

A Correct Report and the Way of Punishment and Coaching To Build an Atmosphere in which Everyone Can Say Anything.

Aterazawa Line 320D

From the Case “On the Shunting Operation at Yamagata Station. The function of the Erroneous Start Prevention Device.”



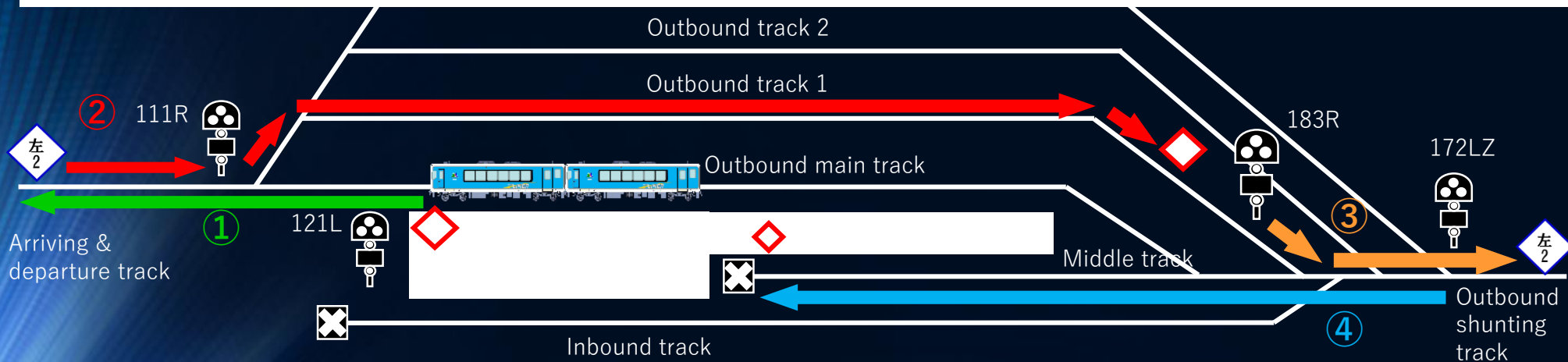
East Japan Railway Workers' Union
Aterazawa Line Branch

320D Shunting Operation at Yamagata Station (Prescribed Steps)

320D outbound main track of Yamagata Station - Shunting operation after stopping at the stop signal.】

【Time】 AM6:43～AM7:01

【Content】 ①outbound main track (121L 6:43signal aspect) ~arrival & departure track
②arrival & departure track (111R)- outbound track 1 (stop at “white stop sign”, recognize 183R’s signal aspect turn on then call stationmaster.)
③outbound track 1 (183R) ~outbound shunting track
④outbound shunting track (172LZ · induction of shunting at 6:54 turned on) ~ coupling of trainsets in middle track, braking test.



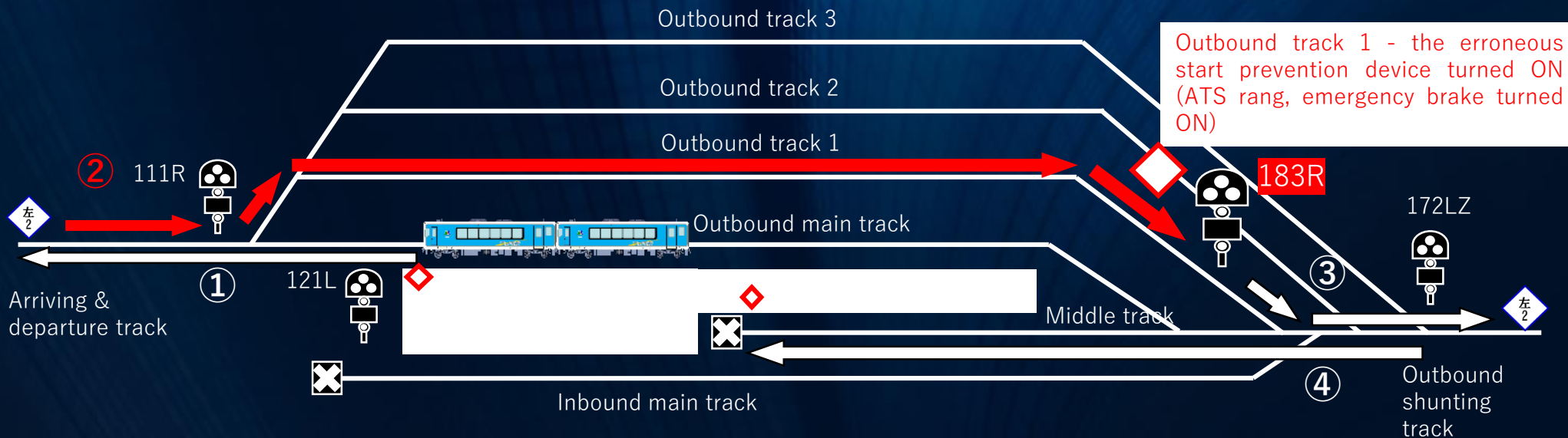
320D Shunting Operation at Yamagata Sta. (Involved Driver's case)

