



INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)

**REGIONAL AVIATION SAFETY GROUP – PAN AMERICA
(RASG-PA)**

**TWELFTH PAN AMERICA –
REGIONAL AVIATION SAFETY TEAM MEETING**

PA-RAST/12

SUMMARY OF DISCUSSIONS

MEXICO CITY, MEXICO, 21 TO 22 FEBRUARY 2013

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HISTORICAL

ii.1 Place and Date of the Meeting

The Twelfth Meeting of the Pan American - Regional Aviation Safety Team (PA-RAST/12) was held in Mexico City, Mexico, at the ICAO NACC Regional Office, from 21 to 22 February 2013.

ii.2 Opening Ceremony

Mr. Adolfo Zavala and Mr. Eduardo Chacin, Regional Officers, ATM/2 and Flight Safety, respectively from the ICAO NACC Regional Office greeted the participants and opened the meeting.

ii.3 Officers of the Meeting

Mr. Enrique Herrera, of the DGAC of Mexico and Mr. Gerardo Hueto, Boeing, acted as PA-RAST Co-Chairpersons representing States/Territories and International Organizations/Industry respectively. Mr. Eduardo Chacin, Regional Officer, Flight Safety, served as the PA-RAST Secretary, assisted by Mr. Adolfo Zavala, Regional Officer, Air Traffic Management, both from of the ICAO NACC Regional Office. Mr. Victor Hernandez, ATM/SAR Regional Officer and Mr. Julio Garriga, TCB Regional Officer, both from the ICAO NACC Regional Office, attended the Meeting.

ii.4 Working Language

The working language of the meeting was English.

ii.5 Agenda

Agenda Item 1: Opening of the Meeting

- 1.1 Introductions
- 1.2 Administrative Notes
- 1.3 Approval of the Agenda

Agenda Item 2: Elections

- 2.1 Co-Chairperson representing International Organizations/Industry
- 2.2 Vice-Chairperson representing States/Territories

Agenda Item 3: Information Analysis Team (IAT)

- 3.1 Outcome of IAT/01 Meeting
- 3.2 Outcome of IAT/02 Meeting

- Agenda Item 4: Runway Excursion (RE) Detailed Implementation Plan (DIPs)**
- 4.1 RE/08 - Guidance for Maintaining Runway in Accordance with ICAO Annex 14: ACI-LAC - Update
 - 4.2 RE/09 - Specific Training for Pilots and Air Traffic Controllers to Avoid Unstabilized Approaches: ALTA - Update
 - 4.3 RE/11 - Develop Guidance Material and Training Programmes to Create Action Plans for Runway Safety Teams: Mexico DGAC - Update
- Agenda Item 5: Controlled Flight into Terrain (CFIT) Detailed Implementation Plan (DIPs)**
- 5.1 CFIT/04 - CRM/Situational Awareness for Pilots and Air Traffic Controllers: IFALPA/IFATCA - Update
 - 5.2 Development of new DIP
- Agenda Item 6: Loss of Control-Inflight (LOC-I) Detailed Implementation Plan (DIPs)**
- 6.1 Development of new DIP
- Agenda Item 7: Large Height Deviation (LHD) issues in CAR/SAM Regions**
- Agenda Item 8: Development of RASG-PA Safety Targets**
- Agenda Item 9: PA-RAST/13 Meeting**
- 9.1 Logistics
 - 9.2 Agenda
- Agenda Item 10: Recommended Actions for the RASG-PA Executive Steering Committee (RASG-PA/ESC/16)**
- Agenda Item 11: Other business**

ii.6 Attendance

The Meeting was attended by 31 participants from States, International Organizations and members of the Pan America – Regional Aviation Safety Team (PA-RAST). The representative of Brazil presented his apologies for not attending due to personal reason.

LIST OF PARTICIPANTS

MEXICO

Enrique Herrera - DGAC
Susana González - ASA
Andrés Sacristán - SENEAM
Rodrigo Bruce Magallón - SENEAM
Luciano A. Pérez - AICM
Tonatiuh González- AICM
Joaquín E. Ramírez - IPN
Víctor Anguiano - COCTAM
Oscar E. Plata - COCTAM

ACI-LAC

Fabio Salvatierra De Luca

AEROMAR

Christian Cedillo

AIRBUS

Michael Preis
Rudy Canto

ALTA

Santiago Saltos

BOEING

Gerardo Hueto
Robert Noges

CANSO

Javier Vanegas

COCESNA/ACSA

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Ana Arenas

EMBRAER

Fabio Catani

IATA

Gabriel Acosta

IFALPA

Germán Díaz-Barriga
Salvador M. Lizana

INTERJET

Víctor Ayala

VOLARIS

Mauricio Moran
Jaime Osollo
Roberto Ponce

ICAO SECRETARIAT

Eduardo Chacin
Adolfo Zavala
Victor Hernandez
Julio Garriga

PA-RAST/12
List of Participants – Contact Information

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CONTACT INFORMATION

Name / Position Nombre / Puesto	Administration / Organization Administración / Organización	Telephone / E-mail Teléfono / Correo-e
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PA-RAST/12
List of Participants – Contact Information

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Name / Position Nombre / Puesto	Administration / Organization Administración / Organización	Telephone / E-mail Teléfono / Correo-e
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PA-RAST/12
List of Participants – Contact Information

iii – 4

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Agenda Item 1: Opening of the Meeting

1.1 Introduction

1.1.1 *See Historical section of this report.*

1.2 Administrative Notes

1.2.1 Mr. Adolfo Zavala, representative of the ICAO NACC Regional Office, served as a host of the PA-RAST Meeting and presented the schedule of activities to the participants.

