

# Chapter 5 Marine accident and incident investigations

## 1 Marine accidents and incidents to be investigated

### <Marine accidents to be investigated>

#### ◎Article 2, paragraph (5), of the Act for Establishment of the Japan Transport Safety Board (Definition of marine accident)

The term “Marine Accident” as used in this Act shall mean as follows:

1. Damage to a ship or facility other than a ship related to the operations of a ship.
2. Fatality or injury of the people related to the structure, equipment or operations of a ship

### <Marine incidents to be investigated>

#### ◎Article 2, paragraph (6), item (ii) of the Act for Establishment of the Japan Transport Safety Board (Definition of marine incident)

“Marine incident” is a situation prescribed by Order of the Ministry of Land, Infrastructure, Transport and Tourism (Article 5 of the Ordinance for Enforcement of the Act for Establishment of the Japan Transport Safety Board), where deemed to bear a risk of Marine Accident occurring.

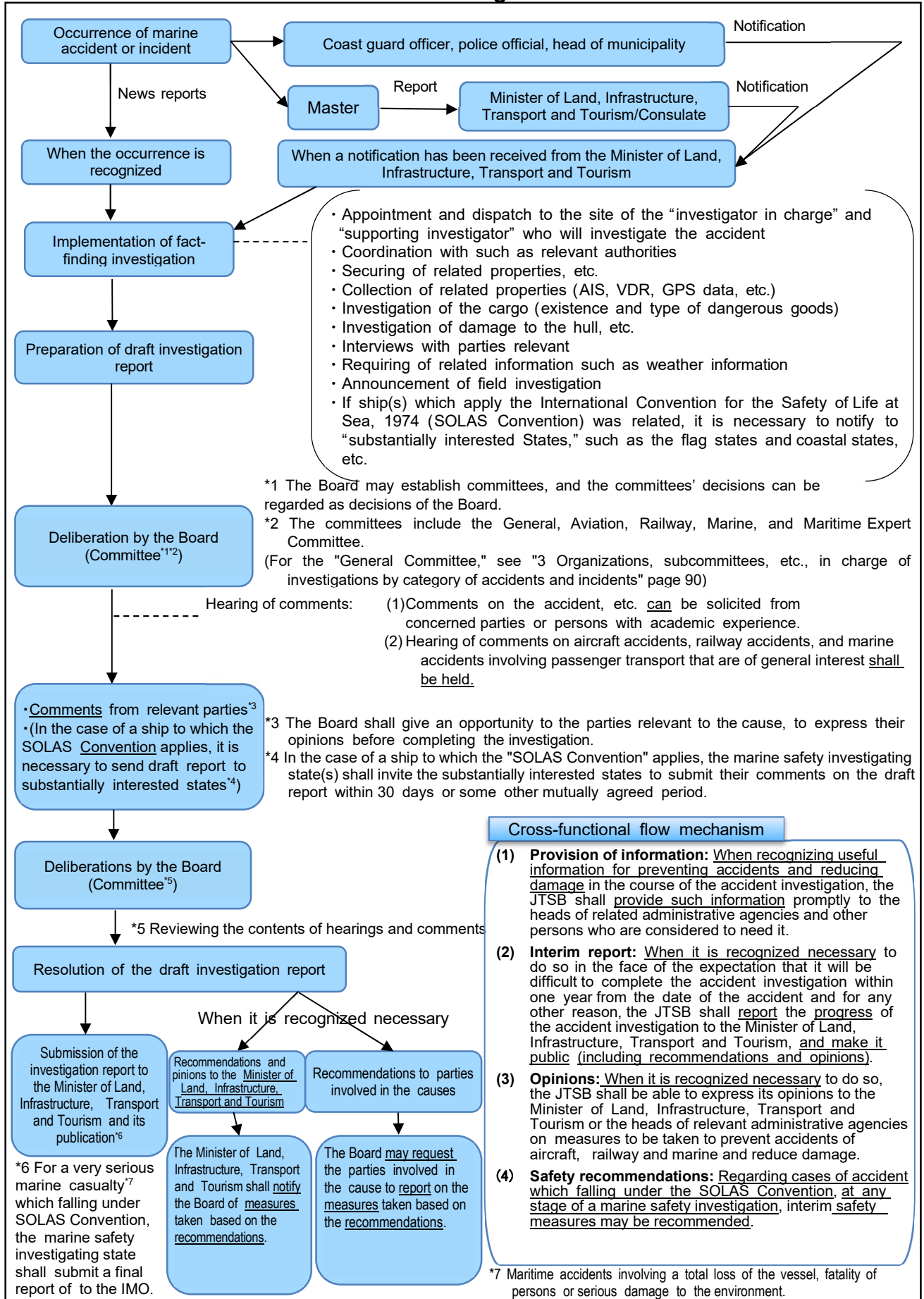
#### ○Article 5 of the Ordinance for Enforcement of the Act for Establishment of the Japan Transport Safety Board

1. The situation wherein a ship became a loss of control due to any of the following reasons:
  - (a) navigational equipment failure;
  - (b) listing of a ship; or
  - (c) short of fuel or fresh water required for engine operation.
2. The situation where a ship grounded without any damage to the hull; and
3. In addition to what is provided for in the preceding two items, the situation where safety or navigation of a ship was obstructed.

#### Category of marine accident and incident

Marine accident and incident to be investigated		Type of marine accident and incident
Marine accident	Damage to ships or other facilities involved in ship operation	Collision, Grounding, Foundering, Flooding, Capsizing, Fire, Explosion, Missing, Damage to facilities
	Fatality or injury related to ship structures, equipment or operations	Fatality, Fatality and injury, Missing person, Injury
Marine incident	Navigational equipment failure	Loss of control (engine failure, propeller failure, rudder failure)
	Listing of ship	Loss of control (extraordinary listing)
	Short of fuel or fresh water required for engine operation	Loss of control (fuel shortage, fresh water shortage)
	Grounding without hull damage	Stranded
	Obstruction of ship safety or navigation	Safety obstruction, Navigation obstruction

## 2 Procedure of marine accident/incident investigation



### 3 Organizations, Committees, etc., in charge of investigations by category of accidents and incidents

“Serious marine accidents and incidents” shown in the table below are investigated by marine accident investigators of the secretariat in Tokyo, and deliberations are conducted at the Marine Sub-Committee. Incidentally, “Particularly Serious Accident<sup>\*1</sup>” and “Very Serious Accidents<sup>\*2</sup>” are deliberated at the General Committee, etc.

“Marine accidents and incidents” shown in the table below are investigated by local accident investigators at regional offices in eight locations across Japan, and deliberations are conducted at the Maritime Expert Committee.

<sup>\*1</sup> The General Committee is responsible for matters related to the following particularly serious accidents (aircraft accidents, railway accidents, and marine accidents, excluding those deliberated by the Aircraft Committee, the Railway Committee, the Marine Committee, and the Maritime Expert Committee) and matters deemed necessary by the Board (Article 1, paragraph (2) of the Rules of Management of the Japan Transport Safety Board).

(1) Accident in which 10 or more people were fatally injured or missing (In the case of aviation accidents and marine accidents, only those involving aircraft or ships used for business that transports passengers. The same shall apply to (2).)

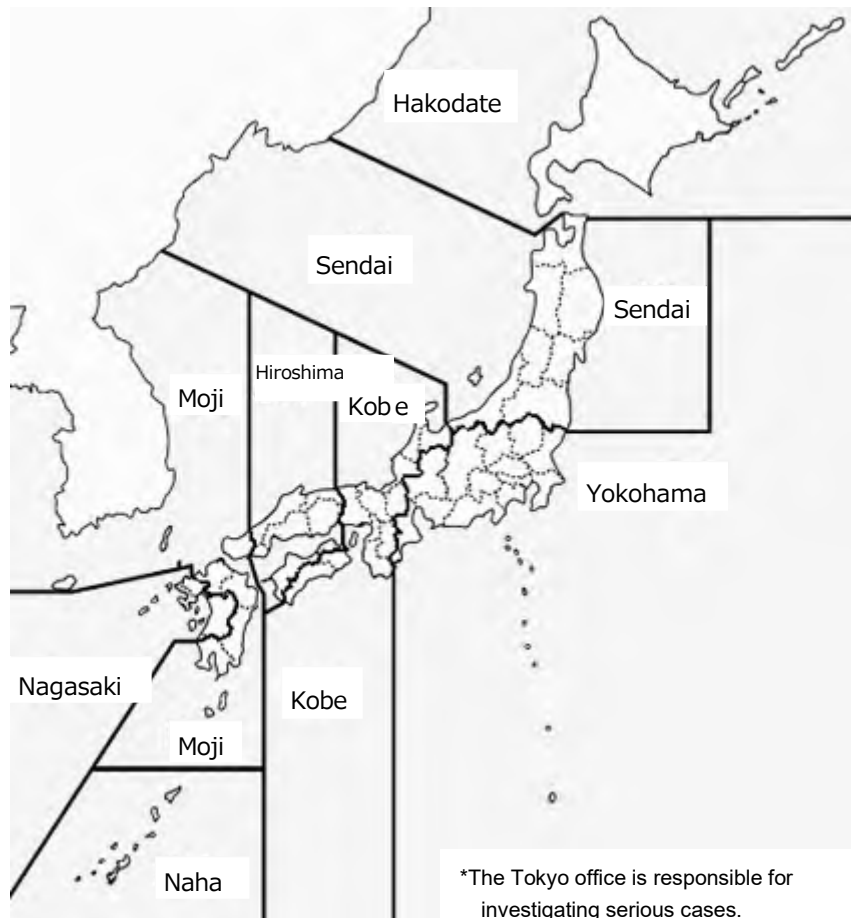
(2) Accident in which 20 or more people were fatally injured, missing or seriously injured.

<sup>\*2</sup> The resolution on very serious accidents recognized by the Board and on matters deemed necessary by the Board shall be taken at the Board in consideration of the occurrence situation of damage, social influence and other circumstances (Article 2, paragraph (5) of the Rules of Management of the Japan Transport Safety Board).

