

STATEMENTS AND SPEECHES

INFORMATION DIVISION
DEPARTMENT OF EXTERNAL AFFAIRS
OTTAWA - CANADA

No. 58/13

THE CANADIAN NATIONAL RAILWAYS:
BACKGROUND AND ACCOMPLISHMENT

An address by Donald Gordon, C.M.G., Chairman and President, Canadian National Railways, to the Canadian Club and Empire Club of Toronto April 21, 1958.

In today's newspapers it is commonplace to find such headlines as: Flight to Moon to Take Four Days -- Vanguard Cap Land Marker on Moon -- Two and a Half Million m.p.h. Flight Possible. Anything seems possible in this age of scientific marvels, but the amazing feature is that the possibility of space travel no longer raises the flicker of an eyebrow. Against the contrast provided by these new entrants into the field of movement there will be some who will feel that railroading has become pretty mundane and "old-fashioned". For example, you hear from time to time that the railway industry is unimaginative, and to quote one critic, "tardy in its efforts, apathetic in its attitudes, and belated in a drive towards extensive technological development". Let me say at once that most of such talk turns out upon analysis to be based either upon fundamental misconceptions or upon wisecracks made by newcomers to the transportation industry who suffer from the delusion that what is new is glamorous and what is glamorous is always better.

My intention in talking to you today, therefore, is on behalf of the railway industry to disavow and deprecate such attitudes, to impress upon you that we are efficient and modern in our outlook, that we are and will continue to be a national asset, a vital and influential force in the economy of Canada.

For this purpose, I felt that it might be well to describe some of the dimensions of the organization known as the Canadian National Railways, to reflect on its history, to examine its fabric, and to record some of its accomplishments.

The Canadian National Railways is the largest railway in North America. Its assets total over \$3 billions. It operates a network of nearly 25,000 miles of first main track, serving all ten Canadian Provinces, and reaching into twelve of

the American States. To this trackage - nearly enough steel to girdle the Earth at the Equator - must be added about 9,700 miles of secondary track, yards, sidings, spurs, to serve industry, making a grand total of close to 35,000 miles. We have more than 5,000 stations, ranging from flag stops to immense and complicated terminals, nearly 7,000 bridges, nearly 3,000 locomotives, 121,000 freight cars of all classifications, 3,600 passenger cars, thousands of units of work equipment, roundhouses, shops to maintain equipment in repair, and so on. Incidentally, when thinking about space travel and its vast distances, it is noteworthy that last year in freight and passenger service, C.N.R. trains chalked up a total of 68,000,000 miles -- and that this is equivalent to approximately two-hundred and seventy trips to the Moon.

Here are a few more figures. In 1957, it employed in excess of 124,000 people, which easily makes it the biggest corporate employer in Canada. Actually only twelve Canadian cities have a population larger than this.

Last year, the Company's total revenues amounted in round figures to \$753 millions. In other words, it took in \$1,430 every minute around the clock. If this were in one dollar bills, it would be faster than you could count it.

The C.N.R.'s expenses run high too. Last year its payroll alone exceeded \$425 millions and if pensions, health and welfare expenses are added to this, it can be said that labour compensation accounted for 63% of the Company's total operating expense.

The C.N.R. is in fact the largest corporate buyer or shopper in Canada. Over the past ten years the Company's purchases have averaged about \$282 millions a year. This means that our Purchasing Department spends at the rate of something in excess of \$500 a minute. Every year we go to the market for something like 300,000 different items, ranging from ballast to bed-linen, from lock nuts to locomotives, from caviar to stewing beef, and from silk stocking to structural steel.

On the other hand, the great bulk of our traffic produces a very small margin of profit. On the average, Canadian National must haul more than a ton of freight for two miles to earn enough gross revenue to buy a common lead-pencil.

So far, I have touched only upon the rail operations. Our basic job, of course, is transportation, moving people and goods from one place to another. But the organization is much more than a railway. It operates hotels, steamships, dockyards, bridges, ferries, communications, road transport, express, warehousing, grain elevators, stockyards, buses, trucks, fruit and produce terminals, and many other allied ventures.

The C.N.R. is organized and operated as a business corporation, with the same kind of management procedures as may be found in any private enterprise undertaking. Nevertheless, it cannot escape from the implications of its history nor the obligations and burdens which had to be assumed in the public interest and because of the manner in which the C.N.R. system came into existence. As a consequence, the contribution of this great organization to the nation cannot be adequately evaluated by reference only to the profit and loss standard.

