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WORKING PAPER

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THIRTEENTH AIR NAVIGATION CONFERENCE

Montréal, Canada, 9 to 19 October 2018

COMMITTEE B

Agenda Item 6: Organizational safety issues
6.1: Strategic plan
6.1.1: Vision and overview of the Global Aviation Safety Plan (GASP), 2020-2022 edition

ANNEX 13 COMPLIANCE, ICAO USOAP AND THE CMA CHALLENGE

(Presented by Trinidad and Tobago)

EXECUTIVE SUMMARY

This paper presents an alternative solution to States struggling to satisfy the requirements of ICAO Annex 13 — *Aircraft Accident and Incident Investigation*, the Universal Safety Oversight Audit Programme (USOAP) and the continuous monitoring approach (CMA).

This paper proposes that States with less complex aviation environment be treated in accordance with the long established system used in evaluating compliance with ICAO Annex 8 — *Airworthiness of Aircraft*.

This paper proposes that having Member States develop applicable procedures will be far more effective, efficient, and productive and will satisfy the requirements of the audit. For emphasis, States will be mandated to have and to demonstrate that they have a system for accident investigation, than to establish regional accident and incident investigation organizations (RAIOs).

This facilitates independence of the investigation and States must know that having an independent system does not mean that they must engage in huge non-productive expenditure.

Action: The Conference is invited to:
a) acknowledge that there is real difference between less developed States and States with complex aviation industries which include aircraft manufacturing and those that do not have manufacturing capabilities;
b) recommend to the Council that Annex 13 be subdivided into sections similar to those of Annex 8 such that all States can more meaningfully meet the requirements of the audit program; and
c) recommend that the process for amending associated manuals be established.

1. INTRODUCTION

1.1 This paper is developed as a result of review of the current system that all States must satisfy in complying with Annex 13. Over the last seventeen years Trinidad and Tobago has grappled with the issue of satisfying the requirements of Annex 13 for accident investigation. The current approach to auditing seems to suggest that a State must have an accident in order that it can tick all the boxes of the USOAP and CMA protocol questions. This approach is self-defeating because the primary purpose of accident investigation is to determine cause and prevent recurrence.

1.2 Various reports of audits conducted of States in the North American, Central American and Caribbean (NACC) Region continue to show that compliance with ICAO Annex 13 remains relatively low and remains a challenge for small States.

1.3 To solve this challenge one of the recommendations that has been discussed repeatedly over the last five years with the European Union (EU) and the NACC Office has been the formation of an RAIO properly staffed and resourced.

1.4 Trinidad and Tobago is of the view that this approach will not resolve the issues as no office can be resourced with all the trained, qualified and experienced personnel 365 days of the year, 24 hours a day to basically be on standby. Our governments will not pay for this system. Obtaining the facilities and keeping it current will be only one of several challenges.

1.5 This paper proposes that it is far more effective, efficient, and productive and that it satisfies the requirements of the audit that States should be mandated to have and to demonstrate that they have a system that facilitates the independence of the investigation free from interference and biases.

2. DISCUSSION

2.1 Our experience is that a cadre of inspectors have completed several hours of classroom accident investigation training but are not qualified to lead any accident investigation because they have no practical experience on the job (on-the-job training (OJT)).

2.2 It is preferable that Trinidad and Tobago should never ever gain any practical experience because to do so would be as a result of an occurrence that involved the loss of several lives and property.

2.3 Small island States similar to Trinidad and Tobago do not currently have the complexity of aviation activity that enables the State to have the technical, human and financial resources required to efficiently conduct an accident investigation.

2.4 Experience in treating with several aircraft incidents over the years is that these can be satisfactorily resolved through cooperation with the various States of design and manufacture whenever there is an incident. This has also worked whenever there have been accidents in the Region.

2.5 To put this argument into perspective, operating into the Caribbean and into Trinidad and Tobago we have the Boeing 777, Boeing 737, ATR 72, ATR 42, Cessna Caravan, Boeing 767, Embraer 190 to name a few. It is uncertain that the European Aviation Safety Agency (EASA) or Boeing will be willing to share their design data including hoop stress and strain data, or their systems for analysis of flight data recorder and cockpit voice recorder so that Trinidad and Tobago can make a meaning full analysis of the last few hours or minutes of a flight.

2.6 The point to be emphasized is that an audit that seeks to suggest that a State has all the facilities and resources for the different types of aircraft operating into its jurisdiction may be overly optimistic. The structure of these audits should be reviewed.

PROPOSAL

2.7 It is proposed that the principles of Annex 8 be adopted for Annex 13 along with establishing similar guidelines to those which guide the structure of Doc 9760, *Airworthiness Manual*, where continuing airworthiness responsibilities of States is treated different from those for aircraft design, production and manufacture.

2.8 The associated *Manual of Aircraft Accident and Incident Investigation* (Doc 9756), Part I — *Organization and Planning*, and the *Manual on Accident and Incident Investigation Policies and Procedures* (Doc 9962) should be amended to be consistent with a revised Annex 13 so that all States can be audited against Standards which are achievable.

2.9 It must be clear that a State of occurrence which is also a State with responsibilities for design and manufacture will be required to address a different set of protocol questions if not all as opposed to those states which do not have complex aviation industries and that are not engaged in design or manufacture.

2.10 So with an amended Annex 13 and guidance manual of procedures for accident investigation States can be in a position to achieve and demonstrate compliance with the Annex.

INDEPENDENCE OF INVESTIGATOR IN CHARGE

2.11 This issue is stymied because in a number of States the pool of aviation resources with the training and expertise lay within the civil aviation authority who are normally also responsible for certification and surveillance.

2.12 It is proposed that this can be solved by each State implementing those laws, regulations and associated guidance procedures that protects the independence of the investigator in charge and the investigation.

3. **CONCLUSION**

3.1 This paper does not seek to reinvent the wheel but to ensure an equitable system of auditing be considered so that States with less complex aviation environment can achieve and demonstrate compliance with the Annex.

3.2 It is proposed that the proposals referenced above be adopted, and that Doc 9756 and Doc 9962 be reviewed for evaluating all countries for compliance with the requirements of ICAO Annex 13.

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