they then had to fly the extra 300 miles to Babine. Someone had gotten his wires crossed.

Getting the ski-equipped aircraft airborne proved to be another problem. There was a wide expanse of open water around the river outlet and water could be seen pounding on parts of the lake surface. The warm sun made the snow sticky and they could not get enough airspeed to break clear. Three runs were made, which helped pack the surface. On the fourth run, we almost broke clear but ran out of runway and were beyond the packed former ski tracks. We lost speed as skis dragged in the unpacked snow. Ahead there was evidence of water on the ice. Immediately the aircraft was showered with water as the ice area yielded under the weight. The pilot gunned his motor and swung toward shore and sound ice. "That's all I want of that!" he shouted as we turned back. "You fellows have some axes with you, don't you? Will you go ashore and cut about a dozen poplar poles?"

We laid the poles across our runway strip about twenty feet apart near the end of the packed tracks, then taxied back to the start area. He had us crowd forward so that we were all under the wing area, and again poured on the power along our runway. With the tail assembly high and the wing flaps down, he hit the line of poplar poles and bounced her free. For a moment we seemed to hover just above that sunken ice area, but she gained speed and we were airborn. Our jinx was still with us. About fifty miles out, the pilot was watching his gas gauge as it registered empty. "Fellows," he remarked, "I've got fifteen minutes of emergency fuel in the belly tanks. I'm switching on now. Let's hope it holds out." The cross runways of the Prince George airport were clear blacktop now, but on one side of the north-south strip there was a packed snow strip for ski aircraft. The sun was down and the air had cooled to below freezing by the time we came in from the north. The snow strip was glassy ice. We were not slowing down and the blacktop of that cross runway was coming at us fast. The pilot shouted to us to get down and hang on. There was a pile of snow at the runway intersection about ten feet high. He gunned his engine and swung it and we stopped on top. One ski frame was broken in the stop. The pilot heaved a sigh of relief. "If we'd have hit that blacktop, we'd have come in on our back. If I ever have to fly you fellows again, I'm going to get myself a rabbit foot."

My new Sergeant had arrived and two days later we had another alert. This time it was Cedarvale, way down the Skeena Valley. When I met Sergeant Morgan in my office, I could see a problem for us. He was nearly fifty, too heavy and obviously had foot problems. He was as game as a bird dog, but mountain terrain and hush travel can be tough on the best of the physically fit. I also learned that he had never been on snowshoes in his life.

The Cedarvale location was rather confusing. It was actually in the Prince Rupert area and they had their own bomb disposal squad; however, I had orders to go, so I arranged with the R.C.A.F. to supply an aircraft for early the next morning. I was told that weather conditions down the Skeena were closing in and that we would have to check again in the morning. By that time the area was socked in and they could not chance flying us in. I checked with the C.N. railway and found that the passenger train which should have been due at 2:00 a.m. the next day would be at least four hours late. I got on the phone to our Headquarters in Vancouver, telling them that our only alternative was to drive. The answer was, "Get there by the quickest possible means."

By 9:00 a.m. we started out by jeep. Corporal Smith drove and Sergeant Morgan rode in the back seat with our bulky equipment. We were about ten miles out when we ran into an area of drifted snow and at one place we had to dig out. A mile further on, we met a snow plow and travel was not bad from there on, except that we were into the breakup season and the roads were full of potholes filled with water and slush. The old road of those days wound around swamps, sidehills and rock bluffs. It used to be said that the way that road was surveyed was by turning a mule loose and then following him wherever he decided to go. It seemed like a logical explanation. We only averaged about 30 miles an hour and it was getting dark when we arrived in Burns Lake. We went into the only hotel to look at their accommodation. It was a fire trap and we decided to go on.

The night turned cold and as we passed Houston on our way towards Smithers, our engine started heating up. The radiator was low, so we broke the ice of a pothole and filled it with a shovel which was all we had to bail with. We refilled it twice more before we got to Smithers. It was 1:00 a.m. when we arrived at the old hotel. There was no one around, so we helped ourselves to room keys and went to bed. I told my men I wanted to be on the road by 6:00 a.m. There was still no one around in the morning, so we left money for the room rental and the keys, and were on our way.

Before we got to Hazelton, we found our engine was in trouble. The crankshaft was full of a mixture of water and oil. Steam belched from the exhaust and it smelled like a steam engine. Luckily, it was downhill into Hazelton and we made it to a small service station. Across the street was a cafe where we got some breakfast and then we headed to the service station. It was just a shack and there was only one service bay which was occupied. A mechanic in grease-covered coveralls was draped over a fender, with head and shoulders inside. The language that oozed out from under that engine hood would have made a mule skinner blush. Smitty walked over to him and slapped him on the behind. Immediately a head popped out with a blast. "What the hell do you want? Oh, Army, eh? Sorry. What can I do for you?" Smitty apologized for the slap, and then told the woman mechanic of our problem. Her face was smeared with grease and she was obviously having a bad morning. She had no gasket material but said we could probably get some sheet as bestos at a plumbing and heating sbop down the street.

Smitty was never stuck. We soon had the head off and he very expertly hammered out a new gasket from the asbestos sheeting. By 11 a.m. we were on the road again. As we were leaving town, an R.C.M.P. corporal waved us down. He told us he had just come off the train after spending the day before up the mountain at Cedarvale with army personnel from Prince Rupert. He said that the C.N.R. passenger train had stopped at Cedarvale three nights earlier and some fifty passengers saw the balloon, swaying in the breeze in the evening sunlight, high up on the mountainside. The army squad from Rupert had come the next day and he had been called. They had spent the whole day searching the mountain on snowshoes, but had decided it

#### **On Old Skeena Road**



Author, right, and Sergeant Morgan in coat, on old highway near New Hazelton. must have blown away. From the little experience I had from our previous incidents, I didn't think it could have risen again once it had landed in trees, so we decided to go on and carry out our own search.

After some rather hazardous travel, we got as far as Skeena Crossing and from there on, the still uncompleted National Defence road had not been plowed. By putting chains on the front wheels, we made another ten miles, but finally we came to a long grade on a north slope. Here the snow was too deep and it was impossible to go any further. I knew from our map that we were about ten miles from our goal, but there was no alternative but to turn back.

There was a small boat ferry operating across the river to Kitwanga and we were able to get across and to the C.N.R. station. We left our jeep back across the river. We found that the train we could have been on from the east had passed through about an hour earlier. I had to do a lot of talking and phoning before I was able to get authority for them to provide a gas speeder to take us on to Cedarvale, but we made it by about 10 p.m. that evening.

Cedarvale was just a whistle stop, with a combined station and section headquarters and a water tank. Here the supervisor, who had heen involved with the search party from the day hefore, fed us and provided us with accommodation for the night. He had raised a family there, hut now they were all gone and he welcomed company. I have forgotten his name, so I will refer to him as Mr. Jones. He had an old survey transit there which I borrowed. From the railway, he showed us where the halloon was seen and pointed out a dead tree with two prominent green treetops beside it. That was where it had been. He said five men had searched the area the day before our arrival without finding a trace of it.

With Smitty helping me, I set up the transit along the track and lined onto the trees away up the mountain, then reversed the instrument and located two landmarks a good distance apart and plotted them on a plan, then about 300 yards the other way along the tracks. I was able to get another sight and followed the same procedure. Theoretically, this would give me two backsight lines that should intersect at the tree location.

