

# Asian Breeze (39)

## (亜細亜の風)

Happy Spring to you

22 April, 2015

Dear Coordinators and Facilitators in Asia/Pacific region.

I wanted to begin this issue by saying “Sakura is full bloom now in Tokyo”, but sakura has gone two weeks ago because of the delay of this issue. From the end of March to the beginning of April, the Sakura was so beautiful as usual. The life of Sakura is so short, it has gone very quickly. However, the Sakura front is still in Aomori, northern most of Honshu, you will have a chance to see them.



In this issue, you will find the article of Japan Schedule Coordination (JSC). I featured our organization in Asian Breeze (1) which was issued in December 2008. There have been a lot of changes in our organization such as member changes, system change and airport changes since then. Now you will find the current activities of JSC up to date. I hope you will find it interesting.

### Japan Schedule Coordination (JSC)

Japan Schedule Coordination (JSC) was established in January 2008 under the Japan Aeronautical Association (JAA) which is a national foundation established in 1952 for the purpose of promoting the development of aeronautics and astronautics in Japan and enhancing the cooperation with world aerospace communities. For promoting the civil aviation, the JAA is engaged in various public service activities such as aviation culture, aviation heritage, aviation sports, regional aviation and schedule coordination.

JSC was initially in charge of slot allocation at Narita International Airport (NRT) and schedule facilitation at Kansai International Airport (KIX). Then, the slot allocation service for Tokyo International Airport (Haneda) (HND) was added with the inauguration of international scheduled flight at Haneda in February 2010. In addition, the schedule facilitation service for New Chitose Airport (CTS) was added in August 2012. JSC is now taking care of four airports; two level 3 airports and two level 2 airports.

Having become a part of JAA's activities, it was ensured that the schedule coordination services will be conducted on a neutral, non-discriminatory and transparent basis. Under JAA's management, JSC follows a fair and open mechanism in line with the International Air Transport Association (IATA) Worldwide Slot Guidelines (WSG).

### Funding Scheme

The JAA's financial resources originally came from the funds donated by the imperial household and the general

public. At present, our public service activities are conducted with the profits gained by operating its own building called the Aviation Building (Koku Kaikan). In this context, the JAA is therefore self-supporting, which allows it more discretion to evaluate aviation issues without prejudice or external influences.

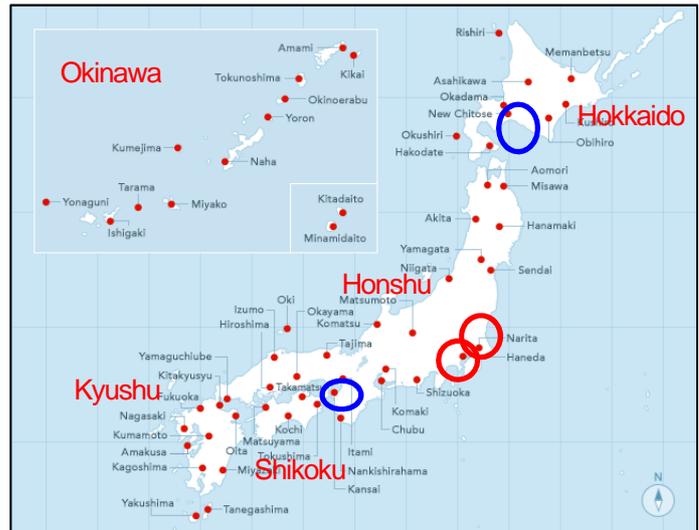
As far as the operational cost of JSC is concerned, it is independent from JAA. The source of fund comes from Japanese airlines as well as airport companies.

## Airports in Japan

There are about 90 airports in Japan where civil aviation flights are operated. Japanese archipelago consists of four major islands (Hokkaido, Honshu (Main islands), Shikoku and Kyushu) with Okinawa group of islands.

New Chitose Airport (CTS) is located in Hokkaido, northern most island. Narita (NRT) and Haneda (HND) Airports are located in Tokyo area and Kansai Airport (KIX) is located in Osaka area in Honshu.

