



ICAO

International Civil Aviation Organization  
North American, Central American and Caribbean Office

WORKING PAPER

GTE/14 — WP/03  
13/11/14

**Fourteenth Scrutiny Working Group Meeting (GTE/14)**  
Mexico City, Mexico, 1 – 5 December 2014

**Agenda Item 3: Large Height Deviation (LHD) Analysis**  
**3.2 Identify trends**

**TREND IDENTIFICATION**

(Presented by CARSAMMA)

<b>EXECUTIVE SUMMARY</b>	
This working paper presents an LHD trend summary when the aircraft calls in a different point from the coordinated one and when the aircraft is still on climb or descent.	
<b>Action:</b>	Paragraph 3
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• GTE Methodology</li><li>• 2013-2014 Large Height Deviation (LHD) reports</li></ul>

**1. Introduction**

1.1 CAR/SAM Planning and Implementation Regional Group (GREPECAS) delegated to the CAR/SAM Monitoring Agency (CARSAMMA) the function of receiving, analysing and codifying Large Height Deviation (LHD) and presenting them in the GTE and teleconferences for their validation, as from them will be stemmed information for risk estimates, qualitative Safety management system/Safety Management System Methodology (SMS/SGSO) and quantitative method: Crew Resource Management (CRM).

1.2 This work objective is to bring more information to the experts so 2013 and 2014 first half LHD reports which reached CARSAMMA are analysed one more time, so similar failures do not repeat, principally in specific points, and that involved FIRs experts take the appropriate mitigation actions.

## 2. Context

2.1 Some 2013 and 2014 first half LHD reports (bold) had as final coordination failure an intermediate coordination level, i.e. transit was still on climb or descent.

2.1.1 Table 1 shows every LHD report framed in this kind of situation; transit is coordinated in a given level and calls during climb or descent.

# Report	Reporting FIR	FIR committing the failure	Position
24	<b>Bogotá</b>	<b>Guayaquil</b>	<b>ENSOL</b>
51	<b>Bogotá</b>	<b>Guayaquil</b>	<b>ENSOL</b>
144	San Juan	Santo Domingo	MELLA
165	San Juan	Santo Domingo	MELLA
171	Lima	<b>Guayaquil</b>	KORBO
206	<b>Bogotá</b>	<b>Guayaquil</b>	UGUPI
263	<b>Bogotá</b>	<b>Guayaquil</b>	<b>ENSOL</b>
274	<b>Bogotá</b>	<b>Guayaquil</b>	BOKAN
330	<b>Bogotá</b>	<b>Guayaquil</b>	<b>ENSOL</b>
423	Miami	Santo Domingo	BESAS
607	<b>Bogotá</b>	<b>Guayaquil</b>	<b>ENSOL</b>
669	<b>Bogotá</b>	<b>Guayaquil</b>	<b>ENSOL</b>
782	Central América	Mérida	PENSO
1042	<b>Bogotá</b>	<b>Guayaquil</b>	<b>ENSOL</b>
1452	<b>Guayaquil</b>	<b>Bogotá</b>	BOKAN
42	<b>Resistencia</b>	<b>Asunción</b>	<b>REPAM</b>
88	<b>Guayaquil</b>	<b>Bogotá</b>	<b>ENSOL</b>
264	Lima	<b>Guayaquil</b>	VAKUD
367	<b>Bogotá</b>	Panamá	DAKMO
401	<b>Bogotá</b>	Panamá	DAKMO
408	<b>Bogotá</b>	<b>Guayaquil</b>	<b>MOXAS</b>
461	<b>Bogotá</b>	<b>Guayaquil</b>	BOKAN
473	<b>Bogotá</b>	<b>Guayaquil</b>	<b>MOXAS</b>
511	Mérida	Central América	ERBOR
513	<b>Bogotá</b>	<b>Guayaquil</b>	BOKAN
661	Mérida	Central América	TAP
748	<b>Bogotá</b>	<b>Guayaquil</b>	BOKAN

Table 1: LHD reports whose transfers are made in one level and calls during climbing or descent

2.1.2 As it can be observed in Table 1, Bogota FIR is the one with more reports. The more reported FIR is Guayaquil and ENSOL and BOKAN are the more reported points in 2013, BOKAN and MOXAS in

2.2 Some LHD reports of 2013 and the first half of 2014 (bold) had as coordination failure a different point from the coordinated one, i.e. the aircraft changes of airway without coordination.

2.2.1 Table 2 shows every LHD report framed in this kind of situation, transit is coordinated in a certain point and calls in another one.

Report	Reporting FIR	FIR committing the failure	Coordinated position	Position called by the aircraft
225	Bogotá	Guayaquil	ENSOL	UGUPI
229	Bogotá	Guayaquil	MOXAS	UGUPI
394	Guayaquil	Bogotá	PULTU	BOKAN
409	Guayaquil	Central América	UGADI	OSELO
494	Curazao	Santo Domingo	VESKA	IRGUT
704	Antofagasta	Lima	DORKA	IREMI
830	Dakar	Piarco	IRELA	GOGSO
847	Bogotá	Guayaquil	ENSOL	UGUPI
868	Maiquetía	Piarco	ITEGO	ONGAL
886	Antofagasta	Lima	IREMI	ASEPU
899	Bogotá	Amazónica	ARUXA	LET
918	Lima	Antofagasta	DORKA	IREMI
1100	Antofagasta	Lima	ASEPU	IREMI
1174	Bogotá	Guayaquil	UGUPI	ENSOL
1196	Atlántico	Dakar	NANIK	TASIL
1258	Amazónica	Maiquetía	VAGAN	ISANI
1374	Kingston	Panamá	DAGUD	ARNAL
1446	Bogotá	Panamá	BUSMO	IVROS
119	Bogotá	Guayaquil	ENSOL	UGUPI
144	Bogotá	Guayaquil	VAMOS	MOXAS
148	Amazónica	Bogotá	BRACO	MTU
215	Panamá	Bogotá	TOKUT	BUXOS
254	Bogotá	Guayaquil	ANGEL	UGUPI
260	Bogotá	Guayaquil	MOXAS	VAMOS
267	Panamá	Bogotá	BUXOS	TOKUT
299	Bogotá	Guayaquil	MOXAS	VAMOS
312	Bogotá	Guayaquil	MOXAS	VAMOS
364	Bogotá	Guayaquil	PULTU	BOKAN
374	Bogotá	Guayaquil	MOXAS	VAMOS
416	Bogotá	Guayaquil	MOXAS	VAMOS
419	Bogotá	Guayaquil	ITATA	UGUPI
426	Central América	Mérida	PENSO	ANIKO
541	Guayaquil	Bogotá	UGUPI	ENSOL
547	Bogotá	Guayaquil	ENSOL	UGUPI
558	Mérida	Central América		SATOS
591	Guayaquil	Bogotá	UGUPI	ENSOL
756	Guayaquil	Bogotá	UGUPI	ANRAX
763	Mérida	Central América	CTM	SIGMA

Table 2: LHD reports whose transfers are made in one point and call in another point

2.2.2 As observed in Table 2, Bogota FIR is the one reporting the most. Guayaquil is the most reported FIR. Most reported points are ENSOL changed for UGUPI in 2013, MOXAS changed for VAMOS and once more ENSOL changed for UGUPI.

**3. Suggested Action**

3.1 The Meeting is invited to:

- a) Recognize the present Working Paper terms;
- b) States use the information as reference for LHD mitigation; and
- c) Present such decision to GTE members for their knowledge and approval.

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