

**Summary of the discussions of the Follow-up meeting of the 1<sup>st</sup> Pan-African Aviation Training Centres Coordination Conference, held in Johannesburg, South Africa, 04 – 05 May 2009**

1. Following recommendation 5/8 from SP/08 AFI-RAN, a first Pan. African Aviation Training Centers Coordination Conference was held in Niamey, Niger, 17-19 February 2009. A follow-up meeting was held in Johannesburg, South Africa, 04-05 May 2009. It was jointly organised by the AFI Comprehensive Implementation Programme (ACIP) and the African Civil Aviation Commission (AFCAC), kindly hosted by Airports Company South Africa (ACSA) and sponsored by SITA. It brought together more than 48 delegates from 16 countries. The delegates were senior managers of 13 Aviation Training Organizations, as well as representatives of civil aviation authorities, services providers and regional organizations, from 16 countries.
2. The follow-up meeting of the 1<sup>st</sup> Pan-Africa Aviation Training Centers Coordination Conference was successful in bringing together all key stakeholders and in serving as a platform for outlining training needs, evaluating the training capabilities available throughout the continent, identifying the key challenges related to the provision of aviation training in Africa, and formulating the way forward for a coordinated approach of aviation training in Africa including a closer co-operation between Aviation Training Organizations, harmonization and standardization of aviation training in Africa.
3. The meeting addressed a wide range of areas related to aviation training in Africa including notably:
  - Training Needs: The safety trends in Africa, passenger traffic growth and current level of overseas training expenditures point to the existence of training needs in all aviation disciplines. However, a database should be established to further quantify these needs in a dynamic manner.
  - Training Capabilities: There is a large number and variety of training programmes and institutions in Africa offering training courses on aviation related subjects. However, the training provided has not been quantified and the resources available to the training centers are limited. There are also restrictions on effective management as a result of controls put in place by Governments. They also face imminent succession crisis due to aging instructors and their facilities are in need of major upgrade.
  - Harmonization and Standardisation of aviation training in Africa: Aviation courses delivered in Africa are not standardized due to the lack of a harmonized regulatory framework on the training requirements for aviation functions. Furthermore, cooperation between African Aviation training institutions is limited.
4. The participants recognised that the ICAO audits point to a shortage of skilled personnel in Africa. It further emphasizes the necessity to establish and maintain an up-to-date database on training needs in Africa, identifying the areas where training is needed and the population concerned by such trainings.
5. The participants agreed on the importance of harmonizing the regulatory requirements related to the competencies requirements for each aviation function in order to

enable training centers in the Region to develop appropriate training curriculum and programs in response to regional needs rather than limited to local needs.

6. Aviation Training Organizations need to adopt a business approach to training management taking into account issues of economics as well as sound human capital management principles.
7. Aviation Training Organizations are encouraged to strengthen co-operation on a broad range of issues in order to enhance collectively their abilities to meet the training needs in Africa, in particular through sharing of modules among training institutions.
8. The meeting adopted the attached Terms of Reference of the Working Group of Training Expert line with recommendation 5/8 of SP AFI RAN (2008).

**Working Group of Training Experts  
TERMS OF REFERENCE**

**A. Tasks**

1. Develop a framework for harmonization of aviation training in Africa,
2. Establish database for aviation training needs and capacities in Africa,
3. Determine and distribute actions for States and Training Institutions.

**B. Membership: training experts from:**

**Airports Council International (ACI) - Africa  
Airports Company South Africa (ACSA) Training Centre  
African Airlines Association (AFRAA)  
Air Traffic National Services South Africa (ATNS)  
Agence pour la Sécurité de la Navigation Aérienne en Afrique et à  
Madagascar (ASECNA)  
Eastern Africa School of Aviation (EASA)  
Ecole Régionale de la Navigation Aérienne et du Management (ERNAM)  
Egyptian Aviation Academy (EAA)**