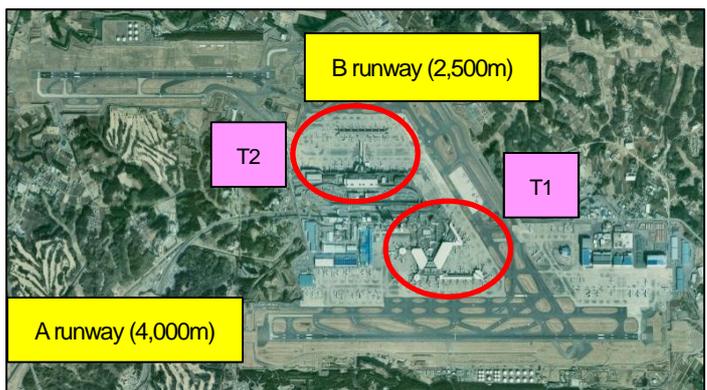
Narita Airport (NRT) and Haneda Airport (HND) are categorized as level 3 airport and Kansai Airport (KIX) and New Chitose Airport (CTS) are categorized as level 2 airport.



## Narita International Airport (NRT)

Narita International Airport (IATA: NRT, ICAO: RJAA), originally known as New Tokyo International Airport, is a primary international airport serving the Metropolitan Tokyo. It is located 58 km east of Tokyo Station and 7 km east-southeast of Narita Station in the city of Narita in Chiba Prefecture.

The airport was inaugurated in May 1978 and it has been constructed and maintained by Narita International Airport Corporation (NAA).

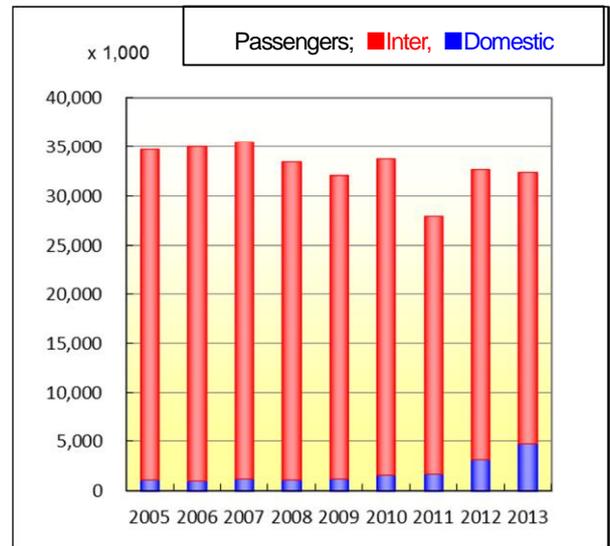
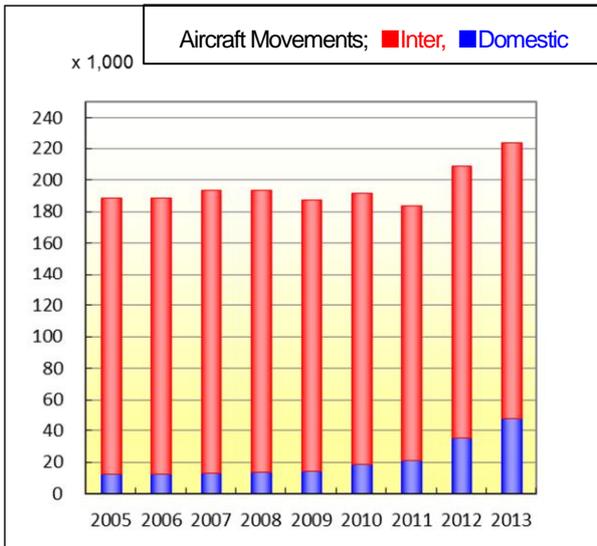


## Air Transport Statistics

Narita handles the majority of international passenger traffic to and from Tokyo and Japan, and is also a major connecting point for air traffic between Asia and the Americas. The airport handled 223,000 aircraft movements

and 32 million passengers in 2013. The airport maintains the 79% ratio of international flight in 2013 although the share of domestic flight by LCC is increasing. It is the second busiest passenger airport in Japan, busiest air freight hub in Japan.

It serves as a main international hub of Japan's flag carrier Japan Airlines (JL), All Nippon Airways (NH), Nippon Cargo Airlines (KZ), and low-cost carriers Jetstar Japan (GK), Peach Aviation (MM), Vanilla Air (JW) and Spring Airlines Japan (IJ). It also serves as an Asian hub for Delta Air Lines and United Airlines.



**Airport Infrastructure**

There are two open parallel runways; A runway is 4,000m (16R/34L) and B runway is 2,500m (16L/34R). Narita started with A runway only in May 1978 and B runway was added in April 2002 with a length of 2,180m and then extended to 2,500m in October 2009. There are four ILSs (Instrument Landing Systems) at this airport; the ILS approach runway 16R is Category IIIb (CAT IIIb) and the rest are CAT I.

