



International Civil Aviation Organization

First Meeting of the Asia Pacific Accident Investigation Group (APAC-AIG/1)
(Bali, Indonesia, 18-19 September 2013)

Agenda Item 5: Work Plan

**SHARING OF TRAINING OPPORTUNITIES FOR
ENHANCEMENT OF INVESTIGATION CAPABILITIES**

(Presented by Singapore)

SUMMARY

This paper proposes forms of training which States/Administrations can consider providing to help enhance the capabilities of APAC accident investigators.

1. INTRODUCTION

1.1 At its first meeting in June 2012, the APRAST Accident Investigation Ad hoc Working Group (AIG AWG) recommended to APRAST that RASG-APAC emphasise to States/Administrations the desirability of the following:

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

1.2 The recommendation was accepted and subsequently the emphasis was conveyed by the ICAO APAC Office to States/Administrations via State Letter dated 4 March 2013 [Ref: T 10/8.3 – AP031/13(FS)].

1.3 A recent ICAO State Letter 2013/55 dated 19 July 2013 [Ref. AN 6/1.2-13/55] proposes a new Standard 3.2 in Annex 13, viz. that “States 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”. This means that an accident investigation authority operating as a unit of a civil aviation regulatory authority will not be in compliance with the proposed new standard.

1.4 The proposed new standard has far-reaching implications for States that have not yet established an independent accident investigation authority. Besides having to establish such an authority and ensure that its operations are independent and are also perceived to be independent, these States will also have to ensure, among others, that their investigators are competent to conduct and manage a major investigation.

1.5 This paper discusses some aspects related to the training of investigators.

2. DISCUSSION

2.1 ICAO Circular 298, *Training Guidelines for Aircraft Accident Investigators*, is a good reference for planning investigator training. In terms of training objective, training of investigators may be categorised in the following ways:

- (a) To familiarise investigators with the organisation and operations of the accident investigation authority
- (b) To acquire knowledge of investigation management, procedures and techniques (including report writing)
- (c) To practise procedures (e.g. for mobilisation of an investigation team or validation of operations and coordination procedures)
- (d) To become competent in making decision, judgment and analysis
- (e) To acquire skills

2.2 Training of investigators to achieve these objectives may take a number of forms, including:

- In-house indoctrination training
- On-the-job training
- In-house discussion
- Reading material (including investigation reports)
- Practising the use of special tools and equipment
- Attendance of formal courses (in essentially a classroom setting)
- Attendance of safety and investigation conferences, seminars, workshops, etc.
- Airport crash exercise
- Observer attachment to overseas investigation

2.3 For objectives 2.1(a)-(c), the forms of training mentioned in paragraph 2.2 are generally not too difficult to realise. However, for objective 2.1(d), good coaches/instructors are an essential factor for an effective training because such training would involve the devising of realistic scenarios by the coaches/instructors as well as a lot of interaction/analysis/debate/discussion with the coaches/ instructors. In addition, realistic models and even real kits may have to be used.

2.4 For objective 2.1(e), the acquisition of skills in using specialised tools or equipment will usually need a lot of practices. Some may involve training in a laboratory (e.g. downloading of recorders). Some may involve outdoor training to practise using the tools or equipment in a real setting (e.g. detecting signal from underwater locator beacons while on a small boat in the sea), which could provide an opportunity for the investigators to appreciate operational difficulties in using such tool and equipment in a real environment.

2.5 Besides the above-mentioned objectives, there is also a need for training that may allow investigators to appreciate the environmental obstacles that could hamper the investigation tasks or even endanger the investigators. These obstacles pertain to, among others, harsh climate (e.g. in extremely hot or cold area) or in harsh and inhospitable terrain (e.g. dry/arid, mountainous or desert area), as it is not unknown that aircraft have crashed in such areas. Outdoor training on operations in such environment should also be arranged, where possible. This would give the investigators a chance to gauge for themselves their physical and psychological capability to endure the hardship in the course of gaining access to the crash site or of performing investigation tasks on the crash site. This in turn would allow them to know their limits and be aware of the limits of others, with the benefit that they would not inadvertently push themselves or others too hard to the extent of endangering themselves or others, or that they could devise the necessary protective measures to overcome the hardship.

2.6 The types of training mentioned in paragraphs 2.4 and 2.5 are usually not available commercially and States/Administrations would need to organise the training themselves. However, not all the States/Administrations have all the relevant terrain and climatic characteristics to organise such training. It is therefore desirable that those States/Administrations who can organise such training offer to other States/Administrations such training opportunities. This will be entirely in line with the cooperative spirit embodied in APAC-AIG's terms of reference and in the Asia Pacific Code of Conduct On Cooperation Relating To Civil Aviation Accident/Incident Investigation, and will be highly beneficial to collectively enhancing the capabilities of the investigators in this region. It is understandable, of course, that the accident investigation authorities may have a limit to the number of training slots that can be offered to other States/Administrations.

3. ACTION BY THE MEETING

3.1 The meeting is invited to consider suggesting to the APRAST that RASG-APAC encourage States/Administrations to invite investigators from other States/Administrations to join the training that they organise, in order to help raise the knowledge, skill and competency level of investigators in the APAC region.

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