Flight Director Lateral Offset

Temporary Revision
Temporary Revision No. 02371-075
To PC-24 Airplane Flight Manual
Report No. 02371

This AFM Temporary Revision is approved by EASA by letter reference 10085540, dated 14 October 2024.

Manual Section
Section FM, Front Matter
Section 3A, Abnormal Procedures (Authority approved)

Validity
This Temporary Revision is valid for all PC-24.

Filing Instructions
1. Print the Temporary Revision.
2. Insert the Temporary Revision after the "TEMP. REV." tab.
3. Record the incorporation of this Temporary Revision on the List of Temporary Revisions.

Important
Do not remove this Temporary Revision unless instructed to do so by:
- The highlights of a normal revision
- A new Temporary Revision which supersedes this one.

Reason for Issue
Possibility of inaccurate approaches in High Latitude and / or areas of High Magnetic Variation with APEX Build 5.3 and below.
Ensuing flight director calculations can result in lateral offsets to the desired approach course when flying ILS, LOC, VOR, LP or LPV approaches. In these instances, the FD maintains the lateral offset and does not provide course corrections to center the CDI.

Action
Revised content shown on next pages.

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SECTION 3A

Abnormal Procedures (Authority approved)

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3A-NAL Non-annunciated Abnormal Procedures List

In the Aircraft Flight Manual, on page 3A-2-1, add the following entry to the list of Non-annunciated Abnormal Procedures:

Procedure Title	Procedure
F	
Flight Director Lateral Offset	3A-NAA-01

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3A-NAA Non-annunciated Abnormal Procedures

In the Aircraft Flight Manual, on page 3A-3-7, add the following new Non-annunciated Abnormal Procedure 3A-NAA-18 between the existing procedures “Engine Thrust Lever Fails To Respond” (3A-NAA-12) and “Fuel Suspected Leak” (3A-NAA-13). If no alphabetical order is needed, alternatively add the procedure on page 3A-3-12 at the end of the section.

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Splits in heading between the pilot and co-pilot may sometimes occur either due to low magnetic field strength, magnetic anomalies or AHRS / IRS system failures.
These heading splits can cause errors in the flight director calculation resulting in lateral offsets to the desired approach course when flying ILS, LOC, VOR, LP or LPV approaches. In these instances, the FD maintains the lateral offset and does not provide course corrections to center the CDI. For illustration purposes, an example manifestation of this issue is provided below for reference:

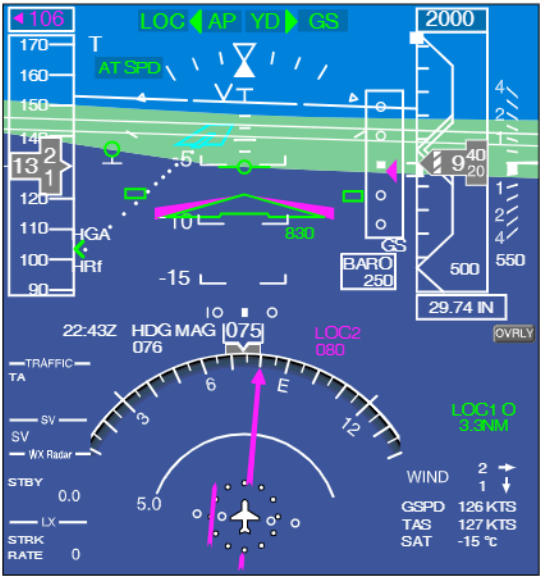

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Figure 3A-NAA-1: Flight Director Lateral Offset

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continued

Note

Procedure applicable to ILS, LOC, VOR, LP or LPV approaches.

Note

The **HDG?** FAS Alert is displayed when the Pilot and Co-Pilot headings differ by more than:

- 6° if aircraft roll angle is less than 5°
- 12° if aircraft roll angle is greater than 5°.

Therefore, depending on the magnitude of the Heading split and the aircraft's roll angle at the time of the split, the **HDG?** FAS Alert may be set prior to the lateral offset being observed.

1.	CDI / ADI.....	Monitor FD guidance and Course Deviation Indicator to assess if FD provides course corrections appropriate to the displayed lateral deviation.
	IF a lateral offset in the Flight Director Guidance is detected:	
2.	FD / AP.....	Disengage FD / AP
3.	Aircraft.....	Initiate appropriate course correction to center the Course Deviation Indicator Continue approach manually with raw data provided by the Course Deviation Indicator and Vertical Deviation Indicator OR Perform Missed Approach procedure.

Continued on next page

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continued

Note

The following procedure can be applied to prevent or correct a lateral offset at locations where HDG splits are known to occur. This allows normal use of FD / AP.

4.	MFD.....	Select MFD 1/6 window, AHRS Sensor Page
		Check DG Src is set to IRS Heading
		Set AHRS Mode to Directional Gyro (DG)
		Select Send DG.

Note

HSI 2 is DG Mode advisory will appear and remain when AHRS DG mode is selected.

5.	FD / AP.....	Re-engage FD / AP
6.	Aircraft.....	Fly Approach normally

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