



INTERNATIONAL CIVIL AVIATION ORGANIZATION

REPORT

**SECOND MEETING OF THE ASIA PACIFIC REGIONAL AVIATION SAFETY TEAM
(APRAST/2)**

BANGKOK, THAILAND
21 – 24 AUGUST 2012

The views expressed in this Report should be taken as those
of the Meeting and not the Organization.

Approved by the Meeting
and published by the ICAO Asia and Pacific Office, Bangkok

Table of Contents

1.	Meeting and Registration	1
2.	Opening Session	1
3.	Introduction of Participants and Meeting Arrangements	1
4.	Agenda Item 1: Adoption of Agenda and Election of Co-Chair (States/Administrations)	2
5.	Agenda Item 2: Review APRAST/1 Conclusions, the work of its subsidiary bodies and related safety initiatives.	3
	— AP-SRP AD-HOC WORKING GROUP REPORT	8
	— REPORT AND REVIEW THE STATUS OF SAFETY ENHANCEMENT INITIATIVES (SEIs) ON CFIT, RUNWAY SAFETY AND LOC	8
	— REPORT AND REVIEW THE ICAO RUNWAY SAFETY SEMINAR OUTCOMES	8
6.	Agenda Item 3: Foreign Air Operator Surveillance Database	9
7.	State / Industry Presentations	9
8.	Breakout Session	10
	— CFIT	10
	— RUNWAY SAFETY	13
	— LOSS OF CONTROL	17
9.	Agenda Item 5: Date and Venue of next meeting	18
10.	Agenda Item 6: Any other business	18
11.	Agenda Item 4: Adoption of Conclusions and Recommendations	19

APPENDICES

- Appendix A - Summary of APRAST Conclusions
- Appendix B - Registry of Emerging Issues
- Appendix C - CFIT Sub-group Report
- Appendix D - Draft SEI / DIP status monitoring document (D-1: CFIT, D-2: LOC,
D-3: Runway Safety)
- Appendix E - Runway Safety Sub-group Report
- Appendix F - LOC Sub-group Report

ATTACHMENT

- Attachment A List of Participants

**Second Meeting of the Asia Pacific Regional Aviation Safety Team
(APRAST/2)**

21 – 24 August 2012, Bangkok Thailand

REPORT

1. Meeting and Registration

1.1 The Second Meeting of the Asia Pacific Regional Aviation Safety Team (APRAST/2) was held at the ICAO Asia and Pacific Office, Bangkok, Thailand, from 21 – 24 August 2012.

1.2 The APRAST/2 Meeting was attended by 95 participants from 21 States/Administrations and 8 International Organizations and Industry Partners i.e. Australia, Bangladesh, Bhutan, Hong Kong China, Macao China, India, Indonesia, Japan, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Papua New Guinea, Philippines, Republic of Korea, Singapore, Thailand, United States of America, Association of Asia Pacific Airlines (AAPA), Airports Council International (ACI), Civil Air Navigation Services Organization (CANSO), International Air Transport Association (IATA), International Federation of Air Line Pilots' Associations (IFALPA), Airbus, Boeing, CAE. The list of participants is at **Attachment A**.

2. Opening Session

2.1 Subsequent to the introductory remarks, Mr. John McCormick, Director of Aviation Safety, Civil Aviation Safety Authority of Australia and Chairperson of RASG-APAC made the welcome address.

2.1.1 The Chairperson RASG-APAC stressed that the success of APRAST activities are dependent on the level of participation by the States and industry partners. To improve channels of communication between the States / industry partners / Secretariat, the Chairperson proposed for all RASG-APAC / APRAST members to nominate a point of contact for RASG-APAC / APRAST activities.

2.1.2 Mr. Anthony Houston, Assistant Director Safety, International Air Transport Association and Co-Chair APRAST made opening remarks. The Co-Chair provided a brief out-line of the results expected of APRAST/2.

3. Introduction of Participants and Meeting Arrangements

3.1 The Co-Chair requested the delegates to introduce themselves. The Secretariat announced the meeting arrangements. The meeting was chaired by Chairperson RASG-APAC, Mr. John McCormick and Co-Chair APRAST, Mr. Anthony Houston. Mr. Amal Hewawasam, ICAO Regional Officer Flight Safety acted as Secretary to the meeting.