Serious marine accidents and incidents	Office in charge of investigation: Marine accident investigators in the Headquarters Committee in charge of deliberation and adoption: Marine Committee
<p>Definition of “serious marine accidents and incidents” (Article 9, Paragraph (1) of Ordinance on Organization of Secretariat of the Japan Transport Safety Board)</p> <ul style="list-style-type: none"> <li>• accident involving passenger was fatally injured, missing or two or more passengers were seriously injured</li> <li>• accident involving five or more persons were fatally injured or missing</li> <li>• marine accident of a ship<sup>*2</sup> engaged in international voyage<sup>*1</sup>, in which caused total loss of the ship, or which resulted in fatality or missing to a person.</li> </ul> <p><sup>*1</sup> meaning a voyage from a country to which the SOLAS Convention applies to a port outside such country, or conversely.</p> <p><sup>*2</sup> excluding vessels used for the business of transportation of goods with a gross tonnage of less than 500 gross tonnage to be used to be used for shipping service of the goods, and also excluding all fishing vessels.</p> <ul style="list-style-type: none"> <li>• accident which caused a serious impact on environment by spilling of oil, etc.</li> <li>• marine accident, etc. or a marine accident as a result of which any unprecedented damage has arisen</li> <li>• in addition to what is listed in the preceding items, the accident determined by the Board to fall under any the following items (a) to (c) inclusive <ul style="list-style-type: none"> <li>a) accident which had particularly serious influence on the society</li> <li>b) accident the identification of the cause of which is extremely difficult; and</li> <li>c) accident which would teach an important lesson for prevention of marine accident, etc. and in the event of a marine accident for alleviating damage in the cases where marine accident takes place.</li> </ul> </li> </ul>	
Less serious marine accidents and incidents	Office in charge of investigation: Regional investigators in the regional offices Committee in charge of deliberation and adoption: Maritime Expert Committee

#### 4 Jurisdiction of the Offices over Marine Accidents and Incidents

Our jurisdiction covers marine accidents and incidents in the water areas around the world, including rivers and lakes in Japan, and regional accident investigators placed in regional offices (8) are in charge of marine accidents other than serious accidents.



**Local Office Jurisdiction Map**

## 5 Statistics of investigations of marine accidents and incidents

(As of end of December 2024)

The JTSB carried out investigations of marine accidents and incidents in 2024 as follows:

In 2024, 604 accident investigations had been carried over from 2023, and 610 accident investigations were newly launched. Besides, 638 investigation reports were published in 2024, and thereby 576 accident investigations were carried over to 2025.

Moreover, 148 incident investigations were carried over from 2023, and 94 incident investigations were newly launched in 2024. Furthermore, 162 investigation reports were published in 2024 and thereby 80 incident investigations were carried over to 2025.

Among the 800 investigation reports published, none was issued with recommendations, and one was issued with opinions.

### Investigations of marine accidents and incidents in 2024

(Cases)

Category	Carried over from 2023	Launched in 2024	Transferred to Tokyo Office	Total	Published investigation reports	(Recommendations)	(Safety Recommendations)	(Opinions)	Carried over to 2024	(Interim report)
Marine accident	604	610	0	1,214	638	(0)	(1)	(1)	576	(6)
Tokyo Office (Serious cases)	16	9	1	26	12	(0)	(1)	(0)	14	(6)
Regional Offices (Less serious cases)	588	601	△1	1,188	626	(0)	(0)	(1)	562	(0)
Marine incident	148	94	0	242	162	(0)	(0)	(0)	80	(0)
Tokyo Office (Serious cases)	0	0	0	0	0	(0)	(0)	(0)	0	(0)
Regional Offices (Less serious cases)	148	94	0	242	162	(0)	(0)	(0)	80	(0)
Total	752	704	0	1,456	800	(0)	(1)	(1)	656	(6)

Note 1: The figures for “Launched in 2024” includes cases which occurred in 2023 or earlier, and which the JTSB was notified of in 2023 as subjects of investigation.

Note 2: The column “Transferred to Tokyo Office” shows the number of cases where the investigation found out that it was serious and the jurisdiction was transferred from the regional office to the Tokyo Office.

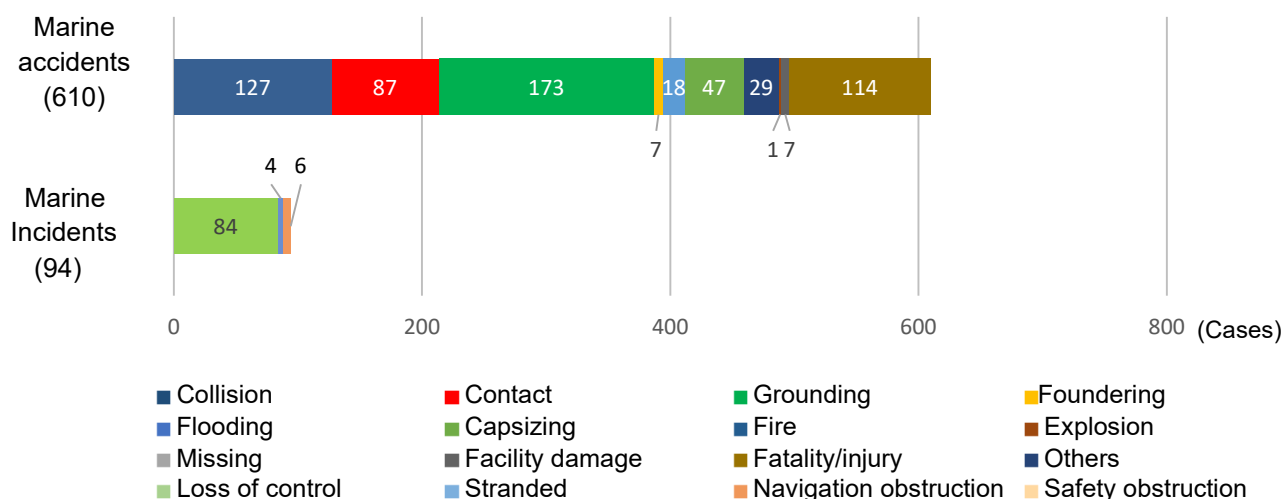
## 6 Statistics of investigated marine accidents and incidents

(As of end of December 2024)

### (1) Types of accidents and incidents

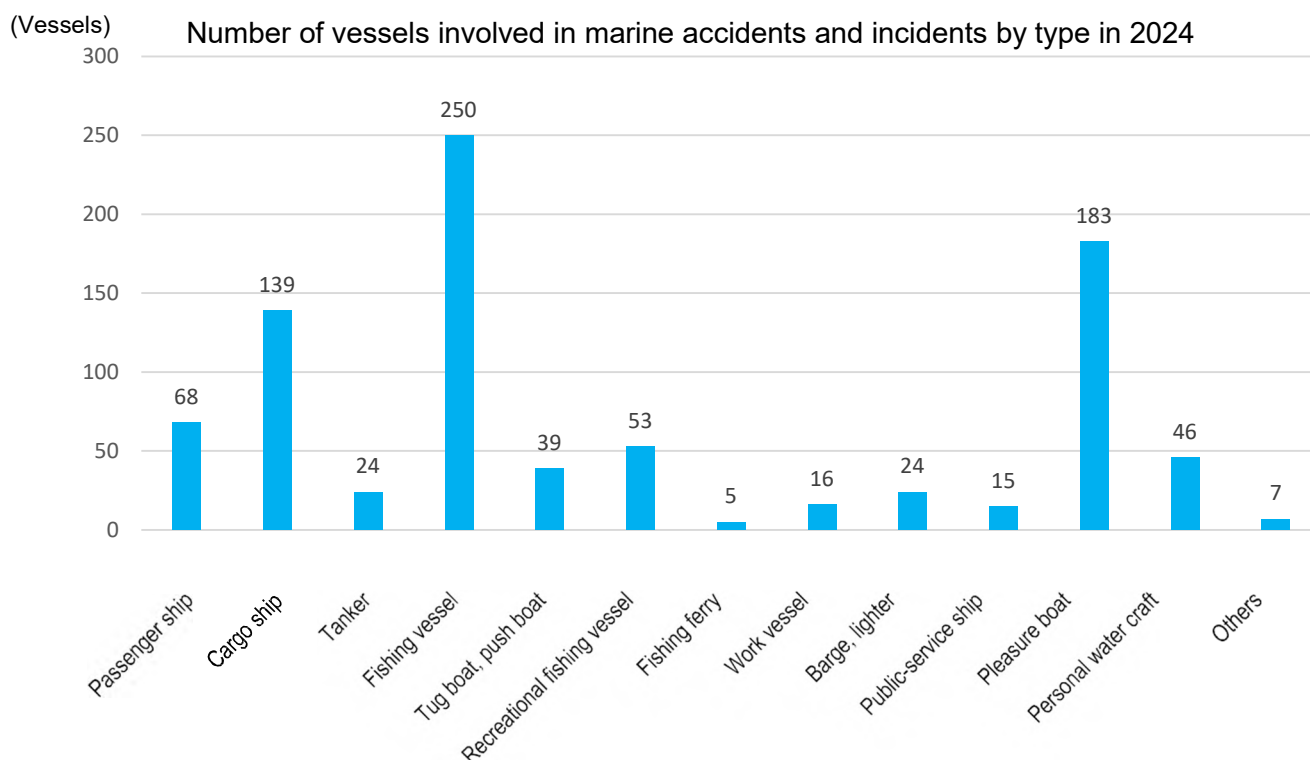
The breakdown of the 610 new investigations launched in 2024 by type of accidents and incidents is as follows: The marine accidents, in descending order included 173 cases of grounding, 127 cases of collision, 114 cases of fatality/injury (not involved in other types of accidents), and 87 cases of contact. The marine incidents included 84 cases of loss of control, six cases of navigation obstructions, and four cases of stranded. Objects that contacted with ships included quays in 21 cases, breakwaters in 15 cases, piers in 11 cases, and light buoy in 9 cases.

