

**AVIATION TRAINING  
ISSUES: CHALLENGES IN  
NIGERIA**

BEING THE TEXT OF THE PAPER PRESENTED

BY

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DURING

THE CONFERENCE ON  
CREW RESOURCE MANAGEMENT (CRM)/  
HUMAN FACTORS

HELD ON

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**AT**

**TAMARIN HOTELS LTD,  
IKEJA - LAGOS**

The Honourable Minister of Aviation,  
Distinguished Senators,  
Honourable members of the House of Representatives,  
The Permanent Secretary, Federal Ministry of Aviation,  
The Board members here present,  
Chief Executive Officers of Aviation Parastatals,  
Chief Executive Officers of Airlines and other aviation  
organizations,  
Directors of Federal Ministry of Aviation,  
Other Stakeholders,  
Invited guests,  
Ladies and gentlemen!

I feel greatly honoured to stand before you on the occasion of this Conference on *Crew Resource Management (CRM)/Human Factors: Key Elements in Operational Safety* to present this paper titled *Aviation Training Issues, Challenges in Nigeria*.

The unsavoury events in the recent past in our aviation industry have certainly called for a thorough soul-searching and sober reflections on where we came from, where we are today and where we are headed. A couple of air accidents which occurred last year in rapid succession have become the nadir of our aviation industry's problems. Yet as tragic as those accidents were, they have served

as a trigger to actions that may well turn out to be the beginning of the golden era of Nigerian aviation. There is no doubt that we have been jolted out of our slumber. We are now, and gladly too, being compelled by these ugly events, to rethink our procedures, re-examine our modus operandi and sanitize our practices in the aviation sector of our economy.

We cannot therefore but be on the right track when we turn our focus on Crew Resource Management (CRM)/ Human Factors. It is a known fact that about 70% of incidents/accidents are traceable to human error. Indeed, a popular adage in aviation is what is commonly referred to as "*Murphy's Law*" which is a statement of the fact that, "if it can happen, one day it will"; that is to say, if anything can possibly go wrong, it will go wrong!! Being human hence not infallible, "human factors" will one way or the other, impact on everything we do. It is unfortunate however, that it took a number of accidents for the industry's attention to be drawn globally to human factor problems and their likely solutions. Efforts in this regard soon brought about the development of the concept of Crew Resource Management to address the deficiencies of human behaviour in the cockpit. Similarly, "human factors" is now an integral part of aircraft maintenance engineering training.

It is evidently clear that training is the key to achieving the above objectives and more. Training of core aviation professionals is a lot more than acquiring knowledge and perfecting certain skills. For instance, with CRM came Line Oriented Flight Training (LOFT) which enables flight crews to make use of their technical proficiency together with CRM theory in demonstration of practical skills in simulator scenarios.

We shall be spending the whole of today being enlightened on this and similar matters.

***The Role of Nigerian College of Aviation Technology in Aviation Training:***

The foremost aviation training institution in our sub-region is the Nigerian College of Aviation Technology, Zaria. Established in 1964, NCAT carries out its training activities through the following 4 Schools:

- Flying School
- Aircraft Maintenance Engineering School
- Air Traffic Services/Communications School
- Aeronautical Telecommunications Engineering School.

The College is equipped to run various courses. The following is a snapshot of the equipment and facilities available at the College as well as some of the courses being run:

### ***Flying School***

- 17 Tampico TB-9 aircraft
- 5 Trinidad TB-20 aircraft
- 3 Beech Baron 58 aircraft.
- 1 Maintenance hangar
- Tools and equipment for maintenance of aircraft in use.

There are 3 TB-20 simulators awaiting installation while the College is processing the purchase of the Frasca TruFlite Simulator.

Courses run at the Flying School include:

- Private Pilot Licence training
- Commercial Pilot Licence training
- Instrument Rating Flight training
- Airline Cabin Service Crew
- Environmental Orientation Course (for Foreign Crew)
- Aviation Meteorology course
- Flight Operations Officers' course (Basic and Advanced).

### ***Aircraft Maintenance Engineering School***

Facilities here include:

- One training hangar
- 15 workshops.

Courses:

- Aircraft Maintenance Engineering course (Airframe and4

Powerplant)

- Aircraft Maintenance Engineering course (Electrical and Instruments)
- Pressurised Metal Airframe Structure course
- Wheels and Brakes course
- Gas Turbine Engine Modular course (GTE)
- Human Factors in Aircraft Maintenance course
- Basic Technician Certificate course

The first ever Helicopter Maintenance course has commenced at the School while courses on NDT and Airborne Radio are being kept on hold till acquisition of a few additional equipment.