Let me take you back for a few minutes to the formation of the Canadian National System. It was evolved out of the chaos during and after World War I, when the Government was forced to take over three large railway systems - The Canadian Northern, The Grand Trunk, and The Grand Trunk Pacific - all of which were insolvent, and each of which was composed of many constituent and subsidiary companies. In one form or another, the Government also had on its hands the Canadian Government Railways, including the National Transcontinental and the Inter-Colonial. Thus, in 1923, formal arrangements were made for the operation under one unified system of management of all of these railways and their associated enterprises, meaning for all practical purposes the physical amalgamation of well over three hundred separate incorporations. It should also be recalled that the taking over of these private enterprise railway systems represented at that time no plan in terms of socialism or public ownership. It came about simply because of the imperative need that the railways continue to run and also because a default in their outstanding financial obligations (many guaranteed either by a Province, or Canada, or both) would have been a serious blow to the credit standing of Canada itself in the money markets of the world.

Clearly then, this first stage of this huge undertaking, the period 1923 to 1931, might well be called the "Formative Period". It was a time when the amalgamation was being worked out, and the dynamic personality of Sir Henry Thornton was being felt as he breathed the challenge of a new vision into the organization. It was a period of glamour and high hope. The energy and enthusiasm which were applied to the problems of integration, rehabilitation and growth, created a fresh atmosphere and generated confidence in the minds of the public and employee alike.

This period of expansion, however, came to an end with the 1929 depression and the eventual departure of Sir Henry Thornton. This set the stage for the ushering in of the "Caretaker Period" which commenced in 1931.

The catastrophic effects of the 1929 depression on the C.N.R. can be highlighted with the figures for Operating revenues which fell from roughly \$305 millions in 1928 to \$148 millions in 1953. The number of employees declined from

a high point of 109,000 in 1929 to a low point of 74,000 in 1933. In 1931, the deficit for the year was nearly \$61 millions, and from 1931 to 1938 the average annual deficit was \$52 millions. During that period, controversy raged about the future of the C.N.R. and serious attempts were made to persuade the Governments of the day to abandon the effort and to amalgamate the two trans-continental systems under private enterprise management. There were conflicting views about the type of managerial machinery that should be employed. The mood changed from an emphasis on expansion to one of retrenchment, even to the point of foregoing the necessary maintenance of the property. The demoralizing effects of annual deficits that were widely discussed as being ruinous to the country were observed on every side.

The "Caretaker Period" came to a spectacular and abrupt end with the advent of war in 1939 which caught the railway unprepared, but, because of its call to patriotism, presented an even more stirring challenge to the railway organization than the 1923/1931 period. Here was the supreme test for the railwaymen and their machines and the response of the C.N.R. to the demands of war, and indeed of all railways of Canada, was an all-out effort. Every other interest was subordinated to the overriding needs of wartime transportation of goods, material, and human beings. Unfortunately, with the war came scarcities of material, and despite emergency action to obtain such needs as steel rails, equipment, and motive power, the entire war period was one of improvisation and exhaustion of the property. During the period 1938 to 1945, annual revenue ton miles all but trebled and passenger carryings jumped nearly five-fold. From an annual deficit of \$54 millions in 1938, C.N.R. earnings under the impact of wartime demands jumped to a published surplus of \$35 millions in 1943, and during the period 1941 to 1945 the annual surplus averaged \$22½ millions. This, of course, is but one demonstration of the fact that the C.N.R. as an operating plant needs volume to produce satisfactory results. But even more significant is that these figures showed clearly the influence of wartime shortages and controls on costs, both in respect of labour and materials. For this review, however, the important point to realize is that the exhaustion of war came on top of a long period of caretaking management which meant that the post war period brought imperative demands for rehabilitation.

The fourth stage, commencing with the post war period, was and is, for descriptive purposes, a double-barrelled one, and can be termed the "Rehabilitation and Reorientation Period". Simultaneously, facing management were the compelling needs to quickly restore the property from the ravages of war and to meet the challenge of new competition. With the sudden release of equipment and material that had been absorbed in the war effort, the full impact of the changing technology of transportation began to be apparent. I refer,

of course, to the growth pattern of automobiles, trucks, buses and better highways, airlines, water, pipelines, and seaways. An interesting comparison is that the number of registered motor cars in 1923 was roughly 515,000 and the 1956 figures were in excess of 3,000,000, and I suspect would be close to 3,350,000 in 1957. As for trucks, in 1923 there were 54,000 registered, while in 1956 close to a million registrations were recorded.

