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U.S. DOMESTIC EN ROUTE FILING – FREQUENTLY ASKED QUESTIONS

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Use of U.S. DOD visual information does not imply or constitute DOD endorsement.

PROPRIETARY INFORMATION

Equipage and filing codes explained



What field in my flight plan needs to be updated to participate in U.S. domestic en route CPDLC?

- › Item 10a of the ICAO flight plan needs to include “J4” to indicate the aircraft is VDL Mode 2 equipped
- › Item 18 (DAT/ code) needs to be updated to an en route filing code
 - *Updating this field designates this aircraft as eligible for en route CPDLC to the ground system (ERAM)*

How do I identify the correct DAT/ code for my aircraft (i.e., 1FANSE vs 1FANSER)?

Reference the “FPL Filing En Route” column from the FAA’s [En-Route CPDLC Participation List](#) for ‘E’ or ‘ER’ designation by aircraft type, or check with your airframe OEM

The image shows a portion of a flight plan form. At the top, there are fields for 'Aerodrome de destination' (containing 'K M C O'), 'HR. MIN' (empty), 'Aerodrome de degagement' (empty), and '2 aerodrome de degagement' (empty). Below these is the '18 OTHER INFORMATION' section, which includes 'REG/N123HS', 'CODE/A05F97', 'DAT/1FANSE2PDC' (highlighted with a red box), and 'NAV/D1'. The form also features navigation arrows and a menu icon.

Q/A – Filing codes



What is the difference between 1FANSE and 1FANSER?

Filing “1FANSE” or “1FANSER” depends on whether the aircraft has known issues loading a CLEARED [route clearance] with a STAR Arrival and Transition.

AIRCRAFT WITHOUT LOADING ISSUES

Use DAT code “1FANSE” or “1FANSE2PDC” to receive a full loadable CLEARED [route clearance] when applicable.

AIRCRAFT WITH LOADING ISSUES

Use DAT code “1FANSER” or “1FANSER2PDC” which places the Arrival/Transition in an appended free text message.

Flight crew will have a two-step process to select the load prompt to load ATC clearance information into the FMS and then manually insert the Arrival and Transition, which will be in free text in the uplinked ATC clearance.



NOTE: Forecast weather data (winds/temp) in the FMS may be lost.

CPDLC-DCL (No PDC) and En Route Data Link Clearances

FANS 1/A & FANS 1/A+ CPDLC-DCL	For flights authorized for CPDLC-DCL (no PDC) and en route CPDLC that have no issues loading a route clearance with a STAR Arrival and Transition.	J4JxZ	1FANSE	This code is to be used to obtain CPDLC-DCL and en route clearances with aircraft that have no issues loading a route clearance with a STAR Arrival and Transition (No PDC).
FANS 1/A & FANS 1/A+ CPDLC-DCL	For flights authorized for CPDLC-DCL (no PDC) and en route CPDLC that have issues loading a route clearance with a STAR Arrival and Transition.	J4JxZ	1FANSER	This code is to be used to obtain CPDLC-DCL and en route clearances with aircraft that have issues loading a route clearance with a STAR Arrival and Transition (No PDC).

CPDLC-DCL (PDC Secondary) and En Route Data Link Clearances

FANS 1/A & FANS 1/A+ CPDLC-DCL/PDC	For flights authorized for CPDLC-DCL (PDC secondary) and en route CPDLC that have no issues loading a route clearance with a STAR Arrival and Transition.	E3J4JxZ	1FANSE2PDC	This code is to be used to obtain CPDLC-DCL and en route clearances with aircraft that have no issues loading a route clearance with a STAR Arrival and Transition (PDC is secondary preference to DCL).
FANS 1/A & FANS 1/A+ CPDLC-DCL/PDC	For flights authorized for CPDLC-DCL (PDC secondary) and en route CPDLC that have issues loading a route clearance with a STAR Arrival and Transition.	E3J4JxZ	1FANSER2PDC	This code is to be used to obtain CPDLC-DCL and en route clearances with aircraft that have issues loading a route clearance with a STAR Arrival and Transition (PDC is secondary preference to DCL).

Reference pg. 23-24 of the [Pilot Handbook](#) for additional information on CLEARED [route clearance].

Q/A – Filing codes (cont.)



What happens if I file 1FANS vs. 1FANSE/1FANSER?

“1FANS” designates CPDLC DCL use only and would result in the termination of the session after takeoff, as well as preventing a successful en route logon. Inclusion of the 'E' or 'ER' is crucial for en route CPDLC participation.

What is the function of adding “2PDC” (i.e., 1FANSE2PDC or 1FANSER2PDC)?

- › Optionally adding the “2PDC” designates PDC as secondary preference if CPDLC DCL is unavailable.
- › Filing "1FANSE2PDC"
 - “1FANS” designates to the system that CPDLC DCL is the preferred method to receive your clearances.
 - “E” or “ER” designates the aircraft as eligible to participate in CPDLC in the en route environment.
 - “2PDC” designates PDC to be used as backup when DCL is unavailable.

What if I want to participate in en route CPDLC only? (No DCL or PDC)

Omit the “1” and simply file “FANSE” or “FANSER”, depending on aircraft type.

Common DAT/ code filing mistakes



✗ Do not add “2VOICE”

Appending “2VOICE” is **not** needed.

Filing “1FANSE” or “1FANSER” automatically designates voice as secondary preference to CPDLC.

✗ Do not add extra “P”

It makes no difference whether “1FANS” or “1FANSP” is filed in the flight plan for CPDLC DCL only flights.

However, filing “1FANSPE” or “1FANS^{PER}” is **not** the proper filing code for U.S. Domestic en route CPDLC.

For additional information on filing codes, reference: [U.S. Domestic CPDLC Flight and Route Planning Guide](#).

Troubleshooting – en route CPDLC logon



Why is my en route CPDLC logon failing?

- ✓ Verify you have submitted a U.S. Domestic En Route CPDLC Participation Form to DCIT@L3Harris.com
 - Failure to submit a form will result in the aircraft being temporarily blocked from en route CPDLC operations until avionics have been verified as eligible per the FAA's [En-Route CPDLC Participation List](#)
- ✓ Verify that 1FANSE or 1FANSER is filed in flight plan
 - Omitting 'E' or 'ER' will result in en route CPDLC logon failure
- ✓ Verify the Flight ID and Tail Number ("REG") used for logon match the flight plan
 - The logon for en route CPDLC will fail if either of these do not match the flight plan
- ✓ Verify logon to "KUSA"
 - Use of the ARTCC identifier or departure airport for logon will result in a failed logon. "KUSA" is the single Data Authority in U.S. domestic airspace

If you have completed these checks and are still having issues, email OPR@L3Harris.com to submit a problem report.

Troubleshooting – en route CPDLC session



Why is my CPDLC session terminating after departure?

- ✓ Verify "1FANSE" or "1FANSER" is filed in flight plan
 - Omitting 'E' or 'ER' will result in CPDLC session termination after departing a CPDLC DCL airport

- ✓ Verify the ICAO 24-bit aircraft address (ADS-B) is filed correctly
 - The ADS-B address filed must match the aircraft's actual ADS-B address
 - An incorrect ADS-B address will result in CPDLC session termination after departure

- ✓ Verify the VHF radio used for CPDLC is in "DATA" mode
 - VDL Mode 2 is the required primary media for U.S. domestic en route CPDLC
 - The aircraft must be on VDL Mode 2 or POA for the connection to remain after departure
 - Use of SAT or HF will cause the connection establishment after departure to fail

If you have completed these checks and are still having issues, email OPR@L3Harris.com to submit a problem report.