



WORKING PAPER

**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 Secretariat)

SUMMARY

This paper discusses the investigation of accidents in relation to relevant allocated resources, as well as the need to investigate all serious incidents aimed at gaining more safety information.

Action by the meeting is in paragraph 3.

1. INTRODUCTION

1.1 Paragraph 5.1 of Annex 13 — *Aircraft Accident and Incident Investigation* calls for States to institute an investigation into the circumstances of accidents. Much resource is allocated by some States to investigate all accidents, while the investigation of serious incidents is mostly a Recommended Practice in Annex 13.

2. DISCUSSION

2.1 Investigation of accidents

2.1.1 Being a long-standing Standard in Annex 13, the investigation of accidents is of undisputable value to the prevention of recurrences and significant progress in safety has been achieved through them. There is a consensus in the aviation industry of the need and usefulness of those investigations and that the public at large deserves to know why an accident happened, and otherwise could not have been prevented.

2.1.2 On the other hand, it is well known that many accidents with light aircraft are repetition of past occurrences and the contributing factors are similar to previous accidents. Therefore, the benefits and lessons acquired through those investigations may not always justify the resources allocated that

could have been used towards other types of investigations, such as the investigation of serious incidents in commercial operations.

2.1.3 It is envisaged that a fact-finding type of investigation would suffice in many cases in which the accident involved a light aircraft and in which there were no fatal injuries sustained. In order to achieve this, an addition to the latter part of paragraph 5.4 in Annex 13 is proposed. The proposed text aims at affording the accident investigation authority some flexibility to adjust the extent of an investigation in relation to the safety lessons that are expected to be drawn from the investigation.

2.2 Investigation of serious incidents

2.2.1 Except when the location of a serious incident cannot definitely be established as being in the territory of any State, the relevant investigation is a Recommended Practice in Annex 13. However, serious incidents are defined as an incident involving circumstances indicating that an accident nearly occurred. In fact, the difference between a serious incident and an accident lies only in the results. From an accident prevention perspective, a serious incident should have the same emphasis as that of an accident.

2.2.2 It is recalled that the Council of the European Union, representing twenty-seven States, adopted Council Directive 94/56/EC, dated 21 November 1994, in which Article 4 mandates that, inter alia, serious incidents shall be the subject of an investigation.

2.2.3 Aiming at having a more proactive approach towards the prevention of accidents, it is proposed that States be mandated to investigate serious incidents by upgrading Recommended Practice 5.1.1 in Annex 13 to a Standard. To this end, it is considered that the investigation of serious incidents would have most safety benefits when involving aircraft in commercial operations. It is, therefore, further proposed that the upgraded paragraph 5.1.1 would have a maximum mass limit of over 2 250 kg which would direct the investigations to larger aircraft.

2.2.4 It is recognized that sometimes a serious incident takes place in or over a State that is otherwise not involved with the flight from a flight operation or airworthiness standards point of view. In such situation, it might be more practical for a State to delegate the investigation of a serious incident to, for example, the State of Registry or the State of Operator. In this connection, it is suggested that a note be added to paragraph 5.1.1.

3. ACTION PROPOSED

3.1 The meeting is invited to consider the amendments in the Appendix, which include:

- a) upgrading the investigation of serious incidents to aircraft of a mass over 2 250 kg to a Standard;
 - b) adding a note to paragraph 5.1.1; and
 - c) expanding paragraph 5.4 to allow accident investigation authorities to adjust the extent of an investigation in relation to the safety lessons that are expected to be drawn from the investigation..
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APPENDIX

PROPOSED AMENDMENT TO ANNEX 13

CHAPTER 5. INVESTIGATION

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State of Occurrence

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5.1.1 **Recommendation.**—The State of Occurrence ~~should~~ shall institute an investigation into the circumstances of a serious incident when the aircraft is of a maximum mass of over 2 250 kg. Such a State may delegate the whole or any part of the conducting of such investigation to another State by mutual arrangement and consent. In any event the State of Occurrence should use every means to facilitate the investigation.

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Note 3.— In the case of serious incidents, the State of Occurrence may consider delegating the investigation to the State of Registry or the State of the Operator, in particular in occurrences in which it might be beneficial or more practical for one of these States to conduct the investigation.

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General

5.4 The accident investigation authority shall have independence in the conduct of the investigation and have unrestricted authority over its conduct, consistent with the provisions of this Annex. The investigation shall normally include:

- a) the gathering, recording and analysis of all available information on that accident or incident;
- b) if appropriate, the issuance of safety recommendations;
- c) if possible, the determination of the causes; and
- d) the completion of the final report.

When possible, the scene of the accident shall be visited, the wreckage examined and statements taken from witnesses.

The extent of the investigation and the procedure to be followed in carrying out such investigation shall be determined by the accident investigation authority, depending on the lessons it expects to draw from the investigation for the improvement of safety.

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