4. Agenda Item 1: Adoption of Agenda and Election of Co-Chair (States/Administrations) (WP/1)

4.1 Adoption of the Provisional Agenda (WP/1)

4.1.1 The meeting adopted the following agenda.

Agenda Item 1: Adoption of Agenda and Election of Co-Chair (States/Administrations)

Agenda Item 2: Review APRAST/1 Conclusions, the work of its subsidiary bodies and related safety initiatives.

2.1 APRAST/1 Progress report

2.2 APRAST-AIG Ad-hoc Working Group Report

2.3 AP-SRP Ad-hoc Working Group Report

2.4 Report and Review:

- i) the status of SEIs and DIPs on Runway Safety, LOC and CFIT to identify priorities and establish implementation dates
- ii) the ICAO Runway Safety Seminar outcomes

Agenda Item 3: Foreign Air Operator Surveillance Database

Agenda Item 4: Adoption of Conclusions and Recommendations

Agenda Item 5: Date and Venue of next meeting

Agenda Item 6: Any Other Business

4.2 Election of APRAST Co-Chair – APAC Member Contracting States (WP/2)

4.2.1 APRAST/2-WP/2 was presented by the secretariat. This working paper invites the Asia Pacific Regional Aviation Safety Team (APRAST) members to elect a Co-Chair from the States / Administrations as indicated in the TORs for the APRAST.

4.2.2 ICAO Regional Director (ICAORD), Mr. Mokhtar A. Awan made an intervention to apprise the meeting that the State that nominated the Director General Civil Aviation for the post of Co-chair APRAST had informed the Secretariat two days before the APRAST/2 meeting that the State's nominee will not be available at APRAST/2 due to the ongoing parliamentary sessions in the State. The ICAO RD informed the meeting that due to the last minute regrets offered by the State concerned that it was too late to proceed with alternate arrangements to obtain nominations from States. The ICAO RD also informed that the State concerned had confirmed to the Secretariat of their participation and support to APRAST activities in the future.

5. Agenda Item 2: Review APRAST/1 Conclusions, the work of its subsidiary bodies and related safety initiatives.

APRAST/1 PROGRESS REPORT

5.1 Report on the Asia Pacific Regional Aviation Safety Team (APRAST) (WP/3)

5.1.1 APRAST/2-WP/3 was presented by Co-Chair. The Meeting discussed initiatives to improve the overall level of aviation safety among APAC States. The Co-chair provided an overview of the progress made in APRAST /1 meeting which was held on 20-24 February 2012.

5.1.2 APRAST/1 meeting generated 25 conclusions.

(Note: The summary of all APRAST/1 and APRAST/2 conclusions can be found in **Appendix A** to this report)

5.1.3 The Co-Chair presented a review of the conclusions and status of ongoing actions resulting from the APRAST/1 meeting. The meeting was invited to note the status of the APRAST/1 conclusions as listed below.

Conclusion 1/1 (*Nominating members for SRP AWG*)
Status: Closed.

Conclusion 1/2 (*APRAST and sub-groups to develop RASG-APAC work programme using a performance based approach*)
Status: on-going.

Conclusion 1/3 (*Provisioning of safety data by CAST*)
Status: Closed subject to Conclusion APRAST 2/1.

Conclusion APRAST 2/1

that Secretariat to follow-up with CAST to obtain the predictive safety data for APRAST and its sub-groups.

Conclusion 1/4 (*State's comments on CFIT SEIs developed during APRAST/1*)
Status: Closed.

Conclusion 1/5 (*Development of CFIT priority DIPs*)
Status: Closed.

Conclusion 1/6 (*Development of CFIT non-priority DIPs*)
Status: On-going. The CFIT Facilitator to monitor the progress on CFIT non-priority DIPs.

Conclusion 1/7 (*State's comments on Runway Safety SEIs developed during APRAST/1*)
Status: Closed.

Conclusion 1/8 (*Development of Runway Safety priority DIPs*)
Status: Closed.

Conclusion 1/9 (*Development of Runway Safety non-priority DIPs*)
Status: On-going. The Runway Safety Facilitator to monitor the progress on Runway Safety non-priority DIPs.

Conclusion 1/10 (*Establishment of a dedicated Ad hoc Working Group to address Runway Excursions*)

Status: Closed per Conclusion APRAST 2/49 referenced in paragraph 8.4.

Conclusion 1/11 (*State's comments on LOC SEIs developed during APRAST/1*)

Status: Closed.

Conclusion 1/12 (*Development of LOC priority DIPs*)

Status: Closed.

