



International Civil Aviation Organization

**The Third Meeting of the APANPIRG ATM Sub-Group
(ATM /SG/3)**

Bangkok, Thailand, 03-07 August 2015

Agenda Item 4: ATM Systems (Modernisation, Seamless ATM, CNS, ATFM)

**IMPLEMENTATION OF INDEPENDENT PARALLEL RUNWAY VISUAL
APPROACH AT BEIJING CAPITAL AIRPORT**

(Presented by China)

SUMMARY

This paper presents brief and general Definitions of Visual Approach, the promoting process of Visual Approach in Beijing Capital International Airport (including the preparation), the implementation process of Vectoring for Visual Approach, the experience and lessons gained within the whole process. And the effects and results have been obtained while the certain conditions are met after the implementation of visual approach at Beijing Capital International Airport.

1. INTRODUCTION

VISUAL APPROACH DEFINITION

- 1.1 VISUAL APPROACH – An approach conducted on an instrument flight rules (IFR) flight plan which authorizes the pilot to proceed visually and clear of clouds to the airport.
- 1.2 The pilot must, at all times, have either the airport or the preceding aircraft in sight.
- 1.3 This approach must be authorized and under the control of the appropriate air traffic control facility.
- 1.4 Reported weather at the airport must be ceiling at or above 300 meters and visibility of 5 km or greater.
- 1.5 A visual approach is an ATC authorization for an aircraft on an IFR flight plan to proceed visually to the airport of intended landing; it is not an instrument approach procedure.
- 1.6 There is no missed approach segment.
- 1.7 VECTOR FOR VISUAL APPROACH-A vector for a visual approach may be initiated if the reported ceiling at the airport of intended landing is at least 150 meters above the MVA (Minimum Vectoring Altitude) and the visibility is 5 km or greater.

Approaches To Multiple Runways

Different spacing of parallel runways (D)	D<760m	1310m>D≥760m	D≥1310m
Separation with aircraft on the adjacent final (prior to one pilot receipt of the visual approach clearance)	Standard separation is provided by ATC	Standard separation is provided by ATC	Standard separation is provided by ATC
Separation with aircraft on the adjacent final (after one pilot receipt of the visual approach clearance)	Visual Separation (* do not permit a heavy/B757 or heavier aircraft to overtake another aircraft on the adjacent final)	not necessary to apply any other type of separation (* Each aircraft has been issued and acknowledged receipt of the visual or instrument approach clearance **Flight paths do not intersect *** Both aircraft are established on a heading which will intercept final)	not necessary to apply any other type of separation (*Flight paths do not intersect)
Intercept angle		not greater than 30 degrees	not greater than 30 degrees

Table - Different requirements for different spacing runways

1.8 The process used for promotion of the Visual Approach at Beijing Capital International Airport:

- On 26th July 2008, the ATC office of CAAC issued the temporary provisions for visual separation and visual approaches.
- On 1st August 2008, visual separations have been provided at Capital Airport and Tianjin International Airport for a test run.
- On 28th October 2014, radar vector for visual approach was implementing at Beijing International Airport, after consulting with the North China regional management bureau of CAAC and several major airlines.

