

Chapter 4 International efforts in accident prevention

1. Objectives and significance of international cooperation

Aircraft and marine accidents have an international characteristic and their investigations are standardized internationally by international organizations, requiring cooperation and coordination with the accident investigation authorities of States involved in the investigation process.

In aircraft accidents, the relevant States involved are: the State where the accident occurred, the State of registry, the State of the operator, the State of the design and the State of manufacture. The Annex to the convention of the International Civil Aviation of the International Civil Aviation Organization (ICAO) stipulates that while the State where the accident occurred has the responsibility of initiating and conducting an investigation, other relevant States have the authority to appoint representatives to participate in the investigation. This requires adequate coordination between the accident investigation authorities during the process.

In marine accidents, the International Convention for the Safety of Life at Sea (SOLAS) of the International Maritime Organization (IMO) sets out a common approach of accident investigation, which mandates that the flag State has the obligation to investigate certain vessels and allows the interested States such as the coastal State and nationals of that State lost their lives or received serious injuries to be involved in the investigation. The flag State and other interested States are supposed to cooperate in exchanging information during the conduct of the accident investigation.

2. International cooperation in accident investigation

(1) Providing information to investigation authorities and manufacturers

In aircraft accident investigations, the State of occurrence shall notify the State of registry, design and manufacture, and the operator. The relevant States then invited to appoint Accredited Representatives (AR) to participate in the investigation in accordance with ICAO Annex 13. Also, a draft final report as results of the investigation is sent to the relevant States for inviting their comments. Safety information is provided to accident investigation authorities and manufacturers of other States through such an arrangement.

In the helicopter accident which occurred in December 2007, the investigation report was published in April 2011, information was provided to a manufacturer through the accident investigation authority of Germany (BFU). Subsequently, the European Aviation Safety Agency issued Airworthiness Directives which instructed to inspect and replace certain parts in the flight control system and this led the issuance of manufacturer's service bulletin. In addition, in the helicopter fire accident which occurred in September 2011, the progress of the investigation was published in October 2011, information was provided to a manufacturer through the accident investigation authority of France (BEA). Subsequently, the European Aviation Safety Agency issued Airworthiness Directives

which instructed to inspect the strobe light system and this led the issuance of manufacturer's service bulletin.

(2) Cooperation with investigation authorities in individual cases

The JTSB Aircraft Accident Investigators were appointed as the AR for five aircraft accident investigations that were commenced in 2011 by foreign authorities and in which Japan was the relevant States.

In the accident where a passenger fell on and was injured in a Japanese airliner descending towards Honolulu Airport in February 2011, the JTSB cooperated with the accident investigation authority of the United States of America (NTSB) in sending interview summaries for the crew and passengers, photographs taken during the aircraft examination, and the DFDR data. In the accident involving a cargo aircraft of a Korean airline which crashed off Cheju Island in July 2011, the JTSB cooperated with the investigation authority of Republic of Korea (ARAIB) regarding the cargo originating from Japan. In the helicopter crash which occurred in Australia in August 2011, the JTSB cooperated with the Australian investigation authority (ATSB) in restoring the records in the onboard video camera which was made in Japan.

In marine accident investigations, the IMO Code of the International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident (Casualty Investigation Code) requires the flag State and the coastal State of the accident to cooperate in accident investigation. When a marine accident involving multiple States occurs, the JTSB conducts the accident investigation jointly in cooperation with the accident investigation authorities of the relevant States.

The following are some major cooperation cases where the JTSB commenced investigations in 2011:

- a. In the case of the cargo ship SCSC WEALTH, a longshoreman wedged between hatch covers and bulkhead died on May 10, 2011 when the hatch covers piled up in the hold moved during cargo handling. With the cooperation of Hong Kong, the flag State of the SCSC WEALTH, the JTSB received the ship's drawings, relevant certificates, and manuals.
- b. In the case of the Japanese registered cargo ship NSS ADVANCE which ran ashore off Liaodong, China on June 30, 2011, the AIS data of the NSS ADVANCE and other vessels sailing near the point were obtained with the cooperation of China, the coastal State.
- c. In the case of a collision between the cargo ship MARUKA registered in Republic of Korea and the Japanese registered fishing vessel Kairyo Maru No. 18 where a person went missing on November 27, 2011, relevant certificates of MARUKA and the AIS data were obtained from Republic of Korea.

The JTSB also provides useful information to accident investigations conducted by other investigation authorities, and cooperates with them. The following is one such

example in 2011:

- a. When the passenger ship WINDU KARSA sank in Indonesia waters on August 27, 2011, JTSB provided the ship's drawings, routes in service and operational conditions of the ship in Japan to the Indonesian investigation authority (NTSC), since the ship was built and operated in Japan before it was sold to Indonesia.

3. Participation in overseas training

In order to conduct a proper accident investigation, the JTSB strives to improve the qualification of its investigators through training and information exchange with foreign organizations, as well as active participation in accident investigation training conducted abroad.

In 2011, aircraft and marine accident investigators were sent to Cranfield University in the UK and the NTSB Training Center for training, both of which are well-known in this field. The curriculum ranges from the basics of accident investigation to specialized knowledge. After the training, the participating investigators fed-back what they have learned to the other investigators, thereby helping to improve the capabilities of the investigators as a whole.