

## Building safe and reliable railways that offer peace of mind

# Enhancing safety, with the Fukuchiyama Line derailment accident as the starting point

## The derailment accident on the Fukuchiyama Line

On April 25, 2005, issues at the West Japan Railway Company resulted in an accident on the Fukuchiyama Line, an extremely serious accident resulting in 106 fatalities and 563 injured passengers. We pray for all the victims of the accident and would like to express our sincerest apologies to their bereaved families. We would also like to express our deepest sympathies and sincerest apologies to the injured passengers and their families.

For the immense anxiety that the accident caused, we offer the deepest apology possible to our customers and those in the local community.

We will continue to make concerted efforts for all persons affected by the accident, while striving to further enhance safety measures and reform our corporate culture.

### Overview

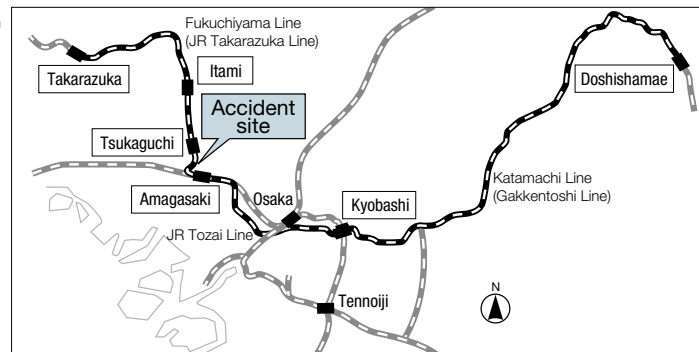
**Date/time** Monday, April 25, 2005, approx. 9:18 AM  
Weather conditions: sunny

**Location** Between Tsukaguchi Station and Amagasaki Station on the Fukuchiyama Line  
Approx. 1,805 m before Amagasaki Station (Amagasaki City, Hyogo Prefecture)

**Train involved** Rapid train from Takarazuka Station bound for Doshishamae Station  
Train No. 5418M (EMU 207 series, 7 cars)

**Summary** Between Tsukaguchi Station and Amagasaki Station, train No. 5418M entered a rightward curve with a radius of 304 m at approximately 116 km/h—greatly exceeding the speed limit of 70 km/h for the corner. As a result, the first through fifth train cars derailed, causing the first and second cars to collide with an apartment building on the left side of the direction the train was traveling.

In this derailment, 106 passengers and the train driver were killed. Furthermore, 562 passengers and 1 pedestrian walking near the scene were injured.



### Cause of the accident

From the *Railway Accident Investigation Report* issued by the Aircraft and Railway Accidents Investigation Commission (now the Japan Transport Safety Board)

It is considered highly probable that the train driver's delay in applying the brake resulted in the entry of the train into a 304 m-radius rightward curved track at a speed of approximately 116 km/h, which was far higher than the specified speed limit of 70 km/h, and the running of the train along the curved track at the high speed caused the first car of the train to fall left and derail, which caused the second to fifth cars to derail.

It is considered probable that the train driver's delay in applying the brake is attributable to the diversion of his attention from driving the train to (1) listening to the dialogue between the conductor and the train dispatcher by radio communication, which was caused by his belief that he had been hung up on by the conductor while he had been talking to the conductor on the intercom to ask him to make a false report and (2) making up an excuse to avoid being put

on an "off-the-train" re-training course.

It is considered probable that the West Japan Railway Company's train driver management system in which drivers who caused an incident or a mistake are put on an "off-the-train" re-training course that can be considered as a penalty or are subjected to a disciplinary action and drivers who did not report an incident or a mistake they had caused or made a false report about such an incident or mistake are put on an even harder "off-the-train" re-training course or subjected to an even harder disciplinary action may have (1) caused the driver to make the call to the conductor on the intercom to ask him to make a false report and (2) caused the diversion of the driver's attention from driving the train.

### Continuing reflection and passing on the lessons of the accident

No matter how much time has elapsed since the accident, and no matter how many generations pass, we must never let it be forgotten, instead making the derailment accident on the Fukuchiyama Line the starting point for all of our safety initiatives. Looking to the future, to ensure that we pass on the serious reflections and lessons that this

accident has taught us, we have reviewed the problems that were present in our corporate culture and safety management at the time and formulated "Achieving Railway Safety into the Future," which outlines what we should hand on as a compass for safety in the future. This was announced in March 2021.

