



International Civil Aviation Organization

**NINTH MEETING OF THE ASIA PACIFIC REGIONAL AVIATION SAFETY TEAM
(APRAST/9)**

(Bangkok, Thailand, 31 October to 4 November 2016)

Agenda Item 5: Update, discussion and review of APRAST activities

UPDATE OF APAC-AIG ACTIVITIES

(Presented by Chairman, APAC-AIG)

SUMMARY

This working paper updates the meeting on the progress made on the conclusions and decisions developed by the Asia Pacific Accident Investigation Group since APRAST/8.

1. INTRODUCTION

1.1 To date, the Asia Pacific Accident Investigation Group (APAC-AIG) has held four annual meetings, in 2013, 2014, 2015 and 2016. The recent APAC-AIG/4 was held hosted by the Japan Transport Safety Board (JTSB) in Tokyo, Japan on 1 – 2 September 2016. The APAC-AIG/4 was attended by 50 participants from 21 Member States/Administrations, and three International Organization/Industry Partners, i.e. ICAO, IFALPA and Airbus.

1.2 At the Sixth Meeting of the Regional Aviation Safety Group–Asia and Pacific Regions (RASG-APAC/6) which was held on 1 – 2 August 2016, the Secretariat updated the RASG-APAC on the work done by the APAC-AIG.

1.3 This working paper reports on the follow-up to the decisions made by the APRAST/8 and RASG-APAC/6 relating to accident investigation and updates the meeting on the other activities pursued by the APAC-AIG.

2. DISCUSSION

Improving USOAP AIG Effective Implementation Rates and Accident Investigation Capabilities

2.1 In relation to the low USOAP AIG EI rates in the region, the APRAST/8 made the following Decision, which was endorsed at the RASG/6:

Decision APRAST 8/8

That, APAC-AIG identify potential initiatives to help improve accident investigation capabilities and USOAP AIG EI rates of States/Administrations.

2.2 Decision APRAST 8/8 was followed up at the APAC-AIG/4, which noted that the reasons for the low USOAP AIG EI rates in the region could be:

- a) Lack of understanding of the audit protocol questions (PQs), e.g. not knowing the difference between process, procedure and guideline, or between establishing and promulgating a process
- b) Lack of documentation of the investigation process
- c) Lack of a training system (including training records system), plans or programmes
- d) Lack of coordination with external agencies
- e) Lack of experience in the day-to-day administration of an accident investigation unit; and
- f) Lack of a systematic compilation of evidence to demonstrate compliance with the PQs.

2.3 The APAC-AIG/4 proposed to address these lacks with a suite of training as proposed in **Attachment A** and formulated the following Conclusion for APRAST's consideration:

Conclusion APAC-AIG 4/1

That, APRAST consider requesting the ICAO APAC Regional Office to initiate a suite of training as per **Attachment A** to assist States/Administrations to improve the USOAP AIG EI rate.

2.4 Details of a five-day training plan identified to assist States will be covered in a separate working paper (APRAST/9-WP/8).

2.5 The APAC-AIG/4 also discussed how the accident investigation capabilities of the States/Administrations may be enhanced. The APAC-AIG/4 identified a number of training topics that could enhance the States/Administrations' investigation capabilities (see **Attachment B**). However, the APAC-AIG/4 was not certain of the demands for such training topics and therefore formulated the following Conclusion for APRAST's consideration:

Conclusion APAC-AIG 4/2

That, APRAST consider requesting ICAO APAC Regional Office to conduct a survey among APAC States/Administrations to ascertain the training demands for the topics listed in **Attachment B**.

Independent accident investigation authority

2.6 ICAO has introduced the following new Standard 3.2 in Amendment 15 to Annex 13:

“A State shall establish an accident investigation authority that is independent from State aviation authorities and other entities that could interfere with the conduct or objectivity of an investigation.”

2.7 This new Standard will become applicable on 10 November 2016. ICAO expects States/Administrations to implement this Standard in six months to two years, counting from 11 July 2016, the effective date of Amendment 15 to Annex 13.

