



WORKING PAPER

**SPECIAL AFRICA-INDIAN OCEAN (AFI)
REGIONAL AIR NAVIGATION (RAN) MEETING**

Durban, South Africa, 24 to 29 November 2008

**Agenda Item 5: Development of a set of comprehensive work programmes in the safety field
(Safety Committee)**

SKILLS SHORTAGE IN AVIATION FIELDS IN AFRICA

(Presented by the Secretariat)

SUMMARY

This paper outlines the skills shortage in African regulatory bodies and in the African aviation industry. The Comprehensive Systems Approach (CSA) of the Universal Safety Oversight Audit Programme (USOAP), launched by ICAO in 2005, has demonstrated that the large majority of African States are facing problems in recruiting and retaining sufficient personnel with the necessary expertise to carry out their regulatory functions. In addition, various recent studies have shown that there is a shortage of trained personnel in the aviation industry as a whole. This problem has been compounded by the migration of personnel to other markets and by the lack of training facilities in Africa. A plan is urgently required to address these shortages in order to mitigate their risks/impact on aviation safety and to ensure the safe and sustainable growth of air transport.

Action by the meeting is in paragraph 4.

1. INTRODUCTION

1.1 The shortage of skilled personnel in the African aviation industry and in African regulatory bodies has been a cause of serious concern for many years. What is particularly worrisome is that this shortage has recently been intensifying. While the lack of skilled personnel in aviation-related fields is not limited solely to African States, African civil aviation faces additional problems due to the migration of aviation experts looking for better opportunities overseas. Many experts in the region have also been retiring and African training institutions have not been able to fill these gaps. In order to address this issue Africa should take advantage of initiatives being implemented in other regions, by identifying and quantifying its training needs, and outline a plan to address the lack of qualified personnel. These actions are vital for the safety and security of civil aviation.

2. DISCUSSION

2.1 The aviation sector requires highly-skilled experts. It is well known that skilled personnel such as pilots, cabin crew, maintenance technicians and engineers, air traffic controllers, aerodrome technicians, telecommunication technicians, firefighters, etc., are the biggest source of competitive advantage within the aviation industry, and that the safety of the travelling public relies heavily on their expertise. Aviation Human Resource Managers in Africa, like their colleagues in other parts of the world, are now facing the challenge of a shortage of personnel in many of these key areas. This is compounded by the fact that Human Resource Managers are struggling to find training organizations within Africa that offer initial, recurrent or specialized training. A further problem is that unfavourable conditions of employment make it difficult to retain trained personnel, which negatively affects the development of skills and the establishment of training organizations in Africa.

2.2 The lack of adequate training organizations in African States, with a few exceptions, makes the training of pilots to fly commercial jetliners very expensive. To address the shortage of pilots, some African airlines have launched their own cadet pilot training programmes. However, the high turnover rate amongst pilots, once trained, makes it prohibitively expensive for African States and operators to invest in this type of training. The cause of this high turnover is twofold. In the first place, the exceptional growth of the aviation industry in the Middle East and in some Asian States continues to attract pilots from everywhere. Second, the financial situation of many African airlines has contributed to pilots leaving to search for other opportunities. As a result of the migration of trained pilots away from the continent, Africa has been left with many uncertainties with respect to the level of expertise of remaining personnel. While the severity of this migration varies from one State to another, the overall picture gives the appearance of a mass exodus, with a consequent skills crisis that may be endangering aviation safety.

