



WORKING PAPER

COUNCIL — SPECIAL MODEL SESSION

Subject No. 01: Challenges relating to the shortage of skilled aviation safety inspectors

Presented by United States of America

EXECUTIVE SUMMARY

Action: The Council is invited to:

- a) Recognize that an issue exists regarding severe shortages of aviation safety inspectors in all aspects of the field;
- b) Acknowledge that several credible sources of data exist confirming and compounding the existence of the shortage; and
- c) Consider the allocation of appropriate funds within the current budget framework in the near future for the establishment of a focused taskforce to evaluate the shortage and identify short and long-term solutions of the problem.

<i>Financial implications:</i>	Near-term work will be accomplished within the existing budget of the organization. This near-term work will generate budget and long-term work programme that will be submitted to the 39 th Assembly.
--------------------------------	--

<i>References:</i>	2010 Universal Safety Oversight Audit Programme 2013 Aviation Safety Workforce Plan
--------------------	--

1. INTRODUCTION

1.1 Alleviating the worldwide shortage of skilled aviation safety inspectors should continue to be a primary focus of the ICAO Next Generation of Aviation Professionals Program. Air carrier and general aviation safety inspectors are accountable for evaluation of airmen, training programs, equipment and facilities. In addition, the inspectors investigate violations, incidents and accidents. An insufficient number of safety inspectors can have a direct impact on global aviation safety. The shortage has become apparent through the observations of job vacancies and recognition that many qualified aviation safety inspectors have transferred to other departments or industries. The International Civil Aviation Organization's (ICAO) 2010 Universal Safety Oversight Audit Programme reported descriptive statistics pertaining to 165 audited States. The following sections highlight areas in the audit regarding the need for aviation safety inspectors globally ~~– s-~~Specifically, in the areas of Critical Elements (CEs) three and four. In addition, there is discussion pertaining to the aviation safety workforce challenges in the United States.

2. CONSIDERATION OF ISSUES

2.1 The International Civil Aviation Organization has defined eight Critical Elements (CE's) of safety oversight. These CEs have been deemed critical and are required for implementation of safety related international standards. The eight CE's are:

- Primary Aviation Legislation
- Specific Operating Regulations
- State Civil Aviation System and Safety Oversight Functions
- Technical Personnel Qualifications and Training
- Technical Guidance, Tools and Provisions of Safety-Critical Information
- Licensing, Certification, Authorization and/or Approval Obligations
- Surveillance Obligations.
- Resolution of Safety Concerns

2.2 **Critical Element-3** refers to establishment of a Civil Aviation Authority (CAA) and/or other relevant authorities or government agencies, headed by a Chief Executive Officer, supported by the appropriate personnel and provided with adequate financial resources. The State authority must have stated safety regulatory functions, objectives and safety policies.

2.2.1 Sixty-one percent of audited States (165) lack effective implementation with respect to staffing and recruitment procedures, which are necessary to enable States to recruit a sufficient number of aviation safety inspectors and personnel. This may be caused by the lack of financial resources allocated to such programs.

2.2.2 Forty-three percent of the audited States lack sufficient personnel to complete the functions related to personnel licensing.

2.2.3 Sixty-four percent of audited States do not have a sufficient number of flight operations inspectors or personnel to allow the State to meet its safety oversight responsibilities.

2.2.4 With respect to aircraft operations, 64% of the audited States have an insufficient number of flight operations inspectors to allow the State to meet its safety oversight responsibilities. Almost half of the audited States have an insufficient number of airworthiness inspectors, while 23% have an insufficient number of airworthiness engineers to effectively carry out critical job functions.

2.2.5 Results indicate approximately 70% of the audited States do not employ a sufficient number of qualified and experienced Air Navigation Services (ANS) inspectors to carry out regulatory functions.

2.2.6 Of the audited States 56% do not have sufficient qualified human resources to meet functional obligations relating to the investigation of aircraft accident and incidents.

2.3 **Critical Element-4** refers to the establishment of minimum knowledge and experience requirements for the technical personnel performing safety oversight functions and the provision of appropriate training to maintain and enhance their competence at the desired level. The training should include initial and recurrent training.

2.3.1 Approximately 52% of the audited States do not have adequately qualified officials responsible for the oversight of the transport of dangerous goods by air, while 67% of audited States do not provide appropriate training to inspectors to allow them to effectively perform dangerous goods inspections and oversee dangerous goods programmes.

2.3.2 With respect to aerodromes, approximately 54% of audited States have not established an organizational structure to effectively address the certification and surveillance of aerodromes. Consequently, technical personnel qualifications and experience have not been well established.

2.4 **United States of America**-According to the Federal Aviation Administration (FAA) (2013) Aviation Safety Workforce Plan, many of the qualified aviation safety inspectors and personnel were hired during their mid or late careers, thus making the workforce much more mature than other departments. Forty-two percent of the aviation safety personnel are eligible for retirement within the next 5 years. The projected rate of attrition is expected to be 7.4 percent through 2022. In response to the data, the Aviation Safety Workforce Plan identifies 6 areas to meet hiring challenges. These areas are:

- Hiring
- Certification
- Training and Development
- Career Paths
- Promotion
- Workforce and Succession Planning

3. FINANCIAL IMPLICATIONS

3.1 This paper calls for the Council to consider the establishment of a taskforce that will identify a work program and budget that will be considered by the 39th Assembly. Near-term support of the task-force should be accomplished within the constraints of the current budget.

4. ACTION

The Council is invited to:

- 4.1 Note the ongoing challenge of recruiting, hiring, training, and retaining aviation safety inspectors in contracting States.
- 4.2 Prioritize measures that streamline safety workforce promotion, and training.
- 4.3 Consider the establishment of an ICAO task force to evaluate the current shortage of qualified inspectors and develop mitigating strategies. These strategies should be developed for the consideration of the 39th Assembly.
- 4.4 Call upon member States to implement and promote policies that encourage the functions of safety inspectors and personnel.

5. CONCLUSION

Data indicates a worldwide shortage of aviation safety inspectors and related personnel, including the United States. Furthermore, data indicates challenges implementing policies promoting the function of safety inspectors. Aviation safety inspectors are crucial to the continued safe and effective operation of global aviation. Establishment of policies, organizational hierarchies, clear job descriptions, recruiting plans, hiring initiatives, training programs, and resource allocation for safety inspectors can assist in improving global aviation safety and efficiency. Cooperation from member States can assist in improving and expanding the current programs relating to the aviation safety workforce.