



ACCIDENT INVESTIGATION AND PREVENTION (AIG) DIVISIONAL MEETING (2008)

Montréal, 13 to 18 October 2008

Agenda Item 1: Annex 13

1.2: Chapter 5 of Annex 13

INVESTIGATION OF ACCIDENTS AND SERIOUS INCIDENTS

(Presented by the United States)

Summary

This paper supports the action proposed by the Secretariat in relation to relevant use of allocated resources for the investigation of accidents; however, it suggests that the Secretariat should delay action on the proposal to mandate that all States investigate all serious incidents.

Action by the meeting is in paragraph 3.1.

1. INTRODUCTION

1.1 AIG/08-WP/3, "Investigation of Accidents and Serious Incidents," presented by the Secretariat, contains two proposals. The first proposal suggests that the allocation of investigative resources should be directed to achieve the greatest possible safety benefit for the traveling public. This concept is fully in concert with the needs of the aviation community and deserves the support of all member States. The second proposal suggests that States be mandated to investigate all serious incidents to aircraft of a mass over 2 250 kilograms by upgrading the Recommended Practice in paragraph 5.1.1 of Annex 13 to a Standard. Such a mandate would remove the flexibility of States to allocate their investigative resources toward those serious incidents that can yield the greatest gains in flight safety. Furthermore, the lack of clear and comprehensive definitions for serious incidents will likely lead to inconsistent interpretations and reporting of events and ultimately could adversely affect the quality of the incident data maintained by ICAO.

2. **DISCUSSION**

2.1 **Investigation of accidents**

2.1.1 The time-tested Standard in Annex 13 paragraph 5.1 – to investigate all accidents – is appropriate to the needs of the aviation industry and to the public at large. However, a review of the investigation of many accidents involving light aircraft indicates a repetition of occurrences that are similar to previous accidents. The benefits of lessons learned in these situations may not, in some cases, contribute to a commensurate improvement in the level of safety. It is appropriate that States be afforded flexibility to adjust the scope of an investigation to derive safety benefits appropriate to the level of available resources. The action proposed by the Secretariat – to include additional text in paragraph 5.4 to provide flexibility to adjust the extent of the investigation – is appropriate.

2.2 **Investigation of serious incidents**

2.2.1 As the aviation industry moves forward toward a more proactive approach to accident prevention, it is appropriate that serious incidents should receive a high level of attention. The Safety Management Systems (SMS) concepts of risk identification and mitigation require a new level of data acquisition and analysis, to include data from serious incidents. However, an ICAO mandate for States to investigate all serious incidents may not be a realistic or attainable goal for all accident investigation authorities due to the sheer volume of aviation activity (and, accordingly, the volume of serious incidents) in many States. Rather, the United States believes that States should continue to utilize resources to investigate all accidents at a level commensurate with their existing resources, while being afforded some flexibility in their investigation of serious incidents per the current recommended practice.

2.2.2 Although the guidance material found in Annex 13, Attachment C, “List of Examples of Serious Incidents,” provides some guidance to States seeking to determine whether a particular occurrence is a serious incident, neither the examples provided in Attachment C nor the definition of “serious incident” found in Chapter 1 provides the kind of definitive criteria required for a State to impose occurrence notification regulations upon the operational community. Event reporting suitable to build useful safety databases will require clearly defined events and supporting aeronautical rules that clearly specify the national obligations for operators, engineers, and service providers. Further, with regard to worldwide flight activity, the notification criteria outlined in the current Annex 13, Chapter 4, if adhered to by accident investigation authorities, will result in an unmanageable flow of serious incident reports. Likewise, a mandate to produce a Final Report for each serious incident, per Annex 13, Chapter 6, will result in an untenable administrative burden on many States, as well as on ICAO itself.

2.2.3 Ultimately, the United States believes that it would be premature to require States to investigate all serious incidents without having first developed a suitable method for efficiently addressing implications such as those discussed in this working paper. Any proposal to upgrade the Recommended Practice to a Standard should provide States the ability to allocate their investigative resources toward those serious incidents that will yield the greatest safety benefits. Finally, it is noted that because not all serious incidents require the same degree of thoroughness and independence of investigation as required by a major accident, many serious incidents can be adequately handled by the States’ SMS programs. It is possible that a comprehensive solution to the investigation of serious incidents may lie outside the confines of Annex 13 and more appropriately, reside within the guidance or directives of the SMS program.

3. ACTION PROPOSED

3.1 The meeting is invited to take into account the comments above to better serve aviation safety and the global accident investigation community and to:

- a) include the additional text in Paragraph 5.4 as proposed by the Secretariat;
- b) recommend that ICAO defer upgrading the investigation of serious incidents to a Standard;
- c) recommend that ICAO establish criteria for definitions of serious incidents that will be suitable for occurrence notification for the operational community; and
- d) recognizing the need for guidance and directives applicable to the full range of investigative and data-gathering activities conducted by States, and recognizing the need for States to appropriately allocate investigative and data-gathering resources, recommend that ICAO develop guidance and directives for SMS activities separately from accident investigation guidance and directives. Such an activity could take the form of a separate section within Annex 13 or, preferably, an entirely new Annex.

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