



WORKING PAPER

ASSEMBLY — 38TH SESSION

TECHNICAL COMMISSION

Agenda Item 31: Aviation Safety — Emerging Issues

POST-ACCIDENT TESTING OF FLIGHT CREW MEMBERS FOR PROBLEMATIC SUBSTANCES

(Presented by the United States)

EXECUTIVE SUMMARY

States and the aviation industry have increased the level of safety and reduced the rate of aviation accidents through aviation safety initiatives that include the incorporation of ICAO Standards and Recommended Practices (SARPs) into national regulatory structures. An integral part of these improvements has been the broad adherence to the ICAO SARPs, which has contributed significantly to a greater collaborative approach in international accident prevention. To ensure that prevention remains a primary focus in reducing accidents, ICAO and States should seek to identify areas where existing SARPs may be interpreted differently with regard to accident investigations or might be usefully updated. One such area is post-accident testing of flight crews for problematic use of substances. Although post-accident testing is referenced in ICAO SARPs, the lack of a common approach to accident investigations, particularly post-accident testing, may result in an inability of some States to properly determine the existence of or impairment from problematic substances.

Action: The Assembly is invited to:

- a) recommend that ICAO review existing SARPs and guidance material to determine whether a specific Standard should be required, to promote the expeditious testing for the problematic use of substances by any flight crew members following an aviation accident; and
- b) recommend that ICAO, after review and consultation, provide the 39th Session of the Assembly with recommendations toward amending or developing a Standard to provide for this activity.

<i>Strategic Objectives:</i>	This working paper relates to the Safety Strategic Objective.
<i>Financial implications:</i>	
<i>References:</i>	Annex 1 — <i>Personnel Licensing</i> Annex 6 — <i>Operation of Aircraft</i> Annex 13 — <i>Aircraft Accident and Incident Investigation</i> Doc 8984, <i>Manual of Civil Aviation Medicine</i> Doc 9654, <i>Manual on Prevention of Problematic Use of Substances in the Aviation Workplace</i>

1. INTRODUCTION

1.1 The last decade has seen tremendous advancements in aviation safety. Air travel is safer than at any other time in history, in large part because of the cooperation and collaboration of States, ICAO and industry in the manner in which they approach their missions with a common and standardized intent. When aviation accidents do occur, it is critical that States and the aviation industry work together to identify the factors that may possibly have led to an accident, mitigate discovered hazards, and ultimately prevent future accidents by identifying the factors that contributed to the accident. Adherence to the Standards and Recommended Practices (SARPs) in ICAO Annexes contributes significantly to ensuring consistency and harmonization in international accident prevention efforts.

1.2 States are to ensure that investigations are focused on obtaining as much information as possible to assist in expeditiously determining the cause of accidents and the recommended actions to mitigate future risk. Therefore, it is critical to investigate all factors that may have contributed to an accident. Human performance factors in particular are a significant element in the events leading to an accident, and are often cited as a primary cause. Immediately following an aviation accident, investigators must have the ability to collect, preserve and test perishable evidence and determine if problematic substances may have impaired the performance of safety-critical personnel. Current ICAO SARPs and guidance materials do not specifically call for such post-accident testing of surviving flight crew members and other safety-critical individuals following accidents.

2. DISCUSSION

2.1 ICAO has addressed the issue of problematic use of substances and psychological fitness in the Annexes and guidance material. Standards in Annex 1 — *Personnel* and Annex 2 — *Rules of the Air* directed at individuals engaged in safety-critical functions regarding the problematic use of substances. Under those Standards, a person may not exercise the privileges of a license and related ratings or perform a safety-critical function when under the influence of any psychoactive substance that could impair performance. Persons are also directed not to engage in any kind of problematic use of substances. One Recommended Practice addresses the role of Contracting States in the process of preventing the problematic use of substances in aviation. Contracting States should ensure, as far as practicable, that all license holders who engage in any kind of problematic use of substances are identified and removed from their safety-critical functions, and that these individuals do not return to safety-critical functions until the problematic use of substances has either been successfully treated or ceased.¹

2.2 Although the ICAO *Manual on Prevention of Problematic Use of Substances in the Aviation Workplace* (Doc 9654) provides guidance on substance abuse programmes, no specific guidance is given regarding a particular role for the State of the Operator or an operator in identifying and preventing the problematic use of substances by flight crew members and other safety-critical individuals, even though both are uniquely situated to address the problem. A State of the Operator is, however, well-positioned to require its operators to test employees engaged in safety-critical functions for the problematic use of substances.

2.3 Given that the time immediately following an aircraft accident is critical to focusing on possible accident factors, the United States believes that the existing provisions of the ICAO Annexes do

¹ ICAO Annex 1, Recommendation under Chapter 1, Section 1.2.7.3

not sufficiently provide for or require post-accident testing of safety-critical personnel for problematic substances.

2.4 Although incidences of problematic use of substances has historically been low, post-accident testing can quickly eliminate one of the potential factors that may have contributed to an accident. In addition, routine post-accident testing could continue to validate whether the problematic use of substances by safety-critical personnel remains relatively rare.

2.5 The establishment of an ICAO Standard outlining a common approach for States to use in performing and communicating post-accident testing of safety-critical persons for the problematic use of substances would promote international acceptance and implementation of such programmes. In this regard, it is envisioned that in the event of an accident, the operator would ensure timely post-accident testing under a programme established pursuant to Standards established by the State of the Operator. The operator would be obligated to arrange for post-accident testing without regard to where the accident occurs. In the event that the State of the Operator does not have adequate requirements for post-accident testing in accordance with international protocols, then such requirements should be established. In addition, the Standard should permit the State of Occurrence to request post-accident testing if the State of the Operator has not established requirements for a testing programme. Because systematic post-accident testing would include sensitive personal information, the process and methods employed to comply with the development of a Standard need to be determined.

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