## Celebrating 15 Years of the Transportation Safety Board



The Japan Transport Safety Board (JTSB) was established in October 2008 as an administrative organ under Article 3 of the National Government Organization Act, the so-called Article 3 organ, by integrating the then Aircraft and Railway Accidents Investigation Commission and the investigation functions of the Japan Marine Accident Inquiry Agency, and we are now in our 15th year. As a new organization, not only have the three modes of investigation been expanded to include aircraft, railway, and marine, but also the authority has been strengthened with the establishment of a new system that can make recommendations to parties involved in the cause of the accident, the appointment and dismissal of

secretariat staff and the establishment of regulations independently. In addition, the provision of information to accident victims has been newly and clearly stipulated. Based on the results of accident investigations, etc., 123 recommendations, opinions, and safety recommendations have been issued since its establishment, and we believe that efforts have been made to prevent accidents from occurring through appropriate measures and efforts by the relevant parties and organizations concerned based on these recommendations.

The accidents and serious incidents that the JTSB handles are often of great social concern. Last year, in March, a train derailed on the Tohoku Shinkansen in Miyagi Prefecture, and in April, the passenger ship KAZU Isank off the western side of the Shiretoko Peninsula in Hokkaido, tragically killing many people or leaving others missing. We are continuing to investigate these accidents with a view to releasing a report on them as soon as possible. In recent years, there was a fatal accident involving a pleasure boat on Lake Inawashiro in Fukushima Prefecture in September 2020, a serious aviation incident in which the engine of a B777-200 was damaged off the northern coast of Naha Airport in December of the same year, and a collision between a foreign cargo ship and a Japanese submarine off Cape Ashizuri in Kochi Prefecture in February 2021. We published the investigation reports on these incidents last year and have made recommendations for accident prevention as necessary. On the other hand, accidents involving small aircraft operated by individuals, such as ultralight plane and gliders in the aircraft mode, accidents causing injuries to passengers and cabin crew due to aircraft turbulence, fatal accidents at Class 3 and 4 level crossings without crossing gates in the railway mode, and accidents involving marine leisure vessels such as pleasure boats and fishing vessel in the marine mode were also reported. We would like to make the contents of accident investigation reports on such cases more widely known to the public. In order to widely inform the public of the causes of such accidents and points to prevent them, the JTSB also focuses on public awareness activities, such as publishing the "JTSB Digest," a safety awareness document that summarizes trends and common factors of accidents based on statistics of the investigation results and data analysis.

In the investigation of accidents and other incidents, the collection and analysis of interview and eyewitness information from the parties involved is extremely important and constitutes a major part of the information required to determine the cause of the accident.

On the other hand, from the perspective of further enhancing scientific investigations, we are also actively promoting the use of more quantitative analysis. In particular, in the marine mode, we have recently been investigating causes using quantitative collision risk analysis and evaluation methods based on AIS (Automatic Identification System) records of the vessels involved. We have also introduced 3D scanner, precision scanning electron microscopes, and X-ray CT imaging equipment to promote objective data acquisition and enhance digital analysis techniques, and have established "Research and Analysis Office" engaged across modes to enable quantitative analysis and improve investigation techniques in the JTSB.

In addition, in order to provide timely and appropriate information to accident victims, prepare easy-to-understand accident investigation reports, and disseminate information such as the chairperson's press conference to further implement appropriately recurrence prevention and detriment mitigation measures, the JTSB is actively and continuously hiring and training administrative and technical staff to strengthen its structure.

Furthermore, since last December, the JTSB has also been investigating accidents and serious incidents involving unmanned aircraft. In the case of accidents involving unmanned aircraft, factors such as pilot error, poor maintenance, airframe or equipment defects, and weather conditions can be considered, but in reality, these factors are complex and intertwined, making it difficult to immediately identify the cause of the accident. In the event of a fatal accident, there is a strong social demand for appropriate investigations and recommendations to prevent recurrence and mitigate detriment. We will work to secure and train accident investigators who are familiar with unmanned aircraft, conduct appropriate investigations that take into account the characteristics of unmanned aircraft, and strive to scientifically and objectively determine the cause and prevent recurrence of accidents involving this new investigation target.

The JTSB will continue to contribute to the prevention of accidents and mitigation of detriment by steadily accumulating factual information on each case, conducting more scientific and objective analysis, compiling reports and making necessary recommendations at an early stage, and also the JTSB will actively contribute to fostering a culture of transportation safety in Japan, providing information necessary for safety in an appropriate manner.

We appreciate your understanding and cooperation.

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