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**FOLLOW UP MEETING OF THE 1ST PAN-AFRICAN  
AVIATION TRAINING CENTERS COORDINATION  
CONFERENCE**

**Johannesburg, South Africa  
04-05 May 2009**

Jointly Organized by  
The AFI Comprehensive Implementation Programme (ACIP)  
Of the  
International Civil Aviation Organization (ICAO)  
And the African Civil Aviation Commission (AFCAC)

In Collaboration with  
Airports Company South Africa (ACSA)  
And  
Société Internationale des Télécommunications Aéronautiques  
(SITA)

**REPORT FROM PANEL 1: Aviation Training Needs in Africa**

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## 1. AVIATION TRAINING NEEDS IN AFRICA

1.1 Under this agenda item, the meeting reviewed the training needs of African Civil Aviation Organizations and the African aviation industry (airlines, airports and air navigation service providers), Civil Aviation Authorities. This includes a review of the safety trends in Africa, passenger traffic growth and current level of overseas training expenditures.

1.2 Panel 1 noted that there has been a significant reduction of accident rate for AFI since 2005 which has changed from a very high rate of 9.2 in 2005 to 2.12 accidents per million departures in 2008. The main contributing factors to aviation accidents in Africa include the latent environment created by the lack of appropriate safety oversight, aircraft maintenance, limited practice of Safety management, air navigation infrastructure, issues of crew proficiency while the global industry keeps pressure on qualified personnel to move for greener pasture. It can be said that the safety improvements in the AFI region are partly attributable to the training initiatives by various organizations, including the IATA PFS investment initiated in 2005 to assist AFI-based carriers in their preparations for IOSA.

1.3 Panel 1 also recalled that the scheduled passenger traffic forecasts for the period 2006-2008, shows that Africa's passenger traffic has been growing by more than 5% per annum, with a prediction of continued growth in the coming years despite the current economic downturn. It further emphasized the projected growth in the industry can only be sustained in the long run when it is matched by a corresponding growth in human resource development.

1.4 A survey of aviation organizations in East Africa revealed training expenditures in excess of 3 million US Dollars in the year 2007, with air tickets and travel allowances representing 55-65% of the total training costs.

1.5 Panel 1 recognizes that in order to sustain the current and projected air traffic growth, there is a need to provide adequate training in various areas such as Air Navigation Services, Flight Safety, Aeronautical Information Services, Flight Operations, Piloting, Aviation Safety/, Aviation Security, Fire Fighting, Airports Operations and Management, and Civil Aviation Regulations. Each training requires classroom courses as well as On Job Training. The latter is best realized in a local environment.

1.6 The example of the Regional Fire-Fighting School of ASECNA was presented. It demonstrates that when States pull resources together, they are able to meet their collective training needs and also reach out to other States. However, to be able to provide courses for different States, the regulatory requirements need to be harmonized.

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1.7 During the discussions, the meeting pointed out that it was important to establish a reliable and dynamic database of training needs in Africa. The meeting was cautioned to ensure that the initial assessment of personnel requirements and shall be rationale in terms of the actual needs as it may have a subsequent impact on the subsequent requirements for initial and recurrent training. It was also noted that for training centers in Africa to develop adequate training programs to meet the various needs of the stakeholders in the continent, it is essential to have harmonized regulatory framework of the competencies requirements for aviation functions as well as access to resources for examinations (database of questions). Furthermore, there should be mechanisms for sharing revenues between the training centers involved, and in particular taking into account preparatory courses and On Job Training. On this basis, the panel submits the following recommendations to the meeting:

**Recommendation 1/1 – Development of a regional database on training needs**

ACIP, in cooperation with AFCAC and other stakeholders establish and maintain a dynamic database on training needs in Africa, identifying the areas where training is needed and the population concerned by such trainings. The database would be made available to all training centers in Africa for them to be able to deploy appropriate programs to address the identified needs.

**Recommendation 1/2 – Harmonization of regulatory framework on training requirements**

States in the AFI Region shall develop and harmonize regulatory requirements related to the competencies requirements for each aviation function in order to enable training centers in the Region to develop appropriate training curriculum and programs in response to regional needs rather than limited to local needs.

