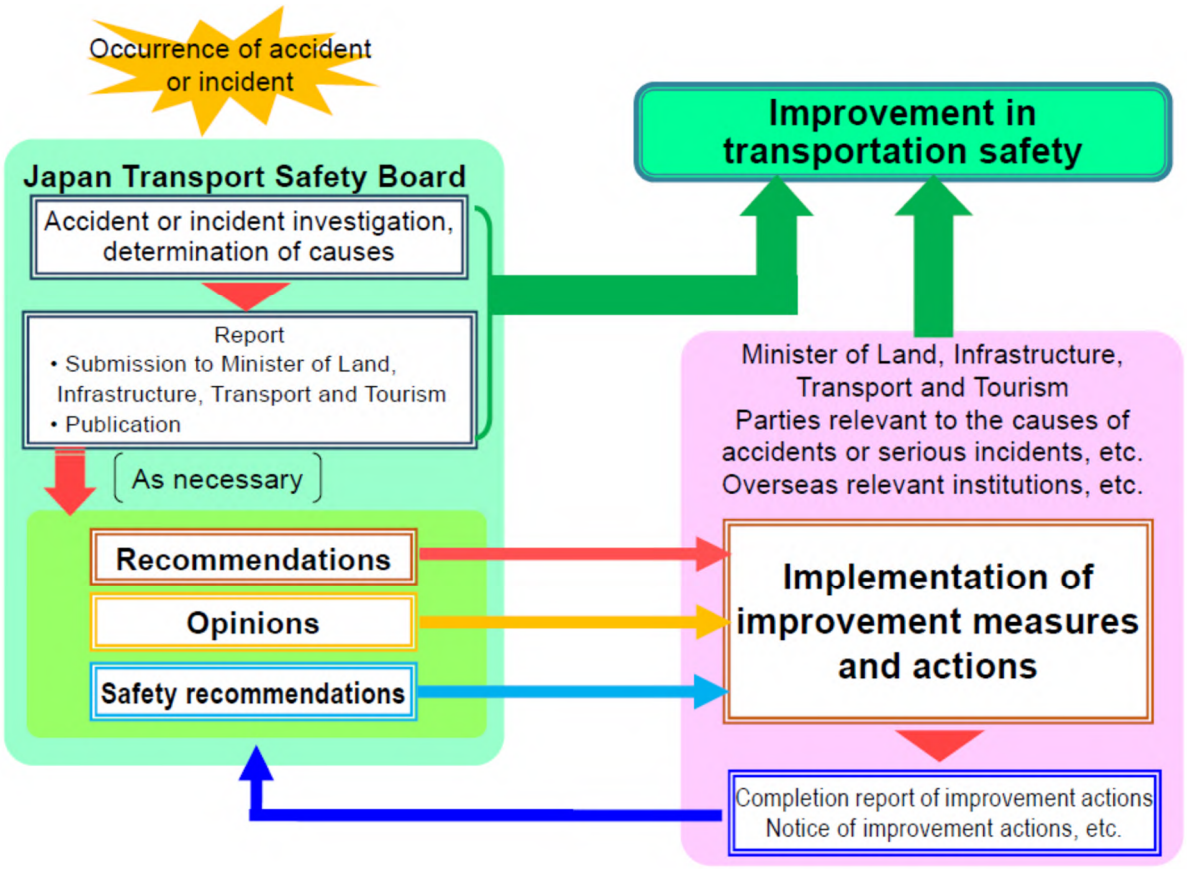
Chapter 2 Summary of recommendations and opinions

In order to fulfill its mission of contributing to prevent accidents involving aircraft, railway, and marine and reduce damage stipulated in Article 1 of the Act for Establishment of the Japan Transport Safety Board (hereinafter referred to as the "Act for Establishment"), the JTSB has an important system of "recommendations" and "opinions" along with accurate accident investigation to determine the causes of accidents and the causes of damage caused by accidents.

