

"The train derailment accident caused by the collision of train and compact sedan occurred in the class 1 level crossing"

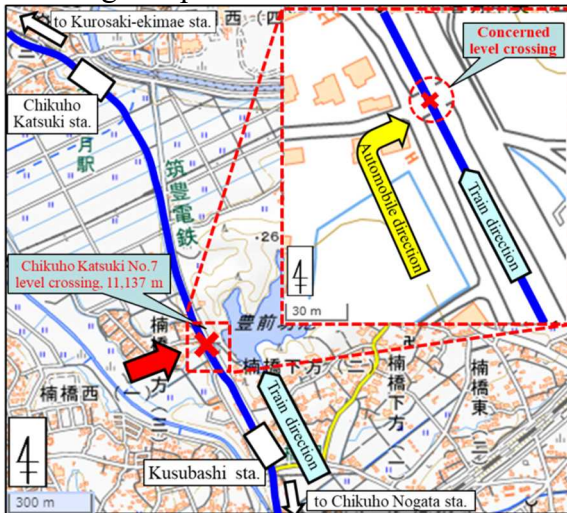
Railway operator : Chikuho Electric Railroad Co. Ltd.
 Accident type : Train derailment, accompanied to the level crossing accident
 Date and time : About 19:22, March 10, 2020
 Location : Around 11,137 m from Kurosaki-ekimae station, Chikuho-Katsuki No.7 level crossing, Class 1 level crossing equipped with crossing gate and road warning device, between Kusubashi station and Chikuho-Katsuki station, double track, Chikuho Electric Railroad Line, Kitakyushu City, Fukuoka Prefecture

<SUMMARY>

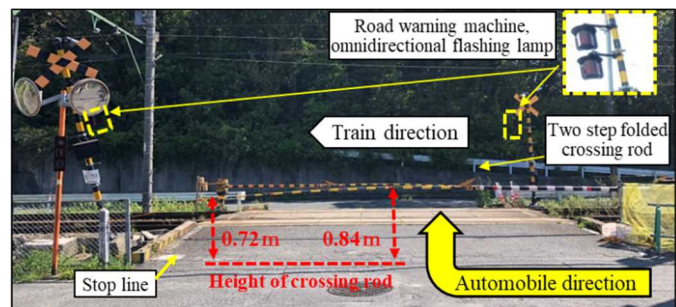
While the inbound Local 92 train, started from Chikuho-Nogata station bound for Kurosaki-ekimae station of Chikuho Electric Railroad Co., Ltd., was operated between Kusubashi station and Chikuho-Katsuki station at the velocity of about 57 km/h, the driver of the train noticed the compact sedan entered Chikuho-Katsuki No.7 level crossing, class 1 level crossing, from left, and applied the emergency brake immediately, but the train collided with the compact sedan and all 2 axles in the front bogie derailed to right.

The driver of the compact sedan was dead on this accident.

<Rough map of around accident site>



<Status of Chikuho-Katsuki No.7 level crossing viewed from entered direction of the compact sedan>



* This figure was made using the Geographical Institute Map, Electrical Country Web, of the Geospatial Information Authority of Japan

<PROBABLE CAUSES>

The JTTSB concludes that the probable cause of this accident was that the approaching train collided with the compact sedan at the velocity of about 50 km/h, and right wheels of the train ran onto right rail and derailed in this accident, because the compact sedan turned right and

entered the level crossing as pushing up the crossing rod in the status that the road warning device was operating and the crossing rod had been lowered, and stopped, and the compact sedan was caught between left side surface of the train and the concrete column for the overhead trolley, etc., and pushed out the vehicle body of the train to right.

Besides, it could not be determined why the compact sedan entered the level crossing, because the driver of the compact sedan was dead.

<SAFETY ACTIONS>

It is desirable to make the level crossing easier to be noticed such as to install the signs. etc., to aware the existence of the level crossing while running in the road before turn right, at the same time, to paint again the blurred stop lines and to install the dangling belts to the crossing rod, etc., in order to prevent accidents from happening, because this accident had occurred in the level crossing just after the compact sedan had turned right. In addition, it is desirable to let the passersby of the level crossing known well to stop once before the level crossing and confirm the safety thoroughly. Furthermore, it is desirable for the railway operators to discuss with the relevant parties such as the road administrators or the police, etc., to take measures to prevent stopping of cars in the level crossing by securing the space just across the level crossing to confirm the status of the road as being stopped cars responding to the status of the road traffic volume.

<MEASURES TAKEN AFTER THE ACCIDENT>

[1] The railway operator took the following measures.

- [i] Installed the red colored revolving lights aimed to improve the sighting ability when the level crossing is operated, to the prop of the road warning device of the level crossing, on May 20, 2020.
- [ii] Let the information on this accident commonly possessing, and conducted the education on the importance of the train protection to all train crews.

[2] The railway operator and the road administrator, *i.e.*, Kitakyushu City, discussed on the measures for the safety.

[3] Responding to the discussion in the above [2], the road administrator, *i.e.*, Kitakyushu City, painted again the blurred stop lines, and installed the light-emitting type road rivets to promote the attention of car drivers, on October 2, 2020.

Details can be obtained by the railway accident investigation report in the website of the Japan Transport Safety Board, *i.e.*, <https://www.mlit.go.jp/jtsb>