**Recommendation 1/3 – Share of revenues between training centers**

When deploying training courses for students from other countries, Aviation Training Centers in Africa should ensure that appropriate arrangements are made for the share of revenues arising from it with training units based at the country of origin of the students who would be involved in portions of the courses delivery (preparatory, On-Job training, etc..)

**Follow-up meeting of the 1<sup>st</sup> pan-African Aviation Training Centres Coordination  
Conference**

**Draft Report**

**Panel 2 – African Aviation Institutes Training Capabilities**

**Presentations**

Presentations were made by

Mr. Chifosho Shingalili – Principal, ZASTI

Mr. Charles Chacha – Principal, Civil Aviation Training Centre, Tanzania CAA

Mr. Emnet Meheret Gebru, SITA Africa

Mr. Andries Viljoen, Aviation Academy for Southern Africa, AAFSA

The presentations by ZASTI and CATC Tanzania provided an insight into the activities of the institutions and highlighted issues facing the African Aviation Training Centres relating to

- Funding of the training centres
- Restrictions on effective management as a result of controls put in place by Government owners
- Management of human capital especially in the face of imminent succession crisis
- upgrading of training facilities
- Collaboration among training centres

The main challenge was how to encourage Governments to view aviation as a critical player in national development and provide the support needed by the training institutions.

The presentation by SITA gave an overview of the wide range of professional aviation services offered through its joint venture and outsourcing programmes, including CNS/ATM and safety management training

AAFSA also gave an overview of its core business which covers aviation safety/security advisory services and aviation training. Emphasis was placed on analysis of the various categories of training needs in respect of each sector and by disciplines within each sector, starting with the identification of all of the Regulatory Authority Training needs, followed by Functional, Re-Current and Introductory Training Needs in respect of all those sectors who are to ensure compliance with safety regulations. The presentation particularly highlighted the vital role of the safety quality management system as far as all of the aviation Sectors are concerned, indicating compliance and/or non compliance in terms of the various training needs and the gaps. It also advocated that on completion of the identification of the various categories of training needs, a common training data base be establishment supported by ICAO to the benefit of the African aviation industry.

## **Summary of discussions**

The ensuing discussions extensively examined the issues raised. Regarding funding, it emerged that a regional policy is needed to look into how funding can be mobilized without excessive reliance on Government. Suggestions included diversification, prioritization, and autonomy for more efficient management. Since most of the training institutions are Government owned, it was proposed that a strategy is needed for dealing with the issue of Government interference which impacts seriously on effective management.

Training institutions need to adopt a business approach to training management taking into account issues of economics as well as sound human capital management principles. Retiring/retired personnel provide a resource for training of younger personnel and stop gap measures and should be considered as part of the solution.

However, it was pointed out that the fundamental issue of safety oversight of the regulatory authority and the need to address identified deficiencies should be accorded high priority. Experience shows that once made aware, some Governments are willing to allocate resources to strengthen their oversight capability.

On the subject of cooperation among training centres, complimentary competency-based training through sharing of modules among training institutions is to be encouraged.

ACIP informed that on its part it can provide support for viable regional projects in which States show commitment. One such project could be the development of the training data base which could be outsourced to an organisation in the region such as SITA. ACIP training programme for 2010 includes Safety Management System (SMS) and State Safety Programme (SSP) courses, as well Government Safety Inspector (GSI) training.

## **Conclusions**

A logical framework which will take stock of where we are and define a vision and a strategy is required. Also required is tool for evaluation of the training product. The idea of a framework supports the proposal for the establishment of a Working Group of Training Experts.