Sergeant Morgan had suffered badly from the cold on our long trip and had come down with a cold, so we left him at the station and Mr. Jones took us across the river in a boat. On the east shore, we went to the home of an Indian (let's call him George). His wife invited us in for coffee, in a home that was immaculately clean. George had a tie and cedar pole contract with the railway and had logged up to the area where we had to go, so he acted as our guide.

The former search party had provided us with a well broken trail and we were able to get up there in about two hours. Snowshoe tracks in the area showed that they had covered the region in a systematic grid search. We spent the next hour covering the same area without result. I felt that we should he further up the mountain, so we began to search a broader area up toward the timber line.

George showed us his method of signalling in the bush by striking a dead tree with an axe, providing a drum-like effect that could be heard up to a mile in timbered country. The sound reverbrates from the treetops very effectively. We had lunch and then continued our search, working up the mountain. I finally saw an opening in the trees some distance higher up. From there, I got a backsight on my landmarks away across the river. With my binoculars, I was able to check them with our location on my map. I was too far north and too high up.

I was just starting down in the direction indicated, when I heard George signal. He kept repeating it and Smitty and I reached him at the same time. He was sitting on a piece of bark beside his signal tree, looking up into the trees above. "There she is, Captain. Those other fellows missed it by 50 feet." Snowshoe tracks confirmed it. I was pleased that my own plotting had worked out so well. The location was right on target.

The balloon was suspended between three big trees, forming a huge canopy. Part of it still bellowed outward so that it looked like some monstrous form of mushroom. A maze of ropes trailed down from it to the chandelier, which appeared to rest on the flat top of a 50 foot high hemlock tree. Two bombs were suspended opposite each other below, and we could count twelve bags of ballast still intact. Evidently there had again been a malfunction of the electrical system.

We spent a good hour with binoculars trying to trace circuits to see if it was possible that the system could still be operational, with the risk of dropping those bombs or of firing that highly dangerous demolition charge. We could see nothing to give us any assurance. I started walking around, looking for any fallen debris, and immediately found a piece of a clear plastic box, then two more pieces. Apparently the battery box had broken up, but there was no sign of the battery.

The heel of my snowshoe snagged something and I looked back at a black object now projecting from the snow. With my hands, I dug the snow from it, to discover the tail fins of a bomb. This one was a different type, apparently an anti-personnel type. A cold chill ran up my back when I discovered what I had almost tripped over. Smitty said my face was the color of a swede turnip when I saw what I had uncovered.

Among the equipment we had with us was a long light cord. This we tied to the tail fins and then got behind a big tree about thirty feet away and pulled. It came free and slid up onto the now packed snow. I looked it over very carefully at close range without touching it. It had been freshly painted. In fact, I found later that the paint was still wet. The nose type fuse was brass and the arming vanc spinner was still on its shaft. Armament markings stamped on the brass of the fuse had been filed away. Fresh file markings were easy to see. The question was why.

From information we had on Japanese bombs and fuses, fuse number markings were normal and bombs were usually identified by coloured bands around the body to identify anti-personnel, shrapnel, fire, phosphorus or time delay types. Why would they remove the means of identity unless — it could be a booby trap.

We decided to leave it undisturbed for the time being. Our instructions had been that, where a bomb was found in a location where it could do no harm: "Demolish *in situe*. Unless of some strategic value." I had better check this out before I destroyed it.

We studied the balloon with binoculars. If possible, we had to get it down intact. Research departments of both the Canadian and American forces wanted one. This one was hung in the tops of three large fir trees, about 100 feet high. Each had a butt diameter of more than two feet and there were no branches until about 30 feet up. That 50 foot hemlock tree, now supporting the chandelier with its bombs and the highly dangerous demolition charge, had to be removed. How could we take it down without the danger of an explosion?

I had previously asked George to leave us, partly for his own safety and for security reasons. He would be home by now. "Smitty," I said, "It will be near dark by the time we get back to the river, so let's go back and tonight we'll find out how much

#### **Cedervale Balloon**



Balloon suspended in tall trees east of Cedarvale. Note chandelier with two bombs attached on top of small tree upper center. Round objects are sandbags of ballast.

of this thing they expect us to bring out and then we can work out a plan for taking it down. Commander Borradaile has said that if we ever get into a situation like this, we should phone him direct, so I'll see if I can get through to him."

It was dark by the time we crossed the river back to the C.N. station and later that evening I tried to get that phone call through on the C.N. phone line. After a lot of explanations to operators at several division points, I finally got through as far as Winnipeg. There, an operator blocked my call, demanding details I could not give him, so he cut me off. I then tried Prince Rupert with similar difficulties, but finally got them to connect me with the National Defence phone system and from there, I got Operations in Vancouver. I was finally connected with a senior officer who obviously knew about the balloon situation. Evidently he was called from his evening revelry, as he started to expound his rank right away. He told me I was out of my area and that the search had been called off. When I told him we bad found the Paper and three U.X.B.s (unexploded bombs), he changed his attitude and insisted that everything must be brought out. He said if I didn't have all my safety equipment with me, I should take the consequences. "Everything must be brought out. THAT IS AN ORDER." I was burning under the collar when he hung up on me. I never did know who I was talking to, but I was in the army and he evidently knew what the operation was all about.

Again I had to rely on Corporal Smith for my plan of action. He was a versatile and ingenious type, having once been a trapper in the north and also a high rigger in a logging operation. I needed the high rigger type now and we had the necessary equipment with us, including climbing spurs and rope, as well as about a hundred pounds of other equipment we had to anticipate a need for. We arranged with George to bring a horse up in the afternoon to haul the load out. We then put on our snowshoes, slung our packs and headed up the mountain to tackle whatever the Japanese had planned and sent over for us.

Our first priority was to get that tree down from under the chandelier with its bomb load and demolition charge. Smitty put on his climbing spurs, belt and rope, and went up one of the big trees like a squirrel. From way up among the branches he called back, "I'm up above the chandelier now and I can see the demolition charge. It seems to be taped to the side of the control box. The battery box is gone, but there are wires dangling. Underneath, there are arming wires hanging down. Must have

#### **Cedarvale Bombs**



Three bombs from Cedarvale balloon, Upper is one of Anti-personnel type. Lower two are incendiaries been pulled out, so those two bombs are armed." He climbed higher, then continued. "It's all suspended by ropes and there's only one branch of that tree carrying anything. If I can get up to one of those ropes, I may be able to pull it clear so that you can cut the tree down."

A minute later he called down from high up in the treetop. "I've got a line onto that rope. I'll try to cinch it over to the tree. Look out helow."

Slowly, the chandelier slid from the branch of the small tree. As it swung clear, it rocked precariously and the bombs swayed in their hangers. "Okay, Smitty," I called, as they settled down. "Hang on for a while." I went to work with my axe and soon the tree went down. It didn't take long for him to free enough ropes to allow the chandelier to come down to where I could reach the bombs. I unhooked each of them carefully and laid them in the snow. I then untaped the demolition charge and cut the fuse leading to the detonator. Now that much was safe.

"Okay, Smitty," I called, "You can try to free the balloon now. I'm going to work on this A.P. bomb." I attached a magnetic mike and put on earphones. I checked everything again thoroughly and then taped the arming vanes to the fuse to prevent movement. Then the very thing I was trying to prevent happened. The spring loaded striker pin that had been driven in snapped out, exposing several threads. The arming vanes had spun off four turns. Five would have caused it to detonate. While I was working, a small branch fell from high up where Smitty was working. It hit the bomb. Through the mike and earphone it was like a blast. I jumped ten feet and dodged behind a tree.