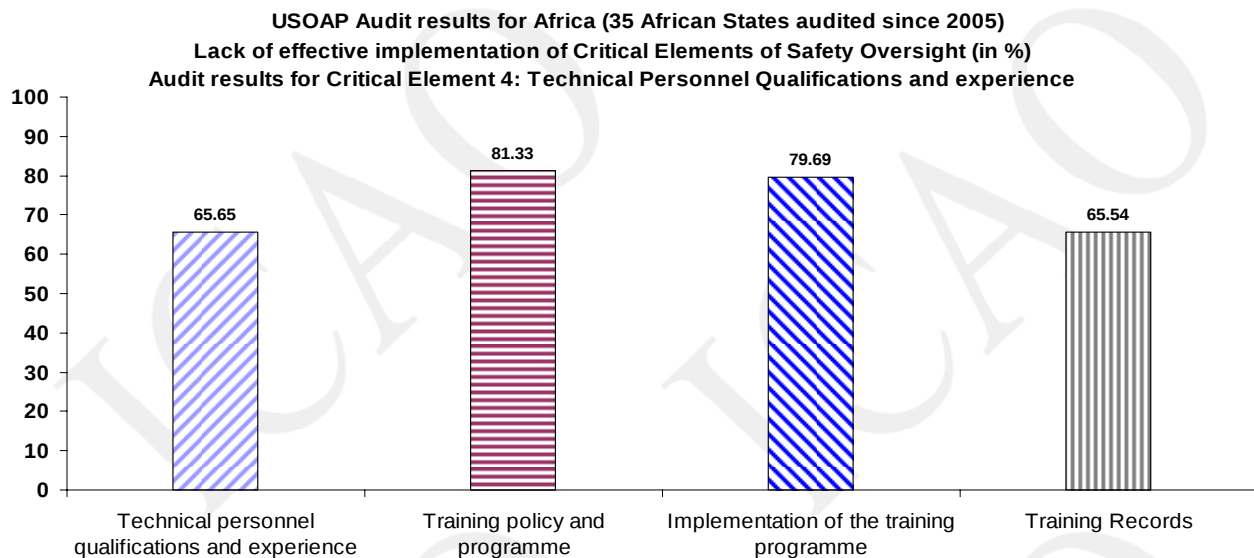
2.3 The skills shortage is also affecting other aviation specialties and is jeopardizing the conditions for a safe and sustainable growth of air transport. As indicated in WP/31, paragraph 2.1, Africa had the second highest regional growth rate per year between 2006 and 2007, the traffic still averages 2.6 per cent of the global civil aviation activities. Statistics also reveal that 126 million passengers are carried in Africa. However, while this growth may be limited, it will still impose its own problems for African States, as the continent must also comply with increasingly stringent international safety, security and environmental standards. Strengthening the capacity of African training organizations is key to sustainable development of civil aviation in Africa. Consequently, a strong emphasis should be placed on the quality of training and education in the region, in order to ensure its effectiveness.

2.4 In addition to the skills shortage in the aviation industry, the Comprehensive Systems Approach (CSA) of the Universal Safety Oversight Audit Programme (USOAP), launched by ICAO in April 2005, has revealed that the large majority of African States are facing problems in recruiting and retaining sufficient personnel with the necessary expertise to carry out their regulatory functions. The figures below summarize the main problems identified by USAOP CSA audits of thirty-five African States in the area of training:

- a) technical personnel qualification and experience not appropriately identified (more than 65% lack of effective implementation);
- b) lack of an established training policy and programmes based on a training needs analysis (more than 81% lack of effective implementation);
- c) training programmes not implemented or no training provided (almost 80% lack of effective implementation); and

- d) lack of evidence of training provided due to basic practices, such as record keeping, lacking (65% lack of effective implementation).

2.5 The AFI Comprehensive Implementation Programme (ACIP) work programme includes the conduct of gap analysis in a majority of States in Africa with the aim of establishing a long term plan. This gap analysis is driven by several data set, including the findings of safety oversight audits. As indicated in paragraph 2.4, the lack of qualified technical personnel is a key finding for Africa. Therefore, training and retention of qualified personnel should constitute an essential element in the establishment of priorities in the ACIP work programme.



3. CONCLUSION

3.1 Africa faces an enormous challenge to make its air transport system safe and sustainable. Such a goal is not achievable without a comprehensive and consistently applied plan aimed at developing skills for aviation. The present skills shortage constitutes a latent condition which impacts aviation safety across the civil aviation sector in Africa. Therefore, a plan to mitigate the risks/impact of this shortage on aviation safety is urgently required.

3.2 Furthermore, Africa needs to develop and implement a strategic plan to address its basic need for skilled and qualified personnel and in order to stop the loss of badly needed human resources. A comprehensive training needs analysis should be carried out as an outcome of the gap analysis with a view to identifying solutions that can be implemented at regional and subregional levels. These solutions can include the availability of training organizations, the implementation of training plans and the sharing of competencies between States. On this basis, the meeting is invited to adopt the following recommendation:

Recommendation 5/x — Conduct a training needs analysis

That based on aggregated results of the gap analysis, ACIP include as part of its work programme, the conduct of a training needs analysis. This training needs analysis would provide the basis to establish a strategic plan to increase quality training capacity in African States.

4. **ACTION BY THE MEETING**

- 4.1 The meeting is invited to approve the draft Recommendation in paragraph 3.2 above.

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