## **Actions**

The Working Group to be set up will include in its terms of reference: (put verbs)

- Policy for recruitment and retention of qualified instructors while recognising the utility of retiring/retired personnel as a resource for training of younger personnel and in providing stop gap measures;
- Development of a policy on funding. Look into how funding can be handled without reliance on government;
- Need to take a business approach to training management without losing sight of the mandate to effectively meet civil aviation personnel requirements;
- Cooperation among training institutions to avoid wasteful competition;
- Standardisation in curriculum development;
- Harmonisation of regulations and procedures for approval of Approved Training Organisations (ATO);



- Establishment of a training data base which would highlight training requirements, current training capacity and gaps that need to be addressed.

## Summary of Panel 3 Papers

### **THE NEED AND CHALLENGES OF HARMONIZING CAA TRAININGS IN AFRICA**

**by Dr.-Ing. Getachew Biru, Ethiopian Aviation Academy**

The paper described the context of the African air transportation system. It reiterated how training personnel is essential to support the activities of airlines, airports, MROs, air navigation services and civil aviation authorities. To be effective, the air transportation system needs to balance safety and efficient service in a cost-effective manner. The goal of harmonization is to align national regulatory policies and practices to international standards. Training should not be considered in isolation but as a key part of the aviation system.

The paper outlined the human resources challenges and barriers Africa is facing in its aviation system:

- insufficient training capacity in a broad range of disciplines.
- barriers such as: language, economic and political differences, disparity of national regulatory systems, cultural differences, etc.
- accountability towards several stakeholders that may have priorities that are difficult to reconcile

The paper went on to describe the scope of aviation training, how a common set of procedures should be applied to develop training. Examples of documents involved in a training quality system were provided.

The paper concludes by stating that:

- harmonization is not an option
- Safety is good business
- consideration should be given to establishing an African Aviation Safety Agency
- training is a key component in the aviation system

## **TRAINING POLICY, COORDINATION AND HARMONIZATION IN AFRICAN AIRLINES**

**by Dr. Elijah Chingosho, African Airlines Association, Nairobi, Kenya**

African airlines face new challenges because of liberalisation, alliances, free market pricing and new technology. The brain drain represents a safety hazard if inadequately skilled or inexperienced personnel are allowed to fly or maintain our aircraft.

### **Training Challenges**

Airlines need to train and retrain in a context of scarce capacity. Once trained and qualified, staff migrate to other higher paying jobs. Airlines training needs cover a wide range of disciplines including: maintenance and engineering, flight crew, middle and high level management, commercial management, safety and risk management, etc. Also, training is often delivered in English only, which represents a barrier to non-English speaking organizations.

### **AFRAA Training**

AFRAA considers training as a strategy-critical activity. It has lecture/conference facilities at its headquarters in Nairobi where it delivers training by top level African experts. Its training programmes are designed to complement rather than to compete with the airline training centres within the continent. The focus is on those competencies that may not be available within airlines such as training of senior airline executives, training on the use of the latest information technology tools, the latest marketing techniques, the aero political developments worldwide as well as safety, security and quality programmes to meet regulatory requirements.

AFRAA believes in partnerships to promote and deliver high quality training and ensures that its training is delivered continent wide and in English and French.. Training can be conducted in a variety of locations depending on the needs of the airlines. AFRAA works very closely with the International Airline Training Fund (IATF) to provide specialized courses to airlines for free.

However, as it stands, airlines have to meet their own training needs. To support its constituents, AFRAA develops training syllabi for various specialties in support of the aviation training centres on the continent and favours implementation of a joint developed syllabus by a centre in order to facilitate access to its members.

For example, AFRAA collaborates with several partners including Egyptair Training Centre, Ethiopian Airlines Training Academy, Royal Air Maroc Training Academy, different organizations in South Africa, Kenya Airways Pride Centre.

The paper reiterates the need to make aviation training a priority in government programmes. AFRAA supports the harmonization of training delivery in Africa by all the critical stakeholders including civil aviation authorities, airports, air navigation service providers and airlines for the development of African aviation and recommends that the location and capabilities of these stakeholders and their availability be published in order to foster collaboration.