Number of investigated marine accidents and incidents by type in 2024



### (2) Types of vessels

The number of vessels involved in marine accidents and incidents was 869. By type of vessel, they included 250 fishing vessels, 183 pleasure boats, 139 cargo ships, 68 passenger ships, 53 recreational fishing vessels, 39 tug boats, 24 barge/lighters, 16 work vessels, 15 public-service ships, 7 others, and 5 fishing ferries.



The number of foreign-registered vessels involved in marine accidents and incidents was 32, and they were classified by accident type as follows: 16 vessels in collision, ten vessels in contact, three vessels in grounding, and two vessels in loss of control. As for the flag of vessels, twelve vessels were registered in Panama, five vessels in Republic of Korea, four vessels in the Republic of Liberia, two vessels in the Republic of the Marshall Islands, and two vessels in the Commonwealth of The Bahamas.

Number of foreign-registered vessels by flag

(Vessels)					
Panama	12	Republic of Korea	5	Republic of Liberia	4
Commonwealth of The Bahamas	2	Republic of the Marshall Islands	2	Others	7

### (3) Number of fatality, injury or missing persons

The number of fatality, injury or missing person was 333, consisting of 87 fatality, 16 missing persons, and 230 injured persons. By type of vessel, 106 persons in fishing vessels, 52 persons in passenger ships, and 45 persons in pleasure boats. By type of accident, 120 persons in fatality/injury, and 23 persons in capsizing, 74 persons in collision, 68 persons in contact, and 29 persons in grounding.

With regard to the number of person's dead or missing, 53 persons were involved in fishing vessel accidents, 24 persons in pleasure boat accidents, and ten persons in tanker accidents, indicating fatality or missing cases occurred frequently in fishing vessels.

Number of fatality, missing or injury (marine accident)

(Persons)										
2024										
Vessel type	Dead			Missing			Injured			Total
	Crew	Passengers	Others	Crew	Passengers	Others	Crew	Passengers	Others	
Passenger ship	0	0	0	0	0	0	9	41	2	52
Cargo ship	4	0	0	0	0	0	7	0	5	16
Tanker	8	0	0	2	0	0	2	0	0	12
Fishing vessel	41	0	2	10	0	0	51	0	2	106
Tug boat, push boat	2	0	0	0	0	0	3	0	0	5
Recreational fishing vessel	1	1	0	0	0	0	5	47	0	54
Fishing ferry	0	0	0	0	0	0	0	1	0	1
Work vessel	0	0	0	0	0	0	0	0	2	2
Barge, lighter	0	0	2	0	0	0	0	0	0	2
Public-service ship	0	0	0	1	0	0	1	0	2	4
Pleasure boat	14	0	7	3	0	0	9	2	10	45
Personal water craft	2	0	0	0	0	0	9	1	18	30
Others	1	1	1	0	0	0	0	0	1	4
Total	73	2	12	16	0	0	96	92	42	333
	87			16			230			

\*The figures above include accidents under investigation and therefore are subject to change depending on the course of investigations and deliberations.



## 7 Summaries of serious marine accidents and incidents which occurred in 2024

The serious marine accidents which occurred in 2024 are summarized as follows.

(Marine accident)

1	Date and location		Vessel type and name, accident type	
	January 16, 2024 Orido Bay, Shimizu Ward, Shizuoka City, Shizuoka Prefecture		Towed vessels 13 Capsizing	
	Summary	While the vessel was being towed and sailing, it capsized. One fishing passenger on the vessel was thrown out and rescued, but was unconscious and transported to hospital, later fatality of the passenger was confirmed.		
2	Date and location		Vessel type and name, accident type	
	March 20, 2024 Off Mutsurejima, Shimonoseki-shi, Yamaguchi Prefecture		Chemical Tanker KEOYOUNG SUN Capsizing	
	Summary	Chemical Tanker KEOYOUNG SUN was capsized off Mutsurejima, Shimonoseki-shi, Yamaguchi Prefecture		
3	Date and location		Vessel type and name, accident type	
	May 20, 2024 Ishinomaki Port Hibarino North Pier, Ishinomaki-shi, Miyagi Prefecture		Bulk Carrier EVER FELICITY Injury and Fatality of Stevedores	
	Summary	While the bulk carrier EVER FELICITY berthed at quay, two stevedores engaged in cargo handling operations and were found collapsed inside a cargo hold. Both of Stevedores were transported to a hospital; one was later pronounced fatality.		
4	Date and location		Vessel type and name, accident type	
	July 2, 2024 Tomakomai Port, Tomakomai City, Hokkaido		Passenger car ferry SILVER BREEZE Collision (with tetrapods)	
	Summary	The passenger car ferry Silver Breeze (8,901 tons, 21 crew members and 119 passengers) collided with a tetrapod revetment in the western part of the port while entering Tomakomai Port.		
5	Date and location		Vessel type and name, accident type	
	July 28, 2024 Sakaiminato		Recreational fishing vessel DAINI AI MARU Collision (with tetrapods)	
	Summary	The recreational fishing vessel Daini Ai Maru collided with wave-absorbing tetrapods of the Sakaiminato second breakwater while returning to Sakaiminato.		
6	Date and location		Vessel type and name, accident type	
	October 16, 2024 Off the east coast of Ogawa Island, Karatsu City, Saga Prefecture		Recreational fishing vessel TOMIFUKU MARU Fatality	
	Summary	When the recreational fishing vessel Tomifuku Maru was sailing off the east coast of Ogawa Island, Karatsu City, one fishing passenger fell overboard and was killed.		
7	Date and location		Vessel type and name, accident type	
	November 10, 2024 Off the coast of Oshima, Munakata City, Fukuoka Prefecture		Minesweeper UKUSHIMA Fire	
	Summary	A fire broke out in the engine room of the minesweeper UKUSHIMA. One crew member of the minesweeper Ukushima was missing, and one person sucked smoke and was transported to the hospital.		
8	Date and location		Vessel type and name, accident type	



November 23, 2024 Around the Kobe West Route, Kobe Ward, Hanshin Port	Cargo ship YIANNIS N.G (Vessel A) Pushboat Shoei Maru (Vessel B) Barge Chuo 2000 Collision
	<b>Summary</b> The cargo ship YIANNIS N.G. and the barge Chuo 2000 collided near the Kobe West Route, and Vessel B capsized.

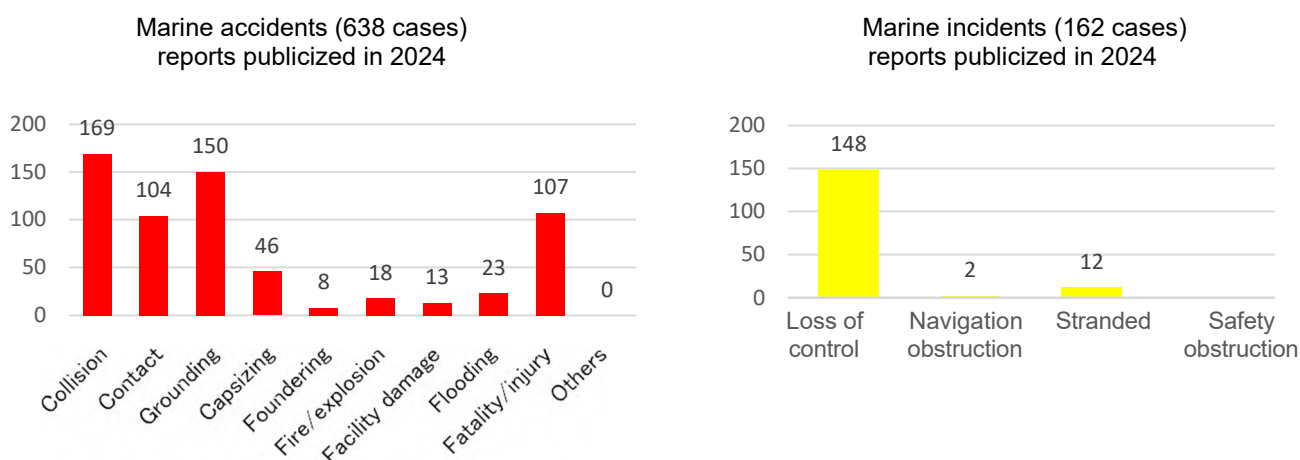
The above details may change depending on the progress of the investigation

## 8 Publication of investigation reports

The number of investigation reports of marine accidents and incidents published in 2024 was 800, consisting of 638 marine accidents (among them, 12 were serious) and 162 marine incidents.

Breaking them down by type, the marine accidents included 169 cases of collision, 150 cases of grounding, 107 cases of fatality/injury, and 104 cases of contact. The marine incidents included 148 cases of losses of control, (139 cases of navigational equipment failure, nine cases of fuel shortages, etc.), 12 cases of stranded, two cases of navigation obstruction, and one case of safety obstruction.

As for the objects of contact, 31 were quays, 16 were breakwaters, and 11 were tetrapods



The number of vessels involved in marine accidents and incidents was 1,005. Breaking them down by type, the marine accidents involved 261 fishing vessels, 187 pleasure boats, 126 cargo ships, 63 personal water crafts, and 53 passenger ships. The marine incidents involved 101 pleasure boats, 17 cargo ships, 16 fishing vessels, and 8 recreational fishing vessels.