1.3 Approval of the Agenda

1.3.1 Mr. Enrique Herrera, of the DGAC of Mexico and Mr. Gerardo Hueto, Boeing, PA-RAST Co-Chairpersons representing States/Territories and International Organizations/Industry respectively, presented the draft agenda and asked for approval by the Meeting. The agenda was approved and is included in the historical section of this report.

Agenda Item 2: Elections

2.1 Co-Chairperson representing International Organizations/Industry

2.1.1 The Secretary explained to the Meeting that there was a discrepancy in the PA-RAST Terms of Reference (TORs), regarding elections dates for the Co-Chairpersons representing States and International Organizations/Industry.

2.1.2 The Meeting discussed the discrepancy, which involved the actual dates to hold the first elections, and agreed that the TORs must be amended in order to clearly represent the exact election year for the PA-RAST Co-Chairpersons.

2.2 Vice-Chairperson representing States/Territories

2.2.1 This item was resolved with the above action to amend the PA-RAST TORs.

Agenda Item 3: Information Analysis Team (IAT)

3.1 Outcome of IAT/01 Meeting

3.1.1 The Meeting was presented with the Summary of Discussions of the IAT/01 Meeting held in the Airbus Training Center, Miami, United States, from 19 to 20 December 2012. See **Appendix A** to this part of the Report.

3.1.2 The Rapporteur of the IAT reminded the Meeting the IAT Recommended Actions for the Twelfth Pan America – Regional Aviation Safety Team (PA-RAST/12) Meeting as mentioned in the Summary of Discussions:

- After reviewing the ASIAS data, the IAT agreed that Controlled Flight Into Terrain (CFIT) occurrences appeared to be on the increase and recommended forwarding the information to PA-RAST

3.1.3 The Meeting acknowledged the information provided and determined that it be useful when discussing the agenda item corresponding to CFIT Detail Implementation Plan (DIP).

3.2 Outcome of IAT/02 Meeting

3.2.1 The Meeting was presented with the Summary of Discussions of the IAT/02 Meeting held in the ICAO NACC Regional Office, Mexico City, Mexico, on 20 February 2013. See **Appendix B** to this part of the Report.

3.2.2 The IAT Rapporteur presented to the Meeting the IAT Recommended Actions for the PA-RAST/12 Meeting as mentioned in the Summary of Discussions:

- Adopt the U.S. Commercial Aviation Safety Team (CAST) risk formula
- Use the U.S. Aviation Safety Information Analysis and Sharing (ASIAS) metrics for determine the Approach and Landing Accidents (ALA), Traffic Collision Avoidance System (TCAS) occurrences, Terrain Avoidance Warning System (TAWS) occurrences and Near Midair Collision (NMAC) incidents in the CAR/SAM Regions
- Note the areas of concern identified by the IAT from the ASIAS data base in CAR/SAM Regions
- Adopt and disseminate the definition of unstable approach used by CAST
- Consider Near Midair Collision (NMAC) incidents in the scope of activities of PA-RAST
- Note the changes introduced in the TORs of the IAT

3.2.3 The Meeting noted, discussed and accepted the information provided, which will be elevated to the ESC as recommendations for approval.

3.2.4 The Meeting considered that the information provided by the IAT was very valuable for developing DIPs, considering that the work programme of RASG-PA is data driven.



INTERNATIONAL CIVIL AVIATION ORGANIZATION
REGIONAL AVIATION SAFETY GROUP – PAN AMERICA
(RASG-PA)

FIRST ISSUE ANALYSIS TEAM MEETING
(IAT/1)

FINAL

SUMMARY OF DISCUSSIONS

MIAMI, FLORIDA, UNITED STATES, 19 TO 20 DECEMBER 2012



**REGIONAL AVIATION SAFETY GROUP – PAN AMERICA
(RASG-PA)**

**INFORMATION ANALYSIS TEAM MEETING
MIAMI, FLORIDA**

(19 to 20 December 2012)

December 2012 Summary of Discussion

ESC Members Present:

Ms. Loretta Martin, RASG-PA Secretary; Mr. Alex de Gunten, ALTA, (RASG-PA Co-Chair); Mr. João Luis Barbosa Carvalho, Brazil; Mr. Mike Preis, Airbus; Mr. Santiago Saltos, ALTA; Mr. Gerardo Hueto, Boeing; Mr. Victor Zamora, COCESNA; Mr. Roberto Sosa, COCESNA; Mr. Warren Randolph, FAA/CAST; Mr. Gabriel Acosta, IATA; Mr. German Diaz Barriga, IFALPA; Mr. Oscar Quesada, Deputy Director, ICAO SAM Office; Mr. Adolfo Zavala, ICAO NACC Regional Officer; Mr. Eduardo Chacin, ICAO NACC Regional Officer

Agenda Item 1: Opening of the Meeting

1.1 The IAT rapporteur, Mr. Gerardo Hueto welcomed all participants to the meeting and reminded the attendees of the importance of keeping the ASIAs data confidential and only for the use of advancing RASG-PA goals and objectives.

