## Chapter 1 Summary of major investigation activities in 2020

In the case of occurrence of aircraft, railway, or marine accidents, the JTSB designates an investigator-in-charge and accident investigators who begin investigations to determine their causes. Since we can never know when or where accidents may occur, the personnel of the Board, including accident investigators, are making continuous efforts to be able to conduct investigation activities immediately when accidents should occur.

Accident investigators conduct investigations and invite comments from parties relevant to the cause of the accident; accordingly, they make draft recommendations or opinions regarding the measures to be taken to prevent the recurrence of accidents and to mitigate damage caused by accidents. Therefore, they shall endeavor to improve their level of skill and knowledge by participating in national and international training; moreover, they share accident information among international society by attending international conferences.

In the future, we will continue to carry out thorough investigations into the causes of aircraft, railway, and marine accidents, and will publish our investigation reports as soon as possible. Based on the results of our investigations, who will also make recommendations and state our opinions as necessary to related government institutions and parties relevant to the causes of accidents to prevent the recurrence of accidents.

[Regarding recommendations and opinions, see "Chapter 2. Summary of recommendations and opinions issued in 2020" (page 18).]

### 1 Major accidents and serious incidents occurred in 2020 for which investigations commenced

The accidents and serious incidents also occurred in 2020. The primary investigations which the JTSB commenced are listed below:

(1) Aviation mode

- A serious incident in which an ATR 42-500 (large aeroplane) owned by Japan Air Commuter Co., Ltd. deviated from a runway at Amami Airport after landing (Occurred on January 8)
- A forced landing accident, which damaged the fuselage of the Fukushima Prefecture Police Aviation Corps Agusta AW139 (rotorcraft) in Koriyama City, Fukushima Prefecture (Occurred on February 1)
- A ground impact accident involving a privately-owned EX-03C PUFFIN-LT447 (ultralight plane) manufactured by the Sanyo Tekko Co., Ltd. during a jump flight at a small landing field in Shiroishi-cho, Kishima District, Saga Prefecture (Occurred on June 9)
- A tail strike accident, which damaged the body of a Bombardier DHC-8-402 (large aeroplane) owned by Oriental Air Bridge Co., Ltd. at Fukue Airport (Occurred on October 23)
- A serious incident caused by an engine damage equivalent, involving a Boeing 777-200 (large aeroplane) owned by Japan Airlines Co., Ltd. about 100 km north from Naha Airport and at an altitude of 5,000 m (Occurred on December 4)

In 2020, 13 aircraft accidents were subject to investigation, with investigations into the causes of 28 accidents conducted, including 15 ongoing accident investigations from the previous year. Further, 9 aircraft serious incidents were subject to investigation, with investigations into the causes of 30 serious incidents conducted, including 21 ongoing serious incident investigations from the previous year.

### (2) Railway mode

- A train derailment between West Japan Railway Company's Tojo Station and Bingo-Yawata Station on the Geibi Line, Shobara City, Hiroshima Prefecture (Occurred on March 9)
- A train derailment in the Aoto Station yard of Keisei Electric Railway Co., Ltd., Katsushika, Tokyo (Occurred on June 12)
- A train derailment between Toyamachiho Railroad Co., Ltd.'s Higashi-Shinjo Station and Shinjo Tanaka Station, Toyama City, Toyama Prefecture (Occurred on July 26)
- Main track overrun (serious incident) between Willer Trains Inc's Tango-Yura Station and Kunda Station, Miyazu City, Kyoto Prefecture (Occurred on October 4)
- A level crossing accident at Hachioji level crossing No. 2 (class 4) located between Japan Freight Railway Company's Shimata Station and Hikari Station on the Sanyo Line, Hikari City, Yamaguchi Prefecture (Occurred on October 18)

In 2020, 13 railway accidents were subject to investigation, with investigations into the causes of 27 accidents conducted, including 14 ongoing accident investigations from the previous year. Further, 2 railway serious incidents were subject to investigation, with investigations into the causes of 4 serious incidents conducted, including 2 ongoing serious incident investigations from the previous year.

### (3) Marine mode

- A collision between cargo ship Guo Xing 1 and fishing vessel Daihachi Tomimaru at about 6.5 nautical miles off the eastern coast of Nakayamasaki, Rokkasho-mura, Aomori Prefecture (Occurred on February 29)
- A grounding accident of cargo ship Wakashio at the south eastern offshore of Mauritius (Occurred on July 25)\*
- An accident caused by a pleasure boat (name unidentified) resulting in a death and injuries of swimmers off the coast of Nakatahama of Lake Inawashiro, Fukushima Prefecture (Occurred on September 6)
- Sinking of passenger ship Shrimp of Art at the northern offshore of Yoshima, Sakaide City, Kagawa Prefecture (Occurred on November 19)
- A collision between cargo ship Hayato and recreational fishing vessel Fudomaru No5 in the vicinity of Kashima Port, Ibaraki Prefecture (Occurred on November 28)

In 2020, 732 marine accidents were subject to investigation, with investigations into the causes of 1,319 accidents conducted, including 590 ongoing accident investigations from the previous year (excluding 3 incidents deemed to not be an accident as a result of investigations). Further, 173 marine incidents were subject to investigation, with investigations into the causes of 322 (excluding 2 incidents deemed to not be an incident as a result of investigations) incidents conducted, including 151 ongoing

incident investigations from the previous year.

\* See the Column at page 146 for details.

# 2 Major accidents and serious incidents for which investigation reports were published in 2020

Completed investigation into the causes of accidents, etc. undergo committee (subcommittee) review/resolution, investigation reports are submitted to the Minister of Land, Infrastructure and Transport, and published on the Japan Transport Safety Board website. Major accidents, etc. published on the Japan Transport Safety Board website are as follows.

