

US Domestic Enroute CPDLC Update

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Key Points

- **Domestic en-route CPDLC in the US is now available to everyone - the Notam limiting GA/BA participation to approved trial participants has been removed.**
- **To get CPDLC, you've got to have the right avionics - the FAA has published a list of aircraft types, which you will need to check to see if you comply.**

Here's a very brief summary. For the full, untarnished info, head to the dedicated FAA site [here](#).

So for a long time, domestic en-route CPDLC in the US was only available to operators of bizav aircraft who were signed up to the FAA trial. That trial has now ended, and as long as your avionics make the grade, you can now make use of this service.

The FAA has published a list with a whole bunch of aircraft types on it.

If your aircraft is highlighted in **yellow** or **green**, you can get datalink – as long as you complete and submit the participation form.

If it's highlighted in **red** (or not on the list at all), you can't get datalink.

En-Route CPDLC Participation List (Pub v1.0) November 27, 2023

Aircraft Manufacturer	Aircraft Type	CMU Type	FMS Type	Radio Type	Reason	PPL Filing En Route	Pathway to Compliance	Compliance/Exemption Date
None	None	None	None	None	N/A	None	N/A	N/A
Boeing	737	RCI 900-151 Core 12, or ATN 505 (Core 12 Equipment)	GE U14.1, or GE U13, or GE U12, or GE U11	HW VHF-RTA-440 (w/58 064-50000-2001), or HW VHF-RTA-500, or RCI VHF-2100 (w/58051 or P/N 822-1287-101/180 w/587 or 822-1287-121 or 141), or RCI VHF-920 (P/N 822-1250-002 w/5816 or 822-1250-020 w/5817), or RCI VHF-2100E (P/N 822-2168-121)	Core-12 is more susceptible to VDL Mode 2 A/G handoff and delivery issues	FANSE	1. Upgrade to Core 16 for A/G handoff and delivery issues. 2. Requires that the evaluation of the accumulated 10,000 operational transactions is complete and satisfactory.	TBD
Boeing	737	HW MAB6 (n v523, or RCI 900-151 Core 16	GE U14.1, or GE U13, or GE U12, or GE U11	HW VHF-RTA-440 (w/58 064-50000-2001), or HW VHF-RTA-500, or RCI VHF-2100 (w/58051 or P/N 822-1287-101/180 w/587 or 822-1287-121 or 141), or RCI VHF-920 (P/N 822-1250-002 w/5816 or 822-1250-020 w/5817), or RCI VHF-2100E (P/N 822-2168-121)	These configurations require accumulation of 10,000 operational transactions for evaluation.	FANSE	When the evaluation of the accumulated 10,000 operational transactions is complete and satisfactory.	TBD
Boeing	737-400	RCI 900-151 Core 12	HW NG BP4.0	HW VHF-RTA-440 (w/58 064-50000-2001), or HW VHF-RTA-500, or RCI VHF-2100 (w/58051 or P/N 822-1287-101/180 w/587 or 822-1287-121 or 141), or RCI VHF-920 (P/N 822-1250-002 w/5816 or 822-1250-020 w/5817), or RCI VHF-2100E (P/N 822-2168-121)	Core-12 is more susceptible to VDL Mode 2 A/G handoff and delivery issues	FANSE	1. Upgrade to Core 16 for A/G handoff and delivery issues. 2. Requires that the evaluation of the accumulated 10,000 operational transactions is complete and satisfactory.	TBD
Boeing	737-400	RCI 900-151 Core 16	HW NG BP4.0	HW VHF-RTA-440 (w/58 064-50000-2001), or HW VHF-RTA-500, or RCI VHF-2100 (w/58051 or P/N 822-1287-101/180 w/587 or 822-1287-121 or 141), or RCI VHF-920 (P/N 822-1250-002 w/5816 or 822-1250-020 w/5817), or RCI VHF-2100E (P/N 822-2168-121)	These configurations require accumulation of 10,000 operational transactions for evaluation.	FANSE	When the evaluation of the accumulated 10,000 operational transactions is complete and satisfactory.	TBD

1

Click to download the list!

On completing the form, L3Harris have said this:

If you have responded to all follow-up questions from L3Harris and have been awaiting publication of the participation list: please compare your avionics to the participation list that is referenced above.

If your aircraft type and avionics configurations are not listed, please continue to file for CPDLC-DCL only (FANS) at this time. We will be reaching out individually over the next week with more information on the current status of your aircraft's avionics in regards to the participation list.

If you have verified that your aircraft type and avionics configurations are acceptable according to the participation list, you may begin en route participation at this time.