1.2 All IAT participants signed an IAT confidentiality agreement. The signed copies of the confidentiality agreements are in the possession of the RASG-PA Secretariat.

Agenda Item 2: Review of the Issue Analysis Team (IAT) Terms of Reference (TORs)

2.1 The Meeting reviewed the draft IAT TOR's and agreed to the final version as depicted in **Appendix 1.**

Agenda Item 3: IAT Process

3.1 The Meeting reviewed the IAT process and agreed to following recommendations:

- Focus on the top 3 areas of risk in the Pan America Region
- IAT Meetings would be held in conjunction with PA-RAST meetings
- Change the name to “Information Analysis Team”
- IAT will present findings to PA-RAST
- Purpose of the team would be to analyse appropriate data sources
- Due to the confidentiality of the data, the IAT will only provide edited information to RASG-PA membership

Agenda Item 4: Review of ASIAS Database

4.1 The Meeting reviewed ASIAS data on unstable approach trends, airport rankings and TAWS data

Agenda Item 5: Determine Case Studies

5.1 The IAT decided on using airport rankings for case studies.

Agenda Item 6: IAT Work Programme for the year 2013

6.1 The IAT work programme for 2013 will tentatively include three meetings in conjunction with the PA-RAST meetings.

6.2 The dates for the 2013 IAT meetings are as follows:

- February 20
- May 21
- September 24 (Changed from Rio de Janeiro, Brazil, to Lima)

Agenda Item 7: IAT/02 Meeting

7.1 The logistics for the IAT/02 Meeting, to be held in the ICAO Mexico City Regional Officer were discussed.

Agenda Item 8: IAT Recommended Actions for the Pan America – Regional Aviation Safety Team (PA-RAST)

8.1 After reviewing the ASIAS data, the IAT agreed that CFIT precursors appeared to be on the increase and recommended forwarding the information to PA-RAST.

Agenda Item 9: Other business

9.1 The meeting recorded the following tasks:

- Remove the gray bars from the ASIAS maps – Rapporteur
- Provide location of TCAS occurrences on ASIAS maps - Rapporteur
- Develop IAT presentation for Pan America Safety Summit – IAT
- Develop IAT presentation for Central American DGAC meeting – IAT

Appendix 1

Pan America – Information Analysis Team (PA-IAT)

Terms of Reference (TORs)

A) Purpose of the Pan America – Information Analysis Team:

- 1) The IAT will utilize appropriate available data sources to pursue data driven predictive safety management.
- 2) The IAT will provide identified safety issues to PA-RAST for action or follow-up. Any outputs from the IAT will be in a de-identified format.

B) Membership:

- 1) The IAT will consist of subject matter experts from RASG-PA member organizations.
- 2) At a minimum, members will be drawn from stakeholders representing ICAO Regional Offices, States, Industry, and pilot and air traffic control organizations.

C) Roles and Responsibilities:

- 1) Roles and responsibilities of the IAT include, but are not limited to:
 - a. Determine appropriate data to be used.
 - b. Develop, implement, and monitor metrics.
 - c. Support Industry safety information sharing forums.
 - d. Prepare status reports for stakeholders.
 - e. The IAT will be lead jointly by representatives from States, Industry, and International Organizations.

D) Data Protection:

- 1) All safety data utilized by the IAT or safety analysis and information developed by the IAT will be protected from public disclosure.
- 2) All data contributors will execute and be bound by the provisions of the Memorandum of Understanding between that data contributor and RASG-PA.



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**REGIONAL AVIATION SAFETY GROUP – PAN AMERICA
(RASG-PA)**

**SECOND INFORMATION ANALYSIS TEAM MEETING
(IAT/2)**

DRAFT

SUMMARY OF DISCUSSIONS

MEXICO CITY, MEXICO, 20 FEBRUARY 2013



**REGIONAL AVIATION SAFETY GROUP – PAN AMERICA
(RASG-PA)**

**SECOND INFORMATION ANALYSIS TEAM MEETING
IAT/02**

ICAO NACC Regional Office, MEXICO CITY, MEXICO

(20 February 2013)

February 2013 Summary of Discussion

Members Present:

Mr. Gerardo Hueto, Boeing, IAT Rapporteur; Mr. Mike Preis, Airbus; Mr. Santiago Saltos, ALTA;; Mr. Robert Noges, Boeing; Mr. Javier Vanegas, CANSO; Mr. Roberto Sosa, COCESNA/ACSA; Mr. Gabriel Acosta, IATA; Mr. Oscar Quesada, Deputy Director, ICAO SAM Regional Office (via gotomeeting); Mr. Adolfo Zavala, ICAO NACC Regional Officer; Mr. Eduardo Chacin, ICAO NACC Regional Officer; Mr. Julio Garriga, ICAO NACC Regional Officer, Mr. Victor Hernandez, ICAO NACC Regional Officer.