【Content】

②arrival & departure track (111R)- outbound track 1

1. The driver recognized 183R's sign was "go" 10m before the white stop sign
2. Drove through the white stop sign; stopped near starting signal at outbound main track to talk about the shunting with a station master; ATS rang under 20km/h driving; train stopped by emergency brake.
3. After he was stopped, the driver told a station master "during the shunting, stopped by ATS, the shunting sign is GO."
4. The driver was told to recover, so he recovered ATS and began the shunting operation.

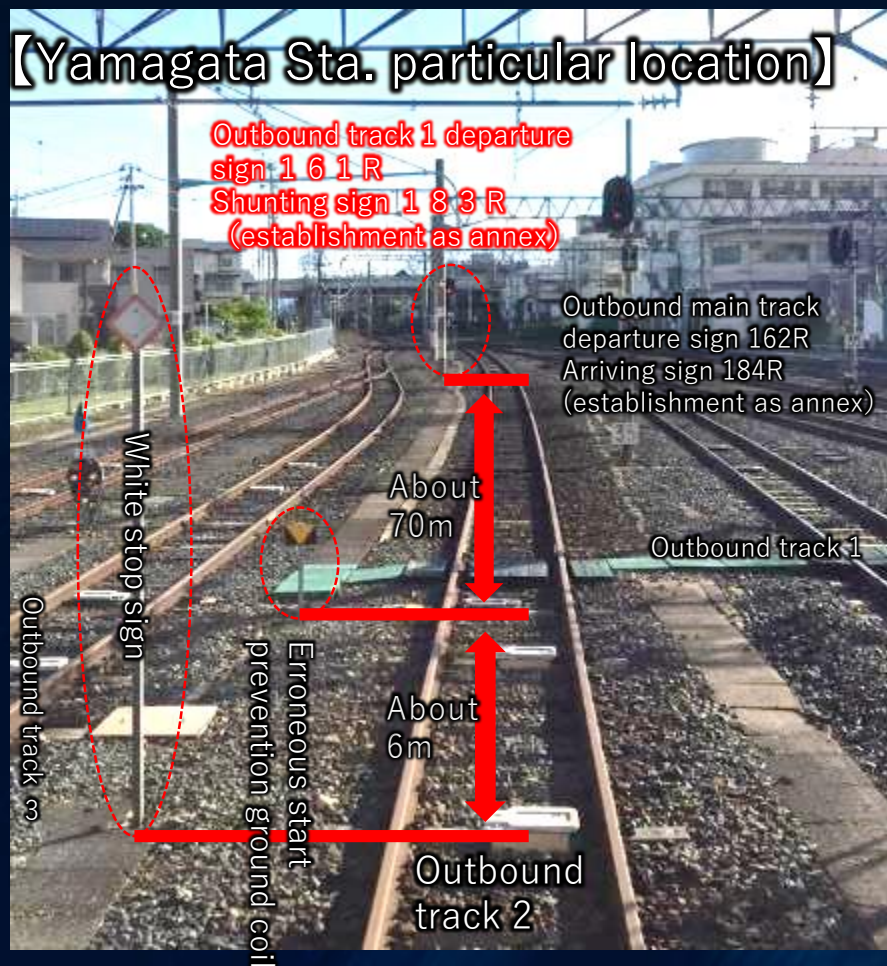
【affects on trains】 NONE



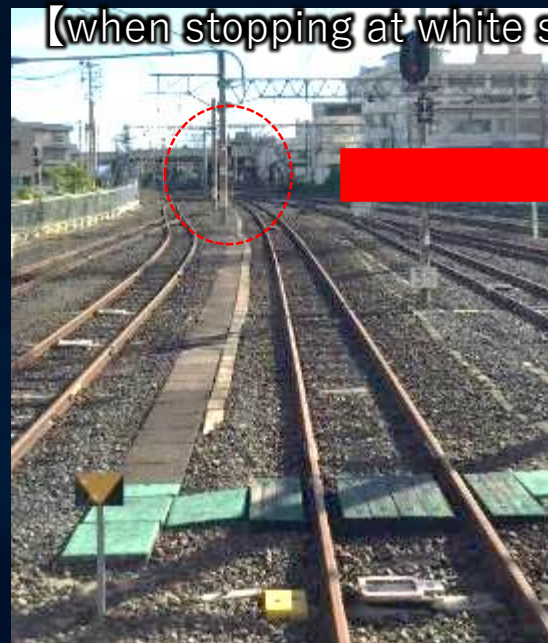
320D About Shunting Operation at Yamagata Sta. (presumption of cause and local scene)

【Presumption of cause】 The driver did not stop at the white stop sign, and he assumed the 183R shunting sign was “GO.”

【Yamagata Sta. particular location】



【when stopping at white stop sign】



【magnification】

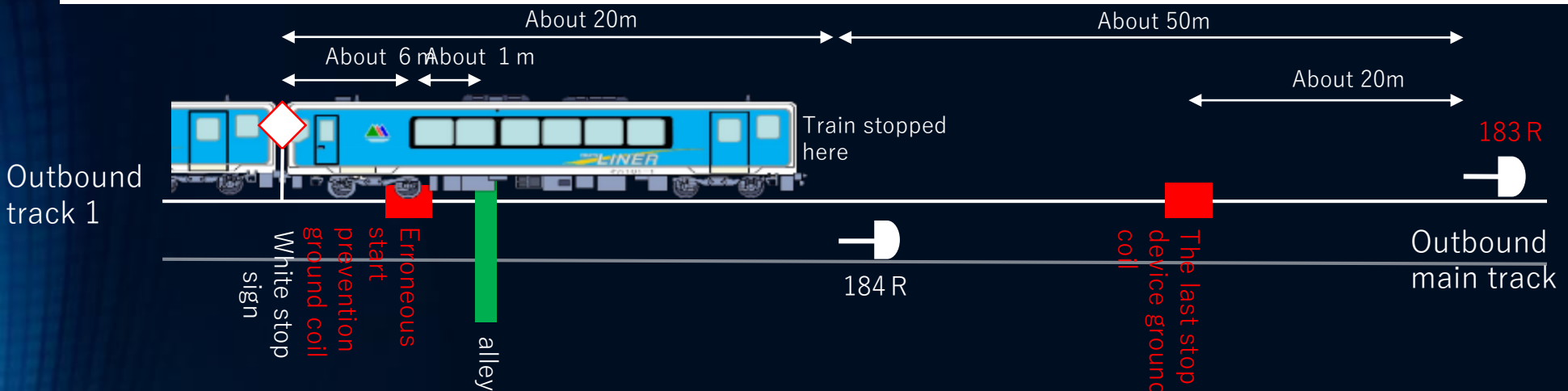


【when stopping near 184R】



When the driver could recognize the sign in advance, he sometimes used to stop beyond the white stop sign and contact a station master.

320D Shunting Operation at Yamagata Sta. (the erroneous start prevention ground coil)



① Hard to see 183R if trains stop at the white stop sign.

② Therefore, went past the white stop sign to see 183R.

③ ATS worked (erroneous start prevention ground coil 161R, 183EQ)

【A case that the erroneous start prevention device operates】
involved last stop device ground coil-161R, 183EQ

- Outbound track 1 departure sign(161R), shunting sign(183R) show “STOP.”
- Involved train’s data:- cause of braking was emergency stop held by the last stop device ground coil.
- ATS device on train-nothing abnormal detected during regular inspection.
(H29.1.10)

Involved driver said, he recognized at 10m before the white stop sign, 183R was “go”.

Progress after the incident ①(Hearing and Punishment)

2017 March 18 Incident report submitted

24 1st hearing (at workplace)

29 2nd hearing (at workplace)



3 mo. After incident
June 29



September 01

Usual work as driver (shunting was held 8 times after incident)

Questioned by 3 personnel and other division staff (at workplace)

An admonition to the driver

“The driver should have stopped at the white stop sign and called the stationmaster in Yamagata Sta. The driver always ignored rules and did shunting operations even though he knew the rules. It is very dangerous, and can lead to serious accidents. It is a problem of the staff.”

