



ICAO

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North American, Central American and Caribbean Office

WORKING PAPER

NAM/CAR/SAM/SAR — WP/03
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NAM/CAR/SAM Meeting/Workshop to Improve Regional Search and Rescue (SAR) System and Civil/Military Coordination (NAM/CAR/SAM SAR)
Havana, Cuba, 13-17 April 2015

- Agenda Item 4: Airspace Organization and Management (AOM)**
4.2 States initiatives for the reduction of the permanently segregated volumes of Special Use of Airspace (SUA)

NEED OF ADOPTING A COLLABORATIVE FOCUS ON THE AIRSPACE MANAGEMENT IN THE COMMON BOUNDARY OF HAVANA AND MIAMI FIR BY THE IMPACT OF HAZARDOUS AREAS IN NORTH LATITUDE 2400

(Presented by Cuba)

EXECUTIVE SUMMARY	
This working paper presents the need of keep the exchange	
Action:	See Paragraph 5
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety•
<i>References:</i>	<ul style="list-style-type: none">• PANS ATM Doc 4444 – <i>Air Traffic Management</i>• LOA ARTCC Miami/ ACC Havana

1. Introduction

1.1 Currently more than 60% of the aircraft traffic operating in Havana FIR is hardly channelled through routes affected during the activation of a dangerous group area, located in the common boundary with the Miami FIR, which remain activated in the major peak hour traffic during more than 80% a year.

2. Analysis

2.1 In the boundary of both FIRs several dangerous areas exist (KW174 B y C, KW465 A and B), where potentially hazardous activities for air navigation safety are frequently and for long periods of time performed.

2.2 Aircrafts operating between both FIRs are to be controlled by both Control Centres, channeling them in a same route, where aircrafts concur performing climb and/or descent maneuvers, increasing the workload and coordination for both Air Traffic Services (ATS) department staffs, which is a source of danger that impacts safety.

2.3 The practice of frequent activation of these hazardous areas entails that flexible use of airspace or appropriate use of Area Navigation (RNAV) routes are not possible, causing additional expenses to aircrafts operators, as well as a pollutant gas emission increase.

2.4 Despite the technologies implemented by both ATS departments regarding the Air traffic services inter-facility data communication (AIDC), two essential elements that impact aviation safety currently exist.

2.5 In the first place, even when radar separation between aircrafts is used for transfer between Miami and Havana, the control becomes more complex as a “seamless sky” does not exist in the Caribbean airspace, Havana CAA air traffic controllers accept traffic from Miami applying radar separation but it needs to be modified to non-radar separation with the rest of adjacent FIRs. In addition, the second element is that the activation of these hazardous areas overloads even more the controllers’ labor.

2.6 During the last five years, most of AIRPROX type ATS incidents occurred in Havana FIR have aircrafts operating in the same route in opposite ways involved, condition determined by the activation of hazardous zones in North of latitude 2400, which has made impossible the separation of these aircrafts through side flow that prevent the occurrence of this kind of incident. More than 70% of the aircrafts that fly daily Havana FIR belong to North American airlines.

2.7 It becomes necessary to emphasize that both Control Centres have achieved to establish a safety climate for all aircrafts, including those of transport and assurance that fly from and to Guantanamo Air Station, established through the Operational Agreement Letter and the Operational Agreement Annex subscribed between the Miami ARTCC and the Havana ACC. Agreements that guarantee the entrance and exit of medical evacuation missions from and to Guantanamo Air Station have also been achieved.

2.8 The Cuban Aviation Authority has conveyed, through the established channels, the concern and need of the flexible use of airspace and the search of joint solutions to reduce the hazardous area activities risks to the North of latitude 2400, without concrete results to the present.

2.9 Air traffic has experienced a sustainable growth between both FIRs and alternatives have been searched that mitigate risks in some measure, applying procedures from performance based navigation, but these alternate routes does not completely mitigate the aircraft confluence risk.

3. Implemented measures

3.1 The redesign of airspace is studied, which includes the low use routes removal, the creation of new routes, preferably RNAV, some of them compulsory, so as to achieve the creation of aircraft side flow, which will reduce the ATS staff workload and therefore the ATS occurrences, and the aircraft continuous climb and/or descent, reducing the fuel consumption and the pollutant gas emission.

3.2 Air Traffic Flow Management (ATFM) measures are being adopted and with ICAO's collaboration on this matter it is expected the establishment of collaboration among adjacent FIRs and in the regional level the establishment of cooperative flow management.

3.3 These measures will help to mitigate the ATS occurrence risks, as well as operator impact, whenever effective civil/military air traffic management collaboration exists.

4. Conclusions

4.1 Civil aircraft operation safety should not be compromised by the non-adoption of appropriate measures, with the participation of those who could facilitate a collaborative decision of those involved, with the view of guaranteeing aircraft navigation through saturated and continually affected by military restrictions airspaces.

4.2 Cuba has encouraged and created the conditions to guarantee safe aircraft operations in Havana FIR and is ready to continue the cooperation with adjacent FIRs through continuous exchange, also expecting reciprocal disposition for maintaining safety levels in the region.

5. Suggested Actions

The Meeting/Workshop is invited to:

- a) take note on the information included in this working paper;
- b) recommend ANI/WG to assess the need to consider the study of the airspace common boundary of Havana and Miami FIRs as part of the 50% of segregated airspace available for civil operations in December 2016; and
- c) recommend other appropriate actions.