## Charles E. Brooks – Canadian National Railway Chief of Motive Power 1923 - 1933



Charles E. 'Ned' Brooks was one of North America's best known locomotive engineers during the 1920's. He was born about 1887 in Constantinople and migrated to Canada with his parents as a child. Completing his education at Trinity College, Port Hope, Ontario and McGill University, Montréal, Quebec, his career began with the Grand Trunk Pacific (GTP) as a machinist in Western Canada. He progressed in various roles at Rivers and Portage La Prairie, Manitoba., Watrous and Regina, Saskatchewan., Wainwright and Edmonton, Alberta., and Winnipeg, Manitoba. Following the absorption of the bankrupt GTP into the newly created, government owned Canadian National Railways (CNR), he was appointed Mechanical Assistant (Locomotives) to the Operating Vice-President in 1920, and in 1923 was made Chief of

Motive Power at the CNR Montréal headquarters.

That year the CNR took delivery from the Canadian Locomotive Company (CLC) of the U-1-a class 4-8-2 Mountain type, and the following year CLC delivered the five T-2-a class booster equipped 2-10-2's, which at the time were the heaviest and most powerful locomotives in the British Empire, with a nominal tractive effort of 91,700 lbs. Brooks wrote an article about them in the Railway Age.

Brooks made an inspection tour of USA and Europe in 1923, and was particularly interested in the development of diesel engines. Visiting the William Beardmore Company in Glasgow, he found them developing a new light weight diesel and saw its potential. Orders were placed and the following year the CNR Shops at Point St. Charles installed one in a railmotor. Encouraged, some more railmotors followed, and in November 1925 ED-60c class No.15820 made a 2,937 mile (4,727 km) delivery run from Montréal to Vancouver in 72 hours, never shutting down the engine and breaking world records for endurance, economy and sustained speed over distance.

Brooks oversaw the development of the general purpose U-2-a class 4-8-4 'Confederation' (Northern), an order for 40 being shared by CLC and Montreal Locomotive Works in 1927. This was a highly successful design, over 200 eventually being built, in various sub-classes.

But Brook's 'baby' was No.9000, the first mainline diesel-electric in the world, completed in 1928. At the time they were called 'Oil-Electrics'. This V-1-a class locomotive comprised two 4-8-2 (2-Do-1) units back-to-back, each with a Beardmore V-12 diesel rated at 1,330 hp at 800rpm, driving a Canadian Westinghouse generator. In August 1929 the units commenced daily service on the 'International Limited', between Montréal and Toronto. In 1932 they were separated and ran other services until retirement in 1939.



Brooks and his 'Oil Electric' No.9000

Brook's last locomotive was the K-5-a class booster equipped 4-6-4 Hudson in 1930. With 80 inch driving wheels, they were capable of 100 mph and were specially built to compete with Canadian Pacific on the Toronto – Montreal corridor. At 330 tons, they were a formidable machine.

With the Depression inhibiting further development, the motive power and car equipment roles were combined under Brooks' leadership. He was Chief of Motive Power and Car Equipment when he died prematurely on 10th April, 1933, aged 46. He was survived by his wife, a son and daughter.

Due to the Depression and the loss of their main advocate for diesel-electric technology, the Canadian National ceased development of diesel locomotives.

## **Sources:**

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