Agenda Item 1: Opening of the Meeting

1.1 The IAT rapporteur, Mr. Gerardo Hueto welcomed all participants to the meeting and for the benefit of new members, reminded the attendees of the importance of keeping the ASIAs data confidential and only for the use of advancing RASG-PA goals and objectives. Mr. Adolfo Zavala and Mr. Eduardo Chacin acted as the Secretaries of the Meeting.

1.2 All IAT participants who had not previously signed an IAT confidentiality agreement were required to do so and the copies were recorded by the RASG-PA Secretariat.

1.3 The Meeting discussed the need to have more state participation. The Secretariat informed the Meeting that Mr. Carlos Pellegrino, Brazil, sent his apologies for not being able to attend due to personal reasons.

1.4 The Meeting decided to include a review of the Terms of Reference (TOR) of the IAT under other business on the agenda item 7.

1.5 The Meeting agenda was reviewed and approved with the addition mentioned in 1.4.

Agenda Item 2: Development of the Process of Information

2.1 The Meeting discussed how the IAT would advance the analysis of information reviewed by the group. The IAT agreed that any findings from the analysis of information would be forwarded to PA-RAST for review and further implementation of projects or development of new Detailed Implementation Plans (DIPs).

2.2 The Meeting was provided with a presentation of the Commercial Aviation Safety Team (CAST) Risk Management Processes. The members agreed to adopt the CAST formula for risk assessment as an analysis tool that supports RASG-PA Safety Enhancement Initiative (SEI) selection and DIP development.

Agenda Item 3: ASIAS

3.1 The Meeting was informed that MITRE created a special section in the Aviation Safety Information Analysis and Sharing (ASIAS) system website to be used by RASG-PA (IAT) for safety data mining.

3.2 The Meeting review the ASIAS database in the following areas:

- ALA
- TCAS
- TAWS

3.3 The Meeting was informed that ASIAS does not have metrics regarding LOC-I.

3.4 The Meeting agreed to look for the Mid-air occurrences and to incorporate them in the scope of RASG-PA activities in addition with the RE, CFIT and LOC-I.

3.4 The Meeting acknowledged that even though the sample of the flight operations is significant, it only reflects American carriers operations in the CAR and SAM Regions. Metrics in FIRs and/or airports not operated by American carriers would not be available

3.5 IATA showed a sample of its data base, which is uploaded with FOQA data from the Latin American and Caribbean regional carriers, showing in more detail CAR/SAM issues.

3.6 IATA mentioned the possibility of signing an MOU with RASG-PA in the future to share information from its safety data base. The Meeting invited IATA and ALTA to provide flight trends until such time that an MOU or other agreement with RASG-PA could be completed.

3.6 The Meeting agreed that the IAT will need to use all sources of safety information for data mining in order to provide accurate information to the PA-RAST regarding safety issues for developing SEI, and also to measure the effectiveness of the DIPs implementation. It will include the RASG-PA Annual Safety Report, PASO trends, etc.

3.7 The Meeting agreed to adopt and disseminate the definition of unstable approach used by CAST. **Appendix 1.**

3.8 Boeing representative will request that MITRE, for standardization purposes, prepare for RASG-PA the same workbook as CAST.

3.9 The Meeting agreed to provide a briefing to the PA-RAST based on the areas of concern identified in the ASIAS data base.

Agenda Item 4: Briefing for DGAC/CAP/97 Meeting

4.1 The IAT discussed and agreed to the topics that could be included for the presentation at the DGAC/CAP/97 Meeting. However, due to the proximity of the event, it was decided that this briefing would be delivered verbally when the Working Paper on RASG-PA was presented to the Meeting.

Agenda Item 5: IAT Recommended Actions for the Pan America – Regional Aviation Safety Team (PA-RAST/12)

5.1 The Meeting made the following recommendations to be presented during the PA-RAST/12 Meeting:

- Adopt the CAST risk formula.
- Use ASIAS metrics for ALA/TCAS/TAWS and Mid-Air events

Note the areas of concern identified by the IAT from the ASIAS data base in CAR/SAM Regions

Adopt and disseminate the definition of unstable approach used by CAST.

Consider Mid-Air events in the scope of activities of PA-RAST.

Note the changes introduced in the TORs

Agenda Item 6: IAT/3 Meeting

6.1 The IAT discussed and agreed to the following agenda and logistics for the IAT/03 Meeting:

- Location: IAT/3 Meeting will be held at the IATA facilities in Miami, FL, United States
- Date: 21 May 2013
- Followed by the PA-RAST/13 Meeting on 22-23 May 2013

Agenda Item 7: Other business

7.1 The Meeting discussed the membership of the IAT and determined that in the best interest of the group, a change was required in the IAT Terms of Reference, under section B (Membership) in order to not limit participation and ensure the continuity of the team. **APPENDIX 2**

