

ELEVENTH AIR NAVIGATION CONFERENCE

Montreal, 22 September to 3 October 2003

Agenda Item 4: Capacity-enhancement measures
4.1: Global measures

MANUAL ON SIMULTANEOUS OPERATIONS ON PARALLEL OR NEAR-PARALLEL INSTRUMENT RUNWAYS (SOIR)

(Presented by the Secretariat)

1. INTRODUCTION

1.1 Implementation of capacity-enhancing measures in the vicinity of aerodromes is increasingly being considered by individual States and in ICAO regions. These measures are often in response to increasing demand and associated political and industrial pressures. At the same time, there has been a growing awareness within the civil aviation community that safety must be improved in light of increasing traffic, particularly in the vicinity of aerodromes. The use of procedures and separation minima inconsistent with ICAO provisions is an obvious threat to safety through a lack of standardization. Based on the above, Agenda Item 4 addresses the establishment of a global approach to capacity-enhancement.

1.2 One of the ways that States may increase capacity at aerodromes is to make more efficient use of parallel runways at aerodromes where these exist. In 1980, the Air Navigation Commission reviewed the Secretariat's report and proposals regarding minimum distances between instrument runways. The Commission recognized the difficulty in determining acceptable distances between parallel instrument runways and agreed on the need for ICAO to study the matter further. States and international organizations were then invited to provide information on current practices and related questions with respect to minimum distances between parallel runways for simultaneous use under instrument flight rules (IFR).

1.3 Four States indicated that they had operational experience with simultaneous operations on parallel instrument runways and had conducted studies on the subject. The requirements for the simultaneous use of such runways were considerable, and there was support for ICAO to develop specifications and undertake work on this subject.

1.4 The Air Navigation Commission, in light of the views expressed by States and international organizations on minimum distances between instrument runways used for simultaneous operations, noted the complex nature of the subject and the fact that it covered many disciplines in the air navigation field. It also agreed that guidance material was needed in view of the complexity of the subject. The Commission decided in January 1981 to proceed with the study and authorized the establishment of an air navigation study group, designated the Simultaneous Operations on Parallel or Near-Parallel Instrument Runways (SOIR) Study Group to assist the Secretariat in its work. Subsequently, in 1988, the ICAO Circular *Simultaneous Operations on*

Parallel or Near-Parallel Instrument Runways (Circ 207) was published and, in 1991, Amendment 3 to the twelfth edition of the *Procedures for Air Navigation Services — Rules of the Air, Air Traffic Services* (Doc 4444) now re-titled as the *Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM) established requirements and procedures for simultaneous operations on parallel or near-parallel instrument runways.

1.5 At the request of the Commission, the manual on simultaneous operations on parallel or near-parallel instrument runways (attached) has been prepared by the ICAO Secretariat, with the assistance of the study group.

1.6 The information contained in the attached draft manual reflects the experience accumulated by several States, and is intended to facilitate implementation of related provisions in Annex 14 — *Aerodromes*, Volume I — *Aerodrome Design and Operations*, Chapters 1 and 3, the *Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM, Doc 4444), Chapter 6 and the *Procedures for Air Navigation Services — Aircraft Operations* (PANS-OPS, Doc 8168), Volume I, Part I, Chapter 1 and Volume II, Part II, Chapter 6.

1.7 The manual at the appendix is currently being editorially reviewed and translated and will be published as an ICAO manual in 2004. In the meantime, however, the information in the Appendix may be used as suitable guidance material by States that have parallel runways and who may wish to make more efficient use of those runways.

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