CAAC

Airport Construction and Management

I. Construction and Development of Civil Airports

1. Overview of Airport Certification and Transport Airports

By the end of 2014, there had been 202 certified transport airports (excluding those in Hong Kong, Macao and Taiwan), an increase of 9 over the previous year. There had been 61 certified general aviation airports (excluding makeshift airports and landing points), an increase of 4 over the previous year. The newly certified airports were all feeder-line airports, namely, airports in Shanxi Lüliang, Hubei Shennongjia, Heilongjiang Fuyuan, Qinghai Delingha, Jilin Tonghua, Guangxi Hechi, Sichuan Aba, Guizhou Liupanshui and Hunan Hengyang, which were located in north, northeast, central-south, southwest and northwest regions of China respectively and their movement areas were all qualified as 4C. Among these 202 transport airports, if classified by the movement area, there were eight 4F airports, thirty 4E airports, forty 4D airports, one hundred and thirteen 4C airports, ten 3C airports and one 1B airport.

The passenger traffic at Beijing Capital International Airport stood at 86.128 million which ranked second in the world, and the cargo and mail turnover at Shanghai Pudong International Airport reached 3.182 million tons, which ranked third in the world. There were 24 airports in China whose passenger traffic exceeded 10 million.

2. Laws, Regulations and Technical Standards for Airport Construction and Management

The Department of Airport finished examination and approval of Provisions on the Management of Operation Safety Licensing of Aviation Fuel Supplies at Civil Airports (newly developed) and Provisions on the Management of Equipment Dedicated to Civil Airports (CAAC Order No. 150 amended). The Department initiated the development of Provisions for the Management of General Aviation Airports, and continued the revision of Provisions for Civil Airport Operation Certificate (CAAC Order No. 156) and Provisions for the Management of Operation Safety of Civil Airports (CAAC Order No. 191). The Department revised Examination Methods for the Siting of Civil Airports, and issued the Guidance on the Building of Low-Cost Terminals, General Requirements and Test Specifications for Low-Impact Resistant Poles

and Towers, Management Methods for the Industrial Standards of Civil Aviation Engineering Construction, and the Content and Format Requirements for the Compilation of Standards for Civil Aviation Engineering Projects. The Department issued 4 sets of construction project standards,including Standards for the Quantity Pricing List of Civil Aviation Professional Engineering Projects and 9 sets of industrial standards for dedicated equipment at airports including Ground Power Units for Aircraft. It also translated Volume II (Heliports) of Annex 14 (4th edition) to the Convention on International Civil Aviation and 9 FAA advisory circulars on nav-aid lighting into Chinese.

3. Safety Management of Airport Operations

The Department earnestly implemented the notion of sustained safety to ensure the effectiveness of safe operations and safety management at airports. First, special oversight campaign for the implementation of alternate landing regulations in the whole industry and special rectification campaign for airport operation safety were carried out. Second, special supervision and randomized examination of airport emergency rescue drills were organized. Third, the evaluation of bird strike prevention and the building of national bird alert system for airports were launched. Fourth, special evaluation of foreign objects was carried out and special supervision was also conducted in some airports. Fifth, the notice on the management of engineering construction without suspension of flight operations at airports was issued. Sixth, efforts were made to address the obstacle problems at Shenyang Taoxian Airport and Changsha Huanghua Airport. A notice was issued to standardize the evaluation of foreign objects at airport and made clear requirements on the effective discharge of obstacle clearance management functions; the compilation of Methods for the Management of Civil Airport Obstacle Clearance was carried out; the application of the obstacle clearance management system software was promoted at the airports; airports were urged to work together with their regional administrations and safety supervision and management bureaus to rectify the outdoor posters and other lighting facilities in the airport areas that affect flight safety.

4. Civil Aviation Infrastructure Development

All efforts were made in the construction of key civil aviation projects. CAAC identified 23 key construction projects in which three expansion projects at Nanjing Lukou Airport, Tianjin Binhai Airport and Nanning Wuxu Airport were completed. Nine extended projects such as Guangzhou Baiyun Airport and Chongqing Jiangbei Airport went on as planned. Among the 7 newly commenced projects, the new Beijing airport and expansion of movement areas at Pudong Airport kicked off, and preliminary work was done for other five projects including those at Lanzhou Zhongchuan Airport and Changchun Longjia Airport (Phase two). Among the 4 airports whose preliminary studies were made, the filing for the relocation of Qingdao Airport was approved; new airports of Chengdu and Xiamen were under review with regard to their project filings, and the siting application for the relocation of Dalian Airport was not submitted for review and approval. Active efforts were made in the construction of new airport of Beijing. The feasibility study was actively followed, supported and approved, the command headquarters and design entities worked to optimize the design plan, and relevant studies and coordination were carried out in relation to land expropriation, airspace planning, noise addressing, comprehensive transport, integration of Beijing and Tianjin, the residence of airlines and the follow-up demolition. The review of the overall design plan for the new airport of Beijing was organized in advance; the preliminary design and budgeting for the movement area were approved, and the Department coordinated with Beijing Municipality, Hebei Province and Ministry of Land and Resources to make preparations for the construction land use. On December 26, the construction of new airport of Beijing was officially started.