Conclusion 1/13 (*Development of LOC non-priority DIPs*)

Status: On-going. The LOC Facilitator to monitor the progress on LOC non-priority DIPs.

Conclusion 1/14 (*United States paper on Airfield Safety referred to APRAST/1 by RASG-APAC/1*)

Status: Closed.

Conclusion 1/15 (*APRAST/1 Paper on Runway Incursions/Wrong Runway Departures*)

Status: Closed.

Conclusion 1/16 (*United States paper on Improving International Validation Programs referred to APRAST/1 by RASG-APAC/1*)

Status: Closed.

Conclusion 1/17 (*48DGCA paper on Search and Rescue in New Caledonia and French Polynesia*)

Status: Closed.

Conclusion 1/18 (*urging the participation of Accident Investigation specialist at Search and Rescue Training programmes*)

Status: Closed.

Conclusion 1/19 (*Inclusion of SSP as part of APRAST's regular work programme*)

Status: Closed pursuant to Conclusion APRAST 2/4.

Conclusion 1/20 (*Identification of gaps in the implementation of SSP*)

Status: Closed pursuant to Conclusion APRAST 2/4.

Conclusion 1/21 (*Pakistan's agreement to champion SSP implementation among APAC States*)

Status: Open. Work not yet commenced.

The Chairperson RASG-APAC cited the low level of feedback from States on matters related to RASG / APRAST activities and urged all States to actively participate in these activities. He requested all participating States / Administrations to respond to the survey on the SSP and SMS implementation related to APRAST /1 conclusions 19 and 20 to the Secretariat as soon as possible. He also requested States / Administrations to nominate a person from their respective organization to act as a primary point of contact for RASG / APRAST activities.

Conclusion APRAST 2/2

that, APRAST recommend to RASG-APAC to request member States and industry partners to nominate a person from their respective organizations to act as the primary point of contact (POC) and liaison for RASG-APAC / APRAST activities.

Conclusion APRAST 2/3

Request ICAO to tailor the APRAST web page found on the ICAO portal to feature an APRAST point of contact list that can be updated by each member State and industry partner organization as required.

Conclusion APRAST 2/4

To support previous APRAST/1 conclusions 19 and 20, APAC member States / Administrations are urged again to submit their completed SSP and SMS implementation gap analysis survey.

Conclusion 1/22 (*Provisioning of information on Oversight of Operations Conducted within Foreign States*)

Status: Open. Insufficient response by Members to enable APRAST review. Secretariat to send a reminder.

Conclusion 1/23 (*Forwarding information on Oversight of Operations Conducted within Foreign States RASG-APAC meeting*)

Status: Open. Any available information will be provided to RASG-APAC/2 meeting in October 2012 for further guidance.

Conclusion 1/24 (*Maintaining of register of emerging issues in APAC region*)

Status: On-going. Any information received to be forwarded to RASG-APAC for further advice. (**Appendix B** – Registry of Emerging Issues)

Conclusion 1/25 (*Taxonomies on accident occurrences*)

Status: Closed. (Note. Taxonomies on accident occurrences was provided and available on the ICAO APAC website at

http://www.bangkok.icao.int/cns/meeting.do?method=MeetingDetail&meeting_id=189)

APRAST-AIG AD-HOC WORKING GROUP REPORT**5.2 Report on the First Meeting of the APRAST-AIG Ad-hoc Working Group (WP/4)**

5.2.1 WP/4 was presented by the Chairperson of the APRAST-AIG AWG. APRAST-AIG AWG/1 was held in the ICAO APAC Office on 6-8 June 2012. Chairperson stated that the meeting discussed the issues of independence of investigation, investigator training, investigation cooperation, voluntary and non-punitive incident reporting, and accident and incident database. Furthermore he stated that the success of AIG AWG is dependent upon receiving the feedback requested by the AIG AWG through the Secretariat. He requested all States to provide the information at the earliest opportunity.

5.2.2 The APRAST/2 discussed the APRAST AIG AWG/1 conclusions at length and the outcome is as follows:

Conclusion AIG AWG 1/4 - Adopted.

Conclusion APRAST 2/5

that, APRAST recommends to RASG-APAC to emphasize to States / Administrations the desirability of the following:

- An independent system of accident investigation;
- The appointment of an accountable person for accident investigation matters; and
- The formation of a core group of personnel to be trained as investigators.

Conclusion AIG AWG 1/6 - Adopted subject to Conclusion APRAST 2/7.

