



International Civil Aviation Organization

PBN FLIGHT PROCEDURE IMPLEMENTATION FEEDBACK

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SUMMARY



AFI FPP

- **Background**
- **Requirements of AFI FPP**
- **Difficulties**
- **Outcomes**
- **Conclusion**

BACKGROUND



AFI FPP

On October 2013 the ivorian ANSP called SODEXAM, agreed with ASECNA (and AFI FPP manager) on the design of RNAV(GNSS) approach procedures based on PBN criteria for 5 national aerodromes : Bouaké, Korhogo, Odienné, San Pedro and Yamoussoukro:

- 10 LNAV approaches;
- 10 LNAV/VNAV approaches, using APV baro VNAV.

The goal of this presentation is to make the feedback of the process followed in this job.

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REQUIREMENTS OF AFI FPP



AFI FPP

As an ICAO programme whose goal is to foster the implementation of safe and efficient flight procedures, with specific attention on PBN procedures and airspace design techniques, the following support activities are provided:

- Training and support for local airspace and procedures designers;
- Design of IFR procedures for States without FPD capability;
- Training on PBN regulatory approval;
- Training on validation and quality assurance process;
- Training for ATC and ATM staff;
- Training and support on operational approval of aircraft operators.

Therefore, the following conditions have been required :

- The full process must comply with ICAO requirement or national ones if applicable.
- SODEXAM must nominate a point of contact for PBN.

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Flight procedure design activity is not often well understood; therefore, the following difficulties can result:

- The activity may seem expensive:
 - Procedure design need accurate and correct data.
 - Quality data have a cost.
 - Procedure design requests some "on-site missions": data collection, review by stakeholders, flight validation and consultation with stakeholders.
 - Flight check has a cost.
 - Gathering people for any activity has to be funded.
- The activity is not well understood: ANSPs often require "ready for use procedures" and are not aware of the cost.
- ANSPs are not often trained the new concepts: PBN, safety assessments.
- CAAs are often not trained for new concepts and requirements (aircraft certifications for PBN, approbation process). They do not have units for procedure approval.

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OUTCOMES



AFI FPP



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AFI FPP

Cooperation:

During the full process we got the full collaboration and support of the following organizations at any level:

- SODEXAM;
- Ivorian CAA called ANAC;
- ASECNA national branch;
- Local airlines:
 - Air Côte d'Ivoire;
 - Aerocorporate;
 - Elite group;
 - ONUCI;
 - Etc.

OUTCOMES



AFI FPP

Training:

According to ICAO Doc. 9913 (PBN manual) requirements and taking into account the great need of awareness to this new concept, the following trainings have been provided:

- Area navigation;
- PBN concept;
- PBN applications;
- AFI PBN roadmap and PBN implementation status in ASECNA airspace;
- Use of PBN procedures;
- PBN vs new flight plan.

OUTCOMES



AFI FPP

Assistance provided:

In the AFI region, not all ANSPs and CAAs are aware on some of the ICAO requirements particularly those regarding safety assessment and PBN procedures approval. That's why AFI FPP has provided the following support:

- Conduction of safety assesment of flight procedures (to SODEXAM);
- Approval documents preparation (SODEXAM and ANAC);
- Approbation of flight procedure: letter, decision, etc., (SODEXAM and ANAC) .

OUTCOMES



AFI FPP

Publication:

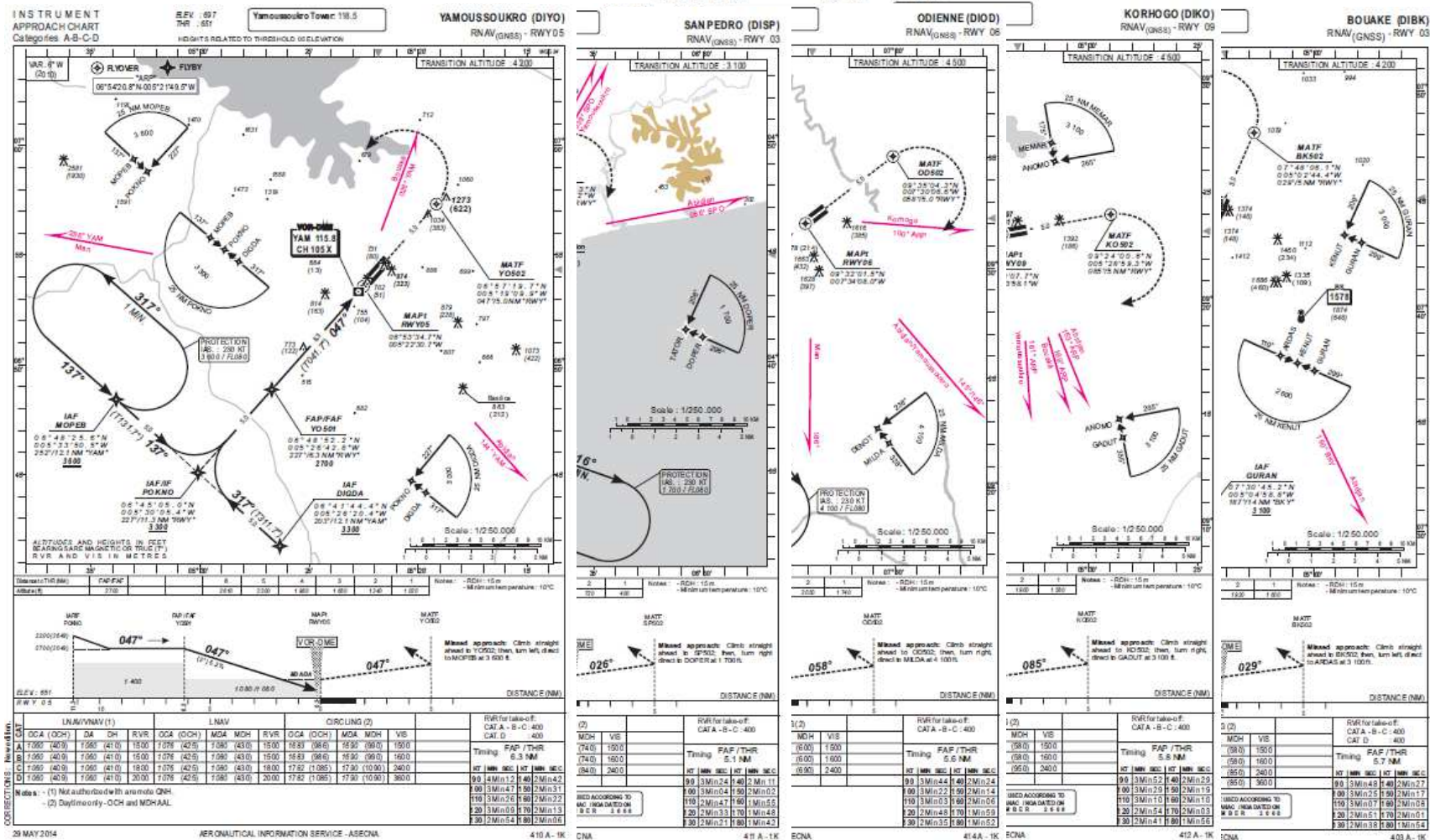
The totality of the 20 instruments flight procedures have been designed by AFI FPP. The publication pack is forwarded to the NOTAM office for publication with the following targets:

- Date of publication : 3 April 2014;
- Effective date : 29 May 2014.

OUTCOMES



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CONCLUSION



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It with a very great pleasure that AFI FPP has accepted to realize this first on field activity. By this action, demonstration has been giving that AFI FPP can play the role of a center of excellency, gathering the best experts in PBN design and in the relevant other activities (training, support, etc.), capable of fostering the harmonious implementation of PBN within the region.

We express our sincere thanks to SODEXAM for the confidence in AFI FPP and the others involved organizations for the full collaboration during all the process.

We invite the others States and ANPs to partipate to the programme either to draw profit of the activities or to help AFI FPP in assisting the others,



AFI FPP



Thank you



AFI-FPP, the Flight Procedure Programme for you and with you