There were two small screws in the neck of the bomb locking the threads of the fuse. I picked out the right size screwdriver and dug through the still wet paint of the holes. Both screws came out easily. Next I got a wrench onto the fuse. This could be it.

I gripped the bomb with my left arm against my ribs. "If I'm going to go, I don't want to leave any pieces lying around." I applied pressure on the wrench with my right hand. I felt the thread turn a bit. I called up to Smitty. "Hey, Smitty, I'm going to take the fuse out now. Better get behind that tree in case she blows." He paused a moment, then called back. "Just hold on a second, Sir, I want to get my lasso ready. I'll try to get a rope on you as you go by." A little good humoured wit right now helped

to ease the tension and I called up, "Never mind the rope, Smitty. Just ask Saint Peter to have the gate open for me".

The fuse turned under the pressure of the wrench. My mike picked up the grating sound of the threads and nothing more. Now it turned freely and I took it out by hand. There it was — that little brass gain on the back of the fuse. (The gain was a booster charge between the initial detonator and the main explosive body.) It had all that was needed to blow me into eternity. Moving away from the bomb, I took it out of the fuse easily with my fingers. I wrapped it in cotton batting and packed it into one of our containers. "All clear, Smitty," I called. "You can go back to work." He shouted back. "Oh hell, you did me out of my roping practice."

It was apparently all safe now, except for those blow-out plugs on the chandelier, and on these I carefully cut the circuit wires, making them safe. Now to collect samples. Where do I start, in the mess we have here? Some snow, a few twigs from the trees. Those plastic box parts. What else? If anything was contaminated by now, it was me. Tests they ran on us after the Takla incident had all been negative, but we wouldn't dare get on board that passenger train going back.

Smitty moved about in those treetops like a spider building a web. Each rope he released allowed the great billowing mass to sink lower until the last one let it settle to the snow. It seemed alive as it billowed and writhed like some huge form of jelly-fish. I had two quart jars ready and cut a small hole with my knife and took gas samples. We then let it all deflate.

George arrived with a horse, wallowing along the snowshoe trail. He had two moose hides which we packed everything onto and trailed it out behind the horse. At the station, we persuaded the conductor to take the balloon in the baggage car with Sergeant Morgan. We took the bombs and all parts to Kitwanga on the C.N. speeder.

Our problems on this trip were not over yet. Smitty and I managed to get the jeep gassed up at New Hazelton at nearly midnight and we drove on through the night; neither of us had any desire to sleep so we just kept on driving. It was 4:30 a.m. when we reached Houston. It had turned quite cold, and being tired, we both felt it in the open jeep. There was a light on in the Houston Hotel so we went in to get warm. There were three big easy chairs set facing a long barrel-type heater in the lobby and we each flopped down in one and I was asleep in seconds. Smitty woke me, saying we had better keep moving on.

I got behind the wheel for a spell of driving and started out onto the road. When I turned the steering wheel, nothing happened and we piled up in a snow-bank. I backed out and tried again with the same result. It was then that I realized that the wheel would spin freely. We checked underneath and found the steering arm had broken. There were obviously no jeep parts in this settlement, which left us no alternative but to weld it by some means.

We finally roused someone in the coffee shop of the hotel and had some breakfast, after which we set out to find the owner of the only machine shop. He was suffering from a hangover and couldn't care less for our troubles, but we finally persuaded him to open up his shop. He had a gas welding outfit and once we had access to it, repairs were made in minutes.

All day we drove on, averaging about thirty miles an hour, and several times we had to dig out of snow-banks as we left the road, partly from ice conditions and from fatigue. We told stories, whistled and sang as the miles rolled by and we arrived back in Prince George at 9:30 p.m. after being without sleep for 38 hours.

We later learned that our balloon was shipped to Defence Research headquarters in New York. There the Americans rebuilt it and released it, where it got away and blew out to sea. They shot it down with anti-aircraft fire. All our efforts ended in the ocean.

Of all the incidents we were involved in, this one was the most exciting; perhaps from the challenge of all the problems encountered, or from that moment when I gripped that bomb in my arm and my life in my fingers. It left an exciting memory.

Returning to the routine of army engineering work, I was faced with a staggering backlog. I called headquarters and asked our C.O. for help. He advised me that it was on the way and that he planned to put a complete crew in our area attached to my section. Shortly afterward, Sergeant Mullett arrived. He was fresh from the Bomb Disposal School, so I gave him the responsibility of care of equipment and reports.

Shortly after Mullett's arrival, I had a letter forwarded from the B.C. Police from a small sawmill operator at Dome Creek. An employee, a part time farmer, had brought in an article that he found lying in his field one morning. It was placed on a stump outside their office because the manager suspected it to be some form of bomb. He was right. Sergeant Mullett and I went up by train, where I defused it, and we brought it home in the caboose of a freight train the next day. We followed this with an air search of the area and the mountains presumed to be downwind, for more than forty miles without result.

Lieutenant Love arrived and I arranged for his space and the necessary accommodation. He had hardly got settled when there was another report. This one was from Collins Lake, southwest of Houston. They had recovered a badly damaged balloon and two incendiaries. An order had come out now that a hacteriological expert or a medical doctor must accompany the bomb disposal squad on all future incidents. It seems that all of the samples we had taken had produced no trace of bacteria except from our own hands. We were providing the only contamination. From here on, we would not take samples.

It was Lieutenant Love's crew that found the bomb of "china eggs" near Barkerville. They also found another balloon with two more of the 5 K.G. incendiaries. Another report came in from Fort Ware in the headwaters of the Finlay River. That balloon was recovered by a crew from Alberta, as our R.C.A.F. group was unable to provide transportation. Love and his crew recovered another balloon in the Chilako River area in the Chilcotin, shortly before he was moved to Kamloops with Lieutenant Nichols, to a base which was more centrally located for the southern interior. From then on, their crew had a comparatively easy time, making only one recovery at the Gang Ranch in the lower Chilcotin.

When Lieutenant Love moved to Kamloops, Sergeant Mullett and Sergeant Morgan moved with him, leaving me with no bomb disposal crew. They had no sooner left, than a report came in from the R.C.M.P. at Vanderhoof. Someone had found a large piece of paper about fifteen feet long with a glued seam down its center. I had orders to carry out a search by air. The R.C.A.F. detailed a Ventura homber to fly me. We covered an area of fifteen miles wide by twenty miles long on the assumed downwind course of the balloon, which had obviously been demolished in flight. I lay in the bomber's compartment in the nose of the aircraft on the plexiglass window, where I had a perfect view ahead and below. They covered the area in half mile wide runs at about a thousand feet altitude. The end of each run bothered me from the pressure of the steeply banked turns and the apparent twisting of terrain banked at a steep angle. The visibility was perfect but I didn't see a trace of anything resembling balloon remnants. The co-pilot moved back into the plane to allow me to climb up into his seat for the trip back to the airport. Immediately I felt violently sick, which evidently the pilot had expected. He remarked, "You look a bit green, Captain. Just fix your eyes on the horizon for a minute and you'll be okay." To my surprise it worked and my stomach smoothed right out with no problem. It was a fruitless search, but one of those things that had to be done.