Conclusion APRAST 2/6

that, APRAST recommends to RASG-APAC to encourage those States / Administrations which do not yet have an independent investigation system to establish some form of independent investigation system and consider the possible options described by AIG AWG. (Note: Possible options for an independent investigation system are described in the working paper APRAST-AIG AWG/1-WP/5 of the APRAST-AIG AWG/1.)

Conclusion APRAST 2/7

that, AIG AWG to consider amending the Record of Discussions and Conclusions of the APRAST AIG AWG/1 with a view to clarifying, in respect of Conclusion AIG AWG 1/6 therein, that the establishment of an independent investigation organisation by a State/Administration does not exclude States/Administrations from making use of external investigation experts or of the resource of a regional investigation organisation.

Conclusion AIG AWG 1/7 - Adopted.

Conclusion APRAST 2/8

that, APRAST to recommend RASG-APAC to encourage States / Administrations to have a dedicated core of one or more trained accident investigators, lest the effort in training go to waste through frequent changes of investigation personnel.

Conclusion AIG AWG 1/10 – Adopted with a minor change recommended by the Co-Chair.

Conclusion APRAST 2/9

that, AIG AWG to develop a draft Code of Conduct aimed at promoting mutual cooperation in accident/incident investigation and APRAST to forward same to RASG-APAC for consideration.

Conclusion AIG AWG 1/11 – Adopted subject to Conclusion APRAST 2/11.

Conclusion APRAST 2/10

that, RASG-APAC to form a Group of Experts on Accident/Incident Investigation (APAC-ACC) with representation from the investigation authorities, industry partners and professional bodies to institutionalise a network for the exchange of views, practices and experiences. (Note: The APAC-ACC may be formed by a restructuring of the AIG AWG.).

Conclusion APRAST 2/11

that, AIG AWG to suggest terms of reference for the activities of the Group of Experts on Accident/Incident Investigation (APAC-ACC) for consideration by RASG-APAC.

Conclusion AIG AWG 1/12 - Adopted.

Conclusion APRAST 2/12

that, APRAST to recommend RASG-APAC to encourage States / Administrations to implement a Confidential Aviation Incident Reporting (CAIR) system.

Conclusion AIG AWG 1/14 – Adopted.

Conclusion APRAST 2/13

that, APRAST to recommend RASG-APAC to encourage States / Administrations interested in setting up a CAIR programme to contact the International Confidential Aviation Safety Systems Group (ICASS) for assistance in designing and implementing new systems.

Conclusion AIG AWG 1/15 – Adopted.

Conclusion APRAST 2/14

that, APRAST to recommend RASG-APAC to encourage States / Administrations to use the European Coordination Centre for Aviation Incident Reporting System (ECCAIRS) database software for their accident and incident database.

Conclusion AIG AWG 1/17 – Adopted.

Conclusion APRAST 2/15

that, APRAST to recommend RASG-APAC to encourage States / Administrations to consider the use of Accident/Incident Data Report (ADREP) -compatible systems.

AP-SRP AD-HOC WORKING GROUP REPORT5.3 **AP-SRP Ad-hoc Working Group Report (WP/5)**

5.3.1 WP/5 was presented by SRP Ad-hoc Working Group. The meeting commented on the draft format of the Annual Safety Report – Asia Pacific Region.

Conclusion APRAST 2/16

that, SRP present all safety reporting information for member States in a manner that reflects the ICAO geographic region and is based on ICAO categorizations and terminology.

REPORT AND REVIEW THE STATUS OF SAFETY ENHANCEMENT INITIATIVES (SEIs) ON CFIT, RUNWAY SAFETY AND LOC5.4 **Controlled Flight into Terrain (CFIT) (WP/6)**

5.4.1 WP/6 was presented by CFIT Facilitator. The meeting noted the progress by the CFIT SEIs group.

5.5 **Runway Safety (WP/7)**

5.5.1 WP/7 was presented by Runway Safety Facilitator. The meeting noted the progress by the Runway Safety SEIs group.

5.6 **Loss of Control (LOC) (WP/8)**

5.6.1 WP/8 presented by LOC Facilitator. The meeting noted the progress by the LOC SEIs group.

REPORT AND REVIEW THE ICAO RUNWAY SAFETY SEMINAR OUTCOMES5.7 **Update on Regional Runway Safety Seminars (WP/11)**

5.7.1 The Secretariat presented WP/11. The meeting noted the content of the paper.

Conclusion APRAST 2/17

that, APRAST to recommend to RASG-APAC to encourage States to establish runway safety teams at their airports.