Narita has three terminals. Terminal 1 is mainly used by SkyTeam and Star Alliance members and terminal 2 is mainly used by oneworld members. Terminal 3 is newly opened this year and for Low Cost Carriers (LCC).

**Terminal 1**

Terminal 1 uses a satellite terminal design divided into a North Wing, a South Wing, and a Central Building. Two circular satellites 1 and 2 are connected to the North Wing. Satellites 3 and 4 compose a linear concourse connected to the Central Building. Satellite 5 is connected to the South Wing. The terminal 1 has been renovated several times and now the total floor is 455,000 m<sup>2</sup> with 76 boarding bridges.



Check-in is processed on the fourth floor, and departures and immigration control are on the third floor. Arriving passengers clear immigration on the second floor, then claim their baggage and clear customs on the first floor. Most shops and restaurants are located on the fourth floor of the Central Building. The South Wing includes a duty-free mall called "Narita Nakamise", the largest airport duty-free brand boutique mall in Japan.

The North Wing is dominated by SkyTeam carriers. The South Wing and Satellite 5 opened in June 2006 as a terminal for Star Alliance carriers. Today, All Nippon Airways (NH) and all other Star Alliance members use this wing.

### Terminal 2

Terminal 2 is divided into a main building and satellite, both of which are designed around linear concourses. A new walkway between the main and satellite buildings began operation in September 2013, and the shuttle system was discontinued. Total floor of the terminal 2 is 374,000 m<sup>2</sup> with 58 boarding bridges.

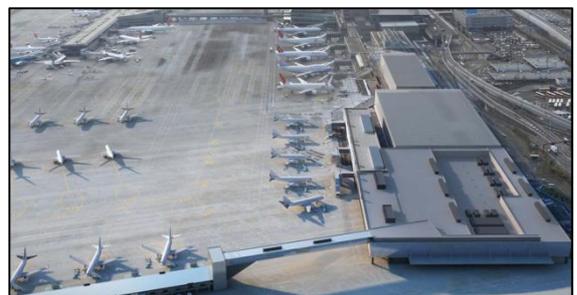


Check-in, departures, and immigration control for arriving passengers is on the second floor, while baggage claim and customs are on the first floor. For domestic flights, three gates in the main building are connected to both the main departures concourse and to a separate domestic check-in facility. Passengers connecting between domestic and international flights must exit the gate area, walk to the other check-in area, and then check in for their connecting flight.

Japan Airlines (JL) is currently the main operator in T2; several **oneworld** carriers which used to be in T1 moved their operations to T2 in early 2007 so as to ease connections to and from flights operated by **oneworld** partner Japan Airlines.

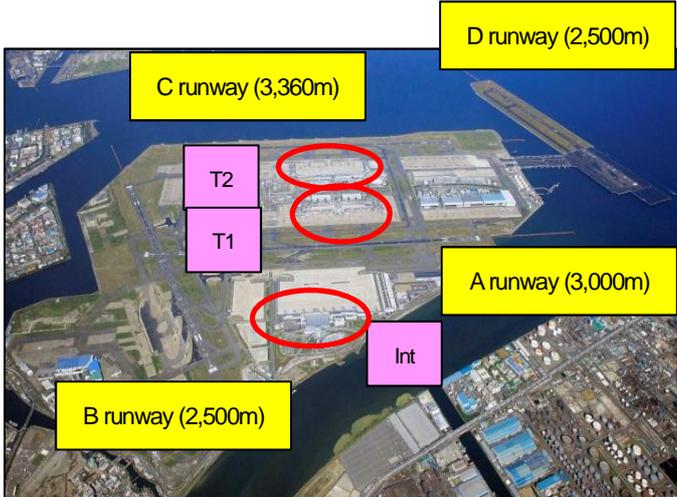
### Terminal 3

Terminal 3 for LCC opened in April 2015. Located 500m north of Terminal 2, the new terminal incorporates several cost-cutting measures, including using decals instead of lighted directional signs and using outdoor gates and airstairs instead of boarding bridges, which are intended to reduce facility costs for airlines and their passengers. Jetstar Japan (GK), Vanilla Air (JW), Spring Airlines Japan (IJ) and one other LCC uses the terminal. The terminal also includes a 24-hour food court, which is the largest airport food court in Japan, and an Islamic prayer room. Total floor is 66,000 m<sup>2</sup> with no boarding bridges.



