



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

IMPROVEMENT OF USOAP AIG EI RATES OF STATES/ADMINISTRATIONS

(Presented by Chairman, APAC-AIG)

SUMMARY

This paper proposes a five-day training course to assist States/Administrations in improving their USOAP audit Effective Implementation rate in the area of aircraft accident and incident investigation.

1 INTRODUCTION

1.1 The results of ICAO USOAP audits using a Comprehensive System Approach show that the Effective Implementation (EI) rate for APAC States in the area of aircraft accident and incident investigation (AIG) ranges from zero to almost 97%, with an average of 45.68%. Fifteen States are above the average and 21 States below. This APAC average is below the global average AIG EI rate of 54.89%.

1.2 The Regional Aviation Safety Group - Asia and Pacific Regions (RASG-APAC) has set a target for APAC States/Administrations to achieve an average AIG EI rate of at least 60% by 2017.

2 DISCUSSION

2.1 **Attachment A** is a list of some USOAP AIG protocol questions (PQs) in terms of low Effective implementation status (less than 40% EI rate) on the part of the APAC States. This is based on a review of the protocol question (PQ) results (as of 5 October 2016) in the ICAO iSTARS database.

2.2 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 With a view to improving the USOAP AIG EI rates, a five-day training course as suggested in **Attachment B** is proposed. The APAC-AIG can assist the ICAO APAC Regional Office in the organisation of the course (e.g. in sourcing for instructors).

3 ACTION BY THE MEETING

3.1 The meeting is invited to consider requesting ICAO APAC Regional Office to organise the training course as suggested in Attachment B.

USOAP AIG PQs that are less than 40% EI rate

PQ	EI%	Protocol Questions (PQ)	CE
6.004	33.33	Does the State's primary aviation legislation clearly delegate authority to the Director General (DG)/chief executive officer (CEO)/Chairman Director/Chief Investigator/Chairman of the specific agency, commission or board designated to conduct aircraft accident and serious incident investigations?	CE-1
6.005	31.43	Does the legislation provide for the independence of the investigation process and of the authority in charge of conducting aircraft accident and serious incident investigations?	CE-1
6.028	33.33	Has the State established means to ensure that administrative or judicial proceedings do not interfere with investigations conducted under Annex 13?	CE-1
6.031	34.29	Does the legislation contain provisions to ensure the non-disclosure of investigation records (other than CVR and CVR recordings) for purposes other than aircraft accident or incident investigation?	CE-1
6.015	31.43	Has the State developed and implemented procedures for the amendment of its accident and serious incident investigation enabling regulations and national standards?	CE-2
6.359	25.71	Has the State established and implemented means to ensure: a) the coordination of activities (in particular at the accident site); and b) separation between the investigation conducted under Annex 13 and the one by the judicial authority?	CE-2
6.505	30.30	Has the State promulgated regulations and developed and implemented procedures to ensure that its voluntary incident reporting system is non-punitive and that the sources of the information are protected?	CE-2
6.122	33.33	Has the State/investigation authority established formal means (such as letters of agreement), to be used for investigations that it is conducting, to clarify the entitlements and obligations of each individual participating in the investigation?	CE-3
6.135	33.33	If the State uses experts seconded by the State's CAA or other organizations in the State as investigators, has it established and implemented measures to avoid possible conflicts of interest?	CE-3
6.123	37.14	Has the State/investigation authority developed a formal training programme detailing the type of training to be provided to its investigators?	CE-4
6.125	26.47	Does the investigation authority develop a periodic training plan detailing and prioritizing the type of training to be provided during the established period?	CE-4
6.127	23.53	Is the training programme appropriately implemented?	CE-4
6.129	37.14	Has investigation authority established and implemented a system for the maintenance of training records for its technical personnel, including records on the OJT received?	CE-4
6.131	31.43	Does the investigation authority provide investigators with initial and recurrent training related to safety at the accident site?	CE-4
6.201	37.14	Does the State provide its investigators with all necessary investigation equipment to enable the conduct of investigations?	CE-5
6.205	37.14	Has the investigation authority developed and implemented guidelines to ensure that its investigators have their investigation field kits and essential personal items packed and ready to proceed without delay to the accident site?	CE-5
6.207	34.29	Does the State provide its investigators with all necessary protective equipment to address biological hazards and other hazards at accident sites?	CE-5

