

# Title 2 Maritime Transport

## Chapter 1 Maritime Accident Trends

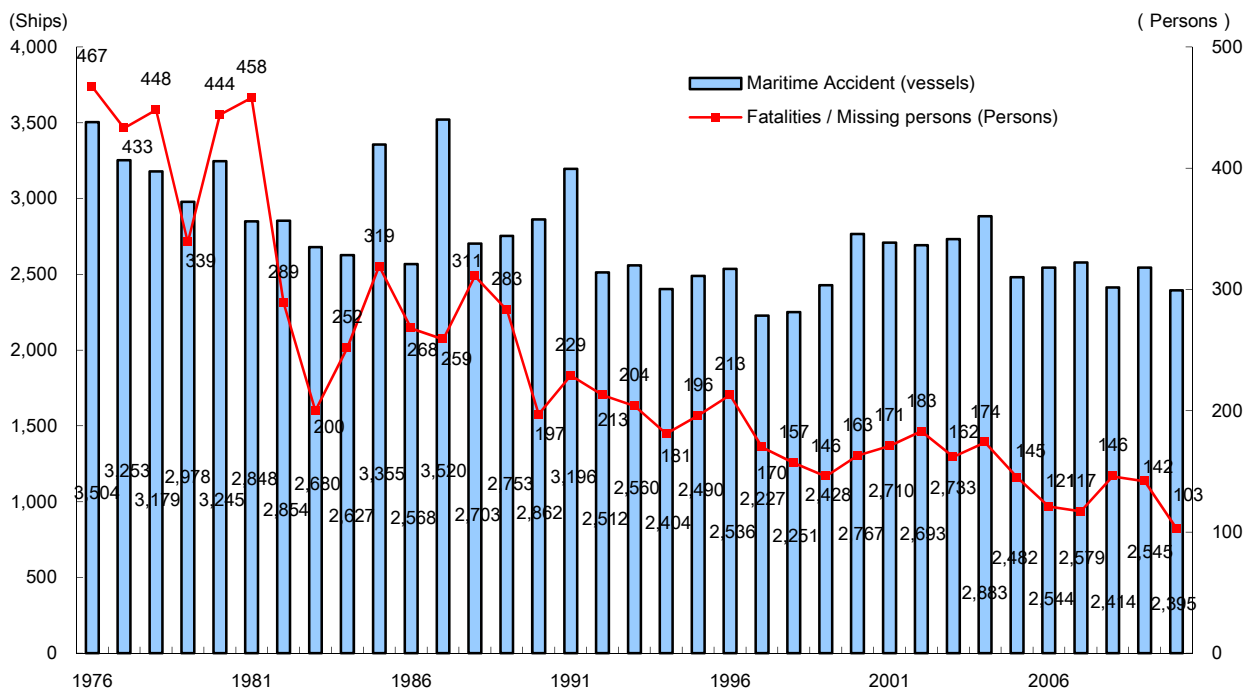
### 1 Maritime Accidents and Rescues During 2010

(1) There were 2,395 vessels of ships involved in maritime accidents. Excluding the 880 vessels that entered the port by their own power, 1,334 out of 1,515 vessels were rescued. There were 13,198 people on board during the accidents: within this group, and excluding the 8,759 people who rescued themselves, 4,364 out of 4,439 were rescued.

(2) There were 103 maritime accident-related fatalities and missing persons. In addition, there were 94 fatalities and missing persons resulting from falling overboard from a ship.

(3) The number of fatalities and missing persons from maritime accidents and falling overboard from ships is the highest in fishing boats, comprising 78% and 63% respectively of all cases.

Trends in number of dead or missing and the number of vessels of maritime disaster



Note 1: Data by the Japan Coast Guard.

Note 2: Dead or missing include those who died when maneuvering marine accident is no longer possible due to disease of the operator and when a ship drifting has occurred.

### 2 Major Constituents of Maritime Accidents and Rescues during 2010, Including Pleasure Boats

(1) There were 1,057 pleasure boats\* involved in maritime accidents. Excluding the 212 vessels that made it to port on their own power, 772 out of 845 vessels were rescued.

(2) Maritime accidents involving pleasure boats have decreased by 18 vessels since the previous year, and comprise 44% of overall maritime accidents.

\* Pleasure Boat - A small ship used by individuals for leisure such as a motorboat, yacht, or personal jet ski. An all-inclusive term for ships such as yachts and motor boats used in sports or recreation.