- 1 intentional because it occurs repeatedly
- 2 difference between analytical data and testimony of the driver

Progress after the incident ② (after punishment)

2017 Sep - Oct.

Urgent safety conference



- incidents occur repeatedly if the company only punish individuals
- why didn't the driver obey rules? Need to create atmosphere of finding a cause
- demand to the company from voice of staff for countermeasures to equipment

2018 February

Collective bargaining with company

- Ability to see 183R - we don't understand, but will consider
- Countermeasures of equipment by the company will consider

Countermeasures by company have not been done.

Demerit of Punishment by Presumption Causes

Presumption cause : the driver did not stop at the white stop sign. He continued the shunting operation as he assumed 183R shunting sign was GO. It is a problem he did not stop at the white stop sign.



The shunting sign was hard to see from that place, so the driver tried to see it from a better place.

Ignore rules
“Direction” < Individual’s liability
“Punishment”

Not telling truth = Culture of hiding incidents

From the Point of View of Human Factors (1)

Human Factors

Mechanism of human error as a cause of incidents and disaster

Deviation from rules –Law-abiding paralysis and intentional violation

Tomoki Kuwano, Japan Institute of Human Factors

Human Errors



From the Point of View of Human Factors (2)

Deviation = error of “goal selection” out of “judgement error”

No intention of deviation

Future
aim?

Intentional
deviation
(ignore rules)

Non-
malicious
violation

Exceptional violation
(only once)

This incident

Daily violation

Limited
violation

Unavoidable
punishment

Malicious
violation

Law-abiding
paralysis

From the Point of View of Human Factors (3)

Deviation = ignore rules

It is necessary to be pointed out so as to prevent the spreading of deviatins at work places.

Non-malicious violation

Should not be punished. If you do so, people try to hide the truth.

The way of punishment
and discipline

Important theme which affects
safety culture of an organization

From the Point of View of Human Factors (4)

JR West Amagasaki rail crash (April 25, 2005)

Definition of safety – Managing the Risks of Organizational Accidents –

Dr. James Reason

“Incidents are not caused only by an individual’s mistake.
But because of organizational errors and no action for countermeasures.”

“To punish someone” is the easiest way.

We must remember the lessons of the incidents.



Photo by The Mainichi Newspapers Co. Ltd

What should we do?

“Comprehension” and “Education” of Origins of Rules

Why do we need to stop at the white sign? Does everyone know the reason for the establishment of the white stop sign ? Everyone was told to stop there, but was the meaning of “why here?” successfully passed on? (skill succession in generation changes)

Concrete actions to improve difficulties such as “hard to observe” and “hard to handle”

Whether measurement actions are taken to improve based on workplace voices ?

Improve the quality of “Investigation of Causes” instead of “Pursuit of Responsibility”

Accident investigation should build up the facts. If the driver’s testimony doesn’t fit, we should not punish him, but understand what he is saying

To Build an Atmosphere in which Everyone Can Say Anything

① We should check the rules and regulations from workplace viewpoints

- Is it possible to achieve normally?
- Is the reason for the rules and regulations clear?
- Increase of rules and regulations will not lead to countermeasures

To Build an Atmosphere in which Everyone Can Say Anything

② Fostering a “Corporate Culture of Praise” in terms of human training

To do the ordinary work normally.



- every single duty should be handled carefully
- we understand we are affecting passengers lives
(to do daily work safely)



Praise of each daily duty leads to railway safety

To Build an Atmosphere in which Everyone Can Say Anything

③ In the stage of Management “Correct Reporting”
Culture should be established

- Has “Reporting ”been enforced to only on-site workers ?
- Workplace culture is easily affected by the behaviors of managers.
- When managers say “I will do only what I am ordered” or “It is useless to say something”, there is a failure to encourage reporting.

To Build an Atmosphere in which Everyone Can Say Anything

- ④ Place higher priority on training and education over punishment

A violation of rules should be pointed out correctly and resolutely, even if it is very small,

But it should not result in punishment but discussion, hearing, and coaching.



Punishment causes 'A Culture of Concealment'

Thank you

J R EU Aterazawa Line Branch