# Chapter 1 Aircraft Accident Trends

## 1. Aircraft Accidents in Recent Years

The number of accidents of private aircrafts in Japan was 20 in 2017, in which 22 people were killed and 6 injured. In recent years, only a few aircraft accidents of large airplane have occurred per year, most of which are caused by air turbulence, and most of the aircraft accidents are that of small airplane.

U Table 3-1 Numbers of Aircraft Accidents and Casualties	5
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Туре	Number of accidents							Number of casualties		
Year	Large airplane	Small airplane	Ultralight aircraft	Helicopter	Gyro plane	Glider	Airship	Total	Fatality	Injury
2013	1	4	1	3	0	2	0	11	2	14
2014	4	5	2	1	0	5	0	17	2	28
2015	3	9	3	3	1	8	0	27	10	42
2016	3	4	1	2	0	4	0	14	8	14
2017	2	7	3	5	1	2	0	20	22	6

Note

1. Source: Ministry of Land, Infrastructure, Transport and Tourism.

2. Data as of the end of December each year

3. Include accidents of Japanese aircrafts that occurred outside of Japan.

Include accidents of foreign aircrafts that occurred in Japan.
Accidents/casualties regarding such as natural deaths or deaths caused by violence are not included.

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The number includes those who died within 30 days after the accident and missing persons.

7. A large airplane is an airplane with a maximum takeoff weight of over 5.7 tons and a small airplane with that equal to or less than 5.7 tons.

## 2. Incidents Related to Air Traffic Safety during 2017

## Safety Issues Involving Air Carriers

There were 17 cases of accidents and serious incidents<sup>\*</sup> which air carriers are obliged to report to Government in FY2017.

Furthermore aircraft accident involving passenger fatalities of specified domestic air carriers (domestic air carriers using aircraft with seats over 100 or the maximum takeoff weight exceeding 50,000kg for air transport services) has not occurred since the crash of Japan Airlines Flight 123 at the mountain Osutaka in 1985.

# **Chapter 2** Overview of Current Air Traffic Safety Measures

### 1. Further Promotion of Aviation Safety Program

### Strengthening SMS (Safety Management System) in service providers

Guidance was provided to improve the quality of SMS, which is a mechanism for risk management related to safety by promoting safety performance indicators and safety performance targets directly linked to the measures to improve safety for the business alliance such as domestic air carrier. Specifically, for business providers such as new entrants of the air carriers or new airport operators based on the Private Sector Resources Utilization Act who have very few experience about SMS measures, guidance, supervision and advice etc. were provided by maintaining close coordination so that the setting of safety performance indicators and safety performance targets can be implemented properly.

Serious incident An incident which did not result in an accident, but could have resulted in an accident

### 2. Ensuring Safe Operation of Aircraft

## **Development of operation standards for ensuring safe operations**

Regarding the aircraft operation standards in Japan, in order to appropriately respond to the operational environment of the airline industry that has been changing rapidly in recent years, we implemented various revisions of standards in light of international standards and situations in other countries for the purposed of ensuring safety. For example, we have established standards for further ensuring safety, including relaxing of operation requirements utilizing new technologies, such as satellite navigation devices (GBAS, ABAS, etc.), starting the pilot fatigue risk management system, introducing new performance requirements for communications between aircrafts flying over the ocean and air-traffic controllers, etc.

#### Enhancement and Strengthening of the Transport Safety Management System

In accordance with "The Transport Safety Management System" which was introduced in October of 2006, the transportation companies build and improve the safety management system company-wide, and the government implement "The Transport Safety Management Audit" which is the system that the government checks the implementation status of The Transport Safety Management system of transportation companies. In 2017, the government implemented this audit on 13 companies.

### 3. Ensuring Aircraft Safety

#### Improvement of Technical Standards of Maintenance and Inspection of Aircraft

To further improve the safety of aircrafts and its components, we did not only conducted necessary investigations, such as an investigation on fuel consumption performance of aircraft, but also developed technical standards for the safety of aircraft and its components, in light of the development situation of latest technologies and trends in international standard formulation.

#### 4. Development of Air Traffic Environment

#### Measures against Runway Incursion

To prevent an erroneous entry to runway due to human error, we are promoting various measures, including formulation of rules which oblige pilots to repeat controller's instructions, prevention of communication discrepancy between the air traffic controller and the pilot, development of Runway Status Light system (RWSL) designed to visually display and convey the runway occupancy state to the air traffic controller and the pilot, etc.