2.7 At the APAC-AIG/4, ICAO clarified that States/Administrations will not be assessed on the new Standard 3.2 until January 2018 at the earliest. However, States/Administrations are still required to file for a difference if they are unable to meet the new Standard 3.2 by 10 November 2016.

Upgrading Recommended Practices 6.11 and 6.12 of Annex 13 to Standards

2.8 The APAC-AIG/4 supported a proposal to upgrade the following Recommended Practices in Annex 13 to Standards

6.11 Recommendation.— *A State conducting the investigation or any other State issuing a safety recommendation should implement procedures to record the responses to the safety recommendation issued.*

6.12 Recommendation.— *A State that receives a safety recommendation should implement procedures to monitor the progress of the action taken in response to that safety recommendation.*

2.9 Accordingly, the APAC-AIG/4 formulated the following Conclusion for ICAO APAC Regional Office's consideration:

Conclusion APAC-AIG 4/3

That, ICAO APAC Regional Office conveys to the Secretary of the ICAO Accident Investigation Panel (AIGP) that the APAC-AIG supports upgrading Recommended Practices 6.11 and 6.12 of Annex 13 to Standards.

2.10 ICAO APAC Regional Office has acted on this Conclusion.

Code of Conduct on Cooperation Relating to Civil Aviation Accident/Incident Investigation

2.11 The Asia-Pacific Code of Conduct on Cooperation Relating to Civil Aviation Accident/Incident Investigation (CoC) was developed to promote mutual cooperation in accident/incident investigation in the APAC region but is not meant to be legally binding. To date, 19 States/Administrations have pledged their support to the CoC. They are Australia, Bangladesh, China, France, Hong Kong China, Indonesia, Japan, Lao PDR, Macao China, Maldives, Mongolia, Myanmar, New Zealand, Papua New Guinea, Philippines, Republic of Korea, Singapore, Sri Lanka and Thailand. [Note: One more State pledged its support after APRAST/8, i.e. Papua New Guinea.]

Database of investigation agencies

2.12 A database of the investigation agencies in the APAC region has been created to allow States/Administrations to obtain contact information of their counterparts easily and facilitate expeditious communication among States/Administrations. To date, 22 States/Administrations have provided input to the database. They are Australia, Bangladesh, Bhutan, Cambodia, China, France, Hong Kong China, India, Indonesia, Japan, Macao China, Maldives, Mongolia, Myanmar, Nepal, New Zealand, Papua New Guinea, Philippines, Republic of Korea, Singapore, Sri Lanka and Thailand. [Note: Three more States provided their input after APRAST/8, i.e. Bhutan, India and Indonesia.]

Upcoming activities

2.13 The APAC-AIG/4 reviewed the upcoming investigation related activities/events and updated the APAC-AIG work plan (**Attachment C**). The work plan should facilitate States/Administrations' planning for their participation.

2.14 COSCAP-North Asia will also be organizing an aircraft accident investigation workshop in Ulaanbaatar, Mongolia, on 6 – 8 December 2016 for individuals from the civil aviation authorities and service providers who may be called upon to participate in an accident investigation. This workshop serves also as a refresher training for accident investigators.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Note the activities of the APAC-AIG, in particular the identification of initiatives to improve USOAP AIG EI rates and accident investigation capabilities;
- b) Consider requesting ICAO APAC Regional Office to conduct a survey among APAC States/Administrations to ascertain the training demands for the topics listed in **Attachment B**.
- c) Encourage States/Administrations to note the the upcoming investigation related activities/events in the proposed APAC-AIG work plan and consider volunteering to organise the events and activities.
- d) Encourage States/Administrations to attend the aircraft accident investigation workshop in Ulaanbaatar, Mongolia, on 6 – 8 December 2016, to be organized by COSCAP-North Asia.