6. Agenda Item 3: Foreign Air Operator Surveillance Database**6.1 Foreign Air Operator Surveillance Database (WP/10)**

6.1.1 The Secretariat presented WP/10. The meeting noted the content of the paper.

Conclusion APRAST 2/18

that, APRAST recommend to RASG-APAC to encourage all APAC States to participate in the Foreign Air Operator Surveillance Database (FAOSD) Programme to improve transparency and sharing of safety information.

Conclusion APRAST 2/19

that, ICAO RO to compile all comments received on the Manual of Procedure and Use of the FAOSD Programme to RASG-APAC for consideration and feedback as required.

7. State / Industry Presentations**7.1 ACI Airport Excellence (APEX) in Safety Program (WP/9)**

7.1.1 The ACI representative presented the paper on the ACI APEX Programme and requested the meeting to note the contents and support the programme.

7.1.2 The meeting noted the content of the presentation. The Co-chair commended the efforts of ACI to improve runway safety through the APEX in Safety Program and requested that ACI continue to provide updates on the program and general information on safety trends and issues discovered.

7.2 Information Sharing - Commercial Aviation Safety Team (CAST)

7.2.1 The CAST representative made a presentation on the usage of predictive safety data by CAST. He also informed the meeting that administrative arrangements are being made for the sharing of safety data with RASG-APAC and its subsidiary groups.

7.2.2 The meeting noted the content of the presentation.

8. Breakout Session

8.1 The facilitators of three sub-groups CFIT, LOC and Runway Safety provided briefing on the respective activities and progress of each group.

Conclusion APRAST 2/20

that, CFIT, LOC and Runway Safety sub-groups to provide a detailed report on the breakout session proceedings as soon as possible but no later than 31st August 2012 to be included as part of APRAST/2 report.

CFIT

8.2 The CFIT sub-group report is at **Appendix C**. Based on the recommendations and comments from the CFIT group, APRAST/2 arrived at the following conclusions.

(Note: The draft SEI / DIP status monitoring document is at **Appendix D**)

Safety Enhancement Initiatives (SEIs) - CFIT

8.2.1 **CFIT 1 - Ground Proximity Warning Systems (GPWS) with Forward Looking Feature (Safety Impact High)**. The purpose of this SE action is to promote compliance with ICAO SARPS regarding the equipage of GPWS-FLF (Forward Looking Feature) and ensure flight crews are trained and competent to effectively manage GPWS events including degraded performance issues and database validity.

Status: Detailed Implementation Plan (DIP) has been developed.

Conclusion APRAST 2/21

that, APRAST to forward DIP for CFIT 1 to RASG-APAC for review and approval.

8.2.2 **CFIT 2 – Standard Operating Procedures (SAFETY IMPACT HIGH)**. The purpose of this SE is to ensure that all Asia Pacific States have mandated the use of SOPs on applicable aircraft.

Status: Detailed Implementation Plan has been developed and work has commenced on the development of a draft Advisory Circular document.

Conclusion APRAST 2/22

that, APRAST to forward DIP for CFIT 2 to RASG-AP for review and approval.

8.2.3 **CFIT 3 – Precision-Like Approach Standard Operating Procedures (Safety Impact High).** The purpose of this SE is to promote the development and issuance of an advisory circular (AC) containing information for air operators to use to develop Standard Operating Procedures and training for pilots in use of the continuous descent final approach (CDFA) technique when flying non-precision approach procedures in all aircraft types.

Status: DIP is under development.

Conclusion APRAST 2/23

That, CFIT sub-group to continue in developing a mature DIP on CFIT 3, which will be tabled at the APRAST/3 meeting for further review.

8.2.4 **CFIT 4 – Flight Data Analysis (Safety Impact High).** The purpose of this SE is to develop and implement a non-punitive FDA program to promote compliance with the Annex 6, Part 1 requirement regarding establishment of non-punitive FDA program.

Status: DIP is fully developed.

Conclusion APRAST 2/24

That, APRAST to forward the DIP for CFIT 4 to RASG-AP for review and approval.

8.2.5 **CFIT 5 – Crew Resource Management Training (Safety Impact Low).** The purpose of this SE is to promote the implementation of Crew Resource Management (CRM) training programs for flight crew members and other personnel essential to flight safety to reduce the risk of a CFIT event.

