

---

**Chapter V**

**THE RAILROAD SAFETY INQUIRY**

## THE RAILROAD SAFETY INQUIRY

Railroad officials, labor representatives, and officials of the Canadian Transport Commission (CTC)/Railway Transport Committee (RTC) generally agree that a major step towards improving Canadian railroad safety was the railway safety inquiry conducted by RTC. This chapter covers that inquiry, the events leading to it, and some activities that were a direct result of the inquiry.

Critical dates and activities leading to the inquiry and inquiry milestones were as follows:

1904	Jurisdiction for safe operation of Canadian trains came under Federal jurisdiction through the Board of Transport Commissioners
1967	Authority for regulating the safety of the railroads transferred to the Canadian Transport Commission/Railway Transport Committee
1970 (summer)	Series of accidents, including derailments in Cobourg and Port Hope and a collision in Brockville
Sept. 1, 1970	RTC issued a formal notice that a public inquiry would be held regarding three accidents
Sept. 24, 1970	Inquiry on three accidents began
Jan. 18, 1971	Second phase of the inquiry on Midland Structural Company —safety of a subway structure

Jan./March 1971	Series of accidents involving dangerous commodities (sulfuric acid, propane gas, liquid sulfur, fuel, etc. ) and a derailment in the Fraser River Canyon
Jan. 18, 1972	Resumption of the safety inquiry to include investigation of a CN derailment near Dun robin, Ontario
April 19, 1972	Filing of the initial report of the railway safety inquiry
July 17, 1972	Filing of the second report of the railway safety inquiry
Dec. 28, 1973	Filing of the third report of the railway safety inquiry
1973	CTC approached the Treasury Board requesting additional staff resources to be used to ensure railroad safety — request denied
1974	Beginning of the Bureau of Management Consulting study of railway safety

As indicated in this chronology, the inquiry was divided into three phases during the September 1970 through December 1973 period. This chapter describes: the events leading to the safety inquiry; the inquiry process, findings, and recommendations; and, the steps following the inquiry including the Bureau of Management Consulting study and the creation of the Railway Safety Advisory Committee.

## EVENTS LEADING TO THE SAFETY INQUIRY

The Railway Transport Committee and its predecessor, the Board of Transport Commissioners, had jurisdiction over the safe operation of the railroads from the early 1900's.<sup>1</sup> As a result of its authority and growing concern at CTC about the safe operation of Canadian railroads, RTC began an inquiry on railway safety in 1970. The inquiry was prompted by an increase in the number of accidents involving

heavier tonnage trains and an increase in accidents involving dangerous commodities.<sup>2</sup> A series of accidents occurred during the summer of 1970 including two derailments and a collision. These three accidents were the subject of the initial inquiry.

<sup>1</sup>Railway Transport Committee, Review Committee, address by D. H. Jones, Ottawa, September 1975.

<sup>2</sup>*Initial Report of the Railway Safety Inquiry* (Railway Transport Committee, Apr. 19, 1972), p. 1.

## SAFETY INQUIRY: PROCESS, FINDINGS, AND RECOMMENDATIONS

The Railway Transport Committee conducted the inquiry by the authority contained in section 226 of the Railway Act and sections 45 and 46 of the National Transportation Act. On September 1, 1970, RTC issued a formal notice that a public inquiry would be held regarding the three accidents. In addition, evidence was requested concerning maintenance and operating practices, and other matters related to derailments and collisions.

The inquiry took several forms including public hearings and field investigations. The Canadian National (CN) and Canadian Pacific (CP) Railroads, and the Canadian Railway Labour Association participated in the inquiry.

RTC received evidence about three specific accidents (Cobourg, Port Hope, and Brockville). However, during the hearings, the panel decided to observe operating procedures first-hand. The panel conducted onsite investigations of the yards of both CP and CN.<sup>3</sup>

RTC attributed the Cobourg and Port Hope accidents to journal failures that resulted in the derailments (the Port Hope accident also involved postcrash leakage of toxic and flammable weedkiller). It attributed the Brockville accident, a collision between a train and a track motor car, to human error on the part of the track car operator who apparently misjudged the closing speed of the train.

