



**Agenda Item 5:**

**Air Navigation Matters**

- 5.1 Review of the implementation of the RPBANIP, the new NAM/CAR ANI/WG, Results of the Twelfth Air Navigation Conference (AN-Conf/12), the Global Air Navigation Plan (GANP), implementation of Aviation System Block Upgrades (ASBUs) and impact on regional plans**

**FLEXIBLE USE OF AIRSPACE IN THE COMMON BOUNDARY OF HABANA AND MIAMI FIRS**

(Presented by Cuba)

<b>SUMMARY</b>	
<p>This paper addresses the need for adopting a balanced and collaborative approach concerning airspace management in the common boundary of Habana and Miami FIRs, in order to meet the needs of military activity and those of civil air transport, due to reiterated activations of warning areas caused by military operations in said zone, which considerably affect safety, and add non-productive miles to flights, representing an important consumption of fuel, in addition to the related emissions.</p>	
<b>References:</b>	
<ul style="list-style-type: none"> <li>• Global Air Traffic Management Operational Concept (Doc. 9854).</li> <li>• Civil/Military cooperation in air traffic management (Circ. 330).</li> <li>• Resolution A37-15.</li> <li>• Recommendations of the ANConf/2012.</li> </ul>	
<b>Strategic Objectives</b>	<p><i>This working paper is related to Strategic Objectives:</i></p> <ul style="list-style-type: none"> <li>A. Safety – Enhance global civil aviation safety</li> <li>B. Security – Enhance global civil aviation security</li> </ul>

**1. Introduction**

1.1 ICAO Assembly Resolution A37-15 on the consolidated declaration of permanent criteria and corresponding practices specifically related with air navigation, states in its Appendix O, Coordination and cooperation of civil and military air traffic, second item, that:

*“the regulations and procedures established by Contracting States to govern the operation of their state aircraft over the high seas shall ensure that these operations do not compromise the safety, regularity and efficiency of international civil air traffic and that to the extent practicable, these operations comply with the rules of the air in Annex 2;”*

1.2 Likewise, under paragraph 5 of said Appendix, it is stated that:

*“ICAO serves as an international forum that plays a role in facilitating improved civil/military cooperation, collaboration and the sharing of best practices, and to provide the necessary follow-up activities that build on the success of the Global Air Traffic Management Forum on Civil/Military Cooperation (2009) with the support of civil/military partners”*.

1.3 Reiterated activations of warning areas due to military operations in the common boundary of Habana and Miami FIRs considerably affect safety, and add non-productive miles to flights, representing an important fuel consumption, in addition to related emissions: This issue has been addressed during the last three years by Cuba’s ATS authority with its counterpart of the FAA Miami ARTCC.

## **2 Development**

2.1 Activation of zone KW465A located very near to route G/UG448 between Maraton and TADPO, prevents the creation of an traffic flow with radar lateral separation between aircraft heading South entering Habana airspace and those flying Northbound to Miami airspace. This situation makes that all aircraft be rerouted to intercept the airway, with the risk of loss of the radar separation, restricting departing aircraft climbs, as well as the descent of those arriving to land in Miami and Fort Lauderdale.

2.2 In 2012, due to a TCAS incident occurred in Habana FIR, the Cuban ATS authority informed the NACC Regional Office and ATS authorities of the Miami ARTCC on the need of initiating an exchange on the impact caused by the reiterated activation of warning areas North of parallel 2400, boundary between both flight information regions, with the subsequent deviation of traffic and its consequences on the performance, the orderly flow of operations and safety.

2.3 The **Appendix** to this working paper presents information and data showing the main affectation caused by the activation of warning areas KW465 and KW174, taking as a basis the year 2012.

## **3. Conclusions**

3.1 A real situation exists affecting air traffic control within Habana FIR, causing the need of establishing complementary coordination with other authorities, operations safety risks, and additional expenses for air operators due to fuel consumption and additional flight time.

3.2 Coordination and civil-military cooperation should be improved as a normal practice, in order to comply with the principles listed in the provision clauses of Appendix O to A37-15.

**4. Suggested Action**

4.1 The Meeting is invited to:

- a) note the contents of this paper;
- b) urge the authorities involved in warning areas activation to adopt a balanced and collaborative approach regarding airspace management in the common boundary of Habana and Miami FIRs; and
- c) urge ICAO Secretariat to incorporate in the tasks of the new ANI/WG, the analysis of issues regarding coordination and civil-military cooperation to achieve a balanced and collaborative approach concerning airspace management in the common boundary of Habana and Miami FIR, and of any other zone as required.

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**APPENDIX**  
**MAIN AFFECTATION BY ACTIVATION OF WARING AREAS W465 AND W174**

During year 2012 the warning areas North of parallel 2400 were activated 848 times, with an average of 8 activation hours, with the following behavior:

<b>W 465 A</b>	<b>W 465 B</b>	<b>W 174 ABGD</b>	<b>W 174 C</b>	<b>W 174 E</b>
170	170	251	252	5

The days of the week during which the areas were activated the most, in descendent order, were Tuesdays, Wednesdays, Thursdays and Monday, as shown in the following table:

<b>Day of the week</b>	<b>W-465</b>		<b>W-174</b>			<b>Total</b>
	<b>A</b>	<b>B</b>	<b>ABGD</b>	<b>C</b>	<b>E</b>	
Sunday	14	14	26	25	0	79
Monday	26	26	38	38	2	130
Tuesday	36	36	49	49	1	171
Wednesday	31	31	41	42	1	146
Thursday	27	27	39	39	0	132
Friday	22	22	34	35	1	114
Saturday	14	14	24	24	0	76
<b>Total</b>	170	170	251	252	5	<b>848</b>

The months with greater affectations by quantity of activation times were February, August, October, September, May, January and June, as per the following table:

<b>Month</b>	<b>W-465</b>		<b>W-174</b>			<b>Total</b>
	<b>A</b>	<b>B</b>	<b>ABGD</b>	<b>C</b>	<b>E</b>	
January	16	16	19	20	0	71
February	26	26	28	28	1	109
March	12	12	19	19	0	62
April	9	9	21	20	0	59
May	13	13	22	22	1	71
June	13	13	22	22	0	70
July	8	8	23	22	0	61
August	18	18	25	24	0	85
September	16	16	20	20	0	72
October	15	15	24	24	0	78
November	9	9	15	18	3	54
December	15	15	13	13	0	56
<b>Total</b>	170	170	251	252	5	<b>848</b>

Taking as a reference only 5 hours of activation of the areas between hours 1200 and 1730 UTC, the following affectation to operations in route UG/G448 in the critical months is shown:

<b>Months</b>	<b>Total operations in the month</b>	<b>Affected operations in the schedule</b>	<b>% of the total operations of the month</b>
February	5079	1563	30,8
August	4615	1505	32,6
October	4401	1425	32,4
September	3931	1318	33,5
May	4476	1145	25,6
January	5820	1181	20,3

Other interesting data:

- From the total affected airlines, 60% are North American companies.
- In year 2012 in segment TADPO – VARADERO, 3 non-guaranteed safety incidents occurred, in which 6 airlines were involved, 5 of which were North American.