Status: DIP is fully developed.

Conclusion APRAST 2/25

that, APRAST to forward the DIP for CFIT 5 to RASG-APAC for review and approval.

8.2.6 **CFIT 6 – CFIT/ALAR Training (Safety Impact Moderate).** Purpose: The purpose of this SE is to promote the training of flight crews in Approach and Landing Accident and Controlled Flight into Terrain Prevention.

Status: DIP is fully developed.

Conclusion APRAST 2/26

that, APRAST to forward the DIP for CFIT 6 to RASG-APAC for review and approval.

8.2.7 **CFIT 7 - ALAR - Policies for ALAR (Safety Impact Moderate).** This SEI will promote the development of flight safety documents systems that ensures easy access to information required for flight and ground operations that is contained in the various operational documents comprising the system and which facilitate management of the distribution and revision of operational documents.

Status: DIP is under development.

Conclusion APRAST 2/27

that, CFIT sub-group to continue on the development of the DIP for CFIT 7 and review of work completed to take place at the APRAST/3 Meeting.

8.2.8 **CFIT 8 - Minimum Safe Altitude Warning (MSAW) (Safety Impact Moderate).** The purpose of this SE is to promote that where MSAW equipment is being utilized it is important that all controllers are aware of the need to issue 'Safety Alert / Warning' when circumstances so warrant and that procedures have been clearly established in this regard.

Comments from CFIT sub-group. The Sub-group agreed that there was no suitable ATM expertise within the group to proceed with this SEI.

Conclusion APRAST 2/28

that, the CFIT facilitator will pursue the identification of the appropriate expertise that can adequately progress this initiative.

8.2.9 **CFIT 9 - Review of existing and emerging technologies for enhanced flight visibility.** Promote awareness in the air operator and the regulator community of existing and emerging technologies in the area of Enhanced Vision Flight Systems that reduce the risk of a CFIT event.

Conclusion APRAST 2/29

That, APRAST to place this SEI in the Registry of Emerging Issues.

RUNWAY SAFETY

8.3 The Runway Safety sub-group report is at **Appendix E**. Based on the recommendations and comments from the Runway Safety group APRAST/2 arrived at the following conclusions.

Safety Enhancement Initiatives (SEIs) - Runway Safety

8.3.1 **RE/2 – Identify Specific training for Pilots and Air Traffic Controllers to avoid unstabilized approaches (Safety Impact High)**. To identify specific requirements of training for Pilots and Air Traffic Controllers to avoid unstabilized approaches.

Status: Detailed Implementation Plan developed.

Conclusion APRAST 2/30

that, APRAST to forward the DIP for RE/2 to RASG-APAC for review and approval.

Conclusion APRAST 2/31

that, APRAST requests RASG-APAC to encourage States to promptly and accurately provide data on accidents/incidents due to Runway Excursions.

Conclusion APRAST 2/32

that, ICAO APAC is requested, to collect and provide data to the APRAST on accident/incident due to runway excursion)

8.3.2 **RE/6 – Timely and Accurate Notification about Runway Conditions by AIS AND ATS (Safety Impact High)**. To ensure that timely and accurate notification about the runway conditions is transmitted to the Flight Crew and ensure that the Flight Crew understands the notification.

Status: Detailed Implementation Plan developed.

Conclusion APRAST 2/33

that, APRAST to forward the DIP for RE/6 to RASG-APAC for review and approval.

Conclusion APRAST 2/34

that, APRAST request RASG-APAC to encourage the states to respond to the Runway Condition Reporting (RCR) survey questionnaire which was sent by the ICAO APAC on 16th June 2012.

Conclusion APRAST 2/35

that, APRAST review the work being done by the ICAO Friction Task Force, TALPA-ARC, and EASA-RuFAB and consider potential recommendations to ICAO on applicability as SARPs and guidance.

8.3.3 **RI/4- Runway Safety Teams (Safety Impact Medium).** To form the runway safety team in each state.

Status: Recommend deletion, based on existing ICAO initiatives already in progress.

Conclusions APRAST 2/36

That, APRAST deletes RI/4.

8.3.4 **RI/5 - Scenario based training for pilots (Safety Impact Medium).** To impart scenario based training to the pilots.

Status: Topic not considered a current Regional priority. Recommend to move to Registry of Emerging Issues.

