proving and development of these deposits marked the beginning of Canadian air transport. The airplane opened a new frontier to the prospector the geologist and the mining engineer. From our east coast to our west coast and northward to the Arctic, potential mining regions of Canada, otherwise inaccessible, were subjected to an intensified frontal attack. Among the discoveries resulting therefrom was the pitchblende deposit at Great Bear Lake which turned the attention of the world upon 1000 square miles of promising mineralized area. Today we have copper, zinc, silver, gold and radium properties which were prospected, proven and developed by air transport. The personnel, supplies and mining machinery which were flown into these properties were the backbone of our air transport during the "Thirties." Today the quest continues at an even greater pace as new discoveries on the industrial front bring forth new demands for the lighter metals and alloys.

With regard to "light" metals I should like to refer to Aluminum Company of Canada's proposed development in British Columbia. Kitimat, an old Indian village lying some 400 miles north of Vancouver, may become the site of one of the world's largest aluminum smelters. Initial development, costing $200,000,000 over a 3-year period, is now under way. Ultimate development will require a further $300,000,000 investment and would increase Kitimat's annual production from 330 million pounds of aluminum to a billion one hundred million pounds or about 1½ times production at Arvida. Although several roads are under construction to link the major centers of the work with existing road and rail arteries nevertheless the project is largely dependent upon air services. Several carriers are now actively engaged in transporting materials and supplies to and from the construction areas and one operator is reported to have signed the largest air transport contract in Canadian aviation history.

It may be that an important characteristic of the years before us will be the replacement of coal by petroleum. While no one can foretell the precise effect that the recent oil and gas discoveries in Alberta may have upon our economic growth, yet it may well be tremendous. The construction of a pipeline from Edmonton to Superior, Wisconsin, a distance of 1,200 miles, and specialized tanker vessels to ply between Superior and Sarnia, set the stage for substantial expansion in the secondary industries of this province. In "Sarnia Chemical Valley" alone some $40,000,000 is being invested in plant expansion. Cheap transportation of a natural resource in volume quantities is the basis of this development.

From a cost standpoint, few means of transport can compare with water carriage. The utilization of specialized lake carriers has been a factor in the development of the iron ore deposits of Steep Rock. Although discovered in 1862, production did not begin until 1945. The ensuing six years has been a period of production and further development. The 1950 production approximated 1,500,000 tons; by 1955 this will be more than doubled. The total possible annual production is said to be 15,000,000 tons annually. In 1947 the proven and probable reserves were estimated at 75,000,000 tons; later estimates raised this figure to 300,000,000 tons; and I now understand that an estimate of 1,000,000,000 tons has recently been made.