5. Following the Principle of Deregulation and Adjusting the Mode of Management

The administrative approval process for airport construction was further simplified. The Notice on the Adjustment of Approval Procedures for Civil Aviation

Transport Airport Siting was printed and issued, and the review by regional administration in the original procedure was canceled to further improve the approval efficiency for the siting of civil aviation transport airports. Approved by the State Council, the project acceptance licensing for civil transport airports were all relegated to regional administrations of CAAC. The Management Methods for the Expert Evaluation of Civil Aviation Basic Projects was developed; the Notice on Further Standardizing the Consultation and Evaluation of Civil Aviation Construction Projects was issued to improve the management of expert evaluation of construction projects, enhance service awareness of the consultancies and improve quality and efficiency of consultancy.

6. Other Work Including Qualification Review

The Department completed the the review of construction qualification applications of 31 companies in 6 batches, the submitted application material for civil aviation constructors of 83 persons in 13 batches and the continued education and training material of 100 civil aviation constructors in 3 batches. It coordinated with the Ministry of Housing and Urban-Rural Development in carrying out surveys of the qualification management of construction companies and provided feedback from the industry opinions.

II. Key Civil Airport Construction Projects in 2014

1. The Expansion of Nanjing Lukou Airport

From June 25 to 27, CAAC East Regional Administration organized project acceptance inspection of the expansion project at Nanjing Lukou Airport. The project was designed to accommodate 18 million passengers traffic annually, which mainly includes a new terminal area of 263.4 thousand square meters, a new runway with a length of 3 600 meters and a width of 60 meters, an apron with 59 parking stands, the renovation of the original terminal, the building of ground transport center, parking lots, flyovers, cargo areas, living facilities, business buildings, power supply, cold air supply, water supply and drainage, treatment of refuses and fire-fighting facilities. The project investment totaled 9.619 billion yuan.

2. The Expansion of Tianjin Binhai Airport

From August 14 to 15, CAAC North Regional Administration organized project acceptance inspection of the Tianjin Binhai Airport expansion project. The project was designed to accommodate 25 million passenger traffic and 1.7 million ton cargo and mail turnover annually by 2020. The project mainly includes the building of 3 fast exiting taxing ways in the movement area of the east runway, an apron with 40 stands, Terminal 2 with a floorage of 247 thousand square meters, flyovers in front of the terminal with a length of 700 meters, a total floorage of 42 250 square meters for operation support, offices and service facilities, and supporting power supply, water supply and drainage, cold air supply, heat supply, gas supply, communication and fire-fighting. The project investment totaled 6.009 billion yuan.

3. The Expansion of NanningWuxu Airport

From September15 to 16, CAAC Central-south Regional Administration organized project acceptance inspection of the expansion project and oil supply at Nanning Wuxu Airport. The project was designed to accommodate 16 million passenger traffic and 164 thousand ton cargo and mail turnover annually by 2020. The project mainly includes the building of a new parallel runway with a length of 3 200 meters, a new terminal with a floorage of 189 thousand square meters, an apron with 50 stands, a cargo station with an area of 14 thousand square meters, supporting nav-aid lighting, communication, fire-fighting, power supply, water supply, cold air supply, heat supply, gas supply and rain and waste water processing facilities and supporting living facilities. The project investment totaled 6.433 billion yuan.

4. The Expansion of Guangzhou Baiyun Airport

The project was designed to accommodate 80 million passenger traffic and 2.5 million ton cargo and mail

turnover annually by 2020. The project mainly includes the building of a third runway with a length of 3 800 meters and a width of 60 meters and the taxiing way system, installation of category II precision approach lighting system at both ends of the runway, building of the new Terminal 2 with a floorage of 624 thousand square meters, and pier No. 5 and pier No. 6 at the east and west end of the main structure of Terminal 2, and an apron with 100 stands. The project investment totaled 19.74 billion yuan.

5. The Expansion of Chongqing Jiangbei Airport

The project was designed to accommodate 45 million passenger traffic, 1.1 million ton cargo and mail turnover and 370 thousand aircraft movements annually by 2020.The project mainly includes the building of a third runway with a length of 3 800 meters and a width of 60 meters, Terminal 3A with a floorage of 508 thousand square meters, an apron with 79 stands, a cargo station with a floorage of 79 thousand square meters, and supporting production and living facilities such as nav-aid lighting, fire-fighting and rescue, power supply, water supply, cold air supply and heat supply, and gas supply. The project investment totaled 28.207 billion yuan.