## **THE LOOMING SHORTAGE OF PILOTS AND MAINTENANCE CREW – THE CASE FOR THE REVISION AND HARMONISATION OF THE POLICIES ON AVIATION TRAINING**

Presented by East African Civil Aviation Academy, Soroti-Uganda

The paper focuses particularly on the potentially severe shortage of pilots and aircraft maintenance engineers which requires immediate measures to be put in place in order to avert it.

While the training for some services such as airports and air traffic remained the responsibility of the State, pilot and engineering trainees are now required to meet all or part of the course fees. The problem was exacerbated by high costs and lack of ab initio training.

The data at the Academy shows that 51% of the aviators who have trained at our establishment are at age 50 and above. This means that in 5-10 years, at least 300 pilots and 150 engineers are going to retire across the region.

The Academy's output has declined and is now of 4 pilots and 7 engineers per year. The main reason for this low output are prohibitive fees. The high fees may also impact safety in that the ability to pay is not always the ability to make the standard. A more affordable fees structure would widen the catchment area and permit a more rigorous selection of suitable candidates.

The paper recommends that States should place the training of aircraft pilots and engineers in the same category of strategic importance as the training of doctors, teachers, etc., and make it more accessible to the deserving candidates by either:-

- Rendering the fees affordable through increased subvention to the training institutions, or
- Introducing a loan scheme to be paid back after the student gets employment. The student could, for example, meet the living and travelling costs while the loan covers the tuition fees (Tanzanian model).

The paper asks AFCAC to persuade airlines to invest in ab-initio training and to provide vital manpower statistics.

## **EAA PRESENTATION**

**by Capt. Ahmed ALy Negm, Business Coordinator, Egyptian Aviation Academy**

The paper presented a description of the Egyptian Aviation Academy and then stated the case for harmonizing training practices and standards.

The paper raised several important questions such as:

- Have we all information about African training needs?
- Have we all information about Capability, Training Capacity and Programs For Each Resource Available in Africa?
- Have we information about the level of implementation of different aviation training categories?
- How can we standardize training programmes?.
- Are States willing to changes their policy to accommodate regional needs?
- The data collected must truly reflect the existing situation.
- Have we an Effect Control System?

The paper concludes that:

AFCAC should establish an African Training Advisory Board ( AFITAB) related to the ICAO regional Offices ( Cairo , Nairobi, Johannesburg, Dakar ) and include all Centers of Excellence. It should address:

- A. Data Base
- B. Training Needs in the Area of Responsibility
- C. Capability , Capacity and Training Programs using Training Methodologies, Standardization Level.
- D. Policy of Coordination Between Training Centers.
- E. Improve Existing Program to The Standardization Level.
- F. Quality Control System .
- G. Distributing Activities.

## **TASKS TO BE CARRIED OUT BY THE TRAINING EXPERT GROUP**

Presented by Nicole Barrette-Sabourin, Training Officer, FLS, ANB, ICAO

To achieve harmonization and cooperation, the paper proposes that three actions should be taken by the African training institutes:

- Base their training delivery on updated national, sub-regional and regional human resource plans
- Deliver training and assessments based on agreed upon competencies
- Meet criteria of approved training organizations, including for quality assurance

These actions would shape the work of the training expert group recommended during the SP AFI RAN meeting.

The SP AFI RAN meeting recognized that training capacity should be rationalized taking into account the business case for the training industry.

The paper proposes specific tasks for each the actions outlined above.

The paper concludes that:

- all stakeholders should be involved in training expert group
- ICAO and AFCAC should provide secretariat support
- progress should be reported to ACIP Steering Committee, ICAO Council and AFI States
- ICAO Document 9841 and 9868 be used

The paper requests the meeting to:

- agree with the tasks outlined
- request ICAO to finalize and establish detailed TORs for expert group
- agree that TORs be presented to ACIP Steering Committee, ICAO Council, and AFI States
- agree that the first meeting of the expert group be conducted no later than 30 September 2009 and submit their final report and recommendation by April 2010.