## Tokyo International Airport (Haneda) (HND)

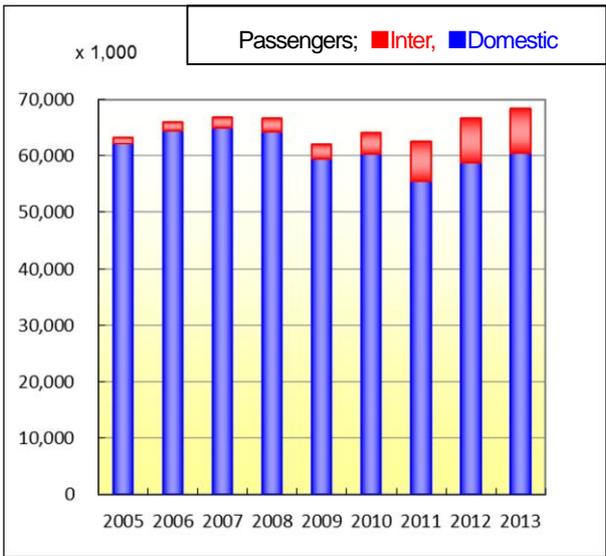
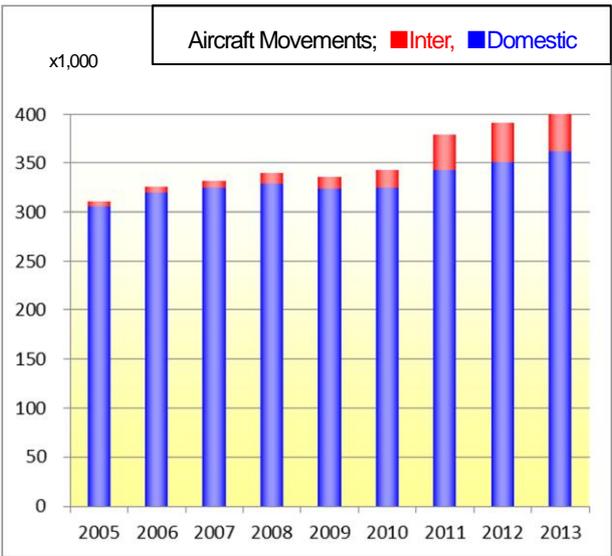
Tokyo International Airport (IATA: HND, ICAO: RJTT), commonly known as Haneda Airport, is one of the two primary airports that serve the Metropolitan Tokyo, and is a primary base of Japan's two major domestic airlines, Japan Airlines (Terminal 1) and All Nippon Airways (Terminal 2), as well as Air Do (HD), Skymark Airlines (BC), Solaseed Air (6J) and StarFlyer (7G).



Haneda was the primary international airport serving Tokyo until 1978; from 1978 to 2010, Haneda handled almost all domestic flights to and from Tokyo as well as "scheduled charter" flights to a small number of major cities in East Asia, while Narita International Airport handled the vast majority of international flights. In 2010, a dedicated international terminal was opened at Haneda in conjunction with the completion of a fourth runway (D runway), allowing long-haul flights during nighttime hours. Haneda opened up to long-haul service during the daytime in March 2014, with carriers offering nonstop service to 25 cities in 17 countries.

### Air Transport Statistics

Haneda handled 403,000 aircraft movements and 68 million passengers in 2013; by passenger throughput, it was the second busiest airport in Asia. It is able to handle 90 million passengers per year following its expansion in 2010. With Haneda and Narita combined Tokyo has the third busiest city airport system in the world after London and New York City.



### Airport Infrastructure

There are two main open parallel runways mainly used in the north wind; A-runway is 3,000m (16R/34L) and C-runway is 3,360m (16L/34R). In addition, there are two cross wind runways mainly used in the south wind; B-runway is 2,500m (04/22) and D-runway is 2,500m (05/23). The fourth runway (05/23) was completed in 2010, having been constructed via land reclamation to the south of the existing airfield.

Haneda Airport has three terminals. The main terminals 1 and 2 are connected by an underground walkway; a free shuttle bus runs between the main terminals and the International Terminal every five minutes.

### Terminal 1

Terminal 1 called "Big Bird" opened in September 1993. Japan Airlines (JL), Skymark Airlines (BC) and StarFlyer (7G) are using this terminal which has 43 boarding bridges and bus lounges for open spots. The terminal is six story and one underground building with a total floor of 292,400 m<sup>2</sup> accommodating restaurant, shopping area and conference rooms in its center section and a large rooftop observation deck with open-air rooftop cafe.



### Terminal 2

Terminal 2 opened in December 2004. All Nippon Airways (NH), Air Do (HD), Solaseed Air (6J) and StarFlyer (7G) are using this terminal which has 40 boarding bridges and bus lounges for open spots. The terminal is five story and one underground building with a total of 255,600 m<sup>2</sup> featuring an open-air rooftop restaurant, a five story shopping area with restaurants and the 387-room Haneda Excel Hotel Tokyu.