### Number of vessels by type involved in marine accidents and incidents for which reports were publicized in 2024

(Vessels)

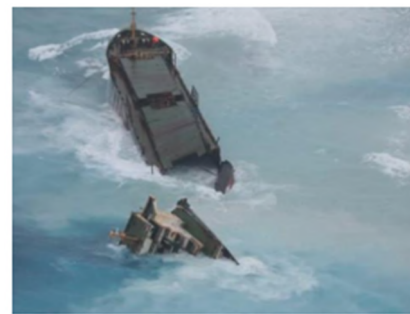
Classification	Passenger ship	Cargo ship	Tanker	Fishing vessel	Tug boat, Push boat	Recreational fishing vessel	Fishing ferry	Work vessel	Barge, lighter	Public-service ship	Pleasure boat	Personal water craft	Others	Total
Marine accident	53	126	29	261	33	63	2	18	18	13	187	31	7	841
Marine incident	5	17	3	16	3	8	0	3	1	1	101	6	0	164
Total	58	143	32	277	36	71	2	21	19	14	288	37	7	1,005
Composition ratio (%)	5.8	14.2	3.2	27.6	3.6	7.1	0.2	2.1	1.9	1.4	28.7	3.7	0.7	100.0

The marine accidents and serious incidents which occurred in 2024 are summarized as follows:


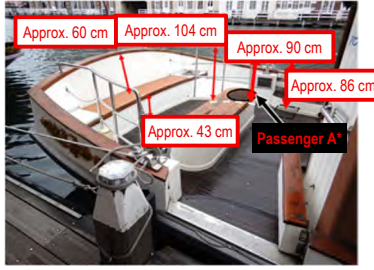

### Marine serious accident reports published in 2024

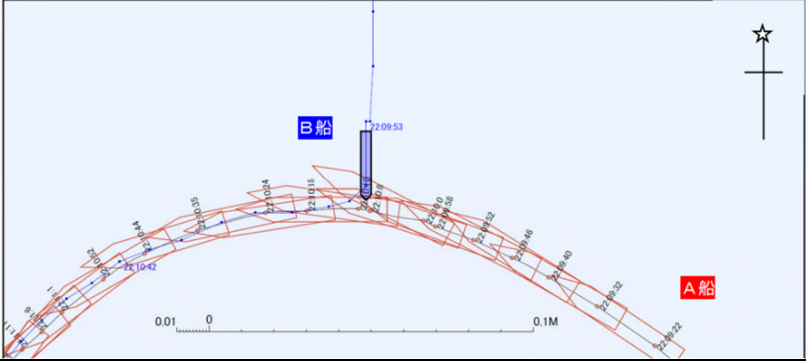
1	Date of publication	Date and location	Vessel type and name, accident type
	February 29, 2024	November 30, 2020 Off the northwest coast of the Hawaiian Islands, U.S.A.	Container Ship ONE APUS Damage to container hatchcover, etc.
	Summary	<p>While the vessel, with the master and 23 other crew members on board, was proceeding east-southeast off the west-northwest coast of Niihau Island, Hawaiian Islands, U.S.A., the cargo shifted due to horizontal shaking, causing containers to fall into the sea.</p> <p>The vessel had holes, etc. in the container loading platform.</p> 	
	Probable causes	<p>It is probable that the cause of the Accident was that, at night when the vessel was proceeding east-southeast off the west-northwest coast of Niihau Island in the Hawaiian Islands, when the ship was experiencing swells of approximately 5 to 6 m from the northwest and north-northwest directions on the port side and stern, and the master attempted to reduce the rolling. As the ship was sailing on a course of approximately 140°, the direction of the swell was close to the danger zone where the ship received waves from 30° to 60° to port stern, resulting in a roll angle of over 20° and the first cargo collapse.</p> <p>After that, the master felt the rolling become even more intense, changed the course to approximately 120° and continued sailing, causing the direction of the swell to shift from the stern of the ship to 30° to 60° to port.</p> <p>It is thought that this caused the cargo to enter the danger zone, resulting in a roll angle of 25° or more, and the second collapse of the cargo occurred.</p> <p>It is probable that the cargo on the ship collapsed, causing the loaded containers to collapse and damage to container hatch cover and other equipment on deck leading to this accident. The master set the course at approximately 140° and the direction of the swell was close to the danger zone, probably due to the fact that he could not properly assess the sea conditions at night.</p> <p>The vessel is considered to have proceeded under conditions that were prone to parametric rolling*<sup>1</sup> from about 21:40 on November 30, when the rolling began, to about 00:59 on December 1, when the ship changed course significantly.</p> <p>*<sup>1</sup> Parametric roll is a resonance phenomenon in which the roll of a ship is rapidly amplified when the roll period of the ship and the encounter period of waves are in a certain relationship.</p>	
	Safety actions	Company A should continue to establish a system to assist masters, as necessary, in determining passage plans when heavy weather is expected, such as parametric rolling, etc.	
	Report	<a href="https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-2-1_2022tk0001.pdf">https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-2-1_2022tk0001.pdf</a> (Japanese) <a href="https://jtsb.mlit.go.jp/eng-mar_report/2024/2022tk0001e.pdf">https://jtsb.mlit.go.jp/eng-mar_report/2024/2022tk0001e.pdf</a> (English)	
2	Date of publication	Date and location	Vessel type and name, accident type
	March 28, 2024	January 24, 2023 Off the northwest of Taketomi Island, Taketomi Town, Okinawa Prefecture	The cargo ship XIN HAI ZHOU 2 (Panama) Grounding
	Summary	<p>The cargo ship was drifting for the purpose of time adjustment off the west of Ishigaki Island, Ishigaki City, Okinawa Prefecture, when she was pushed by the wind and waves. She therefore started her main engine and navigation; however, she continued to be pushed without gaining sufficient propulsion or rudder effect and ran aground on a shallow reef off the northwest of Taketomi Island. The cargo 2's hull subsequently broke in two at her center section.</p>	

	<p><b>Probable causes</b></p>	<p>It is probable that the accident occurred when, under conditions in which a gale warning for the sea south of Okinawa and southern part of the East China Sea as well as a high winds advisory and heavy seas warning for Ishigaki City and Taketomi Town had been issued, the Vessel drifted off the west of Ishigaki Island, where the Shallow Reef exists to the south, received northerly wind and waves from her port side and was pushed south; she continued to drift even after the wind and waves intensified until her distances to the Shallow Reef reached about 3 M; and she subsequently started her main engine and began navigating in an attempt to proceed north but could not gain sufficient propulsion and rudder effect to overcome the external forces, and therefore she continued to be pushed in an uncontrollable state and ran aground on the Shallow Reef.</p> <p>It is somewhat likely the Vessel could not gain sufficient propulsion and rudder effect after she started her main engine because the Master continued to use the main engine at half-ahead revolutions and did not use the maximum available output, resulting in main engine output that was approximately 40% of the MCR.</p> <p>It is probable that the Vessel drifted off the west of Ishigaki Island, where the Shallow Reef existed to the south and where she received wind and waves from the north, without taking refuting steps, such as heaving to<sup>*1</sup> using the main engine, because the Master thought based solely on weather information he obtained from an overseas weather information website that the weather and sea conditions would not present a problem for navigation if they were as forecasted.</p> <p>It is probable that the Vessel continued to drift even after the wind and waves intensified until her distance to the Shallow Reef reached about 3 M because the Master thought the weather and sea conditions would not present a problem for navigation if they were as forecasted and therefore did not instruct the officer of the watch to monitor and maintain the Vessel's position during drifting and did not specify matters to be reported to the Master concerning changes in weather and sea conditions, etc., or the timing of such reports.</p> <p><sup>*1</sup> "Heaving to" is a method of ship maneuvering for keeping a vessel in place by using enough forward propulsion from the main engine to maintain the rudder's effectiveness during stormy weather and catching the wind and waves at slight angle to the bow.</p>
	<p><b>Safety actions</b></p>	<p>The following measures are possible to prevent recurrence of and mitigate the damage caused by similar accidents:</p> <ul style="list-style-type: none"> <li>• In cases where a passage plan must be changed, the master of a vessel should obtain the latest data and information on the revised destination and weather and sea conditions from the ship management company or local ship's agent.</li> <li>• The master should make weather predictions based on comprehensive judgments from multiple sources of weather information, including forecasts from local weather authorities. When weather and sea conditions are expected to worsen and a safer anchorage is available inside port, the master should coordinate with their ship's agent<sup>*2</sup> or other concerned party to permit early port entry. If a suitable place to refuge is unavailable, the master should consider moving to safe waters away from the shore and using the main engine to turn the bow to windward or heave to.</li> <li>• When drifting, the master should select a drifting location with no shallow reefs or other such features downwind that is suitable for the forecasted weather and sea conditions as well as geographical conditions.</li> <li>• The master should confirm in advance the possibility of arranging a tugboat in case the vessel's control becomes difficult. When intending to use a tugboat, the master should request it with plenty of time to spare.</li> <li>• When drifting, the master should give clear instructions to the officer of the watch concerning monitoring and maintaining the ship's position and specify the matters to be reported to the master concerning changes in weather and sea conditions, etc., and the timing of such reports, and should have officers of the watch make reports to the master so that moving to a safe area can be completed as soon as possible before the danger of approaching a shallow reef, etc., increases.</li> <li>• The master and officers should, based on a full understanding of the vessel's maneuvering performance and engine performance, handle the main engine within a range that extends to its maximum available output so that sufficient propulsion can be obtained for early movement to a safe area if the vessel encounters stormy weather.</li> </ul>