### ***Air Traffic Services/Communications School***

Equipment and facilities available here include:

- Aerodrome/Approach Simulator
- Area/Airways Simulator
- Language Laboratory
- AFTN Switching System.

A PC-based radar simulator is on order. Courses conducted at this School include:

- Standard Air Traffic Officer's course
- CNS/ATM COURSE
- Area Control course
- Aeronautical Information Service Officers' course

- Radar course (terminal)
- Aviation Security course
- Instructional Techniques course.

### ***Aeronautical Telecommunications Engineering School***

Equipment/facilities include:

- Computer-based Electronic Laboratory
- Computer-based Telecommunications Laboratory
- Radar Test Instrument Laboratory
- ALCATEL Nav-Aids Test Instrument Laboratory

Courses run at the School include:

- Aeronautical Telecommunications Engineering Diploma course
- Computer Maintenance and Repairs
- Communication Systems Maintenance
- Digital Techniques course
- Radar Head Maintenance course
- Radar Processor and Display course
- Computer Appreciation and Application course.

### ***Training in NCAT: The Challenges***

Without question, NCAT is living out its mission; ***to consistently provide the aviation industry with professionals and other personnel through training and***

*related services for safe transportation in accordance with international standards.* When we cast our minds back to where we were coming from, particularly from the nineties to up to the year 2000, we will recall that the institution was then beset with myriad problems such as:

- obsolete training equipment/facilities
- decaying infrastructure
- demoralized workforce
- poorly trained instructors
- severe instructional staff attrition
- generalized state of apathy in the College.

The College has however come a long way from the scenario painted above. The College is gradually being turned around into an institution that is alive to its responsibility and focused on its vision: *to maintain the prestigious position of the foremost aviation training institution in Africa, and be amongst the best in the world.* Since the inception of the present management in January, 2004, over 1,200 students have been graduated, 698 of these in the last 1 year. Numerous new courses have been designed and are being run. 30 student pilots stuck in the College some for upward of 8 years, were graduated by December, 2004. Additionally, the College has since last year joined the ICAO<sup>7</sup>

TRAINAIR Programme which is designed to enhance the efficiency and effectiveness of aviation training institutions.

In order for it to continue to actualize its vision, NCAT must overcome the following challenges:

- Funding
- Research and development
- Remaining relevant to our customers in the country, in the sub-region and in the world.

### ***Funding***

Aviation is a capital intensive enterprise. Without a doubt, funding is one of the most serious problems facing NCAT.

It can easily be seen that solving this problem will definitely provide a solution to the others. The College has to be funded in a reasonably adequate, regular and sustainable manner, if it is to continue to live up to expectations, if it is to become not just a regional player, but a global one.

The challenge to all the aviation stakeholders in Nigeria is to vastly improve the level of their investment in training and manpower development while patronizing the College as they should. This we believe, is in the best interest of the industry as a well-funded NCAT will be in a better position to provide for the industry,

qualitative as well as quantitative training.

### ***Research and Development***

In order to be a big continental and global player, the aviation institution needs to graduate from offering the current arrays of engineering (aircraft) courses that are mainly designed for aircraft maintenance purposes, to those involving the design and eventually, production of aircraft and aircraft systems.

To facilitate achievement of this goal, a well-equipped Research and Development (R&D) department is an idea the time of which has come. We are all aware that R&D requires a lot of funding. Once again, the challenge that is staring us all in the face is the funding of an R&D department in NCAT, Zaria. The College has the infrastructure, the conducive environment and the legal instrument to institute a research and development department on its premises. What are lacking are the funding and the manpower.

The latter can be obtained through ***specialized training, exchange programmes and use of resource-persons - swapping initiatives.***

The former requires consistent and sustainable capital infusion.

### ***Relevance to our Clients/Customers in the Country, Africa and the World***

There is an obvious relationship between consistent, adequate funding and relevance to clients. Most often, an institution has to 9

be adequately funded to be able to have in place, facilities and equipment that will assure its relevance and hence its ability to be regularly patronized by its customers. Yet to be adequately funded, an institution has to remain relevant.

This intertwined relationship has led to a vicious circle. A programme to ensure a regular and sustainable funding of NCAT will enable the College to finally break out of this vicious circle.

On its own part, it intends to intensify its internally generated revenue drive. Suffice it to say that the release of the long-awaited funds for completion of its revitalization programme will enhance its capability towards this end.

Conclusively, the College is ever ready, willing and able, to provide the much needed manpower for the aviation industry. All it needs at this moment is the support and patronage of stakeholders.

While wishing that the knowledge gained here today will be put to fruitful use for the benefit of us all, I thank you for listening and have a pleasant day!