# Chapter 1 Air Traffic Accident Trends

## 1. Air Traffic Accidents in Recent Years

In 2012, there were 18 civilian aircraft accidents in total in Japan with 1 fatality and 23 injuries. Aviation accidents in recent years only number a few and they are mainly due to air turbulence. Small civilian aircraft account for most of the air traffic incidents.

Changes in the number of Air Traffic Accidents and Casualties (Civilian aircraft)										
Туре	Number of accidents								Number of casualties	
Year	Large aircraft	Small aircraft	Ultralight aircraft	Helicopter	Gyro plane	Glider	Airship	Total	Fatality	Injury
2008	3	6	2	3	0	3	0	17	7	10
2009	6	2	1	7	0	3	0	19	9	7
2010	0	4	2	4	0	2	0	12	17	3
2011	2	8	1	3	0	1	0	15	7	14
2012	8	3	2	4	0	1	0	18	1	23

Note:

2. Data as of the end of December each year

3. Include accidents of Japanese aircrafts occurred outside of Japan. (1 in 2009, 3 in 2009 and 3 in 2011)

4. Include accidents of foreign aircrafts occurred in Japan. (1 in 2008, 3 in 2009 and 3 in 2012)

5. Natural deaths and deaths caused by other reasons are not included in the number of accidents and casualties.

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

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

#### 2. Incidents Related to Air Traffic Safety during 2012

Safety Issues Involving Air Carriers

Aviation accident involving passenger fatalities of designated airline business operators in Japan (airline business operators in Japan operating air carrier business using aircrafts with seats over 100 or the maximum takeoff weight exceeding 50,000 kg) has not occurred since the crash of Japan Airlines Flight 123 at the mountain Osutaka in 1985. There was a total of 983 incidents and troubles which aircraft operators in Japan are obliged to report in FY 2011.

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

#### 1. Conversion to Comprehensive Safety Management

• Introduction of State Safety Program (SSP)

The Convention on International Civil Aviation was revised in November, 2010. In its Annex, it was recommended to each government to introduce State Safety Program (SSP) which provides the supervision of the degree of safety by means of safety indicator, focused supervision of specific unsafe factors, implementation of seminars for service providers (airline business operators, airport operators, air transport operators) on safety management. The preparation for its introduction is underway and is planned to be completed by the end of FY 2013.

#### 2. Development of Air Traffic Environment

• Measures Against Runway Incursion

As measures to prevent runway incursion, a wide range of measures both in terms of hardware and software is promoted including the obligation of pilots to recite control tower instructions, prevention of miscommunication between air traffic controllers and pilots, development of systems to visually display and transmit the state of runway occupancy, etc.

#### Promotion of Prevention of Bird Strikes to Aircraft

Analysis and review on the prevention of bird strikes are underway in review meetings for the prevention of bird strikes composed by bird experts and airline people. Based on the recommendations submitted by the review committee, the building of database on information on bird strikes is underway in order to provide information to interested persons and because in some cases it is not possible to identify the type of struck birds, measures for the identification of birds through DNA test and feather test are being taken in order to develop a control method based on their behavioral patterns. In addition, in order to strengthen the monitoring of bird behavior in the Tokyo International Airport, bird detection devices (bird detection radars etc.) have been introduced and evaluation procedure is

<sup>1.</sup> Source: Ministry of Land, Infrastructure, Transport and Tourism.

## performed at stages.

## 3. Ensuring Safe Operation of Aircraft

#### • Strengthening of Supervision of Air Carriers

Professional and systematic on-site inspection by full-time supervisory bodies was frequently carried out with the focus on key issues by airline companies and when any safety issue arose, effective measures against the subject company were implemented including on-site inspection.

## 4. Ensuring Aircraft Safety

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

In order to further improve the safety of aircraft and its components, improvement of technical standards on the safety of aircraft and its components was implemented including the maintenance requirement for engines, requirement of child seats and others in addition to the implementation of necessary research and investigation, in light of the status of the development of latest technology and trends in the formulation of international standards.