The investigation of the three accidents convinced RTC that an expanded investigation was necessary to determine: whether the railroads were implementing CTC rules and regulations, the adequacy of the railroad's maintenance procedures, and the adequacy of its own review procedures.<sup>4</sup> The expanded inquiry specifically explored:

- a CN derailment near Dunrobin, Ontario, where 39 passengers reported minor injuries;

- a derailment in the Fraser River Canyon involving a rockslide that killed three crew members; and
- a number of accidents involving dangerous commodities.

After hearings, investigations and analyses, RTC issued its report. Among the major findings of the general inquiry were:

- the need for more active research into possible improvements for the design of railroad signaling devices and equipment;
- derailments caused by journal failures required better evaluation;
- reporting requirements for accidents at rail grade crossings should be improved;
- systems to detect rockslides were often inadequate and should be improved; and
- deteriorating track conditions were increasing the potential for derailments.

Based on its findings, RTC recommended several research projects on specific safety problems identified during the inquiry. It also recommended that the Government's regulatory and oversight functions be strengthened. For example, it called for increases in RTC staffing. Most significant, it created a Railway Safety Advisory Committee. The committee consists of railroad company representatives, CTC members, one of which chairs the committee, and representatives from the railroad unions. Its purpose is to explore solutions to safety problems and make recommendations to CTC.<sup>5</sup> (Advisory committee activities are discussed in chapter VI.)

In 1973, CTC requested that the Treasury Board grant it 55 additional staff to conduct a number of rail safety programs. The Treasury Board initially denied the request on the basis that the need for the programs was insufficiently documented. The Board requested justification of the programs by careful analysis and demon-

<sup>3</sup>*Ibid.*, p. 9.  
<sup>4</sup>*Ibid.*, p. 10

<sup>5</sup>*Ibid.*, p. 10.  
<sup>6</sup>Interviews, Canadian Transport Commission, 1978

stration of their potential effectiveness. CTC then requested that the Bureau of Management Consulting (BMC) conduct an independent study of rail safety problems. Specifically, CTC requested comments on the functions of a regulatory agency and proposals for a rail safety program. The resulting study, which required 4 man-years, produced a 13-volume report consisting of:

- an evaluation of current CTC programs,
- a study of the railroad environment,
- an analysis of railroad accident statistics,
- a compilation of the views of railroad and union officials,
- research on the economics of safety regulations, and
- policy alternatives.

BMC concluded that:

- Much of the increase in derailments could be attributed to increased traffic and larger heavier trains.
- Rail grade-crossing accidents declined between 1956 and 1973.
- The number of collisions during that period had not changed substantially.
- The economic input into maintenance of rails and associated structures had progressively decreased over a period of 20 years. (It recommended that the issue of deferred maintenance be studied by Government in cooperation with the railroads and if a problem was found to exist, it should be addressed by a combination of fiscal and regulatory policies.)

<sup>7</sup>*Railroad Safety Study* (Bureau of Management Consulting, Canada, 1975)

- The accident data was not fully reliable. Differences existed in the data collected by the Government and that collected by the railroads.
- Problems existed in implementing programs to deal with the highway/rail-crossing problem. (Highway/rail-crossing findings are discussed in chapter VI.)
- Problems existed in the handling and shipment of dangerous commodities. (See chapter VI.)

The safety programs of RTC were evaluated and a number of further improvements were suggested by BMC. These included the redesign of inspection programs, accident investigation, data reporting and analysis, and the introduction of some new standards.<sup>8</sup>

BMC made the following policy observation: In order to set a level of collective risk, the Government must consider the societal costs of damage and societal benefits from transportation, as against the railway cost and railway benefits. The difference between the societal costs and railway costs from accidental damage arises due to the fact that the railways do not suffer the total economic loss from accidents. The societal costs of accidents are greater than that considered by the railways. To induce a higher level of safety, society can use the following three policy instruments: subsidy, taxation, and regulatory measures.<sup>9</sup>

<sup>8</sup>Review Comments for Preliminary Draft of OTA Rail Safety: A U.S.—Canadian Comparison submitted by E. W. Eastman, February 1979.

<sup>9</sup>*Overview of the Rail Safety Study*. (Railway Transport Committee, Review Committee, Bureau of Management Consulting), p. 11.