The war in Europe was near to an end and there were many changes and troop movements, as efforts were now concentrated on the Pacific action. I was surprised one morning when Corporal Smith asked to see me and I had him shown into my office. I knew he was not very happy back in the transport shop where he had been under constant pressure from senior N.C.O.s who always expected priority service any time they had vehicle troubles. This had reached a point of blowing up when he refused the keys of a vehicle to one of them when he was drunk. I had smoothed that incident over.

"Come in Corporal," I said. "What's your problem?" "I quit, Sir," was his reply. "You QUIT? What do you mean? You know you can't quit the army." "That's what I said, Sir. I quit. Ship me to hell out of here."

For once he had me stumped. "Shut the door and sit down, Smitty. Tell me what this is all about." He told me about some of his problems, all of which I was aware of. He left me no alternative but to report the matter to our Company C.O., so I got him on the phone in the Vancouver office. When I told the Colonel what Corporal Smith had just told me, he just laughed loudly. He said Smitty had done the same thing with him twice before and each time he had taken his stripes. "You can't help liking the guy, though," he said. "So I gave him his stripes back and shipped him up to you. That was why I didn't approve his promotion that you recommended."

"Well, what do I do with him now, Sir? He's sitting here in front of me." The Colonel paused a moment. "He's been very good with you on bomb disposal work, basn'the? Do you think he would fit in there?" My answer was yes, because I had asked for him in that work before. After further discussion he said "Let's fool him for a change. Make him a Sergeant and we'll send him away on a course." I told Smitty of the decision and I thought he was going to break down. He turned toward the door. "For Christ's sake, Sir, I thought you were going to throw the book at me! Whoopee!"

That afternoon, I came into the front office where our civilian girl stenographers and accountant worked. The Staff Sergeant and the Sergeant Major were both looking on, and all of them were bursting with laughter. Our new Sergeant Smith, already with his new stripe on his tunic, but wearing a black beret and hip waders turned down below his knees, glided across the room on the tips of his toes. His nose pointed upward toward his hand, which was raised straight above him. The other hand extended outward, with his little finger cocked at a sophisticated angle. At the end of his glide, he raised one knee and spun on the tip of one toe, like a professional ballerina. When I could control my own voice, I called, "Sergeant Smith, what is going on here?" He looked around at me. "Sorry Sir, we didn't know you were in. That was just an expression of appreciation." He left for Ottawa on his course the next day.

I had to go on another refresher course myself to the Bomb Disposal Center in Ottawa. We learned more about the balloons from work done by the research department. We learned that it was more from good luck rather than good judgement that we were alive to be able to attend the course. Among other things, we found out that those blow-out plugs on the chandelier could kill a man if the battery and electrical system remained intact. Any jar or movement could close a circuit to fire the detonator plugs. We learned a lot more about the many types of Japanese bombs and fuses and more particularly, the potential methods in the threat of germ warfare, for which the balloon systems were considered to be readily adaptable, should the enemy decide to use it. Lectures we attended were top secret even then and behind locked doors guarded and checked by the R.C.M.P.

The war in Europe was rapidly nearing its end, but England was still the target for the many V2 rockets, which fell straight down from the sky without warning. This was Hitler's long-heralded secret weapon and had his scientists been able to perfect their atomic warhead, the tide of war might even then have been turned in his favor. There was no known defence at that time against the V2, which was the early development of what later became the I.C.B.M. (inter-continental ballistic missile). Hitler's scientific technology had simply run out of time and resources. The Pacific operations against the Japanese were being accelerated and it was believed that, when left on its own, Japan could resort to desperation tactics involving germ warfare, possibly as a last resort deterrent against its enemies. Our own intelligence had reported that they did have the means. Perhaps the Japanese were more humane than we were led to believe, as opposed to the tactics of the Germans and our allied forces. The slaughter and maiming of civilian populations in the cities of Hiroshima and Nagasaki by our side proved that point.

Back again at my base, reports still came in. In August, we had one from an Indian near Pinchi Lake. He claimed to have seen a huge balloon drifting low over the timber northward toward the lake. We carried out both air and ground searches without result, but two small fires started along the assumed path and were brought under control by the forestry department. Weather was cool at the time and there had been no thunder storms. They were not in an accessible area.

A few days later, I flew to Vancouver and from the air I saw a balloon apparently resting in treetops in a swamp area a few miles west of Quesnel. It was unmistakable, like a big mushroom well above the trees. On my return the next day, I got the Air Force to fly me on another search. Once again, after a thorough search at both low and high levels, there was not a trace of it. The location was so far removed from any road that we did not attempt a ground search for possible bombs.

In another similar incident, I was travelling west from Jasper by train and in the late evening, near Rauch Valley, I was standing on the platform between the railway coaches getting some fresh air. On a timbered slope about a mile away near the mountains, I saw what appeared to be a huge rounded roofed barn some thirty feet above the timber. The view was only for a few seconds, then it was blacked out by trees as the train rolled westward. At McBride, I phoned the police and asked them to check, giving the approximate location. The next morning in Prince George, I had a call from them stating that a Corporal and two members of the P.C.M.R. had gone past the area by railway speeder and by car and had found no sign of it. I was now certain that what I had seen was a balloon, so again I got the R.C.A.F. to fly Sergeant Smith and me on another search.

Squadron Leader Hobbs again piloted the Norseman aircraft. He loved to fly that machine. He always said it was like flying a kite. He took some wild chances but

always came through without problems. This morning, we flew east from the airport across Six Mile Lake where his wife was staying in one of the summer cottages on the slope at the north end. As we crossed the lake, he called back to us. "Hang on, fellows, I'm going to go down to see if my wife's awake." He slipped steeply down, then zoomed in low over the cottage and pulled up into a steep climb, just clearing the tree tops. The stall alarm shrieked as he levelled off over the top of the hill. His co-pilot groaned. "For Christ's sake, Sir, this thing isn't a Spit-fire." Gus just laughed and we continued on our way.

The trip was about 130 miles and there was nowhere to land an aircraft where you could be sure of getting off again. We flew in low and proceeded to do a low level search. On about the second pass, we spotted the balloon draped like a big white mat over a number of large trees. Gus put the aircraft into a tight turn as we circled above it and I wanted to get a picture. The pressure of the turn drove me to my knees so the co-pilot took my camera and tried. Even he missed. We plotted its location relative to some nearby farm buildings and started back.

Smitty got up off the floor and stood behind our pilot. "Sir," he said, "I'm beginning to learn a bit about flying. When I'm lying on my back on the floor and I can see treetops through the roof hatch, that's what you'd call a tight turn, wouldn't you?" Gus was quick with an answer. "You're learning fast. I haven't flown this thing upside down yet. Shall we try it?" "Before you do," Smitty replied, "Just let me get out. I'd rather walk."

We were just passing over McBride and Gus circled over the town and called back to me. "If you want to save some time, Chuck, there's a couple of chutes back there. I'll take her up a way and you can both jump." Smitty groaned, and I looked at that ground, now steeply banked off our wing tip, with nothing but bush, small fields and that river. I didn't want any of it. "Thanks, Gus" I answered. "There's a train coming through here tonight. We'll be on it. Better take us home." Gus laughed. "You army types are all chicken." "So what?" I said. "Chickens have wings but we haven't. You'll never get me to jump out of one of these things."