APPENDIX 1

ASIAS Unstable Approach: Standard Definition

Unstable Approach: 1000 to 500 ft HAT and 500 to 50 ft HAT		
Category	Criteria	Threshold
ILS	1. Above Glideslope	> 1 dot high for 5 sec
	2. Below Glideslope	> 1 dot low for 5 sec
	3. Localizer Deviation	> 1 dot left/right for 5 sec
Airspeed	4. High Speed	> (Vref + 20 kts) for 3 sec
	5. Low Speed	< Vref for 3 sec
ROD	6. High Descent Rate	> 1000 ft/min for 3 sec
Thrust	7. Low Thrust Descent	N1 < 35% for 5 sec; N1 < 5 th Percentile by Fleet Type
Configuration	8. Late Flap Extension	Any flap movement > 2 degrees
	9. Late Gear Extension	Any gear movement
	10. Speed Brakes Deployed	Any deployment of speed brakes
Attitude	11. Unstable Pitch	Abs (Pitch) > 15 degrees for 3 sec; StDev (Pitch Rate) > 1.25
	12. Unstable Roll	Roll > 40 degrees for 3 sec; StDev (Roll Rate) > 3.5
	13. Unstable Yaw	StDev (Yaw Rate) > 1.25
GPWS	14. GPWS Alert	Any GPWS Alert

ASIAS Unstable Approach: Egregious Definition

Unstable Approach: Egregious		
Category	Criteria	Threshold
ILS	1. Above Glideslope	> 2 dot high for 5 sec, 500 to 200 ft HAT
	2. Below Glideslope	> 2 dot low for 5 sec, 500 to 200 ft HAT
	3. Localizer Deviation	> 2 dot left/right for 5 sec, 500 to 200 ft HAT
Airspeed	4. High Speed	> (Vref + 35 kts) for 3 sec, 500 to 50 ft HAT
	5. Low Speed	> (Vref - 35 kts) for 3 sec, 500 to 50 ft HAT
ROD	6. High Descent Rate	> 1500 ft/min for 3 sec, 500 to 50 ft HAT
Thrust	7. Low Thrust Descent	Below Approach Power Limit (Fleet Constant) for 5 sec, 500 to 50 ft HAT
Configuration	8. Late Flap Extension	Any flap movement, below 300 ft HAT
	9. Late Gear Extension	Any gear movement, below 1000 ft HAT
GPWS	10. GPWS Alert	Any GPWS Alert, below 1000 ft HAT

Appendix 2

Pan America – Information Analysis Team (PA-IAT)

Terms of Reference (TORs)

A) Purpose of the Pan America – Information Analysis Team:

- 1) The IAT will utilize appropriate available data sources to pursue data driven predictive safety management.
- 2) The IAT will provide identified safety issues to PA-RAST for action or follow-up. Any outputs from the IAT will be in a de-identified format.

B) Membership:

- 1) The IAT will may consist of subject matter experts from RASG-PA member organizations.
- 2) At a minimum, Members will be drawn from stakeholders representing ICAO Regional Offices, States, Industry, and pilot and air traffic control organizations.

C) Roles and Responsibilities:

- 1) Roles and responsibilities of the IAT include, but are not limited to:
 - a. Determine appropriate data to be used.
 - b. Develop, implement, and monitor metrics.
 - c. Support Industry safety information sharing forums.
 - d. Prepare status reports for stakeholders.
 - e. The IAT will be lead jointly by representatives from States, Industry, and International Organizations.

D) Data Protection:

- 1) All safety data utilized by the IAT or safety analysis and information developed by the IAT will be protected from public disclosure.
- 2) All data contributors will execute and be bound by the provisions of the Memorandum of Understanding between that data contributor and RASG-PA.

Agenda Item 4: Runway Excursion (RE) Detailed Implementation Plan (DIPs)

4.1 RE/08 - Guidance for Maintaining Runway in Accordance with ICAO Annex 14: ACI-LAC – Update

4.1.1 The Meeting was informed by the Secretary that the “Guidance for Maintaining Runways in Accordance with ICAO Annex 14,” a DIP output related to runway maintenance guidance for airports in the Pan American Region prepared by ACI-LAC, was reviewed by ICAO Aerodromes and Ground Aids (AGA) experts from the ICAO NACC and SAM Offices, and HQ.

4.1.2 The recommendations from the experts was to use the guidance material already developed by ICAO in this regard considering the difficulty in keeping the ACI-LAC Guidance for Maintaining Runways updated.

4.1.3 The ACI-LAC representative delivered a presentation to clarify the output of the DIP. It was clarified that the purpose of the document was to serve as a simple guide and/or best practices for runway maintenance personnel, not to substitute any ICAO documentation associated with the subject.

4.1.4 The Meeting acknowledged the excellent work done by ACI-LAC and their completion of the assigned task.

4.1.4 The Secretariat reminded to the Meeting that the former Flight Safety Training Team (FSST/02) Meeting, currently the Aviation Safety Training Team (ASTT), developed a programme for a three days’ workshop about AGA Deficiencies in the Pan American Region, and suggested that this Guidance material would be used in the workshop as support documentation. See **Appendix** to this part of the Report.

4.1.5 The Meeting concluded that a teleconference will be coordinated by the Secretariat that includes ICAO AGA Officers from NACC and SAM Regional Offices, and ACI-LAC to review this issue, reach an agreement on how to proceed with the RE/08 DIP, and inform the ESC accordingly.

