

1913-1957

The quest to conquer winter

"The first snowmobile race was held the day they made the second snowmobile."

Anonymous

America's great era of motorized transportation was underway. Orville and Wilbur Wright proved man could fly. Henry Ford revolutionized the automotive industry, building interchangeable parts and mass-producing his cars on a unique assembly line.

But there was still winter with which to contend. There were heavy snows and unpassable drifts which rendered wheeled vehicles useless. The need to conquer traveling despite the snow generated a continuing wave of creations for that express purpose.

In 1913, Virgil D. White, a Ford automobile dealer in West Ossipee, New Hampshire, invented a caterpillar-type tracked unit which could be mounted to the rear axle of a Ford car, along with a set of skis for the front end, complete with independent suspension arms.

There were others similar to it, before and after, but White applied for a patent on his particular invention and was granted a copyright on the name he gave it.

He named it the "Snowmobile."

In 1917, Otto Johnson, a farmer in the Red River Valley region near Roseau, Minnesota, built a small one-man motorized toboggan. It was less than an instant success, and wasn't around for long.

Early in the winter of 1922, a mechanically-minded 15-year-old boy in Valcourt, Quebec, turned his attentions from the motorized toys he had been building for his younger brothers and sisters to a more ambitious project.

Joseph Armand Bombardier had an idea for a motorized sleigh, using the motor from a used Model T Ford he had purchased. Young Bombardier designed a rough frame which employed four ski runners, the front runners turned by a rope, and he mounted the motor on the rear. He hand-carved a propellor for propulsion, and fixed a seat in place in front of the engine.

It was Christmas time when the youngster had his creation ready for its pilot run. He skidded it out of the garage, fired up the engine and drove the contraption right down the streets of Valcourt.

J. Armand's father was outraged. And horrified. He ordered the young inventor to drive the machine home and take it apart.

In 1924, in snowbound Sayner, Wisconsin, a young store owner began to realize a dream. Born with a club foot that handicapped his ability to use snowshoes, thus curtailing the fishing and hunting activities he dearly loved, Carl Eliason began assembling parts and pieces to a wooden toboggan. He constructed a frail craft which was powered by a 2½-horsepower Johnson outboard motor, a radiator from a car and a chain track with wooden lugs.

Eliason's first "motor toboggan" was completed in 1925. He built another in 1926 (which was still operative 51 years later), and in 1927, Eliason was granted a patent on the first single-track, one passenger snowmobile.

On January 31, 1926, the first "snowmobile race" in history was held on Rangeline Lake near Three Lakes, Wisconsin.

Bill Neu of Three Lakes and Harold Hanson of Eagle River were drivers of Virgil White-type "Ford snowmobiles" in a special grudge race organized as part of Three Lakes' first winter sports carnival. Neu was driving for Badger Garage of Three Lakes in a car named "The Tramp." It had been "specially tuned" by Badger Garage, with an overhead valve and special carburetor. Hansen was driving for Strong and Manley Ford Agency of Eagle River.