### International terminal

The current international terminal opened in October, 2010. 24 airlines including Japan Air Lines (JL) and All Nippon Airways (NH) are using this international terminal which has 38 boarding bridges and bus lounges for open spots. The terminal is 5 story building with a total of 249,110 m<sup>2</sup> accommodating restaurant, shopping area. Adjacent to the terminal, Royal Park Hotel "The Haneda" which has 313-room for the general public and a 17 room transit passenger was opened in October 2014.



## Kansai International Airport (KIX)

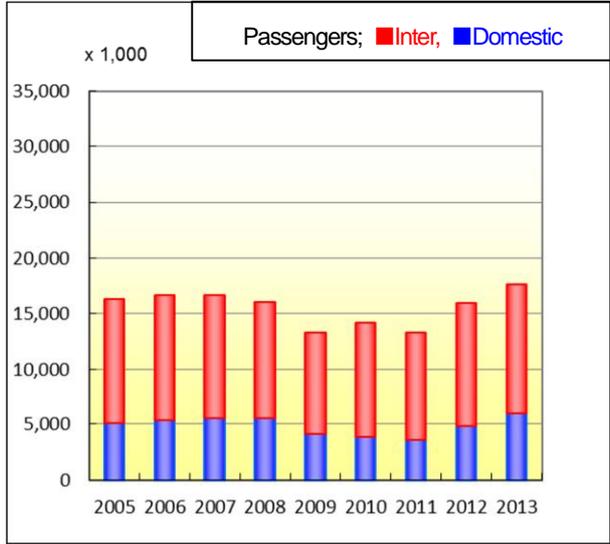
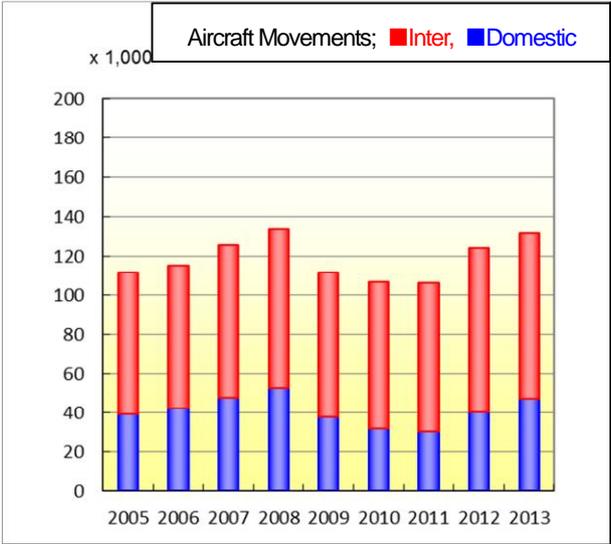
Kansai International Airport (IATA: KIX, ICAO: RJBB) is an international airport located on an artificial island in the middle of Osaka Bay, 38 km southwest of Osaka Station, located within three municipalities in Osaka Prefecture. The airport was inaugurated in September 1994 to relieve overcrowding at Osaka International Airport (ITM), which is closer to the city of Osaka and now handles only domestic flights. The Kansai airport has been constructed and maintained by New Kansai International Airport Company Ltd. (NKIAC).



The airport serves as an international hub for All Nippon Airways, Japan Airlines, and Nippon Cargo Airlines, and also serves as a hub for Peach Aviation, the first international LCC in Japan and FedEx.

## Air Transport Statistics

In 2013, KIX had 132,000 aircraft movements, of which 85,000 were international, and 47,000 were domestic. The total number of passengers was 18 million, of which 12 million were international, and 6 million were domestic.



## Airport Infrastructure

There are two open parallel runways; A runway is 3,500m (06R/24L) and B runway is 4,000m (06L/24R). Second runway of B was inaugurated in August 2007 which made Kansai International Airport fully 24 hour operational airport.

Kansai has two terminal buildings. Terminal 1 is for Full Service Carriers (FSC) and terminal 2 is for LCC.

### Terminal 1

The main KIX passenger Terminal 1 is a single four story building designed by Renzo Piano and has a gross floor space of 303,444 m<sup>2</sup>. As of 2008, it is the longest airport terminal in the world, at a total length of 1.7 km from end to end. It has a sophisticated people mover system called the Wing Shuttle, which moves passengers from one end of the pier to the other.



The terminal's roof is shaped like an airfoil. This shape is used to promote air circulation through the building: giant air conditioning ducts blow air upwards at one side of the terminal, circulate the air across the curvature of the ceiling, and collect the air through intakes at the other side.

