



ICAO

## Twenty-Fourth Meeting of the AFI Planning and Implementation Regional Group (APIRG/24)

(Virtual – 2 to 4 November 2021)

### Agenda Item 4: Other Air Navigation Initiatives

#### ASECNA expertise in flight validation of Instrument Flight Procedures (IFP)

(Presented by ASECNA)

SUMMARY	
This working paper focuses on the efforts and the expertise of ASECNA as part of flight validation of instrument flight procedures (IFP)	
Action by the Meeting is found in paragraph 3	
<b>REFERENCES</b>	<ul style="list-style-type: none"> <li>▪ States regulations,</li> <li>▪ AAMAC regulations,</li> <li>▪ Doc 9906 vol 5 ICAO</li> </ul>
<i>Strategic Objectives</i>	<b>A</b> – Safety, <b>B</b> – Capacity and efficiency of the air navigation, <b>D</b> – Economic development of air transport, and <b>E</b> – Protection of the environment.

## 1. INTRODUCTION

1.1. ASECNA, in its role as air navigation services provider, undertakes several activities to implement the instrument flight procedures (IFP) in conformity with objectives set out in ASBU blocks.

1.2. The design process described in ICAO DOC. 9906, Vol 1, presents the different steps including the flight validation of instrument flight procedures (step 8).

1.3. The present working paper brings out the actions undertaken by ASECNA to strengthen its capacity in this area. The expertise and the increase in capacity of ASECNA in the field of the flight validation and navigation aids calibration are presented.

## 2. DISCUSSION

2.1. While subscribing in the continued improvement process, and notwithstanding the occurrence of covid pandemic, ASECNA has decided on a strengthening of its competencies and capacity in the field of instrument flight procedures

design and the flight validation of instrument flight procedures.

- a) Thus, with the support of AFPP, ASECNA has qualified for its needs of PBN procedures flight validation, like LNAV, Baro VNAV and SBAS.
  - i. (05) Pilots flight validator
  - ii. (03) Flight engineers
  - iii. (06) Flight procedures Designers
- b) AFPP also ensured the methodology of the check during the flight of the navigation aids, the surveillance and the communication systems such as ILS, VOR, DME, NDB, RADAR, VHF COM
- c) AERODATA Company based in USA and Canada ensured the training of pilots and crew .

2.2. In terms of capacity strengthening, ASECNA acquired a new aircraft, a CESSNA SOVEREIGN +, equipped with AEROFIS 1013 of AERODATA which is capable of:

- ✓ Flying and validating the conventional flight procedures, the PBN procedures like LNAV, Baro VNAV and SBAS.
- ✓ Performing in-flight-checks of the navigation aids, the surveillance and the communication systems such as ILS, VOR, DME, NDB, RADAR, VHF COM

2.3. As OJT

- ✓ Abidjan FHB international airport served as validation of competences test of crew and flight procedures designers.
- ✓ A new documentation and new procedures have been developed and validated. They constitute the new instructions and working procedures of PANS OPS Office and in-Flight Check Office.

2.4. An in-flight validation programme is currently launched. The sites of Cotonou, Ouagadougou, Lomé, Garoua have already been visited.

2.5. A programme for the in-flight validation of Mozambique procedures has been done; the activities are planned for the last week of November, 2021. This programme will comprise the checks-in-flight during of the navigation aids, the surveillance and the communication systems on eleven (11) airport in Mozambique.

### **3. THE WAY FORWARD**

3.1. The meeting is invited to take note of new potentialities—offered by AFI region with the availability of an additional aircraft in the field of the in-flight validation and calibration, with efficient calibration benches.

3.2. Those means have been strengthened in order to better satisfy the previous requests made by several states in the region. Therefore, States could request the services of ASECNA, in case of need, in the fields of design and in-flight validation of instrument flight procedures and navigation aids calibration.