



Grant McConachie.

Bush Tale

Canadian bush pilots really did fly serum to sick children in isolated northern communities. They did all the things you ever saw them do in old movies and they're doing them still.

One of the most celebrated in his youth was Grant McConachie.

In 1932, when he was twenty-three, he made a daring rescue of two brothers named Sens who had been badly burned when a stove exploded in their cabin 150 miles north of Edmonton.

The only way to reach them was by plane, and in the north there were no runways. Planes landed on lakes, with the wheels on the frozen surface in the winter and on pontoons in the water in the summer.

In the fall the ice was too thin for wheels and too thick for pontoons. It was now October and there was no logical place to land at all.

McConachie figured a way. He took off in his blue Fokker monoplane and landed on the narrow beach of a lake near the stricken men's cabin. The Fokker had no brakes but it did have an anchor on the end of a rope. He brought the Fokker down, one wheel in the water, one on the beach. He threw over the anchor, which was supposed to catch on the ground but didn't, and rolled to a

stop at the end of the beach. The brothers were bandaged and loaded aboard the plane, and McConachie tied the tail of his plane to a tree stump until he built up sufficient power to take off from the short runway. A trapper cut the rope with an ax and the plane took off. It immediately began to vibrate frightfully.

McConachie later described the long flight home: "The shuddering continued. It increased when I put on more power, diminishing as I pulled the throttle back, but I couldn't figure out what it was. The engine seemed to be working all right. Chris couldn't find any damage to the fuselage. However, we were able to gain some altitude and continue the flight."

He made a dead stick landing in Edmonton, stepped out and found that the propeller had split down the middle while chopping through bushes on take-off. The only thing that held it together during the long voyage home was the thin metal binding.

The Sens brothers survived and went back to their cabin in the woods.

McConachie's air company, United Air Transport, inaugurated the first airmail service to the Yukon in 1937, and he went on to become president of Canadian Pacific Airlines.

The Best Map by a Dam Site

The basic information for a road map comes from the sky. So does the planning map for the pipeline from Saskatchewan to New Brunswick. So has the best map ever made of the Republic of Indonesia. So, pretty soon, will the most precise map ever made of the world.

Northway-Gestalt Corporation of Toronto has five aircraft equipped with twin television cameras. The cameras take stereoscopic pictures of the ground below. The Gestalt Photo Mapper then eliminates the distortions caused by terrain relief and perspective, produces an orthophoto map on film and stores precise bits of information about ground elevations—700,000 bits for each small section of the photograph—on magnetic tape. The GPM can then be used to make a three-dimensional Digital Elevation Model and maps. These can be used, for example, to pick a site for a hydro-electric power dam.

The map coordinates and the proposed height of the dam are read into the computer, which calculates the total volume of water that will be stored by the dam, and from this, the dam's electrical power potential can be determined.

Northway-Gestalt aircraft fly some 70,000 kilometres a year. Since 1946 they have surveyed the terrain in sixty countries. Similar advanced equipment will soon be used to map the world from the Columbia Space Shuttle.