### Terminal 2

Terminal 2 is a LCC terminal designed to attract more LCCs by providing lower facility fees than terminal 1. It was inaugurated in October 2012 and it is single story building (partially 2 story) with a total floor of 29,680 m<sup>2</sup>. It is exclusively occupied by Peach Aviation. Other LCCs serving Kansai, such as Jetstar Airways, Jetstar Japan, and Cebu Pacific Air, currently use the main Terminal 1, but there are plans to build a third terminal to house other LCCs.



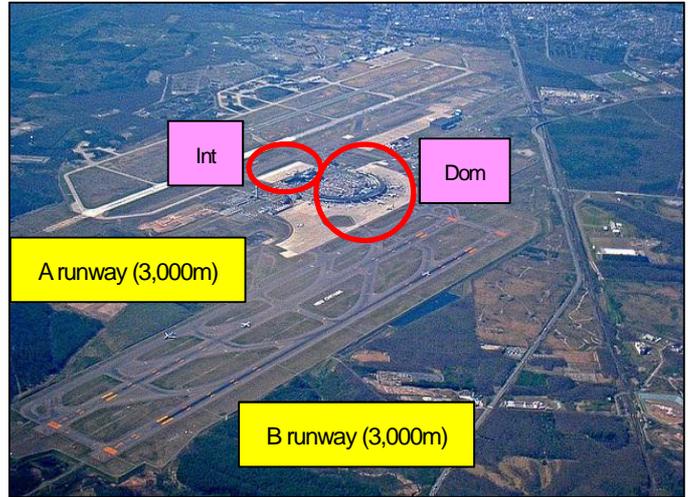
Peach Aviation requested that Terminal 2 have a simplified design in order to minimize operating costs. The terminal is a single-story building, thus eliminating the cost of elevators. Passageways to aircraft have no air conditioning. The terminal also has no boarding bridges, having 4 domestic, 3 swing, 2 international boarding gate. In case of rain, passengers are lent umbrellas to use as they walk to the aircraft.

Terminal 2 is neither directly connected to Terminal 1 nor to Kansai Airport Station. Free shuttle buses run between the two terminals, and between Terminal 2 and the railway and ferry stations. It is also possible to walk between the terminals through the KIX Sora Park, a four-hectare park located adjacent to Terminal 2.

### New Chitose Airport (CTS)

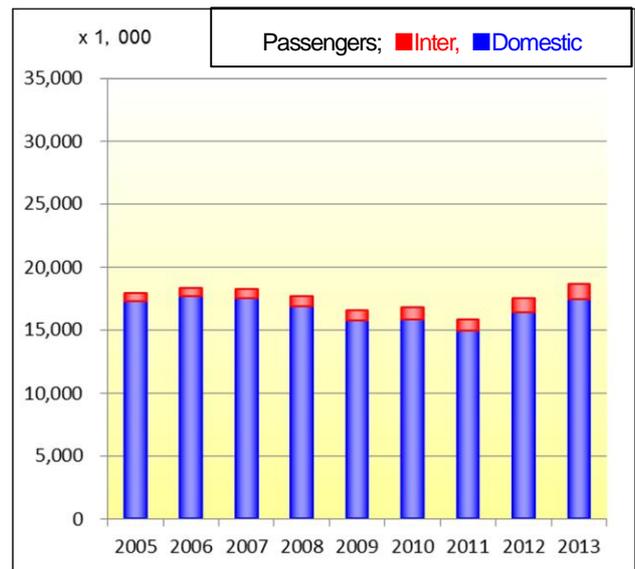
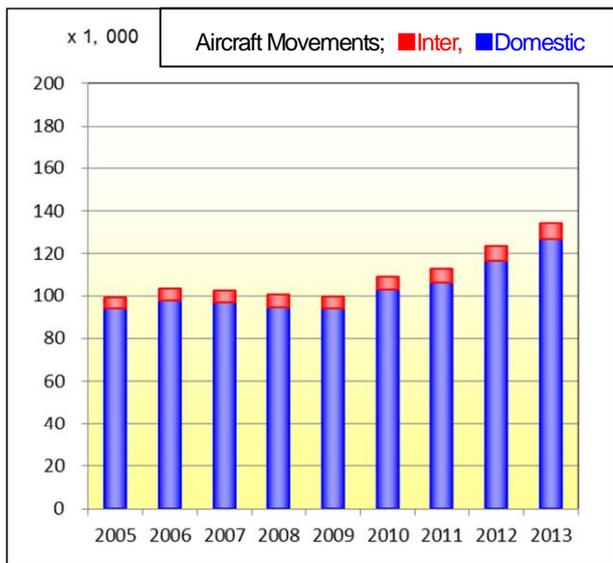
New Chitose Airport (IATA: CTS, ICAO: RJCC) is an airport located 5.0 km south southeast of Chitose and Tomakomai, Hokkaido, serving the Sapporo Metropolitan area. By land area, it is the largest airport in Hokkaido.