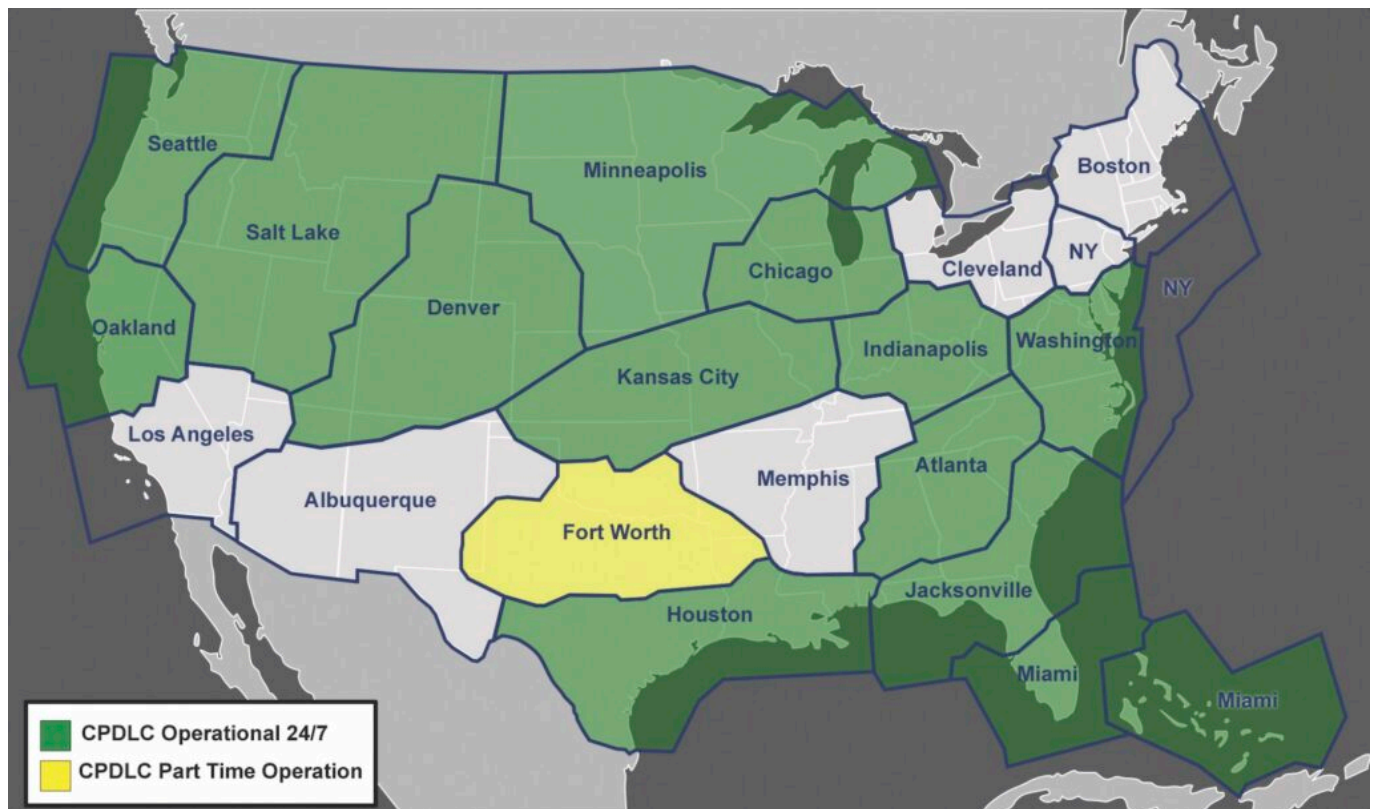
Please review the following guidance:

- *Ensure that your avionics are configured to use VDL Mode 2 as the primary media for U.S. Domestic En Route CPDLC. VDLM2 is the only approved media for participation in the domestic U.S.*
- *Ensure that both the 'J4' code in the field 10a equipment field as well as the FANSE (e.g. '1FANSE2PDC') DAT Code in field 18 (other information/DAT) are both included on the flight plan to indicate eligibility for U.S. Domestic En Route CPDLC.(see the US Domestic Flight and Planning Guide for more information).*
- *Verify that VHF3/COM3 is set to DATA.*
- *The aircraft registration/tail in field 18 (other information/REG).*
- *If you are still researching your avionics in response to questions from L3Harris, please continue to file for CPDLC-DCL only (FANS) until your verification of eligibility is complete.*

Also, a member has reported that if you're now eligible but tried to log on in the past when you were not eligible, **your aircraft reg might have been placed on a "blocked list"**. To get off this list, you need to send the participation form to L3Harris, who will forward to the FAA to ask to unblock you (should take less than 24hrs).

Where is CPDLC available in the US?

L3Harris published this updated map on 27 Nov 2023:



Come on, Fort Worth!

So do I need CPDLC now?

No. US domestic datalink is not mandated.

What if I'm flying into the US internationally?



