



WORKING PAPER

COUNCIL - SPECIAL MODEL SESSION

Agenda Item 45 : Challenges relating to the projected shortages of skilled aviation personnel

SOLUTIONS FOR SHORTAGE OF PERSONNEL IN AVIATION SECTOR

(Presented by United Republic of Tanzania)

EXECUTIVE SUMMARY

The International Civil aviation (ICAO) is the global body charged with the responsibility of formulating policies and developing standards to promote safety for the aviation sector. Statistics show that between 2005 and 2015, 73% of the U.S. Air Traffic Controller population will have reached retirement age. ICAO too is facing similar challenges, with some 25% of the workforce poised to reach retirement age by 2016. ICAO forecasts that by 2030 aviation workforce requirements Would be in the area of 980,000 pilots and 1.16 million maintenance personnel worldwide. This data shows that this is a cause for concern and immediate action needs to be taken. ICAO's major aim is to ensure sustainable growth of the global civil aviation system, and one of the ways of doing this would be to ensure that there is smooth transition to curb the shortage of personnel in the aviation sector.

Actions: The council is invited to;

- a). To note the contents of this paper
- b) Facilitate a stakeholders forum at Regional level to help in equipping the younger generation or Next generation
- c). Support this initiative financially
- d) Encourage Member States to start next generation training for their own aviation professionals
- e.) Consider possible review of Annex 1 to the Chicago Convention to incorporate standards and Recommended Practices supportive of training and retaining young personnel .

<i>Strategic Objectives:</i>	This working paper relates to the 2 nd Strategic Objectives of ICAO: Air Navigation Capacity and efficiency
<i>Financial implications:</i>	ICAO support of the initiative through the Budget Donations and sponsorships from industry including manufacturers
<i>References:</i>	1). Annex 1 to the Chicago Convention; 2) ICAO newsroom publication; Shortage of skilled aviation professionals; 3). ICAO Global and regional 20 year forecasts; 4). ICAO Journal Vol. 64, No. 6, 2009; 5). ICAO training report Volume 3. Number 1 2013 6). Tanzania Civil Aviation Authority; Strategic Plan 7). http://m.jamaicaobserver.com/mobile/business/-Global-aviation-at-crossroads-_13564160

1. Introduction

- 1.1. Recent ICAO statistics and data show that there is a projected shortage of skilled aviation professionals that is about to happen in the next five years. The Next Generation of Aviation Professionals (NGAP) is one of the initiatives that ICAO has embarked on and this is a great step in ensuring continuity with regards to aviation professionals.
- 1.2. Studies have further shown that between 2005 and 2015, 73 per cent of the US Air Traffic Controller population would have reached retirement age. ICAO too is facing similar challenges, with some 25 per cent of their workforce poised to reach retirement age by 2016. Scholars have argued that replacing one generation of experienced technical professionals with another is not as simple as upgrading infrastructure or buying new aircraft. ICAO forecasts that by 2030 aviation workforce requirements will be in the area of 980,000 pilots and 1.16 million maintenance personnel worldwide. Therefore training and equipping personnel would be the best way to begin tackling this problem.

2. Background

- 1.1. The Next generation of aviation professionals programme promotes solutions specific to the projected global shortages in skilled aviation personnel, focusing on primarily recruiting and retaining strategies and new methods of training. It is crucial to take note that the signing of a new agreement with ACI (Airports Council International) and IATA supports a new young aviation professionals programme. In a more generalized sense, ICAO is also adopting its training resources and guidance to reflect latest developments. This includes the development of interactive; self guided learning tools as well as supporting new solutions such as interactive flight training and engineering software. This initiative will select talented candidates with suitable levels of basic aviation knowledge and expose them to real-world work programmes and projects to help enrich their sector experience.
- 1.2. Looking at Tanzania, and other African countries the brain drain and brain gain has resulted in considerable consequences. The alarming shortage in terms of skilled professional in the aviation sector cannot be over emphasized. This has forced the country into brain gain where they have hired pilots from outside, hence increasing operational costs. This in turn results in higher airline operation taxes and over taxed services which then make air travel expensive and constrains the developments of low cost carriers(LCCs).
- 1.3. According to the ICAO journal Number 6, Aviation & Sustainability, aviation professions are not attractive enough to potential candidates. Mostly because aviation has other careers to compete with e.g. medicine. The article noted that training capacity is insufficient and cannot meet the demands of the amount of personnel needed. Also, sadly access to affordable training does not exist as aviation is seen as a privy for rich individuals which results in mediocre outcomes.

2. Consideration of Issues

3.1 The lack of aviation personnel has been at the forefront of most discussions and meetings in ICAO and as well as being part of its fundamental strategies. It cannot be overly emphasized the need for quick and swift action to avoid a looming crisis of a total lack of personnel.

3.2 From a global perspective the solution must be globally harmonized and include human resource planning tools and educational programmes adapted to the next generation, and wide ranging cooperation among concerned stake holders.

3.3 A step more detailed solution would be broken down in the following ways:-

- 1) Formulation of standardized policies on NGAP initiatives including affirmative action when providing employment opportunities especially at entry levels and ensure that member countries inculcate such policies in their own local legislations and if necessary a possible review of Annex 1.
- 2) Motivation and Educational awareness in schools from elementary level in order to spark interest in students at an early age.
- 3) Funds such as the proposed Human Resources Development Fund (HRDF) should find ways to inject funds into existing youth funds in countries for the benefit of aviation and sponsoring students to study aviation related fields.
- 4) Ensuring that most countries have accredited education in aviation that is easily available such as TRAINAIR PLUS institutions. Development of new Standard Training Package (STPs) or repackaging to provide creative and innovative ways of learning to sustain interest of the young professionals.
- 5) Having forums such as the NGAP not just on a global level but on a regional, national and local level to ensure recruitment and participation of young people in the sector.
- 6) Governments and industry to establish mentoring programmes for the young generation so as to replace the body of knowledge lost through natural attrition.
- 7) Consideration of giving professional recognition to aviation engineers to raise the profile of aviation engineers.

3. Financial Implications:

4.1 States, industry stakeholders including manufacturers *inter alia* by providing sponsorship opportunities to train young and able students in the aviation disciplines.. Industry should be encouraged to invest in training facilities to ensure that there are numerous facilities for learning and training to support future growth. ICAO to commit a budget for NGAP initiatives,

5.0 Action

5.1. Action to be taken by the Council is in the Executive Summary

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