4.2 RE/09 - Specific Training for Pilots and Air Traffic Controllers to Avoid Unstabilized Approaches: ALTA – Update

4.2.1 The ALTA representative informed the Meeting on the progress of a video to be used as self-training material. ALTA expects to have the draft ready by March 2013, and they are coordinating with Airbus and Boeing reference the possibility of using their facilities and simulator to film part of the video.

4.2.2 The ALTA representative mentioned that the plan is to develop a single video that covers RE, CFIT and LOC-I with the participation of ALTA, IFALPA and IFATCA.

4.2.3 ALTA informed the Meeting that the aim of the video is to raise pilot and air traffic controller awareness by using fictitious conditions in real scenarios with approximately 15 minutes in each episode as follows:

- SPIM (Lima International Airport): CFIT avoided, B-767
- SKBO (Bogota International Airport): LOC-I avoided, A-330
- MMMX (Mexico International Airport): RE avoided, ERJ-190

4.2.4 The Meeting was informed that funding to develop the video is needed.

4.2.5 The Rapporteur reminded the meeting that Boeing provided funds to RASG-PA that could be used for this initiative.

4.2.5 The Meeting acknowledged and supported the development of the video, therefore, agreed to elevate the funding issue to the ESC for consideration.

4.3 RE/11 - Develop Guidance Material and Training Programmes to Create Action Plans for Runway Safety Teams: Mexico DGAC – Update

4.3.1 The DGAC of Mexico representative informed the Meeting about the progress of the Runway Safety Team (RST) Implementation Toolkit. The Toolkit will include the electronic checklist. The draft Toolkit will be circulated for comments.

4.3.2 The Secretary informed the Meeting on the progress of the RST implementation in Mexico International Airport (MMMMX) as a pilot programme of RASG-PA.

4.3.3 The Secretary invited the Meeting to attend and promoted the ICAO/IFALPA Regional Runway Seminar to be held in St. John's, Antigua, from 27 to 29 May 2013.

INTERNATIONAL CIVIL AVIATION ORGANIZATION

**Regional Aviation Safety
Group - Pan American**

RASG-PA

TC_O
8/31/2010





RAST-PA/RE/10 Safety Enhancement Initiative

WORKSHOP ABOUT AGA DEFICIENCIES IN THE PAN AMERICAN REGION

Objective: to improve safety by reducing AGA deficiencies in the Pan American Region. This workshop is aligned with Safety Enhancement Initiative RAST-PA/RE/10: aerodrome personnel receive initial and recurrent training on runway maintenance and operations in order to avoid runway excursions.

Audience: aerodrome personnel, Runway Safety Action Team (RSAT) members, safety managers, etc.

Programme:

Day 1

Module 01: Awareness on the subject deficiencies

- Responsibilities of ICAO and States, articles 37 and 38 of the Chicago Convention
- The relevance of the SMS in the Certification Aerodrome process
- Impact of AGA deficiencies in airport operations
- Introduction to flight safety
- The SMS under the SSP

Module 02: Preventive vs. Corrective Actions

- Types of maintenance
- Maintenance Management
- Human resource training (certification)
- Concept of "cost-consequence"

Day 2

Module 03: Implementing a preventive maintenance system

- ICAO Documentation



- Preparation of manuals, checklists and allocation of responsibilities
- Definition of "goals", the concept of "baseline" indicators and metrics
- Mitigation of environmental impacts and industrial safety

Module 04: Classification of failures in the infrastructure that generate deficiencies

- Aeronautical pavements
- Electro-mechanical systems and radio aids
- Visual aids
- Green areas and the wildlife hazards (birds)
- Perimeter fence and internal roads

Day 3

Module 05: Limiting surface obstacles and strips

- Determination of the boundary of obstacles
- Determination of RESA and stretches from the airport by category
- Assessment of obstacles and land requirements to meet ICAO standards

Module 06: Conclusions and reflections

- To be developed by participants

-oOo-

Agenda Item 5: Controlled Flight into Terrain (CFIT) Detailed Implementation Plan (DIPs)

**5.1 CFIT/04 - CRM/Situational Awareness for Pilots and Air Traffic
 Controllers: IFALPA/IFATCA – Update**

5.1.1 The Meeting was informed by IFALPA that the initiative to develop a video was not feasible due to lack of funding and resources for doing it appropriately.

5.1.2 The Meeting considered that there is enough material available to the aviation community in this regard, so the DIP may be considered as completed.

5.2 Development of new DIP

5.1 In regard to the development of a new CFIT DIPs, ALTA, IATA and IFALPA representatives offered to work on developing a new DIPs based on the original CFIT safety enhancement initiatives developed during the first PA-RAST/01 meeting. IATA will work on the CFIT/01 initiative and IFALPA will look at developing a DIP on CFIT/03 initiative. The initiatives will be presented during the PA-RAST/13 Meeting.