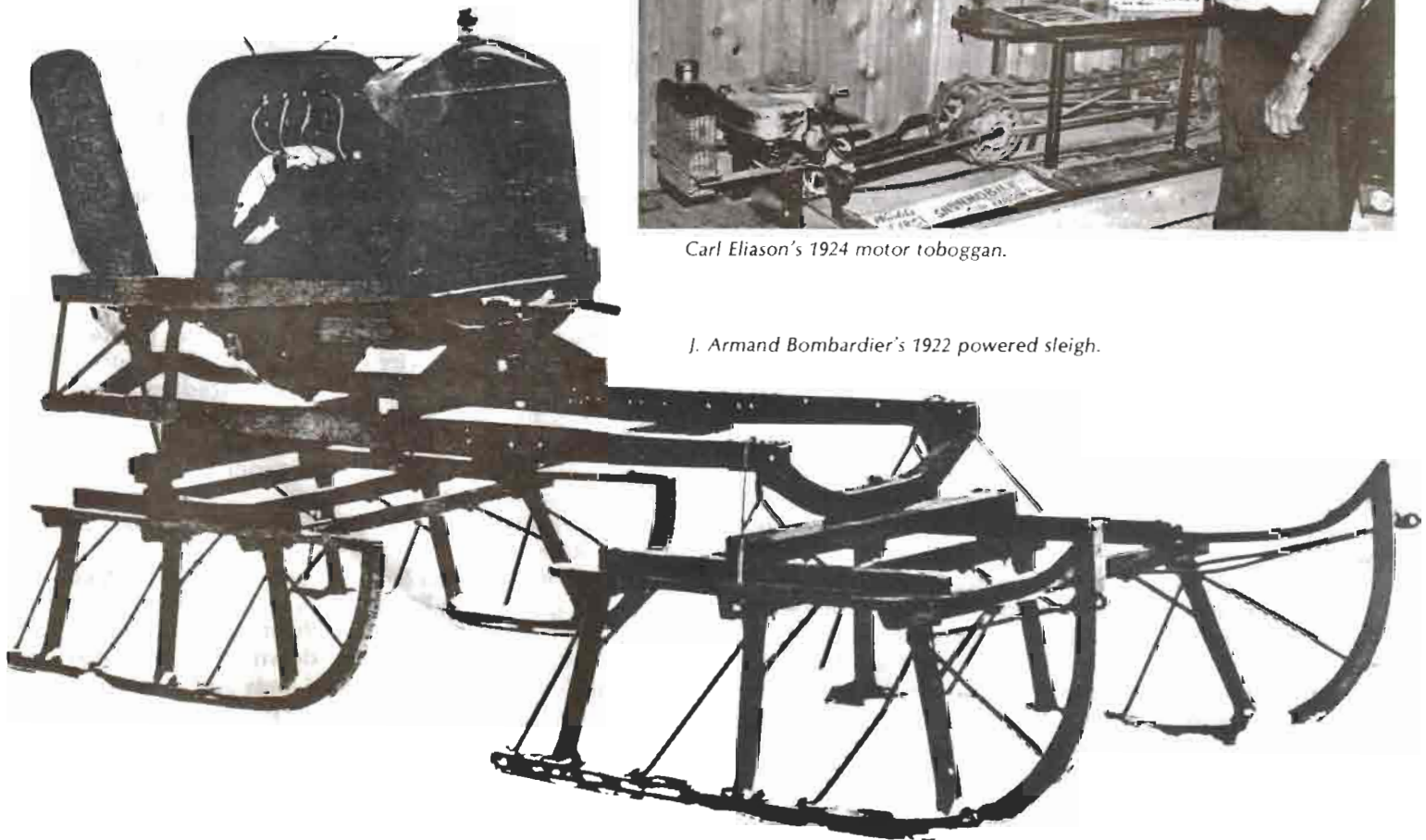
A crowd of more than 200 people gathered on the lake to see the great Eagle River vs. Three Lakes duel, but it wasn't close. Hansen's car overheated and failed to finish. Neu, with the car's top down and windshield raised for less air resistance, raced away and won a new .22 caliber rifle, as well as the lusty cheers of his hometown backers.



The first "snowmobile race" at Three Lakes, Wisconsin, January 31, 1926. Winner Bill Neu is at the right, loser Harold Hanson on the left.

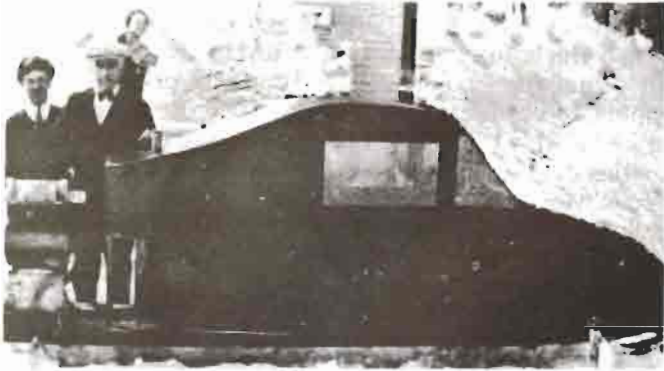


Carl Eliason's 1924 motor toboggan.



J. Armand Bombardier's 1922 powered sleigh.

J. Armand Bombardier was 27 years old in 1934, and had learned a great deal about life, mechanics and the business world in the 12 years since his first experiments with an over-the-snow vehicle. He had moved away from Valcourt for a short time, seriously contemplating entering the seminary. Instead, he returned to Valcourt and established a successful business. He was well-respected as a repairman of automobile and agricultural motors and equipment.



Above, 1933 propeller-driven Bombardier snow vehicle. Left, J. Armand Bombardier. Below, Bombardier's first prototype single-engine one-passenger snowmobile during testing at Valcourt, Quebec, in 1957.



In his spare time, Bombardier continued to tinker with his over-the-snow ideas, but he had built nothing satisfactory, nothing reliable.