6. The Expansion of Wuhan Tianhe Airport

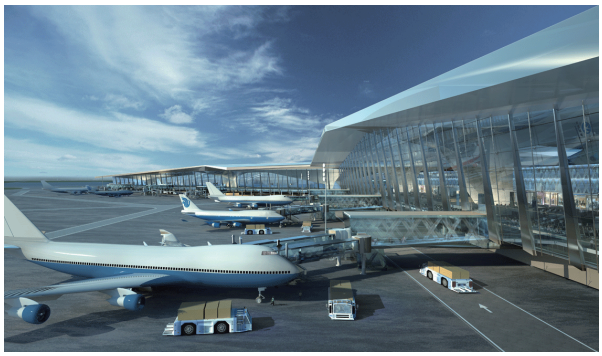
The project was designed to accommodate 35 million passenger traffic and 440 thousand ton cargo and mail turnover annually by 2020.The project mainly includes the building of a second runway with a length of 3 600 meters and a width of 60 meters, Terminal 3 with a floorage of 393 thousand square meters, an apron with 60 stands, and building for various business, supporting and living facilities, and projects such as fire-fighting, security, power supply, water supply, cold air supply, heat supply, gas supply and drainage and sewage water and refuse treatment. The project investment totaled 15.275 billion yuan.

7. The Expansion of Harbin Taiping Airport

The project was designed to accommodate 18 million passenger traffic and 175 thousand ton cargo and mail turnover annually by 2020.The project mainly includes the 400-meter extension of the current runway to 3 600, the building of Terminal 2 with a newly built floorage of 160 thousand square meters, an apron with 45 stands, supporting and living facilities, and projects such as power supply, water supply and drainage, cold air supply, heat supply, gas supply, communication and fire-fighting, etc. The project investment totaled 4.448 billion yuan.

8. The Expansion of Changsha Huanghua Airport

The project was designed to accommodate 31 million



passenger traffic and 320 thousand ton cargo and mail turnover annually by 2020. The project mainly includes the building of a second runway with a length of 3 800 meters and width of 60 meters according to category 4F of the movement area, two parallel taxing ways with a length of 3 800 meters along each side of the runway, setting of the fast exiting taxi ways, perpendicular connection ways, circumventive taxi ways, category III and I lighting systems respectively on the primary landing direction and secondary landing direction of the new runway and ILS, and supporting facilities including communication, power supply, water supply and drainage, heat supply, cold air supply, fire-fighting and rescue. The project investment totaled 3.65 billion yuan.

9. The Expansion of Zhengzhou Xinzheng Airport

The project was designed to accommodate 29 million passenger traffic and 500 thousand ton cargo and mail turnover annually by 2020.The project mainly includes the building of a second runway with a length of 3 600 meters and width of 60 meters according to category 4F of the movement area, new Terminal 2 with a floorage of 332 thousand square meters, an apron with 85 stands, and supporting constructions including a comprehensive transportation center, parking lots, cargo stations, an aviation catering center, and supporting facilities for production, living, office and public purposes. The project investment totaled 14.928 billion yuan.

10. The Expansion of Yinchuan Hedong Airport

The project was designed to accommodate 10 million passenger traffic and 100 thousand ton cargo and mail turnover annually by 2020.The project mainly includes the 400-meter extension of the current runway to 3 600 meters according to 4E of the movement area, Terminal 3 with a floorage of 80 thousand square meters, an apron with an area of 178.6 thousand square meters, and expansion of the navigation, communication, nav-aid lighting, power supply, water supply and drainage and fire-fighting facilities. The project investment totaled 2.815 billion yuan.

11. The New Beijing Airport Project

On December 26, the construction of the new Beijing airport was started. The project was designed to accommodate 72 million passenger traffic, 2 million ton cargo and mail turnover and 620 thousand aircraft movements annually by 2025.The project mainly includes the building of category 4F movement areas, 4 new runways, a passenger aircraft apron with 150 stands, a cargo aircraft apron with 24 stands, 14 stands for maintenance, a new terminal with a floorage of 700 thousand square meters, a cargo station with a floorage of 75 thousand square meters, comprehensive supporting space for cargo transport with a floorage of 35 thousand square meters, a warehouse under the supervision of Customs with a floorage of 74 thousand square meters, supporting operational and living facilities, such as a training center for aviation security, comprehensive management offices, and housing for the overnight stay of passengers, and other supporting facilities including comprehensive transportation, water supply, power supply, refrigerating, heat supply, gas supply, information communication, fire-fighting, rain, waste water and refuse treatment, green plants, and also a support center of off-airport living. Two new ATC towers, office buildings for ATC with a floorage of 67 thousand square meters, a new terminal control center, oil supply and airlines' bases will be built. The project investment totaled 79.98 billion yuan.

12. The Expansion of the Movement Area at Shanghai Pudong Airport

On September 15, 2014, the expansion of the movement area at Shanghai Pudong Airport was initiated. The project was designed to accommodate 80 million passenger traffic and 5.7 million ton cargo and mail turnover annually by 2020.The project mainly includes the building of a fourth runway with a length of 3 400 meters and a width of 45 meters, parallel taxi ways, nav-aid lighting facilities, etc. The project investment totaled 4.203 billion yuan. ■