



WORKING PAPER

ASSEMBLY — 40TH SESSION

TECHNICAL COMMISSION

Agenda Item 29: Aviation Safety and Air Navigation Regional Implementation Coordination Mechanisms

ESTABLISHING REGIONAL AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION WORKING GROUPS (AIWGs)

(Presented by the United Arab Emirates)

EXECUTIVE SUMMARY

This working paper presents the benefits of establishing regional accident and incident investigation working groups (AIWGs) to enhance the aircraft accident and incident investigation capabilities of regional States through the sharing of information, knowledge and experience.

Action: The Assembly is invited to:

- a) note the contents of this working paper; and
- b) note and urge states to take as example the Strategy of the Middle East (MID) Region States and the practical model of the accident investigation regional cooperation mechanism (ARCM) of the South American Region.

<i>Strategic Objectives:</i>	This working paper relates to the Safety Strategic Objective.
<i>Financial implications:</i>	Not applicable.
<i>References:</i>	Annex 13 — <i>Aircraft Accident and Incident Investigation</i> Doc 10004, <i>Global Aviation Safety Plan</i> Doc 9946, <i>Manual on Regional Accident and Incident Investigation Organization</i> MID Safety Support Team (SST) Reports and working papers

1. INTRODUCTION

1.1 It is incumbent on the State in which an aircraft accident occurs to institute an inquiry into the circumstances of the accident in accordance with Article 26 of the Convention. This activity has produced a very significant improvement through safety recommendations which implementation has led to improvements in aircraft design, manufacture, maintenance and operation, in addition to other aviation disciplines such as air navigation and aerodromes.

1.2 To assist in maintaining public confidence in the safety of commercial aviation, it is important that aircraft accidents and incidents be properly investigated to determine the probable cause and that the resulting safety recommendations are promulgated appropriately.

1.3 In order for an investigation to be effective, considering the sophistication and complexity of modern aircraft, and the environment in which they operate, the conduct of an accident or incident investigation usually requires participation of experts from many specialized technical and operational fields, and access to specially equipped facilities. This will require the States to establish and implement a readiness plan that will be activated upon the occurrence of an accident or incident. Such a plan may not be implementable in some States due to lack of resources or due to inadequate planning. Some other States do not have specialized technical and operational investigation expertise, or appropriate facilities.

2. DISCUSSION

2.1 The findings of ICAO Universal Safety Oversight Audit Programme (USOAP) indicate that a number of States have not implemented an effective accident and incident investigation system for their aviation activities. The findings have been associated, in general, with a lack of resources, appropriate legislation and regulations, organization, training system, equipment, policies, regulations, and guidance material.

2.2 These findings may not be easily corrected by a State if it lacks sufficient resources. The result will be ineffective investigations that consume the limited resources of the State with outcomes that are not relevant to the actual cause of the accident or incident. This dilemma may prevent the global aviation industry from learning valuable safety lessons from accident and incident investigations.

2.3 On the other side, some States may have the financial ability to acquire the necessary resources (both human and financial), they employ appropriate legislation and regulations, and have established an organization structure, they implement an expensive training system for investigators, own up-to-date equipment, and they have the capability to develop policies, procedures and guidelines for accident and incident investigations. However, the aviation system in these States may not suffer an accident and, accordingly, the investigators may not carry out investigations for a significant period of time. This may deprive the accident investigation authority (AIA) of opportunities to refresh the knowledge and experience of its investigators, and the organization know-how may deplete with time.

2.4 Cooperation among States in accident and incident investigation will provide a platform for the exchange of information, knowledge, and experience. This will give the States an opportunity to update their systems, share their resources, and establish a positive environment for a State to observe or participate in another State's investigation.

2.5 This platform may be established utilizing a group encompassing, among others, State representatives, who can meet periodically and maintain an open communication network to discuss investigation issues. The most practicable platform size will be at the regional level, which may form a leverage to already established global platform embodied by the Accident Investigation Panel (AIGP).

2.6 As a practical example for such regional working groups, the MID Region had presented an initiative, which was approved by the Regional Aviation Safety Group (RASG)-MID/7 Meeting, that took place in Cairo, Egypt, during the period from 15 to 18 April 2019, to establish an ICAO MID Region AIWG which will be tasked to advance strategies, policies, and provisions relevant to the MID Region States' AIAs. A Terms of Reference was also submitted to the meeting for review and approval, and it contained the purpose of the AIWG, its composition, roles, and responsibilities.

2.7 The objective of the ICAO MID Region AIWG is mainly to enhance the effectiveness of MID Region States' aircraft accident and incident investigation capabilities through: sharing of knowledge and experience; support and facilitate cooperation among the MID Region States through managing the activities of the AIG regional cooperation mechanism (ARCM); and consequently facilitate the effective investigation of accidents and incidents as set forth in Annex 13 — *Aircraft Accident and Incident Investigation*, and in support of the *Global Aviation Safety Plan* (Doc 10004, GASP).

2.8 In general, examples of potential work items that could be addressed by a regional AIWG are discussion of investigation methodologies, new investigation topics such as unmanned aircraft systems (UAS) and urban air mobility (UAM), and encouraging and supporting the development of aircraft accident and incident investigation common standards, rules and regulations consistent with the ICAO provisions.

2.9 In addition, a regional AIWG may cooperate and coordinate with all partners for effective use of AIG resources available in the regional States, including expertise, training capabilities, equipment, investigation know-how and information, standards and guidance, etc.; review the results of the aircraft accident and incident investigations undertaken and the safety recommendations issued by the regional States, including the identification of possible trends; develop an agreed and harmonized regional dataset of accidents and incidents and utilizing this database to identify operational safety risks and their corresponding controls; and discussion of initiatives and urgent or important topics for the AIGP or any other international forums established by ICAO and other organizations.

2.10 An AIWG may encompass, in addition to the States' AIAs, representatives from air operators, air navigation service providers, and aircraft manufacturers, in addition to regional and international professional organizations such as the International Air Transport Association (IATA), regional aircraft accident and incident organizations (RAIO), the International Federation of Air Line Pilots' Association (IFALPA), the International Federation of Air Traffic Controllers' Association (IFATCA), the International Society of Air Safety Investigations (ISASI) and its regional chapters.

2.11 The AIWG may meet periodically to discuss an agenda of topics, it may also utilize tele- or video-conference networks on an ad-hoc basis to discuss and exchange opinions on any urgent issues relevant to accident and incident investigations.

2.12 It is important that the Regional AIWG comes under the corresponding RASG framework, and be a promoter of AIG functions. This feature will empower the AIWG to focus its tasks and expedite the process.

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