During the winter of 1934, a blizzard buried Valcourt. J. Armand's oldest son was desperately ill with appendicitis. Roads were impassable. There was no way for medical help to reach the tiny village. Bombardier's son died.

J. Armand Bombardier's interest in over-the-snow travel was no longer whimsical. He realized the urgency

of overcoming winter's cruelty. He began working tirelessly on a solution. By the winter of 1936-37, he had developed a large, enclosed snow vehicle that did what he intended. It was the beginning of a new era in reliable transportation in winter with heavy-duty equipment.

Bombardier was never content, however, as he created and built a continuing series of over-the-snow machines during the next 20 years. He sought a light, maneuverable machine. In 1957, he built one—a bullet-shaped single passenger snow machine with enclosed sides. It had a front-mounted engine. He was close to the solution he had in mind.

In 1947, Mike Bosak, a farmer and cabinet maker from the Beausejour, Manitoba, area, started work on a motorized toboggan. Bosak had read about the inventions of Bombardier and others, and thinking of his trapper friends who struggled through the bush with loads of fur in the winter, decided a smaller snow vehicle would be more practical.

He secretly began working on a crude prototype in his cabinet shop in the barn, hiding his invention from his wife, Jessie. Money was scarce; few cabinets were being built. So when Jessie approached the barn daily with milk pails clinking, Bosak hid his handiwork. One day, however, the suspicious wife sat her milk pails down before she reached the barn, flung open the doors and caught her husband red-handed. Suddenly, on that cold winter day, the barn got warm.



Mike Bosak with later-model Bosak Power Toboggan.

Bosak didn't give up, however. In 1948, he leaped onto his contraption, the motor roared and off he went. A total of 150 feet. He towed it back to the barn, and began making alterations that resulted in his first successful "Bosak power toboggan" in the winter of 1948-49. In ensuing years, he built 50 machines a season and 30 years later, some of Bosak's power toboggans were still in use by northern Canadian trappers.

During the winter of 1954-55, David Johnson plunged through waist-deep snow on an unsuccessful deer hunt. Disgusted and tired, he decided there had to be a better way. A partner in the former Hetteen Hoist and Derrick, renamed Polaris Industries in 1954, Johnson suggested to



The original Polaris team: from left, Allan Hetteen, Edgar Hetteen and David Johnson.

his partners and brothers-in-law, Edgar and Allan Hetteen, that the company build a machine to travel over the snow.

Polaris Industries built lots of things. Special machines and parts for farmers in the Roseau area. Parts for Ford Motor Company. Why not a machine for traveling on snow?

Edgar and David Johnson began working on a vehicle, using ideas from the Eliason motor toboggan they had read about. The first machine they built used an auger as its propulsion device. . . and it soon was nicknamed the "Screaming Lena" because of its tendency to snake sideways every time it hit hard-packed snow or road surface. Back to the shop it went and soon a version with a track made of elevator chain appeared.

Across the road in Roseau, H. F. Peterson of Peterson Lumber Company took an interest in the vehicle. He offered to buy it. The fledgling Polaris Industries was short on its forthcoming payroll — as usual — so the machine was sold to Peterson for \$465.

"That turned out to be the best thing that happened," David Johnson recalled. "I told him when he bought it that it was an experimental machine and not to go too far from the roads. But Pete was a fox and rabbit hunter and he didn't listen. He took off cross-country and we'd see him walking back on snowshoes. It would be broken down out in the middle of a section someplace, so we had to pull it by hand to the closest road and get it back into town to repair it. That's how improvements were constantly made on the first machine."



Polaris' 1956 Sno-Traveler.

Edgar Hetteen then realized this vehicle had commercial possibilities. In 1955-56, Polaris built and sold five more. In 1956-57, the company went into major production, building 75 "Sno-Travelers."

It was a difficult time, however. Polaris Industries constantly teetered on the brink of financial disaster. The banking community and other conservative investors looked upon this contraption with amused disdain. Were the Hetteens crazy? Who would ever buy one of those things?

The Hetteens and Johnson, however, knew better. They could see the Sno-Traveler had great potential as a winter vehicle lumbermen could use to cruise timber, utility companies could use for repairing power lines, trappers and hunters and Eskimos could use instead of dog sleds. They could envision doctors and Eskimo missionaries employing the Sno-Traveler as an emergency vehicle. Most people, however, had trouble translating the Polaris visions into reality.



