

DCA22LA133

OPERATIONAL FACTORS

Attachment 7

United 737 MAX Quick Reference Handbook

November 10, 2022

FMC FAIL**FMC
P/RST**

Condition: Display of VTK followed by MAP failure flags on one or both navigation displays.

Objective: To restore dual FMC operation, configure for single FMC operation or resume conventional navigation.

Note: LNAV/VNAV may disengage.

1 Check both navigation display MAP modes and FMC CDUs.

2 Choose one:

◆ **No FMC data on the Captain's and First Officer's navigation display MAP modes and no FMC data on both CDUs:**

Both FMCs are failed.

▶▶ Go to step 7

◆ **No FMC data on the Captain's navigation display MAP mode and no FMC data on both CDUs:**

Left FMC is failed.

▶▶ Go to step 3

◆ **No FMC data on the First Officer's navigation display MAP mode, MSG light is illuminated and SINGLE FMC OPERATION scratchpad message is shown:**

Right FMC is failed.

▶▶ Go to step 3

3 FMC source select switch BOTH ON L or BOTH ON R
Select the operating FMC.

4 Wait 1 minute.

5 Check for FMC-L and FMC-R bearing/distance information on POS SHIFT page 3/3.

6 Choose one:

◆ **Bearing/distance information for both FMCs is displayed:**

FMC source select switch NORMAL



◆ **Bearing/distance information for only a single FMC is displayed:**

Continue with single FMC operation.



▼ Continued on next page ▼

▼ FMC FAIL continued ▼

- 7 Resume conventional navigation. Without an operating FMC, LNAV and VNAV are not available.
- 8 Verify position relative to terrain using conventional navigation.
Note: *GPWS may use inaccurate GPS position data or an inappropriate value of RNP. This could result in a VSD terrain display (if installed) that is incorrectly positioned relative to the aircraft track.*
- 9 **When preparing for the approach:**
 - (MAX) Use the N1/SPD REF SET page to set the current gross weight.
 - (MAX) Use the N1/SPD REF SET page to set the reference airspeed bugs.
 - (MAX) Use the N1/SPD REF SET page to set the N1 bugs.



FMC INFLIGHT RESTART

Condition: FMC data is lost due to momentary lockup or restart:

- Display of FMC prompt at 1L on CDU, indicates FMC is operable.
- Restart produces loss of information on both CDUs and loss of FMC data on the Captain and First Officer map displays.
- Data entry is available on CDU.

1 Press menu key.

2 Choose one:

◆ FMC prompt is *not* displayed at 1L on CDU.

▶▶ Go to the FMC FAIL checklist



◆ FMC prompt is displayed at 1L on CDU:

▶▶ Go to step 3

3 1L of CDU (FMC prompt)..... Press

4 INIT REF button Press

5 INDEX..... Select

6 PERF Select

7 ZFW, RESERVES, COST INDEX, CRUISE ALT..... Enter

8 RTE button Press
Select previous page to have page 1 displayed.

9 4-Letter airport code for ORIG and DEST Enter
Enter remaining enroute segment(s) as required.

10 DEP/ARR button..... Press
Enter appropriate runway, SID, STAR, approach, and transition(s), as required.

11 Activate Press

12 Execute Press

13 Normal FMC operations should now be re-established.



FMC/CDU ALERTING MESSAGE**M
S
G****FMC
P/RST**

Condition: An alert message is in the FMC scratchpad.

- 1 See the Systems chapter, Flight Management, Navigation section for a detailed list of advisory and alerting messages.

**GLS****GLS**

Condition: A GLS failure occurs.

- 1 Do not fly a GLS approach.
- 2 ILS and non-ILS approaches may be flown.

**GPS****GPS**

Condition: Both GPS receivers are failed.

Note: *The FMC uses only IRS or radio inputs.*

Look-ahead terrain alerting and display are unavailable due to position uncertainty.

Note: *ADS-B is inoperative.*

- 1 Continue normal operation if ANP meets the requirements for the phase of flight.