## Chapter 2 Current Maritime Traffic Safety Measures

### 1 Improvement of Maritime Traffic Environment

#### ○ Improvement of Traffic Safety Facilities

In order to improve the security and operational efficiency of maritime traffic, improvement is being implemented for beacons that correspond to changes in the maritime traffic environment such as improving the maintenance of ports and ocean routes, and accelerating ship traffic. As of the end of 2010, 5,369 beacon groups are being managed.

In 2010, the improvement and strengthening of traffic control/information provision system and prevention of maritime accidents in congested water areas that applied new information technology for starting AIS (Automatic Identification System) in the Osaka Bay Traffic Advisory Service Center and augmentation of existing beacons in Muroran Port, and installation of 723 LED (light-emitting diode) light sources were implemented.

### 2 Dissemination of Knowledge Regarding Maritime Transport Safety

#### ○ Spreading of the Principle of Prevention

In order to prevent maritime accidents, it is important to raise the awareness of maritime accident prevention in maritime participators, marine leisure lovers, and each citizen. Therefore, compliance with maritime laws and enforcement of safe operation have been instructed through opportunities such as maritime accident prevention seminars and guidance visits to ships.

Also, newsletters were issued with explanations of the summary and analysis results of accident/incident investigation reports that were publicized by the Japan Transport Safety Board, and were widely distributed to maritime participators.

In addition, for the purpose of preventing the recurrence of vessel accidents in the Kanmon Strait, an English version of the magazine for foreign seafarers, featuring similar accidents, was published.

### 3 Ensuring Safe Operation of Boats and Ships

#### ○ Strengthening of Supervision for Passenger Ship Operators

Targeting passenger ships and cargo ships, audits are carried out based on the Marine Transportation Law and Coastal Shipping Law, and efforts have been made to improve auditing methods and enhance the system.

#### ○ Implementation of the Transport Safety Management System

Based on the “Transport Safety Management System” introduced in October 2006, a safety management system was established by the operators which was taken action by management executives to on-the-site workers as a whole. The country carried out the evaluation for transport safety management to 2,181 companies by the end of December 2010 to confirm the status of implementation.

### 4 Augmentation of Safety Measures for Small Vessels, etc.

#### ○ Promotion of Safety Measures for Pleasure Boats

Through guidance visits to ships and maritime accident prevention seminars, the Japan Coast Guard has implemented detailed guidance and edification catering to the proper procurement of weather and hydrographic information as well as the compliance of leisure to maritime laws; all corresponding with leisure purposes.

The National Police Agency has focused on water areas with heavy maritime traffic outside ports, seaside resorts frequented by many swimming visitors, and water areas with active marine leisure sports. In addition to carrying out safety guidance with police boats, efforts have been made to ensure water safety through patrols with the collaboration of police aircrafts, cooperation and collaboration with local and relative organizations, and by improving the marine leisure environment, instructing safety measures for marine leisure providers, and holding activities for marine leisure users to raise awareness of safety.

## Topics

### Measures to prevent the recurrence of ferry large inclination accidents, as the overturned ferry grounding accident in Kumano-nada, Mie Prefecture



Source: "Coast Guard Report 2010"

In November 2009, on Ferry Ariake (7,910 tons) the hull strongly tilted to starboard side while sailing to Kumano-nada, after that, rose up in an overturn state resulting in an accident off the coast of Mihama town, Mie Prefecture. Although passengers and crew were all safely rescued due to the rapid rescue-assistance, as a ferry accident, it is a serious accident unprecedented in recent years among the accident of similar kind in Japan.

Through the investigation by the Transportation Safety Board, the following have been cited as the causes of the accident: 1) The righting moment was reduced because the ship was sailing under the dangerous situation in the follow-wave resulting in a larger inclination, 2) Due to the insufficient measures of cargo securing, the load shifting occurred during the large inclination, so the hull could not return back from the inclination.

For this reason in Maritime Bureau Ministry of Land, Infrastructure and Transport between May 2010 and March 2011, the "Review Committee for preventing ferry large inclination accidents" was held under the consideration of measures to prevent accident recurrence, and in the light of the above committee a compilation of preventive measures was made in March 2011.

(Main points of the measures are as follows: )

In Maritime Bureau Ministry of Land, Infrastructure and Transport in the future proceeding with preventive measures based on the compilation of the above is being planned.

Points of preventive measures:

1) Maneuvering for the prevention of large inclination

If a ship (ferry, roll-on/roll-off ship) has received a following wave during navigation, slowing down or making changes to the course could assist to ensuring safety.

2) Securing measures to prevent movement of cargo

For containers placed directly on the deck of transport vehicles such as ferries, measures to improve fixation need to be taken. For vehicles and chassis loaded on the vehicle deck of the ferry, verification measures for the fixation and improvement measures if there is a lack of fixation strength need to be taken.