Allan Hetteen with the first production Polaris Sno-Traveler in 1955.

"People would always ask, 'What's that?'" David Johnson said. "I'd tell them it's a SnoTraveler, or snowmobile. They'd say, 'What does it do?'"

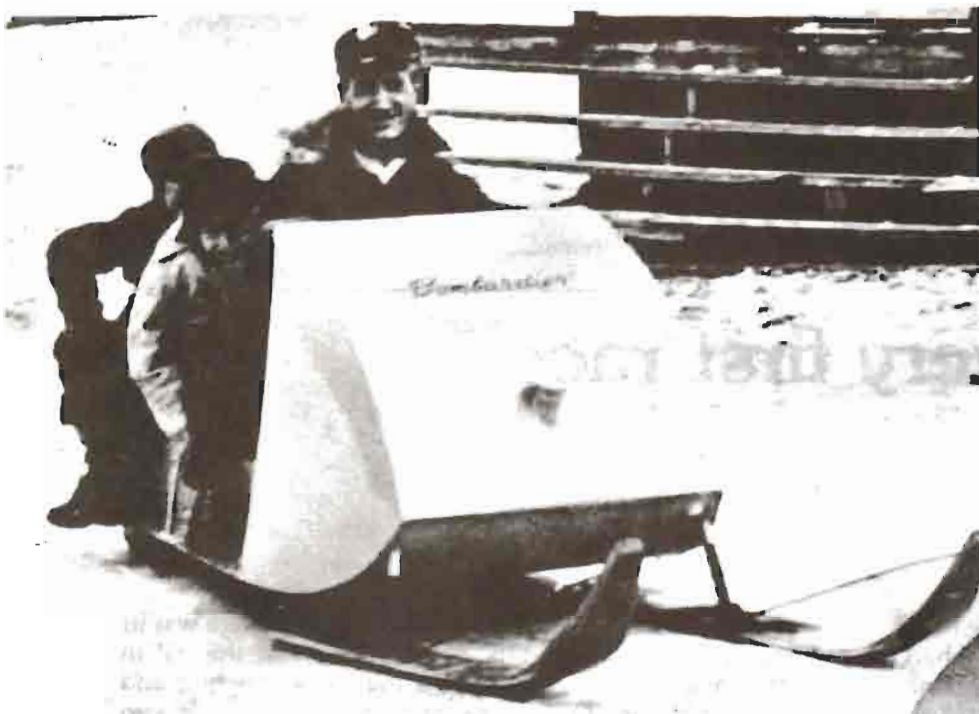
"It goes on snow."

"'What do you want to go on snow for?'"

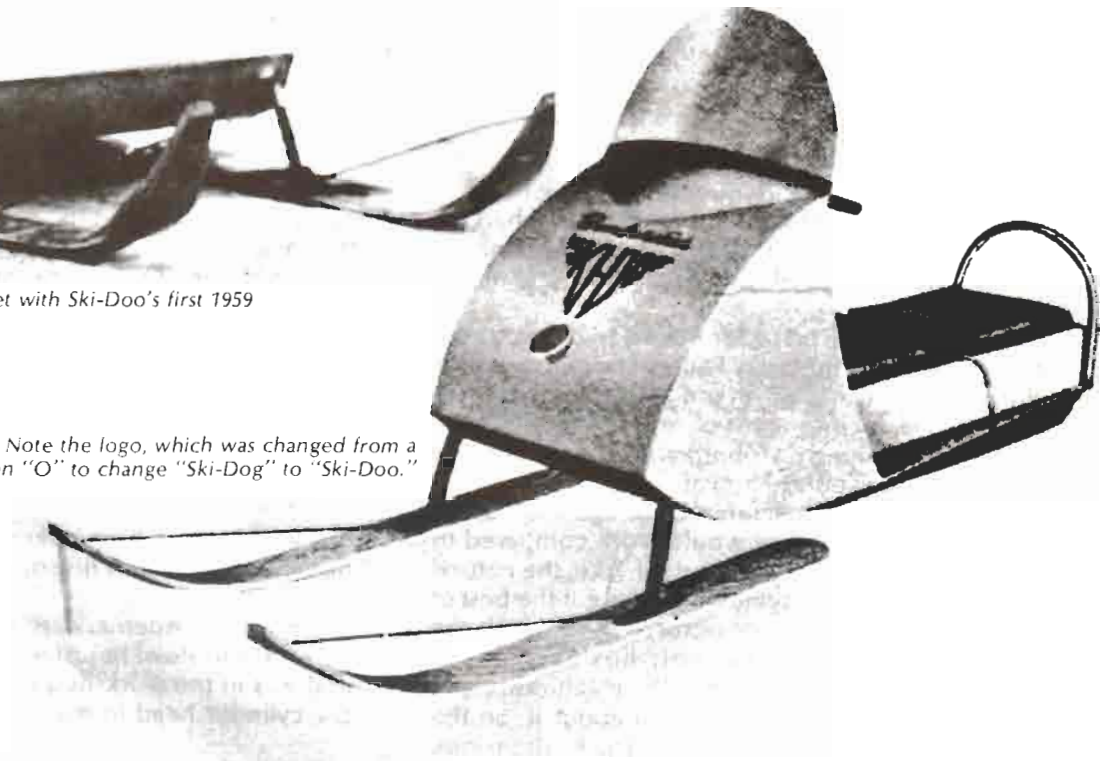
"They had no conception. If you had to go on snow, you'd use a dog team."

