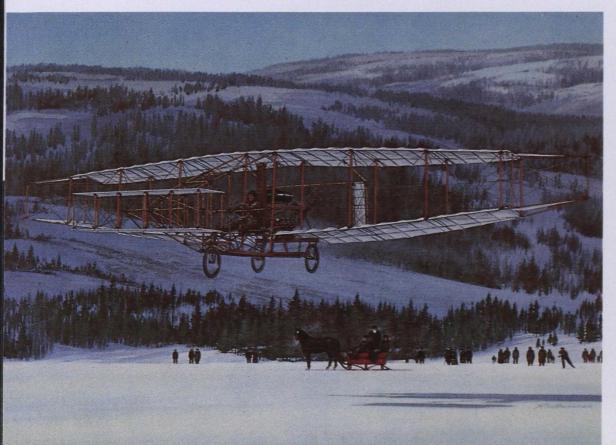
Introduction



The Silver Dart, the first powered, heavierthan-air machine to fly in Canada, piloted by J.A.O. McCurdy, made its first flight over Baddeck Bay, Nova Scotia, on February 23, 1909. When Canada became a nation in 1867, the major obstacle in forming a united country was the vastness of the land — an enormous expanse of over 10 million km² from east to west and north to south. A demanding climate and geography also created some of the most challenging conditions on earth. Today, most of Canada's 26 million people are clustered in large cities in a narrow 5 500-km-long ribbon of land skirting its southern border with the United States.

Canadians have not so much tamed their land as they have been inspired by it, and they have used their environment as a means of discovery. They have, for example, cracked the granite shield wide open to let the railway through, linking the Pacific with the Atlantic. They invented vehicles to carry people and goods across snow and muskeg; ships that could ply through the thickest sheets of ice; and they developed aircraft that could fly into isolated wilderness, then land and take off again on short, crude runways, or on numerous lakes and rivers. In large, crowded urban areas they designed elevated guideways and propelled automated vehicles up and out of the way of city traffic.

Confronted with great distances, Canadians have had to develop flexible and efficient transportation routes. Scientists, engineers and technicians have designed and adapted new technologies to create these networks — networks that have made Canadians leaders in providing transportation solutions to countries throughout the world.