New Chitose Airport opened in 1988 to replace the adjacent Chitose Air Base (ICAO: RJCJ), a joint-use facility which had served passenger flights since 1963. Chitose Air Base is located on the west side, which is dedicated for use by Japan Air Self-Defense Force (JASDF). New Chitose Airport is situated in newly developed area on the east side, which is operated by Japan Civil Aviation Bureau (JCAB) for civil aviation use.



**Air Transport Statistics**

New Chitose Airport is the third busiest airport in Japan (behind Narita and Haneda). In 2013, New Chitose Airport handled 134,000 aircraft movements, of which 127,000 were domestic and 7,000 were International. The total number of passengers was 18 million, of which 17 million were domestic and 1 million were international.



**Airport Infrastructure**

There are 4 separate runways at this airport; two close parallel runways on the west side (2,700m (18R/36L) and 3,000m (18L/36R)) are operated and maintained by JASDF. Two close parallel runways on the east side (3,000m (01R/19L) and 3,000m (01L/19R)) are operated and maintained by JCAB. While Chitose Air Base and New Chitose Airport have separate runways, they are interconnected by taxiways, and aircraft at either facility can enter the other by ground if permitted; the runways at Chitose Air Base are occasionally used to relieve runway closures at New Chitose Airport due to winter weather. While the runways are operated and maintained by JASDF and JCAB separately, Air Traffic Control (ATC) services for both facilities are being provided by JASDF.

## Domestic Terminal

The airport has a semicircular domestic terminal which is similar in design to the terminals at DFW Airport. This terminal was inaugurated in July 1992 with four stories and one underground totaling floor of 182,517 m<sup>2</sup> with 26 boarding bridges.



## International Terminal

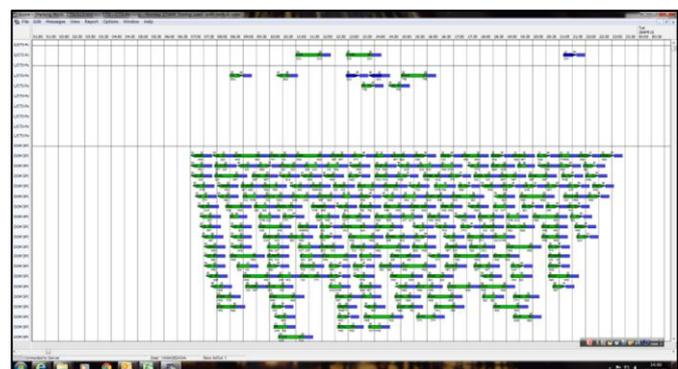
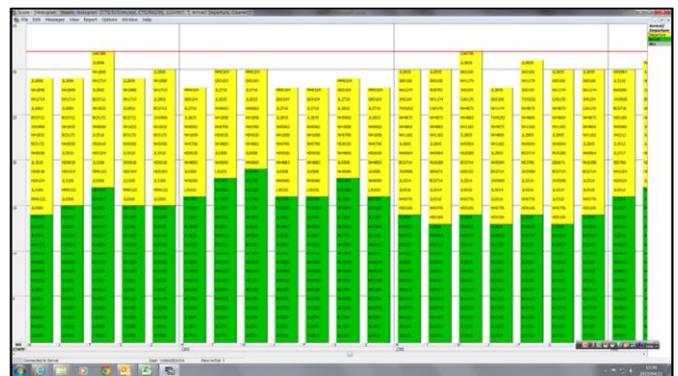
In order to cope with the rapid increase of international passengers, the new international terminal was inaugurated in March 2010 opposite side of domestic terminal facing Chitose Air Base. The international terminal building is four stories and one underground totaling floor of 59,155 m<sup>2</sup> with 8 boarding bridges. This international terminal is connected with domestic terminal by connecting corridor over the parking lot.



## Introduction of Coordination System

The SCORE (Slot Coordination and Reporting) system developed by Prolog Development Center (PDC) in Denmark has been used for coordination in our office. This system was introduced with minimum modules in April 2009 and the additional modules were added in November 2011.