We were on the train that night and arrived in McBride about midnight. The next day, Corporal Maxwell of the B.C. Police drove us as near as we could get to the site. It was about a ten minute hike from there to where we found the balloon. It lay spread over five sixty foot high poplar and jackpine trees. All the ropes formed a tangled mass through the branches and the chandelier hung about thirty feet above the ground. On it, we could see one bomh and about a dozen sandbags. I told Smitty and Corporal Maxwell to stay back while I made an inspection of the ground around it. I almost tripped over a bomb in some low brush. Evidently it had fallen from the balloon when it became tangled in the trees. It was fully armed but had fallen in a deep bed of moss and leaves sufficient to cushion its fall and prevent detonation. We had enough experience with these incendiaries to know that they could be handled safely as long as they were carried horizontally.

A half hour of study with binoculars revealed that this one was a replica of all the others we had encountered, with one exception — the fuse leading to the demolition charge had been cut with a knife or other sharp instrument. This meant that the charge with its detonator was intact. From the lack of debris on the ground, it was evident that the battery was still intact. From the cut fuse, it was possible that the charge could have been wired up electrically. This meant checking before anything was touched. I climbed a tree to where I could get above it and examine it more closely. The battery and demolition charge were intact but it was a safety fuse type detonator and the cut fuse was clearly visible, so everything appeared to be safe.

We got the whole balloon and its gear down without any problems, but the tangle of shroud lines took us over an hour to get free. The three of us were up in the treetops like a family of squirrels. The police corporal was in the top of one tree, a jackpine that swayed menacingly under his weight. Sergeant Smith was in the top of a big poplar some twenty feet away, while I was in the top of another. Smitty and the Corporal were both trying to free the same set of ropes when Smitty called out in jubilation. "Oh boy, all my life I've waited for a chance to get a cop up a tree. Now I've got one." He pulled on the ropes, causing Corporal Maxwell's tree to sway to and fro, while the Corporal shouted about all the things he would do to Smitty if he ever found him on a dark night. We got the balloon down among a lot of jocular threats of reprisals.

I defused both of the bombs by removing their detonators and reversing the firing pins. The demolition charge had to be destroyed, since we could not take it on a train. We took it out to a small rifle range built by the P.C.M.R.s for their training.

## **Rauch Valley Balloon**



Balloon chandelier with bomb and sandbags attached. Balloon in jackpine tree behind.

Smitty rigged the charge for demolition using a half stick of 808 H.E. that he always seemed to be able to smuggle along in his knapsack.

We all walked down the range about a hundred yards, feeling secure in that the charge was well down in the target trench. The blast fired as we were still walking away. We turned in time to see the P.C.M.R. masterpiece of steel reinforced, wooden target frame, flying to pieces about eighty feet in the air.

Another incident we had, prior to the one in McBride, came hy way of a phone call from the police in Quesnel. A prospector from the Ahbau Lake area reported that he had found a balloon at the east end of the lake about thirty miles from Quesnel. I was unable to get a medical officer who could be spared for the estimated two day trip, but there was an inspector from the Health Department from Ottawa doing a check on water supplies and sanitary facilities in our area. Igot permission to take him along and he was thrilled at the idea of such a trip.

Sergeant Wales of the B.C. Police accompanied us as far as Cottonwood, one of the old stops on the original Barkerville Trail. There we met the prospector, who had arranged for horses so that we could ride in to the lake, a trip of twelve miles.

It soon became evident that our substitute medical scientist was in for a rough time. He had only been on a horse once before in his life. He knew even less about handling one. The horse sensed this more than we did. The first thing that happened was as he was mounting up. He had both hands on the saddle and his foot in the stirrup, but he hesitated too long. The horse looked around, saw the tightly stretched pants over his rider's buttocks, and nailed him with his teeth. It was only a nip, but his rider leaped into the saddle a lot faster than he had intended! Along the trail, he was ahead of me and I had to keep prodding him along from behind. Every time the horse saw a nice bunch of green grass, he would lunge for it, almost pulling his rider out of the saddle. If a low branch hung over the trail, that horse would deliberately dive under it, so that his rider would get raked by the branch. It was a case of the horse controlling the rider and if I hadn't been behind to give a reminder with my whip, he would have turned around and gone home.

There were places where we had to walk because of too much overhanging brush and other places where we were glad to ride where the trail was rough and rocky. It took nearly four hours on the trail before we finally arrived at a cabin at the west end of the lake. All of us except for our prospector guide were stiff and sore and glad to see the end of the trail.

After we had eaten and tethered out the horses in a small nearby meadow, we put the only boat in the water. It was full of leaks. We tried a little fishing in it and then left it in the water, to soak overnight to seal up the many small cracks. There was a nip of frost in the air and the mosquitoes were gone, so we slept outside under two big spruce trees. Square frames of logs filled with old dry spruce boughs showed that both trees had been used for beds frequently over the years.

Our substitute medic (let's call him Jim) was also a strict vegetarian and all he got for supper was bread and jam, while we had canned beef stew. This became a bit of a problem. Anyway, that night we bedded down in our sleeping bags on the old bough beds covered with canvas tarp. Jim and I slept under one tree, while Smitty and our guide slept under the other. Our sleeping bags were light summer weight bags, so we threw another canvas sheet over top of both of us. It was just getting daylight, about 4:00 a.m., when I woke from some pressure against my hack. I thought it was Jim crowding me and I heaved up and looked to see what had happened. Hooked over my shoulder into the face of a big porcupine. My face evidently scared him the worst and he scrambled up the tree above our beads. He sat up there on a limb for the rest of the night, dropping chip bark down onto us. I lay there hoping that was all he was going to drop. In the meantime, Jim slept through it all.

We got an early start in the rickety old rowboat. Four of us loaded it down, so that it leaked higher up on the sides and kept one of us constantly bailing. It was a five mile row up the lake and we kept fairly near the shoreline in case the boat gave up under our weight. With every pull of the oars, its sides heaved in and out and we wondered if the oar locks would hold out.

About balf way along the lake, we had to cross a wide bay. The waves had become choppy and up ahead something was splashing around in the water. We thought at first it was some geese at play, but as we moved closer to within about thirty feet, two bull moose heads lifted up out of the water, each draped with water lilly vines. They were obviously standing on bottom in the middle of the lake. Neither of them was alarmed and both went on feeding as we passed. We started up the lake at about 6:00 a.m. and by 9:00 we had arrived at the balloon, after a half mile trip up a swampy creek full of brush and beaver swamps. I recognized it to be an American Met balloon. It hung in some spruce trees with shroud lines trailing to the ground. What our prospector had seen and mistaken for some type of bomb was a pack of drycell batteries used to power the transmitter that provided weather information from a small pack of instruments. A moose had stepped on the battery case, exposing the block of dry cells. The trademark (Eveready) could be seen on the batteries. We salvaged only the instruments and returned to our boat.

Going back down the lake, we had the wind at our backs, but the lake was rough. Someone came up with the idea that we should rig a sail. Three of us had bone-dry Army coats along, so we made a frame with the oars on which we strung the coats and sailed back under wind power using the single paddle we had on board for a rudder. We were back in camp by about 1:00 p.m.