Provided by the Japan Coast Guard

		<ul style="list-style-type: none"> <li>The master should share information on the status of ship operations, use of the main engine, and other matters between the bridge and the engine room, and should establish an operating environment that allows him or her to receive advice on the use of the main engine not only from the crew members on the bridge but also from those in the engine room.</li> </ul> <p>*2“Ship’s agent” refers to a business operator who, based on a contract, acts as an agent for the shipping company or master of a vessel when the vessel enters or leaves a port. The agent secures the wharf and other facilities, coordinates cargo handling arrangements, completes procedures for entering/leaving port with concerned government agencies, arranges for pilots and tugboats, and handles other necessary matters.</p>	
	Report	<a href="https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-3-1_2023tk0001.pdf">https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-3-1_2023tk0001.pdf</a> (Japanese) <a href="https://jtsb.mlit.go.jp/eng-mar_report/2024/2023tk0001e.pdf">https://jtsb.mlit.go.jp/eng-mar_report/2024/2023tk0001e.pdf</a> (English)	
3	Date of publication	Date and location	Vessel type and name, accident type
	April 25, 2024	April 12, 2023 Sasebo City, Nagasaki Prefecture	Passenger ship DELFT Fatality
	Summary	While the passenger ship DELFT, operated by the master alone, with seven passengers on board, was sailing through a canal in a theme park, one passenger fell overboard and died.	
	Probable causes	<p>It is probable that the accident occurred during the night, while the vessel was sailing in the canal in Huis Ten Bosch, Passenger A fell overboard and drowned. It is likely that Passenger A fell overboard from near the gangway of the port side on the stern deck, but as there were no witnesses and no objective information was available, the situation that led to Passenger A falling into the water could not be clarified.</p> 	
	Safety actions	<p>The vessel is an attraction for the theme park as well as a vessel engaged in regular ferry line service for general passengers. It is desirable that the operators, including the company, who operate the vessels in theme parks, take safety measures based on both tangible and intangible elements to reassure passengers.</p> <p>The company suspended the operation of the Canal Cruiser after the accident, but resumed operation on April 18, 2023 after taking the following measures.</p> <ul style="list-style-type: none"> <li>It was decided that passengers on the stern deck should be requested to wear lifejackets, and the company posted that on the stern deck (in four languages (Japanese, English, Korean and Chinese)) as well as informed the passengers (in four languages) through broadcasting before boarding and at the time of departure, and it equipped lifejackets on the stern deck. Safety management regulations were also revised.</li> <li>It was decided that passengers should not move from their seats while the boat was in motion, and the company posted that on the stern deck (in four languages) and informed (in four languages) through broadcasting before boarding and at the time of departure.</li> <li>A camera with a recording function was installed on the stern deck and the rear of the cabin, and a monitor installed in the cockpit was displayed.</li> <li>A message requesting passengers not to lean forward was posted on the stern deck in larger letters than before the accident (in four languages).</li> <li>In addition to the rope on the gangway, a rope was also installed on the inside.</li> <li>The vessel and outboard motor boat were equipped with portable lights to help ensure the safety of passengers at night.</li> </ul> <p>In addition, it is probable that the following measures will help mitigate damage in similar accidents in future.</p> <ul style="list-style-type: none"> <li>It is desirable to conduct drills assuming various accident responses that may occur during operation, such as searching for water droppers at night and rescuing unconscious men overboard.</li> </ul>	
	Report	<a href="https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-4-1_2023tk0005.pdf">https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-4-1_2023tk0005.pdf</a> (Japanese only)	
4	Date of publication	Date and location	Vessel type and name, accident type


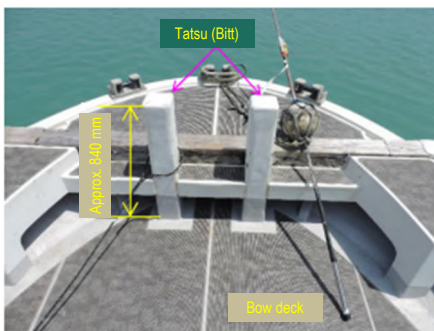
	May 30, 2024	February 29, 2020 Off the east coast of Nakayamazaki, Rokkasho village, Aomori Prefecture	Cargo Ship, GUO XING 1(Vessel A, Belize) Fishing Vessel, TOMI MARU No. (Vessel B) Collision
	Summary	<p>Vessel A with the master and 13 crew members on board, was heading north toward Dangjin, Republic of Korea, and the fishing vessel TOMI MARU No. 8, with the master and 14 crew members on board, was heading south toward Hachinohe Port, Aomori Prefecture.</p> 	
	Probable causes	<p>The JTSB concludes that the probable cause of this accident was that, when Vessel A was heading north toward the Republic of Korea and Vessel B was heading south toward Hachinohe Port after fishing operation at off the east coast of Nakayamazaki Rokkasho Village, during night, since Vessel A turned to starboard and sailing the course which was east side of extended course of Vessel B and Vessel A approached around 0.6M to Vessel C which was forward sailing toward south of east side of vessel B, Vessel A turned to port exponentially and sailing toward north-west under same speed and Vessel B was also sailing same course and speed continuously. Therefore, it is probable that two vessels were collided.</p> <p>It is probable that Vessel A turned to port exponentially and sailing toward north-west under same speed after heading to the east of the extended course of Vessel B in order to avoid to collider with Vessel C. However, since the Officer A2 who was navigational watch on duty of Vessel A was disappearance, it could not be determined why especially the cause to turn to port exponentially.</p> <p>When Chief fisherman B saw two lights of which were red light (port side light) and masthead light, he seemed that Vessel A sailed around 020° on the course. Since he believed that Vessel A could pass in forward of the Vessel B safely and Vessel A could pass port to port with Vessel C, Chief Fisherman B was watching the fish finder continuously and he could not find to be approach from Vessel A. Therefore, it is probable that Vessel B was sailing continuously under same speed and same course.</p>	
	Safety actions	<p>The master and navigational watch officer should be following measures in order to prevent the recidivating similar accidents and mitigate the damage caused by the accident.</p> <ol style="list-style-type: none"> <li>(1) Officer of the Watch should confirm the surroundings of the vessel properly using radar etc., if they take action to avoid collision with other vessel, it should take care that the vessel does not approach to other vessel such as the course should be substantially changed and speed should be substantially decreased.</li> <li>(2) If Officer of the Watch sees other vessel which is approached to this vessel, they should properly monitor the movement of another vessel until the vessel passes, even if the situation of two vessels can safely pass each other.</li> <li>(3) If Officer of the Watch sees several vessels which are sailing same course without distance each other, since it may difficult to avoid from other vessels when the vessel enter in the extended course of other vessels, the vessel should be away from course of other vessels as soon as possible.</li> <li>(4) If the vessel flood during to sail by accidents, the master should stop the running of Main Engine immediately and judge of status of the danger. If the vessel is in danger, the master should order and action to abandon from ship. If the abandon ship is ordered, crews should wear clothing possible to prevent loss of body heat and wear life jackets (or carry them if there is no time to put them on). In addition, the equipment listed on Master List (EPARB<sup>*1</sup>, radar transponder and other radio life-saving equipment, blankets and other cold protection equipment, food and drinking water, and designated documents) should carry and go to a designated master station.</li> </ol> <p>The master of the vessel shall ensure that the crews are familiar with the life-saving appliances</p>	


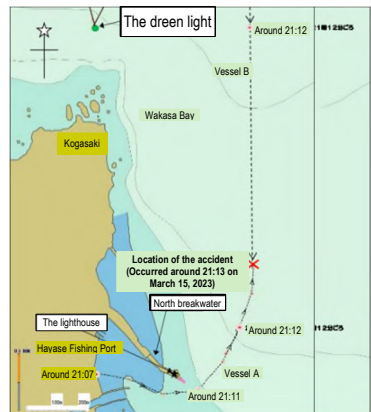



		<p>on board, such as life rafts, immersion suits, radio life-saving appliances, etc., and that they are proficient in their use.</p> <p>*1 “EPARB : Emergency Position Indicating Radio Beacon” refers to a buoy-type radio device that emits a distance signal to a satellite and is automatically levitated by a water pressure sensor when a vessel sinks and sends out a distress signal.</p>	
	Report	<a href="https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-5-1_2020tk0003.pdf">https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-5-1_2020tk0003.pdf</a> (Japanese) <a href="https://jtsb.mlit.go.jp/eng-mar_report/2024/2020tk0003e.pdf">https://jtsb.mlit.go.jp/eng-mar_report/2024/2020tk0003e.pdf</a> (English)	
5	Date of publication	Date and location	Vessel type and name, accident type
	May 30, 2024	April 2, 2023 Off the west coast of Kamo Fishing Port, Oga City, Akita Prefecture	Recreational fishing vessel KIMIMARU Fatality of Passenger
	Summary	While the vessel, operated by the master alone, with three anglers on board, was drifting for recreational fishing off the west coast of Kamo Fishing Port in Oga City, one angler fell overboard and died.	
	Probable causes	<p>It is probable that this accident occurred while the vessel was drifting for recreational fishing off the west coast of Kamo Fishing Port in Oga City, Passenger A fell overboard and drowned.</p> <p>It is possible that Angler A fell overboard from a crouching or standing position while the hull was rolling somewhere on the port side of the vessel, but the witness was not present and the situation of falling water could not be clarified.</p>	
	Safety actions	<p>The following matters, which may be useful for preventing any similar accidents from recurring and mitigating damage in future should be heeded:</p> <ul style="list-style-type: none"> <li>• Masters of recreational fishing vessels, regardless of whether sailing or harvesting aquatic animals and plants, shall pay the utmost attention to ensuring passenger's safety by constantly monitoring the conditions of the passengers on board.</li> <li>• Masters of recreational fishing vessels shall check whether lifejackets brought by passengers are those for small vessels that conform to the type approval standards of the Ministry of Land, Infrastructure, Transport and Tourism, and in case they do not conform to the standards, shall ensure passengers wear lifejackets that conform to said standards on board.</li> <li>• It is desirable that lifejackets worn by passengers of recreational fishing vessels should be of the crotch string type.</li> <li>• Passengers of recreational fishing vessels shall, when wearing lifejackets, tighten fasteners, etc. securely, adjust them to suit their bodies, and wear them appropriately to ensure they remain in place if the passenger falls overboard. The crotch string should always be used if present.</li> </ul>	
	Report	<a href="https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-5-2_2023tk0004.pdf">https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-5-2_2023tk0004.pdf</a> (Japanese only)	

