



International Civil Aviation Organization

North American, Central American and Caribbean Office

**Seventh Meeting of Directors of Civil Aviation of the Central Caribbean
(C/CAR/DCA/7)**

San Juan, Puerto Rico, 28 June – 01 July 2004

C/CAR DCA/7-WP/06

17/0604

Agenda Item 2:

Air navigation issues

**2.1 Review of the Summary of Discussions of the Fourth C/CAR
Working Group Meeting.**

ATS SAFETY MANAGEMENT

(Presented by the Secretariat)

SUMMARY

This paper analyzes the aspects related with ATS safety management concerning the provisions of ICAO for the States/Territories/International Organizations to develop an action plan to implement ATS safety programmes in the airspace and aerodromes under their jurisdiction.

References:

- Doc 7300 *Convention on international civil aviation*
- Annex 11
- Doc 4444, PANS-ATM
- Report of the Eleventh Air Navigation Conference (Montreal, Canada, 23 September to 3 October 2003)
- Draft Report of the GREPECAS/12 Meeting (Havana, Cuba, 7-11 June 2004)

1. Introduction

1.1 Safety is considered the most important activity of global aviation, and it is reflected in the objectives and targets of ICAO. Based on Article 44 of the *Convention on international civil aviation* (Doc. 7300), commonly known as the Chicago Convention, ICAO is entrusted to foster a worldwide safe and ordered growth of civil aviation. In light of this convention, the States agreed to be responsible for the compliance with ICAO SARPs or else to inform about their differences to them.

1.2 ICAO has established a Global Aviation Safety Plan (GASP) in order to reduce accidents and incidents, not as an independent activity, but as a mechanism presenting and allowing the consolidated notification of all these activities in a sole document. The current version of the GASP is posted on the ICAO web site (www.icao.int/icao/en/anb).

1.3 ICAO's role within the GASP includes fostering several safety activities worldwide such as facilitating the communication of safety-related information and experience between governments and aeronautical industry, and endeavoring to ensure that the various safety programmes being undertaken worldwide are complementary rather than competitive, and that they address regional as well as global aviation safety concerns in a complete, integral and systematic manner.

1.4 Annex 11 describes safety as the primary objective of air traffic services (ATS), seeking to ensure the safe, orderly and timely flow of air traffic; and that, when applicable, the safety levels and objectives shall be established on the basis of regional air navigation agreements.

1.5 Likewise Doc. 4444, PANS-ATM expresses the objectives of safety management as ensuring that the established level of safety applicable to the provision of ATS within an airspace or at an aerodrome is met, and that safety-related enhancements are implemented wherever necessary. The provisions relating to implementation of systematic safety management and programmes with levels and objectives of Annex 11 and PANS-ATM are effective since 27 November 2003.

1.6 Likewise, the Eleventh Air Navigation Conference recommended the publication of the ATM Operational Concept Manual, to help the transparent and harmonized regional planning in line with the Global Plan for CNS/ATM Systems. During this conference, the *ATM operational concept* and *Manual on Safety Management for Aerodromes and Air Traffic Services* were presented, in which each element of the system shall be the subject of a safety analysis as an individual element, and as a component that interacts with others as part of a larger system, as indicated in the following definition:

System safety approach. A systematic and explicit approach defining all activities and resources (people, organizations, policies, procedures, time spans, milestones, etc.) devoted to the management of safety. This approach starts before the fact, is documented, planned and explicitly supported by documented organizational policies and procedures endorsed by the highest executive levels. The system safety approach uses systems theory, systems engineering and management tools to manage risk formally, in an integrated manner across all organizational levels, across all disciplines and all system life cycle phases.

1.7 The objective of this Manual is to help States/Territories/International Organizations in the implementation of the provisions of Annex 11, Section 2.26 and Chapter 2 of the PANS-ATM, providing guidance for the implementation of a safety management system and an introduction to the related duties and organizational support requirements, highlighting the application of ATS safety management techniques.

1.8 GREPECAS/12 Meeting approved Conclusion 12/29 on "Implementation of ATS Safety Management Programmes and Minimum Safety Levels".

2. Analysis

2.1 Day by day, safety management is held by ATS providers, whether from public corporations or private, which are not under the direct administration of the State. Nevertheless, the State, as signatory of the Chicago Convention, is responsible for the implementation of ICAO SARPs within the airspace and aerodromes under its responsibility.

2.2 In order to delegate this responsibility concerning ATS safety management provision, it is firstly required that States regulate the required provisions so that the ATS provider may implement systematic safety management practices and procedures to establish the suitable surveillance mechanisms to ensure that the ATS service providers comply with these aeronautical regulations requirements and will achieve an acceptable level of safety in operations.

2.3 The formal system and safety practices are normally referred to, in a collective manner, a safety management system. Therefore, every State safety management programme has two elements; the basic element of direct responsibility of the State to regulate and watch safety aspects, and the active element of ATS safety management, implemented through ATS providers.

2.4 Although the regulatory function and ATS provision are both under the direct administration of an organism (civil aviation department or a State-controlled authority), it is important to keep a clear distinction between these two functions.

ATS Database and Quality Assurance Programmes

2.5 The prevention of ATS accidents and incidents is considered as the highest priority for Safety Oversight in Air Traffic Services. To this end, ICAO NACC Regional Office is carrying out a follow-up on the Quality Assurance implementation Programmes and has developed a database of ATS incidents occurred in the CAR/SAM Regions based on the reports received in order to register safety measures carried out by States/Territories/International Organizations. ICAO NACC Office will send on a regular basis to the States/Territories/International Organizations a register of the incidents occurred so as to help that the relevant actions may be taken.

3. Conclusion

3.1 There is already a significant degree of interdependence between ground-based and airborne components in the current air traffic management systems, and it is expected that this interdependence would become even more significant in future systems.

3.2 With the increasing significance of air transport to the world economy, and the increasing costs of operating aircraft, there is also a need to ensure that the ATS system is as efficient as possible. The expression “ATS system” may be seen as the totality of the hardware, software and personnel required to operate the system, together with the standards and procedures, which govern its operation.

3.3 To improve safety in the C/CAR, it is necessary that States/Territories/International Organizations continue to participate more actively in activities organized by ICAO within the GASP, in order to introduce improvements to the safety systems through the implementation of ATS safety management programmes in coordination with the ICAO NACC Regional Office.

3.4 In view of all the above, it is necessary that the Meeting recommends the States/Territories/International Organizations to increase their efforts towards the implementation of safety management programmes. In this regard, the Meeting should bear in mind the paragraphs above.

4 Suggested action

4.1 The Meeting is invited to approve the following:

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DECISION 7/X

INCLUSION IN THE WORK PROGRAMME OF THE C/CAR WG THE DEVELOPMENT OF ATS SAFETY MANAGEMENT PROGRAMMES WITH OBJECTIVES AND MINIMUM ACCEPTABLE LEVELS

That the C/CAR WG:

- a) develop, in coordination with the ICAO NACC Regional Office, an ATS safety management programme with objectives and minimum acceptable levels for the Central Caribbean so as to ensure safety in the provision of Air Traffic Services within the airspace and aerodromes of its jurisdiction, and,
- b) present to the next C/CAR DCA meeting this programme.