Although the constraints for Tokyo International Airport (Haneda) is so complicated (5, 10, 15, 30 and 60 minute constraints), SCORE can handle the requested slots without any trouble. We totally depend on the SCORE system and we are very much satisfied with its performance and graphical presentation. We also appreciate the on-line update and on-line support whenever we have a problem. Encountered with problems we file the phenomenon at PDC helpdesk at the end of the day, then the solution will be given to us next morning because of the difference in time.



As far as the On-Line Coordination System (OCS) is concerned, we have not introduced it yet, and we are now in learning process what can be done with it. For those who have introduced the OCS, please give us the advice of real benefit you can get out of OCS.

## Introduction of our members

From left to right;

Mr. Hiroki Takeda, Head Coordinator,

Ms. Rei Yanagisawa, Supervisor & New Chitose Airport,

Ms. Reina Komori, Tokyo International Airport (Haneda),

Mr. Toshiya Tsurumi, Narita International Airport,

Mr. Ryo Tomomatsu, Kansai International Airport

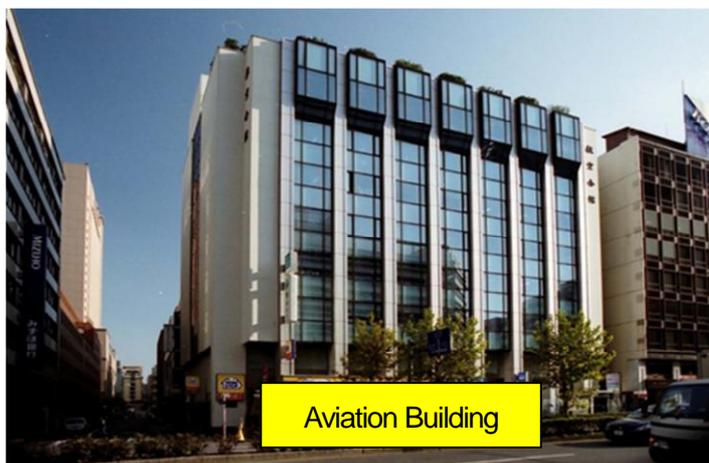
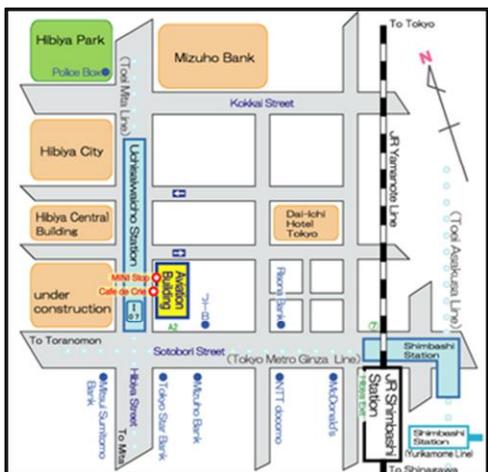


## Introduction of our office

Our office is located in the middle of downtown Tokyo, not at the airport, the details are as follows.

Organization	Japan Schedule Coordination (JSC)
Address	Aviation Building 6 <sup>th</sup> floor, 1-18-1 Shimbashi, Minato-ku, Tokyo 105-0004
Telephone	+81-3-3502-2721
Fax	+81-3-3502-2720
E-mail for slot request	<a href="mailto:scr@schedule-coordination.jp">scr@schedule-coordination.jp</a>
E-mail for general inquiry	<a href="mailto:jsc@schedule-coordination.jp">jsc@schedule-coordination.jp</a>
Web Site	<a href="http://www.schedule-coordination.jp">www.schedule-coordination.jp</a>
Office Hours	Monday-Friday; 09:30 – 17:30 (JST)

Please drop by whenever you have a chance to come to Tokyo, we will welcome you all to our office. The location map and the picture of our building are shown below.



From the Chief Editor

What a relief! I have just finished Asian Breeze (39) before “Golden Week”. “Golden Week” in Japan starts the end of April. 29 April (Wed), 4, 5, and 6 May (Mon, Tue and Wed) are national holidays. If you take the day-off on 30 April and 1 May (Thu and Fri), there will be 8 holidays in sequence. If you take the day-off on 7 and 8 May (Thu and Fri), there will be 9 holidays in sequence. What a nice holiday system in Japan!

As Sakura has gone, “Tsutsuji” in Japanese or Azalea (*Rhododendron indicum*) is now getting full bloom in Tokyo. I am planning to go to my hometown in Shikoku to enjoy “Tsutsuji” there during Golden Week. (H.T.)