### Points to reflect on, and their background

At the time of the accident, JR-West had not put in place systems to identify and deal with risks when planning and implementing management policies, and we did not have an ATS (Automatic Train Stop) system with speed check functions installed on the curve where the derailment occurred. Moreover, our understanding of human factors was insufficient, and we had reeducation measures in place that were seen as being punitive. Further, there were problems within our organization, including stagnating technical capabilities and a decreasing awareness of safety,

excessive top-down communications, and overconfidence due to our previous successes.

As this shows, at the time of the accident, there were a slew of issues in every aspect of our safety management, and we had been unable to build a company-wide framework for ensuring safety and establish a corporate culture in which safety is the highest priority. We have deeply reflected on our failure to fulfill our responsibilities as a company entrusted with the lives of our passengers.

#### Reflections on the derailment accident on the Fukuchiyama Line

We had been unable to build a company-wide framework for ensuring safety and establish a corporate culture in which safety is the highest priority. In other words, we did not fulfill our responsibility as a company entrusted with the precious lives of passengers.

#### Major background factors to reflect on (Problems rooted in the organization)

##### How to address safety and ensure it in an organizational context

- We had not based our thinking on the idea that risk is inherent to operating a railway, and thus efforts must be made to prevent possible accidents with serious consequences, regardless of the laws and regulations.

- Because of strongly embedded perceptions that specialist divisions should be responsible for their own activities, management was not prepared to work together with the entire organization to make safety a top priority.

##### Dealing with employees who stand at the forefront of safety

- We were not working from the concept that any person may make a mistake, which led to the spread of idealistic instruction that had the potential to be perceived as punitive.

- Front-line employees were under the expectation that they should do what they had been told, exactly as they had been told, and as an organization JR-West had not yet matured to a level that allowed the opinions of its employees to be heard, recognized the personalities and independence of each person in the company, and improved the safety and quality of service through proactive effort.

##### Attitude toward society and overconfidence and excessive pride in railway operations

- We had grown overconfident and excessively proud of our operations, and we lacked the humility to learn from outside our own organization.

### Learning from the lessons of the accident

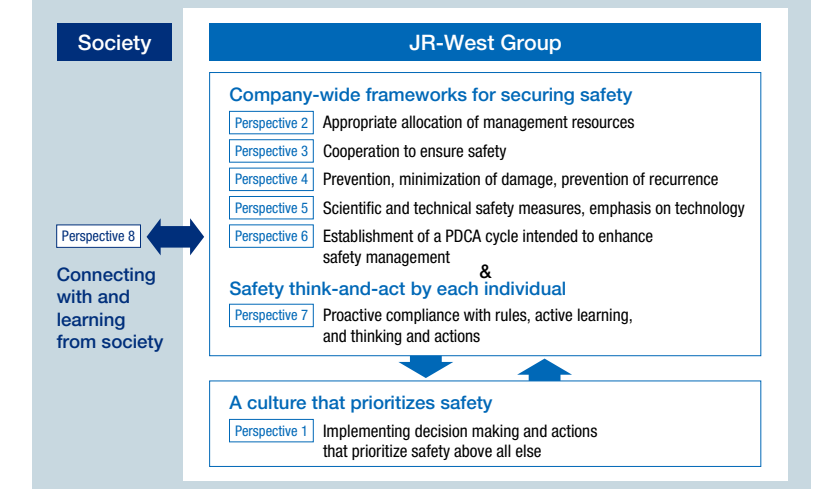
In order to continue to operate safe railways in the future, we must create a company-wide framework for ensuring safety and leverage that framework to encourage safety "think-and-act" by each individual.

These activities will give rise to a culture in which safety is the highest priority, leading to the construction and improvement of systems and increased safety-oriented thinking and action by all individuals. Repeating this cycle will allow continuous improvements to safety.

In addition to promoting safety initiatives within the company, we will work to connect with and learn from society while gaining the cooperation of our customers and society at large, thus further improving railway safety.

Based on the lessons learned from the accident on the Fukuchiyama Line, we defined the following essential perspectives in achieving safety.

#### Essential perspectives in achieving safety



### Initiatives based on the essential perspectives in achieving safety

We will periodically check the direction and effectiveness of our safety initiatives, which are based on the essential perspectives in achieving safety, as we build mechanisms that improve safety and raise the level of our safety management. Moreover, we will work

harder on employee education by, for example, increasing their understanding of the purpose and background of the safety initiatives and making them aware of the role they have to play in putting these into action.

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## Memorial Grove (Inori no Mori) at the accident site

The place where the Fukuchiyama Line accident occurred holds great importance. It recalls the sorrow felt by those who lost their lives, the grief of their families, and the painful memories of those injured. It also preserves traces of the aftermath of where the train derailed and crashed. It is thus the site of Memorial Grove, which serves as a place to remember and lay to rest the souls of those who perished, while also leaving a record of the accident for those who come after. The site will keep the accident from being forgotten and will convey the preciousness of life to society and future generations. It will help JR-West reflect on the accident and will act as a physical pledge to ongoing safety as the company continues to carefully and responsibly preserve the site for all future generations.



