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EFFORTS TO IMPROVE SHANGHAI PUDONG AIRPORT FLIGHT PUNCTUALITY

(Presented by China)

SUMMARY

This paper presents the efforts and achievements to improve the flight punctuality of Shanghai Pudong international Airport. At the same time, we believe that collaborative decision-making is the key to improving punctuality.

1. INTRODUCTION

1.1 Since October 2017, the Pudong airport has performed an on-time rate of more than 80% for 7 consecutive months, up nearly 20% from the same period last year. During the Spring Festival in 2018, the average on-time rate of Pudong airport was 92.7% under the optimal airspace environment, the on-time rate reached 97.5% on 15 February. From the rankings, Pudong airport's rate of on-time has steadily risen, and has been out of last three for 7 months in a row, of which 4 months in the top of the top three major airports in China.

1.2 The flight delay time of Pudong airport dropped significantly. In April 2017 October - 2018, the average delay time of the flight departure of Pudong airport was 7.2 minutes, 13.5 minutes decreased from the same period, and the long delay flight (2 hours or more) fell to 1.5% from the previous 4.1%. The passengers felt obviously improved and the number of passengers in the waiting room was alarm times. The normal operation of flights at Pudong airport has also achieved good social effects.

2. DISCUSSION

2.1 Emphasis should be laid on improving operation efficiency. First of all, the flow management work flow can be refined. By setting up Flow Management Positions in Hongqiao and Pudong towers in Shanghai, moderately increase the autonomy of two towers, increase the ADR during early peak time. In the first 5 months of 2018, the on-time rate of departure increased significantly, Pudong airport increased by 22.87%, and Hongqiao airport increased by 20.15% over the same period.

2.2 All the air traffic control units in East China have utilized 10 km in area control units and 6 km in approach control units (except Ningbo approach, which in trial radar control phase). The target which is not more than 20 km in same altitude transfer spacing will be utilized before September 30th.

2.3 Focusing the goal of the flight punctuality. ECATMB aim at the target Pudong's departure flight on-time rate more than 75% and Taxi-out time less than 20 minutes, Hongqiao's departure flight on-time rate more than 80% and Taxi-out time less than 15 minutes. Under the administration of the East China CAAC, all members of the aviation community practice the concept of collaborative decision-making and work together to improve the operational capability, and achieve the expected goals.

2.4 In the first 5 months of this year, the average Taxi-out time of Hongqiao airport is 14.9 minutes (17.4 minutes for the same period last year). The average Taxi-out time of Pudong airport is 20 minutes / frame (24.6 minutes for the same period last year), and the on-time rate of Pudong airport and Hongqiao is 83.69% (an increase of 20.48% over the same period) and 89.85% (an increase of 19.47% over the same period).

2.5 The improvement of air traffic control operation efficiency is based on the efficiency of resource utilization. At present, the East China region, especially the Yangtze River Delta region, has a shortage of airspace resources (the routes of East China account for 16.7% of the country's total route, and the flight flows in East China account for 26.4% of the country's total flight flow), and the route structure is not reasonable (the average daily flow of each 8 busy air routes in the Yangtze River Delta region is over 600, and HFE and TOL are the busiest way points in the country for a long time).

2.6 ECATMB have intensified the refinement of the airspace in the Yangtze River Delta. The military and civil aviation have well cooperated in the flexible use of airspace, the prevention of collision between military and civil aviation flights, and the acceleration of civil aviation flight under reverse weather condition. Civil-Military ATC unit are working together to research and develop a military and civil aviation collaboration information system for the sharing of operational information and the docking of work flow, which is conducive to reducing errors caused by human factors and workload.

2.7 By docking CDM system with Pudong airport A-CDM and airlines, ECATMB shares and exchanges information on flight and flow information with airport and airlines. By utilization of A-CDM concept, all members of Pudong aviation community have improved ground support efficiency. The CTOT implementation rate of Pudong airport reached 93.5%. Pudong airport pays close attention to small delay flights and reduces delays in such flight by completing ground support work in advance. Pudong airport optimizes the parking position for the landing flight based on the direction of the departure flight, reduces the Taxi-out time of departure flight.

2.8 In short, the concept of collaborative decision-making has played a crucial role in realizing the improvement of the flight punctuality of Pudong Airport. Air traffic management, airport and airlines will work together to practice the CDM concept and continuously improve the efficiency of Air Navigation Operations.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information contained in this paper.

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