Chapter 5 Efforts toward accident prevention

1. Publications

The JTSB prepares and issues various publications in addition to investigation reports regarding specific cases.

We place these publications on our website, and in order to make them more accessible to the public, we also introduce them through the monthly JTSB E-Mail Magazine service (only in the Japanese language).

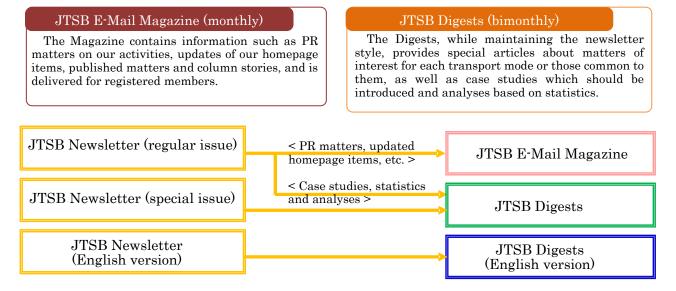
Our e-mail magazine service is widely used by aviation, railway and shipping industry people, administrative agencies, and educational and research organizations.

2. Issuance of JTSB Digests

We launched the JTSB Newsletter in January 2009, on the occasion of the establishment of the JTSB, in order to help foster transport safety by introducing our frontline activities to readers. This newsletter, containing the summaries of published investigation reports and results of cause analyses in an easier-to-understand manner, was then issued on a regular basis.

In 2009, we carried out a questionnaire survey to readers relating to the views on the newsletter and could get the information about actually how the newsletter is used and readers' opinions about the service.

Based on these opinions, we divided the newsletter into the monthly JTSB E-Mail Magazine and the bimonthly JTSB Digests, and issued both of them in April 2012.



In 2012, we released the final issue of the JTSB Newsletter in January (the 13th issue). Then, we issued the JTSB Digests five times (the first to fifth issues, in April, June, August, October and December) and one English version of JTSB Digests in December.

The contents of the English version of JTSB Digests are described below.

JTSB Digests [Digest of Marine Accident Analyses]

For prevention of "Fatal and Injury Accidents Related to Shipboard Works" (Issued on December 10, 2012)

- Statistics on fatal and injury accidents related to shipboard works
- Case Study 1: During discharge of copper sulfide concentrate, oxygen-deficient air was inhaled, leading to anoxia.
- Case Study 2: While in berthing operation for a container ship, a mooring rope attached onto a bitt on the berth broke, and snapped back, hitting mooring workers, and took their lives
- Case Study 3: While hoisting cargo with a deck crane, the wire rope broke and the cargo fell into the hold of the barge.



3. Issuance of Analysis Digests Local Office Edition

The JTSB has issued analysis digests local office edition (only in the Japanese language) in order to provide various kinds of information for prevention of marine accidents, based on analyses made by our regional offices regarding specific accidents which occurred in their respective jurisdictions, in which they focus on cases with characteristic features such as the sea area, the type of vessl and the type of accident.

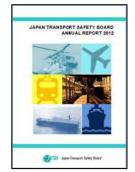
Analysis Digests Local Office Edition in 2012

| Hakodate | Situation of the fishing vessel capsizings in waters around the Hokkaido coast | | | | |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Sendai | Fires involving small fishing vessels | | | | |
| Yokohama | Situation of the marine accidents mainly resulting from incursions into fixed fishing nets in waters off the Kanto and Tokai regions | | | | |
| Kobe | For prevention of pleasure boat accidents | | | | |
| Hiroshima | Situation of the collision accidents in the Bisan Seto waters | | | | |
| Nagasaki | Situation of the fishing vessel accidents in waters west of the Kyushu coast | | | | |
| <image/> <image/> <complex-block><complex-block></complex-block></complex-block> | | | | | |

4. Issuance of JTSB Annual Report

In August 2012, we issued the JTSB Annual Report 2012 so that the lessons from the accidents and incidents may be widely shared among interested parties, by introducing our activities.

