

Chapter 1 Summary of major investigation activities in 2021

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 2021, accident investigators not only have conducted on-site investigations and interviews with parties relevant to the causes of the accidents, taking measures for COVID-19 as being taken continuously since 2020, but also put efforts, such as holding a council meeting with a Web form for an accident investigation report, to minimize the impact on the investigation activities.

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 2021” (page 18).]

1 Major accidents and serious incidents occurred in 2021 for which investigations commenced

The accidents and serious incidents also occurred in 2021. The primary investigations which the JTSB commenced are listed below:

(1) Aviation mode

- **A forced landing accident, which damaged the fuselage of a privately-owned Aerospatiale AS350B (rotorcraft) in Aoki Village, Chiisagata District, Nagano Prefecture (Occurred on March 23)**
- **A serious incident in which a P-1 (large airplane) owned by Kawasaki Heavy Industries, Ltd. deviated from a runway at the JASDF Gifu Air Base (Occurred on September 7)**
- **A ground impact accident involving a Kaman K-1200 (rotorcraft) owned by Akagi Helicopter Co., Ltd. in Okuwa Village, Kiso District, Nagano Prefecture (Occurred on September 20)**
- **A ground impact accident involving a privately-owned Robinson R22 Beta (rotorcraft) in Hadano City, Kanagawa Prefecture (Occurred on October 7)**
- **A ground impact accident involving a privately-owned Schempp-Hirth Arcus M (motor glider)**

in the vicinity of the Biei Glider Field (Occurred on October 12)

In 2021, 11 aircraft accidents were subject to investigation, with investigations into the causes of 29 accidents conducted, including 18 ongoing accident investigations from the previous year. Further, 10 aircraft serious incidents were subject to investigation, with investigations into the causes of 32 serious incidents conducted, including 22 ongoing serious incident investigations from the previous year.

(2) Railway mode

- **A level crossing accident between East Japan Railway Company's Oguni Station and Echigo-Kanamaru Station on the Yonesaka Line, Oguni Town, Yamagata Prefecture (Occurred on May 16)**
- **A train derailment between East Japan Railway Company's Mataki Station and Rikuchu-Kanzaki Station on the Ofunato Line, Ichinoseki City, Iwate Prefecture (Occurred on July 5)**
- **A train derailment in the Sumidagawa Station yard on the Joban Line of Japan Freight Railway Company, Arakawa, Tokyo (Occurred on July 24)**
- **A train derailment in the Toneri-koen Station yard of the Nippori-Toneri Liner of Tokyo Metropolitan Bureau of Transportation, Adachi, Tokyo (Occurred on October 7)**
- **A train derailment between Japan Freight Railway Company's Seno Station and Hachihommatsu Station on the Sanyo Line, Hiroshima City, Hiroshima Prefecture (Occurred on December 28)**

In 2021, 11 railway accidents were subject to investigation, with investigations into the causes of 25 accidents conducted, including 11 ongoing accident investigations from the previous year. Further, 1 railway serious incident was subject to investigation, with investigations into the causes of 3 serious incidents conducted, including 2 ongoing serious incident investigations from the previous year.

(3) Marine mode

- **A collision between cargo ship OCEAN ARTEMIS and submarine SOURYU off the south-southeastern coast of Cape Ashizuri, Tosashimizu City, Kochi Prefecture (Occurred on February 8)**
- **An explosion of pleasure boat KUMASAN007 at the Motobu Port in Motobu Town, Kunigami District, Okinawa Prefecture (Occurred on April 27)**
- **A collision between recreational fishing vessel AMAMASA MARU and recreational fishing vessel HANABUSA MARU at sea in the vicinity of 9,200 m east from Isumi City, Chiba Prefecture (Occurred on May 20)**
- **A collision between cargo ship BYAKKO and chemical tanker ULSAN PIONEER at the west entrance of Kurushima Strait (Occurred on May 27)**
- **A grounding accident involving cargo ship CRIMSON POLARIS in the Hachinohe Port, Hachinohe City, Aomori Prefecture (Occurred on August 11)**

In 2021, 736 marine accidents were subject to investigation, with investigations into the causes of 1,339 accidents conducted, including 612 ongoing accident investigations from the previous year

(excluding 9 incidents deemed to not be an accident as a result of investigations). Further, 153 marine incidents were subject to investigation, with investigations into the causes of 286 (excluding 1 incidents deemed to not be an incident as a result of investigations) incidents conducted, including 134 ongoing incident investigations from the previous year.

2 Major accidents and serious incidents for which investigation reports were published in 2021

Completed investigation into the causes of accidents and incidents 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 and incidents published on the Japan Transport Safety Board website are as follows.