The period 1946-1950 saw relatively little accomplished in the rehabilitation of the property to offset the exhaustion of war. Materials were still in short supply and yet there was talk as you will recall of post war depression. In any event, I think it fair to say that it was not until the 1950's that planning and investment expenditures reached a scale commensurate with the problems confronting the System. My own entry into the railway industry was in early 1950 so that what I have to say about this latest and current phase in C.N.R. history is in the nature of a first-hand report. This phase I shall call the "Rehabilitation and Reorientation Period". What, then, has been accomplished?

It is no exaggeration to say that a major rehabilitation of the property has been accomplished in a remarkably short space of time. Indeed, what has been achieved is not simply a restoration, but more, a revolution in motive power, in freight and passenger equipment, in fixed plant and facilities, such as marshalling yards, and in organization and methods. It has been a costly process, but in the judgment of management, both necessary and sound. Since 1950, nearly one billion dollars of capital has been ploughed into the property.

Remember, however, that the Caretaker Period, from 1930 to the advent of war, saw little or no improvement expenditures on the property, and that with war came severe wear and tear and exhaustion of plant and equipment. The cumulative result of all these years of use may be seen in the fact that from 1930 to the end of the war only \$205 million had been invested in the property or, in other words, in 15 years the average capital invested annually was only \$14 millions. In such circumstances, it is scarcely to be wondered at that much of the equipment, both motive power and rolling stock, was obsolete, as were many of the yards in terminal areas; the condition of track left much to be desired, the railway was lagging behind the advance of technology in such fields as signalling, and so forth.

The capital expenditure of one billion dollars since 1950 needs to be put into perspective, particularly so in light of the fact that it does not by any means complete the job. First we should recall that the period in question has been a high cost period and that a technological revolution has added

larger units of machinery to our complement of equipment and has, as well, greatly enlarged the use of labour saving devices. Moreover, because of inflation, a depreciation based on original cost has fallen far short of meeting current replacement costs. That is one of the major reasons for the increase in our fixed charges. However, you may be interested to know that our net capital expenditures expressed as a percentage of the total property investment of the System have during the past ten years averaged only 3.4% annually.

Let me now summarize the highlights of these expenditures with some passing comment on the shape of things still to come.

On dieselization from 1950 to the end of 1957, we had spent approximately \$250 millions on the locomotives and the necessary facilities. Our present estimate of the remaining cost to completely dieselize our operations is roughly \$268 millions, to be spent over the next four or five years.

Remarkable improvements have been achieved in our freight equipment, many of the innovations being products of our own research laboratories. The benefits of technological advance in freight car design and construction are strongly represented today in our inventory, for nearly 40% of our freight equipment is new and has been acquired during the past ten years. The improvements from these two features alone -- the acquisition of the diesels and new types of freight equipment -- have yielded substantial dividends in operating performance and service to the public. Here is a yardstick of the range of the improvement. If we were to carry out 1957 volume of traffic at, say, the 1928 level of efficiency, we would have needed no fewer than 1,100 more locomotives and 80,000 more freight cars, and an increase in man-hours which would have added a staggering \$280 millions to our recorded expense. Not only do we carry more traffic with less equipment, but we carry it at faster speeds over the road and with greater convenience to shippers in terms of pick-up and delivery.

I have told you that our passenger equipment was obsolete. In looking over the record, I find that in 1930 some twenty-nine pieces of passenger equipment were purchased, another five in 1931, and then there was a gap with none purchased until 1938. The order at that time was sixteen passenger cars and, of course, through the war period there were practically no deliveries. In 1946, some new first class coaches and roomette cars were placed into operation. In 1952, however, we faced up to the fact that as a minimum, replacement of obsolete and out-moded equipment had to be undertaken on our main passenger trains and for this purpose we took the decision to buy 389 new units at a cost of some \$67 millions.

Concurrently with the acquisition of motive power and equipment, there of course had to proceed the restoration of the roadbed and the track structure to the standard of a first class railway. In the period 1950 to the end of 1957, we have installed 5,591 miles of new rail. This represents about 23% of our first main track mileage. The total cost of such installation has amounted to some \$167 millions.

There has also been a marked increase in the efficiency of our signalling and yard facilities, through an expenditure totalling \$50 millions. In signalling the C.N.R. can fairly claim to be one of the first users of Centralized Traffic Control, (or C.T.C. as it is known) a modern system which makes it possible to handle the heavier volumes of traffic more economically, faster, and with an added margin of safety compared with conventional methods. It is nevertheless true that while plans are well advanced, actual installation has been slower than I like to see because of a scarcity of the highly technical skills required.