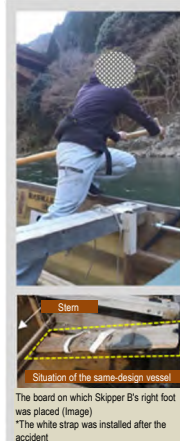
6	Date of publication	Date and location	Vessel type and name, accident type
	July 25, 2024	November 9, 2021 Akaishi, Komatsushima District, Tokushima Komatsushima Port, Tokushima Prefecture - 10m berth	Container Ship DONGJIN FORTUNE (Republic of Korea) Fatality of the Linesman
	Summary	<p>When the vessel with master and 16 crew members on board were during an operation of berthing on the Akaishi-10m berth with starboard side, a linesman who was working at the berth to connect the ship's mooring line to the bollard was seriously injured when he was hit by a mooring line bouncing up, and he had subsequently died.</p> 	
	Probable causes	<p>Under the subject vessel was berthing operation at Komatsushima District, Tokushima Komatsushima Port, Tokushima Prefecture, when this spring line caught on the underside of this fender and receiving the tension, the linesman A looked diagonally downward from near upper edge of the berth located this fender in order to confirm the status of this spring line. When this spring line came off from underside of this fender and bounced up, since linesman A's head was entered in the area that this spring line was bounced up and this spring line hit to his head, it is probably that this accident had occurred.</p>	
	Safety actions	<p>It was probably that the following measures are useful in preventing the recurrence of similar accidents in the future.</p> <ul style="list-style-type: none"> <li>• The company contracting the mooring line work must conduct specific safety training to the linesman of the mooring work at shore such as inform the accident example and clearly indicating of the dangerous area, regarding the risk of snapback which the mooring line under tension is ruptured and bounced back, and risk of the mooring line of tautness was released and bounced up after the mooring line catch on the obstacle and pull. Also, during field meetings prior to work, when the mooring line is caught between the hull and the fender and the mooring line is receiving tension, specific precautions for each stage of work must be clearly indicated and strictly observed such as requiring ships leaving or arriving at the berth to loosen the mooring line.</li> <li>• The company contracting the mooring line work is advisable to decide on signals in advance, and ask your business partners to help publicize and utilize the information in order to improve the communication between crew members of docking and departing vessels and workers on shore.</li> </ul> <p>The company has implemented the following measures to prevent the occurrence of similar accidents.</p> <ul style="list-style-type: none"> <li>• Since the company has been conducted re-evaluation of the organizational structure within the company and Safety and Health Manager has been provided to each department of assuming field work, a more detailed safety management system has been established.</li> <li>• The company organized the hand signals for mooring work (hereinafter referred to as "hand signals") in order to improve communication with the ship's side, and the documents which was described the explanation and how to use of hand signal have been distributed to the business acquaintance through agents and requested the ship's side to use them and cooperate with us.</li> <li>• During the mooring work, the observer has been provided in addition to the lines man who are engaged in the mooring work, in order to observe the condition of work of the crew on board ship leaving and berthing as well as overall mooring work status, communicate with ship side by hand signal, and provide necessary safety instructions.</li> <li>• The company has been created the documents of the mooring work procedure which is described specific precaution statement such as the substance and procedure of the field work, setup and function of Observer, communication with Ship side by hand signal, and the marking of the dangerous area during the work. In this regard, the company has conducted the confirmation of the</li> </ul>	






		<p>substance and procedure of the field work and safety guidance by using this document in the meeting prior to commencing work.</p> <ul style="list-style-type: none"> <li>The company has held a safety and health meeting once a month at each branch and each office, and provided safety guidance and education to linesman using work procedures and accident examples.</li> <li>The company has collected various risks during field work, compile them into near-miss reports along with improvement measures, etc., and share and inform each department within the company and each field.</li> </ul>	
	Report	<a href="https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-7-1_2022tk0005.pdf">https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-7-1_2022tk0005.pdf</a> (Japanese) <a href="https://jtsb.mlit.go.jp/eng-mar_report/2024/2022tk0005e.pdf">https://jtsb.mlit.go.jp/eng-mar_report/2024/2022tk0005e.pdf</a> (English)	
7	Date of publication	Date and location	Vessel type and name, accident type
	July 25, 2024	May 7, 2023 Off the south coast of Kudaka Island, Nanjo City, Okinawa Prefecture	Recreational fishing vessel SEISHOMARU Injury of Passenger
	Summary	<p>While the vessel, operated by the master alone, with ten anglers on board, was proceeding off the south-southeast coast of Kudakashima Island, two anglers on the bow were injured when the bow rolled up and down violently.</p> 	
	Probable causes	<p>It is probable that this accident occurred because under conditions of swell and waves from the south, while proceeding south-southeast at a speed of about 9 knots off the south coast of Kudakashima Island, the master thought that the speed of the main engine had been lowered sufficiently and continued to navigate with the anglers on the bow deck. Therefore, when the bow was struck by waves about 2.0 m high at the bow and the bow rolled violently up and down, Angler A suffered injury to the buttocks and back when colliding with the bow deck and the left face of Angler B collided with the bow, injuring him.</p>	
	Safety actions	<p>The following matters, which may be useful for preventing any similar accidents from recurring and mitigating damage in future should be heeded.</p> <ul style="list-style-type: none"> <li>Masters and other responsible parties of recreational fishing vessels, etc. should comply with the departure cancellation standards stipulated in the operational guidelines, obtain the latest weather and sea conditions information in advance, and determine whether or not to depart.</li> <li>Masters and other responsible parties of recreational fishing vessels, etc. should ensure that users observe the precautions before boarding the vessel, such as the risk of the bow rolling up and down violently due to the vessel's motion, which may pose an injury risk and that they wear lifejackets except in the cabin while on board the vessel.</li> <li>Masters and other responsible parties of recreational fishing vessels, etc. should pay attention to the height and direction of the waves during navigation, and when the vessels are rolling due to the impact of waves, taking the rolling characteristics during navigation, etc. into consideration, should comply with accident prevention provisions for users due to rolling in the operational guidelines, in accordance with the contents of the opinions expressed by the JTSB to the Director-General of the Fisheries Agency on February 16, 2023, e.g. by reducing rolling by changing the course to the waves and reducing to a sufficiently safe speed, and instructing users from the central part to the rear of the hull.</li> <li>It is desirable that the masters of recreational fishing vessels and recreational fishing vessel operators take measures to ensure that precautions, etc. are communicated to foreign users by, for</li> </ul>	

		<p>example, distributing leaflets translated into multiple languages using easy-to-understand illustrations to users and utilizing tablet terminals with multilingual voice translation applications, assuming that foreign tourists use recreational fishing vessels.</p> <ul style="list-style-type: none"> <li>• In view of the fact that the accident occurred that the recreational fishing vessel was suddenly hit by a wave about 2.0 m high while navigating on the ocean with waves about 1.5 m high, it is desirable for the master of the recreational fishing vessel to review the objective departure cancellation standards and return navigation standards stipulated in the operational guidelines from the perspective of both the safe operation of the recreational fishing vessel and ensuring passenger safety.</li> </ul>	
	Report	<a href="https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-7-2_2023tk0006.pdf">https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-7-2_2023tk0006.pdf</a> (Japanese only)	
8	Date of publication	Date and location	Vessel type and name, accident type
	August 29, 2024	March 15, 2023 Off the northeast coast of Hayase Fishing Port, Mihama Town, Fukui Prefecture	Recreational fishing vessel SHINGYOMARU (Vessel A) Recreational fishing vessel SEA BRAVO (Vessel B) Collision
	Summary	<p>While Vessel A was proceeding north toward the fishing spot, and Vessel B was proceeding south after completing recreational fishing, both vessels collided. On Vessel A, one of the anglers died, one was seriously injured, one was slightly injured, and a crushing injury occurred between the starboard bow and the starboard side of the wheelhouse. In addition, Vessel B sustained a rupture to the bow and the starboard bottom.</p> 	
	Probable causes	<p>It is probable that the accident occurred, while Vessel A was proceeding north off the northeast coast of Hayase Fishing Port at night, while Vessel B was proceeding south after completing recreational fishing, Master A, who was distracted by a conversation with a fellow shipmate on the mobile phone, continued to navigate while watching the Green Light on the port bow, which is the course target, and did not keep a proper lookout on the right ahead. In addition, Master B thought that there were no other vessels at about 1 M from Hayase Fishing Port that would interfere with the navigation, continued to navigate with a blind spot created by the bow lift, and did not keep a proper lookout to compensate for the blind spot on the bow. Accordingly, the two vessels approached each other unawares and collided.</p>	
	Safety actions	<p>The following matters may well be useful in preventing similar accidents from recurring in future.</p> <ul style="list-style-type: none"> <li>• Masters should always keep an appropriate lookout, even in sea areas familiar to them, without relying solely on empirical trends in ship traffic over time to determine the presence or absence of other ships</li> <li>• Masters should keep an appropriate lookout over the entire circumference near the altering course point without focusing excessively on specific objects such as the altering course target.</li> <li>• In situations requiring particular attention, such as when entering or leaving port, near an altering course point, or when approaching another ship, masters should refrain from making calls using mobile phones or radio and concentrate on navigation.</li> <li>• Since the existence of other vessels may be interrupted by port facilities such as breakwaters, masters of vessels entering and departing ports should navigate at a safe speed at which measures to give way can be taken, even if the other vessel is viewed from a short distance away.</li> <li>• Masters operating vessels with blind spots at the bow should fill in the blind spots in every way possible and endeavor to detect other vessels approaching at an early stage, such as shaking the bow to the left and to the right, taking a face out of the wheelhouse, and utilizing radar.</li> <li>• It is desirable for masters to install navigational radar reflectors even on small vessels which are exempt from this requirement, from the viewpoint of ensuring safety.</li> </ul>	