It was decided that we would have a late lunch before leaving and as Jim's vegetarian diet would not allow him to eat the pork and beans we were planning on, our prospector guide provided him with a couple of pounds of rice to cook to his own liking. While this was being prepared, he asked me if we could advise him on how to dispose of a problem he had there. Hidden behind a spruce tree about fifty feet from the cabin was a hig cedar stump, on top of which were two boxes of 60% dynamite. They had been there for nearly four years, packed in by a former miner and abandoned when he went into the army. The stump was blackened by the solutions that had seaped from the boxes. A tarpaper covering had weathered away, allowing water to get in.

The logical thing to do would have been to burn the stump and boxes where they were, but this was still in the fire season and the hazard was high. After a consultation with Smitty, we decided we would take the boxes some distance up the lake and blow them up. We each very carefully carried a box of the dynamite down to the shoreline, where there was a log raft. We were afraid to risk climbing in and out of the boat with the boxes, which were blackened on the bottom from the nitro that had seaped from the explosives. We poled the raft about a quarter of a mile along the shoreline to a gravel bar that jutted out into the lake. Our main concern, in going well along the shoreline, was to avoid stampeding the horses, which were now tied up by the cabin. The explosion of two boxes of dynamite should produce one hell of a bang.

We had about fifteen feet of F.I.D. (fuse instantaneous detonating) with us for demolition purposes, together with three feet of two-minute safety fuse and detonators. We opened the boxes and laced the F.I.D. fuse among the dynamite sticks of both upper and lower boxes as they were stacked on the rock, and then attached the detonator and safety fuse. I made sure the raft was free and Smitty lit the fuse.

Between us and the cabin, a tree-covered point jutted out into the lake, leaving a small bay between it and where we now were. We started poling the raft straight toward the point. When we were rigging up the charge, the lake had been perfectly calm, but now a choppy ripple sprang up with gusts of wind. That fuse gave us six minutes to get behind that tree-covered point. We were about a hundred feet from it when we hit deep water and could no longer pole, and the wind held us back so that we had to use our poles as sweeps and head toward shore until we were able to reach bottom again. We were almost around the point when the time was up. I was just calling to Smitty to hit the deck when the charge blew. It sounded like a shotgun blast and we could see sticks of dynamite flying in the air.

We poled all the way back again and found that none of the dynamite had exploded. Sticks had been shattered by the F.I.D. charge and there was nothing in them but the dry pulp, so we put a big rock in each box and sank them in deep water.

When we got back to camp, we found out that the other two had not even heard the blast, so I told the prospector what we had done and then suggested he set the stump on fire later in the fall. It could be more dangerous than the dynamite had been.

We went to the cabin to eat and found Jim struggling with pots and pans on the stove. He had boiled the whole two pounds of rice and now had nearly four gallons cooked. We all ate rice with our pork and beans and the horses had to finish the rest, which they enjoyed.

The trail out presented no problems and the horses ran when they could, all anxious to get back home and to good pasture. We were able to get back to our Prince

George base by evening.

There was another similar incident with an American weather balloon which was found about forty miles south of Vanderhoof on the old telegraph trail. It only took us a day to complete the trip, but it cost us two jeep tires. The old trail, over seventy years old, had apparently never had a grader on it, being in most places just four deep ruts between grass-covered ridges. Sharp glacial rocks projected from the sides of each rut and the width of the jeep was just too narrow for the old wagon tracks. We had one flat on the trail and the other tire failed just as we arrived home. The side walls of each tire were in shreds.

The balloon was similar to the one at Ahbou Lake, but we had to make our way through nearly a mile of mosquito-infested swamp to reach it. Those mosquitoes were some of the hungriest and meanest I have ever encountered so late in the season.

We recovered one more Japanese balloon at Chilko Lake in the southern Chilcotin country. The report had come from the local P.C.M.R. officer, relayed from an Indian, Eagle Lake Henry, chief of the Chilko Lake band. The Chilko Lake band were ranchers, with large herds of cattle in the Chilko and Tatleoco Lakes area.

The trip from Prince George was about 320 miles and according to what information we had, there was a road all the way, so we took the army station wagon. We got to Red Stone just at noon. The P.C.M.R. officer was expecting us and we were invited in for lunch. The road all the way was gravel and dirt, the last hundred miles being just dirt and dust. The opportunity to wash up and have a home cooked lunch was wonderful. Although our host and his wife were both born and raised in the Chilcotin, they were typically English, both having attended university in England. Their beautiful home was as typically English as they were. The living room was carpeted and with dark wood panelling, accentuated with oriental brass and Chinese tapestries. The dining room was set in an almost formal atmosphere, and at the signal from a brass gong on the table by our hostess, a Chinese waiter in white coat wheeled in an English tea cart table with each course. We were ever so thankful to this couple for their outstanding hospitality. It was greatly appreciated.

Our host gave us instructions on how to get the rest of the way and whom to contact. From Red Stone on, there was only an Indian wagon road. It followed along the tops of a series of glacial drumlin ridges, most of them strewn with boulders averaging about the size of a man's head. Typically, at the end of each ridge, there was a steep drop into a narrow ravine, then up onto another ridge, each directionally paralleling the others. The distance from Red Stone to Chilko Lake is only forty miles, but it took us four hours.

In several places there were natural meadows, partly brush-covered and with creeks running through them. At this time of the year, they were nearly dry but still better adaptable to a wagon than to a car. In these meadow areas, trails branched off in different directions leaving the main one hard to distinguish. Smitty was good at spotting Indian trail signs, a number of which had obviously been placed for our directions. At one place, we met a girl on a horse and asked directions from her. She simply pointed to the right road without a word. Nearer the lake, we met another horse and rider, this time a boy. He told us we had about two more miles to go and showed us the proper trail.

We finally emerged from the jackpine-covered terrain to a river bank and to our surprise, met another car. It was highly polished and looked factory new. The driver was Eagle Lake Henry. I later learned that he had done some advertising work for the Ford Motor Company, being a colourful figure from the Chilcotin country, and that they had made him a present of the car. He used it to drive over the many miles of open range and meadows of the Chilko and Tatleoco Lakes country where he supervised the cattle and haying operations of other members of his band.

It was getting late and our day had been long enough, so he invited us to stay the night with him and his son in their river cabin. The boy turned out to be the one we had met along the trail earlier. It was a new log cabin with a good roof and shiplap floor. There was one small stove and a table in one corner. We shared our canned food with them in exchange for some of their dried smoked salmon. He sprinkled the dry salmon with water, put it in the oven for a few minutes, and then broke it into pieces. It was surprisingly good.

We all slept on the floor. They had their own bedrolls and we bad our light sleeping bags. That shiplap floor had warped in the sun before the roof was put on and was a bit hard to get used to, without any form of mattress. I finally found a way to fit hip, shoulder and knee joints into the hollows between the joints in the boards and went to sleep.

Eagle Lake Henry gave the immediate impression of being a very capable rancher and manager. He was not a fluent conversationalist, but when he talked, he showed that he was well-versed in his own business and in current world affairs. When he went to bed that evening, I noticed that he wore a wide thickly padded belt under his outer clothes. He took it off and slept with it in his bed roll. Sometime later, I happened to be talking to a policeman in Williams Lake and we talked about Henry. He told me that he knew him very well. His padded belt was a money belt and he was a walking bank for the members of the band. If anyone ever dared to attempt a robbery, he would have had to contend with the whole band.