Edgar and David had to prove the Sno-Traveler was better than a dog team. In February of 1957, they loaded a pair of Sno-Travelers on a truck and drove to the end of the road in northern Manitoba to attend the annual Trapper's Festival in The Pas. There, the first informal races involving a single-track snowmobile took place. Against sled dog teams.

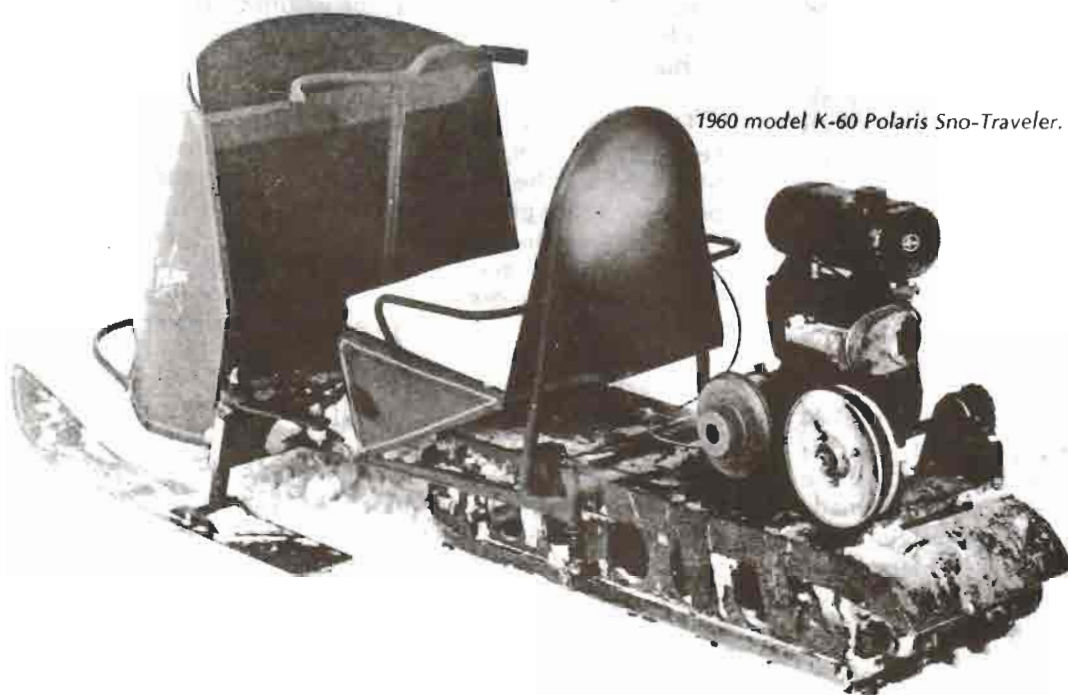
The objective was to prove the Sno-Traveler could outpull sled dogs, and beat dog teams across the lake. It was a successful trip. The snowmobiles beat the dogs . . . barely. After the 1957 trip to The Pas, Winnipeg distributor Harry Paul placed an order for 25 snowmobiles. It was the beginning of big things for Polaris Industries . . . and the beginning of a traumatic turn in the life of company president Edgar Hetteen.



Quebec priest Father Maurice Oiumet with Ski-Doo's first 1959 production machine.



Prototype 1959 Ski-Doo. Note the logo, which was changed from a "G" to an "O" to change "Ski-Dog" to "Ski-Doo."



1960 model K-60 Polaris Sno-Traveler.