Agenda Item 6: Loss of Control-Inflight (LOC-I) Detailed Implementation Plan (DIPs)

6.1 Development of new DIP

6.1.1 The Meeting agreed to delay the development of any DIP related to LOC-I until May 2013, due to ICAO working with stakeholders (ICATEE, etc.) in the development of a comprehensive Manual of Upset Prevention and Recovery Training with sections pertaining to pilots, instructors, training providers and regulators. It will be referred to in ICAO Annex 1 and Annex 6. Specific text will also be added to ICAO Doc. 9868 PANS-TRG. An addendum to ICAO Doc. 9625 Manual of Criteria for the Qualification and Testing of Flight Simulation Training Devices (FTSD) will include FSTD recommendations mentioned above.

Agenda Item 7: Large Height Deviation (LHD) issues in CAR/SAM Regions

7.1 The Secretary informed the Meeting that this item was pending from PA-RAST/11.

7.2 The Secretary presented to the Meeting the LHD issues in the CAR/SAM from the Report of the Twelfth GREPECAS Scrutiny Working Group Meeting (GTE/12) held in Mexico City, Mexico, in 10-14 September 2012.

7.3 The Secretary informed the Meeting that even though the GTE reports to GREPECAS, the RASG-PA as a focal point for regional safety should be aware of the LHDs issues in the region.

7.4 The Secretariat presented to the Meeting the geographical location of the hot spots of LHDs as determined by CARSAMMA.

7.5 The Meeting discussed the causes of the LHDs, and agreed that there are infrastructure issues and operational issues according with the classification of the events, however it is clear that this is a GREPECAS process and the ICAO Secretariat should determine if it is appropriate for RASG-PA to get involved.

Agenda Item 8: Development of RASG-PA Safety Targets

8.1 The Meeting discussed the need for developing safety targets, with the purpose of monitoring and achieving the continuous improvement of safety in the Pan America Region.

8.2 The Meeting agreed that it will be beneficial considering the maturity of the Group.

8.3 The Meeting was aware that the adoption of a common and universal methodology would facilitate the setting and measurement of the safety targets in a simple way, allowing benchmarking with other groups and regions.

8.4 The Boeing representative delivered a CAST confidential presentation regarding their development of goals and metrics methodology, for consideration of the Meeting.

8.5 The Meeting agreed to adopt the CAST methodology for establishing the RASG-PA safety targets.

Agenda Item 9: PA-RAST/13 Meeting

9.1 Logistics

9.1.1 The PA-RAST/13 Meeting will be hosted by IATA in their facilities in Miami, Florida, United States, from 22 to 23 May 2013.

9.2 Agenda

9.2.1 The Meeting was informed by the Secretary that the draft agenda will be coordinated with the PA-RAST Co-chairpersons and circulated by the RASG-PA Secretariat as part of the invitation letter to the PA-RAST/13 Meeting.

9.2.2 The Secretary encouraged the PA-RAST members to review the draft agenda upon its circulation and to propose any changes or provide inputs as required in a timely manner.

Agenda Item 10: Recommended Actions for the RASG-PA Executive Steering Committee 16 (RASG-PA/ESC/16)

10.1 The PA-RAST/12 Meeting invites the RASG-PA/ESC/16 to note the progress of PA-RAST activities as follows:

- a) Regarding elections, the Handbook must be amended in order to clearly present the starting dates for election of PA-RAST Co-Chairpersons.
- b) Note the recommendations from IAT/01 to PA-RAST:
 - ASIAS data showed that CFIT precursors (TAWS Alerts) appeared to be on the increase in the CAR/SAM Regions
- c) Note the proposals made during the IAT/02 Meeting:
 - Utilize the CAST risk formula
 - Use the ASIAS metrics for to monitor the ALA, TCAS occurrences, TAWS occurrences and NMAC incidents in the CAR/SAM Regions
 - Note the areas of concern identified from the ASIAS data base in CAR/SAM Regions
 - Utilize and disseminate the definition of unstable approach in Appendix 1 of agenda item 3
 - Consider Near Midair Collision (NMAC) incidents in the scope of activities of PA-RAST
 - Note the changes introduced in the TORs of the IAT
- d) RE/08: coordination between ICAO AGA Officers from NACC and SAM Regional Offices, and ACI-LAC to reach an agreement on how to proceed with DIP.
- e) RE/09: promote the development and funding of a runway excursion video supported by ALTA.
- f) RE/11: the Runway Safety Team (RST) Implementation Toolkit will be circulated for comments.
- g) Implementation of the RST in Mexico International Airport (MMMX) as a pilot programme of RASG-PA is on-going.
- h) CFIT/04: completed
- i) New DIPs for CFIT: ALTA, IATA and IFALPA will work on this initiative and will review CAST safety enhancement initiatives that are relevant and present it to the PA-RAST/13 for approval
- j) LOC-I new DIP: on hold until ICAO presents the results of the initiative with ICATEE, and new CAST SEs are available.