Henry was up by daylight and had a fire going in the stove. The boy left the cabin and I heard a horse going down to the river. Half an hour later, he returned, leading three others all saddled and ready to go. We had to ford the river. Henry told us to kneel in the saddle and let the horses find their own footing across the boulder-strewn bottom of the fording place. The current was swift and each horse faced upstream and walked sideways, angling across the current. I have never seen water as sky-blue as in that river, not far below where it left the lake. Looking down into it, all the boulders and even the horses' legs and bodies looked blue. At one point, the water came up almost to my horse's back. He felt his way along with his hoofs and never hesitated or stumbled. It was quite an experience. It would have been impossible for a man to wade through that current.

About a mile beyond the river, with the Indian boy in the lead, we turned off the trail and headed into a stand of jackpine for a few hundred yards, and there was the balloon. It was badly torn and part of it lay on the ground. The chandelier lay on some small logs, with one bomb and a few sandbags still attached. The battery box and the demolition charge were gone and it appeared that they must have been torn away by treetops along its path. It was evident that it had landed in water along its way, as a number of sandbags had dropped their sand through bottoms that had obviously been soaked in water. An island in the river about an acre in area had heen burned over about two weeks earlier. There was no apparent reason for a fire to start on that island. It was in the path of the balloon's travel and from the condition of grass under the part of the balloon that was on the ground, the time of its grounding appeared to

## Balloon northeast of Chilko Lake



Balloon chandelier with one bomb attached. Part of balloon envelope lies in background.

coincide with that of the fire. Again, this could only be assumed.

There were still three other reports that I had to investigate. One came from Red Pass Junction near Jasper and another from a farm near the foot of Mount Robson. Both reported grounded balloons clearly visible. Sergeant Smith and I took the train to Red Pass, arriving about 5:00 a.m. on a Sundaymorning. The combined station and section house was just nearing the end of a Saturday night party. There were about eight people there, most of them nearing the final stages of exhaustion and intoxication. One had already passed out on the floor and others walked to and fro over him as he blissfully slept.

We had a job to do and obviously this was no place for us, but we each had a beer just to be sociable. Walking into such a party when you are tired and hungry, one can hardly adopt a party spirit. We finally persuaded someone to cook us some breakfast and got the section foreman, who was reasonably sober, to take us about a mile east on the railway to where the balloon was visible from the tracks. We could see it clearly. It was about a mile up the mountain, at the foot of a vertical rock face above the timber line. Although it had rained down where we were, it had been snowing up there and the snow line was about half way up. Our guide told us the balloon had first been reported about a week earlier and that it had positively not been there longer than that. Looking at it with binoculars, it was clearly visible and the early morning sun reflected from it, showing it to be a light buff color and apparently hanging from a jagged rock where strata was nearly vertical. The background of rock was weathered brown. It was in strong contrast against the rock wall and above the white of the new snow below.

It took us a good hour of steady climbing through the small trees and brush of the lower slopes before we got into the snow. From there on, the trees ended abruptly and we had to climb in a zig-zag course in loose shale slide rock. The higher we climbed, the deeper the snow became, and footing became ever more difficult and treacherous. We finally had to resort to working our way up a small ravine where rock projections gave us some footing and where there was some scrub brush for an occasional handhold.

The sun came out brightly now and it became quite warm as we worked up the ravine onto a narrow bench. Here the snow was almost knee-deep, but we got a clear

view of our objective. It was only about a hundred yards above us, but it was very obviously not a balloon. Binoculars brought everything out in detail. A slab of shale rock had recently slipped away and fallen, probably from recent rain and frost action, exposing a near vertical, light buff coloured face, that now reflected the brilliant sunlight. Its pattern was so typical of balloons we had encountered, trailing from some treetop or snag, that from the railway tracks now about a mile below us, we had both been certain of its identification. It was a relief to know that we didn't have to climb the rest of the way, because it would have been almost impossible without the safety of ropes and climbing gear.

We started back, thankful for not having to continue the climb, but regretting the waste of time and effort. Our return was almost as slow as our climb. It was slippery and treacherous and to make matters worse, black flies now swarmed from every bit of brush we came near. I have never encountered any quite so vicious. Every bite drew blood and they stung like mosquitoes, only worse. They finally drove us out onto the slide until we were able to get down below the snow.

We hiked back along the railway to the station and arrived at about noon. There we met a woman from a farm near the foot of Mount Robson. Somehow she had gotten word of our being here and she had come to report the other balloon, which was visible from her place and located on the mountainside to the south of the railway. That afternoon, we decided to try to climb up to it. We made our way upward for nearly two hours, up along the side of vertical rock faces, through a tangle of vine cedar and buck brush which at times was almost impossible to push through. Finally, we got to a place where we could see the thing with binoculars, but again we could not be sure of its identity.

It looked like a split and broken tree, but we could not be sure. The climb from here on was almost impossible. We were again into snow. There were numerous small rock bluffs where the only way up was through crevasses. We looked up at it several times and it seemed we were never going to get to it. Finally, after a rest, Smitty remarked, "Captain, I've just been thinking. The war is over and if some idiot is so stupid as to climb up to that thing, he deserves to get blown up." I looked at him for a bit, too winded to even talk. "Smitty," I got out at last, "I was just about to say the same thing. You just made my mind up. Let's get to hell out of here." We never did know what that thing was, but I think we made the right decision.

It was in mid-October that I had our last report. Most of my men were now gone and I had been requested to stay on and put the Brigade camp and other areas on a maintenance basis, pending decisions as to their disposal. The call came in from a place called Goat River, where a railway section crew was employed. The man who reported it was a trapper, Nels Larsen, who had just returned from a trip up into the mountains. He was positive about his identification, so I took the only man I had with any hush experience and we went east by train. Larsen was waiting for us and we spent the night with him and the next day made our way up the Goat River over a well-used trail. The weather had been warm and there was no snow until we reached his first cabin, about fifteen miles up, near the foot of a deep ravine that extended upward to the foot of a glacier. We had to cross the river to reach his cabin, which was high on a bench on the other side. A steel cable was strung across the river some thirty feet above the water, strung from what looked like rather dilapidated head framework. A small plank frame suspended from two pulleys ran on the cable and light pull ropes attached to the frame ran through pulleys of the head frames each side. You simply sat on the plank platform and pulled yourself across by the ropes. It provided rather a sensational ride.

His cabin was large and had three bunks of split cedar, each covered with two caribou hides. These provided as comfortable a mattress as I have ever slept on. It was still early when we arrived, so we went on up the trail along the canyon rim to where we could see Larsen's balloon. It was about a quarter of a mile away across the canyon and well above where we were. Through binoculars, it certainly looked like a balloon, but I had been fooled before and was not sure. The side hill was steep with numerous small rock bluffs and some snow-slide scars. Most of the tree cover was cedar, with some hemlock which was rather out of place this high in the mountains of the northern interior. I decided that we could reach it by going up the other side of the river, so we returned to the cahin.

Larsen was quite a story teller and that evening he told us some rather interesting ones. He had some pictures of a grizzly he had shot up there in the big slide below the glacier. It measured more than ten feet in length. Another story was of a moose he had shot up above timber line. He claimed it to be the biggest head ever seen in the area. He said in his Swedish accent, "The reason that old hull never gets shot vas because his head vas so vide he couldn't get down through the timber. He had to stay in the high country until his horns dropped off. By that time the hunting season vas closed. I cooked some of that moose for two days, by gosh he's so tough you couldn't get a fork into the gravy."