We also issued the English version of the JTSB Annual Report 2012 in December 2012 hoping to let people abroad know concerning the topics we took up from the original Japanese version as part of efforts to disseminate our information to other countries.



5. Dispatch of lecturers to seminars

The JTSB uses accident case studies and analysis results in accident prevention activities to impart knowledge and accident prevention measures to concerned parties.

JTSB lecturers were dispatched to conduct seminars and training organized by organizations and companies. We select a topic suitable for the audience and explain case studies, prevention measures and lessons learned from past accident investigations in an easy-to-understand manner.

The following is a list of some of the seminars JTSB lecturers were dispatched in 2012.



Japan Institute of Navigation, 126th Seminar and Study Meeting, Ocean Engineering Research Group

| Date | Name / Sponsor | Participants | Theme | Lecturer |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Feb. 10 | 9th Light Airplane Safety Seminar / Japan Aircraft Pilot Association | 150 pilots of light airplane | Accident statistics and analyses of recent accidents | Aircraft accident investigator (JTSB Secretariat) |
| May 25 | Japan Institute of Navigation, 126th Seminar and Study Meeting, Ocean Engineering Research Group / Japan Institute of Navigation | 50 university teachers and researchers | On centennial of Titanic Accident marine accidents and safety | Board member (JTSB) |
| July 5 | Railway Technology Training (Onsite Inspection) / Kashiwa Training Center, College of Land, Infrastructure, Transport and Tourism | 25 onsite inspectors | Roles of railway accident investigations | Railway accident investigator (JTSB Secretariat) |
| July 5 | Joint Seminar for Electric Power, Raw Materials and Resources Safety Promotion / Shinwa Kaiun Kaisha Ltd. | 45 safety managers | Organization and roles of JTSB | Regional accident investigator (Moji Office) |
| Sept. 10 | General seminar (part of curriculum for comprehensive studies) / Miyagi Prefecture Izumitateyama High School | 841 students | Seaborne experience and current job as marine accident investigator | Marine accident investigator (JTSB Secretariat) |
| Oct. 23 | 2012 Special Training for Aviation Security and Disaster Prevention Personnel / Aviation Safety Dept., Civil Aviation Bureau | 11 aviation security and disaster prevention personnel | Case studies and verification of aircraft accidents | Aircraft accident investigator (JTSB Secretariat) |
| Nov. 17 | 2012 Seminar for Safety Instructor Training / Japan Sailing Federation | 40 certified instructors for instructor license renewal | Prevention of reoccurrence of marine accidents | Special Assistant to the Director for Analysis, Recommendation and Opinion (JTSB Secretariat) |

Major seminars JTSB lecturers were dispatched (2012)

| Date | Name / Sponsor | Participants | Theme | Lecturer |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------|
| Nov. 27 | Safety Seminar / An-ei Kanko Co., Ltd. | 55 crewmen and back office employees of An-ei Kanko | Safety in ship operation | Regional accident investigator (Naha Office) |
| Dec. 11 | 2012 Special Course for Building Guidance and Elevator Safety and Accident Training / Kashiwa Training Center, College of Land, Infrastructure, Transport and Tourism | 26 elevator safety and accident-related personnel | Investigations of railway accidents | Railway accident investigator (JTSB Secretariat) |

6. Provision of information for accident victims and their families

Following the alleged disclosure of information in the course of the investigation of the Train Derailment Accident between Tsukaguchi and Amagasaki Stations on the Fukuchiyama Line of the West Japan Railway Company, we established a meeting consisting of victims of the accident and members of their families and bereaved families as well as experts to verify the reliability of the investigation report about the accident. The verification meeting compiled a proposal on the future of the JTSB.