- (1) Aviation mode
- An uncontrolled crash of an aircraft owned by Toho Air Service Co., Ltd. due to loss of control during flight above Ueno-mura, Tano District, Gunma Prefecture (Occurred on November 8, 2017)
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- A serious incident resulting in emergency maneuvers of an aircraft owned by Thai Airways International to avoid ground impact during an approach to Tokyo International Airport (Occurred on April 11, 2018)
- A serious incident due to an engine damage equivalent (i.e., penetration of an engine case by a broken debris) of an aircraft owned by Japan Airlines Co., Ltd. at about 6 km southwest from Kumamoto Airport (Occurred on May 24, 2018)
- A ditching, which damaged the body of an aircraft owned by Excel Air Service Inc. at sea 41 km northwest from Naha Airport (Occurred on June 7, 2018)
- A crash of a Gunma Prefectural Air Rescue helicopter due to pilot spatial disorientation during a flight above Yokoteyama, Nakanojo-machi, Azuma District, Gunma Prefecture (Occurred on August 10, 2018)

(For more details, see "Chapter 3. 9 Summary of major aircraft accident and serious incident investigation reports (case studies)" at pages 57-61.

Completed investigation reports into 10 aircraft accidents and 8 serious aircraft incidents have been published.

Among the published investigation reports, the JTSB made recommendations to the Minister of Land, Infrastructure, Transport and Tourism regarding the "accident of Eurocopter AS350B3 owned by Excel Air Service Inc." and the "accident of Bell 412EP helicopter owned by the Gunma Prefectural Air Rescue" on February 27.

Moreover on April 23, the JTSB made recommendations to Toho Air Service Co., Ltd. regarding the accident of its "Aerospatiale AS332L helicopter."

(For more details, see "Chapter 2. Summary of recommendations and opinions issued in 2020" at page 28.)

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(2) Railway mode

- · A train derailment of a Saitama New Urban Transit Company train between Kamonomiya
- Station and Tetsudo-Hakubutsukan Station on the Ina Line, Saitama City, Saitama Prefecture (Occurred on January 16, 2019)
- A level crossing accident in the yard of Zushi Station on the Yokosuka Line, Zushi City, Kanagawa Prefecture (Occurred on March 21, 2019)
- Incorrect management of safety block (serious incident) between Asakura Station and Yashiro-dori Station on the Ino Line operated by Tosaden Traffic Co., Ltd., Kochi City, Kochi Prefecture (Occurred on March 25, 2019)
- A train derailment of an East Japan Railway Company train between Shibukawa Station and Shikishima Station on the Joetsu Line, Shibukawa City, Gunma Prefecture (Occurred on June 28, 2019)
- A serious incident involving dangerous trouble in vehicle at the Suminoe Inspection Ward owned by Nankai Electric Railway Co., Ltd., Osaka City, Osaka (Occurred on August 24, 2019)

(For more details, see "Chapter 4. 9 Summaries of major railway accident and serious incident investigation reports (case studies)" at pages 98-102.

Completed investigation reports into 16 railway accidents and two serious railway incidents have been published.

#### (3) Marine mode

- Collision of passenger ship Nippon Maru with a mooring facility (Occurred on December 30, 2018)
- Collision of passenger ship Ginga with objects floating in the sea (Occurred on March 9, 2019)
- A collision between cargo ship JK III and marine sweeper Notojima (Occurred on June 26, 2019)
- Capsizing of fishing ship Keiei Maru No.65 (Occurred on September 17, 2019)
- A passenger injury accident on passenger ship Nankyu No. 10 (Occurred on December 2, 2019)

(For more details, see "Chapter 5, 11 Summaries of major marine accident investigation reports (case studies)" at pages 148-152.)

Completed investigation reports into 708 marine accidents and 187 incidents have been published.

Among the published investigation reports, the JTSB made recommendations to the Minister of Land, Infrastructure, Transport and Tourism regarding the "collision of passenger ship Ginga with objects floating in the sea" on March 26 and regarding the "passenger injury accident on passenger ship Nankyu No. 10" on November 26.

(For more details, see "Chapter 2. Summary of recommendations and opinions issued in 2020" at





pages 19-24.)

# 3 Accidents and serious incidents for which progress reports were published in 2020

Accident progress reports are made to the Minister of Land, Infrastructure and Transport, and published on the Japan Transport Safety Board website where deemed necessary during accident investigations, etc. to prevent a recurrence of such accidents. Progress reports of accidents, etc. published on the Japan Transport Safety Board website are as follows.

### (1) Railway mode

## • A railway accident resulting in casualties at Shin-Sugita Station on the Kanazawa Seaside Line (Occurred on June 1, 2019)

This investigation is anticipated to take time to analyze facts further investigate before a final report is completed.\* Therefore, to prevent the occurrence of a similar accident, the JTSB submitted a progress report to the Minister of Land, Infrastructure, Transport and Tourism on February 27 a summary of the accident, progress of investigation, analyses of the line disconnection and reverse run, and measures for preventing line disconnection and reverse run of the trains using the railroad on February 27. The report was made publicly available.

This progress report has been published on the Japan Transport Safety Board website. (<u>https://www.mlit.go.jp/jtsb/railway/rep-acci/keika20200227.pdf</u>) (Japanese only)

\* Later on in February 18, 2021, an investigation report was published. (https://www.mlit.go.jp/jtsb/railway/rep-acci/RA2021-1-1.pdf) (Japanese only)