Conclusion APRAST 2/37

that, APRAST to place this SEI in the Registry of Emerging Issues.

8.3.5 **RI/6 - Scenario Based Training For The Air Traffic Controllers (Safety Impact Medium).** To impart scenario based training to the Air Traffic Controllers.

Status: Topic not considered a current Regional priority. Recommend to move to Registry of Emerging Issues.

Conclusion APRAST 2/38

that, APRAST to place this SEI in the Registry of Emerging Issues.

8.3.6 **RI/7 - Taxiway and Runway Configuration (Safety Impact Medium).** To determine risk factors associated with airport geometry and complexity.

Status: Topic not considered a relevant Regional issue. Recommend deletion.

Conclusion APRAST 2/39

that, APRAST deletes RI/7.

8.3.7 **RI/8 - Review of Air Traffic Control Clearance Procedure (Safety Impact High).** To review the existing Air Traffic Control clearance procedure for any drawback or shortcomings which could lead to runway safety hazards.

Status: Safety data does not suggest a Regional issue related to this topic. Recommend deletion.

Conclusion APRAST 2/40

that, APRAST deletes RI/8.

8.3.8 **RE/4 - Promote PBN Implementation and Approaches with Vertical Guidance (Safety Impact High).** To promote the PBN implementation and approaches with vertical guidance to minimize the runway safety hazards.

Status: Recommend deletion based on the existence of extensive Regional PBN promotion and the work of other ICAO Sub Groups.

Conclusion APRAST 2/41

that, APRAST deletes RE/4.

8.3.9 **RE/5 - Promote/Monitor Implementation of RESA including other means such as Arresting Systems (where Possible) (Safety Impact High).** To promote and monitor the implementation of RESA including all other possible means for the effective Runways Safety Measures.

Status: Recommend renaming this initiative to ‘Publish Guidance to air operators on Non-RESA equipped airports’, and reassign the Champion to IATA / IFALPA.

Conclusion APRAST 2/42

that, RE/5 is renamed to ‘Publish Guidance to air operators on Non-RESA equipped airports’; Champion for this initiative is now IATA/IFALPA.

Conclusion APRAST 2/43

that, Runway Safety sub-group to continue on the development of the DIP for RE/5 and review of work completed to take place at the APRAST/3 Meeting.

8.3.10 **RE/7 - Improve Runway Conditions in accordance with the guidelines provided in Annex 14 (Safety Impact Medium).** To improve the runway conditions as per the guidelines provided in the Annex 14.

Status: ACI will commence work keeping in consideration the details that need to be considered.

Conclusion APRAST 2/44

that, Runway Safety sub-group to continue on the development of the DIP for RE/7 and review of work completed to take place at the APRAST/3 Meeting.

8.3.11 **RE/8 - Implement Risk Management Measures taking into consideration the ones contained in ALAR (Safety Impact High).** To study and implement the risk management measures as contained in ALAR.

Status: Recommend combining RE/8 with LOC 2 as both initiatives produce similar outcomes.

Conclusion APRAST 2/45

that, RE/8 is now combined with LOC 2 and will be dealt under LOC 2.

8.3.12 **RE/9 - Guidance in Maintaining Runway in Accordance with Annex 14. (Safety Impact High).** To provide guidance in maintaining the runway in accordance with the requirements of Annex 14.

Conclusion APRAST 2/46

that, RE/9 be merged with RE/7 and work be dealt under RE/7.

8.3.13 **RE/10 - Specific training for Aerodrome personnel Regarding maintenance and operations of the runway (Safety Impact High).** To train the Aerodrome Personnel in regards to its maintenance and operation of the runway.

Conclusion APRAST 2/47

that, RE/10 be merged with RE/7 and work be dealt under RE/7.

8.3.14 **RS/1 - Develop Runway Safety Checklist (Safety Impact High).** To develop a runway safety Check List for the safe operations at airports.

Statement of Work: The champion will develop a safety Check List encompassing all operations for the safe operations at airports.

Champion: CANSO

Status: CANSO will commence work.

Conclusion APRAST 2/48

that, Runway Safety sub-group to continue on the development of the DIP for RS/1 and review of work completed to take place at the APRAST/3 Meeting.

RUNWAY EXCURSION AD-HOC SUB-GROUP

8.4 The sub-group deliberated on the APRAST Conclusion 1/10, to establish an ad-hoc working group to exclusively address/study issues related to runway excursion. The recommendation is to not to form another ad-hoc working group as these issues can be addressed by the existing runway safety sub-group.