Based on this proposal, we established the Duty Improvement Action Plan which specified four action principles. In line with the plan, we are striving to improve our duties by combining all of our resources. We set "consideration for the victims" as one of the four principles and we make efforts to take the feelings of the victims and their families or the bereaved into account in an appropriate manner, and to provide them with information regarding the accident investigation in a timely and appropriate manner, and to sincerely respond to their input as well. To this end, we established a contact point for providing information regarding accident investigations in April 2011. To further promote the provision of related information, we also established the Victims and their Families Liaison Office as stipulated in the official directive in April 2012. Furthermore,

contact points were established at our regional offices to deal with situations in coordination with the Tokyo Headquarters.

Through these contact points, we strive to ensure mutual communications with victims and their family members by carefully listening to their perspectives and concerns and using these as opportunities to further improve our duties.

In May 2012, we adopted the "Information Provision Manual" as a specific effort to better provide information to victims and their family members. At their request, we provide investigation reports and other information on investigations according to this manual. We have also prepared an information card to be distributed for easy access to information about contact points.

In addition, we have organized lecture meetings with victims and their family members as guest speakers in order to further our understanding of their situations and feelings as well as their expectations for our investigations and

Information for Victims and their Families

Japan Transport Safety Board Victims and their Families Liaison Office

The JTSB does not investigate for apportioning blame or liability. The JTSB provides families of accident victims with information on the progress of the investigation or factual information found by the investigation. Please feel free to contact us if you have any comments or suggestions on the investigation of accidents.

> Japan Transport Safety Board http://www.mlit.go.jp/jtsb/index.htm

Information Card for Victims and their Families



information provision activities. At a meeting held in December 2012, a member of a family bereaved in the Train Derailment Accident on the Fukuchiyama Line spoke about information provision regarding the accident investigation from the perspective of bereaved families.

Lecture meeting

Column

Japan-Marine Accident Risk and Safety Information System

 Information on Accidents, Risks, Safety Which Can Be Found from a Map -Japanese version : <u>http://jtsb.mlit.go.jp/hazardmap/</u>

English version* : <u>http://jtsb.mlit.go.jp/hazardmap/index_en.html</u> *Not all contents are translated in English

The JTSB launched a web-based marine accident map, Japan-Marine Accident Risk and Safety Information System, in Japanese at the end of May 2013, followed by its English version in September of that year. The system, aimed at making it easier to search marine accident/incident investigation reports for using them for the prevention of reoccurrence of similar accidents and incidents, allows users to obtain information about where accidents/incidents occurred and what type of vessel is involved from a map overlaid with the location of accidents and incidents.

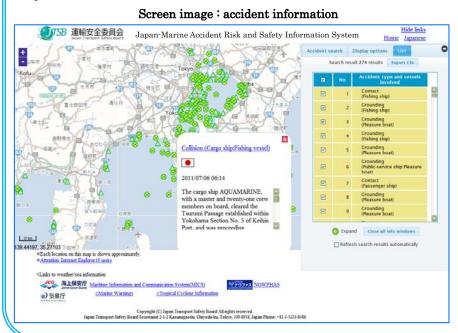
Users can search investigation reports by the location, the type of accident/incident and vessel, the date and time of occurrence, the gross tonnage and keywords, and also see a list of accidents/incidents that are being displayed on the map.

In addition to the search function of accident/incident information, the system can also display various information, such as safety alarts for waters where accidents frequently occur, vessel traffic density based on AIS (Automatic Identification System) information, fishing method and others on the map.

The information can be used to evaluate risks in the planned route and the place of fishing operation, and be utilized as materials for a variety of safety seminars.

With the cooperation of the Ports and Harbours Bureau, the Japan Meteorological Agency, the Japan Coast Guard and the Fisheries Agency, the data on weather and sea conditions, tarffic routes and fishing ground charts are incorporated, and that enable users to check weather and sea conditions in real time.

Numerous marine accidents occur every year, causing a loss of many precious lives and properties. We hope that this system is used by more people for developing their safety measures and then would help reduce marine accidents.





Screen image : safety alert for Ichikawa Waterway

Screen image : vessel traffic density in Uraga Channel



illustration of typical fishing method in the area

Japan Transport Safety Board Annual Report 2013