

~ Accident that the train derailed caused as the side beam of the bogie of the wagon had been pushed up on the ice and snow ~

Railway operator : Japan Freight Railway Company
 Accident type : Train derailment
 Date and time : At about 02:09, February 24, 2018
 Location : In the premises of Tomamu station, Sekisho Line, Shimukappu Village, Yufutsu District, Hokkaido

<SUMMARY>

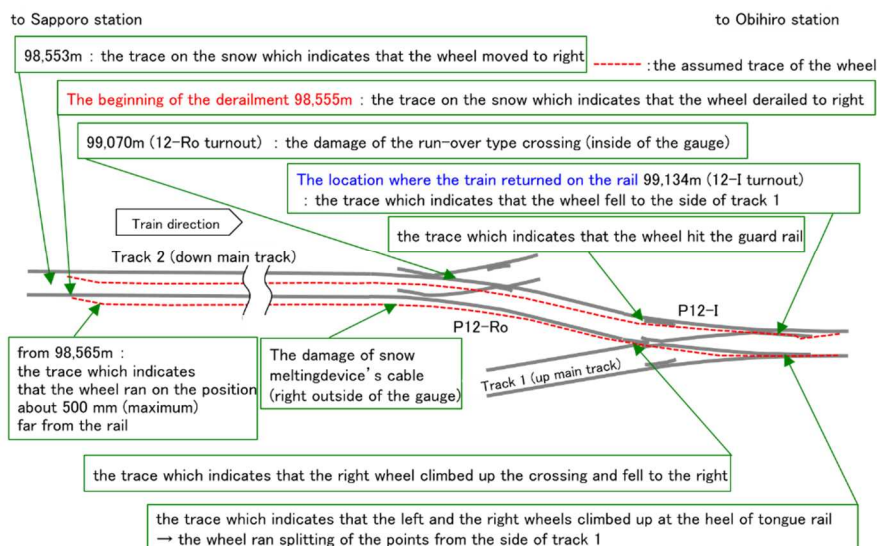
At about 03:55, February 24, 2018, while the snowplow motor car of Hokkaido Railway Company, dispatched for the snow removal works, arrived at the down line main track in Tomamu station of Sekisho Line, the staff for track maintenance boarded on the snowplow motor car received the communication that the turnout in the station could not be switched from the train dispatcher. Therefore, the staff for track maintenance checked the turnout and found the traces that the train had derailed and had been running.

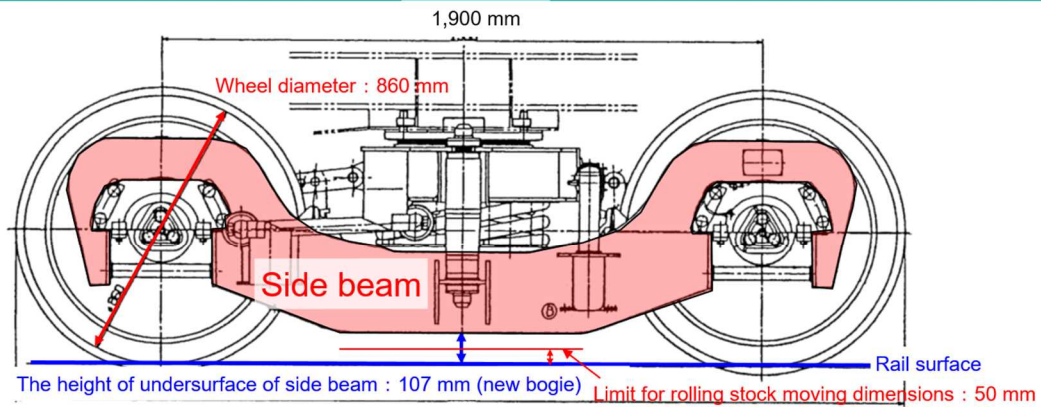


In order to identify the derailed train, the wheels in the trains passed the concerned place were inspected, and the trace as derailed and continued running, was found in the wheel of the 1st axle in the front bogie of the 3rd vehicle of the High Speed Freight 2077 train, started from Sapporo Freight Terminal station bound for Obihiro Freight station of Japan Freight Railway Company, operated before the previous train of the snowplow motor car. The 2077 train had passed Tomamu station at a velocity of about 49 km/h, at about 02:09, February 24, 2018. In the investigation implemented after that, the restored trace of the train was found in around the turnout in the station.

The driver was boarded on the 2077 train, but he was not injured.

<The situation of the derailment>





The side beam of the wagon's bogie

<PROBABLE CAUSES>

It is probable that the accident occurred as the flange of the right wheel of the 1st axle in the front bogie of the 3rd vehicle climbed over the right rail and derailed at the place where large amount of ice and snow were stacked on the track, while the train was passing the straight track section in the premises of the station, and after that the train restored in the turnout while passing in the status as derailed.

It is somewhat likely that the 1st axle in the front bogie of the 3rd vehicle of the train derailed because the side beam of the front bogie of the 3rd vehicle was pushed up over the ice and snow stacked on the railway track, at the same time, the wheel flange was raised up by the hard ice and snow which had existed in around the flangeway.

It is somewhat likely that large amount of ice and snow had been stacked on the railway track in around the place where the derailment accident occurred, related with a large amount of snow fall and stacked snow in the previous day of the concerned accident, and that the snow removal works had not been implemented for 6 days before the occurrence of the accident.

<MEASURES TO PREVENT THE RECURRENCE>

It is probable that the concerned accident occurred as the train ran on the railway track where there was a large amount of the stacked snow. In addition, the derailment occurred before the time when the snow removal work was implemented by the snowplow motor car according to the snow removal plan.

Therefore, it is required to implement the snow removal works of the railway track by judging the proper timing, target area and methods considering the status such as snowfall, accumulated and stacked snow in the site, etc. Then, it is considered that to increase the frequency of the mechanical snow removal works as far as possible and implementation of the manual snow removal works to complement the mechanical snow removal works by judging the places required to secure the safety of train operation, not limited to the under platform, are effective as the measures preventing the recurrence of the similar accident.

Here, it is required to pay special attention for the ice and snow formed higher than the height of rail surface in outside gauge in the track section where the freight trains are operated, considering the position of the side beam of the wagons that caused the concerned accident, when the snow removal works are implemented.