



**PERFORMANCE BASE NAVIGATION  
OPERATIONAL APPROVAL  
TRAINING WORKSHOP**

**DAR ES SALAAM**

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**Presented by**

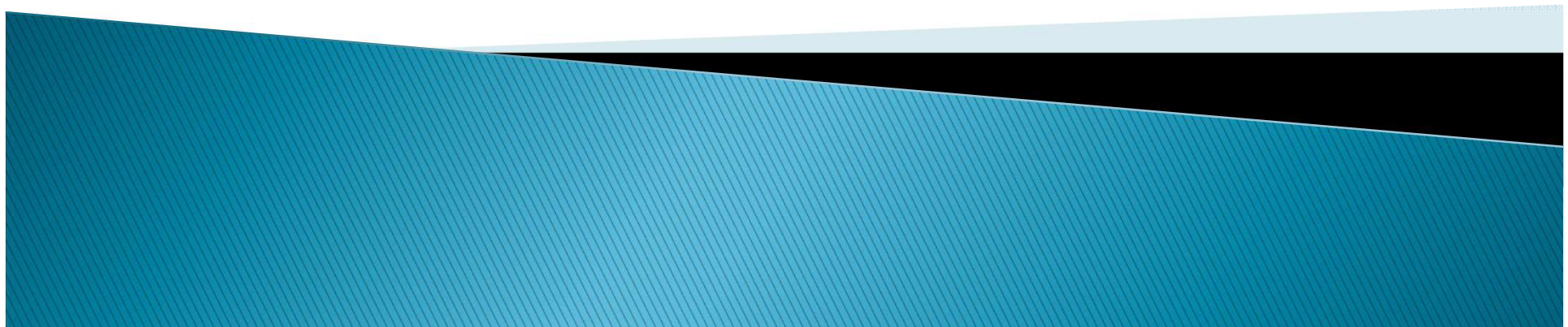
**Capt. Arome, Sunday**





# PERFORMANCE BASE NAVIGATION OPERATIONAL APPROVAL

## THE NIGERIAN EXPERIENCE





# BRIEF HISTORY OF PBN

- ▶ ICAO Assembly resolution A36-23 calls for each State to develop a national PBN Implementation plan by December 2009.
- ▶ In line with ICAO's directives, a national PBN Implementation Plan was developed
- ▶ Nigeria has been committed to PBN,
- ▶ We hosted the 1st 4 -day Regional seminar for WACAF in Nigeria (14<sup>th</sup>-18<sup>th</sup> July 2008).
- ▶ Participated in almost all ICAO seminars on PBN.



# NIGERIA'S POLICY AND LEGAL FRAMEWORK



- The Nigerian Civil Aviation Act 2006 has empowered Nigerian Civil Aviation Authority (NCAA) to make regulations for civil aviation activities in Nigeria
- The regulation for the implementation of PBN is contained in Nig. CARs 2009 Part 7.4.
- Nigeria then published an Aeronautical Information circular AIC 19 Series A (NCAA ORDER NO 001 /2013)





# PBN Implementation Process

- ▶ PBN Awareness programme
- ▶ Development of PBN Roadmap
- ▶ WGS-84 Survey
- ▶ BN stake holders forum (CDM process)
- ▶ Development of relevant operational approval documents
- ▶ Development of navigational specification approval documents





# Development of Relevant Operational Approval Documents

- ▶ Regulations
- ▶ Advisory circular (NCAA ORDER);
- ▶ Technical Guidance Materials (TGM);
- ▶ Application Forms
- ▶ PBN Checklists
- ▶ Approval Certificate (Ops Specs)





# Five Phases of OPS Approval Process

- ▶ Pre-Application
- ▶ Application
- ▶ Analysis of the documentation
- ▶ Demonstration and inspections
- ▶ Approval
- ▶ So far we have granted approval to one airline





# Development of Navigational Specification Approval Documents

- ▶ Adoption and domestication of relevant/applicable documents from FAA and EASA
- ▶ RNAV1, SID and STARs according to EASA TGL-10/AMC20-16 or FAA AC90-100A
- ▶ RNAV(GNSS) LNAV according to EASA AMC20-27 or FAA AC90-105
- ▶ RNP Approaches (GNSS) LNAV/VNAV according to EASA AMC20-27 or FAA AC90-105 and AC 20-129







# Operating Procedures

- ▶ *Operators SOP's covers both normal and non-normal (contingency) procedures:*





- ▶ Pre-flight planning requirements include MEL and where appropriate, RNP/RAIM prediction
- ▶ SOP contain action to be taken prior to commencing the PBN operation.
- ▶ SOP contain action to be during the PBN operation
- ▶ SOP contain action to be taken in the event of a contingency including the reporting of significant incident.





# Control of operating procedure

- ▶ The SOP are adequately documented in the operations manual





# Flight crew and dispatch training

- ▶ Flight crew and dispatch training cover all the tasks associated with the operations.
- ▶ Training programme provides sufficient background to ensure a comprehensive understanding of all aspects of the operations



# Control of navigation database procedures



*If a navigational database is required, the following must be documented in the maintenance manual.*





- ▶ Procedures for maintaining currency.
- ▶ Checking for error
- ▶ Reporting error to the navigation database supplier





# Challenges

- ▶ Need for increased operators awareness
- ▶ Capacity building from the Operator
- ▶ Aircraft eligibility





# Conclusion

- ▶ As contained in this presentation, Nigeria is working all round the clock to ensure full implementation as scheduled in the PBN implementation plan.







**THANK YOU**