In order to fulfill its mission of improving transportation safety, the JTSB has an important system of "recommendations" and "opinions" along with accurate accident investigation. Based on the results of investigations into accidents, the JTSB can make recommendations to the Minister of Land, Infrastructure, Transport and Tourism and other parties concerned about measures that should be taken to prevent accidents and reduce damage. It is stipulated in the act that the Minister of Land, Infrastructure, Transport and Tourism must notify the JTSB of the measures taken based on the recommendations. If the parties concerned with the cause do not take measures related to the recommendations, the JTSB is entitled to announce that effect publicly. (Articles 26 and 27 of the Act for Establishment)

In addition, it is determined not only based on the results of investigations into individual accidents but also on the interim results of investigations or investigations of past accidents. The JTSB is entitled to state its opinion to the Minister of Land, Infrastructure, Transport and Tourism about policies and measures to prevent accidents and reduce damage, if necessary. (Article 28 of the Act for Establishment)

Furthermore, in the case of aircraft and marine accidents, the JTSB may recommend measures to be taken swiftly to enhance safety (safety recommendations) in the course of accident investigations to relevant overseas organizations and parties based on international conventions, if necessary.


Occurrence of accident or incident
Improvement in transportation safety
Japan Transport Safety Board
Accident or incident investigation, determination of causes
Report
• Submission to Minister of Land, Infrastructure, Transport and Tourism
• Publication
As necessary
Recommendations
Opinions
Safety recommendations
Minister of Land, Infrastructure, Transport and Tourism
Parties relevant to the causes of accidents or serious incidents, etc.
Overseas relevant institutions, etc.
Implementation of improvement measures and actions
Completion report of improvement actions
Notice of improvement actions, etc.

1 Recommendations

The recommendations issued by the JTSB in 2024 are as follows.

(1) Recommendations concerning the train derailment accident that occurred between Ariigawa Station and Tosa-Shirahama Station on the Nakamura Line of the Tosa Kuroshio Tetsudo Co., Ltd. and the measures taken in response to the recommendations

(Recommendations on July 25, 2024)

○Summary and probable causes

See Chapter 4, page 78.

○Recommendations to Tosa Kuroshio Tetsudo (Railway) Co., Ltd.

It is highly probable that this accident occurred when the train derailed after colliding with the mud and sand and other materials that had flowed onto the tracks due to collapse of a slope, which occurred after the train had departed when the rainfall had reached the level of train operation prohibition. The reason why the train dispatcher did not give the notice of the operation prohibition to the driver is probably because, contrary to regulations, operation controls were to be implemented after instructions from the head of facility and rolling stock depot. With regard to the fact that the head of facility and rolling stock depot did not give instructions to the dispatcher to stop the train, it is probably because it had become the norm to wait and see what would happen without immediately taking operational control when the rain gauge reached the regulated level, and there was a low level of awareness of the need to ensure the safety of train operation during rainfall, which may have been due to a lack of understanding of the dangers of rainfall when it reached the regulated level.

During rainfall, there is a risk that situations may arise which threaten the safety of train operations, such as the inflow of mud and sand from slopes close to the tracks, or the tilting of bridge piers and the washing away of bridge girders due to rising river levels. Depending on the situation on each line, it is necessary to carry out operational controls based on rainfall observations, and if the regulatory value of rainfall is reached and trains are not immediately slowed down or stopped in accordance with the regulations, there is a risk of serious danger to the safety of train operations and therefore to the lives of passengers. This must be avoided at all costs. After the accident, Tosa Kuroshio Tetsudo (Railway) Co., Ltd. revised its " Operation Control Procedures in the Event of Disaster " as a recurrence prevention measures, but only deleted the provision that the train dispatcher or the head of facility and rolling stock depot should temporarily suspend train operations when the alarm buzzer sounds, and instead clarified that the same procedure as in the accident (the train dispatcher suspends train operations at the request of the head of facility and rolling stock depot) should be followed. This cannot be considered as a measure to prevent recurrence. To ensure the safety of train operations during rainfall, it is necessary to have a system in place that allows the immediate implementation of operation controls when the rain gauge reaches the regulated value.

