



International Civil Aviation Organization

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

Bangkok, Thailand, 03-07 August 2015

Agenda Item 5: ATM Coordination (Meetings, Route Development, Contingency Planning)

SPEED CONTROL IN THE FINAL APPROACH PHASE

(Presented by China)

SUMMARY

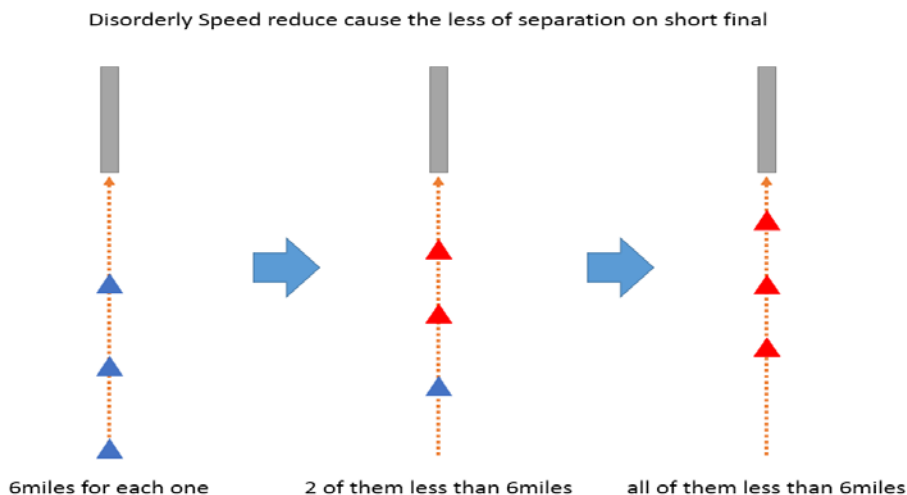
This paper presents the low efficiency operation in busy airports caused by lack of the final speed control regulation. Also recommended that ICAO can regulate the speed control operation on short final, particularly for busy airports.

1. INTRODUCTION

1.1 With the increase of flights, the traffic capacity of East China is reaching saturation; therefore China is considering how to improve the efficiency in these busy airports. Based on feedback from both pilots and controllers, more departure flights need to spend extra time waiting for arrival landing flights, so the departure delays become exacerbated.

2. DISCUSSION

2.1 Normally, pilots will intercept ILS according to ATC instruction. When established on the localizer, pilots will adjust the approach speed until landing based on their own discretion, if there's no specific requirement. This action will probably affect the horizontal spacing which was provided by Approach controller few minutes before. Considering that the tower controller cannot issue the lineup instruction for departure flight, if the spacing is less than 6 miles, it will affect the departure plan, and result in lower operating efficiency and flight delays. For the purpose of safety, the approach controller has to provide extra separation for landing traffic. This is an example for the disorderly speed control:



2.2 But in London Heathrow, they have this special rule:

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EGLL/LHR HEATHROW	JEPPESEN 28 JAN 11	10-1P3	LONDON, UK AIRPORT BRIEFING
2. ARRIVAL			

2.1. SPEED RESTRICTIONS

Pilots should typically expect the following speed restrictions to be enforced:

- 220 KT from the holding facility during the initial approach phase;
 - 180 KT on base leg/closing heading to the final apch;
 - between 180 KT and 160 KT when established on the final apch;
- and thereafter 160 KT to D4.0.

These speeds are applied for ATC separation purposes and are mandatory. In the event of a new (non-speed related) ATC clearance being issued (e.g. an instruction to descend on ILS), pilots shall continue to maintain a previously allocated speed. All speed restrictions are to be flown as accurately as possible. ACFT unable to conform to these speeds should inform ATC and state what speeds can be used. In the interests of accurate spacing, pilots are requested to comply with speed adjustments as promptly as feasible within their own operational constraints, advising ATC if circumstances necessitate a change of speed for ACFT performance reasons.

2.3 This speed restriction does have a good effect. All the flights on final will strictly maintain the enough separation provided by ATC. Even 2 B747 flights can follow on the final with only 2.5 miles separated from each other.

2.4 But when we want to write this rule in our AIP, some airlines put forward: This rule is contradictory to items of their company's operation manual. The company requires their pilots to establish full landing configuration above 1000 feet on the short final. Even some airliners over 1500 feet!

2.5 This makes us feel very troubled. We hope this can be explained by ICAO. So airliners can carry out more effectively.

2.6 Whether we can make a research to regulate the final speed control rules for busy airports in order to protect the spacing on short final.

3. ACTION BY THE MEETING

The meeting is invited to: analyze the necessity of this sort of research.

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