		<ul style="list-style-type: none"> <li>It is desirable that shipowners should, as far as possible, ensure bow visibility when constructing or modifying ships.</li> </ul> <p>Master A took the following measures after the accident; an infrared camera was installed at the bow to strengthen the lookout at night.</p> <p>Master B took the following measures after the accident:</p> <ol style="list-style-type: none"> <li>The radar was renewed to enable the use.</li> <li>A trim tab (mounted on the stern and movable blades which control the inclination of the hull by adjusting the angle by the hydraulic pressure) was installed at the stern to reduce bow lift, and the blind spot in the bow was eliminated.</li> </ol>	
	Report	<a href="https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-8-1_2023tk0002.pdf">https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-8-1_2023tk0002.pdf</a> (Japanese only)	
9	Date of publication	Date and location	Vessel type and name, accident type
	September 26, 2024	March 28, 2023 Hozugawa River behind the mountain at Shinochooji, Kameoka City, Kyoto Prefecture	Passenger ship No. 9 Capsizing
	Summary	<p>While the vessel, operated by four skippers and with 25 passengers on board, was sailing downstream in Hozu River, it capsized after landing on a rock field on the left bank, killing two skippers and injuring 19 passengers.</p> <p>The vessel sustained damage to the port bow and the bottom of the port stern and starboard bow.</p>	
	Probable causes	<p>It is probable that this accident occurred while the vessel was sailing along the normal route, when Skipper B fell overboard after being struck by the tiller and the wooden tiller extension went into the river. Skipper C hurriedly took over steering but was unable to regain control of the rudder. The vessel veered off course toward the port bank, and the bow struck rocks on the left bank, subsequently the vessel then capsized.</p>	
	Safety actions	<p>The following matters may well be useful in preventing similar accidents from recurring and mitigating damage in future.</p> <ul style="list-style-type: none"> <li>Measures to prevent shippers from falling overboard (Analysis (2)①) River rafting operators should take measures to prevent helmsmen from losing their balance and falling overboard, such as by providing them with a foothold.</li> <li>Measures to prevent rudder misalignment (Analysis (2)②) River rafting operators should take measures to prevent rudder misalignment so that helmsmen can keep rudders operable even in the event that helmsmen have let go of rudders.</li> <li>Thorough enforcement of lifejacket wearing for skippers (Analysis (4)①a) River rafting operators should check the lifejacket situation of each skipper when departing and thoroughly enforce the wearing of lifejackets, and ensure that lifejackets worn are of an appropriate size for their bodies.</li> <li>Thorough enforcement and providing sufficient explanation of the need to wear lifejackets for passengers (Analysis (4)①b) River rafting operators should thoroughly enforce the wearing of lifejackets for passengers, ensure that both adults and children wear lifejackets of an appropriate size for their bodies, and provide sufficient explanations on wearing lifejackets, emergency operation methods, etc.</li> <li>Regular inspection of lifejackets, etc. (Analysis (4)①b) River rafting operators should regularly inspect inflation devices (gas cylinders) of lifejackets, etc. and replace them if a certain period has elapsed and replacement is recommended.</li> <li>Securing communication means and establishing a communication system (Analysis (4)②) River rafting operators should secure communication means, such as deploying IP radios on all boats, and check in advance the locations where calls and communications are possible along the operating route, share this information with the entire organization, and develop communication</li> </ul>	





		<p>procedures and establish a communication system to enable rapid contact with rescue agencies in emergencies.</p> <ul style="list-style-type: none"> <li>• Conduct regular training (Analysis (4)③) River rafting operators should develop rescue procedures, establish rescue systems, when necessary, stipulate them in manuals and conduct practical training sessions based on these procedures at least once a year.</li> <li>• Review of operational suspension standards (Analysis (5)①) River rafting operators should take measures enabling safer operations, such as revising the water level criteria for suspending operations as needed.</li> <li>• Training of skippers, maintenance and improvement of navigation skills (Analysis (5)②) To maintain and improve skippers' maneuvering skills, river rafting operators should regularly assess the level of their skippers' maneuvering skills, provide necessary training and nurturing, and conduct regular training sessions, etc. Additionally, they should compile manuals on the skipper's maneuvering techniques, etc., as necessary.</li> <li>• Identifying hazardous areas and sharing information (Analysis (5)③) River rafting operators should take measures to ensure that all personnel involved in operations are aware of hazardous areas along the route, and should also share information about near misses and dangers during navigation.</li> </ul>	
	Report	<a href="https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-9-1_2023tk0003.pdf">https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-9-1_2023tk0003.pdf</a> (Japanese only)	
10	Date of publication	Date and location	Vessel type and name, accident type
	September 26, 2024	August 16, 2023 Off the Northwest coast of Shimoji Island, Miyakojima City, Okinawa Prefecture	Diving vessel CRYSTAL M Capsizing
	Summary	<p>While the vessel, operated by the master alone, with 12 diving passengers and seven instructors, was sailing off the northwest coast of Shimoji Island, it flooded and capsized. The vessel sustained damage such as water damage to the engine room.</p> <div> <div>  <p>Rescue operations by fellow vessels</p> <p>Provided by the Miyakojima Coast Guard Office</p> </div> <div>  <p>Rescue operations by patrol vessels</p> <p>Provided by the Miyakojima Coast Guard Office</p> </div> </div>	
	Probable causes	<p>It is probable that this accident occurred off the northwest coast of Shimoji Island, when the wind direction changed from southwest to northwest while passengers were diving heavy winds and rain and high waves caused, the vessel continued to anchor with the open transom*1 type stern facing northwest, with the anchor in from the stern, causing waves to crash onto the upper deck from the stern, and seawater, etc. flowing into the engine room from the stern storage, etc., reducing the freeboard. Furthermore, with passengers on board, the vessel continued to navigate with the stern lowered while being hit by waves approximately 2 m high without being able to drain off the water. As a result, water continued to flood the vessel as the upper deck at the stern became submerged, the main engine stopped, the vessel became uncontrollable, and the vessel capsized.</p> <p>It is probable that the waves crashed into the stern because the bulkhead at the stern had been removed, and the weight of the diving equipment on board had reduced the freeboard at the stern. In addition, it is highly probable that seawater, etc., which had entered the storage at the stern, flowed into the engine room because the ship had left the openings and penetrations open without sealing them after the hydraulic piping was repaired.</p> <p>It is probable that the reason the vessel continued to anchor with its stern facing northwest, in the same direction as the wind and waves, was because the master of the vessel recognized that there would be no problem even if waves crashed into the vessel, since any water that entered the upper deck would be discharged overboard without remaining inside the vessel.</p> <p>It is possible that the master of the vessel failed to detect the adverse weather conditions at an</p>	




		<p>early stage based on the latest meteorological and oceanic information, cloud formation, etc., and was unable to make decisions such as evacuating the area before the weather and sea conditions worsened, which may have contributed to the occurrence of this accident.</p> <p>*1 Wide-open stern section</p>
	Safety actions	<p>(1) Response to changes in stern shape</p> <p>The modification to the stern shape by removing the partition plate after the vessel's first regular inspection falls under "changes that may significantly affect stability." However, the vessel's owner did not report this change, and it was not identified during subsequent regular inspections by the Japan Craft Inspection Organization (JCI), therefore, it appears this modification was overlooked.</p> <p>(2) Effect of carrying diving equipment on stability</p> <p>It is probable that on the day of the accident, the vessel was carrying approximately 1,000 kg of diving equipment, mainly on the upper deck at the stern, and the loading of this equipment reduced the freeboard at the stern, which may have contributed to the deterioration of stability, as described in the cause of the accident. It is more likely that in general, diving vessels, like the vessel, navigate with heavy diving equipment loaded on them, meaning that ensuring stability becomes an issue.</p> <p>(3) Involvement of relevant administrative authorities</p> <p>It is probable that Company A carried approximately 4,500 diving passengers (including about 1,000 people on the vessel) in 2022, operating repeatedly under an operating agreement between the operator and the diving company, however, as described in "Guidance by relevant agencies for diving vessels, etc." and "Analysis of guidance provided by relevant authorities, etc.," the initiatives of relevant administrative authorities are currently not necessarily sufficient.</p>
	Safety actions	<p>The following matters may well be useful in preventing similar accidents from recurring and mitigating damage in future.</p> <p>Masters of the diving vessels, diving vessel owners, and the operators involved in the operation of diving vessels should take the following measures to prevent similar accidents on diving vessels:</p> <p>(1) Masters</p> <ul style="list-style-type: none"> <li>• For open-truss diving vessels with a small stern freeboard, be aware that the structure is prone to wave intrusion from the stern. Especially when at anchor, if wave intrusion is expected, position the anchor at the bow.</li> <li>• Understand the drainage capacity and structure of their vessels. If water ingress is detected, immediately confirm the flooded areas and flood volume. If there is a risk to the safety of the hull, take necessary emergency measures such as requesting immediate drainage and rescue.</li> <li>• Always collect the latest weather and information on sea conditions. If they detect a deterioration in weather conditions while offshore, such as changes in cloud cover, immediately stop diving and begin evacuation.</li> <li>• When there is a risk of capsizing, sinking, etc., work with the instructor on board to guide passengers to safety. In this case, the instructor should assist the master in preventing panic, wearing lifejackets, and contacting rescue services, etc. After diving passengers and crew have evacuated to the sea, the instructor should work to ensure buoyancy, visibility with portable floats, and prevent drifting and dispersion.</li> </ul> <p>(2) Diving vessel owners</p> <ul style="list-style-type: none"> <li>• If they make any modifications that could significantly affect stability, such as changes to the stern structure, report to the JCI and undergo a special inspection.</li> <li>• If there are openings in compartments below the upper deck, water ingress, such as from waves, can spread to other compartments, leading to dangerous conditions like capsizing or sinking, so seal the openings with boards or other materials to prevent the spread of water ingress.</li> <li>• It is desirable to install a water ingress alarm system, etc. to detect flooding early.</li> <li>• If loading diving equipment significantly changes the draft, etc., report this to the JCI and receive guidance to ensure the stability of the diving vessel.</li> </ul> <p>(3) Operators involved in the operation of diving vessels</p> <ul style="list-style-type: none"> <li>• Operators who, like Company A, operate diving vessels with a set number of passengers in response to the needs of diving businesses, should clearly define operational standards such as wave height and wind speed in writing, taking full consideration of the seaworthiness of the managed vessels, so that they can make appropriate decisions regarding evacuation, etc. in the event of sudden changes in the weather.</li> <li>• Establish a system for communicating with fellow businesses in the area in case of emergencies and sharing information on weather and sea conditions, etc.</li> </ul>