Based on the results of the investigation into this accident, the Japan Transport Safety Board makes the following recommendations to Tosa Kuroshio Tetsudo (Railway) Co., Ltd. in order to ensure the safety of transportation, in accordance with the provisions of Article 27, Paragraph (1) of the Act for Establishment of the Japan Transport Safety Board.

In addition, the Board requests a report on the measures taken in accordance with the Paragraph (2) of the same Article.

Notes

When the regulated value of operation controls is observed, a system should be established to enable the dispatcher, who is constantly monitoring the operating conditions of the train, to promptly notify the driver of the operation control. Therefore, the revised "Operation Control Procedures in the Event of Disaster" should be re-examined by comparing it with the regulations of other railway operators, etc., and necessary revisions should be made to ensure the safe transportation of trains. In addition, the system should be such as to ensure that the operation control based on the regulations functions properly and that the regulations can be complied with.

The (interim) report was submitted on the measures taken by the Tosa Kuroshio Tetsudo Co., Ltd. in response to the recommendations dated November 29, 2024. For more details, please visit the JTSB's website.
https://jtsb.mlit.go.jp/railkankoku/railway-kankoku8re-2_20241213.pdf
(Japanese only)

The accident investigation report can be viewed on the JTSB website.
https://jtsb.mlit.go.jp/railway/rep-acci/RA2024-2-1.pdf (Japanese only)

2 Opinions

The opinions issued by the JTSB in 2024 are as follows.

(1) Opinions concerning the flooding accident of a fishing vessel Kaiko Maru and the measures taken in response to the opinions

(Opinions on March 28, 2024)

○Summary

On April 1, 2023, while preparing for departure, the engine room of the fishing vessel Kaiko Maru was flooded. The main engine starter motor, etc. in the engine room of the vessel suffered water damage.

○Probable Causes

It is probable that the accident occurred when the Master, for the first time on the vessel, opened the propeller inspection port window to remove a rope that had become entangled in the propeller shaft while the vessel was preparing for departure from Toba Port. The Master did not check the condition of the surrounding walls of the propeller inspection port before proceeding with the rope removal work. As a result, seawater entered the engine room through a hole in the lower part of the surrounding walls.

○Details of the opinions to the Director-General of the Fisheries Agency

It is probable that the accident occurred when the Master, for the first time on the vessel, opened the propeller inspection port window to remove a rope that had become entangled in the propeller shaft while Kaiko Maru was preparing for departure from Toba Port. The Master did not check the condition of the surrounding walls of the propeller inspection port before proceeding with the rope removal work. As a result, seawater entered the engine room through holes in the lower part of the surrounding walls.

According to the marine accident investigation reports published by the JTSB, there have been 15 similar accidents involving small fishing vessels and recreational fishing vessels, including this case, resulting in 7 fatalities and 3 injuries including pneumonia, etc., and the hulls of the vessels sank or capsized.

In light of the investigation results of a sinking accident of a recreational fishing vessel that occurred on September 21, 2008, in which the Master and two passengers drowned, the JTSB issued opinions to the Director-General of the Fisheries Agency on December 18, 2009, regarding the inspection of recreational fishing vessels before departure, including guidance to recreational fishing vessel operators on the tightness of the propeller inspection port windows. The Fisheries Agency, on the same date, requested the prefectural governors and related organizations to provide guidance on pre-departure inspections, etc.

However, similar accidents involving small fishing vessels and recreational fishing vessels, including those caused by loose propeller inspection port windows, continue to occur at a rate of one per year. Additionally, accidents have occurred in which a Master sailed without fully closing the

propeller inspection port window; the Master of a recreational fishing vessel died in October 2019, and three people including the Master of a fishing vessel died in March 2022.