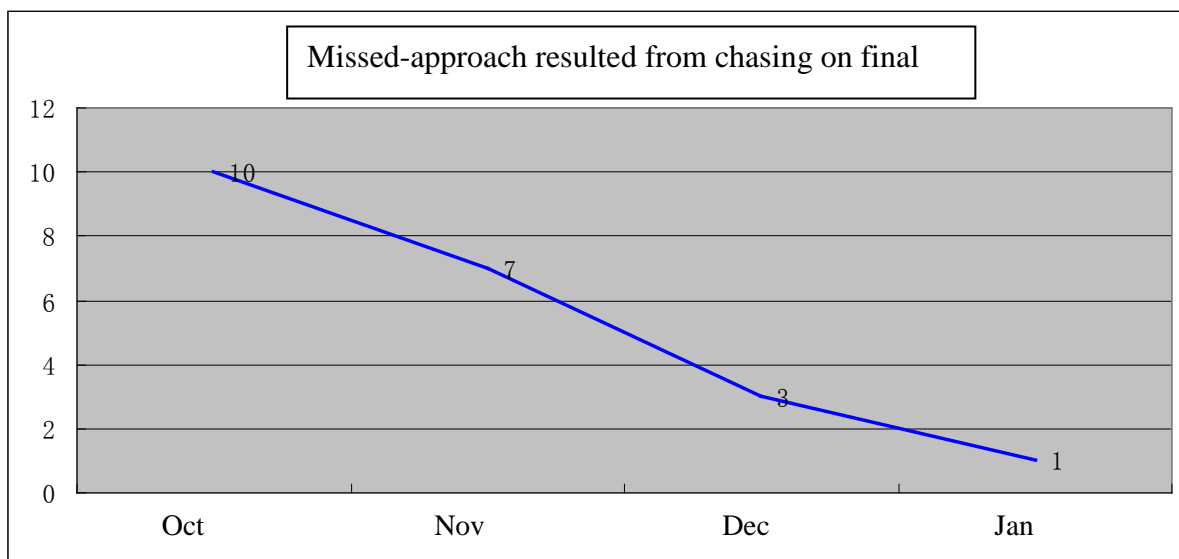
2. DISCUSSION

2.1 After the implementation of visual approach at Beijing Capital International Airport, the following results have been obtained.

2.2 During the first three months period, 2398 flights have conducted visual approach, 467 flights have reported unable to comply, percentage of implementation is 84%, 6 aircraft have conducted missed-approach procedure or go around.

2.3 In them, the percentage of implementation in the first month is 73.33%, in the second month is 75.77%, and 91.21% in the third month.

2.4 The situation of missed-approach or termination of approach resulted from chasing on final have been reduced month by month.



Pic- Missed-approaches resulted from chasing on final

2.5 The separation on same and adjacent runway have been optimized or reduced.

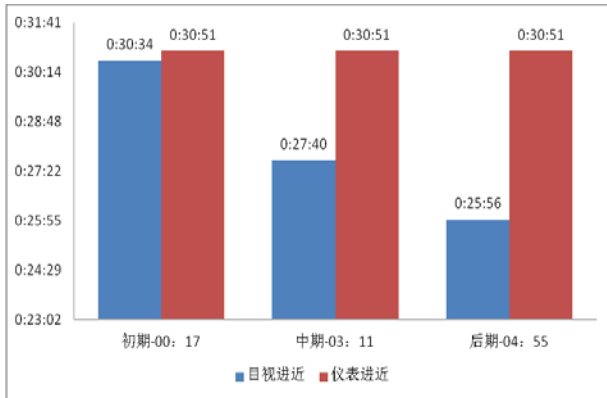


Pic- Separation on same runway

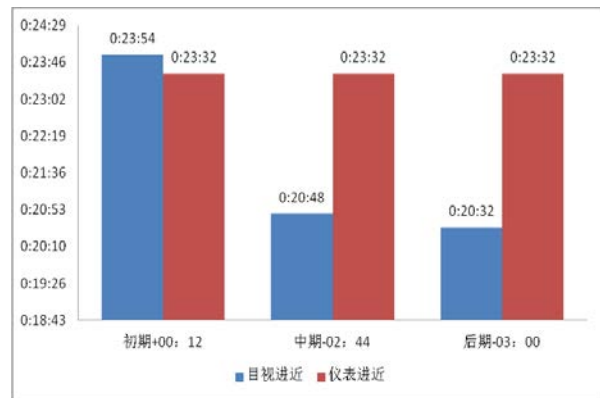


Pic- Separation on adjacent runway

2.6 The average arrival flight time in the air has been reduced around 3-4 minutes for each arrival point.



Pic-Arrival point (GITUM)



Pic-Arrival point (VYK)

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.

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