PQ	EI%	Protocol Questions (PQ)	CE
6.303	37.14	Has the investigation authority developed and issued an investigation procedures manual or equivalent guidance material, containing the policies and procedures to be followed for investigation related tasks?	CE-5
6.329	38.24	Has the State, as the State of the Operator, established and implemented procedures to ensure that it provides the State conducting the investigation with the details of dangerous goods on board the aircraft with a minimum of delay and by the most suitable and quickest means available?	CE-5
6.361	34.29	Has the State established and implemented procedures to ensure the timely recovery and read-out of the flight recorders?	CE-5
6.363	26.47	Has the State established and implemented procedures to ensure that it complies with Attachment D to Annex 13 regarding the choice of the read out facility and the participation of the State of Design/Manufacture and the State of the Operator in the flight recorder read out and analysis activities?	CE-5
6.373	37.14	Has the investigation authority established and implemented procedures and guidance material for the protection of investigators against biological hazards and other hazards at the accident site?	CE-5
6.381	34.29	Has the investigation authority established and implemented procedures to ensure that relevant and timely information on the progress of the investigation will be provided to the families and accident survivors?	CE-5
6.395	37.14	Has the State established and implemented procedures to ensure that it appoints advisers proposed, as applicable, by the operator or by the organizations responsible for the type design and the final assembly of the aircraft?	CE-5
6.397	37.14	Has the State, as a State having suffered fatalities or serious injuries to its citizens, established and implemented procedures to send an expert to the State of Occurrence?	CE-5
6.405	25.71	Has the State, as the State conducting the investigation, established and implemented procedures to ensure that the final report is completed as soon as possible and that, if the report is not made available within 12 months, an interim statement is made publicly available on each anniversary of the occurrence, detailing the progress of the investigation and any safety issues raised?	CE-5
6.409	34.29	Has the State, as the State conducting the investigation, established and implemented procedures to ensure that a copy of the draft final report is sent for comments: a. Through the State of the Operator to the air operator and b. Through the State of Design and State of Manufacture to the organizations responsible for the type design and the final assembly of the aircraft?	CE-5
6.425	38.24	Has the State, as the State receiving safety recommendations from other States, established and implemented procedures: a) to monitor the progress of any action taken in response to these safety recommendations, and b) to ensure that it informs the proposing State within 90 days of the preventive action taken or under consideration or the reasons why no action will be taken?	CE-8
6.431	31.43	Has the State, as the State conducting the investigation, developed and implemented procedures to ensure that it sends preliminary reports, when the aircraft involved in an accident is of a maximum mass of over 2 250 kg, to all involved States and ICAO?	CE-8

Proposal for a 5-day training course to assist States/Administrations to improve USOAP audit Effective Implementation rate on accident investigation

Day	Area	Training modules	Estimated Duration In Days	Targeted CE
1	Objectives of PQs and compliance with PQs' requirements	<ul style="list-style-type: none"> a. Understanding what the PQs are aiming at b. Organisation of evidence and documents needed for the USOAP audit 	1	CE-1 CE-2
2	Documentation of the investigation process	<ul style="list-style-type: none"> 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 	1	CE-2 CE-5 CE-8
3	Documentation of the investigation process (continued from Day 2)	<ul style="list-style-type: none"> 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) 	1	CE-2 CE-5 CE-8

Day	Area	Training modules	Estimated Duration In Days	Targeted CE
4	Organising investigation manpower and coordination with external agencies	<ul style="list-style-type: none"> a. Volunteer investigators b. Regional cooperation c. 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. 	0.5	CE-3
4	Administration of an accident investigation unit	<ul style="list-style-type: none"> a. Day-to-day running b. Duty officer system c. Immunisation for investigators d. Attachment to established accident investigation unit 	0.5	CE-2 CE-3
5	Training system, plan and programme	<ul style="list-style-type: none"> a. Training objectives b. training programme <ul style="list-style-type: none"> i. core training ii specialist training iii optional training 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 	1	CE-4