It is probable that these similar accidents, which put the lives of crew members at risk and cause significant damage to the hull, can be prevented by fishermen and recreational fishing vessel operators through regular inspections and maintenance. Therefore, the JTSB, based on the findings of its investigation into this accident and similar accidents involving small fishing vessels and recreational fishing vessels, expresses opinions as follows to the Director-General of the Fisheries Agency, in accordance with Article 28 of the Act for Establishment of the Japan Transport Safety Board.

If any measures are taken in response to this opinion, please provide us with the details.

Notes

Considering the circumstances where accidents such as sinking and capsizing related to propeller inspection ports in small fishing vessels and recreational fishing vessels have occurred, the Director-General of the Fisheries Agency should publicize the occurrence of these accidents and inform the prefectures, relevant organizations, and others to implement the following measures to raise awareness among fishery operators and recreational fishing vessel operators of similar accidents.

(1) When the Masters of small fishing vessels or recreational fishing vessels open the propeller inspection port windows to carry out work, they must carry out the work while making sure that water does not enter areas outside the compartment where the propeller inspection port is located, and close the windows securely after completing the work. Furthermore, when crew members other than a master open the windows to carry out work, the Masters must instruct them to carry out the work while making sure that water does not enter areas outside the compartment where the propeller inspection port is located, and confirm that the windows are closed after the work is completed.

(2) The Masters and owners of small fishing vessels and recreational fishing vessels equipped with propeller inspection port windows must regularly inspect the bolts, etc. fixing the inspection port windows, and perform maintenance as necessary.

(3) The Masters and owners of small fishing vessels and recreational fishing vessels equipped with propeller inspection port windows must ensure that the surrounding walls of the inspection port are watertight. Additionally, if holes have been made in the enclosure walls, seal these holes to ensure watertightness and take measures to prevent water from entering areas outside the compartment where the propeller inspection port is located.

On May 24, 2024, the report was submitted detailing the measures taken by the Director-General of the Fisheries Agency in response to the opinions issued. For more details, please visit the JTSB's website.
https://jtsb.mlit.go.jp/shiphoukoku/ship-iken20re_20240528.pdf (Japanese only)

The accident investigation report can be viewed on the JTSB website.
https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-3-14_2023yh0077.pdf
(Japanese only)

3 Safety recommendations

The opinions issued by the JTSB in 2024 are as follows.

(1) Safety recommendations regarding the grounding accident of the cargo ship XIN HAI ZHOU 2

(Safety recommendations issued on March 28, 2024)

○Probable Causes

See Chapter 5, page 97.

Safety Recommendations for Management Companies and Flag State Authorities

In view of the results of this accident investigation, the Japan Transport Safety Board recommends that GRAND VOYAGE MARINE CO., LTD., as the ship manager of XIN HAI ZHOU 2, and the Panama Maritime Authority, as the flag state, take the following measures for the purpose of preventing the recurrence of similar accidents and reducing damage.

(1) GRAND VOYAGE MARINE CO., LTD. should carry out, in accordance with the safety actions established after the accident, appropriately and continuously to enhance supervision and support of their management vessels when encountering a stormy weather, and to implement education and training for masters and other crew members.

(2) The Panama Maritime Authority should instruct GRAND VOYAGE MARINE CO., LTD. to ensure the appropriate and continual implementation of the preventive measures by the company as referred in item 1 above set force.

The accident investigation report can be viewed on the JTSB website.
https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-3-1_2023tk0001.pdf
(Japanese)
https://jtsb.mlit.go.jp/eng-mar_report/2024/2023tk0001e.pdf (English)

4 Implementation status of measures taken in response to the recommendations, opinions, etc. issued in the past

There were no reports in 2024 on the measures taken in response to recommendations and opinions issued by the JTSB up to 2023.