SUITE OF TRAINING

S/N	Area	Training modules
1	PQs	a. Understanding what the PQs are aiming at
2	Documentation of legislation amendment	a. Developing policies and procedures to address PQs' requirements b. Compiling of amendment table c. Amendment process
3	Documentation of the investigation process	a. Filling up and dispatching of notification form to ICAO, State of Registry, State of the Operator, State of Manufacturer, State of Design, etc. b. Appointing investigator-in-charge (IIC) and team members / Drafting of appointment letter c. Drafting of preliminary report d. Organisation of investigation team / Deciding on team set-up e. Conduct of investigation meetings f. Medical and toxicology examinations of persons involved g. Recorder readout process and considerations h. Special examinations (e.g. disassembly, laboratory tests, manufacturer's inspections and tests) i. Developing checklists of information to be gathered from cabin crew members and passengers j. Identifying storage areas for aircraft wreckage k. Formulating safety recommendations l. Consultation process for Draft Final Report / Drafting of transmittal correspondence m. Processing and documenting of comments received / Finalising Final Report n. Dissemination of Final Report / Drafting of transmittal correspondence o. Publication of investigation Final Report p. Tracking responses to safety recommendations q. Review of safety actions taken in response to safety recommendations r. Developing checklists for guiding IIC and investigators through the investigation process (from initial notification to issuance of final report)
4	Training system, plan and programme	a. Training objectives b. Initial, recurrent and on-the-job training plan c. Establishing training needs matrix d. Developing checklists for documenting practical training achievements e. Maintaining training records
5	Investigation manpower	a. Volunteer investigators b. Regional cooperation c. Assistance MOUs
6	Coordination with external agencies	a. Coordination with counterpart agencies – Joint Standing Operation Procedures (SOP), MOUs, etc., with CAA, airport authority, ATC, police, judicial authority, maritime administrations, search and rescue body, military (e.g. air force, navy), etc.

7	Administration of an accident investigation unit	a. Day-to-day running b. Duty officer system c. Immunisation for investigators d. Attachment to established accident investigation unit
8	Showing compliance with PQs' requirements	a. Organisation of evidence and documents needed for the USOAP audit

LIST OF BASIC TRAINING

- a. Comprehensive understanding of Annex 13 protocol
- b. Investigation management
- c. Accident site control, management and safety
- d. Wreckage and debris mapping
- e. Preservation and documenting of evidence
- f. Investigator's equipment and protective clothing
- g. Photography for investigators
- h. Interviewing techniques
- i. Readout of flight recorders
- j. Investigation of flight operations
- k. Investigation of aircraft maintenance and engineering aspects
- l. Investigation of human factors
- m. Investigation of crashworthiness
- n. Investigation of cabin safety
- o. Investigation of airport factors
- p. Investigation of organizational and management factors
- q. Making safety recommendations
- r. Investigation report writing
- s. Crisis management (news media / family assistance)
- t. Underwater search and recovery of flight recorders
- u. Dangerous goods accident investigation
- v. Electronics systems investigation
- w. EGPWS and TCAS investigation
- x. Fire and explosion investigation

APAC – AIG Work Plan

Date	Activities / Events	APAC-AIG Meeting	ICAO Regional Workshop	AsiaSASI Workshop	ISASI Annual Seminar	International Accident Investigation Forum	ICASS Meeting	Creation of AIU Database	Workshop on Cabin Safety Investigation	1st Asian Turbomeca Engine Seminar	Advanced Investigation Training	Workshop on Underwater Search of Flight Recorders	Aircraft Accident Site Safety Workshop	ECCAIRS In-house Training	HF and Org Mgmt Investigation Training	Manufacturer's Investigation Training
2015		23-24 Jun Sri Lanka	25-26 Jun Sri Lanka		24-27 Aug Augsburg		19-23 Oct Cologne	Database expansion							16-20 Nov Singapore	
2016	Q1															
	Q2					19-21 Apr Singapore										
	Q3	1-2 Sep Tokyo		30-31 Aug Tokyo			17 - 21 Oct Tianjin									
	Q4				3-6 Oct Reykjavik											
2017	Q1								Proposed			10 - 11 Jan Singapore				
	Q2	Proposed	Proposed													Airbus May Toulouse
	Q3				21-24 Aug San Diego											
	Q4															

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