

5. Proposals

In view of the result of this accident investigation, the Aircraft and Railway Accidents Investigation Commission make proposals to the Minister of Land, Infrastructure, Transport and Tourism as follows:

Proposals Based on the Results of the Investigation of the Train Derailment Accident on the Fukuchiyama Line of the West Japan Railway Company

(1) Improvement of procedures to grasp and utilize information about incidents etc.

To allow railway operators to correctly grasp incidents etc., efforts to motivate crewmember to actively report incidents etc., such as efforts to develop a non-punitive reporting system, should be promoted, in addition to promoting the activities and efforts specified in the Commission's Proposals dated September 6, 2005 ("Installation and Utilization of Equipment that Records the Operating Status and Related Data of Trains", written in Japanese).

The Commission has been investigating train accidents etc. and publishing reports on them, but a system should be considered for other events as well in which railway operators etc. perform the necessary analyses and these results are utilized by other railway operators as well.

In addition, research and studies should be conducted on methods and procedures to make a comprehensive analysis of information on a variety of incidents etc. and utilize the analyzed results in an effective manner in consideration of the uniqueness of railway business in the sense that not only crewmember and vehicle but also train traffic control system and infrastructures are centrally managed by transportation operators.

(2) Limitation of using train radio by train driver while train is running.

Use of the train radio by train drivers while they are driving trains should be limited to cases where it is necessary to use the train radio for safety reasons such as the case where braking operation is necessary to stop the train in an emergency situation.

In addition, train drivers should be prohibited from making notes the dialogue exchanged over the train radio while they are driving trains.

For line sections in which trains run frequently and the burden on train drivers of confirming signals is high, a method to reduce the needs of communication using train radio while they are driving trains through the use of equipment that allows train dispatchers to grasp the status of the operation of the trains accurately and in real time, and a method to transmit driving-related instructions, etc., to the onboard device in the form of text information that can be read by the drivers when their trains are not moving, should be considered. In addition, a method to reduce the needs of communication using train radio for train through utilization of conductors to the maximum extent possible should be considered.

(3) Certain notification of the relevant laws and regulations to the related staffs in manufacturers.

Because equipment that is important for safety including vehicle equipment and signal equipment tends to be "black boxes" to railway operators, measures should be taken to ensure that all design, production, and quality control staff members, who are involved in actual design, production, and quality control work, of manufacturers of equipment that is important for safety know and understand the applicable laws and regulations so that sufficient quality control is exercised by such manufacturers.

In addition, because maintenance of vehicle and railway facilities is increasingly being

outsourced, measures should be taken to ensure that all staff members, who are involved in actual maintenance work, of contractors of such maintenance know and understand the applicable laws and regulations.