Beijing Olympics & Airport Safety

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  Beijing Capital International Airport Co. Ltd.
  - Nov. 18th, 2008
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I Beijing Capital International Airport Overview

II Capital Airport Safety Management Mechanism

III Safe Service for Beijing Olympic Games
BCIA is not only the first national gateway of China but also an important aviation hub in Asia-Pacific region. In the 21st century, BCIA maintains a rapid growth rate. The passenger volume of BCIA in 2007 is 54 million, ranking first in China and 9th in the world. With the largest single terminal in the world, BCIA has become a world-class airport.
General Layout Plan of BCIA(2008)
Airfield

Apron Area: 15.72 million square meters
328 Stands, including 8 for Airbus A380.

Total Perimeter: 38.8 Kilometers.
Terminals
As one of the busiest airports in Asia-Pacific area and in the world, BCIA’s routes network covers the whole globe. The three indicators of BCIA—passenger volume, aircraft movements and cargo volume, respectively increase by 17.8%, 10.4% and 25.4% in the past 8 years.

At present, the average passenger volume is 170,000 per day and aircraft movements reach 1463 on peak day. It is estimated that in 2009 passenger volume will reach 62 million, aircraft movements 0.47 million and cargo volume 1.7 million tons.
Company Vision

Our Vision:

To become world-class airport management company

Our Mission:

To promote development of Civil Aviation industry and to display the first national gateway image

Our Core Value:

Safety First;

Sincere Service;

Harmonious Environment.
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Safety First;
Always Prioritize Prevention;
Comprehensive Management;
Continuous Improvement.

Safety Management Committee

Aviation Security Committee
BCIA Safety Management Mechanism

- Continuous Improvement
- Safety Management Inner Audit
- Safety Supervision
- Distribution and Management of Resources
- Tenants Management
- Communication and Information Management
- Documentations Control
- Emergency Response
- Safety Education

- Safety Policy & Objectives
- Structure of the organization and relevant responsibilities
- Safety Plan
- Potential Danger Identification
- Risk Evaluation and alleviation
- Inner Safety Inspection

- Safety First
- Safety Supervision & Improvement
- Safety Commitments and Planning
- Risk Management
- Always Prioritize Prevention

Comprehensive Management

Safety Management Closed Circle
According to Chinese government’s “Civil Airport Operation and Safety Regulations”, BCIA accounts for the major responsibility of operation and safety management for Beijing Capital International Airport, and other companies involved in the airport operations will bear their own safety-related responsibility.
Clear Implementation

- Departments, Divisions, and sub-divisions are all required to sign the Safety Responsibility Statement. Thus every staff is responsible for their specific corresponding safety duty.
- Signing of safety agreements with on-site organizations
- Signing of safety agreements with Departments, Divisions, and sub-divisions inside the company
2. Clear Safety Management Objectives

**Overall Safety Objectives of BCIA**

- Avoid Real and Potential Accidents to Maintain A Safe Airport

**Company Level**

- 10 Safety Management Objectives

**Dept. Level**

- 47 Dept. Criterions and 172 Management Points

**Division Level**

- Three Level Criterions

**Example**

- Lower Than 0.1 Per 10,000 Flights For Bird Attack

- Airfield Management Dept.
  - Lower Than 0.05 Per 10,000 Flights For Bird Attack

1. Over 98% Effectiveness of The Facilities;
2. 100% Training Pass;
3. Half Year Round Risk Check;
4. Local Government Support and Cooperation.
### 3. Safety Standard

**Intl. Standards**
- (ICAO) Annex14

**National standards**
- 《China Civil Aviation Safe Operation Eleventh 5-year Plan》
- 《China Civil Airdrome Operation Certification》
- 《Safety Management System Construction Guide》
- 《Civil Airdrome Operation Safety Management Regulation》

**Airport Standards**
- 《BCIA Operation Handbook》
- 《BCIA Safety Management System Handbook》
4. Multi-level Safety Supervision

3 level Safety Supervision Mechanism
CASMC supervises and inspects safety situation of all the on-site organizations;
Quality and Safety Dept. supervises and inspects safety situation of departments inside company;
Operation Departments supervise and inspect safety situation of tenants.

Comprehensive Supervision Contents
Safety Management Rules and Standards
Inner Supervision Mechanism
On-spot Operation
Personnel Quality
5. Strict Safety Training Certification

BCIA and the on-site organizations carry out comprehensive Employee Access System and improve the staff’s safety knowledge.

BCIA and the on-site organizations carry out comprehensive Employee Access System. Every employee working in BCIA should learn the common knowledge about the terminals and pass the exam before taking the job. Up to Aug. 31, 2008, 58147 had taken the training courses and the exams. 379 did not pass the exams and was rejected.
6. Smooth Operation of Safety Management & Control Platform

- BCIA cooperates with 27 major companies to establish Capital Airport Safety Management Committee (CASMC) to ensure the safe operation of BCIA through information sharing and working closely.

- CASMC is the first organization established in China, in charge of coordinating the relevant organizations on airport to ensure a sound safety management system.