Conclusion APRAST 2/49

that, APRAST will not recommend forming another ad-hoc working group for the issues relating to Runway Excursion. APRAST Conclusion 1/ 10 is closed.

LOSS OF CONTROL

8.5 The Loss of Control (LOC) sub-group report is at **Appendix F**. Based on the recommendations and comments from the LOC group APRAST/2 arrived at the following conclusions.

8.5.1 **LOC 1 -- Use of SOPS (Standard Operating Procedures).** The establishment, maintenance and appropriate use of flight crew SOP's to reduce the risk of LOC events. (Paragraph 3.1 of LOC sub-group report refers.)

Status: Detailed implementation plan developed.

Conclusion APRAST 2/50

that, APRAST to forward detailed implementation plan on LOC 1 to RASG-APAC for review and approval.

8.5.2 **LOC 2 -- Hazard Identification and Risk Management.** Implementation of safety management practices (hazard identification and risk management) into operational processes & decision making. (Paragraph 3.2 of LOC sub-group report refers.)

Status: Detailed implementation plan developed.

Conclusion APRAST 2/51

that,

- i) LOC 2 and RE 8 were combined into a single SEI and renamed as LOC 2/RE 8. LOC sub-group to finalize LOC 2/RE 8 DIP for submission to RASG-APAC.
- ii) APRAST to forward LOC 2 / RE 8 DIP to RASG-APAC for review and approval.

8.5.3 **LOC 3 -- Safety Information (Flight Safety Documents System).** ICAO SARPs in Annex 6, Operations of Aircraft, Part I. The essential safety information and operational procedures generated by airplane manufacturers must be included in companies' operating manuals, training programs for pilots and other appropriate documentation. (Paragraph 3.3 of LOC sub-group report refers.)

Comments from LOC sub-group: Flight Safety Documents System, in general, apply broadly to all safety areas, not only loss of control. Included as part of a flight safety documents system are standard operating procedures (SOPs). Reference LOC 1.

Conclusion APRAST 2/52

that, APRAST agreed to close LOC 3.

8.5.4 **LOC 4 -- Flight Crew Proficiency.** The appropriate use of trend information from Safety Management Systems (SMS) in the training and qualification processes to mitigate risk that could lead to a LOC event. (LOSA, non-punitive reporting systems, FDA, etc). (Paragraph 3.4 of LOC sub-group report refers.)

Status: Detailed implementation plan developed.

Conclusion APRAST 2/53

that, APRAST to forward the DIP for LOC 4 to RASG-APAC for review and approval.

8.5.5 **LOC 5 -- Human Factors and Automation.** Increase flight crew Inflight Awareness of aircraft Mode, configuration, attitude and Energy State Management (Human Factors and Automation) (Paragraph 3.5 of LOC sub-group report refers.)

Status: Detailed implementation plan developed.

Conclusion APRAST 2/54

that, APRAST to forward DIP for LOC 5 to RASG-APAC for review and approval.

8.5.6 **LOC 6 -- Loss of Control Training.** Establish and implement flight crew training to improve knowledge, understanding and ability to prevent, recognize and recover from flight conditions outside of the normal flight envelope. (Paragraph 3.6 of LOC sub-group report refers.)

Status: Draft detailed implementation plan developed.

Conclusion APRAST 2/55

That, LOC sub-group will seek to identify champion for the further development of LOC 6 DIP.

8.5.7 **LOC 13 -- Loss of Control: Information Sharing.** Improve the sharing of flight safety information. (Paragraph 3.7 of LOC sub-group report refers.)

Conclusion APRAST 2/56

That, APRAST to place this SEI in the Registry of Emerging Issues.

9. Agenda Item 5: Date and Venue of next meeting

9.1 The meeting agreed to the following dates and venues for the meeting of the sub-group and its subsidiary bodies.

APRAST/3:	7 – 10 May 2013, Bangkok
APRAST – AIG AWG/3:	TBD
AP - SRP AWG/2:	TBD
APRAST teleconference/3:	Week of 10 September 2012 (date to be notified).
APRAST teleconference/4:	To be notified.

10. Agenda Item 6: Any other business

10.1 There were no new items for discussion.

11. Agenda Item 4: Adoption of Conclusions and Recommendations

11.1 The APRAST/2 meeting adopted the Report and Conclusions and requested that they be put up to the RASG-APAC for approval.