Just kidding, we *do* actually know something about this. Or rather, L3Harris do. They have published this beautiful little guide answering this very question. You can access it [here](#):

CPDLC logon guidance – U.S. domestic departures

U.S. Domestic Departures – CPDLC DCL Airports

Departures from CPDLC DCL Airports within an active U.S. Domestic CPDLC En Route Center

- KUSA session will remain active after departure
- No need to re-logon after take-off

Departures from CPDLC DCL Airports outside an active U.S. Domestic CPDLC En Route Center

- KUSA session will remain active after departure
- No need to re-logon before entering active U.S. Domestic CPDLC En Route Center airspace

U.S. Domestic Departures – Non-CPDLC DCL Airports

Departures from non-CPDLC DCL Airports within an active U.S. Domestic CPDLC En Route Center

- Performs a logon on the ground or after departure to send and receive En Route CPDLC messages
- KUSA session will be established after departure in active U.S. Domestic CPDLC En Route Center airspace

Departures from non-CPDLC DCL Airports outside an active U.S. Domestic CPDLC En Route Center

- Performs a logon on the ground or after departure to send and receive En Route CPDLC messages
- KUSA session will be established upon entry to active U.S. Domestic CPDLC En Route Center airspace



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Inbound/Outbound – ATOP/Oceanic



1 Entering via active U.S. Domestic CPDLC En Route airspace from ATOP/Oceanic airspace

- If an aircraft has a CPDLC connection established, an automatic connection handoff will occur between ATOP/Oceanic airspace and an active U.S. Domestic CPDLC En Route Center
 - No manual termination or manual logon action required, but the flight crew must accept the CDA confirmation message for the ground system to confirm the KUSA connection is recognized by the aircraft as its CDA
 - If the flight crew does not acknowledge the CDA confirmation after three attempts, the connection will be terminated, and the flight crew will have to manually logon to KUSA
- If an aircraft does not have a CPDLC connection established, the flight crew needs to perform a manual logon to KUSA
 - KUSA session will be established upon reaching an active U.S. Domestic CPDLC En Route Center and accepting the CDA confirmation message

2 Entering via non-active U.S. Domestic CPDLC En Route airspace from ATOP/Oceanic airspace

- If an aircraft has an ATOP/Oceanic CPDLC connection established, that CPDLC session will be terminated
- Flight crew needs to perform a manual logon to KUSA
 - KUSA session will be established upon reaching an active U.S. Domestic CPDLC En Route Center and accepting the CDA confirmation message



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Inbound/Outbound – NAVCanada



1 Entering via active U.S. Domestic CPDLC En Route airspace from NAVCanada airspace

- If an aircraft already has a CPDLC connection established, an automatic connection handoff will occur between NAVCanada airspace and an active U.S. Domestic CPDLC En Route Center
 - No manual termination or manual logon action required, but the flight crew must accept the CDA confirmation message for the ground system to confirm the KUSA connection is recognized by the aircraft as its CDA
 - If the flight crew does not acknowledge the CDA confirmation after three attempts, the connection will be terminated, and the flight crew will have to manually logon to KUSA
- If an aircraft does not already have a CPDLC connection established, the flight crew needs to perform a manual logon
 - KUSA session will be established upon reaching an active U.S. Domestic CPDLC En Route Center and accepting the CDA confirmation message

2 Entering via non-active U.S. Domestic CPDLC En Route airspace from NAVCanada airspace

- If an aircraft has a NAVCanada connection established, that CPDLC session will be terminated
- Flight crew needs to perform a manual logon to KUSA
 - KUSA session will be established upon reaching an active U.S. Domestic CPDLC En Route Center and accepting the CDA confirmation message



3 Exiting into NAVCanada airspace via active U.S. Domestic CPDLC En Route airspace

- If an aircraft has a CPDLC connection established, an automatic connection handoff will occur between the active U.S. Domestic CPDLC En Route Center and NAVCanada airspace
 - No manual termination or manual logon action required by the flight crew
- If an aircraft exits without a CPDLC connection, the flight crew needs to perform a logon to the next ATC facility per SOP

4 Exiting into NAVCanada airspace via non-active U.S. Domestic CPDLC En Route airspace

- KUSA session will be terminated prior to transition to NextCanada airspace from a U.S. Domestic CPDLC En Route Center that does not have CPDLC enabled
 - No manual termination action required by the flight crew
- The flight crew needs to perform a logon to the next ATC facility per SOP after KUSA session termination

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Inbound/Outbound – Non-CPDLC airspace



1 Entering U.S. Domestic airspace from non-U.S. airspace where CPDLC service is not provided (e.g., Mexico, Houston Oceanic – KHNH)

- Flight crew needs to perform a manual logon to KUSA
 - KUSA session will be established upon reaching an active U.S. Domestic CPDLC En Route Center and accepting the CDA confirmation message



2 Exiting U.S. Domestic airspace into non-U.S. airspace where CPDLC service is not provided (e.g., Mexico, Houston Oceanic – KHNH)

- KUSA session will be terminated prior calling U.S. Domestic airspace
 - No manual termination action required by the flight crew

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For those of you who aren't so familiar with the US, **KUSA is the CPDLC logon code** – and that is the one and only logon code you need, all the way across.