He told us stories of all the caribou up in the alpine country and of the wolves that usually followed them. "I never need any music in this country because every night those wolves, they make music yoost like an orchestra."

That evening it rained and during the night it turned to snow, so that in the morning we could see that the mountain side where we had to go was heavy with snow. Travel was wet and miserable and we were soon soaked through from the wet snow that hung on every bush that we had to push our way through. As we climbed, the snow got deeper and our direction was hard to orient. Fog now settled down into the canyon, making things more difficult. Finally, after about two hours, we found ourselves working along a steep ledge below a rock wall. The ledge became narrower and the trees became shorter and finally disappeared. As the fog lifted a bit, we found ourselves on top of a vertical bluff about a hundred feet high. All we could do was backtrack and work our way down. Finally, the fog lifted enough for us to see where we were. We had climbed higher than we realized and were in fact at a height parallel to the toe of the glacier in the head of the gulch. There was about six inches of snow on the ground and covering all the brush and vine cedar. Each touch of a branch or bush against your thighs sent a chilling dash of iced water through already saturated clothing to run down into your shoes.

Eventually, we got our bearings and were able to find our objective. We were in an area of ancient cedar growth. There were a number of old trees of thick stubby growth with several tops to each tree. Larsen's balloon turned out to be one of these — a tree that was dead with a double top. The larger of the tops had recently blown down, stripping bark from half the tree in its fall, to expose light coloured inside wood. A strip of bark some twenty feet long still hung from the fork of the tree. It was about two feet wide and it turned and waved in the slightest breeze. Looking at it the day before from the other side of the gulch, I was almost certain it was a balloon, hanging, as we had found so many others, from the top of a tree. Once more we had been fooled.

It didn't take us long to get started back. Larsen felt badly that he had led us on such a fruitless trip. Once we were back to the trail and out of the chilling dash of snow-

covered brush, we started to warm up. Legs and thighs that were nearly numb from the stinging cold soon became warm. Water sloshed in our shoes so we stopped to drain them and wring out our socks. We had brought our packs across the river when we crossed in the morning, so we were ready to start out.

By the time we reached the valley in late afternoon, we were surprised to find that a good six inches of snow now covered the ground. Our clothes were nearly dry by the time we arrived at the house and a cup of hot coffee, well-spiked with rum, drove out any feeling of chill that remained in our legs. We had a long wait ahead for the passenger train which would pick us up at about eleven that night for the trip home.

Larsen had chores to do and he suggested that Bill and I take a rifle each and go out along the river bank to see if we could get a deer, which should be easy to spot in the heavy snow that was now on the ground. We kept about 200 yards apart, making our way out to the river bank. Here we had a clear view for nearly half a mile. We both waited until it was nearly dark. When the light faded, we made our way back to the house. The sky had cleared off completely and stars now shone, and the chill of a clear cold evening now closed in.

From the hillside across the river, there was barking, like that of some big dog; then another, some distance away. It was followed by a long, deep, baying howl. Nels met us at the door. "You hear that over there? By yimminy, I think you're going to hear mine orchestra tonight. There's a dead horse in the field over west of here and this snow's going to bring the wolves down." One of the railway section crew came by as we stood listening. He said he had just come by a bend in the river a half mile back and had seen two wolves swim across.

We had just finished supper when the barking started again. This time it was close; obviously at the dead borse to the west of us. Then the howling started. One would have thought by the noise they made that there were twenty wolves, but Nels said he could only hear five. Some were deep-throated howls, others started with a high pitch that trailed off to a long, deep moan. In the dark, it was eerie, but as Nels said, it was sure a great orchestra. I have never heard anything like it before or since. We went back inside because of the cold and were followed by Nels' two horses, which were being fed out in the yard. They, too, tried to get into the door and stood on the porch until he decided to put them into the barn. I was surprised to see that one of them actually trembled from fear of that howling, which continued, and which sounded, in the dark, like it was only a few yards away.

The peaks of the eastern horizon now lit up from the rising moon. The howling increased in volume and the hills around rang back echoes of their songs until it gave the impression that wolves were everywhere. Then suddenly they all stopped. The echoes died away and there was nothing but cold, clear silence. Then there was not another sound, except for the stamping of the horses' hoofs in the barn nearby.

Nels broke the silence. "Vell, that's the intermission. Maybe they sing again after a vile."

The wolves never did sing for us again. Instead of an intermission, it proved to be the finale to our Japanese balloon and bomb disposal work. We returned to Prince George that night and the next day, I wrote by final report. It had all been quite an exciting experience, and looking back at it now, I would not want to have missed any of it.

Of the number of balloons we dealt with, it was the first three that were the most critical. The one at Takla Landing was only the second found in North America. We really knew nothing of what the Japanese had planned in this operation, or what type of trap they could have had waiting for us. The large bomb at Cedarvale was the first of the anti-personnel types found on the continent. Although each turned out to be routine, we had to anticipate a trap. It was rather like the game of Russian roulette, where you put a gun to your head and pull the trigger before you find out if it is loaded.

In the handling of any war equipment — machine gun, rifle, bayonet, grenade or mortar bomb — I always sensed the feeling that they were made for death and destruction; yet in handling the Japanese balloons and their equipment, particularly the later ones, I felt that they were not entirely the product of a savage war machine, but were most likely assembled by the hands of Japanese women. Rather then being released with a vicious curse for death and destruction, they may instead have held a woman's prayer for peace and good will.

To my knowledge, not one of us sustained so much as a cut finger in the entire operation over a period of eight months. As far as we knew, there was never any attempt to trick or booby trap any of them. Had they been German or our own, we probably would not have survived. Throughout it all, we had to be constantly alert with a keen vigilance and a justifiable dread of what could be waiting. The much-dreaded bacteriological warfare never happened.

There were no ribbons, medals or badges handed out to any of us, nor did we receive any recognition for the fact that our small group was the only operational force of the army in Canada in actual contact with enemy operations on Canadian soil. Our Colonel in the Vancouver Headquarters received the O.B.E. and a staff sergeant in his department received the M.B.E.. We, out in the wilderness of British Columbia, had all of the trips and excitement and now have all of the memories.

There are two people in particular to whom I owe thanks for their help through these operations. First is Lieutenant Commander Robert Borradaile, R.C.N.V.R. He was in Command of all Bomb disposal operations and training in Canada and the best of instructors that I have ever known. He tripped me in a verbal examination while questioning me on past instruction. To my first question, he gave his approval. To the second, he stopped me short, saying, "That's all for you." I questioned why. His answer was simple. "Because you're dead. Your answer was a mistake and in bomb disposal you must always remember that you are only allowed one mistake and it's all over. Don't forget – That's all for you, Captain."

Then there is Sergeant W.V.L. Smith, whom I can never thank enough. There were never any problems that really got him down. He had initiative and ingenuity, which got us out of many difficult situations. He could turn any hardship or tough problem into a joke and that quality in a man is hard to find, but very necessary in the situations we were involved in. I am sure he must have enjoyed the whole experience as much as I did.

I have always heen a lover of the wilderness and nature, and our many trips into the wilds, both in winter and summer, were all a wonderful experience. It seems significant that, at the start of our operations, it was a serenade of wolves that was played for our overture, and it was with one grand orchestration that wolves played our finale before the curtain went down and we all went home.

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