(1) Aviation mode

- **A serious incident in which Airbus A320-214 (large airplane) owned by Peach Aviation Limited was disabled to perform taxiing due to damages to the nose landing gear at the Fukuoka Airport (Occurred on March 24, 2018)**
- **A serious incident in which a Embraer ERJ170-200STD (large airplane) owned by Fuji Dream Airlines Co., Ltd. deviated from a runway at the Yamagata Airport (Occurred on April 23, 2019)**
- **A human injury accident involving a Boeing 787-8 (large airplane) owned by All Nippon Airways Co., Ltd. due to aircraft shaking in the airspace over Chengde City, Hebei Province, China (Occurred on August 15, 2019)**
- **A serious incident in which a F-2A owned by Japan Air Self-Defense Force (large airplane) approached to the runway of the Misawa Air Base without clearance from the control tower during a final approach of a Embraer ERJ170-100STD (large airplane) owned by J-AIR Corporation to the runway of the Misawa Air Base with clearance to land (Occurred on October 3, 2019)**
- **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 in Shiroishi Town, Kishima District, Saga Prefecture (Occurred on June 9, 2020)**



Damages to the nose landing gear of the Peach Aviation Limited's aircraft

Completed investigation reports into 12 aircraft accidents and 11 serious aircraft incidents have been published.

(2) Railway mode

- **A railway accident resulting in casualties at Shin-Sugita Station on the Kanazawa Seaside Line of Yokohama Seaside Line Co., Ltd. in Yokohama City, Kanagawa Prefecture (Occurred on June 1, 2019)**

- A train derailment in the Kanagawa-shimmachi Station yard on the Main Line of Keikyu Corporation in Yokohama City, Kanagawa Prefecture (Occurred on September 5, 2019)
- A train derailment in the Mino-Ota Station yard on the Etsumi-Nan Line of Nagarakawa Railway Co.,Ltd in Minokamo City, Gifu Prefecture (Occurred on March 18, 2020)
- A train derailment in the Higashi-Shinjo Station yard on the Main Line of Toyama Chihou Tetsudou Inc. in Toyama City, Toyama Prefecture (Occurred on July 26, 2020)
- Main track overrun (serious incident) between Willer Trains Inc's Tango-Yura Station and Kunda Station on the Miyazu Line, Miyazu City, Kyoto Prefecture (Occurred on October 4, 2020)



Completed investigation reports into 12 railway accidents and two serious railway incidents have been published.

Among the published investigation reports, the JTSB made recommendations and stated our opinions to the Minister of Land, Infrastructure, Transport and Tourism regarding the "railway accident resulting in casualties at Shin-Sugita Station on the Kanazawa Seaside Line of Yokohama Seaside Line Co., Ltd. in Yokohama City, Kanagawa Prefecture" on February 18.

(For more details, see "Chapter 2. Summary of recommendations and opinions issued in 2021" at pages 19 and 24.)

(3) Marine mode

- A collision between container ship APL GUAM, container ship MARCLIFF+, and container ship HANSA STEINBURG at Anchorage YL4, Yokohama Section 5, Keihin Port (Occurred on March 21, 2019)
- A foundering accident involving cargo ship JIA DE off the southeast coast of Higashi-Ogi Island in Kawasaki City, Kanagawa Prefecture (Occurred on October 12, 2019)
- A grounding accident involving cargo ship AZUL CHALLENGE at shallows on the western side of Nakato Shima, Imabari City, Ehime Prefecture (Occurred on July 22, 2019)
- A fire accident involving passenger ship ASUKA II at Osanbashi Pier D of Yokohama Section 1, Keihin Port (Occurred on June 16, 2020)
- A passenger injury accident involving pleasure boat GURILAND 900 off the northern coast of the Ogura Peninsula in Towada City, Aomori Prefecture (Occurred on September 19, 2019)



Completed investigation reports into 673 marine accidents and 156 incidents have been published.

Among the published investigation reports, the JTSB made recommendations to the irregular shipping business operator and safety manager and vessel operations controller regarding the "passenger injury

accident involving pleasure boat GURILAND 900" on August 26, and to NS United Kaiun Kaisha, Ltd. and Otokura coastal shipping cooperative partnerships regarding the "collision between cargo ship SENSHO MARU and cargo ship SUMIHO MARU" on December 16.

The JTSB also made safety recommendations to the Panama Maritime Authority of the Republic of Panama regarding the "foundering accident involving cargo ship JIA DE" on February 18, to APL MARITIME LTD. and MARCONSULT SCHIFFFAHRT GMBH regarding the "collision between container ship APL GUAM, container ship MARCLIFF, and container ship HANSA STEINBURG" on February 18, and to Jangho Shipping Co., Ltd. regarding the "accident involving fatality of the crew member of cargo ship FIRST AI" on June 24.

(For more details, see "Chapter 2. Summary of recommendations and opinions issued in 2021" at pages 21-23 and 25-27.)

3 Major accidents and serious incidents for which progress reports were published in 2021

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 and incidents investigations to prevent a recurrence of such accidents. Major accidents and incidents of which progress reports were published on the Japan Transport Safety Board website are as follows.

· Marine accident investigation on casualties of persons waiting for boarding a pulled float at the Inawashiro Lake (Occurred on September 6, 2020)

It was required to proceed with confirmation and analysis on the facts based on the information obtained so far through the investigation on this marine accident under investigation, and to invite comments from parties relevant to the cause of the accident. For this reason, it is expected to be difficult to finish this investigation within one year from the date when the accident occurred. Therefore, the JTSB submitted a progress report to the Minister of Land, Infrastructure, Transport and Tourism on August 26. The report was made publicly available.

This progress report has been published on the Japan Transport Safety Board website.

(https://www.mlit.go.jp/jtsb/ship/rep-acci/2021/keika20210826-0_2020tk0008.pdf)