- CASMC is composed of 27 organizations, including airline companies, customs, immigration inspection, quarantine and ground handling companies, building a Safety Management & Control Platform.
Members of CASMC

Station of Immigration Inspection
Airport Capital Customs
Airport Capital Quarantine Bureau
3rd Division of Armed Police, Beijing
Special Police School
Public Security Branch Bureau
Air China
South Airline
East Airline
Hainan Airline
China International Cargo Airline
China Postal Airline
Airline Operation Committee
Ground Handling Service Co.
Ground Handling Co. South Airline
VIP Service Co.
Airport Catering Co.
In-flight Kitchen Co.
Aviation Security Co.
Property Management Co.
Bowie Aviation Facility Maintenance Co.
Power and Energy Company
Capital Airport Hospital
BCIA Co., Ltd.
CASMC’s Four Principles

Communication and Coordination:
Regular meetings help to realize the communication of member organizations coordination to deal with operational problems and upgrade BCIA safety management qualities.

Supervision and Evaluation:
The operational safety situation of each member organization is evaluated and the safety problems are collected through operational safety survey, report submitted by special inspection team, daily theme visit, joint inspection and regular meeting.
Information Feedback: Report of the excellent companies to the superior organizations; Regular CASMC information announcement; regular report of the overall safety situation of BCIA to its superior organization.

Stimulation and Reward: Rewards are given to encourage member organizations to comply with safety commitments and promote its safety management.
With sound and healthy organization, clear objectives, definite standards, clear responsibility, comprehensive supervision and continuous improvement, BCIA has achieved systematic safety management. And through training and education, effective safety culture requires everyone being responsible for airport safety. In recent year, there’s no real accident or potential accident that has occurred. The number of unsafe incidents declines every year.
Number of Incidents

Year | Incidents
--- | ---
2005年 | 100 (69% decrease)
2006年 | 20 (22% decrease)
2007年 | 8 (39% decrease)
2008年（1-10月） | 0
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Smooth Operation of T3 is the foundation for Olympic Service

Challenges:

- T3 was constructed in 3 years and 8 months, 2 months for system testing.
- Insufficient experience in managing and operating the largest single terminal in the world
- New environment, new facilities, new flows and new staff.
Features of Transfer

1. 6 Drills Plan
2. Problem Discover & Timely Correction
3. Emergency Plan and Public Notice
4. Coordination Mechanism for 3 Terminals
4 Transfers of Flights

1. 29th Feb, 6 airlines including Shandong airlines and Sichuan airlines moved to T3.
2. 26th March, 20 airlines including Air China and Shanghai airlines moved to T3
3. 20th May, 3 airlines including China Southern airlines moved to T2 from T1
4. 27th June, Hainan airlines moved from T2 to T1
T3 accounts 60% of total flights. Its smooth operation laid solid foundation for Olympic service.
From 8th July to 20th September, BCIA successfully handled:
7361 Olympic flights from 204 countries, including 421 Head of State aircrafts, 1076 business jets and 53 charter flights, 90142 Olympic family members, including 2266 wheelchair passengers.
Olympic Passenger of Peak Arrivals: 4794
Olympic Passenger of Peak Departures: 10031
Peak Day Flight Movements: 1339
Peak Day Commercial Jet’s Flight Movements: 111
1. Comprehensive Coordinating Agency Setup by the Government

BCIA Olympic Operational Command
(Leaders of Civil Aviation, BOCOG and the Ministry of Foreign Affairs)

IMM  COS  QUA  Venue Team  AA  AIR CHINA  ATC  Public Security  Business Jets  BGS

Suppliers  ..  ..  ..  ..  ..  ..  ..  ..  ..  ..  Suppliers
In order to provide high-quality Olympic services and testing plans of emergency, BCIA developed precautions to tackle emergencies related to aircraft, equipments, services, transportations, weather and so on.

According to the precautions, BCIA organized 6 drills for T3 operations and dedicated flow test for the Olympic and Paralympic Games. More than 800 problems were discovered through drills.
Joint On-duty Mechanism was established in Control Center of BCIA to ensure hardware and information sharing and timely feedback.

Implementing the daily joint meeting mechanism through which 195 problems were found during Olympic Games.
Following the idea of “Science Complete Security”, BCIA invested RMB100 million into airfield and terminals for upgrade of security equipments.

BCIA invested RMB90 million to equip the transgress alarming system and strengthen the perimeter into double layer.
Vehicle security at the entrance to airfield

Equipped 2 extra-large X-ray machines and 2 CT80 security inspection machines and 3 mobile security vehicles.
5. Risk Prevention Upgrade On Aviation Security

- CAAC published guidelines on LAG carriage, BCIA strictly complied with the guidelines.
- According to Chinese Government, BCIA enforced special security inspection, with Explosives Trace Detection in Terminal 1, 2 and 3.
Stakeholders established supervision mechanism to conduct continuous safety check and risk assessment.

Together with relevant organizations, BCIA carried out several united inspections. More than 380 issues were identified and solved.
The Olympic service work realized the "0 incident, 0 accident and 0 complaint" result, receiving wide recognitions from IOC, IPC, Olympic Family Members and world leaders.
Safety is a never-ending work for airport operator. We will accumulate useful experience, make continuous improvements, benchmark industry excellence and promote innovations in order to improve the quality of safety management and strengthen the communications with colleagues world wide. BCIA endeavors to be a hub of high standard safety, operation and service in order to contribute to the sustained and rapid growth of aviation industry.
Thank You!