## Efforts to keep the accident in mind and think and act accordingly

Based on our strong determination to prevent an accident such as that on the Fukuchiyama Line from ever occurring again, we conduct training and other initiatives to increase the awareness of each employee regarding safety. This will ensure that we do not forget this accident and will allow us to put the lessons learned from it into practice in our daily work.

## Safety Day and workplace initiatives

In order to never forget the Fukuchiyama Line accident and to build a corporate culture that prioritizes safety above all else, we have made the 25th of each month Safety Day to mark the accident's occurrence on April 25, 2005. Company-wide activities are held on this day.

Besides visiting Memorial Grove, employees of each workplace plan and implement a range of activities, including first-aid training for customers, discussions among employees in different jobs, viewings of interviews with victims of the accident, and talks by employees who were there at the time.

Safety training at the Railway Safety  
Education Center

The Railway Safety Education Center is a JR-West site for employee learning. It comprises the Fukuchiyama Line derailment accident training section, where participants reflect on the Fukuchiyama Line accident and its causes in order to learn ways to improve safety, and the railway accident history training section, where participants systematically study and learn from past train accidents.



## Initiatives in the workplace

We young mid-level employees do everything from planning initiatives for Safety Day to acting as instructors for safety education. Armed with a sense of purpose and the aim of putting safety thinking into real action, we create a training curriculum by first firmly imprinting in their minds that the Fukuchiyama accident is their direct concern, then discussing what topics to cover so that by the end of the course participants are able to talk about the accident in their own words. Training so far has included visits to Memorial Grove, overviews of the accident, lessons learned, and initiatives implemented after the accident.

For example, we set aside time to study how our Safety Charter was created and what it means. While continuing to learn ourselves, we will strive to raise employees' awareness and sensitivity to making safety a top priority in all workplaces, with the goal of having each employee put safety thinking and action to work every day.



Izumi-Fuchu Station, Kansai Regional Head Office  
Shota Murosaki, Yuki Egawa,  
Takahiro Watanabe

## Safety think-and-act training

Safety think-and-act training is conducted for all employees of JR-West and its group companies. The aim is to keep the Fukuchiyama Line derailment accident firmly in mind, strengthen determination to build safe railways, and attain a systematic understanding of safety measures through lessons learned from serious accidents. Through study at the Railway Safety Education Center and Memorial Grove, and dialogue with JR-West management, employees think how to make safety the top priority in daily work. By the time their training is over, they have written in their safety promise notebooks what they have learned and concrete targets for how they will think and act for the sake of safety in their jobs.



## Responding to victims

We will continue to respond to the needs of those who suffered from the Fukuchiyama Line derailment accident through concerted ongoing efforts to listen closely to their thoughts and opinions.



## Memorial ceremony

To express our condolences to those who died in the Fukuchiyama Line derailment accident, in September 2005 we held a Memorial Ceremony and Safety Event. We have followed this up with a Memorial Ceremony every year on April 25.

## Explanation meetings

Every year we hold explanation meetings at which the company president and other associated executives inform accident victims directly of our improvements to safety and initiatives we have taken to address issues, as well as receiving input from them.

## Initiatives toward creating a society that affords safety and peace of mind

As a company entrusted with the precious lives of passengers, we are committed to reflecting on the gravity of allowing such a major accident to occur and, as part of creating a society that affords safety and peace of mind, we established the JR-West Relief

Foundation in April 2009. The foundation strives to enrich people's hearts and lives by engaging in projects that provide physical and mental care to those affected by accidents and disasters, while also joining projects for building safer local communities.

## Hosting events

The foundation holds Life Seminars presented by guest speakers from various fields, which focus on life from multiple perspectives and strive to provide participants with the opportunity for personal reflection.

As an event marking its 10th anniversary, the organization now holds an annual essay contest for elementary and junior high school students on the topic of life, and shares the best submissions with the community.

## Offering grants

The foundation offers grants to support groups and research projects working on preparations and recovery care for accidents, natural disasters, and unforeseen tragedies, in an effort to create a society that affords safety and peace of mind. Furthermore, in order to help promote emergency aid/life support training in local communities the foundation subsidizes AED practice equipment and also supports a group whose achievements include providing Inochi no Denwa (a suicide prevention line servicing the six prefectures of the Kansai area).



An online Life Seminar



JR-West provides AED practice equipment



Essay contest booklet