Our terminal problems have been enormously complicated by the explosive growth of industrial development that has characterized the post war period. In almost every large city there are extreme problems of congestion and delays which simply cannot be tolerated by present day standards. Electronic hump yards are costly but essential and we have \$71 millions committed already in Moncton, Montreal and Winnipeg. The situation at Toronto remains unsettled and is currently the subject of an intensive study. The forthright co-operation of all planning authorities is being invited in an effort to reach sensible solutions. We already know, however, that it will be very very costly to cure the built-in congestion in this area.

Even in the field of our bookkeeping, accounting, and statistical records, a large scale revolution in methods and procedures is taking place with the development of the electronic data processing devices which are becoming another "must" in modern railroading. One part of our program involves the operation of a computer centre in Montreal. At present this centre is producing pay cheques twice a month for the 70,000 Canadian National employees located between the Atlantic Coast and the Lakehead. The computer performs the complicated calculations involved in railway pay and produces printed payrolls and pay cheques for fifteen-hundred men per hour.

During the next two or three years, we expect to derive advantages from the application of integrated data processing to a wide variety of railway activities. For example, we own approximately 121,000 freight cars which cost some \$620 millions. These cars move two and a half million times each month and the problem of recording these movements and of

digesting and extracting the information we need to speed the movements, increase the utilization, reduce our terminal costs and improve our service can be tackled by computer processing far more effectively than by manual methods.

The Canadian National is not neglecting its important, indeed dominant, role in opening up and developing the resources of the nation. From 1950 to the end of 1957, we have constructed 465 miles of new branch lines mainly for mining development and have, either underway or committed, another 171 miles. We have spent or committed some \$90 millions on such construction and the interested private enterprise corporations have spent, committed, or announced intentions of \$1.2 billions in capital investments in the areas concerned. This is surely a spectacular demonstration of the vital part that railways play in the development of our country.

Railway research works increasingly to tailor our product to the demands of modern day business. The handling of perishable foodstuffs is constantly under survey so as to meet and anticipate developments in this important field. Such innovations as piggy-back operations have been introduced. These began in 1952 between Montreal and Toronto and with the extension last fall of the piggy-back services to commercial truckers developments have been further accelerated.

Now with the record of accomplishment I have set before you in regard to the physical structure of the railway and the improvements made in service, you might expect to hear that these efforts have produced an equal measure of success in our financial results. Our financial story, however, is such a complex one that it requires extensive analysis to bring out all the factors necessary for a complete understanding of it. Time does not permit that sort of detail for this talk so I set it aside for another occasion. This much can be said, however, that the physical rehabilitation of both plant and equipment, which has taken place and is still in progress, is a necessary prelude to successful financial operations. Even more important, the collateral actions which these expenditures require in order to ensure the full benefit of them must be undertaken systematically and logically. To the extent that this fails of realization, the net result will be waste rather than savings or earnings, duplication and redundancy rather than streamlining and efficiency. The hard realities of an increasingly competitive world will have to be faced, for many of the practices pertaining to the railway industry are overdue for change. I include in this such things as the method of rate-making, labour negotiations, community and regional pressures and the various actions of regulatory authorities.

The transitional period which we are now undergoing tends to obscure the real accomplishments of railway management and the immediate current circumstances add to the distortion. So it is that in 1957, the C.N.R. fell short by 29.6 million dollars of meeting its fixed interest charges, and with traffic in 1958 showing a steady decline, we are for this reason alone faced with very serious deficit possibilities for the current year. Add to that the consideration that the non operating unions and the Running Trades have placed demands on us that would, if granted, add to our expenses some \$102 millions on an annual basis and you will see why I am not prepared to give any abbreviated judgment on our financial circumstances.

Be all this as it may, I say with all sincerity that we have a loyal and energetic organization. I say further with a sense of pride that the Canadian National System is one of Canada's greatest assets. Despite the aura of conflict that surrounds a period of re-negotiation of contracts, the devotion to duty of our employees and their contribution, not only as railroaders but as citizens, has been one of a few unchanging facts in a rapidly changing world.

Looking back over the history of the Railway I think it is fair to say that the organization itself has undergone almost a complete reconstruction and change of direction. There have been difficult times in the past and there will be difficult times in the future, but I hope that from this brief interpretation and reflection on the history of the C.N.R. that the moral will be clear and I venture to state it in this fashion: Let us not lose faith in the institutions which have stood the test of time; institutions which have demonstrated their ability to serve as instruments of economic integration and economic development with such outstanding success that it has been possible for a strong, vigorous, and growing nation to emerge from the reaches of half a continent.

S/A