	Safety actions	<p>(1) Ensuring the effectiveness of stability inspections Changes to the stern structure and the loading of heavy diving equipment affect vessel stability. While vessel owners must naturally exercise caution themselves, in cases where structural changes are clearly visible during inspection or where interviews about the vessel's purpose suggest inadequate stability, the JCI should provide appropriate suggestions and advice to enhance the effectiveness of visual inspections, even when the inspection applicant has not requested approval for structural changes.</p> <p>(2) Initiatives of relevant administrative authorities</p> <p>① Necessity of multi-layered initiatives, etc. To ensure the safe navigation of diving vessels and the safety of the many passengers on board, in addition to the voluntary operational control by operators, we believe that relevant government agencies should also strive to grasp the actual operation of diving vessels, examine the current state of initiatives, and provide multi-layered safety management and guidance regarding safe operation, etc.</p> <p>② Guidance and raising awareness by relevant administrative authorities on site, etc. From the perspective of ensuring the safety of diving vessel operations and diving passengers, it is desirable for the 11th Regional Coast Guard Headquarters and the Okinawa General Bureau of the Cabinet Office to provide guidance and raising awareness for diving vessel operators on how to prevent similar accidents through safety campaigns, etc.</p>	
	Report	<a href="https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-9-2_2024tk0003.pdf">https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-9-2_2024tk0003.pdf</a> (Japanese only)	
11	Date of publication	Date and location	Vessel type and name, accident type
	October 31, 2024	September 21, 2023 K-1 Wharf, No.2 District and Kudamatsu Area, Tokuyama Kudamatsu Port, Yamaguchi Prefecture	Coal Carrier ENERGIA CENTAURUS Fatality of a crewmember
	Summary	<p>Coal Carrier “ENERGIA CENTAURUS” was moored and was loading cargo handling operation at K-1 Wharf, No.2 District and Kudamatsu Area, Tokuyama Kudamatsu Port, a boatswain was performing an inspection work on the upper deck, and then, the boatswain was caught between her structure on the upper deck and the cargo unloading device, which had been running, and then was pronounced dead.</p> 	
	Probable causes	<p>The JTSB concludes that the probable cause of this accident was more likely that Boatswain entered around the Travelling Rail in Warning Area for the purpose of HO Pipe Inspection after completing the switching operation of the hatch covers, and subsequently, his body was caught between the SUL Traveler which was travelling to the fore side and the Stanchion, and was injured while the Vessel was moored and was loading cargo handling operation at K-1 Wharf during the night.</p> <p>It is probable that Boatswain entered around the Travelling Rail in Warning Area for the purpose of HO Pipe Inspection because it is more likely he thought HO pipe Inspection would be completed immediately in a short time before beginning to conduct HO Pipe Inspection, and furthermore, he thought it was enough to report the situation after specifying oil leakage point.</p> <p>It is probable that the SUL was travelling to the fore side because the hatch covers of No.2 cargo hold, etc. had been opened and the Stevedores conveyed to CHO Officer, etc. that the un-loading work was going to restart. In addition, Boatswain and Crewmember A did not contact CHO Officer before beginning to conduct HO Pipe Inspection.</p> <p>It is probable that Boatswain continued to conduct HO Pipe Inspection around the Travelling Rail because he was standing and leaning against the Stanchion for observing Crewmember A's state entered under the Stage, etc., and then his visibility was restricted and he did not hear the warning sound during the SUL travelling, and subsequently, he did not notice the SUL approaching.</p> <p>It is certain that the TSS did not detect Boatswain who was at around the Travelling Rail and did not operate emergency stop of the SUL because the SUL was equipped with the TSS on the SUL Traveler, and also the fore side TSS flame of the TSS was narrowed at left and right width and there was a clearance of approximately 400 mm between the end of the TSS flame and the Stanchion.</p>	

	Safety actions	<p>The following measures are possible to prevent recurrence of and mitigate the damage caused by similar accidents:</p> <ul style="list-style-type: none"> <li>• Master should instruct crewmembers to reconfirm the SMS manual and the arrangements and the procedures, and then repeatedly instruct them not to enter risk areas for conducting inspection work and maintenance work during cargo handling operation. In addition, when crewmembers have necessity for similar inspection work, etc., crewmembers must report the work to responsible persons in charge of cargo handling operation on board and accept permission, and then they must confirm via contact with responsible persons that stevedores are not operating the SULs, and then must conduct the inspection work, etc. by securing safety measures, e.g. assignment of watchmen.</li> <li>• Master and personnel in charge of safety in each department should reinstruct crewmembers to make planning and conduct inspection work and maintenance work and for cargo handling apparatus in appropriate period when they could secure safety.</li> <li>• Master and ship management company, etc. should conduct inspection of safety devices for cargo handling apparatus on a daily basis, and also collect near-miss reports concerning operation of cargo handling apparatus and conduct risk assessment*<sup>1</sup> based on the result of the near-miss report, and subsequently take risk mitigation measures, e.g. improvement and modification safety devices.</li> </ul> <p>*<sup>1</sup> “Risk assessment” means an overall process of risk specification, risk analysis and risk evaluation in some work. Business operator and company were required to decide risk mitigation measures and to take appropriate safety measures based on the result.</p>	
	Report	<a href="https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-10-1_2023tk0008.pdf">https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-10-1_2023tk0008.pdf</a> (Japanese) <a href="https://jtsb.mlit.go.jp/eng-mar_report/2024/2023tk0008e.pdf">https://jtsb.mlit.go.jp/eng-mar_report/2024/2023tk0008e.pdf</a> (English)	
12	Date of publication	Date and location	Vessel type and name, accident type
	November 28, 2024	December 6, 2023 Miyazaki Port, Miyazaki City, Miyazaki Prefecture	Recreational fishing vessel GOROKUMARU Capsizing
	Summary	<p>While the vessel, operated by the master alone, with five anglers on board, was returning to its mooring at Miyazaki Port, it capsized near the entrance to the port's southern channel.</p> <p>As a result, the master and one angler died, four anglers were injured, and the vessel sustained damage to its hull.</p>	
	Probable causes	<p>It is probable that this accident occurred when the vessel was attempting to enter the southern channel to return to its mooring at Miyazaki Port. Near the channel entrance at the mouth of the Oyodo River (east of the training walls), there were approximately 2-meter waves with surf and triangular wave patterns. As the master approached at reduced speed with the stern facing the waves, a wave overtook the vessel, lifting the stern on its descending slope and causing the vessel to accelerate. This drove the bow down into the wave ahead, submerging the port bow bulwark and causing the vessel to capsize.</p> 	
	Safety actions	<p>The following matters may well be useful in preventing similar accidents from recurring in future. Masters of small vessels using Miyazaki Port should:</p> <ul style="list-style-type: none"> <li>• Consider the use of the northern sea route and other ports in advance because the southern route is set at the mouth of the Oyodo River which faces the open sea, and waves may increase to dangerous levels or surf may occur due to weather and sea conditions.</li> </ul>	



		<ul style="list-style-type: none"><li>• Gather sufficient weather and sea condition information before setting sail because navigating in high following seas increases the risk of capsizing, and postpone departure, return early, or enter a safe port if they feel that navigation is dangerous based on their vessel's maneuverability.</li></ul> <p>The above details may also be useful for the masters of small vessels navigating the mouth of the Hitotsegawa River, where five capsizing accidents have occurred in the past.</p>	
	Report	<a href="https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-11-1_2023tk0010.pdf">https://jtsb.mlit.go.jp/ship/rep-acci/2024/MA2024-11-1_2023tk0010.pdf</a> (Japanese only)	

## 9 Provision of factual information in 2024 (marine accidents and incidents)

The JTSB provided one factual information (a marine accident) in 2024, the details of which are as follows:

### Provision of factual information on passenger injuries caused by impact when passenger ships are docked

(Factual information provided on November 28, 2024)

JTSB provided factual information to the Maritime Bureau of the Ministry of Land, Infrastructure, Transport and Tourism and the Japan Passengerboat Association on November 28 in relation to factual information revealed in the course of the investigation to date and the occurrence of similar accidents in the past regarding injury accidents involving a passenger on the passenger car ferry MIKADO at Mitarai Port, Kure City, Hiroshima Prefecture on May 2, 2024.

#### 1. Summary of the Marine accident

Date and time of occurrence: Around 12:10 on May 2, 2024

Place of occurrence: Kubi No. 2 Pier, Mitarai Port, Kure City, Hiroshima Prefecture

Events leading to the Accident: The passenger car ferry MIKADO, with the master, one other crew member and five passengers on board, departed Mikado Port in Kure City, Hiroshima Prefecture, and when it arrived at Kubi No. 2 Pier, three passengers fell over due to the impact of contact with the pier, resulting in injuries.

#### 2. Contents of factual information provided

The facts revealed in the investigation to date are as follows.

##### (1) Outline of the Vessel

Total Tons: 19 tons

Maximum carrying capacity: 32 people (30 passengers, 2 crew)

Passage: Mitarai Port (Mikado Port) - Kubi No. 2 Pier

##### (2) Injuries: 3 passengers (minor injuries)

##### (3) Calling for attention when docking

The master did not alert the passengers to the fact that there was a risk of falling due to the impact when docking, or to prepare for the impact, before docking.

#### 3. Occurrence of similar accidents in the past

The JTSB published investigation reports by the end of October 2024 on 27 cases in which passengers were injured due to impact when docking (hereinafter referred to as "accidents resulting in passenger injuries when docking",) resulting in 72 injured passengers.

Three recent accidents involving passenger injuries when docking, including this accident, occurred between September 2023 and May 2024, in which five passengers were injured.

The master did not alert the passengers to the fact that there was a risk of falling due to the impact when docking, or to prepare for the impact, before docking. Of these three cases, the investigation reports of two cases (see Attached Table) published in November 2024 presented the following safety actions to prevent recurrence of similar accidents and mitigate damage.

- i) Operators of passenger ships shall instruct the crew members to alert the passengers to the fact that there are risks of accidents including fall over due to the impact of docking, and to prepare for the impact, before docking.
- ii) Crew members shall alert passengers to the fact that there are risks of accidents including fall over due to the impact of the docking, and to prepare for the impact, before docking.

※The information provided, including Appendices, is available on the JTSB's website.  
[https://jtsb.mlit.go.jp/iken-teikyo/s-teikyo21\\_20241128.pdf](https://jtsb.mlit.go.jp/iken-teikyo/s-teikyo21_20241128.pdf) (Japanese only)