- k) LHD: ICAO Secretariat will coordinate if it is appropriate for RASG-PA to get involved in this GREPECAS process.
- l) Utilize the CAST methodology for establishing the RASG-PA safety targets.
- m) PA-RAST/13 and IAT/03 Meeting will be hosted by IATA in their facilities in Miami, United States, from 21 to 23 May 2013.
- n) Encourage the participation of RASG-PA members of the NAM/CAR region to attend the next ICAO/IFALPA Regional Runway Safety Seminar (RRSS) in St. John's, Antigua, 27-29 May 2013.
- o) Note the summary regarding the Detailed Implementation Plans (DIPs) (See **Appendix** to this part of the Report):
 - (i) RASG-PA identified 30 Safety Enhancement Initiatives (SEI) in relation to the top 3 aviation safety risk areas in the Pan American Region (10 for each risk area).
 - (ii) The progress of the associated DIPs are:
 - 9 DIPs developed:
 - a. 3 in-progress
 - b. 6 completed
 - (iii) The progress of the associated Outputs are:
 - 25 Outputs developed:
 - a. 5 in-progress
 - b. 20 completed

	A	B	C	D	PA-RAST/12	F	G	H			
1					APPENDIX TO THE REPORT ON AGENDA ITEM 10 DETAILED IMPLEMENTATION PLANS (DIPs) by PA-RAST/11						
2	#	DIP	Description	Champion	Output	Deadline	Status	Comments			
3	1	RE/04	Promote pilot adherence to Standard Operating Procedures (SOPs) for approach procedures including go-around decision making process	ALTA	1) Distribution	18/01/11	Completed				
4					2) Training		Completed				
5	2	RE/09	Specific Training for pilots and air traffic controllers to avoid unstabilized approaches	ALTA	1) ALTA will conduct a survey within its operators regarding the actions taken to mitigate unstable approaches.	20/02/11	Completed				
6											
7								2) Develop a strategy to deliver safety seminars for pilots and controllers in Pan America that targets recognition and avoidance of unstable approaches.	31/12/12	In process	ALTA, IFALPA, IFATCA requesting funding for developing the video.
8											
9	3	CFIT/02	Specific ALAR/CFIT Training for Pilots	IATA	1) CAA conducts a review of all operators to ascertain which operators have CFIT prevention training and procedures in their approval training	20/02/11	Completed				
10								2) If an operator does not have a CFIT training, it will be encourage to incorporate CFIT training into the airline training program.	20/12/11	Completed	
11	4	CFIT/04	CRM/Situational Awareness for pilots and air traffic controllers	IFALPA & IFATCA	1) Incorporate and/or update CRM/situational awareness training programs for all flight crew members of air transport operators emphasizing aircraft position with relation to terrain and reviewing past	20/02/12	Completed				
12								2) Incorporate CRM/situational awareness training programs for all air traffic controllers and air navigation service providers (ANSP) emphasizing aircraft position with relation to minimum allowable	20/08/12	Completed	
13											
14											
15	5	LOC-I/06	LOC Training – Human factors and automation	PA-RAST	1) Review and evaluate the advisory circular created by the ICAO COSCAP's in Asia	20/02/11	Completed				
16								2) ICAO will distribute a copy of the developed generic advisory circular to each State in the region.	20/03/11	Completed	
17								3) Each State in the region wil use the generic advisory circular as a template to prepare a State Advisory Circular on mode awareness and energy state management aspects of flight deck automation.	20/09/11	Completed	
18								4) Mode awareness and energy state management aspects of flight deck automation guidance is provided by operators to all their pilots.	20/09/12	Completed	
19											
20											
21	6	LOC-I/07	LOC Training – Advanced maneuvers	ALTA	1) Listing of training materials available from regulators, industry, operators, academia and other resources.	18/01/11	Completed				
22								2) Advanced Maneuvers Training provided to all operators.	18/04/11	Completed	
24								3) Advanced Maneuvers Training provided by all operators. The expectation is that this training will be accomplish during initial training and as part of the recurrent training program via ground and simulator instruction within the certified flight envelope, with emphasis on recognition, prevention and recovery technique.	18/08/13	Superseded	
25											
26	7	LOC-I/9	Loc Training - Pilot monitoring policies and procedure for the operator and training program for crews	IFALPA	1) Listing of training materials available from industry, operators and other resources.	20/02/11	Completed				
27								2) Raise awareness of availability and need of Pilot Monitoring Training.	20/03/11	Completed	
28								3) Pilot Monitoring Training material provided to all operators.	20/03/11	Completed	
29								4) Pilot Monitoring Training provided by operators to all their pilots.	20/09/12	Completed	
30											
32	8	RE/8	Guidance in maintaining runway in accordance with Annex 14	ACI-LAC	1) Create a guide that collects best practices for runway maintenance	18/04/12	Completed				
33								2) Promote and encourage the use of the guide		In process	Coordination between ACI-LAC and ICAO is on going regarding the document.
34								3) Airports implement their maintenance plans according to the runway maintenance guide.		In process	

	A	B	C	D	E	F	G	H
35	9	RE/11	Develop guidance material and training programs to create action plans for runway safety teams	DGAC Mexico	1) Gather and publish in the RASG-PA website available material that may be used in to mitigate hazards related to runway safety.		Completed	
36					2) Electronic checklist development.		In process	Mexico DGAC will circulate the draft Toolkit for comments
38					3) Develop a roll out plan.	25/08/12	In process	Updated: 6 December 2012. Mexico DGAC considered that the Output 4 must be coordinated with PA-RAST due to the need of resurces for delivering the workshops.
39								

Agenda Item 11: Other Business

11.1 The Meeting did not consider any other business.