Major activities in the past year

The Japan Transport Safety Board was established in October 2008, and there were some events that attracted a great deal of social interest. Here, these cases are introduced.

1. [Partial revision of the Act for Establishment of the Japan Transport Safety Board: Investigations of unmanned aircraft accidents and serious incidents]

In the 204th Ordinary Session of the Diet, the "Law for the Partial Revision of the Civil Aeronautics Act" was enacted to include revisions to the Act for Establishment of the Japan Transport Safety Board (JTSB).

Unmanned aircraft such as drones are part of technologies associated with the "aerial industrial revolution" from which arises new possibilities, including aerial photography, dispersal of chemicals used in agriculture, surveying, infrastructure inspections and the like that are already widely in use. Their usefulness for purposes such as delivering goods to remote islands, mountainous areas, depopulated areas, etc. is also being developed.

In order to expand use of unmanned aircraft (i.e., enabling human conveniences of deliveries into urban areas) and bringing about industrial, economic and societal innovations, the realization of "BVLOS flight over populated areas (level-4 flight)," which has not been permitted so far from a safety standpoint, is indispensable. To realize this, the "Law for the Partial Revision of the Civil Aeronautics Act" requires that the establishment of a new system for licensing unmanned aircraft and their maneuvering (allowing them to begin operation in FY2022) be enacted as one of its main pillars.

As level-4 flights are put into practical use, the widespread utilization of unmanned aircraft, including routes over "third-party airspaces" is expected. Therefore, the Act for Establishment of the Japan Transport Safety Board has been revised to prevent occurrences and recurrences of accidents and serious incidents and reduce their damage by carrying out proper investigations of the accidents and serious incidents (see the following figure for revised contents). Furthermore, accidents and others caused by unmanned aircraft will be newly added as investigation targets by the JTSB.

Summary of revisions to the Act for Establishment of the Japan Transport Safety Board (JTSB Establishment Act)



1. JTSB's investigations of accidents involving unmanned aircraft (Article 2, Paragraph 1) O Among unmanned aircraft accidents newly specified in the Civil Aeronautics Act (casualties, property damage, collision/contact with another aircraft, etc.), serious unmanned aircraft accidents specified by Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism have been added to JTSB investigated accidents. 2. Collection of reports of users of unmanned aircraft (Article 18, Paragraph 2) ○ The Act clearly specifies unmanned aircraft users and others to be included in JTSB information collections as follows: Unmanned aircraft, accessories or parts users, designers, manufacturers, modifiers, remodelers or inspectors, those who have flown unmanned aircraft and those who have salvaged them. 3. Obligation imposed on the Minister of Land, Infrastructure, Transport and Tourism to report unmanned aircraft accidents (Article 20) The Act specifies that, upon receiving an accident report from an unmanned aircraft operator, the \cap Minister of Land, Infrastructure, Transport and Tourism must immediately notify it to the JTSB [Enforcement date of the revised Act for Establishment of the Japan Transport Safety Board] Date specified by Cabinet Order, within a period not exceeding one year and six months from the enactment date

2 Accident investigations amid the COVID-19 pandemic

The JTSB has been holding meetings (hereinafter referred to as "committee meetings"; also see Appendices-2 of the "Appendices") regarding accident investigation reports on aircraft, railways and ships about eight times monthly to investigate the causes of each accident and serious incident and the causes of damage incidental to such accidents. However, in response to the declaration of a state of emergency due to the COVID-19 pandemic in April 7, 2020, committee meetings were canceled for about six weeks. We also had to cancel the April and May regular press briefings by the JTSB Chairperson.

While the committee meetings were canceled, aircraft accidents, such as cabin attendant injuries due to turbulence, railway accidents, such as one fatality at a level crossing unequipped with crossing bars, and marine accidents, such as a collision between a foreign-flag container vessel and a domestic cargo vessel, accidents and others involved in each mode of aircraft, railway, and marine occurred, even under the state of emergency. In any accident investigation, an immediate investigation of the accident site is necessary, and information must be collected as soon as possible from concerned parties before memories and impressions fade. Thus, the accident investigators were dispatched to conduct the necessary on–site investigations, noting the declaration of the state of emergency.

Since the declaration of the state of emergency, the JTSB has been endeavoring to prevent COVID-19 infections among their staff through telework, staggered working hours, twice-per-day temperature checks for each staff member, and having those with cold-like symptom to stay at home.

Investigators dispatched to accidents are required to carry faceguards, masks, alcohol-based sanitizers and vinyl gloves. When accident investigators are dispatched from Tokyo to local areas, they need to take special care not to arouse anxiety in local people who were involved in accidents and to check PCR test results of all involved who recently entered or returned to Japan (see "Column" in page 120). In this way, site investigations were conducted with the utmost precautionary measures against COVID-19.

When accident investigators conducted hearings from parties related to causation in accidents or incident, they ensured proper room ventilation, social distancing and mandatory masks, which sometimes impeded clear speech and sound projection. Yet they were able to continue with their site investigations and information gathering tasks thanks to the understanding and cooperation of concerned parties.



Measures against the spread of COVID-19

With such site investigation challenges at hand, teleworking made it possible for accident investigators to continue the analyses of accidents with which they were charged, as well as continue the preparations and examinations of the draft accident investigation reports to be submitted at committee meetings, so the number of reports slotted for the meetings (after their resumption) gradually increased. The investigators pointed out that one merit of teleworking is that they allow for more focused attention at home than at the workplace. However, they also noted the disadvantage of less information sharing among those in charge shared cases and additional time required needed to gather data. Currently, teleworking-based team meetings utilizing a web-based systems have been increasing.

Due to the lifting of the state of emergency in May, committee meetings were resumed, but local committee members have been deliberating via a teleconference. Also, the opening and closing hours of meetings have been based on staggered commuting schedules so that committee members can participated in effective deliberations with limited time.

Although it was impossible to publish accident investigation reports in June, more reports than usual were published in July and August as a result of these efforts. Since the JTSB mission is to improve transport safety and protect the lives and livings of people through early dissemination of measures as accident investigation reports to prevent the recurrence of like accidents, they are proceeding steadily with accident investigations while minimizing the impact of the COVID-19 pandemic.

Regrettably, these measures against COVID-19 must be continued. Due to accident investigators' need to thoroughly assess accident sites and perform analyses with the use of technical equipment, and the committee members and chairpersons need to complete in-depth deliberations on each case, they are often required to commute to their workplaces. However, the JTSB is determined to comprehensively identify the causes and damage of every accident, actively disseminate transport safety-related information (including recommendations, opinions and concrete data) and take necessary safety measures (while ensuring counter-infection precautions and data security) by adopting appropriate work methods such as teleworking.